



# Texas State University

## 2024-2025

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Master of Arts (M.A.) Major in Postsecondary Student Success in Learning, Literacy, and Mathematics (Learning Support Concentration) .....	1330	Master of Education (M.Ed.) Major in Reading Education .....	1713
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Master of Arts (M.A.) Major in Elementary Education Bilingual/Bicultural .....	1412		
Master of Arts (M.A.) Major in Secondary Education .....	1429		
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Master of Education (M.Ed.) Major in Secondary Education (Teaching Certification CMED Concentration) - via Distance Education .....	1813	Master of Science (M.S.) Major in Exercise Science (Strength & Conditioning and Sport Coaching Concentration Non-thesis Option) .....	1967
Master of Education (M.Ed.) Major in Secondary Education (Teaching Advanced Academics Concentration) .....	1830	Master of Science (M.S.) Major in Exercise Science (Strength & Conditioning and Sport Coaching Concentration Thesis Option) .....	1972
Master of Education (M.Ed.) Major in Special Education (Autism/Applied Behavior Analysis Concentration) .....	1846	Master of Science (M.S.) Major in Exercise Science (Thesis Option) .....	1978
Master of Education (M.Ed.) Major in Special Education (Behavioral Disorders/Positive Behavior Supports Concentration) .....	1863	Master of Science (M.S.) Major in Public Health Education and Promotion (Non-thesis Option) .....	1984
Master of Education (M.Ed.) Major in Special Education (Learning Disabilities/Inclusion Concentration) .....	1880	Master of Science (M.S.) Major in Public Health Education and Promotion (Thesis Option) .....	1988
Master of Education (M.Ed.) Major in Special Education (Learning and Behavioral Disabilities Concentration) - TXST Global .....	1897	Master of Science in Recreation and Leisure Services (M.S.R.L.S.) Major in Recreation and Sport Management (Non-thesis Option) - TXST Global .....	1993
Master of Education (M.Ed.) Major in Special Education (Teacher Certification CASE Concentration) .....	1913	Master of Science in Recreation and Leisure Services (M.S.R.L.S.) Major in Recreation and Sport Management (Thesis Option) - TXST Global .....	1996
Minor in Creativity Studies in Education .....	1930	Master of Science in Recreation and Leisure Services (M.S.R.L.S.) Major in Recreational Therapy (Non-thesis Option) .....	2001
Minor in Developmental Education .....	1930	Master of Science in Recreation and Leisure Services (M.S.R.L.S.) Major in Therapeutic Recreation (Thesis Option) .....	2005
Minor in Elementary Education .....	1930	Minor in Exercise Science .....	2010
Minor in Elementary Education Bilingual/Bicultural .....	1931	Minor in Public Health Education and Promotion .....	2010
Minor in Gifted and Talented Education .....	1931	Minor in Recreation and Leisure Services .....	2010
Minor in Methods and Materials .....	1931	College of Fine Arts and Communication .....	2010
Minor in Reading Education .....	1932	School of Art and Design .....	2011
Minor in Secondary Education .....	1932	Master of Fine Arts (M.F.A.) Major in Communication Design .....	2011
Minor in Special Education .....	1932	Department of Communication Studies .....	2017
Certificate in Autism .....	1932	Master of Arts (M.A.) Major in Communication Studies (Non- thesis Option) .....	2018
Certificate in Behavioral Disorders/Positive Behavioral Support .....	1932	Master of Arts (M.A.) Major in Communication Studies (Thesis Option) .....	2025
Certificate in Learning Disabilities/Inclusion .....	1933	Minor in Communication Studies .....	2034
Department of Health and Human Performance .....	1933	Certificate in Corporate Communication and Training ....	2034
Master of Science (M.S.) Major in Athletic Training (Professional Master's) .....	1934	School of Journalism and Mass Communication .....	2035
Master of Public Health (M.P.H.) Major in Public Health (Community Health & Behavior Concentration)- Accelerated Online Program .....	1938	Master of Arts (M.A.) Major in Mass Communication (Professional Project Option) .....	2035
Master of Public Health (M.P.H.) Major in Public Health (Health Policy & Management Concentration) -Accelerated Online Program .....	1943	Master of Arts (M.A.) Major in Mass Communication (Thesis Option) .....	2042
Master of Science (M.S.) Major in Exercise Science (Health and Rehabilitation Sciences Concentration Non- thesis Option) .....	1948	School of Music .....	2049
Master of Science (M.S.) Major in Exercise Science (Health and Rehabilitation Sciences Concentration Thesis Option) .....	1952	Master of Music (M.M.) Major in Music (Choral Conducting Concentration) .....	2051
Master of Science (M.S.) Major in Exercise Science (Non- thesis Option) .....	1958		

Master of Music (M.M.) Major in Music (Composition Concentration) .....	2063	Master of Science in Communication Disorders (M.S.C.D.) Major in Communication Disorders (Autism Concentration) .....	2247
Master of Music (M.M.) Major in Music (Musicology Concentration) .....	2076	Master of Science in Communication Disorders (M.S.C.D.) Major in Communication Disorders (Bilingual Concentration) .....	2253
Master of Music (M.M.) Major in Music (Instrumental Conducting Concentration) .....	2089	Master of Science in Communication Disorders (M.S.C.D.) Major in Communication Disorders (Fluency Concentration) .....	2259
Master of Music (M.M.) Major in Music (Jazz Performance Concentration) .....	2102	Master of Science in Communication Disorders (M.S.C.D.) Major in Communication Disorders (Hearing and Related Disorders Concentration) .....	2265
Master of Music (M.M.) Major in Music (Keyboard, String, or Guitar Performance Concentration) .....	2114	Master of Science in Communication Disorders (M.S.C.D.) Major in Communication Disorders (Neurogenic, Voice, & Swallowing Concentration) .....	2271
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Master of Music (M.M.) Major in Music (Performance and Pedagogy Concentration) .....	2153	Master of Healthcare Administration (M.H.A.) Major in Healthcare Administration (Non-thesis Option) .....	2283
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Master of Arts (M.A.) Major in Theatre (Dramaturgy Concentration) .....	2205	Master of Science in Nursing (M.S.N.) Major in Family Nurse Practitioner .....	2319
Master of Arts (M.A.) Major in Theatre (History and Criticism Concentration) .....	2212	Master of Science in Nursing (M.S.N.) Major in Leadership and Administration in Nursing .....	2327
Master of Fine Arts (M.F.A.) Major in Theatre (Design Concentration) .....	2219	Master of Science in Nursing (M.S.N.) Major in Psychiatric Mental Health Nurse Practitioner .....	2335
Master of Fine Arts (M.F.A.) Major in Theatre (Directing Concentration) .....	2226	Graduate Certificate in Psychiatric Mental Health Nurse Practitioner .....	2343
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Master of Science in Respiratory Care (M.S.R.C.) Major in Respiratory Care (Leadership Concentration) .....	2351	Master of Applied Geography (M.A.Geo.) Major in Geographic Information Science .....	2482
Master of Science in Respiratory Care (M.S.R.C.) Major in Respiratory Care (Leadership Concentration and Minor in Polysomnography) .....	2354	Master of Applied Geography (M.A.Geo.) Major in Geography .....	2490
Master of Science in Respiratory Care (M.S.R.C.) Major in Respiratory Care (Polysomnography Concentration) .....	2357	Master of Applied Geography (M.A.Geo.) Major in Geography (Geographic Education Concentration) .....	2497
College of Liberal Arts .....	2359	Master of Applied Geography (M.A.Geo.) Major in Natural Resources and Environmental Studies .....	2504
Department of Anthropology .....	2360	Master of Science (M.S.) Major in Geography .....	2512
Doctor of Philosophy (Ph.D.) Major in Applied Anthropology .....	2360	Minor in Geography .....	2521
Master of Arts (M.A.) Major in Anthropology (Archaeology Concentration Non-thesis Option) .....	2368	Department of History .....	2521
Master of Arts (M.A.) Major in Anthropology (Biological Anthropology Concentration Non-thesis Option) .....	2375	Master of Arts (M.A.) Major in History (History Education Concentration) .....	2521
Master of Arts (M.A.) Major in Anthropology (Cultural Anthropology Concentration Non-thesis Option) .....	2383	Master of Arts (M.A.) Major in History (Non-thesis Option) .....	2531
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Center for Diversity and Gender Studies .....	2390	Master of Arts (M.A.) Major in History (Public History Concentration Thesis Option) .....	2552
Minor in Diversity Studies .....	2391	Master of Arts (M.A.) Major in History (Thesis Option) ..	2564
Minor in Women's, Gender, and Sexuality Studies .....	2391	Minor in History .....	2575
Department of English .....	2392	Certificate in Public History Studies .....	2575
Master of Arts (M.A.) Major in Literature (Non-thesis Option) .....	2393	Center for International Studies .....	2576
Master of Arts (M.A.) Major in Literature (Thesis Option) .....	2398	Master of Arts (M.A.) Major in International Studies (Non-thesis Option) .....	2576
Master of Arts (M.A.) Major in Rhetoric and Composition (Non-thesis Option) .....	2405	Master of Arts (M.A.) Major in International Studies (Thesis Option) .....	2579
Master of Arts (M.A.) Major in Rhetoric and Composition (Thesis Option) .....	2410	Department of Philosophy .....	2584
Master of Arts (M.A.) Major in Technical Communication (Non-thesis Internship Option) .....	2417	Master of Arts (M.A.) Major in Applied Philosophy and Ethics (Non-thesis Option) .....	2585
Master of Arts (M.A.) Major in Technical Communication (Non-thesis Internship Minor Option) .....	2422	Master of Arts (M.A.) Major in Applied Philosophy and Ethics (Thesis Option) .....	2590
Master of Arts (M.A.) Major in Technical Communication (Thesis Option) .....	2428	Minor in Philosophy .....	2596
Master of Arts (M.A.) Major in Technical Communication (Thesis Minor Option) .....	2434	Certificate in Professional Ethics .....	2597
Master of Fine Arts (M.F.A.) Major in Creative Writing (Fiction Concentration) .....	2441	Department of Political Science .....	2597
Master of Fine Arts (M.F.A.) Major in Creative Writing (Poetry Concentration) .....	2448	Master of Arts (M.A.) Major in Legal Studies .....	2598
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Department of Geography and Environmental Studies .....	2454	Master of Arts (M.A.) Major in Political Science (Thesis Option) .....	2607



Master of Public Administration (M.P.A.) Major in Public Administration (Applied Research Project Concentration) .....	2614	Master of Arts (M.A.) Major in Spanish (36-hour Thesis Minor Option) .....	2735
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# Welcome to Texas State University.

Texas State's San Marcos Campus climbs up the Balcones escarpment to the Hill Country. It's a setting that is unique among Texas universities, enhanced even further by the beauty of the crystal clear San Marcos River (<https://www.flickr.com/photos/txstateu/sets/72157661036133102/>) and many large oak, (<http://www.facilities.txstate.edu/grounds/trees.html>) cypress and pecan trees (<http://www.facilities.txstate.edu/grounds/trees.html>). Some are the largest in the state. Although the metropolitan centers of Austin and San Antonio are nearby, San Marcos has managed to retain the charm of a smaller community. Texas State, with over 38,000 students, still has kept a friendly small campus atmosphere. And it is a place where faculty, staff, and students take the processes of teaching and learning seriously.

The Texas State University Round Rock Campus is conveniently located off Interstate Highway 35 on the University Boulevard. The Round Rock Campus provides exceptional academic programs, student academics support services, and training opportunities to students and the community in Round Rock, North Austin, and Williamson County.

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## Explore the catalog

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Texas State University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award baccalaureate, masters, and doctoral degrees. Contact the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Texas State University.

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Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) accreditation is institutional in nature. Although many programs are accredited by other agencies, SACSCOC accredits the university as a whole, not specific degrees or programs.

For information concerning the Texas State University Catalog, please contact us at [mycatalog@txstate.edu](mailto:mycatalog@txstate.edu).

This catalog is a general information publication only and is not intended to nor does it contain all regulations that relate to undergraduate students. The information in this version of the Undergraduate Catalog is subject to change without notice. Texas State reserves the right to withdraw courses at any time, to change its fees or tuition, calendar, curriculum, degree requirements, graduation procedures, and any other requirements affecting students. Changes will become effective whenever authorities determine and will apply to both prospective students and those already enrolled. The provisions of this catalog do not constitute a contract, expressed or implied, between any applicant, student, faculty member, or staff employee and Texas State University or the Texas State University System. In the event of conflict between the provisions of this catalog and the Texas State University System Rules and Regulations, the latter shall govern. Questions regarding current information should be addressed to the office of the Provost and Vice President for Academic Affairs.

This catalog was published in May 2024 and becomes effective with the beginning of the fall semester, 2024.

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As an Emerging Research University, Texas State provides opportunities for discovery and innovation to faculty and students. The university offers bachelor's, master's, specialist, and doctoral degree programs in the colleges of Applied Arts (<http://www.txstate.edu/appliedarts/>), McCoy College of Business Administration (<https://www.mccoy.txstate.edu/>), Education (<http://www.education.txstate.edu/>), Fine Arts and Communication (<http://www.finearts.txstate.edu/>), Health Professions (<http://www.health.txstate.edu/>), Liberal Arts (<http://www.txstate.edu/liberalarts/>), Science and Engineering (<http://www.txstate.edu/science/>), University College (<http://www.txstate.edu/ucollege/>) and The Graduate College (<http://www.gradcollege.txstate.edu/>).

Texas State's San Marcos campus is a growing community of 58,000 people in the southern Austin metropolitan area. The Round Rock Campus (<http://www.rrc.txstate.edu/>) is located north of Austin. Students there can take upper-level courses leading to several bachelor's degrees and selected complete master's degree and certificate programs.

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Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)

- Accreditation Council for Education in Nutrition and Dietetics Academy of Nutrition and Dietetics
- Accrediting Council on Education in Journalism and Mass Communications
- American Council for Construction Education
- American Physical Therapy Association, Commission on Accreditation in Physical Therapy Education
- Association of Technology, Management, and Applied Engineering
- Commission on Accreditation for Health Informatics and Information Management Education
- Commission on Accreditation for Respiratory Care
- Commission on Accreditation of Athletic Training Education
- Commission on Accreditation of Healthcare Management Education
- Commission on Collegiate Nursing Education
- Council for Accreditation of Counseling and Related Educational Programs
- Council for Interior Design Accreditation
- Council of the Section of Legal Education and Admissions to the Bar, American Bar Association
- Council on Academic Accreditation in Audiology and Speech-Language Pathology American Speech-Language-Hearing Association
- Council on Accreditation of Parks, Recreation, Tourism, and Related Professions
- Council on Social Work Education, Commission on Accreditation
- Joint Review Committee on Education in Radiologic Technology
- National Accrediting Agency for Clinical Laboratory Sciences
- National Association of Schools of Music, Commission on Accreditation
- Network of Schools of Public Policy, Affairs, and Administration Commission on Peer Review and Accreditation

## **The following organizations not recognized by either the Council on Higher Education Accreditation (CHEA) or the U.S. Department of Education (USDE) accredit or certify other Texas State degree programs.**

- AACSB International - The Association to Advance Collegiate Schools of Business
- ABET - Accreditation Board for Engineering and Technology
- American Chemical Society
- American Society of Biochemistry and Molecular Biology
- Association of University Programs in Health Administration
- Foundry Education Foundation
- National Association of School Psychologists
- Texas Certified Public Manager Program

## **The following organizations accredit Texas State academic support services.**

- Accreditation Association for Ambulatory Health Care, Inc.
- American Psychological Association Commission on Accreditation
- National Administrator Credential (NAC)

Authorized by the Texas Legislature in 1899, Southwest Texas State Normal School opened its doors in 1903. During the first century, the Legislature retained the regional designation in the name, but as its mission changed it became first Normal College, then successively Teachers College, College and University. These changes reflected the transformation from a teacher-preparation institution to a regional university. In 2003, the Legislature dropped the regional designation and the institution became Texas State University-San Marcos, and in 2013 the place name was eliminated as Texas State University became an emerging research university within the state.

The demographics of the university's student body more closely mirror the population of Texas than any other public university in the state. Texas State became a Hispanic Serving Institution (HSI) in 2010, and continues to expand efforts to promote diversity, equity, and inclusion among all faculty, staff, and students.

While Texas State was originally renowned for preparing public school teachers, today it has grown into a major institution of higher education approaching an enrollment of 40,000. The university's two campuses currently offer programs not only in the College of Education, but also in the College of Applied Arts, Emmett and Miriam McCoy College of Business Administration, College of Fine Arts and Communication, College of Health Professions, Honors College, College of Liberal Arts, College of Science and Engineering, and University College. University College oversees first-year advising as well as other activities of the first-year experience in addition to guiding students who have not yet chosen a major. The Graduate College provides opportunities for continued intellectual growth through advanced and specialized education that develops leaders in the professions and in research up through the doctoral degree.

As Texas State's student population has grown — from 303 in 1903 to nearly 38,376 in 2022 — the campuses, too, have expanded and today Texas State is the seventh largest public university in the state.

Texas State's San Marcos campus is located in a Hill Country community about halfway between Austin and San Antonio. Its location on the banks of the San Marcos River provides recreational and leisure activities for students throughout the year.

Overlooking the San Marcos campus from Chautauqua Hill and serving as a landmark since 1903 is Old Main, a red-gabled Victorian building restored to its original grandeur. In 1979, after adding a number of classroom buildings and residence halls on the San Marcos Campus, Texas State purchased the former San Marcos Baptist Academy adjacent to the original campus. In 1981, South Texas entrepreneur Harry M. Freeman donated a 3,500-acre ranch to Texas State to be held in perpetual trust as the Harold M. Freeman Educational Foundation. The working ranch is used as a laboratory for students in agriculture, animal science, anthropology, biology, and a variety of other academic disciplines. In 1990, the university opened the seven-story Albert B. Alkek Library. The building, conveniently located in the center of campus, is named for the noted Texas rancher, oil man, and educational philanthropist who died in 1995.

Texas State acquired one of the most unique ecosystems in the world in 1994 when it purchased the former Aquarena Springs resort and theme park. The purchase allowed Texas State to serve as steward of the headwaters of the San Marcos River, preserving and protecting one of the oldest inhabited spots in North America for future generations of Texans. Now called The Meadows Center for water and the Environment, the 90-acre property is the site of a wide variety of educational and research pursuits. The Meadows Center is home to eight endangered species of plants and animals that exist nowhere else in the world.

In 1998, as the lead institution, Texas State joined forces with other area universities to establish the Round Rock Higher Education Center, now known as the Texas State University Round Rock Campus (RRC). The RRC, located on 101 acres north of Austin, houses the majority of Texas State's health professions academic programs, and offers upper-division and graduate educational opportunities in Williamson County and Austin.

Texas State became part of the Texas State University System in 1911. The System, governed by a nine-member Board of Regents, also includes Lamar University, Lamar Institute of Technology, Lamar State College–Orange, Lamar State College–Port Arthur, Sam Houston State University, Sul Ross State University, and Sul Ross University Rio Grande College. The first president of Texas State was Mr. T.G. Harris, who served from 1903 to 1911. He was followed by Dr. C.E. Evans, 1911–1942; Dr. J.G. Flowers, 1942–1964; Dr. James H. McCrocklin, 1964–1969; Dr. Leland E. Derrick, 1969; Dr. Billy Mac Jones, 1969–1973; Mr. Jerome C. Cates, 1973–1974; Dr. Lee H. Smith, 1974–1981; Mr. Robert L. Hardesty, 1981–1988; Dr. Michael L. Abbott, 1988–1989; Dr. Jerome Supple, 1989–2002; Dr. Denise M. Trauth, 2002–2022; and Dr. Kelly Damphousse, 2022–present.

Texas State University is a public, student-centered research institution dedicated to excellence, discovery, and innovation. We create new knowledge, embrace a diversity of people and ideas, foster cultural and economic development, and educate our students to participate fully and freely in the communities of Texas, the nation, and the world.

## Shared Values

In pursuing our mission, we, the faculty, staff, and students of Texas State University, are guided by a shared collection of values:

- Teaching and learning based on research, student needs, and the free exchange of ideas in a supportive environment;
- Research and creative activities that encompass the full range of academic disciplines;
- Meaningful student engagement built on active involvement, accessibility, and intentional educational experiences;
- The cultivation of university community that consistently practices integrity, civility, compassion, and respect;
- A shared commitment to creating a sense of belonging across unique communities, identities, ideas, and contributions;
- A welcoming spirit and a global perspective;
- Dedication to service and leadership for the public good;
- Responsible stewardship of our resources and environment; and
- Continued reflection and evaluation to ensure that our strengths always benefit those we serve locally and globally.

Texas State is committed to the value of a racial and ethnic diversity and believes that the primary purpose of higher education is to promote learning for all and to stimulate inquiry for truth in an atmosphere of

freedom. Accordingly, Texas State encourages students to exercise the rights of citizenship. However, these rights are subject to reasonable limitations necessary for the orderly operation of the university. Texas State expects students to accept their responsibilities as citizens and members of a scholarly community. Paramount among these responsibilities is respect for the rights of others, academic and personal integrity, and adherence to federal, state, and local law as well as university regulations.

The faculty and administration are genuinely concerned with the physical and ethical welfare of students. To that end, Texas State has established rules of conduct and has published these in a Code of Student Conduct and Honor Code. These regulations guide students in achieving personal and academic goals and help the university function in an orderly way. Since students voluntarily associate themselves with Texas State, they should know that these rules are honestly and faithfully enforced. The rules include clear prohibitions against sexual or discrimination and racial harassment.

Texas State has established a grievance procedure for the prompt and equitable resolution of complaints related to illegal discrimination or harassment. Texas State, to the extent not in conflict with federal or state law, prohibits discrimination or harassment on the basis of race, color, national origin, age, sex, religion, disability, veterans' status, sexual orientation, gender identity, or expression. This grievance procedure is described in University Policy and Procedure Statement 04.04.46 (<http://www.txstate.edu/effective/UPPS/UPPS-04-04-46.HTML>), *Prohibition of Discrimination*. The Texas State University System Sexual Misconduct Policy outlines our policy and procedure related to Title IX (sexual misconduct). Students should follow the procedures for reporting instances of discrimination or harassment.

The administration and faculty encourage students to participate in managing Texas State through its system of advisory councils and committees. Students are invited to serve as voting members on many of these groups, and are expected to contribute actively to their success. Students may submit recommendations for changes in policy, not only through the committee structure, but also through their own student government.

In 1990, Congress enacted the *Crime Awareness and Campus Security Act of 1990* which amended the *Higher Education Act of 1965*. In 1998, the law was renamed the *Clerly Act*. This law requires institutions that participate in the federal student financial aid programs to disclose crime statistics and security information to the campus community. Among such requirements, the university must prepare and distribute an Annual Security and Fire Safety Report (ASFSR) annually. The ASFSR must include crime statistics for the three most recent calendar years concerning reported crimes that occurred on campus; in on-campus student housing facilities; in non-campus buildings or property owned or controlled by the university or a recognized student organization; and on public property within, or immediately adjacent to and accessible from, the campus. Additionally, the report contains information about law enforcement authority, timely warnings or emergency notifications of crimes that represent a threat to the campus community, the daily crime log, missing student notification procedures that pertain to students residing in on-campus student housing, crime reporting policies, programs to prevent dating violence, domestic violence, sexual assault and stalking, and the procedures the university will follow when one of these crimes is reported. The university must also disclose fire safety information and fire statistics for the three previous calendar years for

on-campus student housing facilities, among other safety and security information.

Texas State's Annual Security Report section applies to the San Marcos, Round Rock, and Advanced Law Enforcement Rapid Response Training Center (ALERRT Center) campuses, and the Fire Safety Report section applies only to the San Marcos Campus as Round Rock and the ALERRT Center do not currently have on-campus student housing facilities.

You may request a paper copy of the ASFSR by contacting Institutional Compliance and Ethics at Elliott Hall A (201 Talbot Street, San Marcos, TX 78666), by calling (512)245-4961, or by emailing [cleryreport@txstate.edu](mailto:cleryreport@txstate.edu). A PDF of the Texas State ASFSR can be accessed electronically at <http://www.clery.txst.edu/report> (<http://www.clery.txst.edu/report/>).

## Correct Data

All students are responsible for making certain Texas State has correct demographic data. A student's name will appear on official records as it is stated on the application for admission, unless a student has previously attended Texas State under a different name. Changes in name, local and/or permanent address, telephone number, marital status, etc. should be reported immediately to the Office of the University Registrar. Texas State is not responsible for loss of correspondence credits due to unreported name changes. Address changes can be completed through Texas State Self-Service. .

## Family Educational Rights and Privacy Act of 1974 (FERPA)

FERPA protects the privacy of educational records, establishes the right of students to inspect and review their educational records, and provides guidelines for the correction of inaccurate or misleading data. Students also have the right to file complaints with the U.S. Department of Education, Student Privacy Policy Office, 400 Maryland Ave, SW, Washington, DC 20202-8520, concerning alleged failures by Texas State to comply with the Act. University policy explains in detail the procedures to be used in complying with the Act. The policy is available at [www.registrar.txst.edu/legislative-policies/ferpa.html](http://www.registrar.txst.edu/legislative-policies/ferpa.html) (<https://www.registrar.txst.edu/legislative-policies/ferpa.html>). The Dean of Students and the Office of the University Registrar both presume that each student is independent of their parents when dealing with the student's educational records. Procedures for establishing dependency status are available in both offices.

## Communications

Most university offices use Texas State email as the official means of communication. Students are expected to set up and read their Texas State email frequently.

In 2015, the Texas Higher Education Coordinating Board launched a new plan for the state of Texas called the 60x30TX Texas Higher Education Strategic Plan. The four goals of this plan are illustrated below.

The third goal of this plan states that by 2030, all graduates from Texas public institutions of higher education will have completed programs with identified Marketable Skills. A key short-term milestone associated with this goal states that:

- By 2020, institutions will have created and implemented a process to identify and regularly update Marketable Skills for each of their programs, in collaboration with business and other stakeholders.

Marketable Skills in the 60x30TX plan are defined as: *Those skills valued by employers that can be applied in a variety of work settings, including interpersonal, cognitive, and applied skill areas. These skills can be either primary or complementary to a major and are acquired by students through education, including curricular, co-curricular, and extracurricular activities.* The Marketable Skills goal emphasizes the value of higher education in the workforce. Students need to be aware of the Marketable Skills that they acquire through their academic programs.

Texas State has developed Marketable Skills for all of its degree and certificate programs. In compliance with the 60x30TX plan, Texas State has developed a Marketable Skills reporting system for all faculty program coordinators, department chairs, school directors, and college deans to effectively report and annually review the Marketable Skills that students acquire from their degree and certificate programs.

To view program specific marketable skills visit: <https://www.provost.txstate.edu/resources/marketable-skills.html>.

As required by the Texas Occupations Code, Section 1, Chapter 53, Sections 53.151 – 53.152, amended in 2017 by House Bill 1508, if you are applying for admission to or currently enrolled in an educational program that may prepare an individual for an initial occupational license as defined under Texas Occupations Code Section 58.001 and/or if you later decide to change to an educational program that prepares you for an initial occupational license as defined under Texas Occupations Code Section 58.001, in accordance with state law, please be advised of the following:

1. An individual who has been convicted of an offense may be ineligible for issuance of an occupational license upon completion of the educational program.
2. Each licensing authority that may issue an occupational license to an individual who completes an educational program must establish guidelines that state the reasons a particular crime is considered to relate to a particular license and any other criterion that affects the decisions of the licensing authority.
3. Local or county licensing authorities may issue additional guidelines related to criminal history. Applicants should contact their respective local or county licensing authority for more details.
4. A person may request a criminal history evaluation letter regarding the personal eligibility for a license issued by a licensing authority under Texas Occupations Code Section 53.102.

Applicants are encouraged to review all applicable eligibility requirements related to the respective occupational license. Questions related to eligibility requirements should be directed to the applicable licensing authority.

A list of the Texas State University degree and certificate programs that prepare a student for an initial occupational license as defined under Texas Occupations Code Section 58.001 is available here. (<http://www.txstate.edu/curriculum/services/programs/occupational-license-HB-1508.html>)

Abandoned and unclaimed personal property discovered on campus is turned over to the University Police Department (UPD) Community Engagement Office. UPD utilizes Crowdfind Program to assist with

managing abandoned and unclaimed personal property and is located on the UPD website under programs and services. Items of value should be sent or bought to UPD for safekeeping. Examples of these items: are credit cards, wallets, jewelry, watches, handbags, computers, computer storage, storage media, electronic devices and items considered valuable. All other property found on campus may be disposed of by the department that oversees the building in which the property was found. Examples include inexpensive clothing, personal care supplies, and similar items that do not include ownership identification. Abandoned and unclaimed property held by UPD will be disposed of after 60 days. For further information please see UPPS 05.01.20 Abandoned and Unclaimed Property (<https://policies.txstate.edu/university-policies/05-01-20.html>).

*Academic advising is an educational process that, by intention and design, facilitates students' understanding of the meaning and purpose of higher education and fosters their intellectual and personal development toward academic success and lifelong learning (National Academic Advising Association, 2004).*

## Purpose

As an integral part of teaching and learning at Texas State academic advising is a student-centered collaborative process that engages students in educational planning to promote academic, personal, and professional development, while considering diverse interests, abilities, and goals.

Academic advising is essential to student success and fosters the retention and graduation of undergraduate students. In consultation with an advisor, students establish and refine educational and career goals that align with their individual aspirations and skills. Professional academic advisors are available to assist students throughout the year. Students are encouraged to meet with advisors on a regular basis for assistance selecting semester courses, understanding curriculum information, and planning for graduation. Additional advising resources include the undergraduate catalog and the university's official degree audit system, Degree Works.

Academic advisors at Texas State University adhere to the standards and guidelines published in *CAS Professional Standards for Higher Education* by the Council for the Advancement of Standards in Higher Education (CAS). Advisor membership in the National Academic Advising Association (NACADA) provides professional guidance in campus-wide advising philosophies.

In order for the advising partnership to be successful, students and advisors have a shared responsibility in the academic advising process.

## Student Responsibilities

- Identify personal values and academic goals related to your degree program
- Schedule timely, regular appointments with your academic advisor
- Prepare for your appointment by reviewing your degree audit and identifying specific questions for your advisors
- Arrive to advising appointments on time and bring any identification or documentation as required by your college advising center
- Participate fully in the advising experience by asking questions, seeking clarification, and providing accurate information regarding your interests and abilities

- Review curriculum requirements for your degree program (e.g., required courses, prerequisites, minimum GPAs) and select courses that are degree applicable
- Follow through with all advisor recommendations and keep a personal record of progress toward meeting goals
- Comply with all university and college policies, procedures, and deadlines
- Apply for graduation at the beginning of the semester you intend to complete all degree requirements

## Advisor Responsibilities

- Encourage students to develop clear and attainable goals
- Ensure advising services remain accessible and available throughout the year
- Understand and effectively communicate curriculum information, graduation requirements, and university and college policies and procedures
- Provide clear and accurate information in all advising correspondence and documentation
- Help students understand the purpose of higher education and its effects on academic and personal development
- Foster a supportive and inclusive environment for all students
- Encourage students to think critically and make independent decisions regarding their education and career
- Maintain confidentiality as required by the Family Educational Rights and Privacy Act (FERPA)
- Provide students with information on campus resources and refer to campus partners as needed

## Change of Degree Plan

Deciding on a major, minor, concentration, or certification is an important step in a student's academic career. The process for changing the curriculum that makes up a degree plan varies by college; therefore, professional academic advisors are available for consultation throughout the year. It is suggested that students research any curriculum changes and then schedule an appointment with an academic advisor to discuss the change in detail.

We encourage students to make informed decisions concerning interests, abilities, values, and future goals. Students should be aware that changing their degree plan can have potential implications related to financial aid, tuition, and anticipated graduation.

## Helpful Resources

One of the most important things students can do to support their success is establish a strong working relationship with their academic advisor. Texas State's academic advising centers (<https://advising.txst.edu/find-your-advisor.html>) provide high quality professional academic advising to all students from their first semester through graduation.

- All first-year students, regardless of major or hours, begin their educational journey with First-Year Advising (<https://firstyear.txst.edu/>).
- The University#Advising Center (<https://advising.txst.edu/university-advising-center.html>) offers major exploration guidance for students who are still in the process of exploring majors (Exploratory), are



unsure about their current major, or are seeking admission to the McCoy College of Business (Pre-Business).

- Each college offers academic advising (<https://advising.txst.edu/find-your-advisor.html>) to their majors in their second year and beyond.
- Browse the Undergraduate Catalog (<http://mycatalog.txstate.edu/undergraduate/>) for Texas State majors, minors, and their requirements.
- Career Services (<http://mycatalog.txstate.edu/undergraduate/general-information/career-services/>) is available to help you research majors, study your options, and plan and implement your professional future.
- The Office of Financial Aid and Scholarships (<http://mycatalog.txstate.edu/undergraduate/general-information/financial-aid-scholarships/>) can assist with any questions you may have related to the impacts a change of degree plan can have on your financial aid package.
- The Office of Veterans Affairs (<http://mycatalog.txstate.edu/undergraduate/general-information/veterans-affairs/>) at Texas State University assists veterans in pursuing their educational, professional, or vocational objectives. They are available to answer questions concerning veteran educational benefits, certify enrollments for the Department of Veterans Affairs, and monitor students' degree plans and academic progress.
- Students are encouraged to review the Tuition for Excessive Undergraduate Hours (<http://mycatalog.txstate.edu/undergraduate/general-information/tuition-fees/>) policy prior to making a change to their degree plan.
- Students are encouraged to review the Tuition Rebate (<https://www.sbs.txstate.edu/billing/Tuition-Rebate-Information.html>) policy prior to making a change to their degree plan.

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**Learn more about Degree Works at <http://www.registrar.txstate.edu/resources/degreeworks.html>.**

## Glossary of Terms

### Academic Advising Center

Located in each College, the Academic Advising Center houses most of the undergraduate advisors for that College.

### Classification

Academic level based on hours earned: 1–29 freshman, 30–59 sophomore, 60–89 junior, and 90+ senior.

### Contact Hours

Clock hours spent each week in the instruction process. Contact hours are not course credit hours. Lecture contact hours are the hours per week students are required to spend in contact with faculty in a lecture setting, e.g., class, conference, seminar, individual instruction, private lesson, thesis or dissertation discussion, or independent study. Laboratory contact hours are the number of hours per week that students are required to spend in contact with faculty in an experiential situation, e.g., laboratory clinical, practicum, internship, or student teaching.

### Core Curriculum

Serves as the common foundation for all majors and accounts for about 35 percent of the approximately 120 semester credit hours required for a bachelor's degree. See the Academic Services ([\[mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/\]\(http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/\)\) section of the catalog for more detailed information.](http://</a></p>
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### Co-requisite

A directive from a School or Department that requires a certain action be taken while enrolled in a certain course. A corequisite may be a course, permission from a faculty member, a specified classification, or additional requirements as determined by the faculty.

### Course Description

Summarizes the content of the course. May include repeatability information as well as pre-requisites or co-requisites.

### Course Number

Courses listed in this catalog and in the Schedule of Classes follow a four-digit numbering system. The first digit indicates the level of the course: 1-freshman, 2-sophomore, 3-junior, 4-senior, 5- and 6-masters, and 7-doctoral. The second digit indicates the number of semester credit hours. The last two digits usually indicate the sequencing of the course in the curriculum. The letter (A, B, C, etc.) at the end of a course number usually indicates a topics course whose content may vary from semester to semester.

### Course Prefix

Letters preceding the course number that indicate the subject of the course. For example, CJ = Criminal Justice; ANTH = Anthropology.

### Credit Hour

For purposes of this catalog and in accord with federal regulations, a credit hour is:

- not less than one hour of classroom or direct faculty instruction and a minimum of two hours out of class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time;
- at least an equivalent amount of work as outlined in the item above for other academic activities including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

A semester credit hour is defined by the Texas Higher Education Coordinating Board as a unit of measure of instruction consisting of 60 minutes, of which 50 minutes must be direct instruction over a 15-week period in a semester system. Credit hours must be presented in whole numbers. Academic administrative units are responsible for ensuring that credit hours are awarded only for work that meets this requirement. Students should expect to invest a minimum of two hours of additional work for each hour of classroom or faculty instruction per week. Additional work often includes reading, studying, writing, conducting research, meeting with tutors, and other learning activities.

### Degree Audit

An advising report, through *Degree Works software*, that shows students progress towards their degrees. Students can request a degree audit report through the Self Service Banner for the degree program(s) in which they are enrolled or for degree programs in which they are interested. Visit <http://www.registrar.txstate.edu/resources/degreeworks.html> for more information and a video tutorial or contact an academic advisor.

## Degree Plan

Set of Texas State University courses that a student may follow in order to achieve the desired bachelor's degree. The degree plan is a sequence of courses generally recommended for undergraduate students to ensure completion of the degree or certificate program within a four-year time frame.

## Free Elective

Course(s) available to students, which are not prescribed, and are selected by students from any undergraduate course in the inventory (unless prerequisite exists).

## Grade Point Average (GPA)

Texas State uses a four-point system. The GPA is the total number of grade points earned divided by the number of semester hours attempted. Semester grade symbols have the following values: "A" = 4 points; "B" = 3 points; "C" = 2 points; "D" = 1 point; "F" = 0 points. Neither hours nor grades are calculated for "I" (Incomplete), "CR" (Credit), "PR" (Progress), or "W" (Withdraw). "U" (Failure Unearned) and "N" (Failure Never Attended) grades are the same as an "F" and equal 0 points.

## Graduate Student

A student who has graduated with a bachelor's degree and is returning to the university to pursue either a master's or doctoral degree.

## Graduation with Honors

Students earning a GPA of 3.40-3.59 will graduate *cum laude*; 3.6-3.79 will graduate *magna cum laude*; 3.8-4.0 will graduate *summa cum laude*. To be eligible for graduation with honors a student seeking a baccalaureate degree must have completed a minimum of 54 semester credit hours preceding graduation at Texas State. Graduation in the Honors College is described on p. 47.

## Multicultural Course

Course identified in the catalog and schedule of classes that offers students an opportunity to enhance their multicultural competence.

## Post Baccalaureate Student

Student who has completed a bachelor's degree and returned to the university to take additional course work that will not count towards a second bachelor's degree.

## Prerequisite

A directive from a School or Department that requires a certain action be taken before enrolling in a certain course. A prerequisite may be a course, permission from a faculty member, a specified classification, or additional requirements as determined by the faculty.

## Prescribed Elective

Course(s) available to students from an approved or designated list, often seen as advanced or by course prefix.

## Probation, Academic

An emphatic warning that the quality of the student's work has not met Texas State's minimum academic standards and that the quality must improve during the probationary semester in order for the student to continue at Texas State. A student will be placed on academic probation at the end of the fall or spring semester in which the Texas State GPA is less than 2.00. A student will be removed from academic probation at the

end of any long semester or summer term if the Texas State GPA is 2.00 or higher.

## Second Degree Seeking Student

Student who has completed a bachelor's degree and returned to the university with the intention to take additional course work that will complete a second baccalaureate degree.

## SLAC

The Student Learning Assistance Center provides a wide range of academic support programs. Whether students are seeking help with course content, study skills, or test preparation, SLAC provides a walk-in tutoring lab, Supplemental Instruction, campus presentations, and online services.

## Suspension, Academic

Imposed on students who fail to raise their GPA higher than a 2.00 at the end of the second probationary semester.

## Transcript

Official Texas State transcripts bear the University Seal and the University Registrar's signature. The transcript is an official record of a student's academic course-work.

## Transfer Student

Student who has attended another institution of higher education prior to enrollment at Texas State.

## TSIP

The Texas Success Initiative program is a legislatively mandated program for certain college freshmen and transfer students, and is located within University College. Additional information about this program and its requirements can be found in the University College section of this catalog.

## Undergraduate Student

Student enrolled in course-work with the intent of receiving a bachelor's degree at Texas State.

## Writing Intensive

Undergraduate courses for which at least 65 percent of the grade must be based on written exams or assignments, and at least one assignment must be 500 words or more in length. Writing intensive is a designation intended to address the writing policy for undergraduate degree programs.

## How to Interpret a Course Entry in the Catalog

Academic courses are located alphabetically by course prefix within the school or department in which they are taught. Within each prefix, the courses are listed numerically beginning with freshman level and proceeding through senior level course-work. Graduate courses may be found in the Graduate Catalog.

Texas State reserves the right to withdraw courses at any time, to change its fees or tuition, calendar, curriculum, degree requirements, graduation procedures, and any other requirements affecting students. Changes will become effective whenever authorities determine and will apply to both prospective students and those already enrolled. Questions regarding

current information should be addressed to the office of the Provost and Vice President for Academic Affairs.

This section of the catalog contains information about Texas State’s general academic policies. All Texas State students should review this information carefully when they enter the University.

As members of a community dedicated to learning, inquiry, and creation, the students, faculty, and administration of our university live by the principles in this Honor Code. These principles require all members of this community to be conscientious, respectful, and honest.

We are Conscientious

We complete our work on time and make every effort to do it right. We come to class and meetings prepared and are willing to demonstrate it. We hold ourselves to doing what is required, embrace rigor, and shun mediocrity, special requests, and excuses.

We are Respectful

We act civilly toward one another and we cooperate with each other. We will strive to create an environment in which people respect and listen to one another, speaking when appropriate, and permitting other people to participate and express their views.

We are Honest

We do our own work and are honest with one another in all matters. We understand how various acts of dishonesty, like plagiarizing, falsifying data, and giving or receiving assistance to which one is not entitled, conflict as much with academic achievement as with the values of honesty and integrity.

The Pledge for Students

Students at our university recognize that, to ensure honest conduct, more is needed than an expectation of academic honesty, and we therefore adopt the practice of affixing the following pledge of honesty to the work we submit for evaluation:

“I pledge to uphold the principles of honesty and responsibility at our university.”

The Pledge for Faculty and Administration

Faculty at our university recognize that the students have rights when accused of academic dishonesty and will inform the accused of their rights of appeal laid out in the student handbook and inform them of the process that will take place:

“I recognize students’ rights and pledge to uphold the principles of honesty and responsibility at our university.”

Addressing Acts of Dishonesty

Students accused of dishonest conduct may have their cases heard by the faculty member. The student may also appeal the faculty member’s decision to the Honor Code Council. Students and faculty will have the option of having an advocate present to ensure their rights. Possible actions that may be taken range from exoneration to expulsion. Information about the Honor Code Council and its policies and procedures may be found at <http://www.txstate.edu/honorcodecouncil/>.

Registration Instructions

Instructions on how to register using Texas State Self-Service can be found on the Office of the University Registrar’s registration webpage. Links to additional information such as the academic calendar, the time ticket schedule, registration holds, instructions for dropping a class, and information regarding withdrawing from a term may also be found there.

Academic Advising

Texas State University encourages all students to seek academic advising before registration for an upcoming term begins and any other time academic questions arise. For some departments, schools, colleges and certain student populations, this advising may be mandatory. Students who are undecided about their major are advised through the University College. Other students may be advised through the department of their major and/or in the appropriate college advising center. Advisors help students understand academic requirements and plan schedules to meet those requirements as well as address the choice of majors and career preparation issues.

Undergraduate Student Classification

Classifications are based on the number of overall earned hours. The overall earned hours calculation includes hours earned at Texas State University including courses with grades of CR (i.e. CLEP, AP, departmental exams) and hours earned at other colleges or universities. In-progress courses are not considered in determining classification.

Classification	Number of Hours
Freshman	0-29 hours
Sophomore	30-59 hours
Junior	60-89 hours
Senior	90+ hours

Course Numbers

Courses listed in this catalog and in the Schedule of Classes follow a four-digit numbering system. The first digit indicates the level of the course: 1–freshman, 2–sophomore, 3–junior, 4–senior, 5–, 6–master’s, and 7–doctoral. The second digit indicates the number of semester credit hours the course carries. The last two digits usually indicate the location of the course in the department/school’s curriculum. A letter (A, B, C, etc.) attached to a course number usually indicates a topics course. The numbers in parentheses following a course title indicate the clock hours per week spent in lecture and in laboratory, respectively.

Texas Success Initiative

The Texas Success Initiative is a state-legislated program that measures students’ skills in Mathematics, English/Language Arts and Reading. All students, except those who are TSI-Exempt, should take an initial TSI assessment test before their first semester in college. Students with disabilities who need reasonable accommodations should contact the Office of Disability Services.

The State of Texas has one approved assessment instrument, the TSI Assessment. This assessment instrument is administered at Texas State University through the Testing, Evaluation, and Measurement Center as well as all two- and four-year public institutions across the state.

## Approved Assessment Instruments and Cut-Scores

### TSI Assessment 2.0

- College Ready Scores
  - Mathematics - 950-990; OR less than 950 with a Diagnostic Level 6.
  - English, Language Arts, Reading – 945-990 with an Essay Score of 5 and above; OR less than 945 with an Essay of 5 and above AND a diagnostic of 5 and above.

### TSI Assessment 1.0

- College Ready Scores Prior to January 11, 2021
  - Mathematics – 350 and above.
  - Reading – 351 and above.
  - Writing - Essay Score of 5 and above; OR Essay Score of 4 with Multiple Choice of 340.

## TSI Exemptions

Some students are exempt or partially exempt from assessment. A student will be identified as TSI-Exempt or partially exempt when Texas State has received official proof that he or she satisfies any one of the following:

- Earned an associate or bachelor's degree from an institution of higher education whose accreditation is recognized by SACSCOC (Southern Association of Colleges and Schools Commission on Colleges);
- ACT prior to February 15, 2023: Earned a composite score of at least 23 and at least 19 on the Mathematics and/or English components of an ACT test which is no more than five years old.
- ACT on or after February 15, 2023: Earned a combined score of 40 on the English and Reading (E+R) tests and earned a score of 22 on the Mathematics test.
- SAT: Earned an evidence-based score of 480 for Reading and Writing and a score of 530 for Mathematics on an SAT test which is no more than five years old. The writing section of the SAT is not considered.
- STARR: Earned a minimum score of 4000 (Level II) on English III (EOC) and a minimum score of 4000 (Level II) on Algebra II (EOC).
- Enrolled in a certificate program of one year or less (Level-One certificates, 42 or fewer semester credit hours or the equivalent).
- Previously attended any institution of higher education and has been determined to have met readiness standards by that institution.
- Is serving on active duty as a member of the armed forces of the United States, the Texas National Guard, or as a member of a reserve component of the armed forces of the United States and has been serving for at least three years preceding enrollment.
- Was honorably discharged, retired, or released from active duty as a member of the armed forces of the United States or the Texas National Guard or service as a member of a reserve component of the armed forces of the United States on or after August 1, 1990.
- Is a non-degree seeking or non-certificate seeking student.
- ESOL Waiver: Texas State may grant a temporary waiver from the assessment required under this title for students with demonstrated limited English proficiency in order to provide appropriate ESOL/ESL coursework and interventions.

The office of Undergraduate Admissions must receive the student's transcript and ACT, SAT, or STAAR scores in order to receive the corresponding TSI exemption.

## Developmental Education

If students do not meet the requirements of one or more parts of the initial assessment test, they will be required to participate in an individualized developmental education program that will prepare them for freshman-level coursework in the area of deficiency. The program may require re-testing, enrollment in developmental courses, and/or participation in lab-based education. The student and a Texas Success Initiative representative will jointly determine the appropriate path for the student to meet TSI requirements.

## Transfer Course Evaluation

Students transferring from other institutions of higher education will have their transcripts initially evaluated by the Undergraduate Admissions Office. In accordance with the Texas Education Code: "If a student successfully completes the 42 semester credit hour core curriculum at a Texas public institution of higher education, that block of courses must be substituted in transfer to any other Texas public institution of higher education for the receiving institution's core curriculum. A student shall receive academic credit for each of the courses transferred and may not be required to take additional core curriculum courses at the receiving institution. A student who transfers from one institution of higher education to another without completing the core curriculum of the sending institution shall receive academic credit from the receiving institution for each of the courses that the student has successfully completed in the core curriculum of the sending institution. Following receipt of credit for these courses, the student may be required to satisfy further course requirements in the core curriculum of the receiving institution." (Title 3, Subtitle B, Chapter 61.822(c-d)) Students seeking evaluation of courses from out-of-state or private institutions for fulfillment of general education core curriculum components may complete a transfer evaluation request (<https://transfercenter.txst.edu/txst-professionals-transfer-center-resources/ter.html>) to initiate the process. Students should be prepared to provide documentation such as catalog descriptions, course syllabi, and textbook information to facilitate verification of course content. Students seeking evaluation of coursework for application to a major or minor requirement should contact their advising center for information about the process for evaluation by department faculty.

## Out-of-State/Private School Transfers

A student who is transferring coursework from a private or out-of-state school may not need to take an assessment test. This rule has many restrictions, and students should check with the Texas Success Initiative Office before assuming this applies to them. The following statements apply to exact transfer courses and not to elective credit non-advanced (ELNA) courses taken at private or out-of-state schools. A student who transfers a grade of "A", "B", "C", or "D" in a course evaluated to be the equivalent of one the following Texas State courses is TSI exempt in Mathematics as a result of the course equivalency:

Code	Title	Hours
MATH 1312	College Statistics and Algebra	3
MATH 1315	College Algebra	3
MATH 1316	Survey of Contemporary Mathematics	3
MATH 1317	Plane Trigonometry	3
MATH 1319	Mathematics for Business and Economics I	3
MATH 1329	Mathematics for Business and Economics II	3
MATH 2321	Calculus for Life Sciences I	3



MATH 2417	Pre-Calculus Mathematics	4
MATH 2471	Calculus I	4

A student who transfers a grade of "A", "B", "C", or "D" in a course evaluated to be the equivalent of one of the following Texas State courses is TSI exempt in English, Language Arts and Reading (ELAR) as a result of the course equivalency.

Code	Title	Hours
ANTH 1312	Cultural Anthropology	3
ENG 1310	College Writing I	3
ENG 1320	College Writing II	3
ENG 2310	British Literature before 1785	3
ENG 2320	British Literature since 1785	3
ENG 2330	World Literature before 1600	3
ENG 2340	World Literature since 1600	3
ENG 2359	US Literature before 1865	3
ENG 2360	US Literature since 1865	3
HIST 1310	History of the United States to 1877	3
HIST 1320	History of the United States, 1877 to Date	3
HIST 2327	History of Mexican America to 1865	3
HIST 2328	History of Mexican America from 1865	3
HIST 2381	African American History to 1877	3
HIST 2382	African American History from 1877	3
POSI 2310	Principles of American Government	3
POSI 2320	Functions of American Government	3
PSY 1300	Introduction to Psychology	3
SOCI 1310	Introduction to Sociology	3

If a student has passed some but not all components of the TSI assessment, they should take the remaining parts of the test prior to attempting to register for classes at Texas State.

Incoming students who have taken an assessment test but have not submitted their scores to Texas State should send their scores using the information located at: <https://accuplacer.collegeboard.org/accuplacer/pdf/how-access-test-scores-from-student-portal.pdf>

## History and Government

Pursuant to Texas Education Code §51.302, every student graduating from a state-supported college or university must complete six semester hours of American history (HIST 1310 (<https://current.mycatalog.txstate.edu/search/?P=HIST%201310>) and HIST 1320 (<https://current.mycatalog.txstate.edu/search/?P=HIST%201320>) at Texas State University) and six semester hours of American government (POSI 2310 (<https://current.mycatalog.txstate.edu/search/?P=POSI%202310>) and POSI 2320 (<https://current.mycatalog.txstate.edu/search/?P=POSI%202320>) at Texas State University). According to current law, the university may grant up to three semester hours of credit to the core curriculum history requirement for substantially equivalent work completed by a student in the program of an approved senior ROTC unit, and up to three hours to the core curriculum government requirement (POSI 2320 (<https://current.mycatalog.txstate.edu/search/?P=POSI%202320>) only) for substantially equivalent work completed by a student in the program of an approved senior ROTC unit.

## Field of Study (FOS) & Field of Study Curricula (FOSC)

A Field of Study (FOS) is a selection of lower-division courses guaranteed by state law to transfer and apply to a degree program. Unless repealed or replaced, FOS in effect as of March 1, 2021 will remain in effect until August 31, 2025, upon which date those FOS expire by operation of law. FOS in the following academic areas are pertinent to degree programs offered at Texas State University: Accounting, Art, Biology, Civil Engineering, Communication Studies, Computer Information Systems, Computer Science, Criminal Justice, Economics, Electrical Engineering, Engineering Technology, English, Finance, History, Journalism, Management, Marketing, Mass Communication, Mathematics, Microbiology, Music, Nursing, Political Science, Psychology, Social Work, Sociology, Studio Art, Theatre, and Wildlife Biology.

Beginning in March 2021, the Texas Higher Education Coordinating Board adopted revised transfer rules that establish a new framework for transfer curricula, including new Field of Study Curricula (FOSC). More information can be found regarding FOS and FOSC at the Texas Higher Education Coordinating Board website (<https://www.highered.texas.gov/institutional-resources-programs/public-universities-health-related-institutions/transfer-resources/texas-transfer-framework/>).

## Degree Plan

Upon enrollment, all degree-seeking students are provided with a degree plan through *Degree Works*, a degree audit software. Based upon the student's major, this online system displays the courses required for graduation, tracks the student's progress and maintains an up-to-date list of their remaining course-work. Students and advisors use this tool to facilitate enrollment in appropriate courses and to monitor progress toward the degree. (Texas Education Code, Chapter 51, Section 51.9685)

## Catalog Designation

The catalog designation a student receives when entering Texas State determines the curriculum and other academic policies that apply to the student. Catalog designations are made according to the following guidelines:

1. Students with no prior college work are assigned to the current catalog.
2. Students with prior college work:
  - a. Students with prior college work from out-of-state or private institutions are assigned to the current catalog.
  - b. Students with prior college work during the last six years, solely from Texas public institutions of higher education, are assigned to the Texas State catalog which was in effect at the time of the student's initial college enrollment.
3. Returning Texas State students (Any Texas State student who does not enroll in the university for one long semester but wishes to return is considered a returning student. Refer to "Readmission of Returning Texas State Students (<http://mycatalog.txstate.edu/undergraduate/general-information/admissions/readmission-returning-students/>)"):
  - a. Returning students whose initial Texas State enrollment was more than six years ago are assigned to the current catalog.
  - b. Returning Texas State students whose initial Texas State enrollment was within the last six years and who have completed fewer than 30 hours of college work elsewhere during the interim retain their initial Texas State catalog designation.

- c. Returning Texas State students whose initial Texas State enrollment was within the last six years and who have completed 30 or more hours of college work elsewhere during the interim are assigned to the current catalog.
4. Students may graduate under the requirements for the degree set forth in the Texas State catalog in force during the semester in which they first enroll, provided they graduate within six years from the end of the semester. Transfer students who have been assigned a Texas State catalog based on their first semester at a Texas junior college have six years from the end of the semester upon which their catalog designation was based to graduate, not six years from their initial semester at Texas State. After the expiration of such a period of time, students may have to meet requirements outlined in the current catalog
5. A college dean may change the catalog designation.

Per Texas Administrative Code, Rule 4.25 ([https://texreg.sos.state.tx.us/public/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_tloc=&p\\_ploc=&pg=1&p\\_tac=&ti=19&pt=1&ch=4&rl=25#:~:text=Texas%20Administrative%20Code&text=\(a\)%20Each%20institution%20of%20higher,Division%20Academic%20Course%20Guide%20Manual.](https://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=19&pt=1&ch=4&rl=25#:~:text=Texas%20Administrative%20Code&text=(a)%20Each%20institution%20of%20higher,Division%20Academic%20Course%20Guide%20Manual.)), each institution of higher education shall permit a student who transfers from another Texas public institution of higher education to choose a catalog for the purpose of specifying graduation requirements, based upon the dates of attendance at the receiving institution and at the transferring institution, in the same manner that a non-transfer student may choose a catalog.

Each Texas public institution of higher education shall include information about graduation requirements under a particular catalog in its official publications, including print and electronic catalogs.

## Public Access to Course Information

Information on Texas State's compliance with HB 2504 to provide public access to course information may be found at the following website: [hb2504.txst.edu](https://hb2504.txst.edu/). (<https://hb2504.txst.edu/>) Contents include course syllabi, curriculum vita for the instructor of record, departmental budget reports, end-of-course evaluations of faculty and current work-study job openings. Information on Texas State's undergraduate classroom courses, including lecture and seminar courses, can be found under the Schedule of Classes via Texas State Self-Services Banner.

## Course Load

The following regulations govern the number of credit hours an undergraduate student may carry during a given term:

1. Fall or Spring Semesters: Students enrolled in 12 or more credit hours are considered full-time students. Students in good academic standing may register for up to 18 credit hours each semester. Graduating seniors or other students with a Texas State GPA of 3.50 or higher may register for 19 or more credit hours with approval from their academic dean.
2. Summer Term: Students enrolled in 12 or more hours combined over the summer term are considered full-time students. Students in good academic standing may register for up to 10 credit hours in each of the parts of summer term.

Only in exceptional circumstances, and only with the approval of the college dean, will students be allowed to exceed the stated course load limitations. In any regular semester or summer term during which a

student is enrolled at Texas State, the course load limitations apply to all work attempted, whether at Texas State or elsewhere.

## Credit Hour

For purposes of this catalog and in accord with federal regulations regarding the definition and assignment of credit hours under section 600.0 and 600.24(f) of the Higher Education Opportunity Act, a credit hour is an amount of work that reasonably approximates:

- not less than one hour of classroom or direct faculty instruction and a minimum of two hours out of class student work each for approximately 15 weeks for one semester or trimester hour of credit, or 10 to 12 weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time;
- at least an equivalent amount of work as outlined in the item above for other academic activities as established by the institution including laboratory work, internships, practicum, studio work, and other academic work leading to the award of credit hours.

A semester credit hour is defined by the Texas Higher Education Coordinating Board as a unit of measure of instruction consisting of 60 minutes, of which 50 minutes must be direct instruction over a 15-week period in a semester system. Credit hours must be presented in whole numbers. Academic administrative units are responsible for ensuring that credit hours are awarded only for work that meets these requirements. Students should expect to invest a minimum of two hours of additional work for each hour of classroom or faculty instruction per week.

## Adds and Drops/Schedule Changes

Information regarding schedule changes can be found on the Office of the University Registrar's website at [www.registrar.txst.edu/registration.html](http://www.registrar.txst.edu/registration.html) (<https://www.registrar.txst.edu/registration.html>). Schedule changes and withdrawal dates are published each term in the official university calendar that can be found at: [www.registrar.txst.edu/registration/ac.html](http://www.registrar.txst.edu/registration/ac.html) (<https://www.registrar.txst.edu/registration/ac.html>).

For assistance, contact the Office of the University Registrar.

## Class Attendance

Texas State expects students to attend every scheduled class meeting. General requirements for class attendance are as follows:

1. Faculty are encouraged to establish mandatory attendance requirements in each course.
2. Each faculty member will inform students of the course attendance policy at the initial class meeting.
3. Students are responsible for understanding the attendance policy for each course in which they enroll and for meeting the attendance requirements.
4. Failure to meet the attendance requirements in a course may lower a grade.
5. Students who do not begin attendance will be administratively dropped from the course during the roster certification period.

## Religious Holy Days

"Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, Tax Code. In accordance with Texas Education Code Section 51.911, if a student notifies the instructor(s) of each class from which they be absent due to the observance of a religious holy day, the student will be allowed

to take an examination or complete an assignment scheduled for that absent day within a reasonable time after the absence. The Education Code includes excused absences for travel to and from the religious holy day observance. The student may make up class assignments or examinations without penalty within a reasonable time after the absence. A student who is excused under this section shall not be penalized for the absence, but the instructor may appropriately respond if the student fails to satisfactorily complete the assignment or examination within a reasonable time. Each instructor may establish additional procedures to accommodate the needs of students who are absent from classes to observe a religious holy day. These procedures must not conflict with the state law. Coordinating Board rules now provide for an appeal of a disagreement between the student and a faculty member over an absence related to a religious holy day. If a student and an instructor disagree about the nature of the absence being for the observance of a religious holy day, or if there is a disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the President or the President's designee. The President or the President's designee must consider the legislative intent of Education Code Section 51.911. The student and instructor shall abide by the decision of the President or the President's designee. The academic dean of each college serves as the President's designee to hear requests for decisions on these matters from either the faculty member or the student. Any questions concerning this policy should be directed to the office of the Dean of Students.

## Number of Drops

In 2007, the Texas Legislature enacted Senate Bill 1231, which provides that, except for specific instances of good cause, undergraduate students entering as first-time freshmen at a Texas public institution of higher education in the fall of 2007 or later will be limited to a total of six dropped courses during their undergraduate career.

Under Texas Education Code Section 51.907 "an institution of higher education may not permit a student to drop more than six courses, including any course a transfer student has dropped at another institution of higher education." This law applies to courses dropped at public institutions of higher education in Texas, including community and technical colleges, health science centers that offer undergraduate programs, and universities. Some courses will not count against the six-drop limit. These include courses dropped at independent or private Texas institutions, courses dropped while the student is still enrolled in high school, developmental courses, non-funded courses or courses dropped at colleges in other states. For the purposes of this law, a "dropped course" is defined as a course that is dropped after the census date, but before the last day to drop.

## Dropping a Class

Dropping a class is an official action whereby students inform Texas State that they will cease attending a class in which they are enrolled while remaining enrolled in at least one credit hour. Refer to the registration instructions at [www.registrar.txst.edu/registration.html](http://www.registrar.txst.edu/registration.html) (<https://www.registrar.txst.edu/registration.html>) for details dropping a class.

1. The drop deadline is the first 60 percent of the term. Please refer to the academic calendar on the Office of the University Registrar's website for the most recent current dates.

2. A "W" grade will be assigned automatically when a student drops one or more classes by the automatic "W" deadline, the first 60 percent of the term.
3. After the drop deadline, students will be unable to drop individual classes and will receive the grade (A, B, C, D, F, U, or I,) earned in the course. To initiate an appeal to drop a class or classes after the semester has ended the student must provide:
  - a. a written letter of appeal and
  - b. documentation of extremely extenuating circumstances to the appropriate chair(s).

## Withdrawal from all Classes

Withdrawing from the current term (dropping all classes and going to zero hours) is an official action whereby a student submits the online withdrawal form that goes to the Office of the University Registrar, thus informing Texas State that they will cease attending all classes in which he or she is enrolled. The deadline to withdraw from Texas State is two weeks preceding final examinations during the fall and spring semesters and one week preceding final examinations during the two parts of the summer term.

1. The deadline to withdraw from the semester and receive an automatic "W" is the first 60 percent of the term. Refer to the academic calendar on the Office of the University Registrar's website for the most current dates.
2. After the automatic "W" period, faculty assign grades to students who officially withdraw from the university. Faculty assign "W" grades only to those students who have a passing average at the time the withdrawal action is officially completed. Otherwise, faculty assigns a "U" grade and must report a last date of attendance to allow the Office of Financial aid and Scholarships to calculate potential return of the Title IV funds.
3. Please refer to the academic calendar on the Office of the University Registrar's website for the withdrawal deadline.

Visit the Office of University Registrar's website at [www.registrar.txst.edu/resources/dropping-vs-withdrawing.html](http://www.registrar.txst.edu/resources/dropping-vs-withdrawing.html) (<https://www.registrar.txst.edu/resources/dropping-vs-withdrawing.html> or/) or contact the Office of the University Registrar at 512-245-2367 for the proper procedures. Students living in the university residence halls must also contact the Department of Housing and Residential Life.

## Auditing a Course

To audit a course, a student must be admitted to Texas State University. After the student has registered for classes, they must complete an online Audit Request Form found on the Office of the University Registrar's website by the census date for the term. Check the University Academic Calendar for the exact date. A student will pay the same fees as if the course were taken for credit and the course will be entered on their transcript with a grade of "AU", but the student will not receive credit for the course.

Senior citizens, 65 or older, may audit courses without payment of a fee if space is available. Registration is permitted just prior to the start of the term with reductions made by the tuition adjustment clerk in Student Business Services, after registering.

For more information on auditing a class, please visit the Office of the University Registrar's website: [www.registrar.txst.edu/registration/reg-](http://www.registrar.txst.edu/registration/reg-)

home/audit.html (<https://www.registrar.txst.edu/registration/reg-home/audit.html.html>).

For more information on registering as a senior citizen, 65+ years of age, please visit the Office of the University Registrar's website: [www.registrar.txst.edu/registration/reg-home/65-registration.html](http://www.registrar.txst.edu/registration/reg-home/65-registration.html) (<https://www.registrar.txst.edu/registration/reg-home/65-registration.html>).

## Grade Report (Final Grades)

Semester grades are based on the student's written or oral work in a given course. Attendance may also affect the grade. Final grades for each semester can be accessed through Texas State Self-Service Banner: <https://ssb.txstate.edu>.

## Grade Symbols

Grades at Texas State are indicated by the following symbols: "A"-excellent; "B"-good; "C"-average "D"-passing; "F"-failure-earned; "U"-failure-uneared (student was not academically engaged until end of term) or withdrawn failing; "DA" (Dropped administratively due to never attended); "CR"-credit; "NC" - not completed correspondence course. A grade of "PR" which is temporary and non-punitive, may be assigned in selected courses where the required clock hours needed to complete requirements extend beyond the regular semester or summer session. A grade of EP (emergency passing) may be used during significant disruptions to academic operations created by health pandemics or natural disasters. The EP grades indicate passing credit given and counts toward attempted hours, excess hours and repeat calculations. The EP grade does not count in GPA calculations.

## Incomplete Grades

The "I" grade may be assigned when a student, for non-academic reasons beyond their control, has not completed a portion of the course. If a student needs to repeat a course or a significant portion of a course, a "W", "F", or "U" grade should be assigned according to regulations governing the assignments of such grades. An "I" grade from Texas State will not count as hours completed until another grade is assigned.

One year from the semester in which a Texas State "I" grade is assigned, or a time period specified by the instructor, whichever is shorter, the I grade will automatically be changed to an "F" if the coursework has not been completed. The grade of "I" may be changed only to another letter grade and may not be extended beyond one year from term in which the original grade was assigned. A grade of "I", once changed to an "F" or another letter grade, may not be changed back to a grade of "I".

Once the grade of "I" has been changed to another letter grade, it will be computed in the student's grade point average (GPA). An "I" grade transferred from another institution remains as "I" on the Texas State record until an updated transcript is received from the other institution.

An undergraduate student cannot graduate with an "I" grade on their record. If the student wishes to graduate and if the course is not needed for a degree requirement, the "I" grade will have to be converted to an "F" regardless of whether the one-year time period has passed or not. A grade change request may be submitted by no later than the end of the final examination period before the student's graduation. If no grade change request is received, the grade of "I" will convert to an "F" and will be computed in the student's GPA. For more information, see G/PPS No. 02.12 Grades and Grade Changes. (<https://policies.txst.edu/division-policies/global.html>)

## Withdrawal Grade

A "W" grade cannot be assigned if the student has not officially dropped the course within the semester deadline. A grade of "W" is assigned if a student drops a course by the Automatic "W" Drop/Withdrawal Deadline (see University Calendar in this catalog). After the Automatic "W" Drop/Withdrawal Deadline, a "U" or "W" will be assigned depending on whether the student is passing ("W") or failing ("U") the course at the time the drop/withdrawal action is officially completed. For a complete list of grades currently and previously used at Texas State visit the Office of the University Registrar's website at [www.registrar.txst.edu/our-services/grades.html](http://www.registrar.txst.edu/our-services/grades.html) (<https://www.registrar.txst.edu/our-services/grades.html>).

## Grade-Point Average (GPA)

Texas State utilizes the four-point system. The GPA is the total number of grade points earned divided by the number of semester hours attempted. Semester grade symbols have the following values: "A" = 4 points; "B" = 3 points; "C" = 2 points; "D" = 1 point; "F" and "U" = 0 points. Neither hours nor grades are calculated for "I", "CR", "PR", "NC", or "W". To maintain an average of "C", grade points divided by semester hours attempted must equal at least 2.00.

The Texas State GPA for all work attempted at Texas State is used to determine whether a student is meeting minimum academic standards. Beginning in the fall of 1991, this Texas State GPA will be calculated by the procedures described in the section titled "Repeating Courses" (see below). Courses taken at other schools will not be included in the institutional GPA at Texas State.

## Change of Grade

An individual course grade may be changed when the involved faculty member certifies to the Office of the University Registrar that an error was made in computing the original grade. The grade change must be approved by the department chair/school director and the appropriate college dean. Students who wish to protest a grade earned in a course should first discuss the grade with the instructor. If no resolution is reached, the student may appeal the grade to the department chair/school director. If no satisfactory conclusion can be reached at this level, the student may appeal to the college dean whose decision is final. In accordance with Texas State's records retention policies, a student appeal for a change of grade must be filed no later than 2 years after the grade is issued.

## Transcripts

Effective fall 1991, Texas State transcripts will separate transfer coursework from Texas State course work. Transfer work will be listed first and will show the number of hours transferred. Texas State coursework listed chronologically will follow any transfer coursework. The transcript will show Texas State hours attempted, Texas State hours passed, Texas State grade points and Texas State GPA.

## Repeating Courses

Effective fall 1991, a student may repeat a course, but cannot receive credit for the course more than once unless the course description in the catalog specifically provides that the course may be repeated for credit. When a course is taken more than once from Texas State, the second grade (first repeat) and all subsequent grades (repeats) are included in computing the Texas State hours attempted, grade points earned and GPA. W, I, PR, and RP grades are excluded. If the last grade in a repeated course is lower than an earlier grade, the last grade is used to determine



whether the course fulfills university requirements. If the last time a course is taken is from another school, that course will meet degree requirements, but the last grade at Texas State counts towards the Texas State GPA. A course taken for transfer credit must be repeated as transfer credit to count as a repeat. When a course is taken more than once from a transfer institution, the second grade (first repeat) and all subsequent grades (repeats) are included in computing the Overall hours attempted, grade points earned and GPA. "W" and "I" grades are excluded.

## Student Indebtedness

All University property in a student's possession must be returned and all debts to Texas State, including past due indebtedness to loan funds, must be satisfactorily adjusted before the student is eligible to receive a statement of good standing, an official transcript of credit, graduation, or re-admission to Texas State. Moreover, continued failure to adjust such debt may result in the student's losing the privilege of attending class.

## Academic Standing

Texas State University cares about student success and offers support to students in achieving their academic goals.

### Good Academic Standing

Undergraduate students are expected to maintain a cumulative Texas State grade point average (GPA) of at least 2.00.

#### Academic Notice

Students in Good Academic Standing who earn a *semester* GPA less than 2.00 are placed on Academic Notice. This is not recorded on an official transcript but will result in the student receiving official university communication about resources to address obstacles preventing academic success, to ensure material needs are met, and to develop GPA-improvement strategies.

### Not in Good Academic Standing

Students with a cumulative Texas State GPA below 2.00 must meet specific benchmarks for timely improvement to continue at Texas State per the guidelines below.

#### Academic Warning

Students whose Texas State GPA has initially fallen below 2.00 are placed on Academic Warning and must raise their cumulative Texas State GPA to at least 2.00 to return to Good Academic Standing.

#### Academic Probation

Students already on Academic Warning who fail to raise their cumulative Texas State GPA to at least 2.00 in the subsequent enrolled semester are placed on Academic Probation and must either (a) raise their cumulative Texas State GPA to at least 2.00 to return to Good Academic Standing, or (b) earn a *semester* GPA at Texas State of at least 2.25 to remain on Academic Probation.

#### Academic Suspension

Students on Academic Probation who fail to reach a cumulative Texas State GPA of at least 2.00 or to earn a *semester* GPA at Texas State of at least 2.25 are placed on Academic Suspension. Suspended students are permitted to complete pre-enrolled correspondence or extension courses but are otherwise prohibited from enrolling at Texas State for a duration of (1) one semester if suspended for the first time; (2) two

calendar years if suspended for the second time; or (3) indefinitely if suspended for a third or more time. Students returning to Texas State following an Academic Suspension must apply for readmission (<https://www.admissions.txst.edu/future-students/returning.html>) and will re-enter on Academic Warning.

Suspended students may enroll at another institution but will be held to Transfer Admission requirements upon returning.

## Suspension Appeals

### Appeals to College Dean or Institutional Official

Students with extenuating circumstances may appeal for reinstatement to the appropriate college dean or institutional official, who may impose conditions regarding course load limits, required academic success programs, additional support services, etc.

### Suspension Appeals Committee

Students denied reinstatement through this process will be provided with supplemental instructions and deadlines for escalating their appeal to the Suspension Appeals Committee if desired.

### Reinstatement following Appeal

Students granted reinstatement by a college dean or institutional official or by the Suspension Appeals Committee will be placed again on Academic Warning; if the reinstatement occurs after having already sat out from Texas State at least one long semester, the student must also apply for readmission.

## Exceptions

Cases not covered by the above regulations will be handled by the director of Undergraduate Admissions and the appropriate college dean or institutional official.

## Academic Recovery Program

Students not in good academic standing may be required by the unit housing their major or pre-major to participate in a mandatory academic recovery program meant to assist them in finding a path to academic success. Information about the program will be communicated by the department of Academic Engagement within the Division of Student Success, in partnership with the academic units.

**NOTE:** This policy is effective December 1, 2024. All previous academic standing statuses are subject to the previous undergraduate catalog. For more information, please review the official policy statement, AA/PPS No. 02.02.04 (<https://policies.txst.edu/division-policies/academic-affairs/02-02-14.html>).

## Degree Audit

In accordance with Section 51.9685 (b) of the Texas Education Code (<https://statutes.capitol.texas.gov/docs/ED/htm/ED.51.htm>), after completing 30 semester credit hours students should review their degree audit with the college academic advising center or through their major department/school, as determined by college guidelines. The degree audit will list all courses required for graduation. Students also have the option to run their own unofficial audit at any time before seeing their advisor. The audit should be used to determine which courses to take at each registration.

It is highly recommended that students see their academic advisors to review their degree audits within their last 30 hours prior to graduation. Students need to verify that they are meeting the appropriate degree requirements including coursework and grade-point averages in all courses taken at Texas State and in the major and minor fields of study.

If any of the grade-point averages are below the minimums required for graduation, the degree audit can be used in deciding how to raise the averages in the remaining coursework.

The college dean has the final approval and appeal for all graduation requirements, including but not limited to degree audits, grade point average, courses, prerequisites, graduation application, transfer credit, Texas state coursework, catalog time limit and designation.

## Teacher Certification

Any degree that includes preparation for becoming a Texas certified teacher will have special degree and graduation requirements. Please refer to the degree requirements under the appropriate College's section and to the Educator Preparation Program (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>) section of this catalog.

## Application for Graduation

Students must indicate their intent to graduate through applying for graduation at the beginning of their final semester by completing the graduation application using the online process. If a student fails to complete the required courses in time for a planned graduation for that term, the student must reapply for a subsequent graduation. Failure to apply for graduation on time may delay the awarding of the diploma until the following graduation. To allow for the receipt and processing of official transcripts in a timely manner, students taking off-campus courses in their final semester should make sure that the Office of Undergraduate Admissions receives official transcripts as soon as they are available from the sending institution.

## Defining Commencement Participation and Graduation

Degree candidates that choose to participate (walk) in a commencement ceremony must attend their corresponding college/department ceremony during the semester they will complete their degree requirements.

Certificate candidates that are simultaneously graduating with a degree (doctoral, specialist, master's, or bachelor's) are eligible to participate (walk) in their corresponding college/department ceremony during the semester they will complete both their certificate and degree requirements.

For questions, please contact the academic dean's office (undergraduate candidates) or The Graduate College dean's office (graduate candidates).

Graduating (receiving a diploma) and participating (walking across the stage) in the commencement ceremony are two distinctly different things. Candidates will be considered "graduated" when they have met all of the following:

1. Have applied for graduation online by the posted semester deadline
2. Have had their application approved by their respective advising center or the Graduate College
3. Have completed all degree requirements
4. Have had final semester grades posted to their Texas State transcript
5. The Dean of the respective college, or the Graduate College, has certified candidates as graduates

Participating in the commencement ceremony and having one's name in the commencement program does not mean that a candidate has completed the requirements for graduation. Ultimately, the final awarding

of degrees, honors and mailing of the diplomas is contingent upon satisfactory completion of the appropriate requirements by each candidate and the Dean's final certification.

## Incomplete Grades

Incomplete grades should be cleared through the Office of the University Registrar's Offices **at least ten days before the commencement for which the degree is to be conferred.**

Per section 03.03 of G/PPS No. 02.12 Grades and Change of Grades, (<https://policies.txst.edu/division-policies/global.html>), an undergraduate student cannot graduate with an "I" grade on their record. If the student wishes to graduate and if the course is not needed for a degree requirement, the "I" grade will have to be converted to an "F", regardless of whether the one-year time period has passed or not. A grade change request may be submitted by no later than the end of the final examination period before the student's graduation. If no grade change request is received, the grade of "I" will convert to an "F" and will be computed in the student's GPA.

## Minimum Degree Hours and Advanced Hours

All undergraduate degrees at Texas State require a minimum of 120 semester credit hours, including 36 advanced hours (junior and senior level courses).

## Texas State Coursework Requirement

To qualify for graduation with a bachelor's degree, a student must complete, through Texas State coursework, at least 25 percent of the minimum number of semester credit hours required for the degree; within this requirement, at least 24 semester credit hours must be advanced (junior or senior) and at least 12 hours of the advanced work must be completed in the major at Texas State. Additionally, at least 24 semester credit hours of the last 30 hours completed that are required for the degree must be taken at Texas State. Correspondence, extension, and off-campus coursework completed through Texas State may be applied toward Texas State coursework requirements. Credit-by-examination may not be applied toward Texas State coursework requirements.

## Writing Intensive Requirement

Certain Texas State courses are designated as "writing intensive" and are labeled as (WI) in this catalog and the schedule of classes. In order for a course to receive this designation, at least 65 percent of the course grade must be based on written assignments and a minimum of one extended piece of writing must be required. All undergraduate degrees at Texas State require a minimum of 9 semester credit hours of writing intensive courses for graduation. Writing intensive credit must be taken at Texas State.

## Minimum Grade-Point Requirements for Graduation

Before graduating from Texas State with a baccalaureate degree, students seeking a first or second bachelor's degree must satisfy the following minimum grade requirements:

1. A Texas State GPA of 2.00
2. A GPA of 2.25 in the major(s)
3. A GPA of 2.00 in the minor(s)

NOTE: Individual departments/schools as well as degree programs with Teacher Certification may have higher requirements listed in the appropriate sections of this catalog.

## Maximum Elective Hours in Courses for the Major or Minor

No more than six semester credit hours within a major or a first teaching field may count as electives after the minimum requirements of the major or teaching field are fulfilled. Likewise, no more than six semester credit hours may be counted as electives in a minor or second teaching field once the minimums have been met. Approval of elective credit beyond these maximums must be granted by the appropriate college dean. If the degree program requires electives, the number of free elective hours a student will complete depends on the number of hours a student may need to achieve the minimum hours, and/or the 36 advanced total hours required.

## Second Bachelor's Degree

Students earning second bachelor's degrees subsequent to receiving the first bachelor's degree are eligible for graduation with honors if they complete 48 or more hours at Texas State in pursuit of the second bachelor's degree. Texas State coursework requirements (as indicated above) apply except that the advanced semester credit hours required are determined by the appropriate college dean.

For students who have already completed a first baccalaureate degree at an accredited college or university, with the approval of the department chair/school director and the college dean, the core curriculum requirements for that degree may be accepted in lieu of Texas State's general education core curriculum. However, requirements associated with particular degrees, e.g., completion of the second semester of a modern language for a Bachelor of Arts degree, or legislative requirements, e.g., history and government course requirements, must be included in an approved program for a second baccalaureate degree.

## Dual Bachelor's Degrees

If two different bachelor's degrees are conferred simultaneously, the student must complete a minimum of 30 semester credit hours beyond the requirements of the single degree. Degree audits must be filed in the office of both college advising centers. Graduation will occur when the student has completed requirements for both degrees. Students completing dual bachelor's degrees receive two diplomas. Refer to the Undergraduate Degree section of the catalog for the different degrees offered.

## Double Majors

A student who fulfills the specified requirements for two different majors authorized under a single degree has completed a double major and will receive a single diploma. Both majors appear on the diploma. Contact your advising center for more information on what programs have double majors.

## Time Limit for Earning a Degree

Students may graduate under the requirements for the degree set forth in the Texas State catalog in force during the semester in which they first enroll, provided they graduate within six years from the end of the semester. Transfer students who have been assigned a Texas State catalog based on their first semester at a Texas junior college have six years from the end of the semester upon which their catalog designation

was based to graduate, not six years from their initial semester at Texas State. After the expiration of such a period of time, students may have to meet requirements outlined in the current catalog. "Requirements for the Degree" refers to the pattern of courses and grade-point averages required for graduation. It does not include other rules and regulations such as probation and suspension criteria, requirements for admission to courses or programs, etc.

## Transfer Credit from Two-Year Colleges

In accordance with rule §4.25 of the Texas Administrative code ([https://texreg.sos.state.tx.us/public/readtac\\$ext.TacPage/?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_tloc=&p\\_ploc=&pg=1&p\\_tac=&ti=19&pt=1&ch=4&rl=](https://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=19&pt=1&ch=4&rl=)), Texas State will apply to a degree up to 66 semester credit hours from an accredited junior/community college (at the approval of the individual college dean, 6-8 hours may be added). At the time of transfer, all transferable work attempted at a junior/community college will be recorded on the official transcript. If the number of hours transferred from a junior college exceeds 66, the student's chair or director will recommend to the college dean how the student will satisfy degree requirements. For more details, see the Undergraduate Admissions (<http://mycatalog.txstate.edu/undergraduate/general-information/admissions/>) section of this catalog.

J.C. Kellam Building  
Telephone: 512-245-8148 Fax: 512-245-1757

The Athletics Certification office is responsible for obtaining, evaluating, and documenting the academic credentials for approximately 400+ student-athletes in accordance with National Collegiate Athletic Association (NCAA) and Sun Belt Conference eligibility rules. This office provides the official certification of eligibility documentation to the Texas State Athletics department.

## Dean's List

To be eligible for the Dean's List at the close of any fall or spring semester, an undergraduate student must have earned a minimum Grade Point Average of 3.5 in that semester on at least 12 credit hours. Hours and grades earned through Texas State correspondence, testing and developmental courses are not counted in the hours required to be eligible for Dean's List nor in the GPA calculation for Dean's List. Extension courses and Graduate courses do count for Dean's List calculation.

## Graduation with Academic Honors

Students earning a GPA of 3.40-3.59 will graduate *cum laude*; 3.6-3.79 will graduate *magna cum laude*; 3.8-4.0 will graduate *summa cum laude*.

Effective fall 2021, to be eligible for graduation with academic honors, a student seeking a baccalaureate degree must have completed at least 48 semester credit hours at Texas State preceding graduation. Calculation of the GPA to determine academic honors status is based on all Texas State work applied to the first baccalaureate degree, including work completed in the final semester.

Hours earned through Texas State correspondence courses and extension courses count toward GPA and academic hours eligibility. Hours earned through Texas State credit-by-examination, work/life experience and other courses that offer only "CR" (pass/fail) grades also count toward academic honors eligibility, but they do not count toward

GPA. All coursework to count toward academic honor eligibility must be evaluated and graded by Texas State faculty.

Transfer students who have earned at least 48 semester hours at Texas State are eligible to graduate with academic honors if their Texas State GPA meets the above criteria. Students earning second baccalaureate degrees are eligible for graduation with academic honors if they complete 48 or more semester credit hours at Texas State, meeting the GPA criteria, in pursuit of a second degree. All coursework to count towards academic honors eligibility must be evaluated and graded by Texas State faculty.

## Honor Societies

The following honor societies are open to qualified Texas State students. More information may be obtained through the Student Organizations Council (SOC). For a complete list of all Honor Societies, see the *get involved* website at [www.getinvolvedlbjisc.txst.edu](http://www.getinvolvedlbjisc.txst.edu) (<https://getinvolved.lbjisc.txst.edu/>).

### Alpha Chi

Alpha Chi is a national honor society, which promotes academic excellence and exemplary character among undergraduate college and university students and honors those who achieve such distinction. To qualify for membership at Texas State, a student must be a first-time undergraduate, a junior or senior (having attained no less than 60 credit hours), have a minimum Texas State GPA of 3.50 on at least 45 semester hours at Texas State. Graduate students with a 4.0 and at least 15 hours of graduate course-work at Texas State also qualify for Alpha Chi membership. Alpha Chi is the oldest honor society at Texas State, founded in 1922. For more information about Alpha Chi at Texas State, contact advisors Dr. Peter Golato in the Idea Center, Dr. Ronald Brown in History, Dr. Paula Williamson in Biology, or Dr. Erika Nielson in Education. The national website (<https://alphachihonor.org/>) (<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Falphachihonor.org%2F&data=05%7C02%7Cmh07%40txstate.edu%7Cc3636deb0fb94e85ea7c08dc33221ba2%7Cb19c134a14c94d4caf65c420f9b0c5d%7C0%7C0%7C638441468779397558%7CUnknown%7CTWFPbGZsb3d8eyJWljoIMC4wLjAwMDAilCJQljoIV2luMzliLCJBtIi6Ik1hadiV6ImlmZS0%7C0%7C%7C%7C&sdata=UBuKbjMxBttHasb2ukRDSkq5a4SKJbNMnV8eTak0fo%3D&reserved=0>) discusses the national activities, the professional journal for student members, its annual conferences, and national scholarship opportunities for members of Alpha Chi National Honor Society.

### Alpha Lambda Delta

Alpha Lambda Delta is a national academic honor society for freshmen that honors academic excellence during a student's first year in college. Its purpose is to encourage superior academic achievement, to promote intelligent living and a continued high standard of learning, and to assist women and men in recognizing and developing meaningful goals for their roles in society. Membership is open to all freshmen who are registered for a full course of study leading to a bachelor's degree, who achieve a minimum scholastic average of 3.50 (based on grades of the first full semester or on the cumulative average of the first year in college), and who have paid the initiation and lifetime membership fee. For more information, contact the Honors College at [honorsadvising@txstate.edu](mailto:honorsadvising@txstate.edu).

### Golden Key National Honor Society

Golden Key recognizes and encourages scholastic achievement and excellence in all undergraduate fields, supports the faculty and

administration in developing and maintaining high academic standards, provides economic assistance by means of annual scholarships, and promotes altruistic conduct through volunteer service to Texas State and community. The Golden Key National Honor Society accepts students who have a minimum cumulative GPA of 3.40, have completed 60 college hours (25 of which must have been taken at Texas State), have filed a Member Data Form, and have paid the initiation and lifetime membership fee.

## The Honor Society of Phi Kappa Phi

Phi Kappa Phi is the nation's oldest, largest, and most selective collegiate honor society for all disciplines. This prestigious honor society was chartered at Texas State in 2013 and 30 members of the faculty, staff, and administration signed the charter petition. To qualify for membership, undergraduates must be juniors who are in the top 7.5 percent or seniors in the top 10 percent of their respective classes. Graduate students must rank in the upper 10 percent of their class. Students who are invited to become members may join by paying the initiation and membership fee and participating in an induction ceremony. In addition to numerous membership benefits, the national organization awards over \$1 million in scholarships and fellowships each biennium. The local chapter website is [www.txst.edu/honors/opportunities/engaged-learning/organizations/phikappaphi.html](http://www.txst.edu/honors/opportunities/engaged-learning/organizations/phikappaphi.html) (<https://www.txst.edu/honors/opportunities/engaged-learning/organizations/phikappaphi.html>)

Texas State believes that freedom of thought, innovation, and creativity are fundamental characteristics of a community of scholars. To promote such a learning environment, the university has a special responsibility to seek diverse and international perspectives, and to nurture sensitivity, tolerance, and mutual respect. The promotion of the values of diversity and equal opportunity for all people through understanding of the contributions and perspectives of people of differing race, ethnicity, culture, language, religion, gender, sexual orientation, and physical abilities and disabilities. (Multicultural Curriculum Transformation in Higher Education, Eds., A. I. Morey and M. K. Kitano, 1997). In support of an increasingly diverse society and student body, Texas State is dedicated to increasing multiculturalism in the curriculum. Many professors have transformed their courses and pedagogical practices through the Multicultural Curriculum Transformation and Research Institute coordinated by the Center for Diversity and Gender Studies. Thus, courses are identified in the catalog and schedule of classes that offer students an opportunity to enhance their learning about multiculturalism and global perspectives

The multicultural classification system helps Texas State track multicultural courses to determine the level at which it is providing U.S. and international diversity topics in the curriculum. The MULT and MULP designation reflects how much multicultural content and diversity infusion is taught in the course. The classification system recognizes the significance of multicultural content and multicultural perspectives. Students benefit from multicultural content as well as perspectives.

### Definitions

**Multicultural Content (MULT):** Courses with 60 percent multicultural content (U.S. or international)

**Multicultural Perspective (MULP):** Courses using a variety of strategies to encourage multicultural literacy, including content, instructional strategies, assessment, and classroom interactions. (When this is the only classification noted, the content is less than 60 percent).



Multicultural Content and Perspectives (MULP, MULT): combination of the above.

#### Alkek Library

[www.library.txst.edu](http://www.library.txst.edu) (<http://www.library.txst.edu/>)

Telephone: 512-245-2686 Fax: 512-245-0392

The Albert B. Alkek Library, located in the heart of the San Marcos Campus, is where students and researchers come to find abundant information resources, cutting-edge technology, and diverse work and study spaces that support successful research and academic endeavors. The Alkek Library is the architectural centerpiece and intellectual hub of the campus and is open year-round with early-morning and late-night hours during the fall and spring semesters. In addition, the library's online services and resources can be accessed through the University Libraries website ([library.txst.edu](http://library.txst.edu) (<http://library.txst.edu/>)).

Special holdings of the library include The Wittliff Collections (includes the Southwestern Writers Collection, the Southwestern and Mexican Photography Collection and the Texas Music Collection) and the Special Collections & Archives. The Alkek Library is also a selective depository for federal government documents. As a member of the Texas Digital Library, the library's Research and Scholarship Repository ([digital.library.txstate.edu/](http://digital.library.txstate.edu/) (<http://digital.library.txstate.edu/>)) features unique Texas State collections, including scholarly works authored by university faculty, students and staff. A separate repository houses Digital Collections from The Wittliff and Special Collections & University Archives ([dc.library.txstate.edu](https://dc.library.txstate.edu) (<https://dc.library.txstate.edu/>)).

Wireless access to the university network is available within the Alkek Library. Laptop computers may be checked out for building use and there are multiple workstations, laser printers and scanners located throughout the building.

The first floor of the library known as Alkek One, includes a suite of creative technology spaces designed to give students from all disciplines access to resources that will help them explore, create, and discover. These spaces include: the Immersion Studio, for exploring virtual, augmented and mixed realities; MakerSpace, for creating physical innovations; GeoSpace, for GIS and data story telling exploration; DesignSpace for discovering 2D and 3D design possibilities; and the YouStar Studios, for recording audio and video projects and editing polished productions.

The Alkek Library also boasts a Graduate Commons space for graduate students and other education, instruction, and research spaces and features within its seven stories.

The library maintains cooperative borrowing agreements with other libraries in the region. Through TexShare, a statewide resource sharing program, students and faculty may borrow materials held by most public and private university libraries in the state. In addition, books and articles not available through Texas State can be requested through Interlibrary Loan and they will be borrowed from libraries across the country and sometimes even internationally.

#### LBJ Student Center, 5th Floor

[www.careerservices.txstate.edu](http://www.careerservices.txstate.edu) (<http://www.careerservices.txstate.edu/>)

Telephone: 512-245-2645

Career Services prepares, inspires, and empowers students for career success, serving as a bridge between students' college experience and life after Texas State University. Starting their first year, and continuing

beyond graduation, we are here to help support students on their career journey. In addition we help them connect their experiences—whether from the classroom, campus activities, on- or off-campus employment, internships, or even graduate school—to their post-graduation goals.

Among our services are:

**Career Planning and Exploration** - Career center staff are available to help you learn how skills and interests relate to prospective career opportunities, research career pathways, and plan and implement post-graduation goals.

**Job Search Assistance** – Whether seeking part-time or fulltime employment, career center staff are available to provide support throughout the job search process, including identification of job opportunities, developing resumes, writing cover letters, and improving interview skills.

**Internships** - There are multiple internship pathways available to Texas State students. Career center staff are available to help you research, identify, and apply to a variety of internship opportunities.

**Employer Connections** - Career Services works with employers to create opportunities for students to connect with potential internships and jobs while building their professional network. This is achieved by hosting a wide range of engagement and discovery opportunities including career fairs, information sessions, on-campus interviews, and networking events.

#### LBJ Student Center 5-5.1

[www.ods.txst.edu/](https://www.ods.txst.edu/) (<https://www.ods.txst.edu/>)

Telephone: 512-245-3451 Fax: 512-245-3452

The Office of Disability Services (ODS) at Texas State University is dedicated to promoting equal access to all university programs and activities for students with disabilities through the coordination of academic accommodations and support services. Texas State students should contact the ODS to discuss the services the office can provide and how to register with the office. It is the student's responsibility to provide documentation of their disability. Forms of documentation include the student's self-report and evidence from external sources (e.g., medical records, school records).

Texas State University does not discriminate on the basis of disability in the recruitment and admission of students or in the operation of any of its programs and activities. Students with disabilities must meet the same admission requirements as all other prospective students. If a student believes their educational and/or personal goals for success have been negatively impacted due to disability-based reasons, then they may address these issues in the supplemental essay portion of the admission application. Students needing sign language services for meetings with Admissions, the Office of Disability Services, or their academic advisor should contact the ODS at least one week prior to the event to ensure interpreter availability.

Students with disabilities may receive financial assistance from the following entities: Federal Student Aid, which is an Office of the U.S. Department of Education; the Texas Workforce Commission (TWC); the Texas State University Financial Aid and Scholarships and the Office of Disability Services.

The Office of Disability Services has a procedure for enrolled students to file a concern they may have with a faculty and/or staff member related to their accommodations. Students have the option to raise their concern



to a grievance if they feel it is appropriate; however, an ODS staff member may raise a concern into a grievance if deemed appropriate. Texas State University has established grievance procedures for the prompt and equitable resolution of complaints related to accommodations associated with a disability and illegal discrimination on the basis of disability, which are outlined respectively in the ODS Dispute Resolution Procedure and UPPS No. 04.04.46 (<http://www.txstate.edu/effective/UPPS/UPPS-04-04-46.HTML>), "Prohibition of Discrimination". Students who have concerns or complaints should contact the ODS Director at 512-245-3451 or [ods@txstate.edu](mailto:ods@txstate.edu).

J.C. Kellam Building Room 240  
[www.financialaid.txstate.edu](http://www.financialaid.txstate.edu) (<http://www.financialaid.txstate.edu>)  
 Contact Us: TXST One Stop (<https://onestop.txst.edu/contact-us.html>)  
 Telephone: 512-245-8978

Texas State makes every effort to help students who need assistance in paying for the cost of their education. Interested students should contact Financial Aid and Scholarships or visit the office's website to view the types of assistance that are available.

## Federal and State Aid Programs

Texas State participates in both federal and state financial aid programs. Students with sufficient financial need can benefit from such grants as the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, TEACH Grant, Iraq-Afghanistan Service Grant, TEXAS Grant, Texas State Tuition Grant and Texas Public Educational Grant. Aid is offered in the form of grants, work study, student and parent loans, and scholarships.

## Applying for Financial Aid

To apply for financial aid, a student must complete and submit the Free Application for Federal Student Aid (FAFSA) online at <https://studentaid.gov/h/apply-for-aid/fafsa> (<https://studentaid.gov/h/apply-for-aid/fafsa/>) and include the Texas State University school code – 003615.

## Deadlines

- January 15 is the priority date for filing a FAFSA for the upcoming academic year (fall and spring). If the deadline is missed, a student may still apply and receive some forms of assistance such as the Pell Grant and student loans.
- March 1 is the priority deadline for filing the separate summer financial aid application prior to the upcoming summer semester. This separate summer application, which can be found online at [www.financialaid.txstate.edu](http://www.financialaid.txstate.edu) (<http://www.financialaid.txstate.edu>), is in addition to filing the appropriate year's FAFSA.
- For scholarship deadline information, visit [www.financialaid.txstate.edu/scholarships](http://www.financialaid.txstate.edu/scholarships) (<http://www.financialaid.txstate.edu/scholarships/>).

## Satisfactory Academic Progress Requirements

Federal regulations require students to meet certain minimum academic standards in order to remain eligible for financial assistance. The requirements are that a student:

1. maintain a minimum cumulative Texas State GPA;
2. complete at least 67 percent of all coursework; and
3. not exceed a maximum limit of attempted hours toward their degree.

Additional program-specific requirements also exist. View these SAP criteria in more detail at [www.financialaid.txstate.edu](http://www.financialaid.txstate.edu) (<http://www.financialaid.txstate.edu>) by selecting *Financial Aid* from the menu and then *Maintain My Eligibility*.

## Courses Counting

The federal government requires that a student's aid eligibility only be based on those courses that count toward the completion of the student's degree. So to be considered a full-time student for financial aid purposes, a student would want to enroll in 12 credit hours as an undergraduate (or 6 credit hours as a graduate) **that count toward their degree**. Remember, to be eligible for most financial aid, a student only needs to be enrolled at least half-time (6 hours for undergraduates and 3 hours for graduates). For more details, visit [www.financialaid.txstate.edu](http://www.financialaid.txstate.edu) (<http://www.financialaid.txstate.edu/>), select *Financial Aid* from the menu and then *Receive My Aid*.

## Alternative Loan Resources

For information on alternative loans, visit [www.financialaid.txstate.edu](http://www.financialaid.txstate.edu) (<http://www.financialaid.txstate.edu>), select *Financial Aid* from the menu and then *Types of Aid*.

## Official Withdrawals and Financial Aid

If a student withdraws or is expelled from the university on or prior to the 60-percent point of the semester, the student is required to repay any unearned portion of federal Title IV aid. For more details, visit [www.financialaid.txstate.edu](http://www.financialaid.txstate.edu) (<http://www.financialaid.txstate.edu>), select *Financial Aid* from the menu and then *Withdrawing & Attendance*.

## Unofficial Withdrawals and Financial Aid

If a student is a federal financial aid recipient and fails to receive earned grades (e.g., all U's, all I's or a combination of all U's, W's or I's) in courses that span the entire period the student is scheduled to complete during a semester, the student is considered to have unofficially withdrawn from the university. As a result, a federal withdrawal calculation must be performed to determine the amount of Title IV funds that the student must repay. For more details, visit [www.financialaid.txstate.edu](http://www.financialaid.txstate.edu) (<http://www.financialaid.txstate.edu>), select *Financial Aid* from the menu and then *Withdrawing & Attendance*.

## Non-Attendance and Financial Aid

If the student is a Pell Grant, Iraq-Afghanistan Service Grant (IASG) or TEACH Grant recipient, federal regulations require the student to have begun attending the courses for which the student is enrolled and receiving these grants. If on the census date roster (e.g., 12th class day of each fall and spring semester) the student is reflected as not attending a course, the student is assumed (for financial aid purposes) not to have begun attendance for that course. The student's grant will then be adjusted or cancelled based on the courses the student has actually begun attending. If the student is receiving any other forms of federal or state financial aid, this aid may also require adjustment due to the revised enrollment status. For more details, visit [www.financialaid.txstate.edu](http://www.financialaid.txstate.edu) (<http://www.financialaid.txstate.edu>), select *Financial Aid* from the menu and then *Withdrawing & Attendance*.

## To Withdraw

The student must submit the *Online University Withdrawal* form available via the University Registrar's Office. Financial aid recipients should speak with a Financial Aid and Scholarships representative before the withdrawal is processed. The withdrawal date is defined as the date on which a student first indicates his or her intent to withdraw.

DHRL Office Building  
515 N. Comanche Street  
www.reslife.txstate.edu (<http://www.reslife.txstate.edu>)  
Telephone: 512-245-4663 Fax: 512-245-7619

## University Housing Policy

In support of the educational mission of the university and the student value of the on-campus residential experience, the Department of Housing and Residential Life provides a safe, comfortable and convenient living environment, while offering opportunities for increased campus involvement, community interaction and academic assistance. For these reasons, the university requires that certain students live on campus.

New freshmen under the age of 20 (by September 1 for fall admission or January 1 for spring admission) with fewer than 30 semester credit hours are required to live in on-campus university housing, unless they qualify for an exemption outline in the housing contract. All students who graduated from high school within the preceding 12 months of the semester of their admission are required to live on campus, regardless of the number of credits they may have accumulated prior to attending Texas State University.

## Living On-Campus

It is the mission of the Department of Housing and Residential Life to provide welcoming living communities that foster academic success, campus engagement, and personal development. The on-campus living experience is where lifetime friendships are formed, ideas and ideals are exchanged, and a whole world of opportunity and potential is spread before those willing to explore, study, and get involved.

Research at Texas State and nationally has shown that, when compared to those living elsewhere, students living in the residence halls are more fully involved in academic and extracurricular activities and tend to earn a higher GPA.

## Dining On-Campus

The university offers several different dining plans so students can pick the one that best fits their schedule, eating preferences, and budget.

## Applying to Live On-Campus

Contracts for on-campus housing may be submitted through the established process upon formal admission to the university.

## Cancellation Deadlines

Contracts for on-campus living are for the entire academic year. Once the contract has been signed and submitted there are very limited reasons for cancellation. For those not planning to attend the university, there is a prorated refund scale that is dependent upon the date of cancellation. See the contract terms and conditions for specific cancellation details.

The tuition and fees rates are available on the TXST One Stop website (<https://onestop.txst.edu/cost-payments/cost-attendance/tuition-rates.html>).

The university reserves the right to change fees in keeping with the acts of the Texas Legislature and the Board of Regents of the Texas State University System.

## Tuition

### Tuition for Excessive Undergraduate Hours

Texas Education Code §54.014 specifies a maximum number of semester credit hours an undergraduate student may attempt while paying Texas resident tuition. Students who exceed the maximum hour limitations will be charged the non-resident tuition rate.

Maximum Hour Limitations:

- First term in Texas public institution prior to fall 1999 - Exempt
- First term in Texas public institution from fall 1999 to summer 2006 - 45 hours over degree program
- First term in Texas public institution from fall 2006 to the present date - 30 hours over degree program

Students should meet with their academic advisor regarding their excessive hours status. For additional information, please visit the [Undergraduate Excessive Hours](https://www.sbs.txst.edu/billing/excessive-hours-fee.html) (<https://www.sbs.txst.edu/billing/excessive-hours-fee.html>) page.

### Tuition Rebate Program

Under Texas Education Code §54.0065, qualified students will receive up to a \$1,000 tuition rebate upon graduation from Texas State. Submit the Tuition Rebate Application to your college academic advising center no later than 5:00 p.m. on the Monday immediately following your commencement. If you do not graduate because you did not meet the graduation requirements, you will need to complete another form for the next semester in which you are eligible. To earn the rebate, it is particularly important to follow the advice and counsel of the academic advisors.

Students must consult with their academic advisor to assure they meet all requirements to qualify for this program. For additional information, including the Tuition Rebate Application form, please visit the Tuition Rebate Information (<https://www.sbs.txstate.edu/billing/Tuition-Rebate-Information.html>) page.

## Special Fees and Charges

Admission Application Fee (mandatory & non-refundable)	\$75.00
Admissions Application & Evaluation Fee for International Applicants (mandatory & non-refundable)	\$90.00
Auditing Fee	same as if course were taken for credit
Certificate Fee (payable when applying for teacher certification)	
Texas Standard Certificate	\$77.00
Deficiency Plan Fees (for students seeking teacher certification)	
First Plan	\$75.00

Additional Plans (each)	\$25.00
Late Payment Fee	\$65.00
Electronic Course Fee	\$50.00/semester credit hour
Evaluation of Foreign Credentials (for domestic applicants)	\$15.00
Payment Plan Enrollment Fee (for handling & other processing)	\$30.00
Late Registration Fee	
Prior to initial payment deadline	\$25.00
1st 7 class days - fall/spring	\$100.00
1st 2 class days - summer	\$25.00
8th - 12th class day - fall/spring	\$200.00
3rd-4th class days - summer	\$25.00
Off-Campus Course Fee	\$30.00/semester credit hour
Fresh Orientation Fee	\$115.00
Transfer, International, and Other Types Orientation Fee	\$60.00
Physical Therapy Application Fee	\$50.00
Post-Baccalaureate Teaching Intern Application Fee	\$500.00
Returned Item Fee (for handling and other processing)	\$30.00
Transcript Fee (official copy)	\$5.00

## Auditing Fees

Where auditing of a course is permitted, all fees will be the same as if the course were taken for credit. Eligible senior citizens, 65 or older, may audit courses without payment of a fee if space is available. For additional information, please visit the Auditing a Course page.

## Campus Parking/Vehicle Registration Fee

Every faculty or staff member, or student, who operates or parks a vehicle on campus must:

- register the vehicle at Parking Services;
- purchase a permit;
- properly display a Texas State physical or virtual parking permit anytime the vehicle is parked on campus; and
- become familiar with and abide by the traffic and parking rules which are enforced at all times throughout the year.

Fees for vehicle registration will be published each year in the Schedule of Classes and in the official rules and regulations (<https://www.parking.txstate.edu/regulations.html>). The purchase of a permit and registration of the vehicle does not guarantee a parking space.

The online vehicle registration process can be accessed through the Parking Services portal at [txstate.aimsparking.com](https://txstate.aimsparking.com) (<https://txstate.aimsparking.com/>) or via Catsweb (<https://www.catsweb.txstate.edu/>). Everyone must register online and in advance of bringing a vehicle to campus. Additional information concerning the purchase and issuance of parking permits may be obtained by contacting Parking Services at 512-245-2887.

## Course Repeat Fee

The Texas Legislature eliminated funding to higher education for courses that are attempted three or more times. An attempted course is defined as any course in which a grade is earned on the transcript,

including repeated courses and courses dropped with a grade of "W". For additional information, please visit the Course Repeat Fee (<https://www.sbs.txstate.edu/billing/course-repeats.html>) page.

## International Student Operations Fee

All international students with an immigration status of "F-1" or "J-1" will be charged \$85.00 per semester for the maintenance of records, compliance with government regulations, and other services.

## Laboratory Fees

The amount of lab fees varies on a per course basis. See the Schedule of Classes for current lab fees.

## Late Registration Fees

A late fee will be charged if a student registers during the late registration period.

## Testing Fees

Administration fees will be charged for Proctoring Exam Services for Texas State Students and Non-Texas State students who wish to take a course exam at the Testing, Evaluation, and Measurement Center (TEMC) in San Marcos, or the Round Rock Campus Testing Center. The charge is \$40.00 per test for exams two hours or less. The fee amount will vary with longer time limits. This fee also applies to students who wish take a course exam through the TEMC rather than at the times offered as part of distance education courses. Students who request make-up exams allowed by Texas State faculty will also be charged \$40.00 per test for exams two hours or less.

Varying fees will also be charged for:

- Exams for credit
  - CLEP
  - Departmental
  - ACTFL-OP
- Placement and college readiness tests
  - Accuplacer/Texas Success Initiative Assessment (TSIA)
  - Texas Higher Education Assessment (THEA)
- Upper-level barrier exams
  - ATI TEAS BSN
  - Punctuation, Usage, and Grammar (PUG)

Visit <https://www.txstate.edu/temc/> for specific fees, additional services, and information.

## Room and Board Rates

Information regarding room and board rates for a specific semester may be obtained at [www.reslife.txstate.edu](http://www.reslife.txstate.edu) (<http://www.reslife.txstate.edu>). Room and board is billed on a semester basis and may be paid in full at registration or in installments. All residence halls will be closed between semesters; however, Texas State may choose to keep some of the halls open during the break for an additional room charge.

## Refund of Room and Board Fees

Any student who withdraws officially from Texas State may receive a refund on the unused portion of the room and board payment. Room and board charges will continue until the student has officially moved from university housing and has received written clearance from the director

of Housing and Residential Life. Any refund due will be applied to any unpaid financial obligation with Texas State.

## Students' Financial Obligations

Tuition and fees are to be paid in full before the beginning of the semester or paid under an installment plan with an initial payment due before the beginning of the semester. Students are expected to meet their financial obligations to Texas State within the designated time allowed. For additional information, please visit the TXST One Stop (<https://onestop.txst.edu/cost-payments.html>) website.

As consequences for the student's failure to meet financial obligations, the university may:

1. withhold official transcripts;
2. deny registration and payment confirmation of subsequent semesters;
3. assess additional fees for delinquent payments and returned items as detailed on the TXST One Stop website;
4. report unpaid university obligations to credit agencies;
5. cease university-provided services; and
6. place warrant holds with the State Comptroller's Office stopping state payment to the individual owning the debt.

## Payment of Fees

Please visit the Payment Options (<https://onestop.txst.edu/cost-payments/make-payment.html>) and Payment Methods (<https://onestop.txst.edu/cost-payments/payment-methods.html>) pages of the TXST One Stop website for information regarding payment of tuition, fees, room and board..

### Please note the following:

- A 2.95% convenience fee with a minimum \$3 per transaction fee is applied to credit/debit card payments (effective 05/2023). The convenience fee is not collected by the university and is therefore non-refundable.
- Mailed payments must be RECEIVED, not postmarked, BY THE DUE DATE. You must make allowances for any postal delays. Please include the student ID number.

### Financial Aid and Tuition Adjustment Recipients:

Students receiving financial aid and/or a tuition adjustment, should check their student account by logging in to the Payment Portal on the TXST One Stop (<https://onestop.txst.edu/cost-payments/make-payment.html>) website to ensure that credit was applied.

- Approved tuition adjustments will apply to the student account once received and processed. The Billing and Payment site does take 24 hours to update with this information.
- Students with a financial aid credit or tuition adjustment that covers 100% tuition, fees, and room and board do not need to take action.
- If the financial aid or tuition adjustment is not sufficient to cover 100% of the charges, the student must pay the total balance due or enroll in a payment plan to avoid course cancellation.

## Installment Payments

Students are responsible for making their installment payments by the due date. The installment due dates are listed on the Important Dates (<https://onestop.txst.edu/important-dates.html>) page of the TXST One

Stop website. Students can check their balance, installment amounts and make payments online by visiting the Student Business Services website.

## Late Payment Fees

A delinquent charge of \$65 will be assessed the first business day after the final payment due date of the semester. Under Texas Education Code §54.007, a student who fails to make full payment of tuition and fees, including any incidental fees, by the due date may be prohibited from registering for classes until full payment is made. See the Student Financial Obligation section for more details.

## Returned Checks

If a check or EFT is returned unpaid for any reason other than the admitted error of the bank, the student must pay for the returned check with cash, cashier's check, money order or credit card (MasterCard, VISA, Discover, Diners Club or American Express) immediately. A \$30.00 service fee is assessed for each returned check. Until the check is paid, the student will be on "Cash Only" status. Cash Only status is a denial of check cashing privileges on campus.

Individuals who have three returned checks or EFT within a 12-month period, will be placed on Cash Only status.

Stopping payment on a check for fees or allowing the check to be returned unpaid by the bank for any reason does not constitute official withdrawal. Failure to follow procedures for withdrawing from Texas State may result in financial penalties and delays with future enrollment at the university.

## Refunds

Please refer to the Refund Information (<https://onestop.txst.edu/cost-payments/refund.html>) page of the TXST One Stop website for detailed information of the University's refund policy. **Please note:** Withdrawing and dropping a class are **two different actions** and are defined below. **These actions have separate refund policies.**

Any refund due will be applied to any unpaid financial obligation with Texas State. If the refund exceeds any unpaid balance, a refund will be processed within 30 days. Payments made by credit card are refunded back to the card. Other payment types will be deposited to the student's bank account if they have signed up for direct deposit (eRefund) or issued as a check and mailed to the appropriate address on file. Mailing addresses for refunds are selected in the following priority: (1) Mailing (2) Local (3) Permanent. Students may update their addresses as needed on Catsweb.

**Withdrawal:** Reducing semester credit hours to zero is considered a withdrawal. You **MUST** do this through the Office of the University Registrar.

Students must withdraw from ALL courses to be considered as withdrawn for the semester. Withdrawals are initiated in the Office of the University Registrar. Please refer to the Academic Calendar or Refund Information page of the Student Business Service website for semester/term specific deadlines for withdrawal refunds. Withdrawal Information is available on the Office of the University Registrar website.

\*Please note: Summer semester have several different terms within the semester. Please contact Student Business Services for specific withdrawal dates for summer. Additionally, during the summer, please



allow a minimum of 10 business days waiting period for billing account adjustments to be processed.

**Dropping a class:** Removing one or more classes from your schedule, while remaining enrolled in at least one course.

**IMPORTANT:** Dropping credit hours or withdrawing from the semester may affect your financial aid award. Students receiving financial aid should contact the Financial Aid Office before dropping or withdrawing. If you have dropped hours or withdrawn from the University, the term balance may not reflect the necessary adjustments. Please allow a minimum 10 business day waiting period for award adjustments to be processed.

Dropping a course or courses means that there is at least one other course left in the registered schedule for a semester/term. Refer to the Academic Calendar or the Refund Information page of the Student Business Services website for semester/term specific deadlines for drop refunds.

\*Please note: Summer semesters have several different terms within the semester. Please contact Student Business Services if you have questions regarding drop dates for summer.

J.C. Kellam Building Room 105  
www.va.txstate.edu (<http://www.va.txstate.edu>)  
Email: [veteransaffairs@txstate.edu](mailto:veteransaffairs@txstate.edu)  
Telephone: 512-245-2641

Students attending Texas State (TXST), while receiving educational assistance under one of the public laws for veterans and/or their dependents, must utilize the VA Portal provided at [www.va.txst.edu](http://www.va.txst.edu) (<https://www.va.txst.edu/>) to submit a Certification Request and upload the required forms.

All students applying for GI Bill® or Hazlewood benefits must provide digital copies of required documents for their specific benefit type to our online certification request system. Required documents are listed here: <https://www.va.txstate.edu/required-documents.html>. (<https://www.va.txstate.edu/required-documents.html>) Do not email, fax, or mail documents to the office as they will be deleted, shredded, or returned via US Post. Requests for benefit processing are completed online each semester.

All students must follow their degree requirements to receive the maximum benefit payout. Students who are eligible for Hazlewood are subject to Academic Progress for Waivers and Exemptions (APWE) policies. For more information, go to <https://www.sbs.txstate.edu/students/waivers-exemptions.html>.

It is the student's responsibility to notify the Office of Veterans Affairs of any adds, drops, course, or program changes.

No benefit pays the university directly for living or meal expenses, which are due prior to the start of each semester. GI Bill® benefit payments are made in arrears.

## Pending Payment Compliance

In accordance with Title 38 US Code 3679(e), Texas State University adopts the following additional provisions for any students using U.S. Department of Veterans Affairs (VA) Post-9/11 G.I. Bill® (Ch. 33), or Vocational Rehabilitation & Employment (Ch. 31) benefits, once

confirmed to be eligible and while payment to the institution is pending from VA. Texas State University will not:

- Prevent the student's enrollment;
- Assess a late penalty fee to the student;
- Require the student to secure alternative or additional funding;
- Deny the student access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students are required to:

- Produce the VA Certificate of Eligibility (COE) by the first day of class;
- Complete the online request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA).

302 Academic Services Building North  
[www.distancelearning.txstate.edu/](http://www.distancelearning.txstate.edu/)  
Telephone: 512-245-2322 Fax: 512-245-8934  
Toll-free: 800-511-8656

The Office of Distance and Extended Learning, in addition to administering the self-paced correspondence, extension, and continuing education programs, provides information on Texas State's distance learning programs, courses, initiatives, and resources.

The Office of Distance and Extended Learning provides the Texas State community with an array of educational options through three program areas:

- Correspondence Self- Paced Studies (<http://www.correspondence.txstate.edu/>)
- Continuing Education (<http://www.txstate.edu/continuinged/>)
- Extension Studies (<http://www.extension.txstate.edu/>)
- and the Texas Certified Public Manager Program (p. 45)

## Mission Statement

The Office of Distance and Extended Learning expands access to academic credit learning experiences and lifelong learning opportunities for students through distance learning, extended studies, and continuing education.

## Core Values

The Office of Distance and Extended Learning achieves its mission through strong collaboration among our team and other departments on campus; mutual respect for faculty, staff, and students; effective and accurate communication; and conscientious action in our daily operations.

## Distance Learning Programs

At Texas State, online learning reflects our passion for teaching and learning, the courage and discipline to prioritize, a deep commitment to core values, and the allocation of resources where we can deliver superior performance and distinctive impact. Texas State offers both undergraduate and graduate degrees via online learning, all of which are developed and taught by our university faculty. These degree programs require formal admission to the university, and applicants must meet



Texas State's general admission requirements, as well as those specified by the individual degree program. A list of those distance learning programs, see the graduate and undergraduate programs list at <https://www.distancelearning.txstate.edu/students/program-offerings.html>

Evening and weekend classes are offered on the San Marcos Campus, at various off-campus locations, and at the Round Rock Campus. Many of these classes are enhanced through the use of the Internet, email, video, two-way interactive TV, and broadcast. The Catsweb Class Schedule ([https://ssb.txstate.edu/prod/bwckschd.p\\_disp\\_dyn\\_sched/](https://ssb.txstate.edu/prod/bwckschd.p_disp_dyn_sched/)) provides a listing of all courses scheduled for each semester.

302 Academic Services Building North  
<https://www.distancelearning.txst.edu/continuing-education.html>  
 Telephone: 512-245-2507 Fax: 512-245-8934  
 Toll-free: 800-511-8656

The Continuing Education Office works in cooperation with academic colleges, schools, departments, and programs to extend the resources of Texas State beyond the traditional campus classroom. Professional staff in the Continuing Education Office collaborate with faculty, staff, and external providers to offer seminars, workshops, conferences, and short courses that align with the educational and marketable skills needs of the many communities Texas State serves. The Continuing Education Office plans, budgets, markets, collects fees, manages registration, and ensures ongoing improvement of continuing education programming through regular evaluation and review.

These programs are generally non-credit in nature. Some programs receive Continuing Education credits, and those who successfully complete these designated programs are awarded Continuing Education Units (CEU). One CEU is awarded to a person who completes a ten-contact-hour program.

302 Academic Services Building North  
<https://www.distancelearning.txst.edu/self-paced.html>  
 Telephone: 512-245-2322 Fax: 512-245-8934  
 Toll-free: 800-511-8656

When family, jobs, business travel, and other commitments compete for time, and students find it is difficult to schedule traditional classes, correspondence self-paced study offers a solution. Courses are offered through various disciplines such as art, humanities, health-related fields, mathematics, psychology, modern languages, and sociology. A complete list of currently available courses may be found on the Correspondence Self-Paced Studies (<http://www.correspondence.txstate.edu/>) website. Students may enroll in courses at any time of the year and take up to six or nine months to complete them, depending on the courses. All courses are offered online and require an email account and online access to complete assignments.

## How Correspondence Self-Paced Study Works

Each course gives students step-by-step instructions for completing the required course material and includes study tips, topic discussions, assignments, and other pertinent course information. While guides and support are available both within the course and through additional Texas State resources, students are responsible for managing their own progress through the course. The instructor provides feedback on assignments and answers student questions. Most courses have outline proctored examinations, and many have two or more examinations.

## General Regulations

The following regulations govern correspondence self-paced study at Texas State:

- Students do not have to be currently enrolled or admitted to a college or university to take a correspondence self-paced course.
- Enrollment in a correspondence self-paced course does not constitute official admission to Texas State.
- Texas residents or persons attending public colleges or universities in Texas are subject to compliance with Texas Success Initiative Program (TSIP) regulations.
- Before accepting correspondence self-paced course enrollments from students residing outside of Texas who are not planning on relocating to Texas, Texas State must follow the distance learning regulations of the states in which students reside. Students may visit the State Authorization page (<https://www.distancelearning.txst.edu/about-oxp/state-authorization.html>) to determine whether Texas State may accept student enrollments from particular states.
- It is the student's responsibility to ensure that all prerequisite requirements have been met. Prerequisite requirements for all courses are listed in the course information on the Correspondence Self-Paced Studies website.
- Texas State correspondence self-paced courses are applicable toward Texas State degrees. A maximum of 18 hours of correspondence credit may be applied toward a bachelor's degree.
- All assignments and exams must be completed to receive credit. The grading criteria for each course are stated on the course site.
- Correspondence course grades are calculated into students' Texas State GPA's and included in the review for graduation with honors. Hours and grades earned through Texas State correspondence courses are not counted in the hours required to be eligible for Dean's List nor in the GPA calculation for Dean's List.
- A minimum of ten business days must be allowed after a course has been completed for a grade to be reported on a Texas State transcript.
- Students on active suspension from Texas State are not eligible to enroll in correspondence self-paced courses.
- If enrollment in correspondence self-paced courses creates an academic overload, students must have prior, written approval of their college dean or department chair/school director.
- Correspondence self-paced courses completed through Texas State are applicable toward residency requirements.

302 Academic Services Building North  
<https://www.distancelearning.txst.edu/extension-studies.html>  
 Telephone: 512-245-2322 Fax: 512-245-8934  
 Toll-free: 800-511-8656

The Office of Online & Extended Programs offers many college courses not normally offered through the academic departments/schools. Extension courses may be offered on campus, online, hybrid/blended, or as part of a faculty-led Study-in-America or Off-Campus program. Study in America offers unique experiential learning opportunities in professional and community settings that enable students to apply knowledge, acquire marketable skills, and develop career readiness. The times and locations for such courses depend on student need, faculty availability, and demand.

The following regulations govern Texas State extension study:

- Students do not have to be currently enrolled or admitted to a college or university to take an extension course.
- Enrollment in an extension course does not constitute official admission to the university.
- Students from other institutions who wish to transfer extension credit should obtain prior approval of their home institution.
- If enrollment in extension courses creates an academic overload, students must have prior, written approval of their college dean and department chair/school director.
- Transcript records are maintained for all credit earned by extension.
- Unless a student is granted a waiver by the academic department of the student's major, a maximum of thirty semester hours for Texas State credit may be completed through a combination of correspondence, extension, Study in America, and Education Abroad courses.
- Students on active suspension from Texas State are not eligible to enroll in courses for extension credit.
- Texas residents or persons attending public colleges or universities in Texas are subject to compliance with Texas Success Initiative Program regulations.
- Students are responsible for ascertaining whether credit for an extension course will apply to a particular program and whether it will transfer to another institution.
- Extension courses completed through Texas State are applicable toward residency requirements.
- For a student who is residing outside of the state of Texas and who is not planning to relocate to Texas before beginning an online extension course, Texas State University must be approved to accept student enrollments from the student's state of residency. Students may visit the State Authorization page (<https://www.distancelearning.txst.edu/about-oxp/state-authorization.html>) to determine whether Texas State may accept student enrollments from particular states.

[www.txst.edu/cpm/](http://www.txst.edu/cpm/) (<https://www.txst.edu/cpm/>)  
Telephone: 512-245-3453 Fax: 512-331-7293

Texas State has been officially designated by the National Consortium of Certified Public Managers (CPM) to offer the CPM Program. The CPM Program offers a systematic training program to enhance the quality and efficiency of management in government and to improve professionalism and effectiveness of government managers. Individuals may enroll at any time during the year; programs are held approximately every two to three months depending on location. Admission to Texas State is not required. Courses may be completed for academic credit.

The CPM Program is a nationally accredited comprehensive statewide management development program specifically for managers in federal, state, and local government and for managers in the not-for-profit sector. The program's primary goal is to improve the performance of public and not-for-profit sector managers and the organizational performance of state, local, and federal government. The program is a comprehensive course of study by which public managers can acquire and apply the best practices and theory to their management behaviors and strategies using prescribed sets of professional standards. The curriculum uses theory as the foundation and applies it to practical problems facing the participant's agency/department, and the citizens. Those who complete the program earn a national trademark designation of CPM (Certified Public Manager®).

The Texas CPM Program, a 7-course sequence which leads to a nationally accredited public manager certification, is offered by Texas State University's William P. Hobby Center for Public Service.

Thornton International House  
344 W. Woods Street  
[www.international.txstate.edu](http://www.international.txstate.edu) (<http://www.international.txstate.edu>)  
Telephone: 512-245-7966 Fax: 512-245-8264

## Our Mission

### Vision

ISSS will be nationally recognized as a leader in campus internationalization and excellence in international student services.

### Mission

ISSS advances campus internationalization at Texas State University by offering intentional, holistic, and inclusive immigration and integration services for international students, faculty, and staff.

### Goals

- To support Texas State international students by providing immigration, integration, and intercultural expertise to the University community.
- To advance Texas State's efforts to increase and retain international students.
- To deliver meaningful and informed programming initiatives that support international student success at Texas State and post-graduation.

### Who is an international student?

An international student is a student enrolled in a U.S. academic program in a non-immigrant visa classification.

- Common non-immigrant visa classifications are: A-1, A-2, B-1, B-2, E-1, E-2, F-1, F-2, H-1, H-4, J-1, J-2, K-1, L-1, L-2, M-1, R-1, R-2, TN, and TD.
- F-1 Student is the most common non-immigrant visa classification at Texas State with over 90 percent of international students in F-1 status.
- A student who has applied for or received an immigrant classification such as permanent residency or refugee or asylum status, or who is undocumented is not categorized as an international student.

### General Regulations

The following regulations govern F-1 and J-1 international students enrolled at Texas State:

International students are required to:

- attend a mandatory F-1 Student Immigration Check-in session or J-1 Orientation.
- enroll in a full course of study every fall and spring semesters. Summer is an authorized break period, however, full-time enrollment is required in summer for students whose first semester begins in summer;
- obtain permission from International Student and Scholar Services (ISSS) before dropping below a full course of study for any reason. (See Reduced Course Load (<https://www.international.txstate.edu/current/Reduced-Course-Load-RCL-.html>));

- obtain permission from International Student and Scholar Services before engaging in off-campus employment. (see Curricular Practical Training (CPT) (<https://www.international.txst.edu/work-authorization/curricular-practical-training-cpt.html>) or Optional Practical Training (OPT) (<https://www.international.txst.edu/work-authorization/optional-practical-training-opt.html>));
- not work more than 20 hours per week while participating in on-campus employment in the fall and spring semesters. Students may work more than 20 hours per week during the summer and authorized break periods (see On-campus Employment (<https://www.international.txstate.edu/Work-Authorization/oncampus.html>));
- report address changes or personal information to International Student and Scholar Services within 10 days of the change. (see Change of Address Update (<https://tim.txstate.edu/internationalofficeaddresschange/Login/?returnurl=%2finternationalofficeaddresschange%2f>));
- report any changes in program of study (change of major, adding a minor/concentration, etc.) to International Student and Scholar Services;
- apply for a program extension from International Student and Scholar Services prior to the end date on the I-20;
- apply for concurrent or transient enrollment approval when taking courses at an institution other than Texas State University (see Concurrent Enrollment);
- obtain a travel signature from International Student and Scholar Services for all international travel;
- request a transfer of their SEVIS record from International Student and Scholar Services to transfer to a new SEVIS-certified institution (see SEVIS Transfer-out (<https://www.international.txstate.edu/current/TransferOut.html>));
- notify International Student and Scholar Services upon approval of a change of non-immigration status, or an adjustment of status to permanent residency; and
- maintain continuous health insurance coverage from the time of enrollment to the time of completion of the degree program or until otherwise cease to be a student at Texas State by obtaining coverage under the designated international student health insurance policy, or apply for a waiver and present acceptable proof of other comparable and adequate health insurance coverage (see Health Insurance (<https://www.international.txstate.edu/current/Health-insurance-.html>)).

#### An Overview of Our Services:

- Assist international students and academic departments with immigration processes and issues related to non-immigrant F-1 and J-1 students;
- Assist international faculty and staff and hiring departments with employment authorization issues;
- Provide mandatory F-1 Student Check-in and host International Student Resource Fair;
- Advise and advocate for international students and scholars;
- Plan and host programs for international students and scholars;
- Provide statistical reports
- For the complete list, click here ([https://www.comparable.txstate.edu/about/about\\_us/Services.html](https://www.comparable.txstate.edu/about/about_us/Services.html)).

[www.educationabroad.txstate.edu](http://www.educationabroad.txstate.edu) (<https://www.educationabroad.txstate.edu/>)  
Telephone: 512-245-1967  
Email: [educationabroad@txstate.edu](mailto:educationabroad@txstate.edu)

An education abroad experience expands students' intellectual and personal development as they become immersed in other cultures. Students gain a critical self-awareness, an appreciation for a multicultural world, and a clearer understanding of their own culture. Education abroad prepares students to assume their role as responsible world citizens and to succeed professionally in today's global environment. Education Abroad offers unique experiential learning opportunities in professional and community settings that enables students to apply knowledge, acquire marketable skills, and develop career readiness.

The Education Abroad office offers students the opportunity to participate in a variety of education abroad programs in hundreds of locations around the world. The academic credit students earn may be applied toward a degree at Texas State. Some of these programs involve direct enrollment in an overseas institution, while other programs are led by Texas State faculty.

Through Texas State Education Abroad programs, students can spend from one week to a full academic year in another country either learning another language, concentrating their studies related to a specific topic in their field of study, or participating in an internship. Texas State Education Abroad programs include a variety of activities that allow students to learn and experience the culture of the host country. In some of these programs, students may take the opportunity to live with a host family and become fully immersed in the culture of the host country for a more comprehensive learning experience.

Program locations vary from year to year. Students may learn more about these programs from current information located on the Education Abroad website.

The Education Abroad Fair, as well as many other events and presentations, are held throughout the year to provide information to students interested in studying, teaching, interning, volunteering, working, and/or researching abroad.

## Financial Assistance for Education Abroad Programs

Most of the financial aid that students would normally receive for studying at Texas State may be applied toward Texas State Education Abroad programs. Additionally, there are colleges and education abroad providers that offer financial support for participating in their programs. If a student is receiving federal or state financial aid, it is recommended that the student speak with a representative of the Texas State Office of Financial Aid and Scholarships to determine the application of such aid to any Education Abroad program and the possible adjustment to meet the student's needs.

Education Abroad also has information on internal and external scholarships that are available to students who plan to participate in an education abroad program. The International Education Fee Scholarship (IEFS) is funded through the student service fee account and distributed in a competition open to all undergraduate and graduate Texas State students who meet the established eligibility requirements.

T: 512-245-7966

The Texas State Intensive English (TSIE) Program offers non-credit intensive English-as-a-Second-Language (ESL) courses for students who:

- want to improve their command of the English language prior to beginning /or during college or university-level programs of study;
- would like to polish their English language abilities for academic readiness, test preparation, self-improvement, and/or cultural integration.

Classes emphasizing academic reading, writing, listening, and speaking are offered during the fall, spring, and summer sessions in a face-to-face format. International students on F-1 visas are required to enroll in a full course of study every fall and spring semester. When registering for TSIE classes, these students should consult International Student and Scholar Services for instructions on maintaining visa status.

Dr. Julie Lessiter  
Vice President, TXST Round Rock  
Round Rock Campus Administration Office

1555 University Blvd.  
Round Rock, TX 78665-8017  
[www.rrc.txstate.edu](http://www.rrc.txstate.edu) (<http://www.rrc.txstate.edu>)  
T: 512-716-4001

In the face of Williamson County's substantial annual growth, with a population now almost 700,000, the Round Rock Campus is strategically positioned to continue meeting the evolving needs of the area. The campus proudly presents a diverse array of programs, encompassing 27 undergraduate and 11 graduate options in critical areas such as healthcare, business, computer science and technology, education, psychology and social work, as well as communications. Whether students are incoming freshmen, transfer students, or graduate students, Texas State Round Rock Campus offers academic options to suit all needs.

Texas State Round Rock Campus is committed to delivering affordable, hands-on learning experiences that equip students for successful careers. Emphasizing flexible class times, the educational experience extends beyond conventional boundaries, offering a dynamic mix of face-to-face and online classes. Beyond traditional academic programs, the Professional Studies division enriches the campus offerings by providing a range of certifications and upskilling programs, allowing individuals to enhance their knowledge and skills to navigate today's digital and rapidly changing economy.

For those seeking more information, prospective students can explore Texas State Round Rock Campus or peruse the academic program offerings at [www.rrc.txst.edu](http://www.rrc.txst.edu) (<http://www.rrc.txst.edu>). Alternatively, they can reach out to the admissions office or the graduate college. Texas State Round Rock Campus stands as the intersection where excellence meets opportunity, encouraging students to ignite their potential.

The Academic Services offices, and units (Academic Testing for Students with Disabilities [ATSD], and Student Learning Assistance Center [SLAC], Testing, Evaluation, and Measurement Center [TEMC]) provide supplementary, essential services to students, faculty, and administration at Texas State. Specifically, administration of specific credit and non-credit testing, institutional testing for students with disabilities, tutoring, supplementary instruction, and enhancement of student academic

performance, Academic Services coordinates the undergraduate general education core curriculum, the Honor Code, and Children and Minors on Campus.

Alkek 133A  
T: 512.245.3579  
[bobcatidea.txstate.edu](https://bobcatidea.txstate.edu/) (<https://bobcatidea.txstate.edu/>)

The Innovation, Discovery, Exploration, Analysis (IDEA) Center provides undergraduates in any field of study with the opportunity to engage in faculty-mentored research and creative expression. Additionally, the IDEA center offers a wide variety of student development activities and also advises students on their compatibility with various national fellowship opportunities.

Alkek Library, Suite 411  
T: 512.245.2515  
[www.txst.edu/slac](http://www.txst.edu/slac) (<http://www.txst.edu/slac/>)

Texas State's Student Learning Assistance Center (SLAC) provides a wide range of academic support programs for the needs of a diverse student population. Whether students are seeking help with course content, study skills, or test preparation, SLAC provides assistance with a walk-in tutoring lab, the Veteran Academic Success Center (VASC), Supplemental Instruction (SI), Success Coaching, prelaw advising, campus presentations, and online services.

Texas State students can take advantage of tutoring services by visiting The STUDY at any of its three locations in Alkek Library, Falls & Sayers Halls Community Building, and Jowers Center. The STUDY provides academic assistance in business courses such as accounting, economics, and finance; sciences such as physics, biology, and chemistry; English and writing; statistics; computer information systems; history; philosophy; languages, such as Spanish; and multiple levels of math courses. Subject availability may vary by location, so visit SLAC's website for details.

The STUDY at Alkek also contains study materials on a wide range of topics and levels, from correcting comma splices to study skills to preparing for the admissions tests for graduate (GRE), law (LSAT), and business (GMAT) schools.

In addition to the The STUDY, SLAC also houses Texas State's Veteran Academic Success Center, a holistic tutoring and guiding initiative for military-connected students.

Supplemental Instruction, a nontraditional approach to collaborative learning, provides structured group study for students in historically difficult courses ranging from the liberal arts to science and math-based courses. Supplemental Instruction Leaders (SI's) act as role models and facilitate multiple study sessions per week to assist students, not only with course content, but also with the development of positive study skills and habits.

Success Coaching helps students tailor strategies to improve academic work and productivity. Through a series of individual meetings with a certified Coach, students work to identify their strengths and challenges and create a personal plan to monitor and track appropriate behaviors and assess areas of growth.

SLAC staff members continually foster outreach in the campus community by providing informational and interactive presentations on test-taking and anxiety management, learning preferences, time



management, note-taking, and other topics. Upon request, SLAC's staff will design specialized programs on study skills and academic improvement to fit the needs of a campus club, organization, or professor.

SLAC also provides Texas State students with a number of online resources. By visiting [www.txst.edu/slac](http://www.txst.edu/slac) (<https://www.txst.edu/slac/>), students can access tutoring schedules and hours for The STUDY locations and VASC, the times and locations of SI sessions, information regarding becoming a tutor or SI Leader, and much more. SLAC also maintains an Online Writing Lab (OWL), providing tutoring in an electronic format accessible via email.

SLAC services are available to students at the Round Rock Campus.

Nueces Building, First Floor  
San Marcos Campus

T: 512.245.2276

[www.txst.edu/temc](http://www.txst.edu/temc) (<http://www.txst.edu/temc/>)

Avery, Room 209  
Round Rock Campus  
T: 512.756.4020  
[rrc-testing@txstate.edu](mailto:rrc-testing@txstate.edu)

The Testing, Evaluation, and Measurement Center (TEMC) is dedicated to supporting students, faculty, and the local community with academic and career advancement testing and evaluation related needs. TEMC offices include Testing Lab Services, Academic Testing for Students with Disabilities (ATSD), Testing Center Round Rock (TCRR), and Scanning Services for faculty. The TEMC offers a variety of academic tests, including those listed below. Online proctoring options are available for select test offerings. Please visit our website for additional information.

1. TSIA Assessment (Texas Success Initiative Assessment)
2. TExES (Texas Examination of Educator Standards)
3. GED (General Education Development)
4. ATI TEAS (Assessment Technologies Institute Test of Essential Academic Skills)
5. CLEP (College Level Examination Program)
6. ACTFL-OPI (American Council on the Teaching of Foreign Languages - Oral Proficiency Interview)
7. NOCTI (National Occupational Competency Testing Institute) Exam
8. Departmental Examinations-for-Credit
9. Proctored Exams for other institutions
10. TCEQ (Texas Commission on Environmental Quality) Occupational Licensing Exams
11. TCFP (Texas Commission on Fire Protection) Exams
12. Measure Learning exams
13. Pearson VUE certification and licensure exams

## Credit-by-Examination

Credit may be earned by achieving a sufficient score (as determined by the relevant academic department of Texas State University) on any of several exams and then submitting official score reports to the TEMC. More detailed information on this and other TEMC programs are available at the TEMC website, [www.txst.edu/temc](http://www.txst.edu/temc) (<https://www.txst.edu/temc/>).

Sufficient scores on the following examinations may be applied for credit:

1. CLEP (College Level Examination Program),
2. ACTFL-OPI (American Council on the Teaching of Foreign Languages - Oral Proficiency Interview)
3. AP (College Board Advanced Placement Examination Program),
4. IB (International Baccalaureate Program),
5. Certain established departmental examinations (administered by TEMC or by the relevant academic department)

Credit established in this manner through the TEMC will be recorded as "credit only" (CR) on the transcript and will not affect the GPA, with the exception of certain CLEP scores. Texas State University recognizes superior scores for CLEP exams in French, German, and Spanish language by awarding letter grades of A or B according to the Credit & Grade Awarding Table (<https://www.txst.edu/temc/services/testing-lab-services/exams-for-credit/clep/clep-mdl-grades.html>) (<https://www.txst.edu/temc/services/testing-lab-services/exams-for-credit/clep/clep-mdl-grades.html>). Letter grades for the French, German, and Spanish language CLEP exams are optional, and may be recorded as CR at the student's request. Credit earned by exam satisfies degree requirements in the same way as credit earned by passing courses except that it does not count as credit earned in residence.

## Academic Testing for Students with Disabilities

Academic Testing for Students with Disabilities (ATSD) is the office within TEMC that provides academic testing services (course exams and quizzes) for students who are currently registered with and approved by the Office of Disability Services (ODS) to receive accommodations when testing. Some examples of testing accommodations provided by ATSD include extended time, reduced distraction environment, and use of a reader and/or scribe.

Note that before a student can schedule tests at ATSD, the need for testing accommodations must be approved by ODS, and only those accommodations designated by ODS will be provided. ATSD works closely with ODS and the other TEMC offices to provide the most secure, up-to-date, and reduced-distraction testing environment possible to all students registered with ODS.

Richard A. Castro Undergraduate Admissions Center  
429 N. Guadalupe Street  
[www.admissions.txst.edu](http://www.admissions.txst.edu) (<http://www.admissions.txst.edu>)

Texas State University offers general admission programs for first-time freshman, transfer, and international students, as well as returning students. Admission standards are designed to ensure that admitted students are prepared to meet the academic challenges at Texas State.

Students and their guests are invited to visit campus any day the university is open. Guided tours (both on-campus and virtual) are conducted through the Alumni and Future Student Welcome Center. Tour reservations can be made by means of our online reservation system (<https://www.admissions.txst.edu/visit/campus-tours.html>). Campus tours are available most weekdays throughout the year. The Welcome Center is located in the LBJ Student Center 3<sup>rd</sup> floor. Convenient parking is available at the adjacent Student Center Parking Garage.

Bobcat Days are Texas State University's premier visitation event for prospective students and their families. They take place twice in the fall and the spring. Guests can visit campus to learn more about academic programs, support services, admissions procedures, housing options as



well as financial aid and scholarships opportunities. Visit the admission website for Bobcat Day (<https://www.admissions.txst.edu/visit/events/bobcat-day.html>) dates, a schedule of activities and registration options.

In addition to campus tours and Bobcat Days, we invite you to explore additional visit options (<https://www.admissions.txst.edu/visit/>). For more information, contact the Welcome Center (<https://www.admissions.txst.edu/visit/>) at 512.245.8871 or [welcomecenter@txstate.edu](mailto:welcomecenter@txstate.edu) (%23@txstate.edu). To meet with an admissions counselor, please schedule an appointment online (<https://www.admissions.txst.edu/contact.html>) or contact our office by email at [admissions@txstate.edu](mailto:admissions@txstate.edu).

Prospective undergraduate students should apply for admission as early as possible. Those students still in high school may apply once they have completed six semesters and can provide a high school transcript showing class rank and grades. All students should submit their application for admission, and all supporting documents must be received by priority dates or deadlines listed on the Office of Undergraduate Admissions website ([https://www.admissions.txst.edu/future-students/priority\\_dates.html](https://www.admissions.txst.edu/future-students/priority_dates.html)).

## State of Texas Uniform Admission Standards

Per state law, TEC 51.803-51.809 (<https://statutes.capitol.texas.gov/Docs/ED/htm/ED.51.htm#51803>), Uniform Admissions Policy (UAP) requires first time undergraduate student applicants to four-year public universities like Texas State to meet one of the following college readiness standards, in order to be eligible for admission consideration. (Note: Students who attend an out-of-state high school are exempt from the UAP.)

- Successfully complete the Foundation (HB5), Foundation with Endorsements (HB5), Distinguished Achievement (HB5), Minimum (UAP), Recommended (UAP) or Distinguished (UAP) high school program or complete the portion of the program that was available to them; or
- Successfully complete a curriculum that is the equivalent\* in content and rigor to the Foundation, Foundation with Endorsements, Distinguished Achievement, Minimum Recommended or Distinguished high school program at a high school that is exempt from offering such programs;

\*Equivalencies must be documented by the students' high school.

## Assured Admission

Assured Admission is granted when the student graduates with one of the following diploma types: (HB5) Distinguished Achievement, (UAP) Distinguished or (UAP) Recommended high school program (or equivalent), and meets the class rank and test score requirement listed in the table below:

Class Rank	SAT	ACT
Top 25%	No minimum required	No minimum required
2nd Quartile	1090	22
3rd Quartile	1250	26
4th Quartile	1330	29

*SAT scores are the sum, from a single sitting, of the Evidence-Based Reading & Writing and Math sections only.*

*The ACT score is your composite score from a single sitting. Texas State does not accept superscoring.*

## Admission Review

Applications received from students who do not meet Assured Admissions requirements and are ranked in the top 75 percent of their class will be reviewed through a holistic review process. Texas State will consider high school curriculum, admission essay(s), extracurricular involvement, leadership, community service, work experience, quality and competitive level of courses taken, and grades earned, in addition to other factors presented in the application.

Students who are not offered freshman admission are encouraged to attend another college, complete 16 hours of transferable credit with a minimum GPA of 2.50 before applying for transfer admission.

## Academic Program Entry Requirements

In addition to gaining general admission to the University, some academic programs at Texas State have their own entry requirements. It is possible that some students may be offered general admission to Texas State, but not be admitted to their major and, as a result, will have to start their program classified as a "pre-major" (for example: pre-communication studies). Students interested in pursuing one of these majors must complete the entry requirements, a departmental application and upper-level courses required by the department in order to graduate from that major.

For a list of majors with additional entry requirements separate from general admission, please visit the Program Entry Requirements (<https://www.admissions.txst.edu/future-students/additional-program-requirements.html>) page for complete information on each major.

## Educator Preparation Program

To be eligible for a Texas teaching certificate, a student must first be admitted to the university, then they can apply for admission to the teacher preparation program through the Office of Educator Preparation (<https://www.education.txst.edu/oep/>). Information regarding these requirements can be found in the College of Education section (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>) of this catalog.

## Limited Access Program

### Emmett and Miriam McCoy College of Business

Admission to the McCoy College of Business (<https://www.admissions.txst.edu/future-students/additional-program-requirements.html>) is highly competitive. Freshman applicants who wish to pursue a major in the McCoy College are required to meet more rigorous admission standards. Interested students will automatically be admitted when they:

- Select a Business major as their a first-choice major
- Receive Assured Admission to Texas State

Other applicants who have received admission to Texas State will be considered through the Admission Review Process.

## Falsification of Documents

Students found to have deliberately falsified application information either by failing to submit accurate information, altering their application, or misrepresenting their academic work, will be subject to disciplinary action up to and including denial of admission, withdrawal of an admission offer, or registration cancellation.

1. Meet freshmen admission requirements (<https://www.admissions.txst.edu/future-students/freshman/admission-requirements.html>).
2. Submit an application for admission (<https://www.admissions.txst.edu/future-students/apply-for-admission.html>).
3. Submit a non-refundable application fee of \$75 (check, money order, American Express, Visa, Mastercard, or Discover). Fee waivers (<https://www.admissions.txst.edu/future-students/fee-waiver.html>) are available for eligible students.
4. Submit a high school transcript or GED certificate.
5. Submit an official college transcript from each postsecondary school attended. Students must be eligible to return (e.g., free from suspension, dismissal, or enforced withdrawal).
6. ACT/SAT score requirements are available on the Freshman admission requirements (<https://www.admissions.txst.edu/future-students/freshman/admission-requirements.html>) webpage.
7. (Optional) Submit one of the application essays.

## Nontraditional Secondary Education: GED and Homeschool Applicants

In accordance with Senate Bill 1543 (SB1543), applicants for admission who present evidence of completion of a non-traditional secondary education without an official class rank will have a class rank assigned by Texas State. The class rank will be comparable to the average class rank of other applicants who have equivalent ACT or SAT scores. A non-traditional secondary education includes Homeschool and GED graduates. Texas State requires an official Homeschool or GED transcript to demonstrate evidence of completion.

## Non-Ranking Public and Private High Schools

Students from a non-ranking school who do not fall into the non-traditional school definition, will be assigned a rank. This rank, determined by the Office of Undergraduate Admissions, will be based on the student's academic rigor, grades in academic courses, GPA (if available), and the profile of the high school.

## Transfer Students with 14 or Fewer Hours

Students with 14 or fewer transferable credit hours at the time of application will be evaluated based on a combination of high school and college work. Applicants must meet the following requirements:

1. Submit a transfer application for admission (<https://www.admissions.txst.edu/future-students/apply-for-admission.html>) by the appropriate Admission Priority Date ([https://www.admissions.txst.edu/future-students/priority\\_dates.html](https://www.admissions.txst.edu/future-students/priority_dates.html)).
2. Submit a non-refundable application fee of \$75 (check, money order, American Express, VISA, Mastercard, or Discover) or apply for a

fee waiver (<https://www.admissions.txst.edu/future-students/fee-waiver.html>).

3. Submit final, official high school transcript(s) or GED certificate.
4. Submit an official college transcript from each post-secondary institution attended, with a cumulative GPA of at least 2.0 in all transferable course work. Students must be eligible to return (e.g., free of suspension, dismissal, or enforced withdrawal) to all previous institutions attended regardless of grade point average (GPA) or degree received.
5. ACT/SAT score requirements are available on the freshman admission requirements (<https://www.admissions.txst.edu/future-students/freshman/admission-requirements.html>) webpage.

## Transfer Students with 15-29 Hours

Students with 15-29 transferable credit hours must meet a 2.5 cumulative grade point average (GPA) minimum. Transfer applicants must meet the following requirements\*:

1. Submit a transfer application for admission (<https://www.admissions.txst.edu/future-students/apply-for-admission.html>) by the appropriate Admission Priority Date ([https://www.admissions.txst.edu/future-students/priority\\_dates.html](https://www.admissions.txst.edu/future-students/priority_dates.html)).
2. Submit a non-refundable application fee of \$75 (check, money order, American Express, VISA, Mastercard, or Discover) or apply for a fee waiver (<https://www.admissions.txst.edu/future-students/fee-waiver.html>).
3. Submit final high school transcript(s) or GED certificate.
4. Submit an official college transcript from each post-secondary institution attended, with a cumulative GPA in all transferable work of at least 2.50 (additional review will be completed for students applying to the McCoy College of Business (<https://www.admissions.txst.edu/future-students/additional-program-requirements.html>)). Students must be eligible to return (e.g., free of suspension, dismissal, or enforced withdrawal) to all previous institutions attended regardless of grade point average or degree received.

\*After an initial review, some applicants may be asked to submit additional information

## Transfer Students with 30 Hours or More

Students with 30 or more transferable credit hours must meet a 2.25 cumulative grade point average (GPA) minimum. Transfer applicants must meet the following requirements:

1. Submit a transfer application for admission (<https://www.admissions.txst.edu/future-students/apply-for-admission.html>) by the appropriate Admission Priority Date ([https://www.admissions.txst.edu/future-students/priority\\_dates.html](https://www.admissions.txst.edu/future-students/priority_dates.html)).
2. Submit a non-refundable application fee of \$75 (check, money order, American Express, VISA, Mastercard, or Discover) or apply for a fee waiver (<https://www.admissions.txst.edu/future-students/fee-waiver.html>).
3. Submit final high school transcript or GED certificate.
4. Submit an official college transcript from each post-secondary institution attended, with a cumulative GPA in all transferable work of at least 2.25 (additional review will be completed for students applying to the McCoy College of Business (<https://www.admissions.txst.edu/future-students/additional-program-requirements.html>)). Students must be eligible to return (e.g., free

of suspension, dismissal, or enforced withdrawal) to all previous institutions attended regardless of grade point average or degree received.

## Transferring to the Round Rock Campus (RRC)

Texas State University is one university with two campuses, one in San Marcos, TX and one in Round Rock, TX. Students who intend to take courses at the RRC follow the same application process as students to the San Marcos Campus, and have to meet the same admissions requirements as other applicants to Texas State. Additional information can be found on the Round Rock Campus website (<https://www.rrc.txst.edu/>).

### GPA and Credit Hour Calculations

In computing the GPA for transferable course work, all grades are computed with grade and hour value. The grade earned at the sending institution is the grade transferred to Texas State, except that a plus or a minus is disregarded. Number grades are converted to the A-F (four-point) grading scale. A grade of D or F transfers for admission purposes but may not be accepted by a student's major department, school, or program.

Courses completed in units other than semester hours are converted to semester hours using information from the sending institution's transcript or catalog. Quarter hours are converted at the rate of one to two-thirds (e.g., five quarter hours = 3.335 semester hours, four quarter hours = 2.668 semester hours, and three-quarter hours = 2.001 semester hours). The official Texas State transcript separates transfer course work and grades from Texas State course work and grades. The transfer GPA is used to determine eligibility for admission purposes. Credits transferred are included in the total hours the student has earned, but the grades and quality points do not affect the student's Texas State GPA. However, transfer grades and quality points do calculate into an overall GPA that may be used in some university processes such as course prerequisites.

In calculating the GPA, grades of A, B, C, D, and F are counted. Non-punitive grades such as W or WP are posted but not calculated. Grades of WF or I are averaged as F. If a course has been repeated, every grade except the first will be calculated. Grades in non-transferable and technical/VocEd courses are disregarded. See the Academic Policies section for more on repeated grades and courses. To see what course credits will transfer, visit our Transfer Credit Evaluation (<https://www.admissions.txst.edu/future-students/transfer-credit-evaluation.html>) webpage.

## Falsification of Documents

Students found to have deliberately falsified application information either by failing to submit accurate information, altering their application, or misrepresenting their academic work, will be subject to disciplinary action up to and including denial of admission, withdrawal of an admission offer, or registration cancellation.

## Academic Program Entry Requirements

In addition to gaining general admission to the University, some academic programs at Texas State have their own entry requirements. It is possible that some students may be offered general admission to Texas State, but not admitted to their major and, as a result, will have to start their program classified as a "pre-major" (for example: pre-communication

studies). Students interested in pursuing one of these majors must complete the entry requirements, a departmental application, and upper-level courses required by the department in order to graduate from that major.

For a list of majors with additional entry requirements separate from general admission, please visit the Program Entry Requirements (<https://www.admissions.txst.edu/future-students/additional-program-requirements.html>) page for complete information on each major.

## Teacher Education Program

To be eligible for a Texas teaching certificate, a student must first be admitted to the university, then they can apply for admission to the teacher preparation program through the Office of Educator Preparation (<https://www.education.txst.edu/oep/>). Information regarding these requirements can be found in the College of Education (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>) section of this catalog.

## Transfer Credit Evaluation Maximum Hours

Texas State will apply to a specific degree no more than 72 semester hours from an accredited junior/community college. If the number of hours transferred from a junior/community college exceeds 72, the student's advising center will coordinate input from the appropriately credentialed faculty and units to provide a recommendation to the college dean on how the student will satisfy degree requirements.

Texas State University is one university with two campuses, one in San Marcos, TX and one in Round Rock, TX. Students who intend to take courses at the RRC follow the same application process as students to the San Marcos Campus, and have to meet the same admissions requirements as other applicants to Texas State. Additional information can be found on the Round Rock Campus website (<https://www.rrc.txst.edu/>).

## Evaluation of Transfer Credit

Transfer of credit from another institution to Texas State involves the consideration of the transfer institution's accreditation, how the course work compares and applies to a Texas State degree program, and the grades and hours earned. The Office of Undergraduate Admissions provides, along with the admission notification letter (when applicable), a link to the office's Transfer Credit Evaluation (<https://www.admissions.txst.edu/future-students/transfer-credit-evaluation.html>) webpage, which enables students to view their evaluated transfer work online so they are aware of how each course was evaluated for transfer purposes. For the most current policy statement regarding the transfer and award of undergraduate academic credit, visit the Texas State Policy and Procedure Statement (<https://policies.txst.edu/division-policies/global/02-06.html>) webpage.

## Regional Accreditation

Texas State considers for transfer credit (subject to other provisions outlined below) course work completed at degree-granting institutions that have been granted membership or candidacy status (by the time the course work was completed) by one of the regional institutional accrediting organizations or national faith-related accrediting

organizations approved by the Department of Education or Council for Higher Education Accreditation.

## No Regional Accreditation

Course work from an institution or entity (e.g. online providers), that is neither regionally accredited nor a candidate for such accreditation is not recognized for admission or transfer purposes. Texas State does not accept credit from institutions or entities with accreditation solely from national career-related accrediting organizations, or professional and specialized accrediting organizations.

## Faith-Related Accreditation

Courses from institutions accredited by a national faith-related accrediting organization approved by the Department of Education or Council for Higher Education Accreditation will be evaluated for transfer credit. Remedial courses are nontransferable. Religious courses of a doctrinal or denominational character (sacraments, Christian approaches to missions, etc.) are nontransferable.

## Credit from Abroad

Course work completed at foreign institutions will be evaluated on an individual basis. Foreign institutions must be officially recognized by their Ministry of Education for transfer credit to be considered.

## Role of the Office of Undergraduate Admissions in Determining Transfer Credit

The Office of Undergraduate Admissions manages the process of reviewing transfer credit and works with the respective faculty to review each transferable course taken at another college. The process begins with the Office of Undergraduate Admissions determining if the sending institution meets the accreditation requirements and if so, then determines if the course is transferable. Once a course is determined to be transferable, the Office of Undergraduate Admissions makes a recommendation for direct equivalency to the respective faculty for a decision. Courses without a recommended direct equivalency are coded as electives and faculty will determine how the course will be used to meet degree requirements. The Office of Undergraduate Admissions will send all direct equivalent courses to the respective faculty for a re-evaluation should the course title or description change and will maintain a review schedule for the re-evaluation of direct equivalent courses. The Office of Undergraduate Admissions creates an evaluated transcript for each applicant whose file is complete and provides students access to their evaluated transcripts after a decision has been made on their application.

## Role of Assistant Vice Provost for Academic Advising and Transitions

The assistant vice provost for Academic Advising and Transitions oversees the evaluation of courses upon a student's request from out-of-state or private institutions for fulfillment of general education core curriculum components.

## Role of College Dean and Program Chair/Department Chair/School Director of Student's Major

The applicability of transferred credit toward a degree at Texas State is the decision of the college dean. The process begins with the

respective faculty who determine the applicability of the transferred credit on a course-by-course basis. These decisions are maintained by Undergraduate Admissions which includes a re-evaluation schedule. Texas State faculty have identified common course number equivalents for many of its lower division courses. These are identified in the Texas State catalog and updated annually. Student appeals for re-evaluation of vocational and transferred credit are reviewed by the appropriate faculty. If the faculty and program coordinator recommended acceptance of the credit, it must include final approval by the department or program chair or school director and college dean (or designee). It is sometimes necessary for the transfer student to provide such materials as catalogs, course descriptions, syllabi, class assignments, or textbooks to assure proper evaluation.

## Explanation of Evaluation Symbols

The Office of Undergraduate Admissions personnel assign evaluation symbols to all courses submitted

1. Courses that have been evaluated by faculty to have direct Texas State course equivalency are equated to the Texas State course number and assigned the four-digit number used by Texas State.
2. Elective courses are recorded as ELNA, for lower level freshman and sophomore courses and ELADV, for upper level junior and senior courses.
3. Physical fitness activity courses are evaluated as "Activity" (ACT). These courses are transferable for admission and degree-seeking purposes.
4. Courses evaluated as VOCED are not transferable and are not computed in the transfer grade point average (GPA). VOCED courses may not be used for admission purposes. In cases where VOCED courses support a student's degree program, the student may request that the respective faculty, chair, or director of their major department, school, or program review the courses after enrollment at Texas State and declaration of a major. If the faculty and program coordinator recommend acceptance of the credit, it must include final approval by the departmental and program chair and director or school director and college dean (or designee). The approved VOCED credit will be recorded on the student's official Texas State transcript for application to that degree program only. Should the student change majors, the applicability of the VOCED credit toward the new major is subject to review by the faculty and chair or director and dean of the student's new major department and college.
5. Courses that hold no transfer value for either admission or degree purposes are evaluated as NOCRD

## Course Equivalency Information

Course equivalency information may be obtained from the junior/community college counselor, the Texas State Office of Undergraduate Admissions, or through the Transfer Credit Evaluation (<https://www.admissions.txst.edu/future-students/transfer-credit-evaluation.html>) webpage. Students are encouraged to plan all course selections at the junior/community college as far in advance as possible. Proper planning and use of the equivalency information will maximize the transfer of credit to Texas State.



## Texas Junior/Community College Transfer Students

Prior to transferring from a Texas junior/community college, students should discuss their course selections and degree plans with their two-year college counselor or academic advisor.

## Transfer Planning Guides

Transfer planning guides have been developed for many programs at many junior/community colleges. Prospective transfer students may access existing transfer planning guides (<https://www.admissions.txst.edu/future-students/transfer/tpg.html>) on the Undergraduate Admissions website (<https://www.admissions.txst.edu/future-students/transfer.html>).

Under Texas Education Code 61.832, the Texas Common Course Numbering System (TCCNS) was developed to facilitate transfer of general academic courses among Texas public institutions. Common courses are included in the Academic Course Guide Manual (<http://board.thecb.state.tx.us/apps/WorkforceEd/acgm/acgm.htm>) (ACGM) for lower division courses which is published by the Texas Higher Education Coordinating Board. The ACGM may be used to determine how freshman and sophomore level courses transfer from and to Texas public institutions. The statewide TCCN may be accessed at this url: [www.tccns.org](http://www.tccns.org) (<https://www.tccns.org/>)

The common course number has a standardized four-letter prefix followed by a four-digit number, for example, ENGL 1301. The four-letter prefix identifies the subject area. Each digit in the four-digit sequence gives additional information about the course. The first digit identifies the course as either freshman level (1) or sophomore level (2). The second digit identifies the number of credit hours a student will earn upon completion of the course. Most often this digit will be a 1, 2, 3, or 4. The final two digits serve to establish the sequence in which courses are generally taken.

In the course description sections of the catalog, the common course number is shown in parentheses, for example, (ENGL 1301). In most cases, the common course number is also the course number at the community or junior college. For other institutions, if two courses share the same common course number, no matter what their actual institutional number is, they will be accepted as equivalent for transfer. For a complete list of all the common course numbers currently adopted by Texas State, visit the General Education Core Curriculum section (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) of this catalog.

## Credit-by-Examination

Credit may be earned by achieving a sufficient score (as determined by the relevant academic department at Texas State University) on any of several exams and submitting official score reports to the Testing, Evaluation, and Measurement Center (TEMC).

Sufficient scores on the following examinations may be applied for credit:

1. College Level Examination Program (<https://www.txst.edu/temc/services/testing-lab-services/exams-for-credit/clep.html>) (CLEP),
2. College Board Advanced Placement Examination Program (<https://www.txst.edu/temc/services/testing-lab-services/exams-for-credit/ap.html>) (AP),

3. International Baccalaureate Program (<https://www.txst.edu/temc/services/testing-lab-services/exams-for-credit/ib.html>) (IB),
4. Certain established departmental examinations (<https://www.txst.edu/temc/services/testing-lab-services/exams-for-credit/departmental.html>) (administered by TEMC or by the relevant academic department)

Credit established in this manner through TEMC will be recorded as "credit only" (CR) on the transcript and will not affect the GPA, except that Texas State recognizes superior scores for CLEP exams in French, German, and Spanish language by awarding letter grades of A or B. Letter grades for the French, German, and Spanish language CLEP exams are optional and may be recorded as CR at the student's request.

Evidence of credit by any examination must be evaluated by TEMC, before it can be entered on a transcript. Additional information on this and other TEMC services is available on the TEMC website (<https://www.txst.edu/temc/>).

Transfer planning guides have been developed for numerous programs at many junior/community colleges. Prospective transfer students may access existing transfer planning guides (<https://www.admissions.txst.edu/future-students/transfer/tpg.html>) on the Undergraduate Admissions website (<https://www.admissions.txst.edu/future-students/transfer.html>).

Credit earned by exam satisfies degree requirements in the same way as credit earned by passing the course except that it does not count as credit earned in residence.

The Department of Organization, Workforce, and Leadership Studies, or OWLS (<https://www.owls.txst.edu/>), is the only academic unit at Texas State that employs a systematic process for evaluating and credentialing experiential learning with academic merit and credit. Such credit is validated after enrollment at Texas State according to established criteria and is forwarded to the Office Undergraduate Admissions for posting to the student's record. Should a student change majors, credit awarded for experiential learning will be re-evaluated by the new academic department/school.

The department prepares nontraditional students for careers through high-quality academic, professional, and technical programs. It grants college credit for experiential learning such as work-life experience (<https://www.owls.txst.edu/undergraduate-degrees/Work-life-Experience-Credit.html>), credit for non-collegiate instruction, and credit by exam. To apply for admission to the OWLS program, contact the Office of Undergraduate Admissions (<https://www.admissions.txst.edu/future-students.html>).

1. The following procedures shall be followed by public institutions of higher education in the resolution of transfer credit disputes involving lower-division courses:
  - a. If an institution of higher education does not accept course credit earned by a student at another institution of higher education, the receiving institution shall give written notice to the student and to the sending institution that transfer of the course credit is denied.
  - b. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with Board rules and/or guidelines.
  - c. If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within 45 days after the



date the student received written notice of denial of credit, the institution whose credit is denied for transfer shall notify the Commissioner of the denial.

2. The Commissioner of Higher Education or the Commissioner's designee shall make the final determination about the dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institutions.
3. All public institutions of higher education shall publish the procedures described in sub-sections (1) and (2) of this section in their undergraduate course catalogs.
4. All public institutions of higher education shall furnish data to the Board on transfer disputes as the Board may require in accord with its statutory responsibilities under Section 61.078(e) of the Education Code (<https://statutes.capitol.texas.gov/Docs/ED/htm/ED.61.htm>).
5. If a receiving institution has cause to believe that a course being presented by a student for transfer from another school is not of an acceptable level of quality, it should notify the Commissioner of Higher Education. The Commissioner may investigate the course. If its quality is found to be unacceptable, the Board may discontinue funding for the course.

Any Texas State student who does not enroll in the university for one long semester (spring or fall semester) but wishes to return is considered a returning student (<https://www.admissions.txst.edu/future-students/returning.html>). Whether the student leaves on academic or disciplinary suspension or of their own accord, they must follow these procedures for readmission:

1. Complete and submit the Apply Texas (<https://www.admissions.txst.edu/future-students/apply-for-admission.html#applynow>) Undergraduate Readmit application.
2. Submit application fee. Fee waivers (<https://www.admissions.txst.edu/future-students/fee-waiver.html>) based on need are available.
3. Submit official transcripts from every institution attended since last enrolled at Texas State.
4. Attest that no suspensions, withdrawals, or dismissals affect their eligibility to return to all previously attended institutions.

**NOTE:** Returning students who have taken transferable hours since last enrolled must be eligible to return to all previous institutions and have a minimum GPA of 2.25 in that work.

A student who has left Texas State due to academic suspension will return on probationary status after complying with the suspension requirements and meeting the readmission criteria outlined above. (See the policy stated in "Readmission Following Suspension" in the Academic Policies of this catalog.) Some Texas State returning students may be eligible to take advantage of our Academic Bankruptcy or Academic Fresh Start programs. See Academic Forgiveness Programs (p. 57) for more information.

A student who is member of the U.S. Armed Forces or National Guard who withdrew from school as a result of being called to active duty is eligible to re-enroll without paying a reapplication fee if the student returns to Texas State within a year of being released from active duty. These students will need to complete the Returning Military Information Form (<https://gato-docs.its.txst.edu/jcr:4c9501a1-f17b-4667-a9ff-bac480ff4af3/>) and email [processing@txstate.edu](mailto:processing@txstate.edu) to have their status

reactivated. In addition, the student will need to submit the following documents to the Office of Undergraduate Admissions:

- DD214
- Joint Services Transcript (JST)
- Community College of the Air Force (CCAF) (if applicable)

The Office of Undergraduate Admissions receives then reviews the academic course work of students who earned post-secondary credit while serving in the US Armed Forces. Post-secondary credit is defined as credit earned by means of successful completion of a college-level, academic course at a regionally accredited college or university. In compliance with Texas Education Code 51.3042, eligible former members of the military who are admitted or readmitted as an undergraduate will be awarded two hours of "course credit for all physical education courses required by the institution for any undergraduate degree," and an additional 12 hours of "military science" credit, which may be applied to satisfy any elective requirement.

The two hours of physical education credit will be awarded by Undergraduate Admissions upon receipt of Form DD-214 as long as the following can be verified: two years of active military duty; the student graduated from an accredited high school or equivalent; and the student is an honorably discharged member of the military who completed at least two years of service or was discharged because of a disability. The student must also submit an official high school transcript.

Students are also required to submit the following transcripts and upon receipt will be credited with 12 hours of military science:

1. JST (Joint Services Transcript): Army, Coast Guard, Marine Corps, Navy
2. CCAF Transcript (Community College of the Air Force)

Other military coursework may be considered for transfer credit. Texas State utilizes the American Council on Education's Guide to the Evaluation of Educational Experiences in the Armed Services (<https://www.acenet.edu/Programs-Services/Pages/Credit-Transcripts/military-guide-online.aspx>) to assess potential transferability of military occupational specialties. Careful consideration should be given to the impact of the additional course credit on degree progress and other institutional rules. Credits may be granted for lower- and upper-division course work only, not for graduate-level work. Transfer credit is subject to approval by the student's major department/school. For information on how and when to apply for admission, please visit Veterans Admission (<https://www.admissions.txst.edu/future-students/other-admission-types/veterans.html>).

Texas State defines an international student as anyone who is in a non-immigrant visa status including H1-B visa holders. If you are not a U.S. Citizen, permanent resident, refugee, or asylee, you would be classified as an international student. Students who are not on a visa and are graduating from a Texas high school after three years in residence in Texas (please review Senate Bill 1528) are considered domestic applicants.

## Application Process

International students should complete the International Application (<https://www.admissions.txst.edu/future-students/apply-for-admission.html>) by the Priority Date or Deadline ([https://www.admissions.txst.edu/future-students/priority\\_dates.html](https://www.admissions.txst.edu/future-students/priority_dates.html)). Students must submit the application and all academic credentials, including

a certified English translation of the original academic records, if the originals are not in English. A non-refundable \$90.00 (USD) application fee is required of all international applicants. International students are not eligible for an application fee waiver.

Students whose native language is something other than English must present proof of English proficiency. A complete listing of ways to satisfy Texas State's English proficiency requirements can be found on our International Admissions Requirements webpage (<https://www.admissions.txst.edu/future-students/international/admissions-requirements.html>).

**Freshman applicants** who will be graduates of a foreign secondary school must demonstrate above-average classroom achievement and present an academic profile equivalent to that of a U.S. high school curriculum. Freshman applicants who will be graduates of a U.S. high school, and have completed at least two years in a U.S. high school, must meet the same freshman admission requirements (<https://www.admissions.txst.edu/future-students/freshman/admission-requirements.html>) as those of U.S. applicants.

**Transfer applicants** from within the U.S., as well as those transferring from foreign universities, must meet the grade point average (GPA) criteria outlined below. Transfer applicants will have varying cumulative transfer GPA requirements based on the number of transferable hours submitted.

- **Students with 14 or fewer** credit hours must meet a cumulative GPA requirement of a 2.0 as well as meet freshman admission standards (<https://www.admissions.txst.edu/future-students/freshman/admission-requirements.html>).
- **Students with 15-29** transfer credit hours must meet a cumulative GPA of a 2.5.
- **Students with 30 or more** transferable credit hours must meet a cumulative GPA of 2.25 (additional review will be completed for applicants to the McCoy College of Business (<https://www.admissions.txst.edu/future-students/additional-program-requirements.html>)).

## Credit for Board Exams

International freshmen and transfer students may earn credit by submitting A and AS level Cambridge Assessment (<https://www.admissions.txst.edu/future-students/international/cambridge-exams.html>) Exams administered by other boards will be reviewed on a case-by-case basis, including:

- Pearson Edexcel (<https://qualifications.pearson.com/en/about-us/qualification-brands/edexcel.html>)
- Assessment and Qualifications Alliance (AQA) (<https://www.aqa.org.uk/about-us/>)
- Oxford, Cambridge and RSA Exams (OCR) (<https://www.ocr.org.uk/about/>)

### F1 International Students Transferring to Texas State from Another SEVIS-Approved U.S. Institution

International students who are on F-1 visa status and wish to transfer to Texas State must meet all academic and immigration requirements.

Students who have been admitted into an academic program at Texas State should follow the steps below to initiate the transfer of their SEVIS record. This is a separate procedure not to be confused with the transfer

admission process managed by the Offices of Undergraduate or Graduate Admission. Submitting all the required academic transfer information and gaining admission to Texas State does not complete the SEVIS transfer process.

- Once admitted to Texas State you must,
  - a. Request your I-20 from International Student and Scholar Services: <https://www.international.txstate.edu/prospective/requireddocs.html>
  - b. Inform your current DSO to transfer your SEVIS record to Texas State using the school code: SNA214F00331000
- After the release date of your SEVIS record,
  - a. International Student and Scholar Services will review all required documents and issue a new I-20.
  - b. The new Texas State I-20 will be mailed to you or you can pick it up at the ISSS office.
- All new F-1 international students must complete a mandatory immigration check-in with International Student and Scholar Services prior to the first day of classes: <http://www.international.txstate.edu/prospective/CheckIn.html>.

### Important Considerations

- SEVIS transfer students must begin classes at the transfer-in school the next available term or within five months of the student's last day of classes at the transfer-out school, whichever is sooner, or within five months of the program completion date on the student's current Form I-20 or EAD granted for OPT.
- If a student completes a course of study or OPT, the student is eligible for transfer through the end of the 60-day grace period. Students who are terminated or out of status should contact International Student and Scholar Services prior to transferring their SEVIS record to Texas State.
- If a student is planning to travel abroad, the student must re-enter the US with the I-20 from the school that holds the student's SEVIS record at the time. If the release date passes while the student is abroad, International Student and Scholar Services will create the student a new I-20 as long as the student has submitted an I-20 request.
- A student's authorization for OPT or CPT ends on the transfer release date or the end of the work authorization whichever one is earlier.

### F1 International Students Transferring to Another SEVIS-Approved U.S. Institution from Texas State

To transfer from Texas State to another U.S. institution, you must complete the SEVIS Transfer-Out Form, which is posted at <http://www.international.txstate.edu/current/TransferOut.html>. The form requires you to indicate a release date and a copy of your acceptance letter to a SEVIS-approved institution.

The SEVIS transfer process is separate from the academic transfer process and does not imply a transfer of your academic records. The SEVIS transfer will enable your new institution to issue a new I-20 that will allow you to maintain your F1 visa status.

If you decide to cancel your transfer, you must notify International Student and Scholar Services at Texas State University before the transfer release date. Once the transfer release date has reached, Texas State will no longer have access to your SEVIS record and your new institution will be responsible for the management of your record.

For further information on SEVIS regulations, contact International Student and Scholar Services at 512.245.7966, [international@txstate.edu](mailto:international@txstate.edu), or [www.international.txstate.edu](http://www.international.txstate.edu) (<http://www.international.txstate.edu/>).

In addition to freshman, transfer, returning (readmit) and international students, Texas State admits and enrolls students from additional admission categories. Applicants for admission from these categories must comply with modified application procedures and, in some cases, special (category-specific) admission requirements:

- Non-degree Seeking
- Early Admission
- Second Bachelor's
- Individual Review
- Special Talent

Visit the Office of Undergraduate Admissions website (<https://www.admissions.txst.edu/future-students/other-admission-types.html>) for details on each of these additional admission categories and how to apply/be considered for any of them.

Students who have not earned a Bachelor's degree and wish to enroll in courses at Texas State may be considered for admission as a non-degree seeking student.

Non-degree seeking students are:

- Students who enroll in courses only at the undergraduate level without pursuing a degree at Texas State
- Planning to enroll in courses for one semester before returning to another institution (transient)

Non-degree seekers are limited to a total of 24 semester hours and must reapply for admission each semester. Credit earned as a non-degree seeking student will not be considered for future admission to Texas State, but may be considered for degree purposes only after the student has reapplied and met general admission requirements. Those admitted under this option are not eligible for Financial Aid. For more information on admission requirements and application procedures, visit the Office of Undergraduate Admissions (<https://www.admissions.txst.edu/future-students/other-admission-types/non-degree-seeking.html>) webpage.

Students who have earned a Bachelor's degree and wish to enroll in undergraduate courses should apply for admission as non-degree seeking through The Graduate College (<https://www.gradcollege.txst.edu/programs/non-degree.html>).

Texas State's Early Admission Program affords local high school juniors and seniors the opportunity to take college-level courses at Texas State while still in high school. The program is intended for students who rank in the top half of their class, who meet or exceed the university's assured freshman admission requirements, and who are recommended by their high school counselor or principal. All the usual freshman priority dates and deadlines ([https://www.admissions.txst.edu/future-students/priority\\_dates.html](https://www.admissions.txst.edu/future-students/priority_dates.html)) apply. For more information on the Early Admission Program, visit the Office of Undergraduate Admissions (<https://www.admissions.txst.edu/future-students/other-admission-types.html>) web page.

Students admitted under this option are considered non-degree seeking and are ineligible for financial aid. After high school graduation, those

wishing to continue in a degree-seeking status must reapply and submit their final high school transcript.

Students who have completed a bachelor's degree and wish to obtain a second bachelor's degree are required to apply for admission. For those students seeking a second bachelor's degree in business, the McCoy College requires the overall cumulative GPA from your first degree be a 2.5 or higher. Second-bachelor's degree seekers cannot pursue a General Studies major. Students who hold a bachelor's degree and wish to pursue additional course work but not a second bachelor's degree should apply through The Graduate College (<https://www.gradcollege.txst.edu/programs/non-degree.html>).

To apply, students must complete and submit the Transfer Student Application through ApplyTexas (<http://www.admissions.txstate.edu/future-students/apply-for-admission.html#applynow>), \$75 application fee, and submit an official transcript from the institution where the highest degree was obtained. Transcripts for any course work completed after the degree was earned must also be submitted. Applicants must meet all appropriate priority dates and deadlines ([https://www.admissions.txst.edu/future-students/priority\\_dates.html](https://www.admissions.txst.edu/future-students/priority_dates.html)). For more information on how to apply for a second bachelor's degree, visit the Office of Undergraduate Admissions (<https://www.admissions.txst.edu/future-students/other-admission-types/second-bachelors.html>) webpage.

The Office of Undergraduate Admissions does not post transfer credit for students who have been awarded a bachelor's degree. Course work taken after degree completion will be posted to the student's Texas State transcript. Students should work directly with their major department, school, or program to determine how course work from the first degree applies to their second degree.

Applicants who have been out of high school for at least three years and have 15 or fewer transferable credit hours may be considered for admission on an individual basis. Applicants must submit an official high school transcript validating high school graduation or GED completion certificate. The high school transcript or GED certificate, college transcript(s), application, and the \$75 application fee must be submitted by the appropriate deadline. No test score is required for admission review.

Students who receive a Fine Arts or Athletic scholarship and are recommended for admission by the Dean of the College of Fine Arts and Communication or the Director of Athletics, but do not meet Assured, Admission Review, or Individual Review admission requirements, may be granted admission to Texas State. Freshman students admitted under the Special Talent Program must rank in the top three quarters of their high school class. Transfer students must have a minimum 2.00 cumulative GPA. The university president may authorize exceptions to this policy.

Those who wish to audit a course must be accepted by the Office of Undergraduate Admissions by completing the ApplyTexas Transient application (<https://www.admissions.txst.edu/future-students/apply-for-admission.html>), and approved by the school, department, or program offering the course. Audit status must be declared at registration. Participation in class discussion and examinations are optional with the instructor. Auditors receive no course credit but are expected to attend class regularly. With departmental/school approval, a student who has audited a course may later take the course for credit.

After registering for class(es), the student must contact the Office of the University Registrar (<https://www.registrar.txst.edu/registration/reg-home/audit.html>) in person by the 4th class day in the summer, or by the 12th class day in the fall or spring. Check the university's Academic Calendar (<https://www.registrar.txst.edu/registration/ac.html>) for the exact date. Auditors will pay the same fees as if the course(s) were taken for credit. The course(s) will be entered on their transcript record, but the student will not receive credit for the course(s).

Senior citizens, 65 or older, may audit courses without payment of tuition and fees if space is available. Registration is permitted just prior to the start of the semester, with credit of tuition and fee charges made by the staff in Student Business Services (JCK Administration Building, room 188). Note any audited courses are not eligible for Financial Aid which includes grants, scholarships or loans. For more information, please visit our registration for senior citizens (65+) information page (<https://www.registrar.txst.edu/registration/reg-home/65-registration.html>).

Some prospective transfer students may be eligible for one of these alternative admission programs. Students interested in either the Academic Fresh Start or Academic Bankruptcy program are required to consult with an admissions counselor (<https://www.admissions.txst.edu/contact/forms/academic-forgiveness.html>) before pursuing one of these options. These programs are intended for prospective students only and cannot be applied after the student has been accepted.

## Academic Fresh Start

Under the provisions of the Texas Education Code, the Academic Fresh Start program was established to allow a Texas resident to apply for admission and elect to have all academic course work earned 10 or more years prior to the requested enrollment date ignored for admission purposes. Individuals who choose Academic Fresh Start, including former Texas State students, must submit Academic Fresh Start (<https://www.admissions.txst.edu/contact/forms/academic-forgiveness.html>) paperwork prior to being admitted, must meet current published admission criteria for Texas State and must submit official records from all colleges attended. Students admitted under this provision will not receive any course credit for courses taken 10 or more years prior to enrollment, but any course work completed within the last ten years will be used for admission and course credit. All course work will remain on the student's record. Admission under Academic Fresh Start does not change a student's financial aid obligations for courses not considered for admission purposes.

Students who plan to pursue graduate degrees should note that if their baccalaureate degree was earned under the Academic Fresh Start statute, only the grade point average of the coursework that applied to the baccalaureate degree as stated under the Academic Fresh Start restrictions will be evaluated. However, other standard evaluation criteria for graduate study will apply.

## Academic Bankruptcy Policy

Students who have not enrolled in any accredited college or university for five or more consecutive calendar years immediately prior to admission to Texas State may request permission to declare academic bankruptcy prior to being admitted. Individuals who choose the Academic Bankruptcy Policy, including former Texas State students, must submit Academic Bankruptcy (<https://www.admissions.txst.edu/contact/forms/academic-forgiveness.html>) paperwork prior to being admitted. Under this policy, all college-level work done at an earlier date is eliminated

from computation of the GPA and none of it is applied toward a degree at Texas State. Such work, however, will not be removed from the student's record. Those granted academic bankruptcy are admitted on academic probation. Admission under Academic Bankruptcy does not change a student's financial aid obligations for courses not considered for admission purposes.

In accordance with Texas Higher Education Coordinating Board Rules and pursuant to Texas Education Code ([https://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC/?tac\\_view=5&ti=19&pt=1&ch=21&sch=B&rl=Y](https://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC/?tac_view=5&ti=19&pt=1&ch=21&sch=B&rl=Y)), a student's status as a resident, nonresident, or international (foreign) student for tuition purposes will be determined by the Office of Undergraduate Admissions prior to enrollment. Undergraduate and Graduate students must be prepared to pay tuition and other required fees by specified due dates. Information about the Coordinating Board's rules on residency is published on the THECB website. (<http://www.collegeforalltexans.com/?ObjectID=6D1466D9-AEA5-DE00-C12F3F75E7367718>)

Rules for Texas residency classification for tuition are different from residency rules for voting, obtaining a Texas driver's license, or tax purposes. An individual's residency classification is initially determined by the information provided by the student on their admission application. The student is responsible for ensuring that their residency information is accurate and any corrections are made to their classification before the census date (normally the 12th day of classes for the spring and fall semesters or the 4th day for summer terms).

A member of the Armed Forces who is classified as a non-resident may be eligible for the non-resident portion of their tuition to be waived or exempted. Additionally, there are other categories of students who are classified as non-residents who may be eligible for tuition and fee exemptions or waivers. For more information, visit the Office of Undergraduate Admissions Residency webpage (<https://www.admissions.txst.edu/pay-for-college/residency.html>). To view a list of exemptions and waivers visit the Student Business Services website (<https://www.sbs.txst.edu/students/waivers-exemptions.html>).

Students who choose to file any type of appeal will undergo an extensive review by the Admission Appeals Committee and will be notified in writing of the final decision. All appeals are reviewed on an individual basis.

## Admission Appeals

Students denied admission to Texas State have the right to appeal their decision. For an appeal to be considered, students must submit a request for appeal (<https://www.admissions.txst.edu/contact/forms/deadline-appeal-form.html>). Students must include a formal letter of appeal in their submission, along with new academic information. New academic information includes new semester grades, updated class rank, and/or new test scores. The appeal may also include any relevant information regarding extenuating circumstances that were not reflected in the original application.

## Deadline Appeals

Students who failed to complete their admission application file (consisting of the application, application fee, and all supporting documents) by the published deadline may request a deadline extension (<https://www.admissions.txst.edu/contact/forms/deadline-appeal-form.html>). Students should provide a written explanation to the Office of



Undergraduate Admissions detailing why they were unable to complete their application file by the published deadline.

## Residency Appeals

Students who believe they meet the qualifications for in-state residency but were initially classified as out-of-state by the Office of Undergraduate Admissions, have the right to appeal. Students wishing to appeal their residency classification should review the Residency website (<https://www.admissions.txst.edu/pay-for-college/residency.html>) and submit the online residency reclassification request form.

New Student Orientation (<https://www.admissions.txst.edu/admitted-students/nso.html>) (NSO) is required for all students attending Texas State University. Students who have not attended Texas State for one long semester (Fall or Spring) will be required to both reapply to the university and complete new NSO sessions. NSO takes place before each term as a means of providing just-in-time information regarding student support services, class scheduling, and other university resources. Singing up for NSO is required before advising and registration can occur.

In order to acquire the fundamental skills and cultural background that are the marks of an educated person, all undergraduate students at Texas State complete a 42 semester credit hour program of general education core curriculum courses, which serves as the common foundation for all majors and accounts for about 35 percent of the approximately 120 semester credit hours required for a bachelor's degree.

At the end of the bachelor's program, the student is prepared not only in a field of study, but also in the general abilities of critical thinking, communication, empirical and quantitative skills, teamwork, personal responsibility and social responsibilities that remain universally useful skills in a rapidly changing world. Texas State graduates have the raw materials to build solutions as they fulfill career and civic responsibilities.

A list of courses that fulfill the general education core curriculum at Texas State University is given below. In many cases, the academic degree plans of various Texas State colleges, schools, departments, degrees, majors, and certifications modify or exceed these standards, so students are urged to carefully examine all sections of this catalog, which apply to the academic program of their choice. More information about the Texas State University general education core curriculum may be found at: <https://www.provost.txst.edu/gec.html>

Students transferring from Texas public institutions of higher education may have to fulfill only those portions of the general education core curriculum not completed at their previous institutions. Students from private or out-of-state institutions or those who took coursework before this core curriculum was put into place (Fall 2014), will have their coursework evaluated to determine if it is equivalent to that required at Texas State.

For all undergraduate students, specific major requirements may override those in the core curriculum. Those who have completed the core requirement for college math, for instance, may have to complete Calculus if such is required by their major. In all cases, the major and core requirements applicable are those in the catalog year to which the student is assigned. A list of general education core requirements at all Texas public institutions of higher education is available online at <http://www.thecb.state.tx.us/apps/tcc/>.

## General Education Core Curriculum Components

### Communication Component Code 010 (6 semester credit hours)

Code	Title	Hours
Select two of the following:		
COMM 1310	Fundamentals of Human Communication	
ENG 1310	College Writing I (TCCN: ENGL 1301)	
ENG 1320	College Writing II (TCCN: ENGL 1302)	
ENG 1321	Writing for Sustainable Change	
ENG 3303	Technical Writing	
HON 2301A	Writing to Change the World	
HON 2301B	Writing Yourself into Academia: Creating Portraiture	

### Mathematics Component Code 020 (3 semester credit hours)

Code	Title	Hours
Select one of the following:		
MATH 1312	College Statistics and Algebra (TCCN: MATH 1342) <sup>1</sup>	
MATH 1315	College Algebra (TCCN: MATH 1314) <sup>1</sup>	
MATH 1316	Survey of Contemporary Mathematics (TCCN: MATH 1332) <sup>1</sup>	
MATH 1317	Plane Trigonometry (TCCN: MATH 1316) <sup>1</sup>	
MATH 1319	Mathematics for Business and Economics I (TCCN: MATH 1324) <sup>1</sup>	
MATH 1329	Mathematics for Business and Economics II (TCCN: MATH 1325) <sup>1</sup>	
MATH 2321	Calculus for Life Sciences I (TCCN: MATH 2313) <sup>1</sup>	
MATH 2417	Pre-Calculus Mathematics (TCCN: MATH 2412) <sup>1</sup>	
MATH 2471	Calculus I (TCCN: MATH 2413) <sup>1</sup>	
HON 2302A	Elementary Number Theory	
HON 2302B	Graph Theory and Applications	

<sup>1</sup> See Department of Mathematics section of this catalog for enrollment requirements.

### Life and Physical Sciences Component Code 030 (6 semester credit hours)

Code	Title	Hours
Select two of the following:		
ANTH 2301	Biological Anthropology (TCCN: ANTH 2301)	
BIO 1320	Modern Biology I, Molecules, Cells, and Physiology (TCCN: BIOL 1308)	
BIO 1321	Ecology, Evolution and Society (TCCN: BIOL 1309)	
BIO 1330	Functional Biology (TCCN: BIOL 1306)	
BIO 1331	Organismal Biology (TCCN: BIOL 1307)	
CHEM 1310	Introductory Chemistry for Non-Science Majors (TCCN: CHEM 1305) <sup>2</sup>	
CHEM 1320	Foundations of Chemistry	
CHEM 1330	Chemistry for Non-Science Majors (TCCN: CHEM 1307)	

CHEM 1335	Engineering Chemistry (TCCN: CHEM 1309)
CHEM 1341	General Chemistry I (TCCN: CHEM 1311) <sup>2</sup>
CHEM 1342	General Chemistry II (TCCN: CHEM 1312)
GEO 1305	Meteorology (TCCN: GEOL 1347)
GEOL 1410	Physical Geology (TCCN: GEOL 1403)
GEOL 1420	Historical Geology (TCCN: GEOL 1404)
GS 2310	Life Science Concepts
PHYS 1310	Elementary Physics I (TCCN: PHYS 1305)
PHYS 1315	General Physics I (TCCN: PHYS 1301)
PHYS 1320	Elementary Physics II (TCCN: PHYS 1307)
PHYS 1325	General Physics II (TCCN: PHYS 1302)
PHYS 1335	General Physics I for Life Sciences Majors
PHYS 1340	Astronomy: Solar System (TCCN: PHYS 1312)
PHYS 1345	General Physics II for Life Science Majors
PHYS 1350	Astronomy: Stars and Galaxies (TCCN: PHYS 1311)
PHYS 1365	Physics for Educators
PHYS 2325	Mechanics (TCCN: PHYS 2325)
PHYS 2326	Electricity and Magnetism (TCCN: PHYS 2326)
HON 2303A	Teaching Physical Science to Children
HON 2303B	Astronomy in Art, History, and Literature
HON 2303C	Building a Greener Future: One Home at a Time
HON 2303D	Everyday Biology

<sup>2</sup> Students will not receive general education core curriculum credit for both CHEM 1310 and CHEM 1341.

### Language, Philosophy, and Culture Component Code 040 (3 semester credit hours)

Code	Title	Hours
Select one of the following:		
ENG 2310	British Literature before 1785	
ENG 2320	British Literature since 1785	
ENG 2330	World Literature before 1600	
ENG 2340	World Literature since 1600	
ENG 2359	US Literature before 1865	
ENG 2360	US Literature since 1865	
ENG 2371	U.S. Literature: Writing Identities	
HSPN 2301	Cultures and Literatures of the Hispanic World	
PHIL 1305	Philosophy and Critical Thinking (TCCN: PHIL 1301)	
PHIL 1320	Ethics and Society (TCCN: PHIL 2306)	
REL 1300	World Religions	
HON 2304A	The Meaning of Death	
HON 2304B	Eating Animals in America: Historical and Philosophical Perspectives	
HON 2304C	Nonviolence and Sustainable Social Change	
HON 2304D	Reinventing Utopia	

### Creative Arts Component Code 050 (3 semester credit hours)

Code	Title	Hours
Select one of the following:		
ART 2313	Introduction to Fine Arts (TCCN: HUMA 1315)	

DAN 2313	Introduction to Fine Arts (TCCN: HUMA 1315)
MU 2313	Introduction to Fine Arts (TCCN: HUMA 1315)
TH 2313	Introduction to Fine Arts (TCCN: HUMA 1315)
HON 2305A	African American Popular Music: Society, Politics, and Culture
HON 2305B	Women and Texas Music
HON 2305C	Italy and Arts of the Islamic World
HON 2305D	Honors Creative Arts

### American History Component Code 060 (6 semester credit hours)

Code	Title	Hours
Select one of the following:		
HIST 1310	History of the United States to 1877 (TCCN: HIST 1301)	
HIST 2327	History of Mexican America to 1865 (TCCN: HIST 2327)	
HIST 2381	African American History to 1877 (TCCN: HIST 2381)	
HON 2306D	Witches, Whores, Murderers & Thieves: Capital Crime in Early America	
HON 2306E	Early American History Through Biography	
HON 2306F	Rethinking American Exceptionalism	
HON 2306G	American Countercultures	
Select one of the following:		
HIST 1320	History of the United States, 1877 to Date (TCCN: HIST 1302)	
HIST 2328	History of Mexican America from 1865 (TCCN: HIST 2328)	
HIST 2382	African American History from 1877	
HON 2306A	American History Through Memoirs	
HON 2306B	Baseball and the American Experience	
HON 2306C	America in the 1960s: A History of Movements and Ideas	

### Government/Political Science Component Code 070 (6 semester credit hours)

Code	Title	Hours
Select two of the following:		
POSI 2310	Principles of American Government (TCCN: GOVT 2306)	
POSI 2320	Functions of American Government (TCCN: GOVT 2305)	
HON 2307A	Democracy in America	
HON 2307B	Contemporary Issues in American Politics	

### Social and Behavioral Sciences Component Code 080 (3 semester credit hours)

Code	Title	Hours
Select one of the following:		
ANTH 1312	Cultural Anthropology (TCCN: ANTH 2351)	
CA 2351	Behavioral and Personal Financial Management	
ECO 2301	Principles of Economics (TCCN: ECON 1301)	
ECO 2314	Principles of Microeconomics (TCCN: ECON 2302)	

GEO 1310	World Geography (TCCN: GEOG 1303)
PFW 1301	Social and Behavioral Dimensions of Physical Fitness and Wellness
PSY 1300	Introduction to Psychology (TCCN: PSYC 2301)
SOCI 1310	Introduction to Sociology (TCCN: SOCI 1301)
HON 2308A	Economic Anthropology

### Component Area Option Codes 090, 091, 092, 093 and 094 (6 semester credit hours)

**Code** **Title** **Hours**

Choose 1 course from two of the following component area options:

#### Component Area Option Code 090 and 091:

COMM 1310	Fundamentals of Human Communication (TCCN: SPCH 1311)
HON 2309B	Re-Humanizing Communication
HON 2309F	CS Lewis: Chronicles of a Master Communicator
HON 2309L	Communication and Consumer Culture
HON 2309O	Talking Like TED

#### Component Area Option Code 090 and 092:

MATH 2472	Calculus II (TCCN: MATH 2414)
MATH 2473	Integral Calculus with Multivariables and Series (TCCN: MATH 2415)

#### Component Area Option Code 090 and 093:

PHYS 2326	Electricity and Magnetism (TCCN: PHYS 2326)
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#### Component Area Option Code 090 and 094:

ENG 2310	British Literature before 1785 (TCCN: ENGL 2322)
ENG 2320	British Literature since 1785 (TCCN: ENGL 2323)
ENG 2330	World Literature before 1600 (TCCN: ENGL 2332)
ENG 2340	World Literature since 1600 (TCCN: ENGL 2333)
ENG 2359	US Literature before 1865 (TCCN: ENGL 2327)
ENG 2360	US Literature since 1865 (TCCN: ENGL 2328)
ENG 2371	U.S. Literature: Writing Identities
HON 2309A	Origins of Civilization
HON 2309C	Great Ideas: Humanities I
HON 2309D	Magic Realism in the Works of Gabriel Garcia Marquez
HON 2309E	Preserving Humanity in the Face of Conflict: The War Story Genre
HON 2309G	Nature and the Quest for Meaning
HON 2309H	Great Ideas: Humanities II
HON 2309I	Plotting the American Experience
HON 2309J	Memoirs from Lives off the Neurotypical Map
HON 2309K	The Death Plot: Fiction, Memoirs, Poems
HON 2309M	From Jay-Z to Kendrick Lamar: Politics, Power, and Identity in Hip Hop Literature
HON 2309N	Don Quixote and the Birth of the Modern Novel
HON 2309Q	Honors British Literature
HON 2309P	Honors American Literature

Total General Education Core Curriculum: 42 semester credit hours.

Under Texas Education Code 61.832, the Texas Common Course Numbering System (TCCNS) was developed to facilitate transfer of general academic courses among Texas public institutions. Common

courses are included in the Academic Course Guide Manual (<http://board.theccb.state.tx.us/apps/WorkforceEd/acgm/acgm.htm>) (ACGM) for lower division courses which is published by the Texas Higher Education Coordinating Board. The ACGM may be used to determine how freshman and sophomore level courses transfer from and to Texas public institutions. The statewide TCCN may be accessed at this url: [www.tccns.org](http://www.tccns.org) (<https://www.tccns.org/>)

The common course number has a standardized four-letter prefix followed by a four-digit number, for example, ENGL 1301. The four-letter prefix identifies the subject area. Each digit in the four-digit sequence gives additional information about the course. The first digit identifies the course as either freshman level (1) or sophomore level (2). The second digit identifies the number of credit hours a student will earn upon completion of the course. Most often this digit will be a 1, 2, 3, or 4. The final two digits serve to establish the sequence in which courses are generally taken.

In the course description sections of the catalog, the common course number is shown in parentheses, for example, (ENGL 1301). In most cases, the common course number is also the course number at the community or junior college. For other institutions, if two courses share the same common course number, no matter what their actual institutional number is, they will be accepted as equivalent for transfer. For a complete list of all the common course numbers currently adopted by Texas State, visit the General Education Core Curriculum section (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) of this catalog.

Texas State University offers a full range of programs in applied arts, business administration, education, the fine arts, general studies, health professions, the liberal arts, sciences, and engineering. This section of the catalog gives basic information about the undergraduate degrees, majors, minors, and alternative curricula available at Texas State. Certificate and degree programs are approved in accordance with guidelines provided by the Southern Association of Colleges and Schools Commission on Colleges, the Texas Higher Education Coordinating Board and the Board of Regents of the Texas State University System.

## SACSCOC Accreditation

Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) accreditation is institutional in nature. Although many programs are accredited by other agencies, SACSCOC accredits the university as a whole, not specific degrees or programs.

## Texas State University Undergraduate Degree Program Information

All undergraduate degrees conferred by Texas State University are based on the satisfactory completion of the following components:

1. Uniform undergraduate degree requirements, which apply to all Texas State undergraduates regardless of their major. These requirements include:
  - US 1100 (required for students who enter with fewer than 16 semester credit hours completed after high school graduation),
  - Core Curriculum,
  - Writing Intensive, and
  - Residency.

2. College-specific degree requirements, which include:
  - Major,
  - Minor, if applicable,
  - Upper-division hour,
  - Free electives, if applicable, and
  - Grade-point average requirements.
3. Specific degree or program, if applicable.

## Special Requirements for the Bachelor of Arts Degree Programs

The following requirements apply to all Bachelor of Arts degree programs.

### Minor Requirement

A minor is required and may be selected from any of the Texas State approved minors.

### Science Requirement

In addition to completing the mathematics and the life and physical sciences requirements of the general education core curriculum, students must complete one additional science course (3-4 hours) from anthropology (biological anthropology only), biology, chemistry, computer science, geography (physical geography only), geology, mathematics, philosophy (logic only), physics.

### Modern Language Requirement

An intermediate level proficiency demonstrated by successful completion of American Sign Language, Arabic, Chinese, French, German, Italian, Japanese, Latin, Portuguese, Russian, or Spanish (2310 and 2320) is required. Most students will need to complete 1410 and 1420 as prerequisites before attempting 2310.

Code	Title	Hours
Select one of the following groups:		
ASL 2310 & ASL 2320	Intermediate American Sign Language I and Intermediate American Sign Language II	
ARAB 2310 & ARAB 2320	Intermediate Arabic I and Intermediate Arabic II	
CHI 2310 & CHI 2320	Intermediate Chinese I and Intermediate Chinese II	
FR 2310 & FR 2320	Intermediate French I and Intermediate French II	
GER 2310 & GER 2320	Intermediate German I and Intermediate German II	
ITAL 2310 & ITAL 2320	Intermediate Italian I and Intermediate Italian II	
JAPA 2310 & JAPA 2320	Intermediate Japanese I and Intermediate Japanese II	
LAT 2310 & LAT 2320	Intermediate Latin I and Intermediate Latin II	
POR 2310 & POR 2320	Intermediate Portuguese I and Intermediate Portuguese II	
RUSS 2310 & RUSS 2320	Intermediate Russian I and Intermediate Russian II	
SPAN 2310 & SPAN 2320	Intermediate Spanish I and Intermediate Spanish II	

## English Literature Requirement

Code	Title	Hours
Select two of the following:		
ENG 2310	British Literature before 1785	6
ENG 2320	British Literature since 1785	
ENG 2330	World Literature before 1600	
ENG 2340	World Literature since 1600	
ENG 2359	US Literature before 1865	
ENG 2360	US Literature since 1865	

Note: Students who earn a "B" or "A" in the first sophomore literature course may choose to take an advanced literature course (3000 or 4000 level) instead of a second sophomore literature course.

## Special Requirements for the Bachelor of Science Degree Programs

A minor is required and may be selected from any of the Texas State approved minors.

## Pre-Professional Curricula

Students preparing to study medicine, dentistry, physician assistant, law, pharmacy, physical therapy, or veterinary medicine should consider the following information. Before each registration period, the student should consult with an academic advisor.

### Health Careers

Texas State University provides many resources for students interested in attending post-baccalaureate health-related professional programs such as medical, dental, optometry, physician assistant, veterinary or pharmacy schools.

Students will be able to complete undergraduate prerequisite coursework while earning their bachelor's degree in many of the majors offered. Texas State University offers a rich diversity of science, math and non-science courses that will fulfill prerequisite requirements for all professional schools in the country and prepare students to take admissions tests such as the MCAT, DAT, OAT and GRE.

Texas State University has several dedicated pre-health advisors who will meet with students to help them understand and plan for the steps needed to become competitive professional school applicants. The pre-health advisors also host workshops and may provide qualified medical and dental school applicants with committee letters. Additional information about pre-health advising at Texas State University can be found on the website for Pre-Health Advising (<http://www.bio.txst.edu/prehealthadvising>).

### Medical, Dental, Optometry and Physician Assistant

Students seeking admission to medical, dental, optometry and physician assistant programs must complete a variety of undergraduate prerequisite courses in order to gain admissions to these programs. Prerequisite courses change from time to time and may include courses which may not count towards their degree plan. Texas State University has developed a variety of minors to help alleviate this issue. These minors will provide students with coursework that satisfies prerequisite



courses for many of their chosen professional programs. In addition, students choosing these minors allow the pre-health advisors to track the number of students who are interested in pursuing these professions. This information is important for pre-health advisors, academic advisors, the admissions office, faculty members seeking grant funding from organizations like the National Institutes of Health (NIH), and others on campus. Information about these minors can be found in the Undergraduate Minors (<http://mycatalog.txstate.edu/undergraduate/minors/>) section of this catalog.

There are several student organizations on campus designed to support and encourage students interested in health careers. These student organizations provide students with leadership and community service opportunities and help students learn more about the healthcare careers they are interested in. Some examples of these student organizations include: Pre-Med/Pre-Dent Society, Pre-Physician Assistant Society, Medical Explorers, Black Health Professionals Organization, American Student Dental Association, Minority Association of Pre-Health Professionals, and Women in Medicine.

Texas State University participates in the Joint Admission Medical Program (JAMP). The Joint Admission Medical Program (JAMP) is a special program created by the Texas Legislature to support and encourage highly qualified, economically disadvantaged students pursuing a medical education.

Additional information about JAMP can be found at the program website (<https://texasjamp.org/>).

Texas State University participates in the Dental Early Acceptance Program (DEAP). DEAP is dual-degree program between the UT Health San Antonio School of Dentistry and a few select undergraduate universities that allows students to apply credits earned during dental school to college requirements, allowing students to leave Texas State University and enter dental school one year early, yet still allowing students to earn both a bachelor's degree and a dental degree. This program is intended for students coming straight out of high school with academic excellence and a demonstrated interest in dentistry as a career. Additional information about DEAP can be found at the program website (<http://www.uthscsa.edu/academics/dental/programs/deap-program> (<http://www.uthscsa.edu/academics/dental/programs/deap-program/>)).

## Law

Accredited law schools in the United States typically require at least the following from applicants prior to admission:

1. a bachelor's degree,
2. a high cumulative grade point average,
3. a satisfactory score on the Law School Admission Test (LSAT),
4. a personal statement,
5. a resume, and
6. letters of recommendation (preferably from faculty members).

The Student Learning Assistance Center's (SLAC's) prelaw advisor recommends that students considering law school also seek guidance from faculty members on choosing rigorous courses that are reading and writing intensive to prepare academically and on identifying and applying for relevant internships. Faculty and staff members that have attended law school serve as valuable resources from whom students can learn about law school experiences firsthand.

Prelaw students are also urged to meet with the Law School Admissions Council (LSAC) prelaw advisors in SLAC, the Political Science and/or

Criminal Justice Departments to help students create individualized Law School Admission Test (LSAT) preparation plans using SLAC materials; research and select appropriate law schools; and complete personal statements, addenda, and resumes for students' Credential Assembly Service (CAS) files. Prelaw and appointment scheduling information are available at [www.txst.edu/slac/prelaw.html](http://www.txst.edu/slac/prelaw.html) (<http://www.txst.edu/slac/prelaw.html>) and the departments of Political Science and Criminal Justice and Criminology.

## Pharmacy

Pharmacy is a professional program leading to the Doctor of Pharmacy (Pharm. D). Prerequisite coursework required for admission to the professional program may be taken at Texas State. The pharmacy schools in Texas (including Texas A&M Health Science Center Irma Lerma Rangel College of Pharmacy, Texas Southern University College of Pharmacy and Health Sciences, Texas Tech University Health Sciences Center School of Pharmacy, The University of Texas at Austin College of Pharmacy, The University of Texas at El Paso School of Pharmacy, The University of Texas at Tyler Ben and Maytee Fisch College of Pharmacy, University of Houston College of Pharmacy, University of the Incarnate Word Feik School of Pharmacy, and University of North Texas Health Science Center College of Pharmacy) all require at least two years of prerequisite courses including chemistry, biology, mathematics, physics, English, humanities and social sciences, but the exact courses required vary by school. The Minor in Pre-Pharmacy Studies at Texas State includes coursework that will prepare students to apply to the widest range of pharmacy schools. Students interested in attending pharmacy school are strongly encouraged to add this minor to their degree program. It is imperative that pre-pharmacy students consult with an advisor prior to and during their degree program. For more information contact the Department of Chemistry and Biochemistry.

## Physical Therapy

The physical therapy profession requires a post-baccalaureate degree to practice; Texas State offers a Doctor of Physical Therapy degree program ([www.health.txstate.edu/pt](http://www.health.txstate.edu/pt) (<http://www.health.txstate.edu/pt/>)). The Department of Physical Therapy does not require a specific undergraduate degree for application to their program. There are two degrees that include most of the specific course pre-requisites for the DPT program. The College of Health Professions offers a Bachelor of Science in Health Sciences (<https://www.health.txst.edu/ha/Prospective-Students/Degree-Plan/BSHS.html>). The Department of Health and Human Performance in the College of Education offers the Bachelor of Exercise and Sports Science major in Exercise and Sports Science and a concentration in Pre-rehabilitation Sciences (<http://mycatalog.txstate.edu/undergraduate/education/health-human-performance/exercise-sports-science-prerehab-sciences/>). Because the prerequisites among DPT programs vary and students can apply to any DPT program, students should identify specific prerequisites for each program of interest (<https://ptcasdirectory.apta.org/?seqn=133>).

## Veterinary Medicine

At Texas State, all students must choose a major in one of the 4-year bachelor's programs. While any major is acceptable, majors in Agriculture, Animal Science, Biology or Chemistry most nearly parallel the courses required in the pre-veterinary program. Department of Agricultural Sciences has a specific major in Animal Science (pre-veterinary concentration) that provides specialized course work and animal experience required for students planning to enter veterinary school ([/undergraduate/applied-arts/agriculturalsciences/agriculture-animal-science-preveterinary-concentration/](http://mycatalog.txstate.edu/undergraduate/applied-arts/agriculturalsciences/agriculture-animal-science-preveterinary-concentration/) ([http://](http://mycatalog.txstate.edu/undergraduate/applied-arts/agriculturalsciences/agriculture-animal-science-preveterinary-concentration/)

[mycatalog.txstate.edu/undergraduate/applied-arts/agriculturalsciences/agriculture-animal-science-preveterinary-concentration/](http://mycatalog.txstate.edu/undergraduate/applied-arts/agriculturalsciences/agriculture-animal-science-preveterinary-concentration/))).

Advising for students at Texas State who wish to pursue the pre-professional curriculum in veterinary medicine is available by contacting the pre-veterinary advisor in the Department of Agricultural Sciences at Texas State.

Bachelor of Applied Arts and Sciences (B.A.A.S.)  
 Bachelor of Arts (B.A.)  
 Bachelor of Arts in International Studies (B.A.I.S.)  
 Bachelor of Business Administration (B.B.A.)  
 Bachelor of Exercise and Sports Science (B.E.S.S.)  
 Bachelor of Fine Arts (B.F.A.)  
 Bachelor of General Studies (B.G.S.)  
 Bachelor of Health and Wellness Promotion (B.H.W.P.)  
 Bachelor of Healthcare Administration (B.H.A.)  
 Bachelor of Music (B.M.)  
 Bachelor of Public Administration (B.P.A.)  
 Bachelor of Science (B.S.)  
 Bachelor of Science in Agriculture (B.S.A.G.)  
 Bachelor of Science in Clinical Laboratory Science (B.S.C.L.S.)  
 Bachelor of Science in Communication Disorders (B.S.C.D.)  
 Bachelor of Science in Criminal Justice (B.S.C.J.)  
 Bachelor of Science in Family and Consumer Sciences (B.S.F.C.S.)  
 Bachelor of Science in Health Information Management (B.S.H.I.M.)  
 Bachelor of Science in Nursing (B.S.N.)  
 Bachelor of Science in Radiation Therapy (B.S.R.T.)  
 Bachelor of Science in Respiratory Care (B.S.R.C.)  
 Bachelor of Science in Technology (B.S.T.)  
 Bachelor of Social Work (B.S.W.)

**Certificate and degree programs are approved in accordance with guidelines provided by the Southern Association of Colleges and Schools Commission on Colleges, the Texas Higher Education Coordinating Board and the Texas State University System Board of Regents.**

The table below lists all undergraduate majors and degrees as they appear on a diploma and a transcript. Please note that a number of these programs have additional options or concentrations available. Program hours depend on degree options selected. The program list displays the minimum number of semester credit hours a student could complete to earn a particular degree. It does not reflect an actual student degree plan, which could have concentrations or options that require additional hours beyond the minimum. Consult the program page inside this catalog for more detailed information.

Texas State offers programs through the San Marcos Main Campus (M), Round Rock Campus (RRC), Online (O), Accelerated Online (AOP), and the Collin College Partnership (CCP) identified below.

Major	Degree	Minimum Hours	Minor	Teacher Cert.
Accounting (M) (p. 145)	B.B.A.	120		
Advertising (M) (p. 318)	B.S.	120	Required	
Agriculture (M) (p. 662)	B.S.A.G.	120		Optional
Animal Science (M) (p. 667)	B.S.A.G.	120		
Agricultural Business and Management (M) (p. 668)	B.S.A.G.	120		

Anthropology (M, O) (p. 499)	B.A.	120	Required	
Anthropology (M) (p. 501)	B.S.	120	Required	
Applied Arts and Sciences (M, RRC, AOP, CCP) (p. 132)	B.A.A.S.	120		
Applied Mathematics (M) (p. 770)	B.S.	120	Required	
Applied Sociology (M) (p. 617)	B.S.	120	Required	
Aquatic Biology (M) (p. 684)	B.S.	120	Required	
Art (M) (p. 282)	B.A.	120	Required	
Art History (M) (p. 283)	B.A.	120	Required	
Biochemistry (M) (p. 698)	B.S.	120	Required	
Biology (M) (p. 686)	B.S.	120	Required	Optional
Chemistry (M) (p. 700)	B.S.	120	Required	Optional
Civil Engineering (M) (p. 731)	B.S.	126		
Communication Design (M) (p. 284)	B.F.A.	120		
Communication Disorders (RRC) (p. 437)	B.S.C.D.	120		
Communication Studies (M, AOP) (p. 298)	B.A.	120	Required	Optional
Computer Information Systems (M, RRC) (p. 153)	B.B.A.	120		
Computer Science (M) (p. 709)	B.A.	120	Required	
Computer Science (M, RRC, CCP) (p. 710)	B.S.	120	Required	
Concrete Industry Management (M) (p. 751)	B.S.	120	Required	
Construction Science and Management (M) (p. 752)	B.S.	120	Required	
Consumer Affairs (M) (p. 113)	B.S.F.C.S.	120	Required	Optional
Criminal Justice (M, RRC) (p. 99)	B.S.C.J.	120		
Dance (M) (p. 404)	B.A.	120	Required	
Dance (M) (p. 406)	B.F.A.	120		Optional
Digital Media Innovation (M) (p. 322)	B.S.	120	Required	
Economics (M) (p. 169)	B.A.	120	Required	
Economics (M) (p. 170)	B.B.A.	120		
Education (M) (p. 211)	B.A.	120		Yes
Education (RRC, AOP) (p. 212)	B.S.	120		Yes
Electrical Engineering (M, CCP) (p. 733)	B.S.	130		
Electronic Media (M) (p. 324)	B.S.	120	Required	
Engineering Technology (M, CCP) (p. 756)	B.S.	120		
English (M) (p. 510)	B.A.	120	Required	Optional

Exercise and Sports Science (M, RRC, CCP) (p. 251)	B.E.S.S.	120		Optional
Fashion Merchandising (M) (p. 116)	B.S.F.C.S.	120	Required	
Finance (M) (p. 172)	B.B.A.	120		
French (M) (p. 636)	B.A.	120	Required	Optional
Geographic Information Science (M) (p. 537)	B.S.	120	Required	
Geography (M) (p. 538)	B.S.	120	Required	Optional
Geography Natural Resources and Environmental Studies (M) (p. 539)	B.S.	120	Required	
Geography Urban and Regional Planning (M) (p. 540)	B.S.	120	Required	
Geography Water Resources (M) (p. 542)	B.S.	120	Required	
German (M) (p. 639)	B.A.	120	Required	Optional
Health and Fitness Management (M) (p. 254)	B.E.S.S.	120	Required	
Health Information Management (M, RRC) (p. 447)	B.S.H.I.M.	120		
Health Sciences (M, RRC) (p. 419)	B.S.	120	Required	
Healthcare Administration (M) (p. 442)	B.H.A.	120		
History (M) (p. 561)	B.A.	120	Required	Optional
Human Development and Family Sciences (M) (p. 118)	B.S.F.C.S.	120		Optional
Human Geography (M) (p. 536)	B.A.	120	Required	
Industrial Engineering (M) (p. 739)	B.S.	129		
Integrated Studies (M, AOP) (p. 200)	B.G.S.	120	Required	
Interior Design (M) (p. 120)	B.S.F.C.S.	120		
International Relations (M) (p. 474)	B.A.I.S.	120		
International Studies (M) (p. 476)	B.A.I.S.	120		
Journalism (M) (p. 328)	B.S.	120	Required	
Management (M, RRC) (p. 179)	B.B.A.	120		
Manufacturing Engineering (M) (p. 740)	B.S.	126		
Marketing (M) (p. 191)	B.B.A.	120		
Mass Communication (M, RRC, O, AOP) (p. 317)	B.A.	120	Required	
Mathematics (M) (p. 769)	B.A.	120	Required	
Mathematics (M) (p. 771)	B.S.	120	Required	Optional

Mechanical Engineering (M) ( <a href="http://mycatalog.txstate.edu/undergraduate/science-engineering/ingram-school/mechanical-bs/">http://mycatalog.txstate.edu/undergraduate/science-engineering/ingram-school/mechanical-bs/</a> )	B.S.	126		
Medical Laboratory Science (M) (p. 432)	B.S.M.L.S.	120		
Microbiology and Molecular Genetics (M) ( <a href="http://mycatalog.txstate.edu/undergraduate/science-engineering/biology/microbiology-molecular-genetics-bs/">http://mycatalog.txstate.edu/undergraduate/science-engineering/biology/microbiology-molecular-genetics-bs/</a> )	B.S.	120	Required	
Music (M) (p. 360)	B.A.	120	Required	
Music Studies (M) (p. 362)	B.M.	129		Yes
Musical Theatre (M) (p. 410)	B.F.A.	123		
Nursing (RRC, AOP) (p. 453)	B.S.N.	120		
Nutrition and Foods (M) (p. 121)	B.S.F.C.S.	120		Optional
Performance (M) (p. 369)	B.M.	120		
Philosophy (M) (p. 585)	B.A.	120	Required	
Photography (M) (p. 287)	B.F.A.	120		
Physical Geography (M) (p. 543)	B.S.	120	Required	
Physics (M) (p. 781)	B.A.	120	Required	
Physics (M) (p. 782)	B.S.	120	Required	Optional
Political Science (M) (p. 599)	B.A.	120	Required	Optional
Psychology (M, RRC, AOP) (p. 608)	B.A.	120	Required	
Psychology (M, RRC) (p. 609)	B.S.	120	Required	
Public Administration (M, AOP) (p. 601)	B.P.A.	120	Required	
Public Health (M, AOP) (p. 255)	B.S.	120	Required	
Public Relations (M, RRC) (p. 331)	B.S.	120	Required	
Radiation Therapy (M) (p. 459)	B.S.R.T.	120		
Recreation Studies (M) (p. 259)	B.S.	120	Required	
Religious Studies (M) (p. 586)	B.A.	120	Required	
Respiratory Care (M, AOP) (p. 465)	B.S.R.C.	120		
Social Work (M, RRC, O) (p. 137)	B.S.W.	120		
Sociology (M) (p. 616)	B.A.	120	Required	
Sound Recording Technology (M) (p. 379)	B.S.	120		
Spanish (M) (p. 641)	B.A.	120	Required	Optional

Studio Art (M) ( <a href="http://mycatalog.txstate.edu/undergraduate/fine-arts-communication/art-design/studio-art-ceramics-specialization-bfa/">http://mycatalog.txstate.edu/undergraduate/fine-arts-communication/art-design/studio-art-ceramics-specialization-bfa/</a> )	B.F.A.	120	Optional
Theatre (M) (p. 405)	B.A.	120	Required
Theatre (M) (p. 411)	B.F.A.	120	Optional
Wildlife Biology (M) (p. 690)	B.S.	121	

**Certificate and degree programs are approved in accordance with guidelines provided by the Southern Association of Colleges and Schools Commission on Colleges, the Texas Higher Education Coordinating Board and the Texas State University System Board of Regents.**

Minor hours required are in addition to the hours required for the student's chosen major. Click the name of the minor to find the course requirements.

Minor	Minimum Hours
Advanced Physics ( <a href="http://mycatalog.txstate.edu/undergraduate/science-engineering/physics/advanced-physics-minor/">http://mycatalog.txstate.edu/undergraduate/science-engineering/physics/advanced-physics-minor/</a> )	23
Adaptive Recreation and Sport (p. 262)	18
African American Studies (p. 470)	18
Aerospace Studies (p. 95)	19
Aging and the Life Course (p. 618)	18
Agricultural Mechanics (p. 670)	18
Agriculture (p. 670)	19
Animal Science (p. 670)	19
Anthropology (p. 502)	20
Applied Mathematics (p. 774)	20
Arabic (p. 648)	26
Art (p. 292)	24
Art History (p. 292)	18
Biochemistry (p. 703)	24
Biology (p. 692)	29
Business Administration (p. 143)	18
Chemistry (p. 703)	23
Chinese (p. 649)	26
Coaching (p. 262)	18
Communication Studies (p. 304)	21
Computer Science (p. 714)	22
Consumer Affairs (p. 124)	18
Criminal Justice (p. 100)	18
Dance (p. 417)	20
Data Analytics (p. 162)	18
Diplomacy (p. 490)	21
Diversity Studies (p. 470)	18
Economics (p. 175)	18
Education (p. 226)	21
Engineering ( <a href="http://mycatalog.txstate.edu/undergraduate/science-engineering/ingram-school/-engineering-minor/">http://mycatalog.txstate.edu/undergraduate/science-engineering/ingram-school/-engineering-minor/</a> )	24

Engineering Technology (p. 763)	18
English (p. 523)	24
Environmental Studies (p. 544)	20
Exercise and Sports Science (p. 262)	22
Family and Consumer Sciences (p. 124)	18
Fashion Merchandising (p. 124)	18
Forensic Psychology (p. 611)	21
French (p. 649)	29
Geographic Information Science (p. 544)	23
Geography (p. 545)	19
Geology (p. 545)	27
German (p. 649)	29
Health Communication (p. 304)	21
Health Informatics (p. 448)	19
Health Information Management (p. 449)	19
Healthcare Administration (p. 443)	18
History (p. 574)	24
Horticulture (p. 670)	18
Honors Studies (p. 92)	21
Human Development and Family Sciences (p. 125)	18
Human Resource Development and Training (p. 201)	15
Innovation and Entrepreneurship (p. 187)	18
International Business (p. 143)	18
International Studies (p. 487)	21
Italian ( <a href="http://mycatalog.txstate.edu/undergraduate/liberal-arts/world-languages-literatures/italian-minor/">http://mycatalog.txstate.edu/undergraduate/liberal-arts/world-languages-literatures/italian-minor/</a> )	29
Japanese (p. 649)	26
Jazz (p. 380)	18
Journalism (p. 334)	18
Latina/o Studies (p. 618)	18
Leadership Studies (p. 305)	21
Mariachi (p. 381)	18
Mass Communication (p. 334)	18
Mathematics (p. 775)	20
Media Studies (p. 524)	18
Medical Humanities (p. 588)	21
Medieval and Renaissance Studies (p. 524)	24
Military Science (p. 127)	23
Music (p. 381)	18
Music Composition (p. 381)	18
Nature and Heritage Tourism (p. 545)	22
Nutrition (p. 125)	18
Opera (p. 381)	20
Outdoor Recreation Leadership (p. 263)	18
Peace and Social Justice Studies (p. 575)	18
Philosophy (p. 588)	18
Physics (p. 785)	21
Plant and Soil Science (p. 670)	20
Political Communication (p. 306)	24
Political Science (p. 603)	24
Pre-Dental Studies (p. 650)	60
Pre-Medical Studies (p. 651)	55



Pre-Pharmacy Studies (p. 652)	62
Pre-Physician Assistant Studies (p. 652)	48
Psychology (p. 611)	18
Public Administration (p. 603)	21
Public Health (p. 263)	18
Recreation and Event Planning (p. 263)	18
Religious Studies (p. 588)	18
Social Impact through Applied Research (p. 502)	18
Social Work (p. 139)	18
Sociology (p. 619)	18
Southwestern Studies (p. 491)	18
Spanish (p. 649)	29
Special Education (p. 227)	21
Sport Psychology (p. 611)	21
Studies in Popular Culture (p. 619)	18
Sustainability Studies (p. 620)	18
Theatre (p. 418)	18
Value Studies (p. 589)	18
Women's, Gender, and Sexuality Studies (p. 472)	18
Writing (p. 525)	24

Click the name of the certificate to find the course requirements.

In order to receive the certificate, a student must apply for graduation in the semester in which they plan to complete the certificate.

**Certificate and degree programs are approved in accordance with guidelines provided by the Southern Association of Colleges and Schools Commission on Colleges, the Texas Higher Education Coordinating Board and the Texas State University System Board of Regents.**

Undergraduate Certificate Programs	Department/School	Requirements
Business Spanish (p. 648)	World Languages & Literatures	9-23
Professional Spanish (p. 648)	World Languages & Literatures	9-23

#### Dean

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#### Associate Dean

Peter Tschirhart, Ph.D.

The Honors College at Texas State University provides highly motivated students with unique and challenging educational experiences. Through partnerships with other academic units and community organizations, the college fosters intellectual curiosity and research activity while preparing students to engage meaningfully in our increasingly complex and diverse society.

Honors courses are taught by faculty from numerous disciplines and are intended to promote interdisciplinary inquiry, creativity, and a lifetime love of learning. In small seminar- and workshop-style classrooms, students regularly engage with peers and faculty, interrogate assigned readings, embark on field trips, or present their research and creative projects.

Through the Honors Independent Study, the Honors Contract course, or the Honors Capstone Project, students may design their own course of study.

The Honors College also helps students to consider their educational ambitions beyond campus. We encourage students to apply for nationally and internationally competitive awards that can assist students applying to graduate schools and facilitate both domestic and international study away experiences.

The Honors College is housed in historic Lampasas Hall, adjacent to Old Main. The space includes seminar rooms, study rooms, a student computer lab, a conference room, a multicultural lounge, offices for staff and student academic organizations, an art gallery, and the Honors Coffee Forum.

## Application

The Honors College accepts students on a rolling admissions basis. To apply, visit our website (<https://www.txst.edu/honors/apply.html>). Entering students from the top 10 percent of their high school graduating class, or those with a composite score of 27 on the ACT or 1270 on the SAT (Math + Verbal) are qualified admission to join the college. Transfer or currently enrolled students with an overall or institutional GPA of at least 3.25 are also eligible to apply.

## Graduation

Students wishing to graduate in the Honors College must choose one of the following paths:

1. the traditional Honors College route, which requires 15 hours of honors credit, including a completed Honors Capstone Project, or
2. a Minor in Honors Studies, which requires 21 hours of honors credit, a cross-cultural experience (such as education abroad), and a completed Honors Capstone Project.

To remain in the Honors College and graduate from the program, honors students must also maintain a minimum overall or Texas State GPA of 3.25.

The Honors Capstone Project encourages students to design a significant research or creative project that is completed under the supervision of a member of the Texas State faculty. Students must present their findings during an undergraduate thesis forum, and completed theses are added to the digital collections of Alkek Library. Many students find the experience of completing an Honors Capstone Project valuable as they plan their applications to graduate school and/or applications for post graduate work.

Texas State recognizes students who complete Honors College graduation requirements adding a special annotation to their official transcript and supplementing their diploma with an Honors College certificate. The Honors College also provides a special medallion, which should be worn during the Commencement ceremony as part of the Texas State academic regalia.

## Benefits

Active Honors College students are granted early registration privileges and access to specialized honors advising throughout the year. Honors courses are also limited in enrollment, providing students better access to faculty advising and mentorship. Teaching and learning in the Honor

College is thoughtfully designed to promote student engagement through discussions, seminars, projects, and other forms of active learning.

Students may apply for travel assistance in order to present research at regional and national conferences, and they are eligible for scholarships and research support awarded through the Undergraduate Research Fellowship (URF) program. Honors students are encouraged to contribute, as both authors and editors, to the Texas State Undergraduate Research Journal (TXSTUR), a peer-reviewed journal managed collaboratively among faculty and students. Students may also submit research posters to the Undergraduate Research Conference (URC), organized by the Honors College, held annually in April.

## Honors College Faculty

The Honors College builds on the strength of master teacher-scholars from across campus, including faculty who have received Presidential Excellence, Piper Professor, Fulbright Fellowships, and other awards for their writing, research, teaching, and service to the community.

## Courses in Honors

Honors College courses represent many different academic departments and incorporate interdisciplinary points of view. Because enrollment is limited, honors courses often utilize a seminar or workshop format that encourages students to engage in discussion, demonstrate problem-solving skills, and communicate their work orally, in writing, and through creative projects.

Some Honors College courses satisfy general education core requirements or fulfill requirements in various majors and minors. Most courses with "HON" prefix count as writing intensive. Recent offerings include Political Ecology of Science Fiction; Interdisciplinary Perspectives on Creativity; The Mathematics and Statistics of Gambling and Sports Betting; Philosophy, Politics, and Economics; Balinese Music & Its Cultural Context; Hell Across Cultures; Comics, Cartoons, and Contested Racial Identities in U.S. History; Entrepreneurial Design; Idea Lab: Redesigning the Campus Experience. All courses affiliated with the Honors College are expected to promote active learning or independent inquiry.

## Honors Course Proposals

New course proposals are accepted on a biannual basis and are reviewed by a committee consisting of Honors College faculty, staff, and students. Course proposals for the fall term must be received by September 1 of the prior school year. Course proposals for the spring term must be received by April 1 of the prior school year. New general education course proposals are only accepted at the September deadline.

With approval, faculty may also request that existing departmental courses be offered as Honors College sections; these courses are designated in the online system with an "H" section prefix. Honors courses offered directly through academic departments will follow the same curriculum but include additional depth in subject matter, provide increased engagement with faculty, and promote student research and creative activity. Possible course modifications include independent research, group projects, papers, and fewer multiple-choice exams.

## Honors Course Contract

The Honors Course Contract Application allows any Texas State course at the 3000 or 4000 level to receive Honors credit. A completed application requires concurrent approval of the student, faculty instructor, and Honors College. With the instructor's guidance, students seeking

honors credit complete at least 15% work beyond the requirements set forth in the syllabus and they must earn a 'B' or better for their final course grade. Students may also request to have independent study courses in other departments count as Honors credits using the Honors Course Contract Application form. Completed contract courses will receive a designation of "Honors work included" on the student's transcript.

## Honors Organizations & Post-Graduate Opportunities

Faculty and staff of the Honors College coordinate activities for several campus, state, and national honors organizations, such as the Stelos Scholars, Terry Scholars, and Phi Kappa Phi. A complete listing of Honors-affiliated organizations can be found on our website (<https://www.txst.edu/honors/opportunities.html>).

The Honors College also provides advising and support to students applying for national scholarship and fellowship programs, including the Gates-Cambridge Scholarship, the Truman Scholarship, and the Rhodes Scholarship. More information can be found online. Students interested in applying for these awards should contact the Honors College for a preliminary advising appointment 6-12 months prior to the deadline. Please visit our website to book an appointment.

## Minor

- Honors Studies (p. 92)

**Subjects in this department include: HON (p. 67), RES (p. 92)**

## Courses in Honors (HON)

**HON 1390C. Greek Civilization: The Trojan War and the Western Imagination.**

The course will introduce students to Greek civilization and its impact on the western world by examining how one theme central to the Greek literary imagination—the Trojan War—influenced the development of later western literature. The course studies major texts in the Greek literary canon. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 1390D. Ideal Societies I: The Greek Experience.**

Culture and Civilization in 5th century Athens. The Greek Experience: towards a new vision of human nature and of society. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 1390F. Economic Thinking: Personal Values, Social Choice & Rational.**

This class explores the sociological and philosophical effects operating in conjunction with economic decision-making. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 1390H. Understanding Communication & Technology.**

The course is designed to focus on skills, research and theories about the relationships between technology and communication behavior.

It teaches face to face communication skills in the contemporary technological environment. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 1390I. Role of the Storyteller in Society: Promoter, Protector or Provocateur.**

The course focuses on the role of the storyteller from ancient times to the present. Students will cultivate an appreciation for the oral tradition in the shaping of history, cultural identity, social mores and personal values. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2110A. Soundscape Research and Environmental Listening.**

How might we understand environmental sound as a kind of music? In this interactive short course, students will explore the research and scholarship of the "World Soundscape Project," understood both as a historical movement and a contemporary practice. We will examine primary and secondary source literature from musicians, sound artists, and environmentalists—including R. Murray Schafer, Barry Truax, and Hildegard Westerkamp. And, through a series of workshops, we will describe basic principles of environmental listening, analyze the local soundscape, and assess the aural conditions and qualities of San Marcos and central Texas.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2110B. Research Experience.**

This course will provide students direct engagement with research at Texas State and in the surrounding region. Students will interact with faculty and graduate students, recognize different levels of research engagement, and gain an understanding of the role that research plays in graduate school. Students will also explore how undergraduate research can enhance and expand future learning and career opportunities by interacting with professionals and/or Texas State alumni.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2301A. Writing to Change the World.**

This course examines communication through writing to promote positive change in the world. This course will enable students to communicate their own arguments appropriate to the subject, occasion and audience. Students will choose a global issue on which to focus their writing, and perform related community service. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Communication Core 010|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2301B. Writing Yourself into Academia: Creating Portraiture.**

By studying a person, a group of people, an institution, or a concept, students will create carefully researched written "portraits" that integrate personal narrative, interviews, and academic research. Students will communicate their own arguments and develop ideas about the effect of the message to foster understanding and to communicate persuasively. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Communication Core 010|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2302A. Elementary Number Theory.**

This course engages students in the systematic study of problems in elementary number theory using definitions and logical deductions from these definitions. Emphasis will be on developing critical thinking and applications to modern problems. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2302B. Graph Theory and Applications.**

This course engages students in the study of important topics in graph theory through its applications and through proofs designed to strengthen mathematical techniques. The course will emphasize developing critical thinking and applications to modern problems. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2303A. Teaching Physical Science to Children.**

Course content includes both physics concepts and research findings on physics teaching and learning. Students will develop a deep understanding of fundamental concepts in physical science and how these concepts relate to making sense of everyday experiences. This studio-styled physics course is ideal for pre-service K-8 teachers. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2303B. Astronomy in Art, History, and Literature.**

In this class, students will combine astronomy and the humanities. They will create computer simulations of past celestial events. These results will be combined with evidence gathered from primary sources to investigate how astronomy affected history or appeared in the historical art or literature. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2303C. Building a Greener Future: One Home at a Time.**

Students will use basic scientific principles to investigate resource usage in our daily lives from the production of electrical energy and construction of housing to daily consumption including HVAC systems and major utilities. Students will compare energy conservation programs across the globe and evaluate how public policy effects energy consumption. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2303D. Everyday Biology.**

This course provides the non-science major with a strong foundation of scientific methods and basic biological concepts. Special emphasis is placed on reviewing biological concepts relevant to everyday life (both current and future) including disease, evolution, genetics, biotechnology, diet, and environmental biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2304A. The Meaning of Death.**

By examining the moral and existential questions raised by our own mortality, students in this course will practice critical thinking and examine the variety of human responses to and understanding of death by focusing on how ideas, values, beliefs, and other aspects of culture express and affect human experience. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2304B. Eating Animals in America: Historical and Philosophical Perspectives.**

This course examines the changing nature of, and views about, the production and consumption of animals in America from the 18th century to the present. The course will focus on the ethical and philosophical issues raised by eating animals. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2304C. Nonviolence and Sustainable Social Change.**

This course examines nonviolence as the systematic endeavor to break cycles of violence, poverty, and racism. The course will focus on investigating the ongoing force of such cycles and to formulate effective understandings for subverting and reversing such trends to offer productive contributions toward more sustainable human development. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2304D. Reinventing Utopia.**

This seminar introduces students to utopian studies, a field of humanities that views utopia as an expression of a universal human desire for better ways of living and being. Whether in the form of religious paradises, literary fantasies, philosophical treatises, or intentional communities, cultures around the globe have dreamed utopias—imaginary worlds of peace, plenty, and human flourishing—to define their values, orient their projects, and explore the human condition. What can we learn from utopia's poets, philosophers, and architects, past and present, to help us reinvent utopia at a time when the planet may need it the most? (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2305A. African American Popular Music: Society, Politics, and Culture.**

This course is a reading-, writing-, and listening-intensive interdisciplinary survey of African-American popular music in America and its relationship to American culture, society, politics and the other arts. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050|Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter



**HON 2305B. Women and Texas Music.**

This course examines the lives and creative contributions of Texas women composers, performers, historians, and patrons, and their roles in the promotion and advancement of the arts, especially music, in Texas. This course will address topic-related issues of class, race, and identity formation. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050|Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2305C. Italy and Arts of the Islamic World.**

This course focuses on the interpretation of art in its historical context, introducing students to visual analysis and art historical interpretation to understand related scholarship exploring the relationship of Italy to the Islamic world in the medieval and Renaissance periods. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050|Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2305D. Honors Creative Arts.**

Students in this course develop broad familiarity with creative arts disciplines through project-based learning. Each project is rooted in a "real world" challenge familiar to the disciplines of art, music, theatre, and dance. To propose a tractable solution, students consult with experts and evaluate significant cultural-historical artifacts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2306A. American History Through Memoirs.**

Through studying memoirs this course focuses on American history since the end of the Reconstruction period. The memoirs, depicting interactions among individuals, communities, states, the nation, and the world, provide an understanding of how these interactions have contributed to the development of the United States and its global role. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Exclude from 3-peat Processing|Honors|Multicultural Perspective|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2306B. Baseball and the American Experience.**

This study of baseball focuses on American history since the end of the Reconstruction period. As a testing ground for the persistence of racial prejudice and the expansion of civil rights, and with advances in technology and management structure, the study of baseball will expose the American experience. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2306C. America in the 1960s: A History of Movements and Ideas.**

This course in the history of American social and protest movements from the end of Reconstruction through Occupy focuses in particular on the movements of the 1960s - the Civil Rights Movement, the New Left, the Women's and Homosexual Liberation Movements, and the Counterculture - and their enduring legacies in contemporary society. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2306D. Witches, Whores, Murderers & Thieves: Capital Crime in Early America.**

This course is an in-depth investigation into the social and legal culture of Early America through the study of microhistories. In this course, we will concentrate on a series of capital crimes, ranging from murder to witchcraft. The period will be the 17th century through 1850. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2306E. Early American History Through Biography.**

This course will examine early American history, from colonial times through 1877, through the lens of biography. Students will not only read biographical works on past figures but also analyze autobiographical writings that shed light on their lives. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2306F. Rethinking American Exceptionalism.**

This course introduces students to the major political, economic, social, intellectual, and cultural developments in American history through Reconstruction with a special emphasis on the origins and evolution of the tradition of American exceptionalism. Students will evaluate America's national ideology through an analysis of primary source documents and scholarly debate.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2306G. American Countercultures.**

This course introduces students to major political, economic, social, and cultural developments in American history through the lens of "counterculture." Although this term is usually associated with the 1960s, countercultures have flourished in the US since the mid-nineteenth century. As 60s guru Timothy Leary observed, countercultures bloom wherever and whenever members of a society embrace lifestyles, artistic expressions, and ways of thinking and being that diverge radically from the mainstream. Students will examine how countercultures from the transcendentalists to the hippies and beyond reflect the hopes and anxieties of younger generations and sometimes succeed in bringing about revolutionary change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2307A. Democracy in America.**

This course is a study of functions performed in the American system of government, understood through the framework of Democracy in America, Alexis de Tocqueville's seminal study of American social and political life, the nature and distinctive character of modern democratic societies, and the problems and perils these societies confront. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Govt/Pol Science Core 070|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2307B. Contemporary Issues in American Politics.**

In considering conflicts between liberty and equality with emphasis on how these principles are defined within the American system of constitutional, students will examine literature addressing race, gender, class, and sexuality in relation to events such as national elections, and to works in modern and contemporary political thought. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Govt/Pol Science Core 070|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2308A. Economic Anthropology.**

This course covers central issues in economic anthropology including the production, exchange, distribution, consumption, property, economic surplus, inheritance, and types of economic structure in various cultures. Materials will cover hunter-gatherer societies, simple agricultural societies, pre-capitalist complex state societies, and issues of development in non-industrial countries. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309A. Origins of Civilization.**

By studying literary, mythic and philosophical works selected with special attention to narratives about the origins of humanity and civilization, students will encounter a variety of explanations of human existence. The course will broaden students' perspectives and provide insight into the background of contemporary world cultures. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309B. Re-Humanizing Communication.**

This course examines technology's impact on human communication. Students will examine their dependency on technology in order to re-humanize communication. Students will learn to express ideas through the development of interpersonal, small group, and presentational communication skills, developing command of oral, aural, written, and visual literacy in appropriate contexts. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Communication CAO 091|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309C. Great Ideas: Humanities I.**

By studying classical foundational texts in Western culture from interdisciplinary perspectives, students will understand the origin of great ideas and relate them to today's world. Texts are chosen around a particular theme by a team of instructors to focus on the earliest recorded works up to the Renaissance. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309D. Magic Realism in the Works of Gabriel Garcia Marquez.**

A study of selected works of Nobel Prize author Gabriel Garcia Marquez, this course offers unique insights into Latin American culture, filtered through the literary and journalistic vision of Colombia's world renowned author. Additional readings and films emphasize the complex nature of the Latin American culture and literature. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309E. Preserving Humanity in the Face of Conflict: The War Story Genre.**

This course provides students the opportunity to consider the human impact of several global conflicts that have occurred over the past forty years by focusing on novels, short stories, essays, and a memoir written about post-World War II conflicts in Vietnam, the Balkans, Iraq, and Afghanistan. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309F. CS Lewis: Chronicles of a Master Communicator.**

This course uses the writing and life of C.S. to examine communication theory and principles. Lewis's work as a speaker, teacher, broadcaster and educator provides a comprehensive body of work that students can evaluate as they master and apply rhetorical and communication theories. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Communication CAO 091|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309G. Nature and the Quest for Meaning.**

The class focuses on American nature writing to recognize how authors communicate about nature. Students will examine the ways in which human beings experience the natural world - as an object of study, as a reflection of themselves and as a lens to look for meaning in their lives. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309H. Great Ideas: Humanities II.**

By studying foundational texts in Western culture from interdisciplinary perspectives, students will understand the origin of great ideas and related them to an understanding of today's world. Texts are chosen around a particular theme by a team of instructors to focus on works from the Early Modern period to the present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309I. Plotting the American Experience.**

An in-depth critical study of plot in major contemporary American novels and stories from the last 20 years, both as a driving force in the works and as a reflection of the American moment in which each was written. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309J. Memoirs from Lives off the Neurotypical Map.**

To understand the growing neurologically differently abled/disabled, -ordered, and mentally different/ill population and our perceptions of them and ourselves, we will analyze memoirs and aesthetic works by this true fringe group and consider what being fundamentally different means, and how labels affect people in and out of the neurotypical majority. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309K. The Death Plot: Fiction, Memoirs, Poems.**

Students will read, discuss, and write about poems, fiction, and essays to analyze the end of life. Analysis will encompass literary, sociological, and psychological perspectives on death. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309L. Communication and Consumer Culture.**

This cultural study of the turn of the twentieth century in America focuses on advertising and popular cultural messages. Students will analyze the new culture of consumerism as they develop knowledge about communication theory and strategies and practice their own communication skills. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Communication CAO 091|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309M. From Jay-Z to Kendrick Lamar: Politics, Power, and Identity in Hip Hop Literature.**

Students will read, discuss, and write about the poetry of Jay-Z and Kendrick Lamar along with other texts to analyze the artists' political engagement, power to effect change, command of language, and struggle with identity formation. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309N. Don Quixote and the Birth of the Modern Novel.**

An in-depth study of 16-17th century Spanish, medieval, Renaissance, and Baroque ideas, values, and culture in the study of Cervantes' Don Quixote, the first truly modern novel. Students will examine the novel's literary antecedents and its reception through the twenty-first century. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 23090. Talking Like TED.**

This course develops presentational speaking and storytelling skills through the lens of TED Talks. Students will view and discuss well-received TED Talks and practice the verbal and nonverbal behaviors related to effective communication. This course also focuses on interpersonal and small group communication skills related to presentational speaking.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Communication CAO 091|

Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309P. Honors American Literature.**

This course examines representative authors and works from American literature. Readings will be assigned from various literary genres and will be situated critically within a historical, social, and cultural context. Students will engage with course material through research and creative inquiry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309Q. Honors British Literature.**

Students will read and analyze representative authors and works from British Literature. The course examines works in historical, social, and cultural context as a record of human experience. Courses employ a variety of teaching methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2380F. Introductatino of Complementary/ Alternative Medicine.**

The course introduces students to complementary/alternative medicine (CAM) and its integrate with the traditional health care system. Emphasis is placed on historical, cultural, social, research and consumer aspects of CAM. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2380H. Building a Greener Future One Home at a Time.**

This course will focus on the science and engineering principles involved in building and maintaining a house. Students will investigate how choices of materials and design influence the cost, sustainability, and energy efficiency of housing. Laboratory experiences will develop these concepts and enable students to make common household repairs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2380J. Applying Statistics to Your World.**

This course engages students in active learning through statistical software, research studies, and simulations. Students will explore the elements of statistical thinking by collecting, modeling, and drawing conclusions from data while taking into account the nature of variability. Emphasis will be on engaging with real data and understanding statistical conclusions. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2390F. History of Ideas II: New England Roots of American Culture.**

An examination, through reading of significant works as well as a trip to important sites in New England, of the roots of American culture as it was influenced by the Puritans and Transcendentalists. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2390K. An Introduction to Arab Culture.**

This course will focus on educating students about different aspects of the Arabic culture. The relation between the Arabic language and the Arabic culture will be introduced through the discussion of cultural expressions. The course will also touch on the relation between the culture and Islam for the students to be able to differentiate between what is cultural and what is religious. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2390L. An Introduction to to Islam.**

This course will focus on educating the students about basic history and cultural practices related to Islam, the prophet of Islam and Islam's holy book, The Koran. It will also focus on the relationship between the Arabic language, the Arabic culture and Islam so the students will be able to distinguish between what is cultural and what is religious. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2391B. Role of Images in Mediating Reality.**

This course teaches students about subconscious influences on their perceptions of reality and their behavior, and the fundamentals of visual literacy by introducing students to visual literacy. Seeing is an avenue to higher-order thinking processes that will help students meet the professional, cultural and personal challenges of media. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter



**HON 2391P. Spirituality and Religion: A Contemporary Global Perspective.**

This course examines spirituality and religion as a universal component of human life, explores the world's major faith traditions, investigates personal and cultural biases to allow students to expand their global perspectives. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3010. STEM Cognition and Pedagogy.**

This course provides an introduction to STEM pedagogy. Students learn key education theories and methods from STEM education research and cognitive science. They also evaluate processes of teaching and learning and examine structures and practices that facilitate and/or inhibit student learning. This class is one option for first semester Learning Assistants.

**0 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3100. Research, Fellowships, and Grant Proposals.**

Creating a strong external funding application requires both persistence and imagination. This course will demystify the fellowship, scholarship, and grant application process and push students to develop key competencies that will help them translate their academic and/or creative interests into viable proposals. Students will receive structured and sustained feedback on their work as they engage collaboratively with the instructor and their peers. As a guiding framework, this course will use prestigious national and international programs, such as Fulbright, Churchill, and Rhodes.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3210. STEM Cognition and Pedagogy.**

This course provides an introduction to STEM pedagogy. Students will learn key education theories and methods from STEM education research and cognitive science. Students will evaluate the processes of teaching and learning and examine structures and practices that facilitate and/or inhibit student learning.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380A. Design Thinking and the Art of Product Development.**

Students will explore the use of design-thinking and human-centered design methods for developing new products and services. The course will focus on techniques and methods to articulate problems from a customer's point of view and will also explore contemporary methods organizations use to manage product portfolios and risk management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380B. Idea Lab: Redesigning the Campus Experience.**

In this problem-based seminar, students become active change agents by utilizing design-thinking and other pedagogies to address specific challenges impacting the campus experience. Design-thinking draws upon diverse disciplines and methodologies, takes a human-centered approach to problem solving, and asks students to "prototype to test." All majors and backgrounds are welcome.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380C. Entrepreneurial Design: Utilizing Design Thinking to Create Disruptive Companies.**

Students will focus on the interconnection between entrepreneurial thinking and innovation. They will develop innovation-driven venture skills and will gain open and critical thinking skills with a focus on community, understanding of calculated risk and the initiative to follow-through.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380D. Unpacking the Gaze: Intersectionality and Creative Publication.**

This course gives students the opportunity to develop advanced interdisciplinary skills through creative inquiry, critical analysis, and the creation of art that responds to historical and contemporary notions of the gaze. The debates and issues raised by this subject matter will serve as a platform for interdisciplinary discussions and thus appeal to students from a variety of disciplines. The course will meet the needs of: 1) Studio Art students who seek an introduction to researched-based approaches to art-making; and 2) Students outside of the Arts disciplines who seek exposure to creative problem solving, thinking through materials, and research-based creative production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380E. Exhibition Design & Curatorial Practices.**

This course examines the role that exhibitions play in communicating knowledge and explores the variety of display methods within the language of exhibits. As every exhibition program reflects the hosting institutions' mission, students will learn how to conceptualize exhibits for a variety of subjects: historical, scientific, contemporary, research, and temporary pop-ups. By approaching the subject of exhibit design in this manner, students will gain a sense of their own agency as arts administrators. Concurrent to focused weekly readings/group discussions/experiments, we will workshop final exhibit projects from concept to design throughout the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380F. Design Across Cultures.**

Students will work cross-culturally through collaborative projects with international students from a university program in Europe. Students will research European design values and discuss with students from other cultures, while also presenting American design values. It will conclude with at least one extensive communication design project that showcases their research completed.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380G. Dramaturgy and New Play Development.**

The best friend to a new play is the dramaturg. The process of dramaturgy involves deep exploration into a new play's environment, characters, constructs, and themes. By working with a brand new text, students in the course will practice dramaturgical research skills that will aid in the development and production of said plays. Students in this course will experience first hand the journey of a new play: from inception to fully mounted production. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380H. Regional Field Study: International Sustainable Transportation Engagement Program.**

This course offers a project-based approach to the study of sustainable transportation. Students work to collect primary data, present their findings, and engage with the local culture to develop a structured analysis of space and uses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3382B. Narratives In Psychology, Health, And Illness.**

This course explores the fields of narrative psychology and narrative medicine. Narrative psychology examines how stories and storytelling give significance to people's experiences. The course focuses on narrative representations of health, illness, and healing written by patients, physicians, and others to understand the connection between the individual and their social context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3382C. Emotional Intelligence: Applications for Life and Well-Being.**

In this course students examine the theory, research, and practice related to emotional intelligence. Emotional intelligence has far-reaching implications on health, mental health, education, the workplace, relationships, and more. Students learn the components, theory, and teaching of emotional intelligence and how it impacts a variety of behaviors and outcomes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3390H. Nature of Society: The Problem of Evil.**

The course will consist of a study of arguments and counterarguments about whether it is reasonable to believe in an all-knowing, all-powerful, and all-good God, despite the appearance of gratuitous evil. All major attempts to solve or dissolve the problem will be considered. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3390J. Don Quixote and the Birth of the Modern Novel.**

An in-depth study of Cervantes' Don Quijote, its literary antecedents, and its reception through the twentieth century. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3390K. Modern Democracy & Its Enemies.**

This course will focus on the key characteristics of 21st century democracy and the internal and external threats that challenge its health and continued existence. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3390P. Hollywood Amnesia.**

The course is designed to focus on films involving the topic of memory loss. Students will analyze the psychological, social and political considerations underlying this trend in time. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3390T. Federico Garcia Lorca: Politics and Passion.**

Life and works of 20th century Spanish playwright and poet as a focal point for study of Spanish history, Andalusian folklore, gender and society, and literary styles. Themes are Spanish Civil War, gypsies and Flamenco music, surrealism and oral poetic traditions. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3390X. Investigating European Film: From Cultural Politics to Strategies of Desire.**

This course examines the vision of the United States that European filmmakers developed. Course topics will include the American myth, the figure of the star, the status of the foreigner and the identity politics supported by film production. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3390Y. Theory of Language: Language, Mind and the making of Reality.**

The course is designed for students to gain an understanding of psycholinguistics, providing insights into human cognition and how the mind creates meaning through study of syntax, semantics, pragmatics and metaphors. The course seeks to find universal principles of cognition that make human language and communication possible. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3391B. The Nature of Man: Shaping of the Modern Mind.**

This course explores the ideas and institutions that have created our modern conception of the world. The course examines the importance of industrial change, our interest in science and technology, the insights of the social sciences, and new philosophies about human kind and the human condition. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3391W. Service Learning: A Study Abroad Course.**

This study abroad course will center on students' experiences volunteering with non-profit and/or government institutions abroad. Discussions and written assignments will provide opportunities to analyze the volunteer experiences. Field trips will provide cultural components to add to the discussion and written assignments. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392M. The New and Literary Journalism.**

The new literary journalism examines the genres of the new and literary journalism in light of literature; certain eras in reportage, i.e., war dispatches, philosophy, and the social sciences, among other disciplines. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392N. Modern Organizations' Perspectives.**

The course provides a conceptual and practical perspective on Modern Organizations. It is designed to stimulate the student's curiosity about management practices of companies pursuing a competitive advantage through modern philosophies, and to identify potential areas to apply their chosen field of study. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392P. The Nature of the Human Experience: Technology & Gender in Film.**

Gender and Technology in Film will include a survey and analysis of films and theoretical and literary texts, with a focus on how gender, technology, and body images are depicted in film. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392R. Teaching Children to Write Poetry.**

A study of books by Kenneth Koch describing his work and lessons teaching poetry to children for the past 30 years. Students will examine his ideas about the importance of teaching poetry to children, using classical poetry as well as lessons that draw forth a creative response from children. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392T. The Nature of the Human Experience: Integrated Marketing Communications.**

Integrated marketing communications is an interdisciplinary course designed to acquaint students with the principles and practice of integrated marketing communications. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392V. Nature of Man: Elementary Number Theory.**

This course is the systematic study of problems using definitions and logical deductions from these definitions. Elementary number theory provides an ideal medium for such a study since all basic types of mathematical proofs occur in a setting requiring no prior background. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392X. The Nature of the Human Experience: The Contemporary African Novel in English.**

Novels by contemporary African writers from West Africa, East Africa, and Southern Africa will be read and discussed. The class will also study the effects of colonialism on traditional African cultures. Students will consider problems of language in the African novel. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392Y. The Nature of the Human Experience I: Immortality.**

Is it reasonable to believe in life after death? The course will consist in attempts to answer this question with rational arguments. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3393F. The Nature of Man: Communication & Culture.**

This course is a cultural study of the turn of the twentieth century, with a focus on a critique of advertising and popular culture messages that communicated the new culture of modernism to an America in transition. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3393J. Sex, Drugs & Cabaret.**

This seminar considers European life in the years around 1900. Students will examine "high" modernism's themes, including: Urban experience, nationalism, anti-semitism, and explorations of sexuality in social science, law and the arts. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3393N. Violence in American Culture.**

The study of the life, times and thought of geniuses, focusing on the origin and evolution of their ideas and works and its effect on culture and civilization. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3393S. Entrepreneurs, Leaders, Teams: Best Practices.**

Writing Intensive seminar examining the "life stories" of selected entrepreneurs, identifies leadership qualities that may have contributed to success, and explores principles necessary for groups to become teams and for teams to become high performing. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3393T. The Voices of Eros in Poetry.**

This writing-intensive seminar examines erotic reality through the most private and intense verbal art - the poem. It explores philosophy, visual arts and religion in poetry. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3393V. Science & Politics of the Human Diet.**

This writing-intensive seminar on nutrition provides an exciting and personally relevant venue for learning science. Learning is based on scientific literature, dietary assessment, field trips and experimentation in a food science lab. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter



**HON 3393Y. Ethics of Care - East and West.**

This course compares contemporary western feminist ethics and ancient eastern thoughts regarding care. Each stresses personal relations, and high moral value placed on care. The course is interdisciplinary and studies gender and multicultural issues through a focus on care giving. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394C. Japanese Urban Experience.**

This course introduces students to urban Japanese life and culture through history, anthropology, literature, and film. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394G. Jazz: Cultural Diversity, Psychological & Political Zeitgests.**

This course is intended to help students appreciate cultural diversity and common unifying experiences leading to jazz, a uniquely American musical form. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394I. East Asian Tourism Today: Invention, Culture & Heritage.**

This course uses several disciplines to introduce students to the dynamics surrounding tourism in East Asia at the opening of the 21st century. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394J. Disturbing the Peace: The Politics of Language & Power in Hip-Hop Culture.**

This course introduces students to the language, film, literature, fashion, identity, and politics of hip-hop culture. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394N. Introduction to the Humanities I.**

This team-taught, interdisciplinary course examines the dilemmas that arise when individual desires conflict with the needs of society. Students analyze exemplary, original texts from the humanities tradition from the Classical period through the early modern era using the perspectives of literature, political theory, history, and philosophy. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394P. Individuals & Society: Intro to Humanities II.**

This interdisciplinary course examines the dilemmas that arise when individual desires conflict with the needs of society. Students analyze exemplary, original texts from the humanities tradition from the Enlightenment through the present using the perspectives of literature, political theory, history, and philosophy. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394Q. Modern Drama: Theatre of Revolt.**

This seminar and process-oriented course examines the era of modern drama (late 19th-20th century) through text and performance. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394R. Modern Art & Life: A Curatorial Seminar.**

This interdisciplinary course examines the intersection of art and life in the careers of artists who contributed to the birth of modern art. Students will learn about modern art's history and museum operations as they help to curate a major exhibition based on works in a local collection. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394T. Social Class Collison: the Post WWII British Novel of Manners.**

Using six novels, this course explores the social landscape of Britain when once-rigid class distinctions dissolved during WWII. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394V. Universal Human Rights: A Global Perspective.**

This course will examine universal human rights as an organizing framework for understanding the exceedingly complex global community in which we live today. It will examine significant social, political, philosophical, historical, legal, economic, geographic, and cultural factors that impact universal human rights. It will provide an overview of the challenges in implementing universal human rights, explore effective efforts to redress inequity, and examine opposing viewpoints. Finally, it will encourage students to engage in a critical intellectual inquiry and personal self-reflection. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394X. Magic Realism in the Works of Gabriel Garcia Marquez.**

A study of selected works of Nobel Prize author Gabriel Garcia Marquez, focusing on literature, history, politics and popular culture of Latin America. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394Y. The Quest for the Sacred in a Secular Age: Late-Modern Novels.**

The Protestant Reformation weakened the notion of a homogeneous, central religion, as did the theories of Charles Darwin and Sigmund Freud. Yet the sense that God was no longer a collective concept but a private belief didn't seem mainstream until the twentieth century. We will study five novels that explore this shift. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394Z. The Black Image in Postwar America.**

This course explores the complex ways in which blackness has been figured and represented in postwar American as well as some of the strategies that have been used to respond, intervene, and subvert these frequently monolithic representations. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395B. Integral Ecology.**

This course explores multiple issues associated with the development of integral ecology, an emerging metadiscipline rooted in a perception of reality that goes beyond traditional scientific rationalism to an intuitive awareness of the oneness of life, the interdependence of its multiple manifestations, and its cycles of change. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395C. Fibers to Fabric: the Interlacing of History, Science, and Technology.**

This course focuses on the role of fiber products in the development of civilization and technology. Through interdisciplinary investigations, the course seeks to provide an in-depth understanding of fiber science and place current technological, social and environmental issues surrounding textiles in historical perspective. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395F. Museum Representations.**

This course explores how cultural and aesthetic values, history, and the scientific record are constructed and interpreted by the process of representation in museum exhibits. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395G. 19th Century German Lieder.**

This course explores the poetry and the music of Lieder to propose text-music relationships. This course will explore the genre—its history, primary composers, and its continuing tradition into the 20th century. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395H. Creating and Teaching Mathematical Lessons.**

This course provides students the opportunity to create and teach mathematical lessons for children that integrate algebra and geometry – building their own mathematical understanding using inquiry based methods. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395I. Ever Since Darwin: Celebrating Darwin's 200th Birthday.**

This course explores Darwin's quest in arriving at the theory of natural selection, his reasoning and evidence, as well as flaws and fallout. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395J. The Meaning of Death.**

How does the fact that we will die affect the possibility of our living a meaningful life? In this course we will examine answers to this question provided by philosophers, psychologists, literary writers, and film-makers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395L. Summer Study in France.**

Summer Study in France offers an intensive 35 hours a week, integrated program of oral and written French, phonetics and civilization, designed for intermediate students and supplemented with cultural activities. In addition, a week in Paris introduces students to the French architectural and artistic legacy. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395M. Humanity and the Natural Environment: A Study of Interrelationships.**

An interdisciplinary introduction to the interdependence between humans and their natural environment, emphasizing linkages between human activities and their impacts on environmental resources and sustainability, including the ecosystem goods and services provided by a healthy environment. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395P. Preserving Humanity in the Face of Conflict: the War Story Genre.**

This course provides students the opportunity to consider the human impact of several global conflicts that have occurred over the past forty years by focusing on novels, short stories, essays, and a memoir written about post-World War II conflicts in Vietnam, the Balkans, Iraq, and Afghanistan. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395Q. Vishnu, Bollywood, and Masala: South Asian Literature in Context.**

This course explores the culture of South Asia via its highly provocative literature, including religious texts such as The Bhagavad Gita, as well as contemporary texts by writers such as Salman Rushdie and Manil Suri. We will contextualize our literary discussions by examining the region's history, religious history, religions, and culture. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395R. Hip-Hop Culture and Positive Youth Development.**

Hip-Hop culture is examined within the context of human development over the life course. Cultural dynamics are examined alongside the social and political history of the United States. Through the lens of Hip-Hop, students will use skills in reflection, discussion and creative expression to develop strategies for personal growth and well-being. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395S. Geographies of the Holocaust and Genocide.**

This course examines the Holocaust as a complex historical event and frames the Holocaust in the context of, and in comparison to, other genocides. The course is explicitly geographical in methods and subject matter, focusing on how the Holocaust and genocide are planned, implemented, and experienced differently in different places.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395V. Introduction to LGBT Studies: An Interdisciplinary Approach.**

This course is an introduction to LGBT Studies, combining three academic disciplines: social, political, and historical; drama and fine arts; and English and Queer Theory. These disciplines will be integrated throughout the semester to assist student in developing a perspective of local, national, and global LGBT themes and issues. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395X. Writing Yourself into Academia: Creating Portraiture.**

Portraiture is a cross-genre research methodology in which writers study a person, a group of people, an institution, or a concept. Students will create carefully researched portraits that integrate personal narrative, interviews, and academic research. Portraiture values students' lived experiences and has roots in anthropology, sociology, journalism, and creative nonfiction. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395Y. Juke, Twang, and Shout: Popular Music and Race in the U.S. South.**

Amongst the genres of American popular music, styles heavily associated with the U.S. South tend to predominate, and the history of each seems to be entangled with that region's contentious racial history. This course will engage the history of musical production and performance in the South while also examining the hagiography of the South, its music, and its people. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396B. Playwriting: A Structured Approach to Writing for the Stage.**

This course develops the basic professional techniques and skills used in writing for the theatrical stage. Students analyze scripts and perform practical exercises in story and character development, study dramatic play and structure and develop a full-length dramatic play. Weekly readings and critiques assist writers in refining their scripts. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396C. Screenwriting: A Structured Approach to Writing for the Screen.**

This course develops the basic professional techniques and skills used in writing for the screen. Students analyze contemporary scripts and perform practical exercises in story and character development, study screenplay structure and format, and develop a full-length dramatic screenplay. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396D. Mythology, Science and Creation.**

Using religious studies scholarship on myth, the course surveys creation mythologies from around the world. Native American, African, Near Eastern (including Biblical), Greco-Roman, Old European, and Asian Myths will be included. Cosmological myths will then be compared to scientific cosmology and the current model(s) of the Universe's origin. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396E. Free Speech, Free Press and the Supreme Court of the United States.**

This course focuses on U.S. Supreme Court decisions related to the First Amendment and the five rights of religion, speech, press, assembly and petition. By examining how the high court has interpreted the First Amendment, students will learn about government's sometimes wavering commitment to our nation's most cherished rights. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396F. The Art of Storytelling: From Origins to Improv.**

This seminar examines the art and culture of storytelling from ancient to contemporary times. Students read and analyze stories from oral and written traditions and develop skills in creating and applying storytelling in social, business, political and entertainment environments. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396J. Transforming Creative Art: Literature in Performance.**

This seminar/workshop course examines the process of transforming literature into performance. Through close reading and analysis, students develop a critical understanding of the literary, sociological, and cultural attributes of a written work, and then develop approaches to transforming and presenting the work in performance-readings, dramatic productions, movies, improvisations. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396K. Hispanic Americans: Finding Their Identities and Their Voices.**

This course is an examination of critical moments in American social history that defined the Hispanic American social, political, educational, literary, and cultural experience, and how these experiences continue to impact Hispanic American identities and voices. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter



**HON 3396L. Early American History through Biography.**

This seminar will acquaint students with major issues and events in early American history through the study of biography and autobiography. Students will study the lives of the individual, both prominent and lesser-known, from the American past, and these lives will be examined in the context of the larger historical narrative. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396M. Transforming Creative Art: Literature in Performance, Presenting Later Shakespeare.**

This seminar/workshop series examines the transformation of literature into performance using three examples from Shakespeare's later plays. Through close reading and analysis, students develop a critical understanding of literary, sociological, and cultural attributes of written works, and then develop approaches to transforming and presenting the works into dramatic performances. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396N. American History Through Memoir: From the End of Reconstruction to the Present Day.**

This seminar offers participants engagement with recent American history through the study of memoirs from a broad range of viewpoints. Seminar participants will be responsible for providing contexts for the readings from within the secondary literature, while the featured memoirs will relate recent American history "from the margins": including voices of Native peoples, African-Americans, political and cultural dissidents, and recent immigrants. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396Q. Public Policy for Energy, the Environment, and Global Sustainability.**

This course provides an interdisciplinary introduction to U.S. policy for energy, the environment, and sustainability. Emphasis will be placed on understanding the laws, regulations, and treaties that oversee air and water pollution, solid waste, hazardous waste, energy use, natural resources, climate change, and global governance for energy, environment, and sustainability. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396R. Sustainable Design and the Built Environment.**

This course examines contemporary issues of where we live and the interdependence of our home on the environment. Sustainable principles shall be emphasized with reference to social, economic, and ecological issues of the built environment. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396T. How We Decide: Making Decisions from the Inside Out.**

This interdisciplinary seminar enlightens students on the decision-making process using contemporary research from neuroscience, psychology, management, healthcare, etc. From this foundation students will examine case studies at the individual, group, and societal levels, and they will evaluate a cross section of decision aids such as heuristics, ethics, and computers. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396U. From White Slavery to Sex Trafficking.**

This course seeks to historicize the global migration of sex workers and the modern-day anti-sex trafficking movement by tracing the origins of the anti-white slavery movement in the late nineteenth century to the debates about sex work and sex trafficking of the twenty-first century. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396V. Witches, Whores, Murderers & Thieves: Capital Crime in Early America.**

This course is an in-depth investigation into the social and legal culture of Early America through the study of microhistories. In this course, we will concentrate on a series of capital crimes, ranging from murder to witchcraft. The period will be the 17th century through the Age of Jackson. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396W. The Dragon and the Spaceship: Fantasy, Utopia, and the Fiction of Estrangement.**

This is a course on world literature that looks specifically at otherworldly literature, including works frequently categorized as fantasy, utopia or dystopia, and science fiction. We will look at mostly modern texts written after 1800, with an emphasis on twentieth-century writers. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396X. Storytelling in Video Games.**

This course will examine how stories are crafted to fit the new interactive media of video games, how these new stories resemble traditional stories from the literary canon, and how these unorthodox plots, characters, and games are used to create a new form of literature. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396Y. Urban Horticulture.**

This course introduces the role urban landscape and the regional environment play in the quality of life. Students will consider commercial products, services of Horticulture, and people-plant interactions related to art, science, and practice. Students will learn the importance that land use decisions have on the sustainability of the environment. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396Z. Eating Meat in America: Historical and Philosophical Perspectives.**

This course has two aims: first, to introduce students to the changing nature of, and views about, the production and consumption of animals in America from the 18th century to the present; second, to introduce students to the philosophical issues that eating animals raises. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397A. Revolution, Malaise, Reaction, and Sleaze: America in the 1970s..**

This course revisits the reputation of a decade. Many recent commentators have claimed the Seventies as a pivotal historical moment. We will engage questions regarding why this is so, and how an understanding of the 1970s helps us to orient ourselves in the contemporary political, economic, and cultural milieu. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397B. Plotting the American Experience.**

This course is an in-depth critical study of plot in major contemporary American novels and stories (1985-present), both as a driving force in the work(s) and as a reflection of the American moment in which each was written. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397C. Geography of Africa.**

This course is a systematic approach to the multifaceted aspects of the physical and human geography of the African continent. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397D. Urban Immersion: Seeing Cities through Cinema.**

This course explores themes in urban studies using full-length films and selected readings. Students will study the geo-political, economic, and socio-cultural dimensions of cities. Using cinema as a pedagogical tool immerses students in the urban experience more than traditional instructional methods, resulting in a richer understanding of the subject. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397E. Literary Barcelona.**

With Franco's 1939 victory, the Catalan language was banned from public use. This course will explore the undeservedly disadvantaged work of modern Catalan writers, and investigate texts, such as George Orwell's *Homage to Catalonia*, which stress Catalan social realities and affirm Barcelona as a place of literary imagination and vitality. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397F. America vs. the World: The History of a Love-Hate Relationship.**

This course explores the complex relationship between America and "the rest of the world" through an examination of the twin discourses of "American Exceptionalism" and "Anti-Americanism" from the time of European contact with the New World up through the post 9/11 era. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397G. Memoirs from Life Off the Neurotypical Map.**

To understand the growing neurologically disabled, disordered, and mentally ill population and our perceptions of them and ourselves, we will analyze memoirs and aesthetic works by this true fringe group and consider what being fundamentally different means, and how labels affect people in and out of the neurotypical majority. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397H. International Culture Course: the cultural characteristics and diversity of people outside the US.**

This study abroad course will cultivate student knowledge of the similarities and differences among international cultures, values, traditions, beliefs, and customs. Discussions and written assignments will provide opportunities to understand the cultural achievements and human conditions of a specific target country. Field trips will provide experience of cultural components. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397I. A Cultural History of Mexico in the 20th Century.**

This seminar will investigate the landscape of state and culture in the Republic of Mexico in the 20th Century and explore the creators, as well as the political supporters and detractors, of popular culture in terms of the fine arts, plastic arts, dance and theatre arts, poetry, music, literature, and photography. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397J. Extraordinary Leadership: Ownership and Influence.**

This course is designed to elevate the performance of leaders. Students are challenged to develop their potential in seminar-style sessions covering leadership definitions, theory, frameworks, and the global application of skills. Students explore their behaviors, motivations, values, influences, and character in an effort to increase self-awareness and to think critically. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397K. The Search for Right and Wrong in Politics.**

Using classic texts and works from literature and film, and current event videos, this course provides students with a foundation for understanding the intersection of politics and ethics and for achieving an understanding of how politics works. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397L. Economic Anthropology.**

This course reviews central issues in economic anthropology, using both case studies and theoretical writings. Students will analyze production, exchange, distribution, consumption, property, economic surplus, inheritance, and types of economic structure. Materials will cover hunter-gatherer societies, simple agricultural societies, pre-capitalist complex state societies, and issues of development in non-industrialized countries. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397M. The Death Plot: Fiction, Memoirs, Poems.**

A story or poem is finite. Life is too. When we arrive at its end, we hope to understand its meaning, or, as Peter Brooks said, "to connect ends and beginnings and make of the middle a highly charged field of force." Stories and poems about death provide this opportunity. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397N. Advanced Writing for Video Games.**

This course will teach students to write for video games based on techniques learned from observation and study. The course focuses on creativity and flexibility, two traits essential to game writing, and students will develop a marketable design document for an original video game working in design teams. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397O. Walking: An Active and Interdisciplinary Investigation.**

What has the act of walking meant historically and what does it mean today? What has been written about the experience of walking? What insights can walking with reflection bring? Students will explore these questions through readings in literature, history, and philosophy, and through art and the act of walking. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397P. Anti-Intellectualism in American Culture and Politics.**

Hostility to science, experts, and "book learning" is a common impulse that shapes contemporary American culture and politics. In this course, we will explore how anti-intellectualism promotes notions about media bias, encourages belief in implausible conspiracies, and spurs hyperpolarized politics, among other topics. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397Q. Women and Texas Music.**

This honors course examines the lives and contributions of Texas women composers, performers, historians, and patrons and their roles in the promotion and advancement of the state's music. Conducted in both lecture and class discussion formats, this course will address topic-related issues of class, race, and identity formation. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397R. Demonology, Possession, and Exorcism.**

People have believed in demons throughout Western civilization and continue to, despite advances in science and medicine. This course explores the social significance of demonology. What are the historical, psychological, political, and economic consequences of believing in demons? To explore such questions, students will examine demonology across cultures and employ a variety of disciplinary approaches. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397S. Human Language: its evolution, mental representation, and learning.**

Readings and discussions will concern human language's evolution, its representation in the mind/brain, and its learning by native and non-native speakers. Topics will include: evidence for language in other species including homo neanderthalensis; whether human language is innately specified; and similarities and differences between first and second language acquisition. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397T. Psychology in Film.**

In this course, we will identify and discuss psychological concepts in popular films from a variety of genres. We will address issues of conformity, consciousness, motivation, addiction and psychological disorders. The approach to the material will be interdisciplinary in nature with a special focus on modern behavioral neuroscience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397U. Quests for the Holy Grail.**

The course surveys the Celtic and Christian sources of grail legends, the major medieval grail quests, and post-medieval appropriation of the grail quest. Primary sources shall be examined through the methods of literary criticism, anthropology, and religious studies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397V. Phonetics.**

This course is an introductory overview of human speech sounds. It describes speech anatomy and pays particular attention to the description of the acoustic and articulatory properties of speech as it occurs in real time. Students will study articulatory, acoustic, and auditory phonetics. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397W. Alienation and Authenticity: In Search of the Modern Self.**

This course explores the problem of the self through major philosophical, literary, and social scientific works. Students will gain familiarity both with thinkers and ideas that shape discourse in the humanities and social sciences and theoretical perspectives for analyzing issues of selfhood in their own lives and fields of study. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397X. Nueva York: Hispanic and Latino Literature and Art in New York.**

This course offers an inter-American multidisciplinary approach to Hispanic and Latino writers and artists in New York City from the late nineteenth century to the present. Topics include exile, migration, identity, bilingualism, and civil rights through a variety of literary genres, artistic forms, cultural organizations, and academic disciplines. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397Y. Deception, Risk, and Science Ethics of Research with Human Subjects.**

This course introduces the key ethical concerns related to human subject research. Students will analyze research projects in which scholars place individuals at risk in the interest of reaping some benefit to those individuals and/or society. A case-study approach will actively engage students in ethical decision-making. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter



**HON 3397Z. Makerspaces: Intersections of Art and Everything.**

This course will examine multidisciplinary concepts applied within makerspaces and complete hands-on design projects using beginner-level do-it-yourself techniques, including "upcycling" recyclable materials, 2D subtractive manufacturing (i.e. CNC machines that trim acrylic, cardboard, vinyl), 3D additive manufacturing (i.e. 3D modeling, printing), textiles (i.e. embroidery, sewing), and electrical circuits (i.e. micro-controllers, sensors). (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398A. Italy and Arts of the Islamic World.**

This course will challenge the traditional account of the development of Italian Renaissance art by exploring connections to Islamic culture of the surrounding Mediterranean world. Students will be introduced to visual analysis and interdisciplinary research techniques by which art and architecture can be used as documents in interpreting history. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398B. Modern Tibet: Politics, Identity and Representation.**

This course examines the political, religious, economic, environmental and cultural situation of modern Tibet, by reading works by Tibetan, Chinese and Western scholars, and by analyzing propaganda and stereotypes. Students will be exposed to modern Tibetan literature, art, pop music and film, as well first-hand accounts by class guests. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398C. Theatre and War.**

In "What It Is Like To Go To War", Karl Marlantes calls for ritual to aid young soldiers returning home. In this course students will analyze how classical and modern theatre can provide such a ritual, and be used as a tool to understand society's role in war. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398D. The Politics of Language in Schools and Society.**

Using a critical linguistic perspective, this course examines the sociopolitical aspects of language in local, national, and global contexts. Students learn about language ideologies and gain a profound understanding for how languages and language practices are intricately tied to the racial and economic power relations embedded in schools and society. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398E. CIVIL LIBERTIES AM.**

This course explores major civil liberties themes in depth, both historical and contemporary, such as religious free exercise, free speech and press, criminal procedure, capital punishment, right to privacy, equal protection (race and gender), due process, political participation, and disabilities rights. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398F. Anthropology of Peace and Violence.**

The class explores anthropological perspectives on peace and violence. It focuses on understanding violent practices within both traditional and current day societies including everyday violence and warfare. It explores the contributions of social structure, gender, religion, race, and ethnicity to violence. It examines efforts to build peace and reconciliation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398G. Psychology and Law: Protecting the Vulnerable.**

The course examines clinical, legal and psychosocial conditions of adults who, due to mental illness, developmental impairments, brain injuries or aging, are declared "incapacitated" and have court-appointed guardians. Students will serve as probate court representatives, (i.e., Court Visitors) who inspect living conditions/services for individuals under court-ordered guardianships (service learning component).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398H. Chinese Politics and Society through Literature and Film.**

This course offers an overview of the main political and social developments in contemporary China through the cultural production of Chinese writers and filmmakers who, following the tradition of the Chinese literati of imperial times, became main characters in the modern Chinese political scene. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398I. The Aesthetics of Failure.**

This course examines the role of failure as a creative and constructive part of life. We will consider failure across cultures and time periods, from various disciplinary perspectives, and through various media to define failure as more than the mere absence of success.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398J. The Body and Literature.**

This seminar explores the intersection of the human body and literature in 20th- and 21st-century American fiction. Works will be examined according to form, plot, structure, content, character, language, medium, scale and genre in their representation of the human body. We will also consider the ways in which formal innovations reflect the very body of the text. Through discussion and close reading, students will analyze the cultural significance of the human body in literature, and they will perfect their skills of careful reading, sound researching, and convincing arguing. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398K. Art as a Way of Knowing.**

Both art and science attempt to shed light on aspects of the human experience; yet modern society often presents these forms as dissimilar, merely opposites. In this course we will explore arts-based methodological research tools, and use artistic means in the process and presentation of social inquiry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398L. Soccer: Local Stories, Global History.**

A ball, a field, at least five people: elements which have evolved into a sports phenomenon, providing fodder for claims about national identity, and establishing the most watched activity ever. Soccer is too important to leave to the fans. This course investigates the institutions, aesthetics, and ideologies shaping the game.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398M. The Future of Work: Stratification, Low Growth, and Universal Basic Income in the 21st Century.**

Economic changes such as continued workplace automation and markedly slower growth imply big changes in social stratification in coming years. This course explores work and stratification in light of the "jobless economy" thesis, recent proposals for a universal basic income, and related likely cultural consequences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398N. The Anthropology of Religion and Fundamentalism.**

This course provides students with current and historical approaches to the anthropology of religion with a particular emphasis on fundamentalism. It focuses on the development of religious fundamentalism in different cultural contexts, geopolitical situations, and religious traditions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398O. Introduction to Statistical Genetics and Bioinformatics.**

This is an interdisciplinary course with a focus on the analysis of genetics and bioinformatics data. This course will cover basic genetics, statistics, programming, and cutting-edge research topics on statistical genetics and bioinformatics. Students will have hands-on experience of analyzing different types of genetic and bioinformatic data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398P. Wild Nights! Wild Nights!.**

A multidisciplinary study of the cultural, historical, and ecological significance of the night as revealed in poetry, fiction, and drama. The semester will begin with a historical study of the night pre-electricity, and will end with a consideration of the endangered nights of our post-electrical present and future.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398Q. Life Online: Epistemology, Ethics, and Culture on the Internet.**

Increasingly, our lives are lived online. We communicate, learn, play and love on the internet. In this course, we investigate the epistemological, ethical, and cultural implications of this shift. Class discussion will focus on current internet topics ranging from fake news to the aesthetics and ethics of internet memes. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398R. Culture, Medicine and the Body.**

This course explores how the human body, functions of the body, and the practices of medicine and healing are situated and contextualized within cultural frameworks. Case studies cover body and health-related topics over the life course, from birth to death. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398S. Geography of Food and Agriculture.**

The Geography of Food and Agriculture course will critically evaluate local and global food systems, considering the implications of varying forms of production and consumption and exploring topics related to sociocultural, economic, and environmental landscape change, the role of agriculture in both rural and urban places, and sustainability writ large.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398T. Dramatic Adaptation.**

Dramatic Adaptation is a writing course where students will be adapting non-dramatic works into stage plays. The course will begin with an introduction of the dramatic form, with regards to adaptation, in both principles and structure. Students will then create and write their own adaptations for the stage. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398V. Philosophy, Politics, and Economics.**

What are an individual's moral obligations to their community, nation, and world? How do governments and economic systems shape these obligations? Are capitalism and socialism really opposites? This course investigates these questions, and others, through the interdisciplinary study of "PPE," an emerging field that draws from philosophy, politics, and economics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398W. The Mathematics and Statistics of Gambling and Sports Betting.**

This course uses the scaffolding of gambling and sports betting to engage students in applied probability and statistical modeling. The course covers both descriptive and inferential methods. Topics include measures of central tendency, dispersion, and shape; probability and probability distributions; sampling distributions; estimation, hypothesis testing, linear models, and non-parametric analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398X. Language & the Body.**

Linguistic anthropologists believe that language not only reflects but also shapes and creates our social worlds. This class will focus on how language shapes our embodied identities and our deeply held beliefs through exploration of linguistic, cultural, and medical anthropological research and that of related social sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398Y. The Creative Spark: Interdisciplinary Perspectives on Creativity.**

From technology to the arts, the ideals of creativity and innovation are hotter than ever. But what exactly is creativity? This interdisciplinary course will draw on diverse perspectives (psychology, science, and arts) as we explore what it means to be creative and how to be more creative in our lives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398Z. Political Ecology of Science Fiction.**

Political ecology considers how power relations and politics, as a form of society and culture, influence environmental systems and management. This course applies the concepts of political ecology to science fiction case studies as a means to uncover latent human-environment interactions and explore similar processes in the real world.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399A. Balinese Music and Its Cultural Context.**

This course examines the arts, culture and society of the island of Bali, Indonesia, with special attention to the practice and study of traditional musical forms and structures. The course also explores contemporary artistic trends and the impact of technology and tourism on the arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399B. Language, Culture, and Education.**

Students will consider the roles language and culture play in American education. Through converging scholarship from the fields of anthropology, language and literacy, and education, the course addresses relationships of power, knowledge, and identity in schools, as well as critiques of the effects of globalization, migration, and market-based approaches to schooling in the U.S. and international contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399C. Comics, Cartoons, and Contested Racial Identities in U.S. History.**

This course examines how comics have reflected, shaped, and challenged Americans' notions of racial difference from the nineteenth century to today. Along with reading recent scholarly books and articles, we will analyze a wide range of comics from various periods, tracking the interrelation of comics and larger patterns of U.S. race relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399D. Hell Across Cultures.**

Hell has a dual nature—existing as an afterlife, but always making commentary on its contemporary surrounding society. Using a variety of methodological approaches, this course explores the social significance of the idea of hell across a variety of religious traditions, including Buddhism, Islam, Christianity, Judaism, and popular culture.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399E. From Africa to Texas: A Black Language Odyssey.**

When different peoples speaking different languages meet and need to communicate, interesting things happen. Texas has several such populations, which have their own “new” ethnicities, languages, music and cuisine. This course will look at two of these groups, the Black Seminoles and the French Creoles, both originating in Africa, and both spoken today in Texas. It will also address the position of African American Vernacular English (“Black English”) in the context of creole theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399F. The Myths of Western Civilization: Decolonizing and Queering European History.**

Spanning from antiquity, this course deconstructs the concept and history of “Western Civilization.” Through the study of primary and secondary sources, students will consider how history can be written to include oppressed and marginalized voices while still attempting to understand the broad scope of European history and its legacy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399G. Graph Theory & Its Applications.**

This course introduces the most important topics of graph theory through its applications and in a lively style. It includes some examples of proofs selected with the purpose of strengthening mathematical techniques and offering challenging opportunities to have fun while doing mathematical research. Students seeking core curriculum credit for this course should enroll in HON 2302B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399H. Southern Gothic Storytelling: An Analysis Of Text And Performance.**

At its best, theatre will provoke thought and inspire change. Many productions nonetheless depict agreeable themes and characters to like-minded audiences, rendering critical and self-reflective aspects of the medium ineffective. However, one theatrical genre—Southern Gothic—effectively acknowledges and addresses this concern. By examining Southern Gothic theatre from analytical, performative, and historical perspectives, this course will showcase the genre's influences and impact, and it will explore how different contexts and cultures have shaped performance and interpretive decisions. Students will thereby discover how the Southern Gothic genre aims to honor and criticize the very culture it represents.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399I. Ethics, Science, And Society.**

This course will support students' engagement with ethical issues relating to the interactions of science and society. The material will include case studies from different science disciplines. Students will study a topic within their own field in depth for a final project. This course is intended for any STEM student. It will encourage students to consider the impact of scientific research across multiple disciplines. Students will also focus on a topic within their own discipline for their final project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Writing Intensive

**Grade Mode:** Standard Letter



**HON 3399J. Ireland: Theatre, Postcolonialism, and Identity.**

This course will explore Irish theatre as a form of postcolonial discourse. It will also examine the role of theatre as a guiding force in the Irish Independence movement, and the importance of theatre in the continuing dialogue to define the Irish identity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399K. Data Visualization and Interpretation: Honors Statistics.**

A well known belief is that "a picture is worth a thousand words." Beyond merely analyzing numbers and interpreting the results, an effective way to interact with statistical data is through charts and graphs, which allow for visual interpretations of the frequency pattern of data in the context of data collection. This course explicates statistical theory and the meaning of data, both to ease comprehension and encourage evidence-based decision making. Students will use Tinker Plots, EXCEL, Tableau, and other appropriate software. Prerequisite: MATH 1315 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399L. Exploring The Italian World.**

This class presents an interdisciplinary study of contemporary society and culture in Italy. It will explore elements of civilization, arts, gender, politics, literature, and cinema. It will also introduce students to Italian-American studies by exploring significant cultural expressions from the multifaceted Italian world and their impact on American society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399M. Negotiating the (Black/White) Color Line.**

This course uses literature, film, television, and other media to examine how Black Americans have negotiated the Black/White color line.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399N. Art, Media, and Environmental Justice.**

This course takes an interdisciplinary approach to the environmental justice (EJ) movement by focusing on media: film, photography, theater, art, and social media created at the intersection of environmental ethics and social justice. Students will learn EJ histories and be introduced to activists and artists working on issues ranging from housing and labor to climate and energy justice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399O. Improvisation & Interdisciplinary Play.**

This course offers an interdisciplinary study of improvisation from various entry points. Play, choice-making, connection, and collaboration will be explored through movement, sound, and dialogue. No prior experience with improvisation necessary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399P. Coming-of-Age Archetypes in Contemporary Literature.**

This course applies critical thinking to familiar myths that inform the various ways we are taught, grow up, and define ourselves. In the popular imagination, growing up to become a mature self happens quickly. But contemporary and "realistic" coming-of-age stories instead posit the enemy or danger as society itself. This course explores contemporary stories, poems, and personal "coming-of-age" essays with an inclusive and vibrant reading list by authors from various cultural and ethnic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399Q. Harry Styles And The Cult Of Celebrity: Identity, The Internet, And European Pop Culture.**

This course focuses on British musician Harry Styles and popular European culture since World War II to understand the cultural and political development of the modern celebrity as related to questions of gender and sexuality, race, class, nation and globalism, media, fashion, fan culture, internet culture, and consumerism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399R. Alien First Contact: Best Practices.**

What should humanity do if we come into contact with an intelligent alien species? That far-fetched premise directs attention to serious questions about the contingency and durability of social institutions, about the uses of technology, and about which elements of human society we value most universally.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399S. Seminar on Public Policy: Netherlands Study Abroad Program.**

From congestion to climate change, major issues related to transportation have emerged as contentious and vexing urban policy areas. For metropolitan areas around the globe to continue to grow and thrive, the fundamental components of the transportation system need to be effectively managed. This class examines the policy divide between these two approaches through an experiential "field classroom."

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399T. Intellectual Property Law in Society.**

This course examines the structure and functions of government together with the laws supporting and regulating intellectual property, namely patents, trade secrets, copyrights, and trademarks. The relations between intellectual property policies and societal goals and regulations are also explored to help students develop an understanding of intellectual property law in a context related to their field of study. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399U. Public Memory.**

This course examines how a society's historical narratives are profoundly driven by public memory, which is not absolute truth; it is malleable and shifts over time. Those who control the narratives shape our interpretations of the past as well as the present. Throughout history, the construction of narratives about the past has been dominated by elites whose economic, racial, and gender locations have afforded them privilege. The course considers how expanding and diversifying who participates in this process can profoundly affect political and power debates in society. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399V. Cities And Society In Latin America: Power, Rebellion, and Creativity.**

This course takes a close look at Latin American cities and their historical, political, and cultural role. Case studies of particular cities will give students a deeper understanding of the region and students will link the history of these cities to vibrant cultural productions in the arts and literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399W. The Art of Bob Dylan: Explorations of Method and Performance.**

This course takes a critical look at the work of Bob Dylan, including his contributions as an author, musical performer, painter, sculptor, actor, and recent recipient of the Nobel Prize in Literature. By examining his place in American history, his evolving identities, and his curious methodologies, students will better understand American art and literature in popular culture. The course will explore intertextuality, appropriation, and originality through Dylan's work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399X. The Beat Generation and Explorations of the Self.**

This course will examine how the Beats set out to break free from the stifling conformity of the 1950s—in literature and in lifestyle—by revising and revisiting the 19th-century Romanticism of Emerson, Thoreau and Fuller (among others). Students will explore the forms, content, race, gender, patriotism, censorship, drugs, visions, religion, mass media, hair, and comics utilized in their creative output.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399Y. American Money.**

This course examines the laws, economics, finance, and historical evolution of the United States dollar from its legal birth in 1792 to present. Students will explore economic and financial theories of the dollar and its social, environmental, and economic impacts. Students may propose improvements to the modern American money system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399Z. Soundscape, Environment, Music.**

This course provides an introduction to Sound Studies and Ecomusicology, combining reading, critical discussion, and field research. Participants will examine critically both foundational and current authors (artists, ethno/musicologists, philosophers, sociologists, scientists); apply, test, and synthesize the field's frameworks through creative activities (e.g. soundwalks and local ethnographies); and generate new scholarly and creative work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3480A. Relativity and Quantum Mechanics for Non-Science Majors.**

Principles of quantum mechanics and relativity will be discussed and analyzed including applications to theoretical problems and practical applications. The lab portion will teach basic electronics skills and allow students to perform classic experiments of modern physics. (WI).

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3480B. Building A Greener Future: One Home at a Time.**

This course will focus on the science and engineering principles involved in building and maintaining a house. Students will investigate how choices of materials and design influence cost, sustainability, and energy efficiency of housing. Laboratory experiences will elucidate these concepts. (WI).

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3480C. Teaching Physical Science to Children.**

This studio-styled physics course is ideal for preservice K-8 teachers. Course content includes both physics concepts and research findings on physics teaching and learning. We will focus on developing deep understanding of fundamental concepts in physical science and how these concepts relate to making sense of our everyday experience. (WI).

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 4090. Honors Capstone.**

This course is designed for students to pursue an independent project of research, study, or creative achievement to fulfill the capstone requirement for graduating in the Honors College. Students in this non-credit bearing version of a capstone course should be enrolled in a similar course in their discipline. (WI).

**0 Credit Hours. 0 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Writing Intensive

**Grade Mode:** Standard Letter

**HON 4390A. Senior Seminar: Capstone Development.**

This course provides a structured environment for students to begin work on their capstone projects. Students will explore potential pathways, connect with faculty advisors, and take initial steps toward completing their projects. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 4390B. Honors Capstone.**

This course is designed for students to pursue an independent project of research, study, or creative achievement to fulfill the capstone requirement for graduating in the Honors College. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 4391. Honors Independent Study.**

Individual study under direct supervision of a professor for Honors credit. May involve field trips. This course may be repeated for credit but a student may not exceed six hours of credit in Honors Independent Study. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Research & Creative Expression (RES)

**RES 3399. Research and Creative Expression.**

This course provides students with an interdisciplinary overview of research and/or creative expression. Topics will include approaches to qualitative and quantitative research, and/or approaches to creative processes in the arts. Representative topics may include developing research ideas, experimental design, sampling, measurement, analysis, ethics in research, reflecting on and analyzing the creative process, interpreting works of creative expression, and communicating results of a research or creative expression project. Prerequisite: Approval of the Director of the IDEA Center.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**RES 4399. Mentored Research and Creative Expression.**

This course provides students with a mentored research/creative experience. Students will participate in a research/creative experience under the supervision of a faculty member. Students will share the results of their research/creative experience during a research forum open to the University community. Prerequisite: Approval of the Director of Idea Center and RES 3399 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

The minor in Honors Studies requires 21 semester credit hours. Nine hours cannot count toward any other degree requirement, and twelve credit hours must be at an advanced level. HON 4390A or a substitute pre-approved by the Honors College is required. A thesis must be completed by earning credit for HON 4390B or HON 4090. Students are required to demonstrate cross-cultural awareness by completing an education abroad program or a qualifying project pre-approved by the Honors College.

**Interim Dean**

Angela R. Ausbrooks, Ph.D.  
 Agriculture Building Room 300  
 Telephone: 512.245.3333  
[www.appliedarts.txstate.edu/](http://www.appliedarts.txstate.edu/) (<http://www.appliedarts.txstate.edu/>)

**Associate Dean**

Douglas G. Morrish, Ph.D.

**Assistant Dean**

Bob E. Vasquez, Ph.D.

**Department Chairs/School Directors**

Aerospace Studies—Lt. Col. Brenton J. Ekren, M.A.  
 Criminal Justice and Criminology—Jeffrey Bumgarner, Ph.D.  
 Family and Consumer Sciences—Amy Weimer, Ph.D.  
 Military Science—LTC Jennifer Dembeck  
 Organization, Workforce, and Leadership Studies—Shetay N. Ashford-Hanserd, Ph.D.  
 Social Work—Katherine Selber, Ph.D. (Interim Director)

The College of Applied Arts' mission is to prepare undergraduate and graduate students for careers through programs of high quality in academic, professional, and technical areas; to further faculty excellence in teaching supported by quality scholarship; and to enhance our involvement with local, state, national, and international constituencies.

The College of Applied Arts offers four undergraduate degrees, each with options that prepare students for careers that suit their interests. Refer to each department/school website for more information on degree options:

1. Bachelor of Applied Arts and Sciences;
2. Bachelor of Science in Criminal Justice;
3. Bachelor of Science in Family and Consumer Sciences;
4. Bachelor of Social Work

In addition, the Departments of Aerospace Studies and Military Science offer minors which prepare qualified students for commissioning in the United States Air Force, United States Army, United States Army Reserves, or Army National Guard.

Seven undergraduate majors (several with specialized options) are offered by two departments and three schools within the College:

- School of Criminal Justice and Criminology: Criminal Justice
- School of Family and Consumer Sciences: 1) Consumer Affairs (with a concentration in family and consumer sciences or personal financial management, or teacher certification options), 2) Human Development and Family Sciences (with teacher certification option), 3) Fashion Merchandising (with a concentration in planning and presentation option), 4) Interior Design, and 5) Nutrition and Foods (with dietetics concentration or teacher certification options).
- Department of Organization, Workforce, and Leadership Studies: Applied Arts and Sciences. Individualized degree program which offers students the opportunity to receive college credit for previous competencies acquired in their lives as well as selecting a new career path or supplementing skills in their current path.
- School of Social Work: Social Work (education for beginning generalist in social work practices). Designed to give students a well-rounded foundation on practice skills to enhance human well-being and productivity, help alleviate poverty and strengthen social justice.

Several of the College's programs have externship-type courses. These courses provide opportunities for students to further their education in an environment external to Texas State. These courses have entrance requirements including good academic standing at the time of the internship. More specific course requirements are available from the department of your major.

## Academic Advising Center

Agriculture Building Room 201

Telephone: 512-245-1490 Fax: 512-245-1627  
[www.advising.appliedarts.txstate.edu](http://www.advising.appliedarts.txstate.edu) (<http://www.advising.appliedarts.txstate.edu>)

The mission of the College of Applied Arts Academic Advising Center is to provide accurate and timely advice to prospective and current students regarding their progress toward completion of undergraduate degree programs administered by the College. Services include, but are not limited to:

- assistance with the selection of education programs;
- information on course sequencing and degree requirements;
- interpretation of policies and procedures;
- verification of graduation requirements;
- assistance with academic probation and suspension; and
- referral to other university resources.

Please contact the Advising Center to schedule an appointment for academic advising at 512-245-1490. Staff are available to meet with students Monday through Friday from 8:00 a.m. to 5:00 p.m.

**Air Force Reserve Officer Training Corps Detachment 840**

Derrick Hall Room 301  
 Telephone: 512-245-2182  
[www.afrotc.txstate.edu](http://www.afrotc.txstate.edu) (<http://www.afrotc.txstate.edu>)

The mission of the Air Force Reserve Officer Training Corps (AFROTC) is to develop leaders of character for our Air Force and Space Force. The AFROTC Program at Texas State recruits, trains and develops students for commissioning in the Air Force and Space Force. Students may register for Aerospace Studies courses in the same manner as for other college courses. During the freshman and sophomore years of the program, students enroll in General Military Courses (GMC). Membership in the GMC does not confer any military status or commitment upon the student with exception of those student who are awarded the AFROTC scholarship. After completion of the GMC, students compete for entry into the Processional Officer Course (POC).

The POC is designed to further develop students into leaders and officers in the US Air Force and US Space Force. Students must have two full-time academic years remaining at either the undergraduate or graduate level to meet the minimum requirement for four semesters of POC academics and laboratory requirements. Selection for the POC is highly competitive. Criteria used to assess qualifications of applicants are the Air Force Officer Qualification Test (testing material and information is available through AFROTC), cumulative GPA, physical fitness test, a medical fitness board, and the Professor of Aerospace Studies assessment. Before formal induction into the POC, applicants must complete a two-week summer Field Training encampment paid for and conducted annually by the Air Force. Upon successful completion of summer field training, cadets are offered the Charles McGee Leadership Award, which pays for two academic year's worth of tuition and fees up to \$18,000 per year,



regardless of major. Award winners must maintain basic academic and performance standards to keep their awards.

Both GMC and POC members must attend a weekly two-hour Leadership Laboratory each semester. The laboratory provides students with an environment to develop, learn and practice leadership skills. All members are also required to attend two group physical training sessions per week. Students interested in learning more about AFROTC may visit [www.afrotc.com](http://www.afrotc.com) (<http://www.afrotc.com>) or contact the Department of Aerospace Studies and Detachment 840.

Furthermore, students who are categorized as sophomores, juniors, seniors or graduate students might have an opportunity to enter an abbreviated AFROTC program. Students in these categories who are interested in becoming an Air Force officer are encouraged to contact the Aerospace Studies department to obtain more information on these programs.

Finally, students may compete for a variety of scholarships. Qualified students may apply during the fall or spring semester for a scholarship that covers the remaining years in the program. The scholarships provide up to full tuition, laboratory and incidental fees, and an allowance for books. All students must complete a minimum of 24 semester hours of math and physical science or four semesters of the same foreign language. In addition, scholarship students, based on their classification, may receive up to \$500.00 per month tax-free subsistence. Students may obtain complete scholarship information online at <https://www.afrotc.com/> or at the Aerospace Studies department.

Pursuant to Texas Education Code §51.302, up to three semester hours of credit in an upper-level ROTC course may be applied to the general education core curriculum American History Component (HIST 1310 or HIST 1320) and up to three hours to the general education core curriculum Government/Political Science Component (POSI 2320 only).

## Minor

- Aerospace Studies

## Courses in Aerospace Studies (A S)

### A S 1000. Leadership Laboratory.

An integral and mandatory two-hour lab accomplished concurrently with all Aerospace Studies courses. It is a progression of practical command and staff experiences that develop leadership potential. AFROTC cadets plan, organize, direct, coordinate, and control all activities. The lab is repeatable without credit because it focuses on different leadership processes.

**0 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Time Conflicts Permitted

**Grade Mode:** Credit/No Credit

### A S 1110. The Air Force Today I.

A study of the doctrine, mission, and organization of the United States Air Force; United States strategic offensive and defensive forces, their missions and functions; and employment of nuclear weapons. Co-requisite: A S 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

### A S 1120. The Air Force Today II.

An introduction to flight, oral and written communication for the Air Force officer, Air Force installations, the Air Force profession and how the Air Force integrates with the U.S. Army, Navy, Marines, and Coast Guard. Co-requisite: A S 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

### A S 2110. The Development of Air Power I.

A historical study of the development of air and space power beginning before the first powered flights through WWI, the inter-war years, and WWII, tracing the development of various air power concepts with a focus on factors prompting aerospace research and technological change. Co-requisite: A S 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

### A S 2120. The Development of Air Power II.

A continuation of A S 2110 studying the historical development of air and space power from Vietnam to the present. Events and trends in the history of airpower are examined, emphasizing examples of the impact of air and space power on strategic thought. Co-requisite: A S 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

### A S 3311. Leadership and Management I.

A study of the framework of leadership in the Air Force (AF), part 1. Practical case studies examine AF leadership and management situations and discipline and ethics scenarios that demonstrate applications of the concepts. The course emphasizes communication skills used by officers in the AF. Co-requisite: A S 1000.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

### A S 3312. Leadership and Management II.

A study of the framework of leadership in the Air Force (AF), part 2. Practical case studies examine AF leadership and management situations and discipline and ethics scenarios that demonstrate applications of the concepts. The course emphasizes communication skills used by officers in the AF. Co-requisite: A S 1000.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**A S 4311. National Security Forces in Contemporary American Society I.**  
Part 1 of the study of professional Air Force (AF) officers in a democratic society; societal attitudes toward the armed forces; national defense structure, policy development; and military law. AFROTC cadets study topics that prepare them for duty as AF officers. The course emphasizes AF communication skills. Co-requisite: A S 1000.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**A S 4312. National Security Forces in Contemporary American Society II.**  
Part 2 of the study of professional Air Force (AF) officers in a democratic society; societal attitudes toward the armed forces; national defense structure, policy development; and military law. AFROTC cadets study topics that prepare them for duty as AF officers. The course emphasizes AF communication skills. Co-requisite: A S 1000.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

The minor in Aerospace Studies requires 19 semester credit hours. Cadets must enroll in A S 1000 every term until graduation.

Code	Title	Hours
<b>Required Courses</b>		
A S 1110	The Air Force Today I	1
A S 1120	The Air Force Today II	1
A S 2110	The Development of Air Power I	1
A S 2120	The Development of Air Power II	1
A S 3311	Leadership and Management I	3
A S 3312	Leadership and Management II	3
A S 4311	National Security Forces in Contemporary American Society I	3
A S 4312	National Security Forces in Contemporary American Society II	3
Choose 3 hours of MATH courses		3
<b>Total Hours</b>		<b>19</b>

Hines Academic Center Room 108

Telephone: 512-245-2174 Fax: 512-245-8063

www.cj.txstate.edu (<http://www.cj.txstate.edu>)

The undergraduate degree program in the School of Criminal Justice and Criminology prepares students to serve the community in the operation and management of criminal justice agencies including: federal, state, county, and municipal law enforcement; probation; courts; and law; institutional corrections; parole; and related agencies. The major is founded on an interdisciplinary and academic approach to the role of criminal justice in the maintenance of social order in a democratic society.

Students pursuing a degree in criminal justice should be willing to meet the standards required of such a career. The majority of criminal justice agencies require sound academic preparation, integrity, physical agility, and a record free of felonies or excessive traffic offenses. The Criminal Justice program promotes the development of advanced research and

writing skills, and includes internship experiences and interdisciplinary coursework.

## Bachelor of Science in Criminal Justice (B.S.C.J.)

- Major in Criminal Justice (p. 99)

### Minor

- Criminal Justice

## Courses in Criminal Justice (CJ)

### CJ 1310. Introduction to Criminal Justice.

History and philosophy of criminal justice: ethical considerations, crime defined, overview of criminal justice system, law enforcement, court system, prosecution and defense, trial process, and corrections.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** CRIJ 1301

### CJ 2310. Police Systems and Practices.

Police profession: organization of law enforcement systems, the police role, police discretion, ethics, police-community interaction, and current and future issues. Prerequisite: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** CRIJ 2328

### CJ 2350. The Courts and Criminal Procedure.

Judiciary in the criminal justice system: structure of American court system, prosecution, right to counsel, pre-trial release, grand juries, adjudication process, types and rules of evidence, and sentencing.

Prerequisite: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** CRIJ 1306

### CJ 2355. Correctional Systems and Practices.

Corrections in the criminal justice system: organization of correctional systems, correctional role, institutional operations, alternatives to institutionalization, treatment and rehabilitation, and current and future issues. Prerequisite: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** CRIJ 2313

### CJ 2360. Fundamentals of Criminal Law.

A study of the nature of criminal law: philosophy and historical developments, major definitions and concepts, classification of crime, elements of crimes and penalties using Texas Statutes as illustrations, and justifications of and defenses to criminal responsibility.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** CRIJ 1310

**CJ 3300. Juvenile Justice.**

A study of the juvenile justice process to include both the specialized juvenile law and the role of the courts, police and corrections in juvenile justice. Prerequisite: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 3322. Race, Ethnicity and Criminal Justice.**

This course examines the relationship between race/ethnicity and the criminal justice system. Theories of race/ethnicity and crime, the criminal justice system, and social systems including media, politics and economics are examined to form a comprehensive understanding of the social construction of race as it pertains to a racially disproportionate system. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CJ 3323. Mid-Level Management in Criminal Justice Agencies.**

Introduction and overview of the organizational theories of classical behavioral, and systems management concepts. Included in the course content are analyses of the functions of management in modern CJ organizations, internal and external environmental factors, individual & group dynamics, motivation, and leadership styles. Prerequisite: CJ 2310 or CJ 2355 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 3325. Incarceration in America.**

This course focuses on the role of the institution in the process of incarceration including the philosophy of imprisonment, the inmate subculture and special problems and programs in institutions. Prerequisite: CJ 2355 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 3329. Forensic Evidence.**

Investigator's role in collecting, preparing and presenting evidence in criminal trials. Special attention will be given to electronic evidence in addition to traditional physical evidence. Prerequisites: CJ 2350 and CJ 2360 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 3346. Research in Criminal Justice.**

This course covers the analysis of criminal justice research, survey methods, and the utilization of research in criminal justice. (WI) Prerequisite: CJ 1310 and [ISAN 1323 or CS 1308] and [CJ 3347 or PSY 2301 or SOCI 3307] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CJ 3347. Statistics For Criminal Justice.**

This course focuses on the theory and application of statistical inferential techniques and correlation and regression for behavioral science data and its applications in Criminal Justice. Emphasis is placed on the collection, analysis, and interpretation of statistical data in criminal justice settings. Prerequisites: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4301. Internship I.**

Field service training in public and private criminal justice agencies at the federal, state and local levels. The internship is designed to provide actual work experience, observation, and analysis in the student's chosen career field. (WI) Prerequisite: CJ 2310 and CJ 2350 and CJ 2355 and CJ 2360 and CJ 3346 and minimum 2.25 Texas State GPA and minimum 2.5 Major GPA.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Credit/No Credit

**CJ 4302. Internship II.**

Field service training in public and private criminal justice agencies at the federal, state and local levels. The internship is designed to provide actual work experience, observation, and analysis in the student's chosen career field. (WI) Prerequisite: CJ 2310 and CJ 2350 and CJ 2355 and CJ 2360 and CJ 3346 and minimum 2.25 Texas State GPA and minimum 2.50 Major GPA.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Credit/No Credit

**CJ 4309K. Intelligence Analysis.**

This course provides an overview of the importance of intelligence gathering in the global and domestic war on terrorism, and critically examines issues involved with the gathering of intelligence, techniques for the gathering of intelligence, methods of collecting, collating, analyzing and disseminating intelligence, and a review of current terrorist threats.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 4309L. Gangs and the Criminal Justice System.**

This course offers an introduction to street gangs and crime in the United States. Topics covered include the definition of gangs, gang members and gang activity, the history and development of gangs, the structure of gangs and gang members, the nature of gang activity, theoretical explanations of gangs, and the criminal justice system's response to gangs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 4309M. Active Shooter Response Experiential Learning.**

This experiential learning course connects training to respond to active shooter events to relevant research. Students will complete the ALERRT Level I Active Shooter Response Course, and then examine the research literature that underlies the training with an emphasis on identifying discrepancies and gaps and areas for improvement. Prerequisite: CJ 1310 and CJ 2310 both with grade of "D" or better and instructor approval. Corequisite: CJ 3346 and CJ 3347 both with grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 4309O. Use of Force Experiential Learning.**

This course uses experiential learning to connect use of force training to research. Students examine the research literature, take part in use of force training, and participate in scenarios with an emphasis on connecting their experiences to the literature. The course is physically demanding and involves close personal contact. Prerequisite: CJ 1310 and CJ 2310 both with a grade of "D" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 4310. Special Problems in the Criminal Justice System.**

This course is a study of contemporary problems in the administration, management, organization and operation of criminal justice agencies. (Capstone Course). (WI) Prerequisite: CJ 2310 and CJ 2350 and CJ 2355 and CJ 2360 all with grades of "D" or better. Corequisite: CJ 3346 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CJ 4314. Terrorism in the United States.**

Terrorist groups operating in the U.S. are examined with special emphasis on the far-right (militia, Christian identity, neo-nazi, other racist groups). Analyzed are their belief systems and structures, organizational structure, tactics and targets, and weapons. Future trends are discussed, including the threat posed by nuclear, biological, and chemical terrorism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CJ 4316. Treatment in Community and Institutional Corrections.**

This course is a study of community based programs for adult and juvenile offenders, treatment modalities in various correctional settings, administration, legal issues, and future trends associated with community-based and institutional based treatment. Prerequisite: CJ 2355 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4321. Occupational Crime.**

A study of the problems of organized and upper social status criminal activities with emphasis on statutes and their application to fraud, embezzlement, deceptive trade practices and illegal trade practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4323. Special Operation Units in Law Enforcement and Corrections.**

This course introduces students to the basic principles of Special Operations Units (SOUs) within criminal justice agencies. Topics include the necessity for such units, the changing nature of communities and policing in America, the principles of crisis management, the development/implementation of SOUs, selection/training/operationalizing of personnel, and types of SOUs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4325. Media and Crime.**

This course explores the nature of public knowledge of social problems and their solutions related to crime and justice, and the media's role in facilitating those outcomes. Using an interdisciplinary scholarship drawn from a wide range of empirical and theoretical perspectives, the course addresses the relationship between crime, media, and public opinion in an ever evolving media landscape. The course challenges students to think critically and to consider innovative ways to improve the intersection between crime, the media and criminal justice policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4326. Women and Criminal Justice.**

This course explores women's involvement in three primary areas of criminal justice - as victims, criminals and practitioners employed in criminal justice agencies. Topics covered include the impact of sex and gender on criminological theory, sentencing, prison subcultures, victimization and career choices. (MULT) (WI) Prerequisite: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**CJ 4329. Organized Crime.**

Survey of organized crime in contemporary society. Includes attention to crime types and methods, motivation, affiliations, and the effects of this type of criminality. Related legal and law enforcement perspectives will be covered, along with international and cyberspace issues. Prerequisite: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CJ 4331. Serial Murder.**

This course covers the phenomenon of serial murder and the police investigative response. Theories, concepts, and law enforcement analytic methods are covered in detail. Emphasis is placed on understanding the reality versus the myth of serial murder, serial killers, and criminal profiling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4332. Advanced Criminal Justice Management.**

A critical analysis of the nature of organizations within the criminal justice system. An analysis of theories of organizations and of organizational changes within law enforcement agencies. An examination of the quantitative data gathered by the Criminal Justice System and its effective use and presentation. Prerequisite: CJ 2310 or CJ 2355 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4334. The Death Penalty in the United States.**

This course examines the contemporary controversies that surround the death penalty, including its administration, modes of execution, disparities in application, deterrent effect, related social/economic costs, impact on international relations, and the potential for miscarriages of justice. The history of the death penalty, including Supreme Court developments, are also reviewed. Prerequisite: CJ 2350 and CJ 2360 both with grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4335. The Psychology of Antisocial Behavior.**

This course examines how psychological perspectives are used to explain antisocial behavior, by drawing on the intersection between theory and research in the following areas of psychology: developmental, child psychopathology, biological, personality, cognitive, and social.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4336. Wrongful Convictions.**

This course examines factors contributing to wrongful convictions and the criminal justice system's response from an interdisciplinary perspective using research from the disciplines of law, criminology, and cognitive and social psychology as a foundation for examining how wrongful convictions occur and might be prevented in the future.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4338. Sexual Offenses.**

This course examines the social and individual mechanisms responsible for the onset, persistence, and desistance of sexual offending using a criminological perspective. The current state of risk assessment, treatment, and responses from the police, community, and legal system are also examined. Prerequisite: CJ 1310 and CJ 2310 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4340. Crime Theory and Victimization.**

This course examines the causes of crime, crime victimization and competing explanations for crime and the impact of crime on crime victims. The course draws on perspectives advanced by a number of diverse fields of inquiry, for example, biology, psychology, sociology, and the political and economic sciences. (WI) Prerequisite: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CJ 4350. Contemporary Legal Issues in Law Enforcement.**

An in-depth study of recent developments in criminal law and procedure. Their effects upon the criminal justice agency official in society will be given special attention. Includes specific case studies with emphasis on analyzing factual situations and legal issues. (WI) Prerequisite: CJ 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CJ 4352. Contemporary Legal Issues in Corrections.**

A study of the developing body of law defining the rights and duties of persons confined in penal institutions with equal emphasis on legal issues associated with probationers, parolees, and similar status's within the corrections branch of the criminal justice system. (WI) Prerequisite: CJ 2355 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CJ 4362. Readings in Criminal Justice.**

An individualized readings course tailored to the academic and professional interests and needs of the student. Emphasis is placed on developing in-depth knowledge of selected criminal justice subjects through directed research. Repeatable for credit with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CJ 4363. Independent Studies in Criminal Justice.**

Independent study and research on topics in criminal justice related to a student's primary area of interest. Work may include individual research, critical reviews or integration of existing body of knowledge. Course may be repeated with different emphasis once for credit with approval of department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CJ 4365. Comparative Criminal Justice.**

A survey of the organizational, administrative and philosophical principles of criminal justice systems around the world. (WI) Prerequisite: CJ 2310 or CJ 2355 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### General Requirements

- If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.
- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- For transfer students, 21 semester credit hours in criminal justice core curriculum (or their equivalents) may be transferred from a Texas public institution of higher education for the Criminal Justice Field of Study and be applied to the Bachelor of Science in Criminal Justice degree with a major in Criminal Justice at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional criminal justice courses please contact the College of Applied Arts Academic Advising Center for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
CJ 1310	Introduction to Criminal Justice	3
TCCN: CRIJ 1306		
CJ 2310	Police Systems and Practices	3
TCCN: CRIJ 2328		
CJ 2350	The Courts and Criminal Procedure	3
TCCN: CRIJ 1306		
CJ 2355	Correctional Systems and Practices	3

TCCN: CRIJ 2313		
CJ 2360	Fundamentals of Criminal Law	3
TCCN: CRIJ 1310		
<b>Directed Electives</b>		
CS 1308	Computer Literacy and the Internet	3
TCCN: COSC 1301		
PSY 1300	Introduction to Psychology	3
TCCN: PSYC 2301		
<b>Total Hours</b>		<b>21</b>

4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).

5. Nine semester credit hours must be writing intensive (WI).

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
US 1100		1 Communication Component Code 010	3
CJ 1310 (TCCN CRIJ 1301)	3	SOCI 1310 (Social and Behavioral Sciences Component Code 080 [TCCN SOCI 1301])	3
Communication Component Code 010		3 Mathematics Component Code 020	3
Component Area Option Codes 090, 091, 092, 093 and 094		3 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])		3 CJ Elective	3
PSY 1300 (TCCN PSYC 2301)	3		
16		15	
Sophomore			
First Semester Hours		Second Semester Hours	
CJ 2310 (TCCN CRIJ 2328)	3	CJ 2350 (TCCN CRIJ 1306)	3
CJ 2360 (TCCN CRIJ 1310)	3	CJ 2355 (TCCN CRIJ 2313)	3
Life and Physical Sciences Component Code 030		3 Life and Physical Sciences Component Code 030	3
Language, Philosophy, and Culture Component Code 040		3 American History Component Code 060	3
Creative Arts Component Code 050		3 CJ 3347, SOCI 3307, or 2301 <sup>1</sup>	3
15		15	
Junior			
First Semester Hours		Second Semester Hours	
American History Component Code 060		3 CJ Advanced Electives <sup>2, 3</sup>	6
CJ 3346	3	CJ Elective	3

CJ Advanced Electives	6 Component Area Option Codes 090, 091, 092, 093 and 094	3
Direct Elective	3 Open Electives	3
<b>15</b>		<b>15</b>
		<b>Senior</b>
<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
CJ 4340	3 CJ 4310	3
CJ Advanced Elective <sup>2,3</sup>	3 Open Electives	8
Open Electives	6 CJ Elective	3
CJ Elective	3	
<b>15</b>		<b>14</b>

**Total Hours: 120**

<sup>1</sup> For the Statistics requirement, SOCI 3307 is recommended for Sociology minors.

<sup>2</sup> CJ Advanced Electives must be chosen from the following lists of Career Interest courses in Corrections, Criminal Justice, or Law Enforcement.

<sup>3</sup> Criminal Justice Advanced Electives may include CJ 4301 and CJ 4302. A student must meet the following requirements before being allowed to enroll in CJ 4301 or CJ 4302: Texas State GPA of 2.25, Major GPA of 2.50, permission of the Internship Coordinator, and the following courses: CJ 1310, CJ 2310, CJ 2350, CJ 2355, CJ 2360, and CJ 3346.

Code	Title	Hours
<b>Corrections Electives</b>		
CJ 3322	Race, Ethnicity and Criminal Justice	3
CJ 3323	Mid-Level Management in Criminal Justice Agencies	3
CJ 3325	Incarceration in America	3
CJ 4301	Internship I	3
CJ 4302	Internship II	3
CJ 4309L	Gangs and the Criminal Justice System	3
CJ 4316	Treatment in Community and Institutional Corrections	3
CJ 4334	The Death Penalty in the United States	3
CJ 4336	Wrongful Convictions	3
CJ 4338	Sexual Offenses	3
CJ 4350	Contemporary Legal Issues in Law Enforcement	3
CJ 4352	Contemporary Legal Issues in Corrections	3
CJ 4365	Comparative Criminal Justice	3

Code	Title	Hours
<b>Criminal Justice Electives</b>		
CJ 3300	Juvenile Justice	3
CJ 3323	Mid-Level Management in Criminal Justice Agencies	3
CJ 4301	Internship I	3
CJ 4302	Internship II	3
CJ 4309K	Intelligence Analysis	3
CJ 4309L	Gangs and the Criminal Justice System	3
CJ 4314	Terrorism in the United States	3
CJ 4321	Occupational Crime	3
CJ 4325	Media and Crime	3

CJ 4326	Women and Criminal Justice	3
CJ 4329	Organized Crime	3
CJ 4331	Serial Murder	3
CJ 4334	The Death Penalty in the United States	3
CJ 4335	The Psychology of Antisocial Behavior	3
CJ 4336	Wrongful Convictions	3
CJ 4338	Sexual Offenses	3
CJ 4350	Contemporary Legal Issues in Law Enforcement	3
CJ 4352	Contemporary Legal Issues in Corrections	3
CJ 4365	Comparative Criminal Justice	3

Code	Title	Hours
<b>Law Enforcement Electives</b>		
CJ 3322	Race, Ethnicity and Criminal Justice	3
CJ 3323	Mid-Level Management in Criminal Justice Agencies	3
CJ 3329	Forensic Evidence	3
CJ 4301	Internship I	3
CJ 4302	Internship II	3
CJ 4309K	Intelligence Analysis	3
CJ 4309L	Gangs and the Criminal Justice System	3
CJ 4309M	Active Shooter Response Experiential Learning	3
CJ 4314	Terrorism in the United States	3
CJ 4323	Special Operation Units in Law Enforcement and Corrections	3
CJ 4332	Advanced Criminal Justice Management	3
CJ 4338	Sexual Offenses	3
CJ 4350	Contemporary Legal Issues in Law Enforcement	3
CJ 4352	Contemporary Legal Issues in Corrections	3
CJ 4365	Comparative Criminal Justice	3

The minor in Criminal Justice requires 18 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
CJ 1310	Introduction to Criminal Justice	3
Choose 6 hours from the following:		6
CJ 2310	Police Systems and Practices	
CJ 2350	The Courts and Criminal Procedure	
CJ 2355	Correctional Systems and Practices	
CJ 2360	Fundamentals of Criminal Law	
Choose 9 hours from advanced CJ courses		9
<b>Total Hours</b>		<b>18</b>

Family and Consumer Sciences Building Room 101  
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## Major in Consumer Affairs

Majors choose one of three different degree plans. Students choosing the Consumer Affairs major with a concentration in personal financial management study personal financial decision making, consumer law, financial counseling, the role of the consumer in the economy and they select a minor. Students prepare for careers in financial services for individuals and families, financial counseling, consumer advocacy,

or government agencies. The concentration in Family and Consumer Sciences offers students the opportunity to take courses from all areas of Family and Consumer Sciences and select a minor. Graduates seek employment in business, the extension service, and community agencies. The teacher certification, approved by the Texas Education Agency, certifies graduates to teach Family and Consumer Sciences in 6-12th grades. See note at the bottom regarding background checks for this option.

## Major in Human Development and Family Sciences

Human Development and Family Sciences majors are prepared for careers that address the needs of families and individuals across the lifespan, including child life specialist, early childhood intervention, early childhood educators, activity coordinators at assisted living centers and children's museums, parent educators, child protective services, foster care and adoption programs and other family or human services agencies (nonprofit, faith-based, secular). Students may choose courses focused on a particular Career Interests including, Child Services and Administration (non-profit programs and agencies), Child Life (hospital settings), early childhood educators, pre-Marriage and Family Therapy (graduate school), or Research and Analytics (graduate school). Students may seek high school teacher certification. As a condition for participation in required courses that necessitate either observation or participation at the campus Child Development Center, students must undergo a criminal background check and provide verification of an annual TB test. See note below regarding admittance to the Child Development Center and Texas Teacher Certification Requirements.

## Major in Fashion Merchandising

Fashion Merchandising majors are prepared for a variety of careers in the fashion industry including: product development, retail management, buying, fashion marketing and promotions. Students gain valuable hands-on experience through computer-based assignments, cutting-edge merchandising technology, internships, and study tours. Majors are required to complete a business administration minor to enhance their preparation for the fashion industry. Students pursuing the planning and presentation concentration receive training on the latest industry software for store and merchandise planning and allocation.

## Major in Interior Design

The interior design major prepares students for careers in all areas of the field, including residential and commercial interior design. The program is accredited by the Council for Interior Design Accreditation (CIDA), the recognized accrediting agency for the discipline in the United States and Canada. Students learn to develop and communicate design concepts, solve design problems, and present solutions in an effective and professional manner. They also learn the specific knowledge and skills necessary to practice interior design, such as color theory, design history, hand and computer drafting, space planning, selection of interior finishes, building codes, and interior lighting.

## Major in Nutrition and Foods

Majors study the relationships between dietary patterns, including intake of whole versus processed foods, nutrient status, dietary supplements, behavior and the health of individuals and populations, as well as health equity. Majors prepare for careers in health promotion, clinical nutrition, food service administration, community and public health nutrition, government agencies, private practice, and consulting. The program

also prepares majors for pursuing advanced degrees, research, and careers in food and wellness industries. There are three degree tracks. The first degree track requires the nutrition and foods major with a minor of the student's choice. The second degree track, the dietetics concentration, is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) and fulfills didactic requirements for licensing. Graduates of this track who complete all ACEND requirements will receive a Verification Statement and are qualified to apply for post-graduate dietetic internships in pursuit of Registered Dietitian Nutritionist certification. The third track is for students pursuing the Texas Teacher Certification Requirements. See note below regarding background checks for this option.

### ***Note: Admittance to the Child Development Center and Texas Teacher Certification Program***

**Child Development Center.** Be advised that in the State of Texas, criminal convictions may affect a person's ability to be present in a Licensed or Certified Child Care facility (Chapter 42, Human Resources Code). Therefore, students enrolling in course work which requires any of the following: observation or participation at the campus Child Development Center; or observing or student teaching in K-12 grade Texas schools must undergo a criminal background check. Criminal history will be reviewed and students may be subject to an investigation based on that criminal history.

### **Texas Teacher Certification Program. Criminal Background checks are required for progression through the Educator Preparation Program.**

Based on the information recorded in your criminal history, you may be ineligible for issuance of a certificate upon completion of the Educator Preparation Program. If you have a criminal history, the Office of Educator Preparation (OEP) recommends you pay for a Preliminary Criminal History Evaluation, from the Texas Education Agency, schedule an appointment for free legal counseling services through Texas State University's Attorney for Students, and disclose this information to the OEP.

## Bachelor of Science in Family and Consumer Sciences (B.S.F.C.S.)

- Major in Consumer Affairs (Personal Financial Management Concentration) (p. 113)
- Major in Consumer Affairs (Family and Consumer Sciences Concentration) (p. 114)
- Major in Consumer Affairs (Teacher Certification in Family and Consumer Sciences, Grades 6-12) (p. 115)
- Major in Fashion Merchandising (p. 116)
- Major in Fashion Merchandising (Planning and Presentation Concentration) (p. 117)
- Major in Human Development and Family Sciences (p. 118)
- Major in Human Development and Family Sciences (Teacher Certification in Human Development and Family Studies, Grades 8-12) (p. 119)
- Major in Interior Design (p. 120)
- Major in Nutrition and Foods (p. 121)
- Major in Nutrition and Foods (Dietetics Concentration) (p. 122)
- Major in Nutrition and Foods (Teacher Certification in Hospitality, Nutrition, and Food Sciences, Grades 8-12) (p. 123)



## Minors

- Consumer Affairs
- [Family and Consumer Sciences](#)
- [Fashion Merchandising](#)
- [Human Development and Family Sciences](#)
- [Nutrition](#)

**Subjects in this school include:** CA (p. 102), FCS (p. 103), FM (p. 104), HDFS (p. 106), ID (p. 109), NUTR (p. 111)

## Courses in Consumer Affairs (CA)

### CA 1341. Consumers in the Marketplace.

This course is an introduction to consumerism. Topics covered include: the consumer's role in the economy; consumer responses to the pressures of the economy (credit, inflation, and savings); and an analysis of the largest consumer expenditures (housing, food, and transportation).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** ECON 1303

### CA 1347. Family and Personal Resource Management.

This course focuses on the analysis of family and personal management processes including resource identification and factors that impact management and decision making (i.e., public policy and career implications). Contemporary issues in the field are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CA 2341. Digital Applications in Consumer Finance.

This course focuses on the technology applications that are used to analyze consumer's financial situation, needs, and goals. Topics include constructing personal financial statements; cash flow; time value of money related to education, retirement, life insurance; and amortization. Students will use calculators, Microsoft Excel, and personal financial planning software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CA 2351. Behavioral and Personal Financial Management.

This course provides an investigation of behavioral finance as it impacts the individual, families, U.S. economic system, and ultimately society. Cognitive and social factors that impact the financial decision making of individuals are examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080

**Grade Mode:** Standard Letter

### CA 3341. Personal and Family Finance Goals and Strategies.

In this course students will examine personal/family financial management during different stages of the family life cycle. Topics include budgeting/recordkeeping to achieve economic goals, the role of credit and the need for financial counseling; economic risks and available protection; and alternative forms of saving and investments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CA 3342. Consumer Law.

This course explores the relationship between consumer laws (federal and state) and policy. Topics include consumer protection legislation which defines the consumer's rights/responsibilities and the appropriate avenues of redress on the part of the consumer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CA 3351. Consumer Financial Management I.

Principles and practices of individual and family financial management relating to insurance needs and selection, investment strategies to realize financial goals and income tax planning to improve financial well-being will be addressed. Technical skills required of financial counselors, planners and human resource management are emphasized. Prerequisite: CA 1341 or CA 2351 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CA 3352. Consumer Financial Management II.

Principles and practices of individual and family financial management relating to retirement and estate planning to improve financial well-being will be presented. Technical skills required of financial counselors, planners and human resource management will be emphasized. Prerequisite: CA 1341 or CA 2351 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CA 4301. Internship in Consumer Affairs.

This course is an Internship program in Consumer Affairs related professions, services, business, or industry. Must meet college, department and program requirements. Repeatable for credit with different emphasis. (Capstone Course) (WI) Prerequisite: Departmental approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**CA 4341. Personal and Family Financial Counseling.**

This course is an in-depth study of the role of the financial counselor. Topics covered will increase awareness and knowledge of the characteristics of persons with financial difficulties, complexity of factors affecting such situations, desirable relationships between the helper and helped, and an awareness of community resources. Prerequisite: [CA 1341 or CA 1347 or CA 2351 or CA 3341] and [CA 3351 or CA 3352] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CA 4342. Personal and Family Financial Counseling Practicum.**

This course focuses on applying financial counseling and consulting skills consistent with accepting financial counselor roles. Content includes theoretical models of financial counseling. Prerequisite: CA 4341 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CA 4391. Independent Study in Consumer Affairs.**

This course involves independent reading and/or research on a specific topic related to students' primary area of interest. Work may consist of research, reviews, and integration of existing literature, or other appropriate independent work. Course may be repeated once for credit with approval of instructor.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Courses in Family and Consumer Sciences (FCS)

Many of the subject-matter courses in Family and Consumer Sciences are open to non-majors as electives.

**FCS 1310. Foundations in Family and Consumer Sciences.**

This course provides an overview of the field of Family and Consumer Sciences as it relates to human ecology, emphasizing its interdisciplinary nature, history, theories, career opportunities, and career readiness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 3303. Introduction to Research in Family and Consumer Sciences.**

This course examines practices in the social science research process, with an emphasis on general scientific literacy. Content will focus on technical and academic writing for use in the Family and Consumer Sciences profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**FCS 4101. Special Problems in Family and Consumer Sciences.**

A study of selected areas of Family and Consumer Sciences. Repeatable for credit with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dual Enrollment Permitted|Header|Time Conflicts Permitted

**Grade Mode:** Standard Letter

**FCS 4303. Research Procedures in Family & Consumer Sciences.**

The study and implementation of research procedures for use with family and consumer sciences programs. Includes instrument selection, recruitment and testing of subjects, coding, analysis and dissemination of data. Will include field based experiences using appropriate research procedures. Restricted to Senior Standing. (WI) Prerequisite: FCS 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**FCS 4304A. Family Finance II.**

This course is a study of financial management for individuals and families. Topics include financial inequality, investments, retirement planning, and estate planning. Prerequisite: CA 3341 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FCS 4304B. Introduction to Research Methods in Family and Consumer Sciences.**

The examination of practices in the social science research process with an emphasis on general scientific literacy and technical, academic writing for use with Family and Consumer Sciences programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**FCS 4304C. Teaching Textile Product Construction.**

This course is a teaching-oriented study of the techniques and technologies used to construct textile-based products. Its purpose is to help prepare students for teacher certification and teach textile product construction education content in secondary level FCS classrooms and also to learners of all ages.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FCS 4340. International Study in Family and Consumer Sciences.**

Study of Family and Consumer Sciences topics in international settings. Emphasis will be placed on cultural awareness and its application within FCS professions. Repeatable for credit with different emphasis. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FCS 4343. Occupational Education in FCS.**

Its purpose is to help prepare students for teacher certification and teach occupational education content in 11-12 grade FCS classrooms. Occupational education course in 11-12 grades such as Services for Older Adults, Hospitality Services, Childcare and Guidance and Food Production, management and services are designed for students to gain extensive management skills and practical work experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 4344. Instructional Management for Family and Consumer Sciences.**

This course provides students with hands-on application of the Texas Teaching Proficiencies as outlined by the Texas Teacher Evaluation and Support System (T-TESS) and the Danielson Framework. Principles and practices specifically needed for managing the FCS classroom will be addressed.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**FCS 4347. Family Policy.**

This course is an examination of policy-making and the significance of national, state and local policies that affect families. Students will analyze social policies, including government programs and legislation, and discuss how to influence change in policies. Use of the Internet and computer software programs such as Word, PowerPoint, and others required. Requires Senior Standing. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**FCS 4681. Family and Consumer Sciences: Clinical Student Teaching.**

Students will apply knowledge and skills learned during the teacher preparation program while engaging in clinical practice with experienced Family & Consumer Sciences mentor teachers in school settings with university instruction and supervision. This culmination experience is required for Texas teacher certification. Requires departmental approval through the OEP. Prerequisites: Admittance to the Educator Preparation Program, 2.75 Overall GPA; Additional coursework may not be taken concurrently; For undergraduate students, all other degree-required course work must be completed; For graduate and post-baccalaureate students, all certification coursework must be completed.

**6 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Courses in Fashion Merchandising (FM)

**FM 1330. Introduction to Fashion Merchandising.**

Survey of the fashion industry including an overview of the development, production and distribution of fashion goods and services.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 1332. Textiles.**

A consumer-oriented study of the relationship of fibers, fabrics, and textile product end-uses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 2330. Aesthetics and Branding.**

The study of promotional strategies unique to the fashion industry. Emphasis is placed on techniques used at the retail level. Prerequisite: FM 1330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 2334. Fashion Product Analysis.**

This course focuses on the study of fashion product manufacturing, including textile product quality control issues important to manufacturers, retailers, and consumers. Emphasis is placed on specifying quality based on appearance, cost, durability, and end-use of textile products. Prerequisite: FM 1330 and FM 1332 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 2337. Global Manufacturing and Logistics.**

This course is an introduction to the global supply chain in the fashion industry with an overview of the impact of cultural, political, and economic systems on the manufacturing and logistics of fashion products. Prerequisites: FM 1330 and FM 1332 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective

**Grade Mode:** Standard Letter

**FM 2338. Fashion in Society.**

This course explores the meanings embedded in everyday appearance perceptions and management that result from environmental, socio-psychological, and cultural influences. Course topics reflect about fashion's role in the construction of the self and how appearances shape one's experience in society. Also included is a critical examination of how these meanings influence clothing consumption practices (e.g., buying, using, disposing), which have implications for sustainability concerns associated with the fashion system. An opportunity is provided to connect the theoretical underpinnings of dress to consumption phenomena, from consumerism to minimalism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 3320. Special Events Planning.**

This course is an in-depth study of selected topics and emerging issues related to the planning of special events. Course emphasis will be on planning, organizing, implementing and evaluating special events.

Prerequisite: FM 2330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 3330. Fashion Buying Principles I.**

Quantitative concepts used in merchandising fashion goods with an emphasis on profitability. Prerequisite: FM 2337 and [MATH 1315 or MATH 1316 or MATH 1319] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 3332. Fashion Promotional Strategies II.**

The study of promotional strategies unique to the fashion industry. Emphasis is placed on techniques initiated by manufacturers and wholesalers of fashion products. Prerequisites: FM 2330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 3333. Merchandise Presentation and Planning.**

This course is designed to apply critical thinking skills within the context of retail store space planning and presentation, product category management, and merchandise allocation for a variety of retail business types. Prerequisite: FM 2330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 3334. Fashion Merchandising Administration.**

The study of human resource management in the fashion industry including recruitment, development, assessment, and compensation. Prerequisite: FM 1330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 3335. History of Fashion.**

This course is a survey of textiles, dress and adornment from pre-history through the ancient Eastern and Middle Eastern cultures to the development of Western civilization ending with the Industrial Revolution.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 3336. Modern Fashion Trends.**

This course is a chronological study of fashion, dress and adornment from the Industrial Revolution through modern times. Emphasis in the course is on the socio-economic, political, and technological factors contributing to the evolution of fashion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 3337. Fashion Social Media.**

This course focuses on the management of social media to communicate and sell fashion products. Students measure and evaluate the influence of social media decisions on fashion consumers in order to design fashion-based social media campaigns that meet the needs of social media producers and consumers. Prerequisite: FM 2330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 4101. Special Problems in Fashion Merchandising.**

A study of selected areas of Fashion Merchandising. Repeatable for credit with different emphasis.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**FM 4301. Internship in Fashion Merchandising.**

This course is an Internship in Fashion Merchandising-related professions focused on production, distribution, or retailing of fashion goods, or auxiliary services. Repeatable for credit once. Prerequisite: FM 3334 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**FM 4302B. Specialty Fashion Markets.**

An in-depth study of specialty fashion markets including historic background; significance of the market; terminology; product assortment, development, production and distribution; and trend analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FM 4302G. Creative Problem Solving.**

An in-depth study of selected topics or emerging issues of particular relevance to Fashion Merchandising professionals. Course may be repeated for credit with a different emphasis. Prerequisite: [FM 1332 or ID 2325 or NUTR 1362] with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FM 4302H. Digital Fashion Marketing.**

This course introduces students to the marketing strategies used to sell fashion products in the digital environment. It examines the analytical tools and strategies used in e-commerce, including online advertising, search marketing, email marketing, website optimization, and web analytics for online stores. Prerequisite: FM 1330 and FM 2330 and FM 3330 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FM 4320. Fashion Merchandising in Domestic Markets.**

An on-site study of domestic fashion market centers. Course examines the design, production, and distribution of fashion products and services at various market levels. Repeatable for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**FM 4331. Fashion Buying Principles II.**

This course is a study of the fashion merchandise buyer, planner, and allocator roles emphasizing retail merchandising functions. These include developing merchandise plans, selecting products, and negotiating terms. Using best-practice industry software, students will analyze merchandising data to manage inventory levels, and evaluate performance of sales and profit. Prerequisite: FM 3330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 4333. Advanced Merchandise Planning and Presentation.**

This course is an advanced study of category management strategies with an emphasis on recognizing and evaluating performance data in space planning. This capstone course focuses on creating visual displays based on product selection and projected profit and sales. Prerequisite: FM 3333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 4334. Fashion Product Development.**

The course focuses on fashion product development for target markets. Emphasis of the course is placed on line development, product specification, color and textile selection, sizing, product costing and the use of industry product life-cycle management software. Prerequisite: FM 1332 and FM 2330 and FM 2334 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 4335. Principles of Fashion Consumption.**

This course focuses on the analysis of variables, concepts and theories related to the role of the consumer in fashion and fashion product consumption. Prerequisite: FM 2335 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 4337. Fashion Merchandising.**

The study of managerial decisions in fashion retailing with an emphasis on operational issues. Prerequisite: FM 1330 and FM 2330 and FM 3330 and FM 3334 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**FM 4338. Enterprise Development.**

Principles and procedures used in creating successful enterprises to meet consumer demand, including consumer research, logistical issues, and strategic planning. Examines various product and service offerings in traditional and non-traditional outlets.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 4339. Fashion Economics.**

Economic perspective of textile products, production and global sourcing with emphasis on U.S. fashion industries. (WI) Prerequisite: [FM 1330 and FM 1332 both with grades of "C" or better] and [ECO 2301 or ECO 2314 or ECO 2315 with a grade of "D" or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**FM 4340. Fashion Merchandising in International Markets.**

Study of Fashion Merchandising topics in international settings. Emphasis will be placed on market differences and cultural awareness, and the implications within Fashion Merchandising professions. Repeatable for credit with different emphasis. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**FM 4391. Independent Study in Fashion Merchandising.**

Independent reading and/or research on a specific topic related to students' primary area of interest. Work may consist of research, reviews, and integration of existing literature or other appropriate independent work. May be repeated once for credit with approval of instructor. (WI) Prerequisite: FM 1330 with a grade of "D" or better and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Human Development & Family Sciences (HDFS)

**HDFS 1351. Lifespan Development.**

This course focuses on developmental principles underlying behavior as experienced in physical, intellectual, emotional and social changes across the lifespan. Emphasis is on adult development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**HDFS 1355. Introduction to Family Relationships.**

This course covers a range of research-based topics including the universality and uniqueness of American families, the establishment and maintenance of relationships, family formation, parenthood, and other aspects related to individual and family relationships through the lifespan.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 2311. Statistics and Data Analysis for Human Development and Family Sciences.**

This course is an introduction to statistical concepts within the field of HDFS, including the implementation of statistical techniques using computer software. Concepts include the methods, assumptions, and limitations of statistical analysis, reporting statistical findings, and interpreting statistical results reported in media and scientific outlets.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 2351. Child Development.**

This course focuses on development across domains from conception to adolescence. The course includes opportunities to apply knowledge of child development to observations of children.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**HDFS 2353. Principles of Guidance.**

Students examine research, theory, and developmentally appropriate practices related to children's social development and child guidance techniques. Participation in the Child Development Center is required. Prerequisite: FCD 2351 or HDFS 2351 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 3344. Introduction to Infant and Early Childhood Mental Health.**

This course is an introduction to the study of social and emotional development of infants and young children within the context of the family. The emphasis of this course is on the role of the infant mental health specialist in strengthening the development of young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 3351. Creative Experiences for Children.**

This course focuses on developmentally appropriate creative methods, materials, and planning for children's programs through language, literature, music, art, play, science, math, technology, and social studies. Participation in the Child Development Center is required. Prerequisite: FCD 2353 or HDFS 2353 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**HDFS 3356. Introduction to Early Childhood Intervention.**

This course provides an interdisciplinary orientation to the professional discipline of Early Childhood Intervention (ECI) and the Early Intervention Specialist (EIS). Prerequisite: FCD 2351 or HDFS 2351 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 3358. Practicum in Child Development.**

Students participate in structured practical experience in approved early care and education programs. Prerequisite: [FCD 2353 or HDFS 2353] and [FCD 3351 or HDFS 3351] both with grades of "D" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 3359. Family Diversity.**

This course explores both the internal dynamics and external environments of diverse family forms, including prevalence, social conditions leading to and sustaining their existence, common stereotypes, and recent research. Prerequisite: FCD 1355 or FCD 3355 or HDFS 1355 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 3394. Adolescent Development.**

This course analyzes adolescent development from a research and theoretical perspective. Emphasis is on current critical issues for adolescents in the context of family and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective

**Grade Mode:** Standard Letter

**HDFS 4301. Internship in Human Development and Family Sciences.**

This course provides internship fieldwork in related professions, services, industry, or business for students in Human Development and Family Sciences. Students must meet college, school, and program requirements.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 4302C. Human Welfare Across the Lifespan.**

This course will focus on the analysis of the dynamics of family, partner, and community violence occurring across the lifespan. Students examine history, theory, and research related to physical, sexual, and psychological abuse, including root causes, impacts on individuals and families, and best practices in working with survivors. Prerequisite: [HDFS 1351 or FCS 1351] and [HDFS 1355 or FCS 1355] all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 4304. Conducting Research with Latinx Adolescent Families.**

This course is an introduction to research with Latinx adolescent families and other marginalized populations. As research assistants, students explore current issues and gain hands-on research experience conducting interviews with Latinx adolescent families. Prerequisite: Minimum 2.5 Texas State GPA and instructor approval. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**HDFS 4305. Conducting Research in Early Childhood.**

This course provides students an opportunity to explore and develop fundamental concepts, principles, and methods of research in early childhood, with emphasis on critiques, interpreting, and applying research results and participating in the research process. Prerequisite: Minimum 2.5 Texas State GPA and instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 4351. Cultural Diversity in Families.**

This course focuses on cultural diversity with an emphasis on different racial and/or ethnic groups, religions, and social classes. Students explore selected family science research methods and topics including family functions, family life patterns, multicultural groups, agents of enculturation, and family life education as they relate to cultural diversity. (WI)(MULT) Prerequisite: FCD 1355 or FCD 3355 or HDFS 1355 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HDFS 4352. Administration of Programs for Children.**

This course addresses the history, philosophy, and ethics of programs for young children. Emphasis is on responsibilities of the child care administrator in relation to staff, budgets, facility laws, and standards of agency management. Prerequisite: FCD 2353 or HDFS 2353 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 4353. Introduction to Child Life.**

This course introduces students to theoretical and practical methods of working with children and their families in health care settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 4354. Play and Child Development.**

This course focuses on the therapeutic aspects and learning objectives of play in infants, children, youth, and young adults. This course explores the foundations and theories of play in the growth, development and learning of children. Medical play, play therapy, music therapy, and art therapy are incorporated into the course curriculum. The influence of play environments on children's play is also explored. Prerequisite: HDFS 2351 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 4355. Family Theory.**

This course focuses on the study and comparison of various theories, family structures, and transitions. Interaction strategies to enhance successful family function across various family structures and transitions will be analyzed. Prerequisite: FCD 1355 or FCD 3355 or HDFS 1355 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 4356. Administration of Human Service Organizations.**

This course focuses on the implementation of human service organizations. Leadership and management of human service organizations, including staffing, strategic planning, problem solving, grant writing, and ethical leadership is emphasized. Prerequisite: FCD 2353 or HDFS 2353 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 4357. Grief and Bereavement in Children, Adolescents, and Parents.**

This course focuses on grief and bereavement throughout the life cycle. Topics include historical, current, cultural, spiritual, and religious perspectives, ambiguous loss, transitions, palliative care, self-awareness, and self-care. This course focuses on the health and well-being of children and families. Students analyze grief and bereavement implications for child life specialists.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 4358. Latinx Youth and Families.**

This course is an introduction to research regarding the development of Latinx youth and families, exploring the most common physical, cognitive, and socio-emotional aspects of development. Students learn that these changes are dynamically interrelated and diverse, often depending on factors such as gender and cultural values. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HDFS 4391. Independent Study in Human Development and Family Sciences.**

This course provides opportunity for independent reading and/or research on a specific topic related to a student's primary area of interest. Work includes research, reviews, and the integration of existing literature or other appropriate independent work. (WI).

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive  
**Grade Mode:** Standard Letter

## Courses in Interior Design (ID)

**ID 1310. Introduction to Interior Design.**

This introductory lecture course investigates interior design from social, ecological, cultural, and spatial perspectives related to human habitation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 1320. Design Graphics I.**

This course provides specialized training in manual and digital graphic communication required in the interior design profession. It includes architectural drafting, illustrative sketching, design diagramming and schematics, and basics of orthographic and perspective drawing with emphasis in both technical and aesthetic expression.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 2000. Interior Design Proficiency Review.**

During this course, students will study independently to prepare for a performance-based or portfolio review in which they will demonstrate the ability to apply essential interior design skills and knowledge. Interior Design majors must pass Proficiency Review to gain access to further interior design coursework. Prerequisite: ARTF 1302 and ID 1310 and ID 1320 all with grades of "C" or better. Corequisite: ARTC 2305 and ID 2322 both with grades of "C" or better.

**0 Credit Hours. 0 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ID 2321. History of Interiors.**

Survey of historical styles of furnishings, architecture, and interiors from the Egyptian period to the Industrial Revolution.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 2322. Basic Interior Design.**

This course is an introductory studio for Interior Design majors, analyzing the elements and principles of design as applied to interior environments. Applications of these fundamental components, including finishes, materials, and styles, will be demonstrated by class projects. Prerequisite: ARTF 1302 and ID 1310 and ID 1320 all with grades of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 2323. Design Development.**

This course is an introduction to the process of design development and planning of interior space with an emphasis on graphic visualization as a creative process and design tool. Prerequisite: ID 2000 with a grade of "CR" and ID 2322 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 2324. People, Environment, and Behavior.**

This studio course focuses on the physical and psychological needs of inhabitants of interior space. Students are exposed to theories of environmental perception, human factors, and universal design principles to be applied to design solutions. User needs are demonstrated through the application of space planning throughout the design process.

Prerequisite: ID 2321 and ID 2323 all with grades of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 2325. Materials and Sources.**

This course is an in-depth study of materials and finishes specified for residential and commercial interiors. Material properties, fabrication, installation methods, applications, sustainability, maintenance requirements and sourcing are addressed. Prerequisite: ID 2000 with a grade of "CR" and ID 2322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 2326. Technology for Interior Design.**

This course focuses on residential building construction documentation with a focus on interior design software. Students will apply building construction industry standards to create a residential building construction package through interior design software. Prerequisite: ID 2000 with a grade of "CR" and ID 2322 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 3320. Design Graphics II & Portfolio.**

In this course, students are exposed to various means and methods for using digital media throughout the interior design process. Instruction on presentation graphics, branding and digital publication strategies of a student design portfolio are also addressed. Prerequisite: ID 2322 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 3321. Contemporary Interiors and Architecture.**

A survey of contemporary styles of furnishings, architecture, and interiors from the 19th century to the present. Prerequisite: ID 2321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 3322. Studio I: Residential Interior Design.**

This studio course introduces students to various dimensions, purposes, and characters relative to the small and large residential spaces.

Prerequisite: ID 2324 and ID 3320 both with grades of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 3323. Studio II: Commercial Interior Design.**

This course focuses on the analysis, planning, design and furnishing of small to moderate commercial and other non-residential spaces.

Topics include design programming, the design development process, simple contract document preparation and visual and verbal presentation methods. Prerequisite: ID 2325 and ID 3322 both with grades of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 3324. Professional Practices.**

This course focuses on the business principles, ethics, and procedures for the interior designer. Prerequisite: ID 2323 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ID 3325. Interior Lighting Design.**

This course focuses on the study of natural and manufactured light sources relative to the interior environment. Emphasis is placed on light science and technology and the effects on health, behavior, color and form, and includes issues of aesthetics, energy conservation, codes, evaluation, and specifications. Prerequisite: ID 2323 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 3326. Comprehensive Interior Design.**

This course is an advanced study of materials, systems, codes and other factors relating to public health, safety, and welfare in interior environments. Through lecture and application of resources, materials and design technologies, the course addresses specifying, scheduling, budgeting, and resource conservation. Prerequisite: ID 2324 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 3327. Building Construction in Interior Architecture.**

This course explores the understanding of interior construction and documentation for interior architecture projects. Expression of design intent as construction documents is reinforced in structured classroom experiences, guest lecturers, and on-site visits. Understanding of base building construction and systems will be demonstrated through completion of the set of drawings. Prerequisite: ID 2326 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 4120. Portfolio Design.**

Portfolio preparation and production for seeking employment with design firms. Includes instruction on graphic and publication design, business structures and portfolio strategies. For graduating interior design majors.

Prerequisites: ID 4323 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 4301. Internship in Interior Design.**

Internship experience in the Interior Design profession. (Capstone Course) (WI) Prerequisites: ID 3323 and ID 3324 and ID 3326 all with grades of "C" or better and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ID 4302A. Historic Preservation.**

Introduction to the field of historic preservation, including history, theory, planning, advocacy, law, conservation, and adaptive use, emphasizing the Secretary of the Interior's Standards for Rehabilitation. Students combine design and technical knowledge to approach historical design problems in creative, sensitive, and economical ways. Prerequisite: ID 3321 and ID 3322 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ID 4302C. Lighting Research and Applications.**

An in-depth study of light and color and its impact on people's behavior in interior environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ID 4302F. Color Theory and Design Applications.**

An introduction to color theory and principles with a fundamental understanding of the psychological and physiological effects color has on human perception. Characteristics of major hues which influence design and behavior and how to use, design, and apply color in the creative process will be studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ID 4302G. Color Theory & Design Applications.**

An introduction to color theory and principles with a fundamental understanding of the psychological and physiological effects color has on human perception. Characteristics of major hues which influence design and behavior and how to use, design, and apply color in the creative process will be studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ID 4302H. Study America Sustainable Chicago.**

This course focuses on individual student's exploration of interior design through global, sustainable, wellness and diversity lens. This course provides students with the opportunity to attend the interior design conference NEOCON in Chicago, and to select an issue or problem identifies during the conference to develop a design solution. Prerequisite: ID 2000 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ID 4323. Studio III: Research and Advanced Commercial Interior Design.**

This course expands student understanding and application of design research methods including evidence-based design in the commercial interior environment. Topics include advanced design research methods, programming and large-scale space planning, finish selection/ specifying, furnishings design and detailing, and presentation strategies through creative problem solving and contract document preparation. Prerequisite: FCS 3303 and ID 3321 and ID 3323 and ID 3325 and ID 3326 and ID 3327 all with grades of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ID 4324. Studio IV: Contemporary Design Issues.**

This course requires students to conduct specialized research in interior design to include design issues such as barrier free environments, medical facilities, historic preservation/adaptive re-use, international interiors, energy issues, sustainable design and design for special needs. Prerequisite: ID 4323 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 4391. Independent Study in Interior Design.**

Independent reading and/or research on a specific topic related to student's primary area of interest. Work may consist of research, reviews, and integration of existing literature, or other appropriate independent work. May be repeated once for credit with approval of instructor. (WI).

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Nutrition and Foods (NUTR)

**NUTR 1162. Food Systems Laboratory.**

This course provides for application of the management techniques and concepts of planning, preparation, cost analysis, and evaluation covered in NUTR 1362. Corequisite: NUTR 1362 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 1362. Food Systems.**

Nutrition, food science, and management principles in planning, procuring, preparing, preserving, evaluating, and serving food to fulfill dietary requirements of individuals and diverse cultural groups. Includes federal legislation, environmental issues, and culinary principles. (MULT) Corequisite: NUTR 1162 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**NUTR 2162. Food Science Laboratory.**

Students engage in laboratory techniques and exercises related to food, chemistry, microbiology, nutrition, food palatability, and food safety. Corequisite: NUTR 2362 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 2360. Nutrition Science.**

The science of human nutrition with emphasis on nutrient digestion, absorption, and excretion; nutrient metabolism, requirements, and sources. Prerequisite: BIO 1330 or CHEM 1341 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** BIOL 1322

**NUTR 2361. Nutritional Assessment.**

This course focuses on the principles and techniques of assessing nutritional status, presentation of interviewing and nutrition counseling theories, development of individualized nutrition diagnoses, and introduction to educational tools and community nutrition resources. Practical application is provided through assignments and in-class experiences. Prerequisite: NUTR 2360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 2362. Food Science.**

Students learn the scientific principles underlying the relationships among food, chemistry, microbiology, nutrition, and food safety as related to the major food groups. Co- or prerequisite: NUTR 2162 with a grade of "C" or better. Prerequisite: BIO 1330 or CHEM 1341 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**NUTR 3303. Research Methods in Nutrition Science.**

This course will focus on the evaluation of research concepts, methods, and strategies used in nutrition research. Topics include epidemiological, community, clinical, animal, and cell culture models, study design, statistical analysis and dissemination of research findings. Students will locate, read, and evaluate scientific literature. Prerequisites: BIO 2430 or [BIO 2451 and BIO 2452] all with grades of "C" or better and CHEM 1342 and CHEM 1341 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**NUTR 3362. Nutrition and Health.**

For non-science majors. Involves the study of the nutrients and their function in promoting health throughout the life span. Includes standards for consumer selection of a proper diet and analysis of nutrition-related health problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 3363. Nutrition for Wellness and Fitness.**

Students will study the causes and treatment of overweight and obesity and the effects of dietary and lifestyle choices on attainment and maintenance of health and prevention of chronic diseases. Basic exercise physiology is introduced and dietary recommendations for sports, fitness and prevention of eating disorders are also presented. Prerequisite: NUTR 2361 and NUTR 3367 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 3364. The Science of Nutrition and Exercise.**

This course focuses on basic nutritional science, with emphasis on the physiological and biochemical importance of nutrition to physical performance, health, and fitness. The use and efficacy of ergogenic aids will be investigated. The course requires reading and interpreting the scientific literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 3367. Nutrition and Physiology.**

This course integrates the study of nutrition with other biological sciences, focusing on cellular and molecular physiological processes related to digestion, absorption, transport, and metabolism of nutrients and other dietary components. Prerequisite: NUTR 2360 and [BIO 2430 or BIO 2451 or BIO 2452 or BIO 3421] both with grades of "C" or better and CHEM 1341 and CHEM 1342 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4167. Food Systems-Production & Management Laboratory.**

This course provides for the application of the management techniques and concepts of institutional food production covered in NUTR 4367.

Prerequisite: NUTR 1362 and NUTR 2360 both with grades of "C" or better.

Corequisite: NUTR 4367 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4301. Career Exploration in Nutrition and Foods.**

Students engage in applied experience under the supervision of a professional mentor in nutrition and foods-related professions, services, businesses, and/or research. (Capstone Course). Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4350. Hospitality.**

Focus on the principles underlying operations in the hospitality industry. Concepts include residential and lodging operations, guest expectations, food, beverage, and maintenance services, promotions, budget control, personnel and security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4360. Medical Nutrition Therapy.**

This course explains the physiological and biochemical abnormalities of certain disease states of human body systems with emphasis on diet modification as a therapeutic measure. Prerequisite: NUTR 4365 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4361. Biochemical Nutrition.**

A study of the biochemical and physiological foundations of nutrition. Information pertaining to cytology, biochemical structure of nutrients, energy transformations, nutrient-drug interactions, and the anatomy, physiology, and nutrient metabolism of major organ systems is covered. Prerequisite: NUTR 3367 with a grade of "C" or better. Corequisite: [CHEM 2150 and CHEM 2350] or CHEM 3375 or CHEM 4375 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4362. Nutrition and Genetics.**

This course will examine the specific processes in intermediary nutrient metabolism and their genetic regulation. The effects of nutrients on gene expression, cell signaling, cell physiology, and disease processes will also be explored. Prerequisite: NUTR 3367 and BIO 1330 and BIO 1130 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4363. Nutrition Counseling and Education.**

Study of teaching/learning styles and development of counseling skills to improve the nutritional status of individuals, families, and groups.

Development of effective nutrition education materials and media communications. Prerequisite: NUTR 4365 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**NUTR 4365. Nutrition in the Life Span.**

This course provides for the in-depth study of the normal growth, development, and nutritional requirements associated with pre-pregnancy, pregnancy, infancy, childhood, adolescence, and the older adulthood. (WI) Prerequisite: NUTR 2361 and NUTR 3367 and NUTR 3303 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**NUTR 4366. Equity and Policy in Nutrition.**

This course addresses the influence of government, interest groups, media, and industry on nutrition policy decisions, public and private funding, nutrition education, the food supply and food choices, and includes discussion of equity and ethical considerations that have an impact on public health. (WI) Prerequisite: NUTR 3303 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**NUTR 4367. Food Systems-Production & Management.**

Students study the principles, policies, and procedures for planning, procurement, staffing, production, evaluation, and research in institutional food service. Topics include systems design, decision hierarchy, organizational structure, and personnel selection, training, and management. Prerequisite: NUTR 1362 and NUTR 2360 both with grades of "C" or better. Corequisite: NUTR 4167 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4391. Independent Study in Nutrition and Foods.**

Independent reading and/or research on a specific topic related to students' primary area of interest. Work may consist of research, reviews, and integration of existing literature, or other appropriate independent work. May be repeated once for credit with approval of instructor. (WI).

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to general education core curriculum and degree requirements, this major requires specialized courses in consumer education, family and personal resource management, family finance, consumer law, family financial counseling and family policy.
3. Students participate in an internship in a related area.
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Nine semester credit hours must be writing intensive (WI).
6. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
7. If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.

### Course Requirements

#### Freshman

First Hours Semester	Second Hours Semester	
US 1100	1 Communication Component Code 010	3
Mathematic Component Code 020	3 Life and Physical Sciences Component Code 030	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 Creative Arts Component Code 050 [HUMA 1315]	3
POSI 2310 (Governmen Political Science Component Code 070 [TCCN GOVT 2306])	3 POSI 2320 (Governmen Political Science Component Code 070 [TCCN GOVT 2305])	3

Choose 1 of the following:	3
CA 1341	
CA 2351	
CA 3341	

13

12

Sophomore

First Hours Semester	Second Hours Semester	
CA 1347	3 Language, Philosophy, and Culture Component Code 040	3
FM 2338	3 ACC 2301	3
American History Component Code 060	3 American History Component Code 060	3
Component Area Option Codes 090	3 Component Area Option Codes 090	3
Life and Physical Sciences Component Code 030	3	
15	12	

Junior

First Hours Semester	Second Hours Semester	Summer Hours	
CA 3351	3 CA 3352	3 CA 2341	3
FCS 3303	3 Social and Behavioral Sciences Component Code 080	3 CA 3342	3
Minor	3 Minor (Advanced)	6	
Advanced Elective	3		
ID 2321 or FM 3336	3		
15	12		6

Senior

First Hours Semester	Second Hours Semester	Summer Hours	
ECO 2301 (TCCN ECON 1301)	3 HDFS 1355 or 4358	3 CA 4301	3

Minor	6 Advanced CA, FM, HDFS, ID or NUTR Elective	3 Minor	3
COMM 4327, 3358, or MC 4381	3 Electives	5	
CA 4341	3 CA 4342	3	
15		14	6

Total Hours: 120

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to general education core curriculum and degree requirements, this major is required to take courses in all areas of family and consumer sciences.
- Students participate in an internship in a related area.
- At least three hours of the electives must be advanced.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine semester credit hours must be writing intensive (WI).
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.

### Course Requirements

Freshman

First Hours Semester	Second Hours Semester	
US 1100	1 Communication Component Code 010	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 Life and Physical Sciences Component Code 030	3

POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 ID 1310	3
Mathematic Component Code 020	3 POSI 2320 (Governmen Political Science Component Code 070 [TCCN GOVT 2305])	3
Choose 1 of the following:	3 Creative Arts Component Code 050 [HUMA 1315]	3
CA 1341		
CA 2351		
CA 3341		
CA 1347	3	
	<b>16</b>	<b>15</b>

**Sophomore**

First Hours Semester	Second Hours Semester	
FM 1332 or 2338	3 Language, Philosophy, and Culture Component Code 040	3
HDFS 1351	3 HDFS 2351	3
American History Component Code 060	3 American History Component Code 060	3
Component Area Option Codes 090	3 NUTR 1362	3
Life and Physical Sciences Component Code 030	3 NUTR 1162	1
	<b>15</b>	<b>13</b>

**Junior**

First Hours Semester	Second Hours Semester	Summer Hours	
CA 3351	3 CA 3352	3 CA 2341	3

Minor	3 NUTR 3362	3 Social and Behavioral Sciences Component Code 080	3
ID 2321 or FM 3336	3 Minor	6	
HDFS 1355	3		
	<b>12</b>	<b>12</b>	<b>6</b>
			<b>Senior</b>
First Hours Semester	Second Hours Semester	Summer Hours	
Choose 1 of the following:	3 Minor (Advanced)	3 CA 4301	3
CA 3342	Advanced Electives	4 Component Area Option Codes 090	3
CA 4341	HDFS 4358	3	
FM 3320	Choose 1 of the following:	3	
Minor (Advanced)	6 COMM 3358		
FCS 3303	3 COMM 43		
	MC 4381		
	<b>12</b>	<b>13</b>	<b>6</b>

**Total Hours: 120**

<sup>1</sup> MATH 1316 is not accepted as a prerequisite for courses in some minors.

## Minimum required: 120 semester credit hours

### Admission Requirement

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to general education core curriculum and degree requirements, this major pursuing teacher certification in Family and Consumer Sciences is required to take specialized courses in nutrition and foods, human development and family sciences, fashion merchandising, interior design, consumer affairs, and family and consumer sciences.
3. A minor in Education is required. Courses for the minor in Education are included in the following degree plan.

4. Students participate in FCS 4681 student teaching for pre-professional experience.
5. In addition to the degree and major requirements, students must also complete 12 hours of professional sequence courses through the College of Education. All coursework must be completed prior to FCS 4681.
6. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor
7. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
8. Nine semester credit hours must be writing intensive (WI).
9. Students must demonstrate competency in basic clothing construction techniques.
10. If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.
11. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

## Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
CA 1347	3	Choose 1 of the following:	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	CA 1341	
HDFS 1355	3	CA 2351	
American History Component Code 060	3	CA 3341	
US 1100	1	Communication Component Code 010	3
Mathematics Component Code 020	3	HDFS 1351	3
		American History Component Code 060	3
		PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or PHIL 2306])	3
		COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
16		18	

First Semester Hours		Second Semester Hours	
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [HUMA 1315])	3	ID 1310	3
FCS 3303	3	NUTR 1362	3
FM 1332	3	NUTR 1162	1
Life and Physical Science Component Code 030	3	ENG Literature Component Area Option Code 090/094	3
Social and Behavioral Sciences Component Code 080	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	Life and Physical Science Component Code 030	3
18		16	

First Semester Hours		Second Semester Hours	
COMM 4310	3	AG 4343	3
FM 2338	3	CI 3325	3
ID 2321	3	FCS 4344	3
NUTR 4367	3	HDFS 2351	3
NUTR 4167	1	NUTR 3362	3
Choose 1 of the following:	3		
CA 3351			
CA 3352			
16		15	

First Semester Hours		Second Semester Hours	
AG 4311	3	FCS 4681 <sup>1</sup>	6
CI 4370	3		
FCS 4343	3		
RDG 3323	3		
CI 4372	3		
15		6	

**Total Hours: 120**

<sup>1</sup> All coursework must be completed prior to this semester, no other courses may be taken during the student teaching semester.

**Minimum required: 120 semester credit hours**

## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.



2. A minor in Business Administration (p. 143) or Mass Communication (p. 334) is required for this major.
3. This major is required to take specialized courses in Fashion Merchandising including culture and consumer behavior, textiles, textile product analysis, fashion buying principles, fashion merchandising, fashion history, fashion merchandising administration, fashion economics, and fashion promotional strategies.
4. Students participate in an internship in a related area.
5. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
6. Nine semester credit hours must be writing intensive (WI).
7. If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.
8. Students must pass all required Fashion Merchandising courses with a "C" or higher.

## Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
US 1100	1 Communication Component Code 010	3	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 Component Area Option Codes 090	3	
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 Life and Physical Sciences Component Code 030	3	
MATH 1315 or 1319 (Mathematics Component Code 020 [TCCN MATH 1314 or 1324])	3 FM 2330	3	
FM 1330	3 FM 2338	3	
FM 1332	3		
16		15	

		Sophomore	
First Semester Hours		Second Semester Hours	
Life and Physical Sciences Component Code 030	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3	
American History Component Code 060	3 American History Component Code 060	3	
Creative Arts Component Code 050 [HUMA 1315]	3 Minor <sup>1</sup>	3	
FM 2337	3 FM 3330	3	
Minor <sup>1</sup>	3 FCS 3303	3	
15		15	

### Junior

First Semester Hours		Second Semester Hours	
Component Area Option Codes 090	3 Language, Philosophy, and Culture Component Code 040	3	
FM 3334	3 Social and Behavioral Sciences Component Code 080	3	
FM 3335 or 3336	3 FM Electives	6	
Support Course <sup>2</sup>	3 Electives	2	
FM Elective	3		
15		14	

### Senior

First Semester Hours		Second Semester Hours	
FM 4000-Level Electives	6 FM 4301	3	
FM 4338	3 FM 4339	3	
Minor <sup>1</sup>	6 Minor <sup>1</sup>	6	
		FM 4000-Level Electives	3
15		15	

Total Hours: 120

<sup>1</sup> Students may choose between the 18-hour Business Administration minor or the 18-hour Mass Communication minor.

<sup>2</sup> Support Course: students may choose 3 hours from the following: ECO 2301, ECO 2314, ECO 2315, MC 3343, or MC 3367. Students who minor in Business Administration must choose a MC course. Students who minor in Mass Communication must choose a ECO course.

## Minimum required: 120 semester credit hours

## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. A minor in Business Administration is required for this major. Courses for the minor in Business Administration are included in the following degree plan.
3. This major is required to take specialized courses in Fashion Merchandising including culture and consumer behavior, textiles, textile product analysis, fashion buying principles, fashion merchandising, fashion history, fashion merchandising administration, fashion economics, and fashion planning and presentation strategies.
4. Students participate in an internship in a related area.
5. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
6. Nine semester credit hours must be writing-intensive (WI).
7. If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be

taken at the college level, and the requirement will be added to the student's degree audit.

8. Students must pass all required Fashion Merchandising courses with a "C" or higher.

## Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
US 1100	1 Communication Component Code 010	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 Component Area Option Codes 090	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 Life and Physical Sciences Component Code 030	3
MATH 1315 or 1319 (Mathematics Component Code 020 [TCCN MATH 1314 or MATH 1324])	3 FM 2330	3
FM 1330	3 FM 2338	3
FM 1332	3	
<b>16</b>	<b>15</b>	

Sophomore		
First Semester Hours	Second Semester Hours	
Life and Physical Sciences Component Code 030	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
American History Component Code 060	3 American History Component Code 060	3
Creative Arts Component Code 050 [HUMA 1315]	3 ACC 2301	3
FM 2337	3 FM 3330	3
ECO 2301 (TCCN ECON 1301)	3 FCS 3303	3
<b>15</b>	<b>15</b>	

Junior		
First Semester Hours	Second Semester Hours	
Component Area Option Codes 090	3 Language, Philosophy, and Culture Component Code 040	3
FM Elective	3 Social and Behavioral Sciences Component Code 080	3
FM 3335 or 3336	3 FM 3334	3
Choose 3 hours from the following:	3 Electives	2
MC 3343	FM Elective	3
MC 3367		
CA 3341 (Select 3 hours from the following:)		
CA 3342		
FM 3333	3	
<b>15</b>	<b>14</b>	

Senior		
First Semester Hours	Second Semester Hours	
FM 4331	3 FM 4301	3
FM Elective	3 FM 4337	3
Choose 6 hours from the following:	6 Choose 6 hours from the following:	6
BLAW 3301	BLAW 3301	
CIS 3317	CIS 3317	
FIN 3325	FIN 3325	
MGT 3301	MGT 3301	
FM 4333	3 FM 4339	3
<b>15</b>	<b>15</b>	

**Total Hours: 120**

**Minimum required: 120 semester credit hours**

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- As a condition for participation in a child development class that requires either observation or participation at the campus Child Development Center, students must undergo a criminal background check and provide verification of an annual TB test.
- As a condition for placement in an internship site, students must complete a criminal background check and meet any additional requirements set by the internship site.
- No minor is required; however, Human Development and Family Sciences students may add a minor relevant to their career interests, such as Social Work or Psychology.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine semester credit hours must be writing intensive (WI).
- If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.

## Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
US 1100	1 Communication Component Code 010	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 Life and Physical Sciences Component Code 030	3
Component Area Option Codes 090	3 HDFS 1355	3

Mathematics Component Code 020 <sup>1</sup>	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 Social and Behavioral Sciences Component Code 080	3
HDFS 1351	3	
	<b>16</b>	<b>15</b>

**Sophomore**

First Semester Hours	Second Semester Hours	
HDFS 2351	3 HDFS 2353	3
HDFS 2311, MATH 2328, PSY 2301, or SOCI 3307	3 Language, Philosophy, and Culture Component Code 040	3
American History Component Code 060	3 American History Component Code 060	3
Component Area Option Codes 090	3 Creative Arts Component Code 050 [HUMA 1315]	3
Life and Physical Sciences Component Code 030	3 School Electives <sup>2</sup>	3
	<b>15</b>	<b>15</b>

**Junior**

First Semester Hours	Second Semester Hours	
FCS 3303	3 FCS 4303	3
HDFS 3394	3 HDFS 3359	3
HDFS Career Interest	6 HDFS Career Interest	6
Advanced Electives	3 Electives	3
	<b>15</b>	<b>15</b>

**Senior**

First Semester Hours	Second Semester Hours	
HDFS 4356 or 4352	3 HDFS 4351 or 4358	3
HDFS 4355	3 HDFS 4301	3
School Electives <sup>2</sup>	3 Electives	8
Electives	6	
	<b>15</b>	<b>14</b>

**Total Hours: 120**

<sup>1</sup> MATH 1316 is not accepted as a prerequisite for courses in some minors.

<sup>2</sup> School Electives include courses in CA, FCS, FM, HDFS, ID, and NUTR.

**HDFS Career Interest Courses**

Code	Title	Hours
COMM 3326	Family Communication	3
COMM 4351	Relational Communication	3
HDFS 3344	Introduction to Infant and Early Childhood Mental Health	3
HDFS 3351	Creative Experiences for Children	3
HDFS 3358	Practicum in Child Development	3
HDFS 4302C	Human Welfare Across the Lifespan	3
HDFS 4304	Conducting Research with Latinx Adolescent Families	3

HDFS 4305	Conducting Research in Early Childhood	3
HDFS 4353	Introduction to Child Life	3
HDFS 4354	Play and Child Development	3
HDFS 4391	Independent Study in Human Development and Family Sciences	3
SOCI 3384 or HDFS 4357	The Sociology of Death and Dying Grief and Bereavement in Children, Adolescents, and Parents	3
SPED 2360	Survey of Exceptionalities	3
SOWK 4315	Child Welfare	3

## Minimum required: 121 semester credit hours

**Admission Requirement**

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

**General Requirements**

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to general education core curriculum and degree requirements, this major pursuing teacher certification in Human Development and Family Studies is required to take specialized courses including infant and toddler development, child development, family life education, creative activities for children, and administration of programs for young children.
3. A minor in Education is required. Courses for the minor in Education are included in the following degree plan.
4. As a condition for participation in a child development class that requires either observation or participation at the campus Child Development Center, students must undergo a criminal background check and provide verification of an annual TB test.
5. As a condition for placement in an internship site, students must complete a criminal background check and meet any additional requirements set by the internship site.
6. Students participate in FCS 4681 student teaching for pre-professional experience.
7. In addition to the degree and major requirements, students must also complete 21 hours of professional sequence courses through the College of Education. All coursework must be completed prior to FCS 4681.
8. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
9. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
10. Nine semester credit hours must be writing intensive (WI).
11. If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be

taken at the college level, and the requirement will be added to the student's degree audit.

12. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

## Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
US 1100	1 Communication Component Code 010	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 Life and Physical Sciences Component Code 030	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 HDFS 1351	3
Mathematics Component Code 020	3 HDFS 1355	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
Choose one of the following:	3	
CA 1341		
CA 2351		
CA 3341		
16		15
Sophomore		
First Semester Hours	Second Semester Hours	
HDFS 2351	3 HDFS 2353	3
HDFS 2311	3 Language, Philosophy, and Culture Component Code 040	3
American History Component Code 060	3 American History Component Code 060	3
Component Area Option Codes 090	3 Creative Arts Component Code 050 [HUMA 1315]	3
CA 1347	3 Life and Physical Sciences Component Code 030	3
Social and Behavioral Sciences Component Code 080	3	
18		15
Junior		
First Semester Hours	Second Semester Hours	
FCS 3303	3 CI 3325	3
HDFS 3351	3 AG 4343	3
HDFS 3359	3 HDFS 4352 or 4356	3

HDFS 4351	3	FCS 4344	3
NUTR 3362	3	HDFS 4355	3
SOWK 4315	3	Select one of the following:	3
		CA 3351	
		CA 3352	
18		18	
Senior			
First Semester Hours		Second Semester Hours	
FCS 4343	3	FCS 4681	6
AG 4311	3		
CI 4370	3		
RDG 3323	3		
CI 4372	3		
15		6	
Total Hours: 121			

**Minimum required: 120 semester credit hours**

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- A Texas State GPA of 2.5 is required to graduate.
- Any student admitted to the university can declare the Interior Design major. Except for ID 2321, 2322, and ID 2325 Interior Design majors will not be permitted to enroll in 2000 – 4000 level Interior Design courses until they have met the following requirements:
  - A minimum overall major GPA of 2.75 or higher (ID 1310, ID 1320, ID 2321, ID 2322)
  - A minimum grade of "CR" in ID 2000
  - A minimum grade of "C" in ID 1320
  - A minimum grade of "C" in ID 2322
- This major is required to take specialized courses in Interior Design including history of furnishings and architecture, residential and commercial interior design, research and programming, professional practices, and portfolio design. Visual communication courses, such as drawing and rendering, are taken in the School of Art and Design.
- A proficiency/portfolio review ID 2000 for all Interior Design students is conducted by the Interior Design faculty immediately upon completion of all ID 2322 coursework. The purpose of the review process is to ensure that the most qualified students, evidenced by adequate skill and knowledge level, will advance in the program. Students must pass proficiency/portfolio review to proceed to the studio sequence beginning with ID 2323. Students not earning credit in ID 2000 may only enroll in the course a total of two times. Students who have attempted ID 2000 two times and did not earn credit cannot continue in the Interior Design major.
- Students must pass all required Interior Design and Art classes with a grade of "C" or higher. Any student making a grade of "D" or lower in ID or ART courses may not proceed to the next level course until a grade of "C" or higher is achieved.

7. It is strongly suggested that students consider transferring into the program prior to meeting all general education core curriculum requirements because course options may be limited. The completion of the Interior Design major course requirements requires a minimum of eight semesters due to strict sequencing, regardless of other credit hours accumulated. All Interior Design (ID) courses starting from ID 2323 must be completed at Texas State University.
8. Students entering the sophomore level are required to have their own laptop computers with appropriate software specifications. Hardware and software requirements will be communicated to students passing the proficiency/portfolio review ID 2000.
9. Students participate in an internship in a related area.
10. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
11. Nine semester credit hours must be writing intensive (WI).
12. If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree.  
In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
US 1100	1	ID 2322	3
ID 1310	3	ID 2000	0
ID 1320	3	Mathematics Component Code 020	3
ARTF 1302 (TCCN ARTS 1316)	3	Communication Component Code 010	3
ID 2321	3	Component Area Option Codes 090, 091, 092, 093 and 094	3
Communication Component Code 010	3	Creative Arts Component Code 050	3
16		15	
Sophomore			
First Semester Hours		Second Semester Hours	
ID 2323	3	ID 2324	3
ID 3320	3	ID 2325	3
ID 2326	3	ID 3321	3
American History Component Code 060	3	American History Component Code 060	3
Life and Physical Sciences Component Code 030	3	Life and Physical Sciences Component Code 030	3
15		15	
Junior			
First Semester Hours		Second Semester Hours	
ID 3322	3	ID 3325	3
ID 3324	3	ID 3327	3
ID 3326	3	ID 3323	3
Language, Philosophy, and Culture Component Code 040	3	FCS 3303	3

Government/Political Science Component Code 070	3 Electives	2
15		14
First Semester Hours		Senior
Second Semester Hours		
ID 4323	3 ID 4324	3
Electives	6 Social and Behavioral Sciences Component Code 080	3
Government/Political Science Component Code 070	3 Component Area Option Codes 090, 091, 092, 093 and 094	3
ID 4301	3 ARTH Advanced Elective	3
	Elective	3
15		15

Total Hours: 120

**Minimum required: 120 semester credit hours**

## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to general education core curriculum requirements, this major is required to take courses in biology, and specialized courses in food systems, food science, nutritional assessment, physiology and nutrition, wellness and fitness, life span nutrition, and food service management. Course options include medical nutrition therapy, advanced food science, and nutrition and genetics.
3. A Texas State GPA of a 2.0 or higher and major GPA of 2.25 or higher is required to graduate.
4. Students participate in an externship.
5. A minor is required, and those in biology, Business Administration, and Chemistry are recommended.
6. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
7. Nine semester credit hours must be writing intensive (WI).
8. If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree.  
In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
US 1100	1 Communication Component Code 010		3



Communication Component Code 010	3 CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3
BIO 1330 (TCCN BIOL 1306)	3 CHEM 1141 (TCCN CHEM 1111)	1
BIO 1130 (TCCN BIOL 1106)	1 NUTR 1362	3
MATH 1315 or 1319 (Mathematics Component Code 020 [TCCN MATH 1315 or 1324])	3 NUTR 1162	1
Component Area Option Codes 090, 091, 092, 093 and 094	3 Government/Political Science Component Code 070	3

14

14

**Sophomore**

First Semester Hours	Second Semester Hours	
CHEM 1342 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1312])	3 NUTR 2361	3
CHEM 1142 (TCCN CHEM 1112)	1 NUTR 2362	3
NUTR 2360 (BIOL 1322)	3 NUTR 2162	1
PSY 1300 or SOCI 1310 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2310 or SOCI 1301])	3 BIO 2430 (TCCN BIOL 2404)	4
Government/Political Science Component Code 070	3 American History Component Code 060	3
Language, Philosophy, and Culture Component Code 040	3	

16

14

**Junior**

First Semester Hours	Second Semester Hours	
American History Component Code 060	3 NUTR 3363	3
NUTR 3367	3 NUTR 3303	3
Minor	6 Minor (Advanced)	6
Elective	3 Component Area Option Codes 090, 091, 092, 093 and 094	3

15

15

**Senior**

First Semester Hours	Second Semester Hours	
Creative Arts Component Code 050	3 NUTR 4362	3
NUTR 4367	3 NUTR 4363	3
NUTR 4167	1 NUTR 4366	3
NUTR 4365	3 Minor (Advanced)	6
NUTR 4301	3	

Elective	4
	17

15

**Total Hours: 120**

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to general education core curriculum requirements, this major is required to take courses in biology, and chemistry, and specialized courses in food science, food systems, food service, management, nutritional assessment, physiology and nutrition, wellness and fitness, lifespan nutrition, biochemical nutrition, medical nutrition therapy, and nutrition and genetics.
- A Texas State and major GPA of 2.75 or higher is required to graduate.
- Students participate in an internship.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine semester credit hours must be writing intensive (WI).
- If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.
- An accelerated track in which students may earn their B.S.F.C.S in three years can be requested through the Advising Center.

### Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
US 1100	1	Communication Component Code 010	3
Communication Component Code 010	3	CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3
BIO 1330 (TCCN BIOL 1306)	3	CHEM 1141 (TCCN CHEM 1111)	1
BIO 1130 (TCCN BIOL 1106)	1	NUTR 1362	3
MATH 1315 or 1319 (Mathematics Component Code 020 [TCCN MATH 1314 or 1324])	3	NUTR 1162	1
Component Area Option Codes 090, 091, 092, 093 and 094	3	Government/Political Science Component Code 070	3
14		14	

Sophomore	
First Semester Hours	Second Semester Hours
CHEM 1342 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1312])	3 NUTR 2361 3
CHEM 1142 (TCCN CHEM 1112)	1 NUTR 2362 3
NUTR 2360 (TCCN BIOL 1322)	3 NUTR 2162 1
BIO 2430 (TCCN BIOL 2404)	4 BIO 2440 (TCCN BIOL 2420) 4
Government/Political Science Component Code 070	3 American History Component Code 060 3
PSY 1300 or SOCI 1310 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301 or SOCI 1301])	3
<b>17</b>	<b>14</b>
Junior	
First Semester Hours	Second Semester Hours
American History Component Code 060	3 NUTR 3363 3
NUTR 3367	3 NUTR 4365 3
NUTR 3303	3 NUTR 4367 3
CHEM 2330	3 NUTR 4167 1
CHEM 2130	1 Component Area Option Codes 090, 091, 092, 093 and 094 3
Elective	1 CHEM 2350 3
	CHEM 2150 1
<b>14</b>	<b>17</b>
Senior	
First Semester Hours	Second Semester Hours
Creative Arts Component Code 050	3 NUTR 4362 3
ACC 2301	3 NUTR 4363 3
NUTR 4360	3 NUTR 4366 3
NUTR 4361	3 Elective (Advanced) 3
NUTR 4301	3 Language, Philosophy, and Culture Component Code 040 3
<b>15</b>	<b>15</b>
<b>Total Hours: 120</b>	

**Minimum required: 122 semester credit hours**

## Admission Requirement

- All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to general education core curriculum and degree requirements, this major is required to take specialized courses including biology and food systems, food science, nutritional assessment, physiology and nutrition, wellness and fitness, lifespan nutrition, food service management and hospitality.
- A minor in Education is required for this major. Courses for the minor in Education are included in the following degree plan.
- Students participate in FCS 4681 student teaching for pre-professional experience and an internship.
- In addition to the degree and major requirements, students must also complete 12 hours of professional sequence courses through the College of Education. All coursework must be completed prior to FCS 4681.
- To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine semester credit hours must be writing intensive (WI).
- If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.
- The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

## Course Requirements

Freshman	
First Semester Hours	Second Semester Hours
US 1100	1 Communication Component Code 010 3
Communication Component Code 010	3 CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311]) 3
BIO 1330 (TCCN BIOL 1306))	3 CHEM 1141 (TCCN CHEM 1111) 1
BIO 1130 (TCCN BIOL 1106)	1 NUTR 1362 3

MATH 1315 or 1319 (Mathematics Component Code 020 [TCCN MATH 1314 or 1324])	3 NUTR 1162	1
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 Government/Political Science Component Code 070	3
Choose one of the following:	3 Creative Arts Component Code 050	3
CA 1341		
CA 2351		
CA 3341		
<b>17</b>		<b>17</b>

**Sophomore**

First Semester Hours	Second Semester Hours	
CHEM 1342 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1312])	3 NUTR 2361	3
CHEM 1142 (TCCN CHEM 1112)	1 NUTR 2362	3
NUTR 2360 (TCCN BIOL 1322)	3 NUTR 2162	1
BIO 2430 (TCCN BIOL 2404)	4 Language, Philosophy, and Culture Component Code 040	3
Government/Political Science Component Code 070	3 American History Component Code 060	3
American History Component Code 060	3 PSY 1300 or SOCI 1310 (Social and Behavioral Sciences Component Code 080)	3
<b>17</b>		<b>16</b>

**Junior**

First Semester Hours	Second Semester Hours	
NUTR 3367	3 NUTR 3363 or 4365	3
NUTR 4350	3 CI 3325	3
NUTR 4367	3 AG 4343	3
NUTR 4167	1 FM 4338	3
COMM 4310	3 FCS 4344	3
	Component Area Option Codes 090, 091, 092, 093 and 094	3
<b>13</b>		<b>18</b>

**Senior**

First Semester Hours	Second Semester Hours	
NUTR 4366	3 FCS 4681	6
CI 4370	3	
RDG 3323	3	
AG 4311	3	
FCS 4343	3	

CI 4372	3
<b>18</b>	<b>6</b>

**Total Hours: 122**

The minor in Consumer Affairs requires 18 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
Choose one of the following:		3
CA 1341	Consumers in the Marketplace	
CA 1347	Family and Personal Resource Management	
CA 2351	Behavioral and Personal Financial Management	
CA 2341	Digital Applications in Consumer Finance	3
CA 3351	Consumer Financial Management I	3
CA 3352	Consumer Financial Management II	3
CA 3342	Consumer Law	3
CA 4341	Personal and Family Financial Counseling	3
<b>Total Hours</b>		<b>18</b>

The minor in Family and Consumer Sciences requires 18-19 semester credit hours, including at least 9 advanced hours.

Code	Title	Hours
<b>Required Courses</b>		
CA 3351	Consumer Financial Management I	3
CA 3352	Consumer Financial Management II	3
Choose one of the following:		3
CA 1341	Consumers in the Marketplace	
CA 1347	Family and Personal Resource Management	
CA 2351	Behavioral and Personal Financial Management	
Choose one of the following:		3
HDFS 1351	Lifespan Development	
HDFS 1355	Introduction to Family Relationships	
HDFS 3344	Introduction to Infant and Early Childhood Mental Health	
HDFS 3394	Adolescent Development	
HDFS 4358	Latinx Youth and Families	
Choose two of the following:		6-7
FM 3335	History of Fashion	
FM 3336	Modern Fashion Trends	
FM 3334	Fashion Merchandising Administration	
NUTR 1362 & NUTR 1162	Food Systems and Food Systems Laboratory	
NUTR 3362	Nutrition and Health	
ID 1310	Introduction to Interior Design	
ID 2321	History of Interiors	
FCS 3303	Introduction to Research in Family and Consumer Sciences	

**Total Hours 18-19**

The minor in Fashion Merchandising requires 18 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
FM 1330	Introduction to Fashion Merchandising	3
FM 1332	Textiles	3
<b>Prescribed Electives</b>		
Choose 12 hours from the following (9 hours must be advanced):		12
FM 2330	Aesthetics and Branding	
FM 2334	Fashion Product Analysis	
FM 2337	Global Manufacturing and Logistics	
FM 2338	Fashion in Society	
FM 3330	Fashion Buying Principles I	
FM 3333	Merchandise Presentation and Planning	
FM 3334	Fashion Merchandising Administration	
FM 3335	History of Fashion	
FM 3336	Modern Fashion Trends	
FM 4320	Fashion Merchandising in Domestic Markets	
FM 4335	Principles of Fashion Consumption	
FM 4337	Fashion Merchandising	
FM 4338	Enterprise Development	
FM 4339	Fashion Economics	
FM 4340	Fashion Merchandising in International Markets	
<b>Total Hours</b>		<b>18</b>

The minor in Human Development and Family Sciences requires 18 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
HDFS 1351	Lifespan Development	3
or HDFS 2351	Child Development	
HDFS 1355	Introduction to Family Relationships	3
<b>Prescribed Electives</b>		
Choose 12 hours of HDFS electives, 9 of which must be advanced hours.		12
<b>Total Hours</b>		<b>18</b>

The minor in Nutrition requires 18-19 semester credit hours, depending on the student's major and on which courses are selected from the minor options. This is a science-based minor that requires that some biology and chemistry prerequisites must be completed. Because many of the nutrition courses require science prerequisites, the total hours for the minor may vary depending on what courses the student has completed as part of their major or has satisfied as part of the general education core curriculum.

Code	Title	Hours
<b>Required Courses</b>		
NUTR 2360	Nutrition Science (prerequisite 3 hours of science)	3
NUTR 2361	Nutritional Assessment (prerequisite NUTR 2360)	3
NUTR 3367	Nutrition and Physiology (prerequisites NUTR 2360, CHEM 1341, CHEM 1141, CHEM 1342, CHEM 1142, BIO 2430)	3
<b>Prescribed Electives</b>		
Choose 9-10 hours from the following:		9-10
NUTR 1162	Food Systems Laboratory	

NUTR 1362	Food Systems	
NUTR 2162	Food Science Laboratory (prerequisite NUTR 2360)	
NUTR 2362	Food Science (prerequisite NUTR 1362)	
NUTR 3363	Nutrition for Wellness and Fitness (prerequisites NUTR 2361, NUTR 3367, BIO 2430 or BIO 2451 or BIO 2452)	
NUTR 4361	Biochemical Nutrition (prerequisites NUTR 3367, BIO 2430, NUTR 4365, CHEM 2350, CHEM 2150)	
NUTR 4363	Nutrition Counseling and Education (prerequisites NUTR 2361, NUTR 4365)	
NUTR 4365	Nutrition in the Life Span (prerequisites NUTR 2361, NUTR 3367, BIO 2430 or BIO 2451 or BIO 2452)	
NUTR 4366	Equity and Policy in Nutrition (prerequisites NUTR 1362, NUTR 4365)	
<b>Total Hours</b>		<b>18-19</b>

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The Army Reserve Officer Training Corps (AROTC) Program at Texas State is designed to develop the professional skills vital to Army officers. The purpose of the program is to educate, develop, and inspire qualified students for a commission in the U.S. Army, U.S. Army Reserve, or Army National Guard. All applicants must interview with the Recruiting and Enrollment Officer before registering (512.245.0390 / armyrotc@txstate.edu).

The freshman and sophomore years of AROTC are called the Basic Course, and the junior and senior years are called the Advanced Course. Entry into the Basic Course requires no formal application; however, an interview is advisable because the student may be eligible for advanced placement. Registration is accomplished at the same time and in the same manner as for other college courses. Enrollment in the Basic Course does not confer any military status or commitment upon the cadet. Successful completion of, or constructive credit for, the Basic Course is necessary before progressing to the Advanced Course.

Students entering the Advanced Course should have two academic years remaining at Texas State. Coordination must be made with the Recruiting and Enrollment Officer of Military Science well in advance of anticipated enrollment in order to allow adequate time for enrollment processing. A student may meet some prerequisites as a result of prior military training, ROTC training with any service, or successful completion of the AROTC Cadet Initial Entry Training. An interview is required in order to determine if a student meets any of the above prerequisites.

Students in the Advanced Course attend a Cadet Leader Course during the summer at Fort Knox, Kentucky between their junior and senior years. The purpose of this course is to train cadets to Army standards, to develop their leadership skills, and to evaluate their officer potential while giving them practical field experience in a military environment.

Textbooks and materials for military science classes are furnished without cost to the student.

Some cadets are eligible to participate in the Simultaneous Membership Program (SMP), which allows them to serve in the National Guard or Army Reserve concurrently with AROTC. The Department of Military

Science should be consulted for additional information regarding this program.

Army scholarships are available on a competitive basis to cadets enrolled in AROTC. These scholarships pay 100% of tuition and fees or room and board, plus a \$600 allowance per semester for books and necessary supplies. All scholarship cadets also receive a \$420 tax-free stipend per month. Eligible non-scholarship cadets who sign an AROTC contract may begin receiving the stipend as well.

Opportunities to attend Airborne, Air Assault, and other service schools are available to eligible cadets on a competitive basis.

Pursuant to Texas Education Code 51.302, up to three semester hours of credit in an upper-level ROTC course may be applied to the general education core curriculum American History Component (HIST 1310) or and up to three hours to the general education core curriculum Government/Political Science Component (POSI 2320 only). HIST 1320 is still required to meet the Military History requirement for the minor and commissioning.

All AROTC cadets are required to attend a weekly 120-minute leadership laboratory. This gives them an opportunity to practice basic military skills and the art of leadership.

## Minor

- Military Science

## Courses in Military Science (MS)

### MS 1000. Leadership Laboratory.

This course concentrates on practical leadership training. Must be taken concurrently with all other MS courses. Repeatable for credit with different emphasis.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### MS 1211. Foundations of Officership.

This course introduces the Army profession and the role of the commissioned officer. It focuses on leadership, ethics and military customs as well as practical skills like physical fitness and stress management. Corequisite: MS 1000 with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MS 1212. Basic Leadership.

This course is designed to broaden the introduction to the Army and the skills needed to be a successful Army officer. It focuses on leadership, communication and problem solving as well as nutrition and personal development. Corequisite: MS 1000 with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MS 2211. Individual Leadership Studies.

This course is designed to develop the student's self-confidence, leadership skills and problem solving abilities. It focuses on critical thinking, communication and conflict resolution skills.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MS 2212. Leadership and Teamwork.

This course focuses on self-development guided by group processes. Experiential learning activities are designed to challenge current beliefs, knowledge and skills. This course also provides equivalent preparation for the ROTC Advanced Course and the Leaders Training Course.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MS 2313. American Military Studies and Battle Analysis.

This course is designed to study Military History as it applies to the principles of war and current military doctrine. Students will analyze historical battles and lessons learned and apply them to the modern battlefield. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

### MS 3311. Leadership and Problem Solving I.

This course is designed to enable a student without prior military experience to rapidly integrate into the cadet battalion and perform successfully. Key elements are introduction to physical fitness, how to plan and conduct training, basic tactical skills and military reasoning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MS 3312. Leadership and Problem Solving II.

This course is designed to enable a student without prior military experience to rapidly integrate into the cadet battalion and perform successfully. Key elements are introduction to physical fitness, how to plan and conduct training, basic tactical skills and military reasoning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MS 4311. Leadership and Management.

This course is designed to help cadets make informed career decisions and it continues their education in Army operation, training management, communications and leadership. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter



**MS 4312. Officership.**

This course focuses on completing the transition from cadet to lieutenant. It includes a basic foundation of military law, skills and information on leadership and military science, application and demonstration of knowledge and mastery of military skills reasoning. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MS 4313. Independent Study in Military Science.**

This course will be designed to meet the needs of the individual student. It will be a directed and closely monitored program targeted at the students' weaknesses/interests. The course will primarily deal with topics pertinent to the military profession; such areas as leadership, management, ethics, law and their application. Course will require week/bi-weekly progress review with instructor. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

The minor in Military Science requires 23 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
MS 1211	Foundations of Officership	2
MS 1212	Basic Leadership	2
MS 2211	Individual Leadership Studies	2
MS 2212	Leadership and Teamwork <sup>1</sup>	2
MS 3311	Leadership and Problem Solving I <sup>2</sup>	3
MS 3312	Leadership and Problem Solving II <sup>2</sup>	3
MS 4311	Leadership and Management <sup>2</sup>	3
MS 4312	Officership (advanced course) <sup>2,3</sup>	3
One course in Military History		3
<b>Total Hours</b>		<b>23</b>

<sup>1</sup> Or placement credit given for completing basic training or the Leader's Training Course.

<sup>2</sup> To be eligible to take these courses, students must sign a contract to enter the U.S. Army, Army Reserve, or Army National Guard. Students must be medically, morally, and physically qualified and receive permission from the department chair.

<sup>3</sup> Requires that cadets qualify for an U.S. Army officer commission by submitting to and passing a thorough background investigation to obtain a Secret Security clearance.

Pedernales Building

Telephone: 512-245-2115

<http://www.owls.txstate.edu> (<http://www.owls.txstate.edu/>)

The Department of Organization, Workforce, and Leadership Studies offers the Bachelor of Applied Arts and Sciences (BAAS) degree is designed to allow students to obtain a degree that is both interdisciplinary and individualized. The following are unique characteristics of the BAAS.

- The BAAS degree remains the most flexible degree on campus allowing multiple methods for completion and utilization of various coursework from different disciplines to complete the degree.
- The degree allows students to assist in the choice of courses that would complement their career goals.
- The degree includes an option to obtain college credit for work experience, non-collegiate training, industry certifications, and non-sponsored learning through a portfolio development process called the Prior Learning Assessment.
- The degree includes multiple options for obtaining college credit including testing by CLEP or DSST, correspondence studies, and extension courses.
- Courses are delivered online, hybrid, or in-person on the San Marcos or Round Rock Campus.
- The professional development modules in the degree is individualized based on students' career goals.
- Certificates, such as Certified Public Manager (CPM), may be included in the degree audit.
- Approved technical associate degrees and coursework may be included in the BAAS degree.
- Relevant military coursework may be included in the degree.
- The degree does not include an option for a minor or any industry certifications, such as teaching certification, real estate license, CPA, or any other certifications.
- The degree includes a capstone experiences that students complete during their final semester in the program. No more than 12 total semester credit hours may be completed during the capstone semester.
- Credits earned through the Prior Learning Assessment portfolio process are only applicable to the Occupational Emphasis module of the degree.
- Students must include at least three discipline areas in their upper-level coursework.
- Credits earned in this Professional Development module must be for upper-level (3000/4000) courses that are chosen based on students' career goals.

## Bachelor of Applied Arts and Sciences (B.A.A.S.)

- Major in Applied Arts and Sciences
- Major in Applied Arts and Science (Aviation Science Concentration) - via Distance Education

**Subjects in this department include: CTE (p. 128), OCED (p. 131)**

## **Courses in Career and Technical Education (CTE)**

### **CTE 3304. Human Relations for Career and Technical Education Teachers.**

This course emphasizes the combination of psychological and sociological factors that influence relationships of CTE teachers in the pursuit of professional duties. Strategies for teaching students and mentoring employees on the dynamics of human relations are highlighted.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

### **CTE 3313A. Special Needs Students in CTE.**

This course involves in-depth studies of characteristics, principles of inclusion, development and implementation of individualized programs of instruction and collaboration with school personnel for effective education of special needs students, including special education, limited-language proficiency, and gifted and talented students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics  
**Grade Mode:** Standard Letter

### **CTE 3313L. Civic Engagement as Global Citizenship.**

To live, compete, and innovate in a global society, students need learning experiences that are rooted in the messy intricacies of the real world. To provide such experiences, "Civic Engagement as Global Citizenship" is a field-based, experiential course that provides students with much needed boundary-spanning approaches to learning about community-based issues within the context of global citizenship.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

### **CTE 3313M. Creative Thinking.**

This course introduces students to creative thinking skills-building techniques. Students in this course will engage in weekly activities to practice creative thinking skill acquisition and will learn the importance of fostering creative thinking in the workplace. By the end of the course, students will have knowledge of past creative thinkers who have helped change the world and will have tools to become the next generation of change-making creative thinkers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

### **CTE 3313N. Problem Solving and Decision Making.**

This course surveys the great mental models, explores data types, and overviews basic analytical tools and models to make informed decisions. When problems arise, how do you confront them? How do you approach problems and make decisions? We form mental models all the time without knowing. But power comes when you consciously build a latticework of mental models and deliberately apply tools to make better decisions, solve problems and improve your outcomes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

### **CTE 3313O. Health and Safety in the Workplace.**

Workplace health and safety refers to the right of every employee to carry out daily work in a safe environment—regardless of industry, size, location, and type of organization. This course provides the tools, guiding practices, and resources for maintaining a healthy and safe workplace, and for safeguarding one's person on the job, especially in workplaces where there are high risks of injury. Students' products from the course provides employers with evidence of worker competency in health and safety in the workplace.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

### **CTE 3313P. Project Management.**

This course offers tools, questions, reviews, guiding practices, and exercises that will help students build a roadmap to project management and leadership success. This course will help project managers at any level overcome some of the most common challenges they face by: effectively managing a demanding workload; leading and motivating a team; building effective relationships with senior stakeholders; managing risks, issues, and changes to scope; and delegating effectively.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

### **CTE 3313Q. Teamwork.**

In this course, students will learn the differences between a group and a team, how to lead a team, how to become an effective team player, and how to resolve conflicts in teams. This course describes the lifecycle of teams and team roles. Ultimately, students will be equipped with strategies for setting up teams and managing teams effectively.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

**CTE 3313R. ACCEYSS Learning Community: Action-Research in Communities of Color to Equip Youth for STEM Success.**

This course is a Service-Learning Section designated course that introduces undergraduate students to culturally responsive, community-engaged, participatory, action, and P-20 STEM workforce research. During this course, students will work with the ACCEYSS (Association of Collaborative Communities Equipping Youth for STEM Success) Network, a local community partner, and its network of faith-based and community partners across the Greater San Marcos region. Students will learn data collection, data analysis, and other methodological approaches to conducting participatory action research at assigned ACCEYSS partner sites. Students will receive mentorship from the instructor and a postdoctoral scholar while learning in a real-world environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 3313Y. Excellence in Customer Service.**

This course prepares students to apply hard and soft skills to navigate various aspects of customer service. Topics include identifying customer needs, providing personalized service, building rapport, acting professionally, and handling challenging customers. Throughout the course, students will learn how to shift their mindset to one that is customer centered and service oriented.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 3315. Leadership and Professional Development.**

This course prepares students to examine and apply principles of leadership to create their own applicable model of influencing others. Topics covered include leadership behavior, strategic thinking, managing energy, and getting results within an organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CTE 3320. Effective Methods of Teaching and Training.**

This is an introductory/fundamental course for instructors in trade and industrial education seeking certification and technical trainers who are not seeking certification. It is designed to prepare these individuals to apply effective teaching principles and techniques, to prepare lesson plans, and manage classrooms. Practice teaching will be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3321. Work-based Learning in Career and Technical Education.**

This course is intended for teacher coordinators of work-based program in trade and industrial cooperative education. There is an emphasis on selection of occupations and appropriate training stations, student recruitment, instruction coordination in on-the-job educational experiences, state and local report preparation and required record keeping systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3322. Teaching and Training as Professions.**

This course emphasizes the professional requirements of teaching and training in a variety of settings. Professional topics include licensure and preparation for the profession, organizations, philosophical foundations of teaching and training, and the socio-political landscape of teaching and training.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3323. Technology Applications.**

This course covers the use and integration of computers in the classroom or office. Topics include history of computers, use of word processor, spreadsheet, and presentation software; overview of common computer programs; history and use of the Internet, and computer security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3324. Entrepreneurship in Schools, Communities, and the Workplace.**

Students will gain an in-depth understanding of entrepreneurship and its application in the contexts of schools, communities, and the workplace. This course intersects entrepreneurial concepts in career and technical education with educational entrepreneurship, social entrepreneurship, and intrapreneurship.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3330. STEM Literacy for the Workplace.**

This course focuses on the STEM literacy skills important for success in a diverse workplace.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3340. Occupational Skills for the 21st Century.**

This course allows students to explore past and present occupational trends, new and emerging occupations and the 21st century occupational skills necessary for success. Students will explore transferability of occupational skills and how these skills are applied and packaged for career transitions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3360. Private Aircraft Operations.**

This course explores the dynamics of flight through the investigation into and proper operations of private aircraft. Topics include theory and operation of flying, supplemented by learning acquired from flight simulator experiences and actual flight time combined with practical flight instruction. Students can attempt certification as a private pilot upon successful course completion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3361. Instrument Flight Rules for Aviation.**

This course provides students with a comprehensive review of the standard aircraft instrumentation array. Topics include how these devices operate as well as the nature of the information conveyed by them to a flight crew to ensure safe aircraft navigation, assessment of aircraft system function, and emergency response. To facilitate learning, the course provides opportunities for students to implement the concepts in real-world scenarios. Prerequisite: CTE 3360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3362. Theory of Commercial Flight.**

This course explores advanced aircraft systems, aerodynamics, federal aviation regulations, airports and airspace, navigation, and performance from the perspective of commercial aviation. Topics include theory of commercial aircraft operations and practical application to real-world aviation scenarios. Prerequisite: CTE 3360 and CTE 3361 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3363. Principles and Methods of Flight Instruction.**

This course focuses on techniques for teaching prospective pilots under visual and instrument rules. Topics include theory of adult learning, creation of lesson plans, learning modules, and appropriate assessments for aircraft operation instruction. Prerequisite: CTE 3360 and CTE 3361 and CTE 3362 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3364. Theory of Multi-Engine Aircraft Operations.**

This course explores multi-engine aircraft theory and aerodynamics, pre-flight requirements for safe operation of multi-engine aircraft, and flight and landing maneuvers for aircraft of this type. Topics include system operation of constant speed propellers, multi-tank and pump fuel systems, dual electrical systems, turbocharger and ice control systems. Students also learn to use performance charts based on multi-engine weight and balance. Prerequisite: CTE 3360 and CTE 3361 and CTE 3362 and CTE 3363 all with grades of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3370. Introduction to Leadership.**

This course provides an overview of current leadership theory and research with emphasis on practical application. Topics include leadership styles, models of effective leadership, and strategies for leadership success.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3380. Education and Training Programs in Workforce Settings.**

This course helps students investigate the range of programs related to education and training in Workforce settings. Students will investigate government policies, program coordination techniques, and organizations related to learning in the workplace. Students will explore local programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3381. Strategies for Education and Training in Workforce Settings.**

This course provides an overview of identifying curriculum, individual learning styles, needs of learners in the workforce, instructional strategies, providing support for diverse learners, inclusive instructional strategies, and the use of technology and assessment in workforce settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CTE 4310. Independent Study in Career and Technical Education.**

This course is an independent study of various subjects in CTE. Work is done on an independent basis under the direction of the faculty member. Repeatable for credit with different emphases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CTE 4315. Creating a Purposeful Life Plan: A Journey of Self-Exploration and Discovery.**

This course introduces analytical tools and work-life balance principles students use as they develop their personal and professional goals in creating a purposeful life plan. The impact of social media platforms and mobile app technologies on the management of personal and professional goals is also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 4320. Aviation Safety.**

This course provides an in-depth exploration of safety in aviation operations and the role of leadership in threat and error management. Topics include issues of individual agency, crew factors, weather, and mechanical safety, as well as potential causes of error and accident.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 4321. Operations Risk Management.**

This course explores operations risk management as it relates to professional aviation. Topics include theories of risk planning, identification, and mitigation and the practical applications of these theories within the context of flight systems, environment, and human factors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 4322. Crew Resource Management.**

This course explores the theory and practical application of Crew Resource Management (CRM) for aviation professionals. Topics include situation awareness, communication skills, teamwork, task allocation, and decision making within a comprehensive framework of standard operating procedures (SOP) for aviation operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 4323. Aviation Weather.**

This course explores weather and its effects on aviation operations. Topics include weather theory, meteorological forecasting and reporting tools and the impacts of weather systems on safe aircraft operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Courses in Occupational Education (OCED)

**OCED 3310. Human Problems in the Workplace.**

Overview of problems that supervisors, teachers, and co-workers encounter in business/industry, social service, military, or education. This range of problems interferes with communication, performance, and development of proficiency in school/work. Perspectives and reports on the incidence of these problems will be presented, as well as actions for these human problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 3350. Introduction to Interdisciplinary Studies for the Bachelor of Applied Arts and Sciences Degree.**

Students in this course will apply critical and reflective thinking to develop an individualized plan consisting of interdisciplinary studies courses that meet their career goals. Students will also assess their needs for earning credits through prior learning assessment (PLA), and identify potential capstone projects aligned with their professional goals. Prerequisite: 2.25 Overall GPA; Texas State GPA of 2.25. Corequisite: OCED 4350.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 4111. Independent Study in Occupational Education.**

This is an independent study course that allows research on topics in occupational education related to a student's interests. Work may include individual research, critical reviews or integration of existing bodies of knowledge. Course may be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**OCED 4302. Trends and Issues in OWLS.**

This course examines emerging trends and issues impacting today's workplace. Topics may include aging workforce, financial and mental wellness, and diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 4325. Development and Change in Organizations.**

This course focuses on organization development and change in government, private business, not-for-profit, and educational organizations. Topics covered include evaluation models, interventions at the organization, individual, and team levels, as well as change management strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 4350. Adult Development and Career Planning.**

This course introduces students to human development, learning theory, transition theory, interdisciplinary studies, career planning and assessment, and goal setting relevant to developing a professional growth plan. (WI). Prerequisite: 2.25 Overall GPA; Current Texas State students must also have a Texas State GPA of 2.25. Corequisite: OCED 3350.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**OCED 4360. Bachelor of Applied Arts and Sciences Capstone Part 1.**

This is the first part of a two-part capstone devoted to the development of the student's supervised capstone project. Proposal development, review of literature, creation of timelines, and task analysis are stressed. Following instructor approval, work on the capstone project begins in this course. (WI) Prerequisites: OCED 3350 and OCED 4350 both with grades of "D" or better and instructor approval. Corequisites: OCED 4361 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 13 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**OCED 4361. Bachelor of Applied Arts and Sciences Capstone Part 2.**

This is the second part of a two-part capstone devoted to the development of the student's supervised capstone project. Application of knowledge, abilities, and skills acquired in the degree program is stressed. It requires extensive reports and documentation. (WI) Corequisite: OCED 4360 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 13 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter



## Minimum required: 120 semester credit hours

### General Requirements

1. This major requires an individualized plan of study based on each student's past learning experiences and future career goals.
2. If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.
3. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
4. Nine semester credit hours must be writing intensive (WI).
5. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

### Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
US 1100	1	Communication Component Code 010	3
Communication Component Code 010	3	Mathematics Component Code 020	3
Creative Arts Component Code 050	3	Component Area Option Codes 090, 091, 092, 093 and 094	3
Social and Behavioral Sciences Component Code 080	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
Component Area Option Codes 090, 091, 092, 093 and 094	3	Language, Philosophy, and Culture Component Code 040	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3		
	16		15
Sophomore			
First Semester Hours		Second Semester Hours	
Life and Physical Sciences Component Code 030	3	American History Component Code 060	3
American History Component Code 060	3	Life and Physical Sciences Component Code 030	3
OCED 3350	3	Occupational Emphasis Courses <sup>1</sup>	9
OCED 4350	3		
Occupational Emphasis Course <sup>1</sup>	3		
	15		15

### Junior

First Semester Hours		Second Semester Hours	
Occupational Emphasis Courses	16	Occupational Emphasis Courses <sup>1</sup>	13
		Professional Development Course <sup>2</sup>	3
	16		16

### Senior

First Semester Hours		Second Semester Hours	
Professional Development Courses <sup>2</sup>	15	Professional Development Courses <sup>2,4</sup>	6
		OCED 4360 <sup>3</sup>	3
		OCED 4361 <sup>3</sup>	3
	15		12

**Total Hours: 120**

<sup>1</sup> This module may be satisfied through a number of options including traditional course work from Texas State University and transfer credit from accredited institutions of higher education plus limited numbers of hours from non-traditional methods including correspondence, extension, and forms of testing including CLEP and DSST.

<sup>2</sup> Students will choose courses from at least three different disciplines with the assistance of the academic advisor. This module of 24 advanced semester credit hours constitutes the major for GPA calculation purposes.

<sup>3</sup> Capstone Experience: This capstone experience is completed during the student's final semester. Students must enroll in both OCED 4360 and OCED 4361 in the same long semester. Students who earn credit in OCED 4360 and do not successfully earn credit for OCED 4361 must repeat both courses the following long semester. A maximum of 12 total semester credit hours may be completed during the capstone semester. All other degree requirements must be completed prior to enrollment in the capstone courses.

## Minimum required: 120 semester credit hours

### General Requirements

1. This major requires an individualized plan of study based on each student's past learning experiences and future career goals.
2. If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.
3. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
4. Nine semester credit hours must be writing intensive (WI).
5. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

## Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
US 1100	1 Component Area Option Codes 090, 091, 092, 093 and 094	3	
Communication Component Code 010	3 Mathematics Component Code 020	3	
Creative Arts Component Code 050	3 POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3	
Social and Behavioral Sciences Component Code 080	3 CTE 3361	3	
CTE 3360	3 CTE 4323	3	
CTE 4320	3		
<b>16</b>		<b>15</b>	

		Sophomore	
First Semester Hours		Second Semester Hours	
Communication Component Code 010	3 Language, Philosophy, and Culture Component Code 040	3	
Component Area Option Codes 090, 091, 092, 093 and 094	3 Life and Physical Sciences Component Code 030	3	
POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3 American History Component Code 060	3	
CTE 3363	3 CTE 3364	3	
CTE 4321	3 CTE 4322	3	
<b>15</b>		<b>15</b>	

		Junior	
First Semester Hours		Second Semester Hours	
CTE 3370	3 Occupational Emphasis Courses <sup>1</sup>	16	
OCED 3310	3		
American History Component Code 060	3		
Life and Physical Sciences Component Code 030	3		
CTE 3362	3		
<b>15</b>		<b>16</b>	

		Senior	
First Semester Hours		Second Semester Hours	
Occupational Emphasis Courses <sup>1</sup>	16 Occupational Emphasis Courses <sup>1</sup>	6	
	OCED 4360 <sup>3</sup>	3	
	OCED 4361 <sup>3</sup>	3	
<b>16</b>		<b>12</b>	

**Total Hours: 120**

from accredited institutions of higher education plus limited numbers of hours from non-traditional methods including correspondence, extension, and forms of testing including CLEP and DSST, and PLA prior learning assessment.

<sup>2</sup> Professional Development courses in Aviation Science. This module of 27 advanced semester credit hours constitutes the major for GPA calculation purposes.

<sup>3</sup> Capstone Experience: This capstone experience is completed prior to the student's final semester or during the last semester. Students must enroll in both OCED 4360 and OCED 4361 in the same long semester. Students who earn credit in OCED 4360 and do not successfully earn credit for OCED 4361 must repeat both courses the following long semester. A maximum of 12 total semester credit hours may be completed during the capstone semester. All other degree requirements must be completed prior to enrollment in the capstone courses.

Code	Title	Hours
<b>Required Professional Courses in Aviation Science</b>		<b>27</b>
CTE 3360	Private Aircraft Operations	
CTE 3361	Instrument Flight Rules for Aviation	
CTE 3362	Theory of Commercial Flight	
CTE 3363	Principles and Methods of Flight Instruction	
CTE 3364	Theory of Multi-Engine Aircraft Operations	
CTE 4320	Aviation Safety	
CTE 4321	Operations Risk Management	
CTE 4322	Crew Resource Management	
CTE 4323	Aviation Weather	

Encino Building Room 150

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[www.socialwork.txstate.edu](http://www.socialwork.txstate.edu) (<http://www.socialwork.txstate.edu>)

The Bachelor of Social Work (BSW) degree prepares students for generalist social work practice to help improve the well-being of individuals, families, and communities with integrity. Students will also be able to integrate social work ethics, knowledge, values, and skills in diverse practice settings with focus on economic and social justice. The Texas State University Bachelor of Social Work (BSW) program is fully accredited by the Council on Social Work Education. The BSW degree is completed in three phases, with a separate program-level application process required for admission into Phase II. Students admitted into Phase II of the BSW program can complete all major courses either on campus or online. Graduates will be able to engage in entry-level social work practice, apply for state social work licensure, and pursue graduate social work (MSW) studies. BSW level social workers help people of all ages and practice in such varied fields as child welfare, schools, long-term care, general social services, mental health care, and public assistance. Within the program, Social Work students must maintain high academic standards, develop the capacity to work with people from diverse backgrounds, and assist all people with any life difficulties and transitions they experience.

## Bachelor of Social Work (B.S.W.)

- Major in Social Work (p. 137)

## Minor

- Social Work

<sup>1</sup> This module may be satisfied through a number of options including traditional course work from Texas State University and transfer credit

## Courses in Social Work (SOWK)

SOWK 1350 is a prerequisite to all other social work courses except SOWK 2375, SOWK 4315, SOWK 4318, SOWK 4320, and SOWK 4355.

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### SOWK 1350. Introduction to Social Work.

This introductory survey course includes the nature, function, and various types of social work practice, acquainting the student with the history, scope, and values of the profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** SOCW 2361

### SOWK 2320. Love and Relationships.

This elective course explores the nature of attraction, friendship, love, and human sexuality, enabling students to enhance their own personal and professional relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### SOWK 2375. Social Services in the Community.

This undergraduate course introduces the organizations and policies involved in social services delivery. Students participate in 50 hours of work as supervised observers and volunteers in selected social service agencies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** SOCW 2362

### SOWK 3305. Seminar in Human Behavior and Social Environment I.

This course provides an overview of human functioning in the environment by studying eco-systems and developmental frameworks. It builds knowledge and values for practice with task groups, organizations, and communities. Prerequisite: SOWK 2375 with a grade of "C" or better. Corequisite: SOWK 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### SOWK 3312. Alcoholism and Chemical Dependence.

This elective course focuses on commonly used and abused drugs as well as the dynamics and treatment of addiction and alcohol abuse. It emphasizes direct social work interventions aimed at addiction prevention and treatment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### SOWK 3332. Helping Troops Transition Back to their Families and Communities: The Invisible Wounds of War.

The course examines topics at the individual, family, group, organizational, and community levels related to troops who are returning from current combat operations and their families. It reviews the needs, community resources, and policies in place for helping them and their families make this transition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### SOWK 3340. Social Work Research.

This course builds foundation-level scientific research skills in critical thinking, knowledge of program and practice evaluation, and a philosophy of generalist social work practice. Prerequisite: [CJ 3347 or HP 3302 or HP 3325 or PSY 2301 or SOCI 3307] and SOWK 3425 both with grades of "C" or better. Corequisite: SOWK 4356 and SOWK 4425 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### SOWK 3420. Social Work Practice I.

This course studies generalist theory and application of social work practice with individuals, families, and groups, including introductory data collection, assessment, intervention planning, and evaluation.

(WI) Prerequisite: SOWK 2375 with a grade of "C" or better. Corequisite: SOWK 3305 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

### SOWK 3425. Social Work Practice II.

This undergraduate course emphasizes generalist social work practice with task groups, organizations, and communities, examining data collection, assessment, intervention, planning, implementation, and evaluation. Students develop and implement a community-based project. (WI) Prerequisites: SOWK 3420 with a grade of "C" or better. Corequisites: SOWK 4305 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

### SOWK 4300E. Statistics for Social Work Online.

This course builds foundation scientific research skills. Students develop critical thinking skills, knowledge of program and practice evaluation, and a philosophy of generalist social work practice.

**3 Credit Hours. 45 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 4300F. International Social Work.**

This course covers basic theoretical and practical approaches to empowerment, social and economic justice, and human rights. Particular cultures and specific global problems are examined in-depth to promote student acquisition of an international worldview for human global change based on social work values and research-informed practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 4300K. Innovative Community Engagement with Vulnerable Populations.**

This hybrid, service-learning, Study-in-America course will require students to identify, examine, and critically analyze social service programs in Central Texas and Los Angeles, California which provide services to vulnerable populations (persons experiencing poverty, homelessness, food insecurity, criminal justice issues, etc.). The impact of socio-economic and community-based social justice issues is analyzed within the context of human development over the life course with an emphasis on the impact of positive individual and community development. Cultural dynamics are examined in conjunction with issues of equity, justice, and community service provision. This course is designed to be highly experiential.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 43000. Modern Day Colonialism and Indigenous People.**

This course is a hybrid, service-learning, Study-in-America course that will require students to identify, examine, and critically analyze the history of colonialism on the culture, allocation of resources, oppression, and contribution to on-going risks and strengths in Hilo, Hawaii. Additional components of the course include: 1) required travel to various agencies, communities, and areas of interest throughout Hilo, Hawaii; 2) required participation in synchronous online learning, asynchronous learning, and two pre-travel orientations; and 3) active participation in service-learning/volunteer activities within a human service agency in Hilo, Hawaii.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Perspective|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOWK 4300P. Perspectives in Global Social Work Ethics.**

This course provides undergraduate students with an overview of perspectives on global social work ethics, while affording opportunities to problem-solve practice-related international ethical dilemmas.

Prerequisite: [SOWK 1350 or SOWK 2375] with a grade of "D" or better.

**3 Credit Hours. 45 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 4301. School Social Work.**

This course is an overview of social services in schools. Topics covered include: educational issues, conceptual frameworks, education and mental health policies, and service delivery systems. Special attention is paid to cultural diversity, special populations within education, parent-school collaboration, community liaisons, referral systems, and educational systems change. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 4302. Hip Hop and Social Justice for Individual and Community Change.**

In this course, Hip-Hop culture is introduced within the context of human development over the life course with an emphasis on positive individual and community well-being. Cultural dynamics are viewed alongside art's role in the social and political history of the United States including issues of equity and justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 4303. Spirituality and Social Work Practice.**

This course provides a basic framework of knowledge, values, and skills necessary for ethical and effective spiritually-relevant practice. It examines spirituality as an integral component of a strengths-based approach to social work practice with diverse and/or vulnerable clients. It integrates a contemporary global perspective with critical self-reflection. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 4304. Animal-Assisted Therapy.**

This course is an introduction to the human-animal bond and its therapeutic applications. The course connects students with an extensive network of handlers and facilities in a wide range of disciplines with applied animal-assisted therapy programs. Students learn to plan professional, ethical, goal-directed, individualized and group animal-assisted therapy activities and programs that incorporate peoples from a variety of populations, in a variety of settings, as well as animal welfare. The course assists students in earning American Kennel Club (AKC) Canine Good Citizen certification so they may prepare for future therapy-dog training and certification. Prerequisite: SOWK 1350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4305. Seminar in Human Behavior and Social Environment II.**

This course integrates knowledge from social sciences and SOWK 3305, focusing on individuals, families, and small groups functioning in environments. It uses a bio-psychosocial perspective, expanding on eco-systems, developmental, and values frameworks. (WI) Prerequisite: SOWK 3305 with a grade of "C" or better. Corequisite: SOWK 3425 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**SOWK 4307. Ghana: Human Rights and Social Justice.**

This course focuses on human rights and applied social justice in a global context from an interdisciplinary standpoint. The course helps students develop the capacity to apply human rights and social justice knowledge and skills to interdisciplinary practice with individuals, communities, and families in a global context. This international-based service learning course intentionally integrates community service, academic learning, and civic learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4310. Diversity and Social Justice in Social Work.**

This undergraduate course focuses on knowledge and skills necessary for effective, ethical, and just practice, exploring interpersonal and institutional dynamics of racism, sexism, heterosexism, homophobia, classism and other forms of oppression and their effects on providing social services to diverse populations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 4315. Child Welfare.**

This undergraduate elective course analyzes child welfare services available to abused and neglected children in their own homes, in substitute care, and through the community, emphasizing social work intervention with children and their families.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4318. Social Work and Health Care.**

This undergraduate elective course provides a generalist view of social work practice in mental health and public health, considering the social problems that affect health care, and ethical and effective intervention strategies and service delivery systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4320. Social Work with Older Adults.**

This undergraduate elective gives a comprehensive introduction to contemporary social problems, values, and issues affecting older adults, and effective and ethical intervention strategies and service delivery systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4333. Comparative Social Work Ethics for Education Abroad.**

This course assists students in expanding their basic level of knowledge, values, and skills in the area of ethics in social work, while participating in the Education Abroad program. Prerequisite: SOWK 1350 and SOWK 2375 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4334. Social Work During the Education Abroad Experience.**

This course assists students in exploring social work processes, social service provision and services to special populations in an international context during the Education Abroad experience. Prerequisite: SOWK 1350 and SOWK 2375 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4355. Policy Practice.**

This course is an overview of social policy and legislation and the processes of influencing public policy. It links policy with a broad range of social work service areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4356. Professionalism in Social Work.**

This course builds skills in self-presentation, in taking responsibility for personal and professional growth, in learning professional behaviors in organizations, and in presenting court testimony. Prerequisite: SOWK 3425 and SOWK 4305 both with grades of "C" or better. Corequisite: SOWK 3340 and SOWK 4425 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4360. Directed Study in Social Work.**

This one-semester undergraduate course highlights individualized reading, independent study and projects, and guided instruction. It is offered to superior students by the professor's invitation and with the consent of the BSW Coordinator. This course may be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**SOWK 4374. Generalist Field Integrative Seminar I.**

In this course students engage in generalist social work practice in agencies, supervised by degreed social worker professionals and the field liaison. Students complete this integrative lecture-based seminar concurrently with a field practicum (SOWK 4975) in a social service agency. Prerequisite: SOWK 3340 and SOWK 4356 and SOWK 4425 all with grades of "C" or better. Corequisite: SOWK 4975 with a grade of "credit".

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 4425. Social Work Practice III.**

This undergraduate course emphasizes interpersonal and communication skills necessary for effective, ethical generalist social work practice. Students translate theory into helping behaviors through practice and feedback to develop competent skills for beginning field placement. (WI) Prerequisites: SOWK 3425 and SOWK 4305 both with grades of "C" or better. Corequisites: SOWK 3340 and SOWK 4356 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**SOWK 4975. Generalist Field Practicum II.**

This course provides students with experiential opportunities for generalist social work practice in social service agencies applying micro, mezzo, and macro level knowledge. Prerequisite: SOWK 3340 and SOWK 4356 and SOWK 4425 all with grades of "C" or better. Corequisite: SOWK 4374 with a grade of "B" or better.

**9 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Minimum required: 120  
semester credit hours**

**General Requirements**

1. The Social Work curriculum is based on and interwoven with the general education core curriculum consisting of 57 semester credit hours, and 6 hours in supportive Social Sciences. Students progress in three phases of the Social Work major, without regard to disability. A social worker must be emotionally and behaviorally stable, must have strong communication skills, must have solid interpersonal relationship-building skills, and must conform to professional ethics. The School of Social Work faculty evaluates whether students meet these criteria and may advise a student at any point to continue in the B.S.W. major or consider another major.
2. For transfer students, 15 semester credit hours may be transferred from a Texas public institution of higher education for the Social Work Field of Study and be applied to the Bachelor of Social Work degree at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog.

Code	Title	Hours
SOWK 1350	Introduction to Social Work	3
TCCN: SOCW 2361		
SOWK 2375	Social Services in the Community	3
TCCN: SOCW 2362		
Sociology Elective		3
TCCN: SOCI 1306		
Social Work Elective		3
TCCN: SOCW 2389 Academic Cooperative		
MATH 2328	Elementary Statistics	3
or PSY 2301	Introduction to Statistics	
TCCN: MATH 1342 or PSYC 2317		
<b>Total Hours</b>		<b>15</b>

3. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
4. Nine semester credit hours must be writing intensive (WI).
5. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

**Phase I: Entry Level Social Work Courses and Specified General Education Core Curriculum Courses**

Any student may declare a Social Work major and may enroll in SOWK 1350, SOWK 2375, as well as SOWK elective courses. Social work students should complete most of the following general education core curriculum and liberal arts courses before applying to Phase II of the Social Work major. They must complete at least 45 credit hours, including the following:

Code	Title	Hours
Life and Physical Sciences Component Code 030 <sup>1</sup>		3
Life and Physical Sciences Component Code 030 <sup>1</sup>		3
COMM 1310	Fundamentals of Human Communication (Component Area Option Code 090/091)	3
ENG 1310	College Writing I (Communication Component Code 010)	3
ENG 1320	College Writing II (Communication Component Code 010)	3
ENG 3303 or ENG 3304	Technical Writing Professional Writing	3
HIST 1310	History of the United States to 1877 (American History Component Code 060) <sup>3</sup>	3
or HIST 2327 or HIST 2381	History of Mexican America to 1865 African American History to 1877	
HIST 1320	History of the United States, 1877 to Date (American History Component Code 060) <sup>3</sup>	3
or HIST 2328 or HIST 2382	History of Mexican America from 1865 African American History from 1877	
MATH 1315	College Algebra (Mathematics Component Code 020) <sup>2</sup>	3
or MATH 1316 Survey of Contemporary Mathematics		

PHIL 1305	Philosophy and Critical Thinking (Language, Philosophy, and Culture Component Code 040)	3
or PHIL 1320	Ethics and Society	
SOWK 1350	Introduction to Social Work	3
SOWK 2375	Social Services in the Community	3
US 1100	University Seminar (if required)	1
<b>Total Hours</b>		<b>37</b>

<sup>1</sup> ANTH 2301, BIO 1320, BIO 1330, BIO 1331, BIO 1321, CHEM 1310, CHEM 1330, CHEM 1341, CHEM 1342, GEO 1305, GEOL 1410, GEOL 1420, PHYS 1310, PHYS 1315, PHYS 1320, PHYS 1325, PHYS 1340, PHYS 1350, PHYS 2325 and PHYS 2125, PHYS 2326 and PHYS 2126.

\* Students will not receive general education core curriculum credit for both CHEM 1310 and CHEM 1341. Students will not receive general education core curriculum credit for both PHYS 1325 and PHYS 2425.

<sup>2</sup> Math options include MATH 1315, MATH 1316, or MATH 1319.

<sup>3</sup> History options for HIST 1310 include HIST 2327 or HIST 2381; options for HIST 1320 include HIST 2328 or HIST 2382.

**A minimum 2.50 overall GPA (at the time that final grades post during the semester within which applications are received) is required for the application for Phase II to be fully considered.** Students interested in Social Work must contact the College of Applied Arts Academic Advising Center for advisement.

## Phase II: Social Work Major

Students submit a formal application for admission to Phase II. Web-based application process opens each long Fall and Spring semester for admission into the program the following long Fall and/or Spring semester. Dates and information for open and closing of applications are posted on the BSW Admissions Process website. An Admissions Committee screens applicants, considering academic record and suitability for social work practice, and informs applicants in writing of their decision to admit to full major status, conditionally admit to full major status, or deny admission to full major status. Students admitted to Phase II must attend a mandatory orientation to the major prior to beginning Phase II of the degree program. Information regarding the orientation is provided in the written notification of admission to Phase II of the major. When students are admitted to Phase II, they are eligible to register for the first semester of full major courses.

Admission into Phase II does not guarantee permission to remain in the degree program, nor does it guarantee advancement to Phase III of the major which is Field Placement. Social Work faculty will continuously assess a student's progress. To be retained, the student must maintain the required minimum Texas State GPA of 2.50. Students must also earn a minimum grade of "C" in each social work course and each supportive course. The School of Social Work outlines academic progress and advancement to graduation requirement, including policies on retaking major courses and sequencing in the Student Handbook. To remain in Phase II, students must agree to adhere to the NASW Code of Ethics, and demonstrate emotional and behavioral stability, competent communication skills, effective interpersonal relationship skills, and high levels of self-awareness.

## Phase III: Field Placement

Students who have completed all required courses for the BSW, excluding SOWK 4374 and SOWK 4975, demonstrate emotional and behavioral stability, and who have met all the requirements noted above may apply

for field placement. Students apply for field placement with the School of Social Work's Field Office. Students must take the Phase II Competency Exam and meet all Field Office requirements prior to full advancement into Phase III Field Placement. BSW students complete one block internship with 420 contact hours in a field placement in one semester.

The School prefers that students take SOWK 4374 and SOWK 4975 during the same semester, which requires that the student limit his/her enrollment that semester to field placement, totaling 12 hours. Under exceptional circumstances, students may request permission from the Field Coordinator to take SOWK 4374 and SOWK 4975 over two consecutive semesters (6 hours each semester).

## Graduation Requirements

To be eligible for graduation a student must complete all degree requirements and must have a minimum Texas State GPA of 2.50 in supportive courses with a GPA of 2.75 or above in social work courses. Students seeking either a dual degree or a second bachelors' degree in Social Work will need to complete all requirements for the B.S.W. degree.

## Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
US 1100		1	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302]) <sup>1</sup> 3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301]) <sup>1</sup>		3	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306]) <sup>1</sup> 3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311]) <sup>1</sup>		3	PSY 1300 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301]) 3
MATH 1315, 1316, or 1319 (Mathematics Component Code 020 [TCCN MATH 1314]) <sup>1</sup>		3	Creative Arts Component Code 050 3
Government/Political Science Component Code 070		3	Government/Political Science Component Code 070 3
SOWK 1350 (TCCN SOCW 2361) <sup>1</sup>		3	
		<b>16</b>	<b>15</b>
		Sophomore	
		First Semester Hours	Second Semester Hours
American History Component Code 060 <sup>1</sup>		3	American History Component Code 060 <sup>1</sup> 3
Life and Physical Sciences Component Code 030 <sup>1</sup>		3	Life and Physical Sciences Component Code 030 <sup>1</sup> 3
Component Area Option Codes 090, 091, 092, 093 and 094		3	ENG 3303 or 3304 <sup>1</sup> 3
SOWK 2375 (TCCN SOCW 2362) <sup>1,2</sup>		3	CJ 3347, SOCI 3307, PSY 2301, HP 3302, or HP 3325 3
Interdisciplinary Electives <sup>4</sup>		3	Interdisciplinary Electives <sup>4</sup> 3
		<b>15</b>	<b>15</b>

		Junior
First Semester Hours	Second Semester Hours	
Interdisciplinary Electives <sup>4</sup>	3 SOWK Electives <sup>3</sup>	3
SOWK 3420	4 SOWK 3425	4
SOWK 3305	3 SOWK 4305	3
SOWK 4310	3 SOWK 4355	3
SOWK Electives <sup>3</sup>	3 SOWK 3312	3
<b>16</b>	<b>16</b>	
		Senior
First Semester Hours	Second Semester Hours	
SOWK 4425	4 SOWK 4374	3
SOWK 4356	3 SOWK 4975	9
SOWK 3340	3	
Interdisciplinary Electives <sup>4</sup>	5	
<b>15</b>	<b>12</b>	

**Total Hours: 120**

<sup>1</sup> Required prior to application for Social Work major.

<sup>2</sup> Requires an additional 50 hours volunteering.

<sup>3</sup> Social Work Electives: SOWK 2320, SOWK 3332, SOWK 4300F, SOWK 4301, SOWK 4302, SOWK 4303, SOWK 4304, SOWK 4307, SOWK 4315, SOWK 4318, SOWK 4320, SOWK 4333, SOWK 4334, and SOWK 4360.

<sup>4</sup> Students are required to complete fourteen (14) semester credit hours of interdisciplinary electives from a core of disciplines relevant to the social work major (Note: Students must receive a grade of "C" or better for credit). Approved electives are from the following allied disciplines:

- Psychology
- Sociology
- Criminal Justice
- Anthropology
- Family and Child Development
- Consumer Affairs

Please see the undergraduate catalog for pre-requisites of electives. All electives should be reviewed with College Advising to verify eligibility prior to enrollment.

<sup>5</sup> Statistics options include HP 3302 or HP 3325 or CJ 3347 or PSY 2301 or SOCI 3307.

The minor in Social Work requires 18 semester credit hours. The minor helps students to increase their awareness of society's conditions, and many of the pressing needs facing children, families, and communities. The minor also explores the role of the social work profession in working with services and organizations seeking to help meet these children, family, and community needs. The goal is to help student growth in their chosen academic major fields. The minor does not prepare students for professional social work practice nor for state social work licensure.

Code	Title	Hours
<b>Required Courses</b>		
SOWK 1350	Introduction to Social Work	3
SOWK 2375	Social Services in the Community	3
SOWK 4310	Diversity and Social Justice in Social Work	3
SOWK 4355	Policy Practice	3
<b>Additional Courses</b>		

Choose 6 hours from the following courses: 6

SOWK 2320	Love and Relationships
SOWK 3312	Alcoholism and Chemical Dependence
SOWK 4300F	International Social Work
SOWK 4300G	
SOWK 4300H	
SOWK 4300I	
SOWK 4301	School Social Work
SOWK 4302	Hip Hop and Social Justice for Individual and Community Change
SOWK 4303	Spirituality and Social Work Practice
SOWK 4315	Child Welfare
SOWK 4318	Social Work and Health Care
SOWK 4320	Social Work with Older Adults

**Total Hours 18**

#### Dean

Sanjay Ramchander, D.B.A.

McCoy Hall Room 530

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#### Associate Dean

Diego E. Vacaflares, Ph.D.

#### Associate Dean

Phillip E. Davis, Ph.D.

#### Associate Dean

David Wierschem, Ph.D.

#### Department Chairs

Accounting—Wilhelmina J. Pizzini, Ph.D.

Finance and Economics—Haiyong Liu, Ph.D.

Information Systems and Analytics—Sam Lee, Ph.D.

Management—William C. McDowell, Ph.D.

Marketing—Anna Turri, Ph.D.

Named on February 27, 2004 in honor of Mr. and Mrs. Emmett McCoy, the Emmett and Miriam McCoy College of Business provides broad-based undergraduate and masters-level educational programs that produce graduates with the values, knowledge, and skills to be successful in a diverse, globally competitive environment.

## Mission

The McCoy College of Business is dedicated to empowering diverse students of exceptional promise to become leaders and innovators who create enduring value for business and society. We accomplish our mission by:

- Providing cutting-edge education that equips students with skills and capabilities to excel in a dynamic business environment.
- Producing rigorous research that addresses real-world challenges facing business and the environments in which they operate.
- Promoting strong collaborative partnerships that enrich the diverse communities we serve and creating a growing legacy for our alumni.

## Vision

Through bold ideas and action, we seek to transform the lives of students and define the future of business in Texas and beyond.

## Values

At the McCoy College of Business, we value:

- Our Community
  - We are a diverse and vibrant learning community united in our belief that business makes a world of difference and that our students thrive in a world of possibilities.
  - We create inclusive and welcoming spaces where individuals from all backgrounds can bring their voices and perspectives, create knowledge and meaning, and enrich our learning community.
- Our Students
  - We are dedicated to the success of our students where our knowledgeable and caring faculty and staff prepare students to lead in their professions and communities.
- Academic Excellence
  - We promote an ethic of professional autonomy that allows each of us to
    - pursue deep and meaningful work.
    - We are proud to demonstrate unwavering integrity in our pursuit of excellence with purpose in teaching, research, service, and outreach activities.
- Collaboration
  - We thrive on collaboration that promotes a culture of inquiry, trust, and respect.
  - We encourage collaborative learning and discovery that fosters responsiveness and global engagement.
- Entrepreneurial Spirit
  - We are an innovative, flexible, and learning organization and embrace change that moves us forward.
  - We encourage bold and persistent experimentation and are unafraid of
    - taking calculated risks.
- Stewardship
  - We act within ethical frameworks and are committed to responsible
    - stewardship of our resources and the environment.
    - We value the trust placed in us by our students, alumni, parents, and
      - members of our community.

## Background

Established in 1958, McCoy College offers the Bachelor of Business Administration (B.B.A.) degree with majors in accounting, information systems and analytics, economics, finance, management, and marketing. Additionally, the College cooperates with the College of Liberal Arts in offering the Bachelor of Arts (B.A.) degree with a major in economics. The B.B.A. degree does not require a minor, but the B.A. degree does require a minor.

Minors offered through McCoy College include business administration (for non-business majors only); international business (which is restricted

to business majors); data analytics, economics, and innovation and entrepreneurship.

The learning environment of McCoy College places primary importance on teaching excellence and intellectual contributions complemented by service. This environment prepares students for careers in both the private and public sectors. The curriculum addresses the economic, legal, political, social, technological, and demographically diverse environment in which modern business is conducted. This environment emphasizes comprehensive learning that combines general education, core business requirements that cover the main functional areas of business, and specialized study in one of the six traditional business majors offered.

McCoy College has been accredited by AACSB-International, The Association to Advance Collegiate Schools of Business, since 1997. The college serves over 4,700 undergraduate and graduate business students through five academic departments: Accounting, Information Systems and Analytics, Finance and Economics, Management, and Marketing.

McCoy College is entitled by its designation as an AACSB-International accredited school to have Beta Gamma Sigma as its honorary business society. The top 10 percent of undergraduate business students in their respective classes are eligible to join the society as early as the last semester of their second year of study. Graduate students ranked in the top 20% of their class may join the society after completing 40% of their respective program.

## CenturyLink Academic Advising Center

McCoy Hall Room 115

Telephone: 512-245-1993 Fax: 512-245-1996

<https://advising.mccoy.txst.edu> (<https://advising.mccoy.txst.edu/>)

The McCoy College of Business CenturyLink Academic Advising Center is an accessible, student-centered support service that encourages students to develop educational goals and identify strategies for success, provides official and accurate academic information, and guides students to the successful completion of an undergraduate degree. Services available for students include, but are not limited to:

- assistance with selection of educational programs;
- interpretation of policies and procedures;
- information on course sequencing, and degree requirements;
- referral to other university resources; and
- verification of graduation requirements.

## Admission Policy

Admission to the College is competitive, and a student must be admitted to the College to pursue a B.B.A. degree. Consideration for admission to McCoy College undergraduate programs is based on specific admission criteria.

To be considered for admission to McCoy College, students should list a business major as their first-choice major, (accounting, information systems and analytics, economics, finance, management, or marketing) and apply to Texas State by the stated deadlines on the Undergraduate Admissions website.

Students who are admitted to the University but denied admission to McCoy College will be considered for admission to their second choice major or if one is not listed, students will be declared Pre-Business major.



## Admission Process for Prospective Texas State Students

- Freshman
  - Students admitted to Texas State as a Freshman will be automatically admitted to McCoy College if they meet Assured Admission requirements and select a business major as their first-choice major.
- Transfer
  - Students admitted to Texas State as a Transfer will be automatically admitted to McCoy College if they meet Program Entry requirements based on total semester credit hours earned and select a business major as their first-choice major.

## Admission Process for Current Texas State Students

For current Texas State students, an internal application is available online on the CenturyLink Academic Advising Center website. Students attending Texas State who are currently on academic probation are not eligible for admission to McCoy College.

## Restricted Status

B.B.A. students whose Texas State GPA drops below a 2.0 are placed on academic probation by Texas State, restricted status by McCoy College, and are also subject to university academic probation and suspension policies.

Business majors on restricted status must increase their Texas State GPA to at least 2.0 in the subsequent semester (including summer) or their admission to McCoy College will be voided. Students whose admission has been voided, will be required to change their major to one outside of McCoy College.

Students returning to good academic standing and interested in regaining admission to McCoy College may complete the internal application process.

## General Requirements for the B.B.A. Degree

1. All students seeking the B.B.A. must complete the following General Education Core Curriculum courses or their equivalents as required by McCoy College:

Code	Title	Hours
COMM 1310	Fundamentals of Human Communication	3
ENG 1310	College Writing I	3
ENG 1320	College Writing II	3
or ENG 1321	Writing for Sustainable Change	
MATH 1329	Mathematics for Business and Economics II	3
PHIL 1320	Ethics and Society	3

2. To provide a common body of knowledge in business, all students seeking the B.B.A. must complete the following common core of business courses or their equivalents as required by the McCoy College:

Code	Title	Hours
B A 1310	Introduction to Business	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
ISAN 1323	Introduction to Microcomputer Applications	3
ECO 2314	Principles of Microeconomics	3
ECO 2315	Principles of Macroeconomics	3

ANLY 2333	Business Statistics	3
B A 3110	Professional Development I	1
B A 3120	Professional Development II	1
BLAW 3301	Legal Environment of Business	3
MGT 3303	Management of Organizations	3
MKT 3343	Principles of Marketing	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
FIN 3312	Business Finance	3
MGT 3353	Business Communication	3
MGT 4335	Strategic Management and Business Policy	3

3. A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.
4. Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, business students should follow the general sequence of courses specified for the business curriculum in this section of the catalog.
5. Students who did not satisfactorily complete at least two years of the same foreign language in high school must complete two semesters (6-8 hours) of a single foreign language in college.

## Writing Intensive Hour Requirement

Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy degree requirements.

## Enrollment in Upper-Division Business Courses

Upper-division McCoy College courses (3000- and 4000-level) are restricted to business majors or to students whose declared program of study requires the course(s). To be eligible to enroll in these courses, all students must satisfy stated course prerequisites, maintain an overall GPA of 2.00 or greater, and have completed at least 60 semester hours. Students should note that not all courses are taught each semester. If a specific course is needed, students should verify the prospective course offering with the department.

## Transfer Credit

Business transfer students must meet residency requirements for all Texas State programs outlined in the academic policies section of this catalog. Additionally, at least 50% of the semester hours in business required for the College's various degree programs must be completed in residence at Texas State.

For transfer students, 24 semester credit hours in the business core curriculum (or their equivalents) may be transferred from a Texas public institution of higher education for the Business Administration and Management Field of Study and be applied to any of the B.B.A. programs at Texas State University. More information about the Field of Study is available in the Academic Policies section of this catalog.

In addition to the Field of Study, transfer students should consult the the Transfer Course Equivalency Guide and/or appropriate -Transfer Planning Guide for course transferability. Courses acceptable for transfer by Texas State will transfer at the level at which the courses were taken (i.e., acceptable courses from a community/junior college transfer as freshman or sophomore courses). Undergraduate transfer students who receive elective credit (ELNA and/or ELADV) rather than course-specific



credit from the Texas State Undergraduate Admissions office may appeal this designation to the McCoy College department in which the course is offered.

A maximum of 72 hours from an accredited community/junior college may be applied to a B.B.A. degree. A maximum of 66 hours from an accredited community/junior college may be applied to a B.A. degree.

## Grade-Point Average for Graduation

B.B.A. students must achieve the following minimum grade-point averages:

1. A Texas State GPA of 2.00
2. A Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives); and
3. A GPA of 2.0 in the minor(s).

B.B.A. Accounting students must achieve the following grade point averages:

1. A Texas State GPA of 2.00
2. A Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives)
3. A GPA of 2.0 in the minor(s); and
4. A Major GPA of 2.50

B.B.A. Finance students must achieve the following grade point averages:

1. A Texas State GPA of 2.00
2. A Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives)
3. A GPA of 2.0 in the minor(s); and
4. A Major GPA of 2.25

B.A. students must achieve the following minimum grade point averages:

1. A Texas State GPA of 2.00
2. A major(s) GPA of 2.25 (includes major courses and restricted/advanced electives); and
3. A GPA of 2.0 in the minor(s).

## Double Majors within Bachelor of Business Administration Programs

Students must fulfill the specified requirements for both majors in full and restricted/advanced electives may not double count.

## Minors

- Business Administration (p. 143)
- International Business (p. 143)

## Courses in Business Administration (B A)

### B A 1310. Introduction to Business.

This course introduces freshmen to business and previews what students will experience in the McCoy College of Business. It surveys accounting, finance, economics, law, management, marketing, and information systems and analytics, both as individual components of an organization and collectively as part of an organization's strategy. Students learn about leadership, individual conduct, and the ethical and data-driven decision-making expected in college and the business and professional world.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### B A 2310. Introduction to Business in a Global Environment.

The course introduces the modern business enterprise with an emphasis on the interdependence of the business functions in a global environment. Topics include the cross border impacts of culture, politics, and law on trade, investment, marketing, management, and accounting and financial systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**TCCN:** BUSI 1301

### B A 3110. Professional Development I.

This course prepares students for the professional rigor expected in the McCoy College of Business and gives them a start on career planning and the development process. This process involves a variety of career exploration and development experiences designed to help students identify their passion, prioritize and focus their job search efforts, and develop their leadership, communication, and personal marketability. Topics include self-assessment, career passion discovery, career exploration and development exercises, and resume and interview training to assist in finding rewarding internships and full-time jobs. Prerequisite: B A 1310 with a "C" or better and a minimum 2.0 Overall GPA.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### B A 3120. Professional Development II.

This course builds upon and expands students' basic understanding of career planning and development. A portion of this course is major-focused so that students are prepared for specific business roles. This course applies networking skills, company (prospective employer) analysis, internship/job analysis and search strategy, interviewing skills, and negotiation techniques to maximize the students' new-hire potential. Prerequisite: B A 3110 with a "C" or better and a minimum 2.0 Overall GPA.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**B A 4300. Independent Study in Global Business.**

This study abroad course introduces students to the international business environment. Topics include cultural, political, social, and economic factors affecting international business, and the regulatory and ethical environment of global businesses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**B A 4312. International Business Internship.**

Integration of professional and academic experience through internship in an international business related activity with an external employer.

Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**B A 4315. International Trade Operations.**

This course examines the basics of international trade operations, focusing on the procedures, documentation, and regulation pertaining to export and import operations from the perspectives of exporters, importers, and various intermediaries. Prerequisites: MGT 3375 and MKT 4310 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

The minor in Business Administration requires a minimum of 18 semester credit hours. Students seeking a B.B.A. degree are not eligible to declare a Business Administration minor.

Code	Title	Hours
<b>Required Courses</b>		
Choose one of the following:		3-6
ACC 2301	Accounting in Organizations and Society	
ACC 2361 & ACC 2362	Introduction to Financial Accounting and Introduction to Managerial Accounting	
Choose one of the following:		3-6
ECO 2301	Principles of Economics	
ECO 2314 & ECO 2315	Principles of Microeconomics and Principles of Macroeconomics	
Choose 12 hours from the following:		12
BLAW 3301	Legal Environment of Business <sup>1</sup>	
ISAN 3317	E-Business	
FIN 3340	Fundamentals of Business Finance	
MGT 3301	Introduction to Management <sup>2</sup>	
MKT 3343	Principles of Marketing	
<b>Total Hours</b>		<b>18-24</b>

<sup>1</sup> Credit previously earned for BLAW 2361 may be substituted for BLAW 3301.

<sup>2</sup> Credit earned successfully through testing or previously earned course credit for MGT 3303 may be substituted for MGT 3301.

The minor in International Business requires 18 semester credit hours.

Obtaining an International Business minor will provide students with an understanding of the economic and financial differences across countries. It can also provide a broad background in international management and marketing. Only students seeking a B.B.A. degree are eligible to declare an International Business minor.

Code	Title	Hours
<b>Required Courses</b>		
MGT 3375	International Business	3
MKT 4310	International Marketing	3
<b>Prescribed Electives</b>		
Choose 12 hours of advanced courses from the following:		12
B A 4300	Independent Study in Global Business	
B A 4312	International Business Internship	
B A 4315	International Trade Operations	
BLAW 3363	International Business Law	
ECO 3317	International Economics	
ECO 3320	Emerging Market Economies	
FIN 4331	International Finance	
FR 3381	Business French I	
GEO 3303	Economic Geography	
GEO 3307	Geography of Europe	
GEO 3308	Latin America	
GEO 3328	Geography of North Africa and the Middle East	
GEO 3332	Geography of South and Southeast Asia	
GEO 3333	Geography of East Asia	
HIST Advanced Courses from Groups A and B		
GER 3380	Business German in Global Economy	
JAPA 3308	Advanced Japanese for Business	
MC 4303	International Advertising	
MC 4310	International Communication	
MGT 4390G	Cross-Cultural Human Relations	
MGT 4390V		
MKT 3385	Ethnic and Niche Marketing	
SOCI 3320	Population Dynamics	
SOCI 3328	Complex Organizations	
PS 3353	Issues in World Politics	
PS 4354	Politics of International Economic Relations	
SOCI 3350	Gender and Society	
SPAN 3311	Business Spanish I	
SPAN 3312	Business Spanish II	
<b>Total Hours</b>		<b>18</b>

McCoy Hall Room 431

Telephone: 512-245-2566

[www.accounting.mccoy.txst.edu](http://www.accounting.mccoy.txst.edu) ([http://](http://www.accounting.mccoy.txst.edu)

[www.accounting.mccoy.txstate.edu](http://www.accounting.mccoy.txstate.edu))

The McCoy Collage of Business Department of Accounting is dedicated to preparing our diverse student population for professional success in an ever-changing global economy. Our faculty make McCoy a primary-

choice school for students by providing a rigorous and innovative curriculum that is informed by academic and practitioner research, engagement with the professional community, and meaningful service.

Graduates of the McCoy College of Business Department of Accounting programs enjoy careers in public accounting, industry, government, and not-for-profit organizations. Our programs instill a commitment to lifelong learning and professionalism, and an appreciation for leadership through service.

#### Degree Programs Offered

##### Bachelor of Business Administration (B.B.A.), major in Accounting

The undergraduate accounting curriculum provides a broad education in accounting theory and practice with an appreciation for ethical decision making. Students completing the four-year program (120 credit hours) earn a Bachelor of Business Administration degree with a major in accounting. Career options include positions in corporations, government, and other not-for-profit organizations.

##### Integrated Program: B.B.A. major in Accounting/Master of Accountancy

Currently, the B.B.A. degree with a major in Accounting alone does not satisfy the educational requirements to become a Certified Public Accounting (CPA) in Texas; CPA candidates must earn 150 college credit hours. Of the 150 hours, 30 must be upper-division accounting courses (including a research course), and another 24 must be upper-division business courses (including business communication).\*

The Department provides the opportunity for B.B.A. students to enter a 30 hour Master of Accountancy (M.Acy.) program which offers graduate level accounting courses that, coupled with the undergraduate degree, currently satisfy the educational requirements to become a CPA in Texas. In addition to the career choices available to B.B.A. graduates, M.Acy. graduates are better prepared for career opportunities in public accounting specializing in auditing, tax, or management consulting.

For more information about graduate program requirements and the admission process, please consult the graduate catalog. To talk with a graduate academic advisor, students should contact Laurie.Brown@txstate.edu, the Accounting Department, (512-245-2566), or visit the Department of Accounting in McCoy Hall 431.

#### AACSB Accreditation

The McCoy College of Business Accounting programs are accredited in both general business and accounting by the Association to Advance Collegiate Schools of Business (AACSB). AACSB Accreditation is known, worldwide, as the longest standing, most recognized form of specialized/professional accreditation an institution and its accounting programs can earn.

\*Individuals interested in taking the CPA exam in Texas are encouraged to contact the Texas State Board of Public Accountancy at (512) 305-7800 or at <https://www.tsbpa.texas.gov> (<https://www.tsbpa.texas.gov/>) to verify the educational requirements to take the CPA exam in Texas.

## Bachelor of Business Administration (B.B.A.)

- Major in Accounting (p. 145)

## Bachelor of Business Administration (B.B.A)/Master of Accountancy (M.Acy)

- Major in Accounting (5-Year Integrated) (p. 147)

### Courses in Accounting (ACC)

#### ACC 2301. Accounting in Organizations and Society.

Introductory accounting course for non-business majors. Describes the role of accounting as an information system essential for the operation of today's organizations. Focus is on (1) how data is captured and processed to provide information for decision-making, and (2) how the information provided can be used for decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

#### ACC 2361. Introduction to Financial Accounting.

This course introduces financial accounting concepts and their application in the accounting process for business organizations, including financial statement preparation, analysis and communication of financial information and related ethical responsibilities. Prerequisite: MATH 1315 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2331 or MATH 2417 or MATH 2471 or HON 3391 or ACT Mathematics score of 27 or better or SAT Mathematics score of 580 or better or SAT Math Section Score 600-800.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**TCCN:** ACCT 2301

#### ACC 2362. Introduction to Managerial Accounting.

This course provides an introduction to the use of accounting information as an aid to management decision making and budgeting. Students will gain an appreciation of control processes and an understanding of accounting reports and related ethical responsibilities. Prerequisites: ACC 2361 and ISAN 1323 and (MATH 1315 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2331 or MATH 2417 or MATH 2471 or HON 3391); all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**TCCN:** ACCT 2302

#### ACC 3305. Financial Accounting and Reporting.

This course expands upon financial accounting concepts introduced in ACC 2361 by emphasizing the use of financial accounting principles to prepare and analyze an organization's financial statements and provides an in-depth study of the accounting cycle. Prerequisites: ACC 2361 with a grade of "C" or better and ISAN 1323 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3308. Survey of Income Tax.**

This course is an introduction to federal income tax provisions, concepts and issues concerning individuals, business and property transactions. The coursework focuses on income and expense recognition as well as tax planning opportunities. Prerequisite: ACC 3305 with a grade of "C" or better or ACC 3313 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3313. Intermediate Accounting I.**

An in-depth study of financial accounting concepts and standards with emphasis on current theory and practices relating to corporate financial statements particularly stressing elements of the balance sheet. Prerequisite: ACC 3305 with a grade of "B" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3314. Intermediate Accounting II.**

This course is a continuation of ACC 3313 and provides an in-depth study of advanced financial accounting topics. Prerequisite: ACC 3313 with a grade of "B" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3323. Data Analytics for Accounting.**

This courses introduces students to the application of data analytics in accounting. The focus is on developing a data analytics mindset so that students can critically think through the planning, analysis, and interpretation of data analysis results before making and communicating a professional judgment or decision. Prerequisite: ACC 3305 with a grade of "B" or better and [QMST 2333 or MATH 2328] with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3363. Governmental Accounting.**

A study of concepts and techniques of fund accounting, and financial reporting for governmental and not-for-profit organizations including state and local government, universities, hospitals, and other public sector entities. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3365. Cost/Managerial Accounting.**

The study of cost/management accounting within the manufacturing and merchandising environment. Includes the analysis of cost accumulation, planning, and control within the organization. Specific topics emphasized are job order and process costing; standard costing, standard costing and variance analysis; absorption and direct costing; budgetary procedures; cost/volume profit analysis; and capital budgeting techniques. Prerequisite: ACC 2362 with a grade of "C" or better and [QMST 2333 or MATH 2328] with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3385. Accounting Systems.**

A study of elements of theory, procedures, and practice relating to system design and implementation for manual and computerized accounting information systems. Emphasis placed on system selection, data entry, file structure, internal control implementation, and report generation for various information end-users. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better and CIS 3380 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 4313. Auditing and Internal Controls.**

This course provides a study of the theory and practices relating to auditing. The course emphasizes the procedures used to evaluate the effectiveness of risk management and control processes, including prevention and detection of fraud. Prerequisite: ACC 3385 with a grade of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**ACC 4390A. International Accounting.**

This course introduces students to accounting issues unique to multinational enterprises and international business activity. Financial accounting practices are compared across different countries. The development of international accounting standards is also explored. (MULT) Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**Minimum required: 120  
semester credit hours**

**Admission Requirements**

Admission to the McCoy College of Business Administration (McCoy College) is competitive, and a student must be admitted to the McCoy College to pursue a B.B.A. degree. Consideration for admission to McCoy College undergraduate programs is based on specific admission

criteria and is conducted as a rolling admission process. For current Texas State students, applications are available online at <http://advising.mccoy.txstate.edu/apply> (<http://advising.mccoy.txstate.edu/apply/>). For students not yet admitted to the University, applications are available online at [www.applytexas.org](http://www.applytexas.org) (<http://www.applytexas.org/>). Students should list a business major as their first major choice.

Priority dates are March 1 for summer/fall semester and October 15 for the spring semester. Applications received after the priority date will be considered for admission on a space-available basis. Students not yet admitted to Texas State must meet Texas State admission deadlines. Students attending Texas State who are currently on academic probation are not eligible for admission to McCoy College.

## Freshmen and Students with fewer than 30 Semester Credit Hours

Students with fewer than 30 semester credit hours will be automatically admitted to the McCoy College if they receive assured admission (<http://www.admissions.txstate.edu/future/freshman/admissions-requirements.html>) to Texas State and select a first-choice major in the McCoy College of Business Administration. Students who are admitted to the University but denied admission to McCoy College will be considered for admission to their second choice major or as an exploratory professional major.

## Students with 30 or more Semester Credit Hours

Students who have completed at least 30 semester credit hours, including ENG 1310, ENG 1320, and MATH 1329, either at Texas State or another college or university and who have a minimum 2.5 overall GPA will be considered for admission based upon a competitive index using the grades from ENG 1310, ENG 1320, MATH 1329, and the overall GPA from all colleges and universities attended. Students will be automatically admitted if they have a cumulative GPA of 3.25 or higher and have completed ENG 1310, ENG 1320 and MATH 1329.

## General Requirements

- For the B.B.A. degree, any McCoy College student whose Texas State GPA drops below a 2.0 is placed on probation by Texas State and on restricted status by McCoy College. Students on restricted status must increase their Texas State GPA to at least 2.0 in the subsequent semester or their admission to McCoy College will be voided. Students are required to meet with a representative of the McCoy College Academic Advising Center to remove probation holds; otherwise, the hold will prevent registration or schedule changes. A student whose admission is voided may regain admission to McCoy College by going through the application process and competing with other applicants for openings. Students with a Texas State GPA below a 2.0 are also subject to the University academic probation and suspension policies.
- All students seeking the B.B.A. must complete the following general education core curriculum courses as required by McCoy College. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for other information about the general education core curriculum.
- To provide a common body of knowledge in business, all students seeking the B.B.A. must complete the following common core of business courses or their equivalents as required by the McCoy College:

Code	Title	Hours
B A 2310	Introduction to Business in a Global Environment	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
CIS 1323		3
ECO 2314	Principles of Microeconomics	3
ECO 2315	Principles of Macroeconomics	3
QMST 2333		3
BLAW 3301	Legal Environment of Business	3
MGT 3303	Management of Organizations	3
MKT 3343	Principles of Marketing	3
CIS 3380		3
FIN 3312	Business Finance	3
MGT 3353	Business Communication	3
MGT 4335	Strategic Management and Business Policy	3

- A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.
- Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general sequence of courses specified for the curriculum in this section of the catalog.
- Also, students who did not complete satisfactorily at least two years of the same foreign language in high school must complete two semesters (6-8 hours) of a single foreign language in college.
- Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy degree requirements.
- For transfer students, 24 semester credit hours in the business core curriculum (or their equivalents) may be transferred from a Texas public institution of higher education for the Business Administration and Management Field of Study and be applied to the B.B.A. major in Accounting at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional business courses, please contact the McCoy College of Business CenturyLink Academic Advising Center for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. Students who complete MATH 1319 (TCCN: MATH 1324) in the FOS will receive 3 semester credit hours towards free electives.

Code	Title	Hours
B A 2310	Introduction to Business in a Global Environment	3
TCCN: BUSI 1301		
ECO 2314	Principles of Microeconomics	3
TCCN: ECON 2302		
ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
ACC 2361	Introduction to Financial Accounting	3
TCCN: ACCT 2301		



ACC 2362	Introduction to Managerial Accounting	3
TCCN: ACCT 2302		
Elective		3
TCCN: MATH 1324		
<b>Directed Elective</b>		
CIS 1323		3
TCCN: BCIS 1305		
QMST 2333		3
TCCN: BUSI 2305		
<b>Total Hours</b>		<b>24</b>

9. Students must achieve the following grade point averages for graduation:
- a Texas State GPA of 2.00
  - a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives)
  - a GPA of 2.0 in the minor(s); and
  - a Major GPA of 2.50

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
MATH 1329 (Mathematics Component 020 [TCCN MATH 1325])	3	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
Life and Physical Sciences Component Code 030	3	Life and Physical Sciences Component Code 030	3
Government/Political Science Component Code 070	3	American History Component Code 060	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	CIS 1323 (TCCN BCIS 1305) <sup>1</sup>	3
US 1100	1		
<b>16</b>		<b>15</b>	

Sophomore			
First Semester Hours		Second Semester Hours	
ACC 2361 (TCCN ACCT 2301)	3	ACC 2362 (TCCN ACCT 2302)	3
ECO 2314 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 2302])	3	ECO 2315 (TCCN ECON 2301)	3
B A 2310 (TCCN BUSI 1301)	3	Creative Arts Component Code 050 [TCCN HUMA 1315]	3
QMST 2333 (TCCN BUSI 2305)	3	Government/Political Science Component Code 070	3
American History Component Code 060	3	ACC 3305	3
<b>15</b>		<b>15</b>	

Junior			
First Semester Hours		Second Semester Hours	
ACC 3313	3	ACC 3314	3
ACC 3308	3	ACC 3323	3
BLAW 3301 (TCCN BUSI 2301)	3	MGT 3353	3
CIS 3380	3	MKT 3343	3
MGT 3303	3	Component Area Option 090	3
15		15	
Senior			
First Semester Hours		Second Semester Hours	
ACC 3365	3	ACC 4313	3
ACC 3385	3	MGT 4335	3
FIN 3312	3	Free Electives	8
Free Electives	6		
15		14	
Total Hours: 120			

<sup>1</sup> Credit can be earned by successfully passing a test. Students must pay a fee to take the test.

**This integrated bachelor's and master's degree program is found in the graduate catalog. For information regarding the program please click here (p. 1084).**

McCoy Hall Room 404  
T: 512.245.2291 F: 512.245.1452  
isa.mccoy.txst.edu (<http://www.isa.mccoy.txst.edu/>)

The mission of the Department of Information Systems and Analytics (ISA) is to provide relevant educational opportunities to students wishing to pursue professional careers related to information systems, technology, and data analytics.

The department strives to create an environment for preparing individuals for a lifetime of learning and growth by producing graduates who understand the concepts and uses of information systems and are capable of applying these concepts to business and government.

ISA graduates pursue careers as IT integrators, global enterprise system architects, database administrators, network administrators, information security analysts, business systems analysts, application developers, digital-business solution developers, and information systems managers. Graduates work for technology companies, high-tech startup companies, government agencies, accounting firms, oil companies, financial and insurance institutions, retail firms, manufacturing corporation, and consulting companies where they are succeeding at the highest levels.

### Degree Programs Offered

Bachelor of Business Administration (B.B.A.), major in Computer Information Systems

The computer information systems curriculum provides a strong foundation in the concepts and applications of information systems and technology in organizations. It gives ISA majors the opportunity to study enterprise design, business intelligence, data analytics, database

development, network and security administration, programming languages, and the integration of hardware and software systems with management practices.

The Concentration in Business Analytics prepares students for the emerging world of Big Data and how to effectively analyze business situations for optimal decision making. The concentration consists of 15 hours of undergraduate coursework that may be accommodated within the 120 hours required in the undergraduate business curriculum. More information is available in the McCoy College Academic Advising Center.

#### AACSB Accreditation

The McCoy College of Business is accredited by the Association to Advance Collegiate Schools of Business (AACSB). AACSB Accreditation is known, worldwide, as the longest standing, most recognized form of specialized/professional accreditation an institution can earn.

## Bachelor of Business Administration (B.B.A.)

- Major in Computer Information Systems (p. 153)
- Major in Computer Information Systems (Business Analytics Concentration) (p. 155)
- Major in Computer Information Systems (Information Security Concentration) (p. 158)
- Major in Computer Information Systems (Software Development Concentration) (p. 160)

## Minor

- Data Analytics

**Subjects in this department include: ANLY (p. 148), ISAN (p. 149)**

## Courses in Analytics (ANLY)

### ANLY 2300. Introduction to Data Analytics.

This course introduces data science and analytics fundamental concepts and applications. It covers the use of visualization software, and describes the use of data wrangling, descriptive, predictive and prescriptive analytical models. Topics include the ethical and societal implications of analytics and development of data storytelling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### ANLY 2333. Business Statistics.

This course covers descriptive and inferential statistical techniques for business and economic decision-making. Topics include measures of central tendency and dispersion, probability distributions, sampling distributions, confidence intervals, hypothesis testing, simple linear regression, and correlation analysis. Prerequisite: ISAN 1323 and [MATH 1329 or MATH 2331 or MATH 2471] both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### ANLY 3314. Decision Analytics.

This course introduces the theory, algorithms and applications of decision making methods that are used in analyzing and solving business problems. The methods to be discussed include linear programming, integer programming, network optimization, simulation, and decision models with uncertainty. Prerequisite: ANLY 2333 or MATH 2328 or [ANLY 2300 and [GEO 3301 or PSY 2301 or IE 3320 or SOCI 3307 or PH 3315]] with a grade of "D" or better and a minimum 2.0 Overall GPA. .

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### ANLY 3330. Introduction to Business Analytics.

This course introduces business analytics fundamental concepts and applications. It covers the use of visualization software, and describes the use of data wrangling, analytical models and data storytelling; with an emphasis on business applications. It also discusses ethical and societal implications, and data storytelling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### ANLY 3334. Statistical Modeling.

This course allows students to apply a broad range of statistical analysis techniques using statistical software in business decision-making. Topics include applied modeling techniques, such as regression modeling, time-series modeling and analysis of variance; non-parametric methods; quality control; and simulation. Prerequisite: ANLY 2333 or MATH 2328 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ANLY 3339. Data Mining and Visualization.**

This course introduces data mining concepts and practical skills for applying data mining techniques to solve business problems. It emphasizes data visualization and data analysis algorithms (e.g., prediction, classification, clustering), systematic evaluation, and model assessment for big data sets. Prerequisite: ANLY 2333 or MATH 2328 or [ANLY 2300 and [GEO 3301 or PSY 2301 or IE 3320 or SOCI 3307 or PH 3315]] with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ANLY 3341. Computational Methods for Analytics.**

This course is an introduction to statistical programming. The objective of this course is to use programming tools and statistical methods to analyze large data sets. Topics covered are graphs used for statistical analysis, statistical modeling, visualization techniques, simulation, and optimization. Prerequisite: ANLY 2333 or QMST 2333 or MATH 2328 or [ANLY 2300 or QMST 2300 and [GEO 3301 or PSY 2301 or IE 3320 or SOCI 3307 or PH 3315]] with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ANLY 4320. Analytics in Practice.**

This course covers the use of analytical methods in business practice. Students are expected to do an applied project that includes steps of problem understanding, data preparation, model building, validation, and communication. Prerequisite: [ANLY 3334 OR ANLY 3339] AND [ANLY 3341 OR ANLY 3305] with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ANLY 4321. Predictive Analytics.**

This course covers the use of predictive analytics methods such as advanced regression and classification to solve business problems. Particular topics include feature selection and shrinkage methods such as ridge and lasso regression; deep neural network learning; ensemble methods based on bagging (e.g., random forests) and boosting. Bias-variance trade-off and model complexity will be emphasized. Prerequisite: ANLY 3339 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ANLY 4373A. Operations Analytics.**

This course introduces the analytics concepts and tools used in planning and managing business operations. The course emphasizes forecasting, service systems, queueing analysis, optimization, decision analysis, simulation, and quantitative supply chain analysis. Topics include but are not limited to inventory control, logistics and distribution planning, process analysis, and quality management. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**ANLY 4373F. Big Data Analysis and Artificial Intelligence.**

This course demonstrates utilization of analytical and artificial intelligence methods along with big data to solve business problems. It introduces high performance computing, big data storage and analysis, distributed and parallel programming to increase throughput and/or reduce latency of selected applications. Prerequisite: [ISAN 3305 OR ANLY 3341] AND ISAN 3382 AND ANLY 4321 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ANLY 4395. Independent Study in Analytics.**

This course provides an in-depth study of a single topic or related problem solved through analytics research. May be repeated once for credit with a different emphasis. Prerequisite: Instructor Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ANLY 4399. Analytics Internship.**

This course involves an internship in analytics. Emphasis is on the application of analytics theory to business problems. Repeatable once with different emphasis for credit. Prerequisite: Instructor Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Credit/No Credit

## Courses in Information Systems (ISAN)

**ISAN 1323. Introduction to Microcomputer Applications.**

This course develops advanced information technology skills, focusing on office productivity software. Primary emphasis is placed on spreadsheet, database, and presentation software. Advanced techniques are presented for use in data analysis and decision-making. Students will be expected to demonstrate mastery of these techniques in a hands-on environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 3305. Business Programming I.**

This course provides an introduction to application program development including requirement analysis, design, implementation, and testing.

A blend of structured and object-oriented concepts is used to form solutions to business problems using a visual programming language  
Prerequisite: ISAN 1323 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 3317. E-Business.**

The course explores the constantly changing world of e-Business from an international perspective. This course will emphasize e-Business challenges and opportunities in the worldwide marketplace, while focusing on global issues of management, implementation, and integration of IT resources. (MULT) Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 3325. Business Programming II.**

This course is an advanced visual programming course covering topics related to the design and implementation of user interface, business logic and data access in a tiered architecture. The emphasis is on techniques that take advantage of a development framework through the use of forms, classes, and objects. Corequisite: ISAN 3374 and ISAN 3382 both with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 3348. Data Communications and Network Architecture.**

This course is oriented to the technical concepts of data communications and network designs and how they relate to contemporary computer end-user environments. It incorporates the systems approach for understanding, designing, managing, securing, and implementing data communication networks. Students will analyze and design data communication networks for various business situations. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 3350. Information Systems Security.**

This course examines the concepts of information systems and network availability, integrity, and confidentiality in order to develop effective security controls, processes, practices, and procedures. Topics include methodologies, models, architectures, access control systems, ethics, and legal implications of IT security. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 3360. Web Design and Development.**

This course focuses on design, creation, and maintenance of websites. It covers fundamental technologies for structuring and presenting content on the web and development framework for creating mobile-first web pages. Prerequisite: A minimum 2.0 Overall GPA. Corequisite: ISAN 3374 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 3374. System Analysis and Design.**

This course enables students to understand the analysis and general design phases of the system development life cycle are reviewed. Emphasis is on techniques and tools for determining systems requirements that lead to the development of logical design models using structured and object-oriented methodologies. (WI) Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**ISAN 3380. Enterprise Information Technology and Business Intelligence.**

This course will extend students' ability to effectively use integrated software applications to identify and provide access to various information sources. The course will focus on applying information and Internet Technologies that span normal business functions to develop and implement solutions to managerial problems. Prerequisite: ISAN 1323 and [ANLY 2333 or MATH 2328] and [MATH 1329 or MATH 2331 or MATH 2471] all with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 3382. Computer Data Base Systems.**

This course covers concepts and methodology of planning, design, development, and management of the computerized database. The emphasis is on logical database design and a study of relational implementation. A relational database management system with a relational query language is used for the development of a business application system. Corequisite: ISAN 3305 or ANLY 3341 with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 3389. Programming for Data Processing.**

This course emphasizes the development of data processing software. Topics include designing applications for analyzing and manipulating numerical and textual data from external data sources. Sequence and collections structures, object serializations, design techniques, and reporting will be examined. Prerequisite: ISAN 3305 and [ANLY 2333 or MATH 2328] both with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 3390. Agile Project Management.**

This course introduces project management body of knowledge as applied to Information Technology projects with emphasis on Agile Methodologies. The management of scope, costs, schedules, quality, risks, program management, system methodologies, material procurement, human, and international issues will be examined. Prerequisite: ISAN 3374 and ISAN 3305 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 4318. Object Oriented Development.**

This course delves into the sophisticated application of object-oriented programming (OOP) principles within the realm of business application development. Topics include an in-depth exploration of concepts, methodologies, and toolsets essential for designing, implementing, and rigorously testing software applications grounded in the object-oriented paradigm. Participants will gain hands-on experience in applying OOP techniques to tackle real-world business challenges, ensuring a practical understanding of how these principles can be effectively utilized to build robust, scalable, and maintainable software solutions. Prerequisite: ISAN 3374 with a grade of "D" or better and a minimum 2.0 Overall GPA. Corequisite: ISAN 3382 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 4321. Mobile Application Development for Android.**

This course introduces the concepts, methodology, and toolset for designing business applications for mobile devices. Students will learn the MVC development framework and Java programming environment for Android to create interactive business applications. Prerequisite: ISAN 3374 with a grade of "D" or better and a minimum 2.0 Overall GPA. Corequisite: ISAN 3382 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 4322. Computer System Development and Design.**

This course integrates systems development with analysis, design, project management, and the systems development life cycle. Object-oriented methods and UML models will be used to develop a project for a client. Students will select methodology, platform, and development technology based on client requirements. Prerequisite: ISAN 3325 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 4332. Enterprise Resource Planning Systems.**

This course uses advanced information technology for integrating business functions in an enterprise through distributed databases. Methodology and tools for the selection and implementation of Enterprise Resource Planning (ERP) systems are discussed. Students will use available ERP software to create, track and communicate enterprise information. Prerequisite: ISAN 3380 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 4349. Advanced Database Management Systems.**

This course introduces advanced concepts and database processes to support applications for Business Intelligence. Multi-dimensional modeling along with database, reporting, and analysis capabilities of a modern database environment will be used to design and develop stored procedures, views, user-defined functions, reports and multi-dimensional information cubes. Prerequisite: ISAN 3382 with a grade of "D" or better. Corequisite: ANLY 3339 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 4350. Ethical Hacking.**

This course focuses on the technology and managerial issues related to information systems security. Topics include: Attack methods, access control, authentication, firewalls, incident and disaster response, disaster recovery, security function management, and cryptography. Prerequisite: Minimum 2.0 overall GPA. Corequisite: ISAN 3348 with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter



**ISAN 4358. Network and Cloud Administration.**

This course provides students with an understanding of the responsibilities assigned to network and cloud administrators. Students will acquire a working knowledge of these responsibilities and skills using tools and technologies for administering enterprise networks via network operating systems and cloud computing commonly used in modern business enterprises. Prerequisite: ISAN 4348 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 4360. Developing Business Solutions for the Enterprise.**

This course introduces the concepts, methodology, and toolsets for the architecture, design, implementation, and deployment of business solutions for the enterprise in a services-oriented computing environment. Topics include services-oriented architecture, "Software as a Service" framework, n-tier development of business and data services, and application security. Prerequisite: ISAN 3325 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 4373A. Cyber-Warfare: Actors, Techniques, and Impact.**

This course is designed to cover all aspects of historical cyberwarfare incidents (those including nation-state actors). Topics covered include the political and/or social actors for each occurrence covered, the timeline of events leading up to, and including the actual incursion or event, the technical explanation for what occurred, and the fallout and impact of the event. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**ISAN 4373B. Applied Artificial Intelligence: Development and Application.**

This course immerses students in Large Language Models and Generative Pre-trained Transformers (GPT). The students will master both the theoretical foundations and practical aspects of development. Activities include building custom models, fine-tuning existing ones, and delving into advanced transformer architectures. The course covers real-world applications such as text generation, translation, and chatbots. Additionally, it addresses ethical considerations, bias detection, and model interpretability. Through applied projects, students acquire expertise relevant to AI-driven industries and research, positioning them to meet the demands of the rapidly changing business landscape. Prerequisite: ISAN 3305 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**ISAN 4373C. Legacy Systems: Applications, Development, and Support.**

This course focuses on the role of developers in developing, maintaining, supporting, and migrating mission-critical legacy applications within modern, high-volume transactional organizations. It covers key language proficiency and development processes, offering students the chance to gain proficiency in essential legacy application languages and processes. This enables effective development, modification, testing, and troubleshooting of legacy mission-critical applications. Practical assignments provide hands-on experience. Featured guest speakers from IT Legacy organizations will share insights. Prerequisite: ISAN 3305 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**ISAN 4373D. Artificial Intelligence in Business Operations.**

This course delves into the impact of artificial intelligence (AI) on modern businesses, providing a comprehensive introduction to key AI concepts, including machine learning, natural language processing, and computer vision. Participants will explore practical AI applications in fields such as marketing and finance through hands-on exercises and real-world examples. The course aims to equip learners with the skills and knowledge necessary to navigate the AI-driven business landscape, preparing them for future challenges by understanding AI's transformative potential across various organizational aspects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**ISAN 4373E. Programming for Information Security.**

This course covers advanced programming topics with a focus on information security. Students will learn to develop secure software, identify and mitigate vulnerabilities, and apply coding for cybersecurity tasks. Utilizing practical examples and real-world scenarios learners will gain hands-on experience in crafting solutions to protect against cyber threats. Designed for those seeking to blend programming expertise with security best practices, this course equips participants with the skills to address contemporary digital security challenges. Prerequisite: CIS 2324 or CIS 3305 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ISAN 4373G. Introduction to Machine Learning.**

This course provides a comprehensive overview of foundational concepts, algorithms, and applications of machine learning. Students gain hands-on experience through programming assignments and case studies, exploring real-world applications like data mining, natural language processing, and computer vision. The course emphasizes both theoretical understanding and practical implementation of machine learning techniques, preparing students to apply these skills across various domains. Prerequisite: [ISAN 3305 or CIS 3305 or CIS 2324 with a grade of "D" or better] and [ANLY 2333 or QMST 2333 or MATH 2328 with a grade of "D" or better] and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ISAN 4395. Independent Study in Information Systems.**

This course provides an in-depth study of a single topic or related problem solved through information systems research. May be repeated once for credit with a different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ISAN 4399. Information Systems Internship.**

This course involves an internship in business information systems. Emphasis is on the application of information systems theory to business problems in the area of computer and management information systems. Repeatable once with different emphasis for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Credit/No Credit

## Minimum required: 120 semester credit hours

### Admission Requirements

Admission to the McCoy College of Business Administration (McCoy College) is competitive, and a student must be admitted to the McCoy College to pursue a B.B.A. degree. Consideration for admission to McCoy College undergraduate programs is based on specific admission criteria and is conducted as a rolling admission process. For current Texas State students, applications are available online at <http://advising.mccoy.txstate.edu/apply> (<http://advising.mccoy.txstate.edu/apply/>). For students not yet admitted to the University, applications are available online at [www.applytexas.org](http://www.applytexas.org) (<http://www.applytexas.org>). Students should list a business major as their first major choice.

Priority dates are March 1 for summer/fall semester and October 15 for the spring semester. Applications received after the priority date will be considered for admission on a space-available basis. Students not yet admitted to Texas State must meet Texas State admission deadlines.

Students attending Texas State who are currently on academic probation are not eligible for admission to McCoy College.

### Freshmen and Students with fewer than 30 Semester Credit Hours

Students with fewer than 30 semester credit hours will be automatically admitted to the McCoy College if they receive assured admission (<http://www.admissions.txstate.edu/future/freshman/admissions-requirements.html>) to Texas State and select a first-choice major in the McCoy College of Business Administration. Students who are admitted to the University but denied admission to McCoy College will be considered for admission to their second choice major or as an exploratory professional major.

### Students with 30 or more Semester Credit Hours

Students who have completed at least 30 semester credit hours, including ENG 1310, ENG 1320, and MATH 1329, either at Texas State or another college or university and who have a minimum 2.5 overall GPA will be considered for admission based upon a competitive index using the grades from ENG 1310, ENG 1320, MATH 1329, and the overall GPA from all colleges and universities attended. Students will be automatically admitted if they have a cumulative GPA of 3.25 or higher and have completed ENG 1310, ENG 1320 and MATH 1329.

### General Requirements

1. For the B.B.A. degree, any McCoy College student whose Texas State GPA drops below a 2.0 is placed on probation by Texas State and on restricted status by McCoy College. Students on restricted status must increase their Texas State GPA to at least 2.0 in the subsequent semester or their admission to McCoy College will be voided. Students are required to meet with a representative of the McCoy College Academic Advising Center to remove probation holds; otherwise, the hold will prevent registration or schedule changes. A student whose admission is voided may regain admission to McCoy College by going through the application process and competing with other applicants for openings. Students with a Texas State GPA below a 2.0 are also subject to the University academic probation and suspension policies.
2. All students seeking the B.B.A. must complete the following general education core curriculum courses as required by McCoy College. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for other information about the general education core curriculum.
3. To provide a common body of knowledge in business, all students seeking the B.B.A. must complete the following common core of business courses or their equivalents as required by the McCoy College:

Code	Title	Hours
B A 1310	Introduction to Business	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
ISAN 1323	Introduction to Microcomputer Applications	3
ECO 2314	Principles of Microeconomics	3
ECO 2315	Principles of Macroeconomics	3
ANLY 2333	Business Statistics	3
B A 3110	Professional Development I	1
B A 3120	Professional Development II	1

BLAW 3301	Legal Environment of Business	3
MGT 3303	Management of Organizations	3
MKT 3343	Principles of Marketing	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
FIN 3312	Business Finance	3
MGT 3353	Business Communication	3
MGT 4335	Strategic Management and Business Policy	3

- A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.
- Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general sequence of courses specified for the curriculum in this section of the catalog.
- Also, students who did not complete satisfactorily at least two years of the same foreign language in high school must complete two semesters (6-8 hours) of a single foreign language in college.
- Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy degree requirements.
- For transfer students, 24 semester credit hours in the business core curriculum (or their equivalents) may be transferred from a Texas public institution of higher education for the Business Administration and Management Field of Study and be applied to the B.B.A. major in Computer Information Systems at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional business courses, please contact the McCoy College of Business CenturyLink Academic Advising Center for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. Students who complete MATH 1319 (TCCN: MATH 1324) in the FOS will receive 3 semester credit hours towards free electives.

Code	Title	Hours
B A 1310	Introduction to Business	3
TCCN: BUSI 1301		
ECO 2314	Principles of Microeconomics	3
TCCN: ECON 2302		
ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
ACC 2361	Introduction to Financial Accounting	3
TCCN: ACCT 2301		
ACC 2362	Introduction to Managerial Accounting	3
TCCN: ACCT 2302		
Elective		3
TCCN: MATH 1324		
<b>Directed Elective</b>		
ISAN 1323	Introduction to Microcomputer Applications	3
TCCN: BCIS 1305		
ANLY 2333	Business Statistics	3

TCCN: BUSI 2305

**Total Hours** **24**

- Students must achieve the following minimum grade-point averages for graduation:
  - a Texas State GPA of 2.00
  - a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives); and
  - a GPA of 2.0 in the minor(s).

## Course Requirements

		<b>Freshman</b>	
	<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
US 1100		1 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])		3 PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
MATH 1329 (Mathematics Component 020 [TCCN MATH 1325])		3 Life and Physical Sciences Component Code 030	3
COMM 1310		3 American History Component Code 060	3
B A 1310 (TCCN BUSI 1301)		3 ISAN 1323 (TCCN BCIS 1305) <sup>1</sup>	3
Government/Political Science Component Code 070		3	
		<b>16</b>	<b>15</b>

		<b>Sophomore</b>	
	<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
ACC 2361 (TCCN ACCT 2301)		3 ACC 2362 (TCCN ACCT 2302)	3
ECO 2314 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 2302])		3 ECO 2315 (TCCN ECON 2301)	3
ANLY 2333 (TCCN BUSI 2305)		3 Creative Arts Component Code 050 [TCCN HUMA 1315]	3
American History Component Code 060		3 Government/Political Science Component Code 070	3
Life and Physical Sciences Component Code 030		3 Component Area Option 090	3
		B A 3110	1
		<b>15</b>	<b>16</b>

		<b>Junior</b>	
	<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
BLAW 3301 (TCCN BUSI 2301)		3 ISAN 3380	3
ISAN 3305		3 ISAN 3382	3
ISAN 3374		3 ISAN or ANLY Advanced Electives	3

ISAN or ANLY Advanced Electives	3 MGT 3353	3
MGT 3303	3 MKT 3343	3
B A 3120	1	
	<b>16</b>	<b>15</b>

First Semester Hours		Second Semester Hours
FIN 3312	3 MGT 4335	3
ISAN Advanced Electives	6 ISAN Advanced Electives	9
Restricted Business Elective	3	
Free Elective	3	
	<b>15</b>	<b>12</b>

**Total Hours: 120**

<sup>1</sup> Credit can be earned by successfully passing a test. Students must pay a fee to take the test.

### ISAN Advanced Electives

Code	Title	Hours
ISAN 3325	Business Programming II	3
ISAN 3348	Data Communications and Network Architecture	3
ISAN 3350	Information Systems Security	3
ISAN 3360	Web Design and Development	3
ISAN 3389	Programming for Data Processing	3
ISAN 3390	Agile Project Management	3
ISAN 4318	Object Oriented Development	3
ISAN 4321	Mobile Application Development for Android	3
ISAN 4322	Computer System Development and Design	3
ISAN 4332	Enterprise Resource Planning Systems	3
ISAN 4349	Advanced Database Management Systems	3
ISAN 4350	Ethical Hacking	3
ISAN 4358	Network and Cloud Administration	3
ISAN 4360	Developing Business Solutions for the Enterprise	3
ISAN 4373	Topics in Information Systems	3
ISAN 4373A	Cyber-Warfare: Actors, Techniques, and Impact	3
ISAN 4373B	Applied Artificial Intelligence: Development and Application	3
ISAN 4373C	Legacy Systems: Applications, Development, and Support	3
ISAN 4373D	Artificial Intelligence in Business Operations	3
ISAN 4395	Independent Study in Information Systems	3
ISAN 4399	Information Systems Internship	3

### ANLY Advanced Electives

Code	Title	Hours
ANLY 3314	Decision Analytics	3
ANLY 3330	Introduction to Business Analytics	3
ANLY 3334	Statistical Modeling	3
ANLY 3339	Data Mining and Visualization	3
ANLY 3341	Computational Methods for Analytics	3
ANLY 4320	Analytics in Practice	3
ANLY 4321	Predictive Analytics	3
ANLY 4373	Special Topics in Analytics	3

ANLY 4373A	Operations Analytics	3
ANLY 4373F	Big Data Analysis and Artificial Intelligence	3

### Restricted Business Electives

Code	Title	Hours
ACC 3305	Financial Accounting and Reporting	3
ACC 3313	Intermediate Accounting I	3
BLAW 3360	Business Organizations and Government Regulations	3
ECO 3335	Managerial Economics	3
ECO 4313	Econometrics	3
FIN 3313	Financial Management	3
MGT 3360	Entrepreneurship Studies	3
MGT 4375	Organizational Behavior and Human Relations	3
MKT 3370	Marketing Research	3
MKT 3387	Digital Marketing	3
MKT 4310	International Marketing	3
MKT 4337	Marketing Management	3

**Minimum required: 120 semester credit hours**

### Admission Requirements

Admission to the McCoy College of Business Administration (McCoy College) is competitive, and a student must be admitted to the McCoy College to pursue a B.B.A. degree. Consideration for admission to McCoy College undergraduate programs is based on specific admission criteria and is conducted as a rolling admission process. For current Texas State students, applications are available online at <http://advising.mccoy.txstate.edu/apply> (<http://advising.mccoy.txstate.edu/apply/>). For students not yet admitted to the University, applications are available online at [www.applytexas.org](http://www.applytexas.org) (<http://www.applytexas.org>). Students should list a business major as their first major choice.

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### Freshmen and Students with fewer than 30 Semester Credit Hours

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### Students with 30 or more Semester Credit Hours

Students who have completed at least 30 semester credit hours, including ENG 1310, ENG 1320, and MATH 1329, either at Texas State or another college or university and who have a minimum 2.5 overall GPA will be considered for admission based upon a competitive index using the grades from ENG 1310, ENG 1320, MATH 1329, and the



overall GPA from all colleges and universities attended. Students will be automatically admitted if they have a cumulative GPA of 3.25 or higher and have completed ENG 1310, ENG 1320 and MATH 1329.

## General Requirements

- For the B.B.A. degree, any McCoy College student whose Texas State GPA drops below a 2.0 is placed on probation by Texas State and on restricted status by McCoy College. Students on restricted status must increase their Texas State GPA to at least 2.0 in the subsequent semester or their admission to McCoy College will be voided. Students are required to meet with a representative of the McCoy College Academic Advising Center to remove probation holds; otherwise, the hold will prevent registration or schedule changes. A student whose admission is voided may regain admission to McCoy College by going through the application process and competing with other applicants for openings. Students with a Texas State GPA below a 2.0 are also subject to the University academic probation and suspension policies.
- All students seeking the B.B.A. must complete the following general education core curriculum courses as required by McCoy College. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for other information about the general education core curriculum.
- To provide a common body of knowledge in business, all students seeking the B.B.A. must complete the following common core of business courses or their equivalents as required by the McCoy College:

Code	Title	Hours
B A 1310	Introduction to Business	3
ISAN 1323	Introduction to Microcomputer Applications	3
ECO 2314	Principles of Microeconomics	3
ECO 2315	Principles of Macroeconomics	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
ANLY 2333	Business Statistics	3
B A 3110	Professional Development I	1
B A 3120	Professional Development II	1
BLAW 3301	Legal Environment of Business	3
MGT 3303	Management of Organizations	3
FIN 3312	Business Finance	3
MKT 3343	Principles of Marketing	3
MGT 3353	Business Communication	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
MGT 4335	Strategic Management and Business Policy	3

- A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.
- Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general sequence of courses specified for the curriculum in this section of the catalog.

- Also, students who did not complete satisfactorily at least two years of the same foreign language in high school must complete two semesters (6-8 hours) of a single foreign language in college.
- Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy degree requirements.
- For transfer students, 24 semester credit hours in the business core curriculum (or their equivalents) may be transferred from a Texas public institution of higher education for the Business Administration and Management Field of Study and be applied to the B.B.A. major in Computer Information Systems at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional business courses, please contact the McCoy College of Business CenturyLink Academic Advising Center for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. Students who complete MATH 1319 (TCCN: MATH 1324) in the FOS will receive 3 semester credit hours towards free electives.

Code	Title	Hours
ISAN 1323	Introduction to Microcomputer Applications (Directed Elective)	3
TCCN: BCIS 1305		
B A 1310	Introduction to Business	3
TCCN: BUSI 1301		
ECO 2314	Principles of Microeconomics	3
TCCN: ECON 2302		
ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
ACC 2361	Introduction to Financial Accounting	3
TCCN: ACCT 2301		
ACC 2362	Introduction to Managerial Accounting	3
TCCN: ACCT 2302		
ANLY 2333	Business Statistics	3
TCCN: BUSI 2305		
Elective		3
TCCN: MATH 1324		
<b>Total Hours</b>		<b>24</b>

- Students must achieve the following minimum grade-point averages for graduation:
  - a Texas State GPA of 2.00
  - a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives); and
  - a GPA of 2.0 in the minor(s).

## Course Requirements

		Freshman
	First Semester Hours	Second Semester Hours
US 1100	1 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3



ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
MATH 1329 (Mathematics Component 020 [TCCN MATH 1325])	3	ISAN 1323 (TCCN BCIS 1305)	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	Life and Physical Sciences Component Code 030	3
B A 1310 (TCCN BUSI 1301)	3	American History Component Code 060	3
Government/Political Science Component Code 070	3		
<b>16</b>		<b>15</b>	

**Sophomore**

First Semester Hours	Second Semester Hours		
ACC 2361 (TCCN ACCT 2301)	3	ACC 2362 (TCCN ACCT 2302)	3
ECO 2314 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 2302])	3	ECO 2315 (TCCN ECON 2301)	3
ANLY 2333 (TCCN BUSI 2305)	3	B A 3110	1
American History Component Code 060	3	Creative Arts Component Code 050 [TCCN HUMA 1315]	3
Life and Physical Sciences Component Code 030	3	Government/Political Science Component Code 070	3
		Component Area Option 090	3
<b>15</b>		<b>16</b>	

**Junior**

First Semester Hours	Second Semester Hours		
BLAW 3301 (TCCN BUSI 2301)	3	ISAN 3374	3
ANLY 3330	3	ISAN 3382	3
MGT 3303	3	MKT 3343	3
ISAN 3380	3	MGT 3353	3
ANLY 3339	3	ANLY 3341	3
B A 3120	1		
<b>16</b>		<b>15</b>	

**Senior**

First Semester Hours	Second Semester Hours		
FIN 3312	3	MGT 4335	3
ISAN 3305	3	ISAN Advanced Electives	3
Restrictive Business Elective	3	ANLY or ISAN Advanced Elective	3
ANLY Advanced Electives	6	Free Electives	3
<b>15</b>		<b>12</b>	

**Total Hours: 120**

<sup>1</sup> Credit can be earned by successfully passing a test. Students must pay a fee to take the test.

Code	Title	Hours
<b>ISAN Advanced Electives</b>		
ISAN 3325	Business Programming II	3
ISAN 3348	Data Communications and Network Architecture	3
ISAN 3350	Information Systems Security	3
ISAN 3360	Web Design and Development	3
ISAN 3389	Programming for Data Processing	3
ISAN 4318	Object Oriented Development	3
ISAN 4321	Mobile Application Development for Android	3
ISAN 4322	Computer System Development and Design	3
ISAN 4332	Enterprise Resource Planning Systems	3
ISAN 4349	Advanced Database Management Systems	3
ISAN 4350	Ethical Hacking	3
ISAN 4358	Network and Cloud Administration	3
ISAN 4360	Developing Business Solutions for the Enterprise	3
ISAN 4373	Topics in Information Systems	3
ISAN 4373A	Cyber-Warfare: Actors, Techniques, and Impact	3
ISAN 4373B	Applied Artificial Intelligence: Development and Application	3
ISAN 4373C	Legacy Systems: Applications, Development, and Support	3
ISAN 4373D	Artificial Intelligence in Business Operations	3
ISAN 4395	Independent Study in Information Systems	3
ISAN 4399	Information Systems Internship	3

Code	Title	Hours
<b>ANLY Advanced Electives</b>		
ANLY 3314	Decision Analytics	3
ANLY 3334	Statistical Modeling	3
ANLY 4320	Analytics in Practice	3
ANLY 4321	Predictive Analytics	3
ANLY 4373	Special Topics in Analytics	3
ANLY 4373A	Operations Analytics	3
ANLY 4373F	Big Data Analysis and Artificial Intelligence	3

Code	Title	Hours
<b>Restricted Business Electives</b>		
ACC 3305	Financial Accounting and Reporting	3
ACC 3313	Intermediate Accounting I	3
BLAW 3360	Business Organizations and Government Regulations	3
ECO 3335	Managerial Economics	3
ECO 4313	Econometrics	3
FIN 3313	Financial Management	3
MGT 3360	Entrepreneurship Studies	3
MGT 4375	Organizational Behavior and Human Relations	3
MKT 3370	Marketing Research	3
MKT 3387	Digital Marketing	3

MKT 4310	International Marketing	3
MKT 4337	Marketing Management	3

## Minimum required: 120 semester credit hours

### Admission Requirements

Admission to the College is competitive, and a student must be admitted to the College to pursue a B.B.A. degree. Consideration for admission to McCoy College undergraduate programs is based on specific admission criteria.

To be considered for admission to McCoy College, students should list a business major in their first-choice major and apply to Texas State by the stated deadlines on the Undergraduate Admissions website.

Students who are admitted to the University but denied admission to McCoy College will be considered for admission to their second choice major or if one is not listed, students will be declared an Exploratory Professional major.

#### Admission Process for Prospective Texas State Students

##### Freshman

- Students admitted to Texas State as a Freshman will be automatically admitted to McCoy College if they meet Assured Admission requirements and select business major as their first-choice major.

##### Transfer

- Students admitted to Texas State as a Transfer will be automatically admitted McCoy College if they meet Program Entry requirements based on total semester credit hours earned and select a business major as their first-choice major.

#### Admission Process for Current Texas State Students

For current Texas State students, an internal application is available online on the CenturyLink Academic Advising Center website. Students attending Texas State who are currently on academic probation are not eligible for admission to McCoy College.

### General Requirements

- For the B.B.A. degree, any McCoy College student whose Texas State GPA drops below a 2.0 is placed on probation by Texas State and on restricted status by McCoy College. Students on restricted status must increase their Texas State GPA to at least 2.0 in the subsequent semester or their admission to McCoy College will be voided. Students are required to meet with a representative of the McCoy College Academic Advising Center to remove probation holds; otherwise, the hold will prevent registration or schedule changes. A student whose admission is voided may regain admission to McCoy College by going through the application process and competing with other applicants for openings. Students with a Texas State GPA below a 2.0 are also subject to the University academic probation and suspension policies.
- All students seeking the B.B.A. must complete the following general education core curriculum courses as required by McCoy College. The general education core curriculum courses are listed in the degree

plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for other information about the general education core curriculum.

- To provide a common body of knowledge in business, all students seeking the B.B.A. must complete the following common core of business courses or their equivalents as required by the McCoy College:

Code	Title	Hours
B A 1310	Introduction to Business	3
ISAN 1323	Introduction to Microcomputer Applications	3
ECO 2314	Principles of Microeconomics	3
ECO 2315	Principles of Macroeconomics	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
ANLY 2333	Business Statistics	3
B A 3120	Professional Development II	1
B A 3110	Professional Development I	1
BLAW 3301	Legal Environment of Business	3
MGT 3303	Management of Organizations	3
FIN 3312	Business Finance	3
MKT 3343	Principles of Marketing	3
MGT 3353	Business Communication	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
MGT 4335	Strategic Management and Business Policy	3

- A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.
- Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general sequence of courses specified for the curriculum in this section of the catalog.
- Also, students who did not complete satisfactorily at least two years of the same foreign language in high school must complete two semesters (6-8 hours) of a single foreign language in college.
- Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy degree requirements.
- For transfer students, 24 semester credit hours in the business core curriculum (or their equivalents) may be transferred from a Texas public institution of higher education for the Business Administration and Management Field of Study and be applied to the B.B.A. major in Computer Information Systems at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional business courses, please contact the McCoy College of Business CenturyLink Academic Advising Center for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. Students who complete MATH 1319 (TCCN: MATH 1324) in the FOS will receive 3 semester credit hours towards free electives.

Code	Title	Hours
ISAN 1323	Introduction to Microcomputer Applications	3
TCCN: BCIS 1305		
B A 1310	Introduction to Business	3
TCCN: BUSI 1301		
ECO 2314	Principles of Microeconomics	3
TCCN: ECON 2302		
ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
ACC 2361	Introduction to Financial Accounting	3
TCCN: ACCT 2301		
ACC 2362	Introduction to Managerial Accounting	3
TCCN: ACCT 2302		
ANLY 2333	Business Statistics (Directed Elective)	3
TCCN: BUSI 2305		
Elective		3
TCCN: MATH 1324		
<b>Total Hours</b>		<b>24</b>

9. Students must achieve the following minimum grade-point averages for graduation:

- a Texas State GPA of 2.00
- a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives); and
- a GPA of 2.0 in the minor(s).

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
MATH 1329 (Mathematics Component 020 [TCCN MATH 1325])	3	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
Government/Political Science Component Code 070	3	Life and Physical Sciences Component Code 030	3
B A 1310 (TCCN BUSI 1301)	3	American History Component Code 060	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	ISAN 1323 (TCCN BCIS 1305)	3
US 1100	1		
16		15	
Sophomore			
First Semester Hours		Second Semester Hours	
ACC 2361 (TCCN ACCT 2301)	3	ACC 2362 (TCCN ACCT 2302)	3
ECO 2314 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 2302])	3	ECO 2315 (TCCN ECON 2301)	3

ANLY 2333 (TCCN BUSI 2305)	3	Creative Arts Component Code 050 [TCCN HUMA 1315]	3
American History Component Code 060	3	Government/Political Science Component Code 070	3
Life and Physical Sciences Component Code 030	3	Component Area Option 090	3
		B A 3110	1
		<b>15</b>	<b>16</b>

First Semester Hours		Second Semester Hours	
ISAN 3305	3	BLAW 3301 (TCCN BUSI 2301)	3
ISAN 3374	3	ISAN 3350	3
ISAN 3380	3	ISAN 3382	3
MGT 3303	3	ISAN 3348	3
MKT 3343	3	MGT 3353	3
B A 3120	1		
		<b>16</b>	<b>15</b>

First Semester Hours		Second Semester Hours	
FIN 3312	3	ISAN 4350	3
ISAN 4358	3	MGT 4335	3
ISAN 3325, 3360, ANLY 3339, or ANLY 3341	3	ISAN Advanced Elective	3
ISAN Advanced Elective	3	Free Electives	3
Restricted Business Elective	3		
		<b>15</b>	<b>12</b>

**Total Hours: 120**

<sup>1</sup> Credit can be earned by successfully passing a test. Students must pay a fee to take the test.

## ISAN Advanced Electives

Code	Title	Hours
ISAN 3325	Business Programming II	3
ISAN 3360	Web Design and Development	3
ISAN 3389	Programming for Data Processing	3
ISAN 3390	Agile Project Management	3
ISAN 4318	Object Oriented Development	3
ISAN 4321	Mobile Application Development for Android	3
ISAN 4322	Computer System Development and Design	3
ISAN 4332	Enterprise Resource Planning Systems	3
ISAN 4349	Advanced Database Management Systems	3
ISAN 4360	Developing Business Solutions for the Enterprise	3
ISAN 4373	Topics in Information Systems	3
ISAN 4373A	Cyber-Warfare: Actors, Techniques, and Impact	3
ISAN 4373B	Applied Artificial Intelligence: Development and Application	3
ISAN 4373C	Legacy Systems: Applications, Development, and Support	3
ISAN 4373D	Artificial Intelligence in Business Operations	3

ISAN 4395	Independent Study in Information Systems	3
ISAN 4399	Information Systems Internship	3

### Restricted Business Electives

Code	Title	Hours
ACC 3305	Financial Accounting and Reporting	3
ACC 3313	Intermediate Accounting I	3
BLAW 3360	Business Organizations and Government Regulations	3
ECO 3335	Managerial Economics	3
ECO 4313	Econometrics	3
FIN 3313	Financial Management	3
MGT 3360	Entrepreneurship Studies	3
MGT 4375	Organizational Behavior and Human Relations	3
MKT 3370	Marketing Research	3
MKT 3387	Digital Marketing	3
MKT 4310	International Marketing	3
MKT 4337	Marketing Management	3
ANLY 3334	Statistical Modeling	3

**Minimum required: 120  
semester credit hours**

### Admission Requirements

Admission to the College is competitive, and a student must be admitted to the College to pursue a B.B.A. degree. Consideration for admission to McCoy College undergraduate programs is based on specific admission criteria.

To be considered for admission to McCoy College, students should list a business major in their first-choice major and apply to Texas State by the stated deadlines on the Undergraduate Admissions website.

Students who are admitted to the University but denied admission to McCoy College will be considered for admission to their second choice major or if one is not listed, students will be declared an Exploratory Professional major.

#### Admission Process for Prospective Texas State Students

##### Freshman

- Students admitted to Texas State as a Freshman will be automatically admitted to McCoy College if they meet Assured Admission requirements and select business major as their first-choice major.

##### Transfer

- Students admitted to Texas State as a Transfer will be automatically admitted McCoy College if they meet Program Entry requirements based on total semester credit hours earned and select a business major as their first-choice major.

#### Admission Process for Current Texas State Students

For current Texas State students, an internal application is available online on the CenturyLink Academic Advising Center website. Students

attending Texas State who are currently on academic probation are not eligible for admission to McCoy College.

### General Requirements

- For the B.B.A. degree, any McCoy College student whose Texas State GPA drops below a 2.0 is placed on probation by Texas State and on restricted status by McCoy College. Students on restricted status must increase their Texas State GPA to at least 2.0 in the subsequent semester or their admission to McCoy College will be voided. Students are required to meet with a representative of the McCoy College Academic Advising Center to remove probation holds; otherwise, the hold will prevent registration or schedule changes. A student whose admission is voided may regain admission to McCoy College by going through the application process and competing with other applicants for openings. Students with a Texas State GPA below a 2.0 are also subject to the University academic probation and suspension policies.
- All students seeking the B.B.A. must complete the following general education core curriculum courses as required by McCoy College. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for other information about the general education core curriculum.
- To provide a common body of knowledge in business, all students seeking the B.B.A. must complete the following common core of business courses or their equivalents as required by the McCoy College:

Code	Title	Hours
B A 1310	Introduction to Business	3
ISAN 1323	Introduction to Microcomputer Applications	3
ECO 2314	Principles of Microeconomics	3
ECO 2315	Principles of Macroeconomics	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
ANLY 2333	Business Statistics	3
B A 3110	Professional Development I	1
B A 3120	Professional Development II	1
BLAW 3301	Legal Environment of Business	3
MGT 3303	Management of Organizations	3
FIN 3312	Business Finance	3
MKT 3343	Principles of Marketing	3
MGT 3353	Business Communication	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
MGT 4335	Strategic Management and Business Policy	3

- A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.
- Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general sequence of courses specified for the curriculum in this section of the catalog.

6. Also, students who did not complete satisfactorily at least two years of the same foreign language in high school must complete two semesters (6-8 hours) of a single foreign language in college.
7. Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy degree requirements.
8. For transfer students, 24 semester credit hours in the business core curriculum (or their equivalents) may be transferred from a Texas public institution of higher education for the Business Administration and Management Field of Study and be applied to the B.B.A. major in Computer Information Systems at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional business courses, please contact the McCoy College of Business CenturyLink Academic Advising Center for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. Students who complete MATH 1319 (TCCN: MATH 1324) in the FOS will receive 3 semester credit hours towards free electives.

Code	Title	Hours
ISAN 1323	Introduction to Microcomputer Applications	3
TCCN: BCIS 1305		
B A 1310	Introduction to Business	3
TCCN: BUSI 1301		
ECO 2314	Principles of Microeconomics	3
TCCN: ECON 2302		
ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
ACC 2361	Introduction to Financial Accounting	3
TCCN: ACCT 2301		
ACC 2362	Introduction to Managerial Accounting	3
TCCN: ACCT 2302		
ANLY 2333	Business Statistics	3
TCCN: BUSI 2305		
Elective		3
TCCN: MATH 1324		
<b>Total Hours</b>		<b>24</b>

9. Students must achieve the following minimum grade-point averages for graduation:
- a Texas State GPA of 2.00
  - a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives); and
  - a GPA of 2.0 in the minor(s).

## Course Requirements

Freshman		
First Semester Hours		Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302]) 3

MATH 1329 (Mathematics Component Code 020 [TCCN 1325])	3	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306]) 3
Government/Political Science Component Code 070	3	Life and Physical Sciences Component Code 030 3
B A 1310 (TCCN BUSI 1310)	3	American History Component Code 060 3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	ISAN 1323 (TCCN BCIS 1305) <sup>1</sup> 3
US 1100	1	
<b>16</b>		<b>15</b>

### Sophomore

First Semester Hours		Second Semester Hours
ACC 2361 (TCCN ACCT 2301)	3	ACC 2362 (TCCN ACCT 2302) 3
ECO 2314 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 2302])	3	ECO 2315 (TCCN ECON 2301) 3
ANLY 2333 (TCCN BUSI 2305)	3	Creative Arts Component Code 050 [TCCN HUMA 1315] 3
Life and Physical Sciences Component Code 030	3	Government/Political Science Component Code 070 3
American History Component Code 060	3	Component Area Option 090 3
		B A 3110 1
<b>15</b>		<b>16</b>

### Junior

First Semester Hours		Second Semester Hours
ISAN 3305	3	ISAN 3325 3
BLAW 3301 (TCCN BUSI 2301)	3	ISAN 3382 3
ISAN 3374	3	ISAN 3390 3
ISAN 3360	3	ISAN 3380 3
MGT 3303	3	FIN 3312 3
B A 3120	1	
<b>16</b>		<b>15</b>

### Senior

First Semester Hours		Second Semester Hours
MGT 3353	3	MGT 4335 3
MKT 3343	3	ISAN or ANLY Advanced Electives 3
Choose two of the following: ISAN 3389, ISAN 4318, ISAN 4321, ISAN 4322, ISAN 4349, ISAN 4373B, ISAN 4373C	6	ISAN Advanced Electives 3
Restricted Business Elective	3	Free Electives 3
<b>15</b>		<b>12</b>

**Total Hours: 120**



<sup>1</sup> Credit can be earned by successfully passing a test. Students must pay a fee to take the test.

## ISAN Advanced Electives

Code	Title	Hours
ISAN 3348	Data Communications and Network Architecture	3
ISAN 3350	Information Systems Security	3
ISAN 3389	Programming for Data Processing	3
ISAN 4318	Object Oriented Development	3
ISAN 4321	Mobile Application Development for Android	3
ISAN 4322	Computer System Development and Design	3
ISAN 4332	Enterprise Resource Planning Systems	3
ISAN 4349	Advanced Database Management Systems	3
ISAN 4350	Ethical Hacking	3
ISAN 4358	Network and Cloud Administration	3
ISAN 4360	Developing Business Solutions for the Enterprise	3
ISAN 4373	Topics in Information Systems	3
ISAN 4373A	Cyber-Warfare: Actors, Techniques, and Impact	3
ISAN 4373B	Applied Artificial Intelligence: Development and Application	3
ISAN 4373C	Legacy Systems: Applications, Development, and Support	3
ISAN 4373D	Artificial Intelligence in Business Operations	3
ISAN 4395	Independent Study in Information Systems	3
ISAN 4399	Information Systems Internship	3

## ANLY Advanced Electives

Code	Title	Hours
ANLY 3314	Decision Analytics	3
ANLY 3330	Introduction to Business Analytics	3
ANLY 3334	Statistical Modeling	3
ANLY 3339	Data Mining and Visualization	3
ANLY 3341	Computational Methods for Analytics	3
ANLY 4320	Analytics in Practice	3
ANLY 4321	Predictive Analytics	3
ANLY 4373	Special Topics in Analytics	3
ANLY 4373A	Operations Analytics	3
ANLY 4373F	Big Data Analysis and Artificial Intelligence	3

## Restricted Business Electives

Code	Title	Hours
ACC 3305	Financial Accounting and Reporting	3
ACC 3313	Intermediate Accounting I	3
BLAW 3360	Business Organizations and Government Regulations	3
ECO 3335	Managerial Economics	3
ECO 4313	Econometrics	3
FIN 3313	Financial Management	3
MGT 3360	Entrepreneurship Studies	3
MGT 4375	Organizational Behavior and Human Relations	3
MKT 3370	Marketing Research	3
MKT 3387	Digital Marketing	3

MKT 4310	International Marketing	3
MKT 4337	Marketing Management	3

The minor in Data Analytics requires 18-23 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
ANLY 2300	Introduction to Data Analytics	3
<b>Statistics Courses</b>		
Choose 3-4 hours from the following:		3-4
AG 3352	Quantitative Methods in Agricultural Economics	
CJ 3347	Statistics For Criminal Justice	
GEO 3301	Research Methods in Geography	
HDFS 2311	Statistics and Data Analysis for Human Development and Family Sciences	
HP 3325	Healthcare Statistics	
IE 3320	Engineering Statistics	
MATH 2328	Elementary Statistics	
MATH 3305	Introduction to Probability and Statistics	
PA 3311	Analytical Techniques	
PH 3315	Statistics in Public Health	
PS 3315	Quantitative Research in Political Science	
PSY 2301 & PSY 2101	Introduction to Statistics and Introduction to Statistics Laboratory	
SOCI 3307	Statistics for the Behavioral Sciences	
ANLY 2333	Business Statistics	
<b>Computing/Programming Courses</b>		
Choose 3-4 hours from the following:		3-4
AG 4371X	Data Analysis and its Application in Agriculture	
CS 1342	Programming for Scientists and Engineers	
CS 1428	Foundations of Computer Science I	
GEO 4420	GeoProgramming	
HIM 4331	Research and Data Analytics for HIM	
PHYS 2230	Introduction to Computational Modeling for Physics	
ANLY 3341	Computational Methods for Analytics	
<b>Algorithms/Data Mining Courses</b>		
Choose 3-4 hours from the following:		3-4
CS 4315	Introduction to Data Mining and Information Retrieval	
EE 4331	Introduction to Machine Learning for Engineering Applications	
GEO 4412	Digital Image Processing and Machine Learning	
IE 4340	Non-Linear Optimization Techniques	
IE 4342	Advanced Linear and Integer Programming	
PHYS 3418	Methods in Observational Astrophysics	
ANLY 3339	Data Mining and Visualization	
<b>Prescribed Electives</b>		
Choose 6-8 hours from the following:		6-8
ACC 3323	Data Analytics for Accounting	
AG 4382	Agricultural Price Analysis	
ARTC 4314R	Information and Data Visualization	
BIO 4425	Biometry	

BIO 4351K	R for Biologists
CHEM 3276	Experimental Biochemistry
CHEM 3380	Analytical Biochemistry
CHEM 3381	Biochemistry Techniques
ISAN 3382	Computer Data Base Systems
ISAN 3389	Programming for Data Processing
ISAN 4349	Advanced Database Management Systems
ISAN 4399	Information Systems Internship
CS 4332	Introduction to Database Systems
CS 4346	Introduction to Artificial Intelligence
CS 4347	Introduction to Machine Learning
CS 4380	Parallel Programming
ECO 4313	Econometrics
ECO 4381G	Empirical Data Analysis
EE 3326	Numerical and Scientific Data Analysis Using Python
EE 4332	Introduction to Computer-Aided Engineering Simulation on HPC Systems
FCS 4303	Research Procedures in Family & Consumer Sciences
FIN 4380J	Introduction to Finance Analytics
FM 3330	Fashion Buying Principles I
FM 4331	Fashion Buying Principles II
GEO 2420	Introduction to Geographic Information Techniques
GEO 2426	Fundamentals of Geographic Information Systems
GEO 2427	Management and Implementation of GIS
GEO 3411	Maps and Mapmaking
GEO 3426	Advanced GIS
GEO 4356	Urban Infrastructure Management
GEO 4420	GeoProgramming
GEO 4424	GPS and GIS
HI 3311	Databases in Healthcare
HI 3310	Health Informatics
HI 4401	Advanced Health Informatics and Security
HIM 3311	
HIM 3380	Quality Management for HIM
HIM 4320	Principles of Information Governance
HIM 4331	Research and Data Analytics for HIM
IE 3305	Introduction to Data Analysis
IE 3330	Quality Engineering
IE 3340	Operations Research
IE 4310	Statistical Design of Experiments
IE 4330	Reliability Engineering
IE 4370	Probabilistic Operations Research
IE 4399D	Heuristic Optimization Techniques
IE 4399F	Introduction to Data-Intensive Analysis and Simulation
MATH 3305	Introduction to Probability and Statistics
MATH 3376	Applied Linear Algebra
MATH 3383	Numerical Analysis I
MATH 4305	Advanced Probability and Statistics
MC 4325	Coding and Data Skills for Communicators

MC 4337	Data Journalism
ME 4355	Autonomous Systems and Robotics
MKT 3370	Marketing Research
MKT 4340	Marketing Analytics Foundations
NUTR 3303	Research Methods in Nutrition Science
PH 3370	Epidemiology
PHIL 4361F	Ethics of Artificial Intelligence and Big Data
PHYS 4305	Statistical Physics
PSY 4390R	Intermediate Statistics
ANLY 3334	Statistical Modeling
ANLY 4320	Analytics in Practice
ANLY 3314	Decision Analytics
SOCI 3318	Applied Data Analysis
SOCI 4308	Quantitative Research Methods
TECH 3364	Quality Assurance

**Total Hours** **18-23**

McCoy Hall Room 504

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[www.fin-eco.mccoy.txstate.edu](http://www.fin-eco.mccoy.txstate.edu) (<http://www.fin-eco.mccoy.txstate.edu>)

The mission of the Department of Finance and Economics is to provide students the ability to pursue learning throughout their lives, accept responsibility for their actions, and contribute to the common goals of society. Departmental programs are designed to develop informed citizens capable of thinking critically and succeeding in a highly-complex, interdependent, Globally diverse society. Ideally, graduates will successfully compete for employment in both the public and private sectors and for entrance to high-quality graduate education.

### Degree Programs Offered

Bachelor of Arts (B.A.) major in Economics

Bachelor of Business Administration (B.B.A.) major in Economics

Economics studies the behavior of consumers, producers and governments. The department's introductory courses meet the need for basic economic and legal understanding in a complex modern society. Upper-division economics and business law courses build upon this foundation to provide students a comprehensive training in modern economic theory and empirical techniques. We offer elective courses on environmental economics, sports economics, international trade, money and banking, econometrics, and many more.

The B.B.A. in Economics is a business degree and prepares students better for career paths in financial and non-financial industries. The B.A. in Economics is a liberal arts degree which provides a broader set of skills and graduates follow careers in government, industry, law and teaching.

Bachelor of Business Administration (B.B.A.) major in Finance

The finance program exposes all majors to the areas of corporate finance and investments as well as the technological skills necessary for today's environment. Elective courses in portfolio management, real estate, and analytics allow students to tailor the program to fit their desired career path.

Both Finance and Economics major also have opportunity to apply to the Student Managed Investment Fund (SMIF) course which manages over \$1 million of the McCoy College endowment fund. The SMIF program

gives selected students real-world exposure in security and economic analysis with the goal of sustaining and growing the endowment fund.

The department offers several opportunities through student organizations, such as Financial Management Association (FMA), Students Economics Association (SEA), and Net Impact, for student involvement in community service projects as well as giving students exposure to their chosen major.

#### AACSB Accreditation

The McCoy College of Business is accredited by the Association to Advance Collegiate Schools of Business (AACSB). AACSB Accreditation is known, worldwide, as the longest standing, most recognized form of specialized/professional accreditation an institution can earn.

## Bachelor of Arts (B.A.)

- Major in Economics (p. 169)

## Bachelor of Business Administration (B.B.A.)

- Major in Economics (p. 170)
- Major in Finance (p. 172)

## Minor

- Economics (p. 175)

**Subjects in this department include: BLAW (p. 164), ECO (p. 165), FIN (p. 167)**

## Courses in Business Law (BLAW)

### BLAW 3301. Legal Environment of Business.

The course surveys basic features of the American legal system and legal aspects of business transactions. Topics include generally the nature and sources of law, court systems and procedures, torts, contracts, agency, and ethics. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### BLAW 3360. Business Organizations and Government Regulations.

This course studies corporations, partnerships, limited liability companies, securities law, law for small business, administrative law, consumer law, environmental law, antitrust law, and insurance. Prerequisite: BLAW 3301 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### BLAW 3363. International Business Law.

This course studies the principles of international business law which emphasizes the commercial activities of the multinational firm conducting business in global economic, political, social and cultural environments. (MULT) (MULP).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Multicultural Perspective| Multicultural Content

**Grade Mode:** Standard Letter

### BLAW 3364. Commercial Law.

This course studies sales law, negotiable instruments, secured transactions, suretyship, bankruptcy, personal property and bailments, real property, and creditors' rights and remedies. Prerequisite: BLAW 3301 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### BLAW 3367. Employment Law.

This course studies the legal developments in the workplace, with emphasis on attempts to maintain a proper balance between employees' interest in earning a livelihood and employers' interest in operating their business efficiently and profitably. Prerequisite: PHIL 1320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### BLAW 4310. Sustainable Development & Law.

This course examines the role of law and policy in balancing economic, environmental, and social issues for current and future generations. Prerequisite: A minimum 2.0 overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### BLAW 4320. Legal Issues in Finance & Economics.

This course surveys the ways that law impacts, and is impacted by, the practice of finance and economics. Prerequisite: BLAW 3301 with a grade of "D" or better and a minimum 2.0 overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

### BLAW 4395. Independent Study in Business Law.

An in-depth study of a single topic or related problem solved through business law research. May be repeated once for credit with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Economics (ECO)

### ECO 2301. Principles of Economics.

A non-technical study of micro- and macroeconomic principles, including demand and supply, production and cost, market structures, aggregate output and performance of the economy, the business cycle and growth, unemployment and inflation, money and banking, fiscal policy, monetary policy, and international trade and finance. Not for business or economics majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**TCCN:** ECON 1301

### ECO 2314. Principles of Microeconomics.

This course provides an introduction to the microeconomics of a modern industrial society. Emphasis is placed on supply and demand, cost and price concepts, market structures, income distribution, and similar issues. Prerequisite: MATH 1315 or MATH 1319 or MATH 1329 or MATH 2331 or MATH 2417 or MATH 2471 any with a grade of "D" or better or ACT Mathematics score of 27 or better or SAT Mathematics score of 580 or better or SAT Math Section Score 600 or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**TCCN:** ECON 2302

### ECO 2315. Principles of Macroeconomics.

This course provides an introduction to the macroeconomics of a modern industrial society. Emphasis is placed on the analysis of national income, economic stability, fiscal policy, money and banking, economic growth, and international trade. Prerequisites: [AG 2383 or ECO 2314 either with a grade of "D" or better] and [MATH 1315 or MATH 1319 or MATH 1329 or MATH 2331 or MATH 2417 or MATH 2471 any with a grade of "D" or better or ACT Mathematics score of 27 or better or SAT Mathematics score of 580 or better or SAT Math Section Score 600 or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**TCCN:** ECON 2301

### ECO 3301. Economics of Sports.

This course focuses on the business and economics aspects of professional and intercollegiate sports. Topics include the role of sports leagues, the demand for sports, the structure of labor markets in the four major sports, salaries of professional athletes, antitrust legislation, and intercollegiate athletics. Prerequisite: ECO 2314 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### ECO 3304. Environmental Economics for Decision Makers.

Economic analytical tools and concepts are used to understand how the environment, economy, and businesses interact and the importance of public policy in shaping this interaction. Natural resources as inputs to production are explored. Current policy issues and environmental problems provide illustration and application. Prerequisite: ECO 2301 or ECO 2314 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### ECO 3305. Law and Economics.

An analysis of the role of economics in the examination of law. This course considers the influence that economic theories have had on legal theory, including contracts, property, torts, business regulation, and crime. Prerequisite: ECO 2301 or ECO 2314 either with a grade of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### ECO 3311. Money and Banking.

A study of money and credit in the modern economy. Examines the development of modern money and banking systems, the structure of the Federal Reserve System, and monetary theory. Prerequisite: ECO 2314 and ECO 2315 both with grades of "C" or better and [MATH 1329 or MATH 2331 or MATH 2471] any with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### ECO 3313. Labor Economics.

A study of the application to labor markets of supply and demand principles. Topics include the work/leisure decision, time allocation in the household, the demand for education and training, the firm's use of labor inputs, the impact of unions, and discrimination in labor markets based on race and gender. Prerequisite: ECO 2314 with a grade of "C" or better and [MATH 1329 or MATH 2331 or MATH 2471] any with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### ECO 3314. Intermediate Microeconomics.

A study of theories of supply and demand; consumer and producer decision-making; firm pricing policies; product and resource markets under conditions of perfect and imperfect competition; and imperfect and asymmetric information. Prerequisite: ECO 2314 and ECO 2315 with a grade of "C" or better and [MATH 1329 or MATH 2331 or MATH 2471] any with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ECO 3315. Intermediate Macroeconomics.**

An analysis of the traditional and modern theories of inflation, unemployment, long-run economic growth, and stabilization policies for promoting economic stability. Prerequisite: ECO 2314 and ECO 2315 both with grades of "C" or better and [MATH 1329 or MATH 2331 or MATH 2471] any with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ECO 3317. International Economics.**

A study of the basis for trade among nations and the means of its financing, customs unions, balance-of-payments problems, and similar issues. (MULT) Prerequisite: ECO 2314 and ECO 2315 both with grades of "C" or better and [MATH 1329 or MATH 2331 or MATH 2471] any with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Multicultural Content

**Grade Mode:** Standard Letter

**ECO 3320. Emerging Market Economies.**

The course focuses on the structural characteristics of the emerging market economies, with an emphasis on analyzing the salient economic challenges and opportunities facing contemporary emerging market economies. (WI) Prerequisite: ECO 2314 and ECO 2315 both with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**ECO 3327. Public Finance.**

A study of the growth of the revenue and debt of the United States, taxation and tax incidence theory, and the effect of public expenditures and taxes on economic growth. (WI). Prerequisite: ECO 2314 and ECO 2315 both with grades of "C" or better and [MATH 1329 or MATH 2331 or MATH 2471] any with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**ECO 3334. Business Enterprise and Public Policy.**

A survey of the development and structure of American industry and of governmental regulation of business. (WI) Prerequisite: ECO 2314 with a grade of "C" or better; MATH 1329 or MATH 2331 or MATH 2471 with a grade of "D" or better; Overall GPA 2.0.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**ECO 3335. Managerial Economics.**

A study of the application of economic analysis in the formulation of business policies. Includes demand analysis and pricing policies. Prerequisite: ECO 2314 with a grade of "C" or better and [MATH 1329 or MATH 2331 or MATH 2471] any with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ECO 3353. Comparative Economic Systems.**

An analysis of the theory and practice of capitalism, socialism, and communism. Prerequisite: ECO 2301 or [ECO 2314 and ECO 2315] either with a grade of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ECO 4305. Urban and Regional Economics.**

A study of urban and regional economic issues including regional growth, crime, transportation, and the urban-rural interface. A focus on sources and uses of models and data unique to regional science and urban economics. (WI) Prerequisites: ECO 2314 and ECO 2315 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**ECO 4313. Econometrics.**

This course studies statistical estimation, inference and forecasting methods used in economic research with a focus on models and methods unique to economics. Prerequisite: ECO 2314 and ECO 2315 and [MATH 2328 or QMST 2333] and [MATH 1329 or MATH 2331 or MATH 2471] all with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ECO 4381G. Empirical Data Analysis.**

The application of data analysis and visualization techniques to analyze relationships between economic variables and convey findings in a clear and impactful way using programs such as Excel, SAS, Stata, and Python. Topics include descriptive statistics, simple and multiple regression analysis, statistical inference, and best practices in data visualization. Emphasis is placed on applications and hands-on data analysis. Prerequisite: ECO 2314 and ECO 2315 and [MATH 1329 or MATH 2331 or MATH 2471] all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter



**ECO 4390. Internship in Economics.**

Integration of professional and academic experience through an internship with an external employer. Credit awarded as pass/fail or grade at departmental election. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Credit/No Credit

**ECO 4395. Independent Study in Economics.**

An in-depth study of a single topic or related problem solved through economic research. May be repeated once for credit with different emphasis. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Finance (FIN)

**FIN 3301. Real Estate.**

A study of basic real estate principles. Topics include legal instruments and processes, property management, valuations, planning, development and sales, financing, and private and public interests. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 3312. Business Finance.**

This course is an introduction to the finance function and to problems confronting financial managers. Topics covered include ratio analysis, time value of money, asset valuation, and risk and return. Prerequisite: ACC 2361 and CIS 1323 and [ECO 2314 or ECO 2315] and [MATH 1329 or MATH 2331 or MATH 2471] all with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 3313. Financial Management.**

This course is an advanced study of intermediate and long-term financing alternatives, the incorporation of risk analyses in capital budgeting and the determination of capital costs, capital structure, and dividend policies. Prerequisite: FIN 3312 with a grade of "B" or better and ACC 2362 and ECO 2314 and ECO 2315 and [QMST 2333 or MATH 2328] with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 3316. Financial Information Technologies.**

This course introduces students to the technology supporting financial modeling and decision making. Students in this course use computers to apply concepts and theories learned in the introductory Finance course. Students also rely on quantitative analysis and use the internet. Prerequisite: FIN 3312 with a grade of "B" or better and ACC 2362 and ECO 2314 and ECO 2315 and [QMST 2333 or MATH 2328] all with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 3318. Investment Analysis.**

This course investigates the principles of investing personal and institutional funds. Students in this course also examine information sources, exchanges, and regulations. Prerequisite: FIN 3312 with a grade of "B" or better and ACC 2362 and ECO 2314 and ECO 2315 and [QMST 2333 or MATH 2328] all with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 3325. Personal Financial Management.**

A study of modern money management, including budgeting, banking, real estate, insurance, consumer credit, and retirement and estate planning. Not for Business majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 3326. Financial Planning Insurance.**

An introduction to the steps in the financial planning process. Topics include assessing financial objectives, financial planning, and personal financial management. Insurance planning is emphasized. Prerequisites: FIN 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 3340. Fundamentals of Business Finance.**

This course is an introduction to the financial function within a business and the various tools used in financial decision-making. Topics covered will include financial statement analysis, risk and return, time value of money, and asset valuation. Prerequisite: (ACC 2301 or [ACC 2361 and ACC 2362]) and (ECO 2301 or [ECO 2314 and ECO 2315]) with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4315. Financial Modeling and Equity Analysis.**

This course reviews and extends students' ability to perform financial statement analysis and forecasting. The focus of the course will be on producing objective, high-quality company valuation research. Students will choose and defend inputs for quantitative analysis; they will also discover and illustrate the importance of qualitative factors in firm value and performance. Prerequisites: FIN 3313 and FIN 3316 both with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4317. Case Problems in Finance.**

An application of investment and financial management techniques and concepts to finance cases. Issues and alternatives are identified and evaluated. (WI) Prerequisite: FIN 3313 and FIN 3316 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**FIN 4318. Portfolio Management & Derivatives.**

An advanced investments course which includes the following topics: portfolio analysis and management, derivatives theory and pricing, and applications of derivatives in portfolio management. Prerequisite: FIN 3313 and FIN 3316 and FIN 3318 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4319. Financial Markets and Institutions.**

A study of financial assets, money and capital markets, institutional intermediaries, and the impact of interest rates. Affords a thorough examination of the financial system facilitating economic growth and development. Prerequisite: ECO 3311 and FIN 3313 and FIN 3316 all with grades of "D" or better. Corequisite: FIN 3318 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4320. Treasury and Working Capital Management.**

A study of working capital and short-term financial management. Major topics include cash collections, cash concentration, disbursement management, forecasting cash flows, management of receivables and inventory, banking relationships, and short-term investment and borrow strategies. Prerequisite: FIN 3313 and FIN 3316 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4321. Real Estate Finance.**

An analysis of problems involved in selecting and financing real estate investment opportunities. Prerequisite: FIN 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4322. Student Managed Investment Fund Practicum.**

The course examines the issues involved in the management and investment strategies of an endowment. It focuses on investment analysis, asset allocation, portfolio monitoring, evaluation, and rebalancing. May be repeated one time for credit with different emphasis. Prerequisites: FIN 3318 with a grade of "D" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4331. International Finance.**

A study of international finance principles and their application in a multinational financial management setting. (MULT) Prerequisite: ECO 3311 and FIN 3313 and FIN 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Multicultural Content

**Grade Mode:** Standard Letter

**FIN 4340. Commercial Bank Management.**

Examines a variety of aspects of managing a commercial bank. Provides students with a conceptual framework for determining the effects of various decisions and environmental factors on a commercial bank's operations. Issues addressed include bank regulations, asset and liability management, analyzing bank performance, and capital management. Prerequisite: FIN 3313 and FIN 3316 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4380A. Advance Capital Budgeting.**

A study of capital budgeting techniques, analyses (including risk), and strategies, and their implementation in capital assets investment. Prerequisite: FIN 3313 and FIN 3316 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**FIN 4380J. Introduction to Finance Analytics.**

This course examines how data can be turned into insights for advance Finance concepts (trading strategies, portfolio optimization, model evaluation, investment planning, etc.). This course will show how to use open-source software (R, Python) in a Finance context. This is a hands-on practical programming course with step-by-step source code, in-class exercises and full solutions provided. No previous knowledge of programming is required. However, to be successful in this course you need to want to learn to program. Upon completion, students will be aware of financial models related to investments and corporate finance and will be able to write simple code. Prerequisite: FIN 3313 and FIN 3318 both with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**FIN 4380K. Financial Engineering.**

This course starts with an introduction to the financial markets, basics of trading and market microstructure. It covers options, forward and futures contracts. By the end of this course students will have a good knowledge of how these contracts work, how they are used, and how they are priced. Students will develop the skills for using derivatives in hedging strategies and other techniques for risk management. Prerequisite: FIN 3313 and FIN 3316 and FIN 3318 all with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**FIN 4380L. Fixed Income Analysis.**

This course will cover fixed income products, analytical techniques for valuing bonds, and the quantification of bond exposure to various types of risk. The class will discuss the basics of pricing, the risk/return characteristics of fixed income and embedded option analysis, bond duration measures, convexity, credit and rating factors, and basic portfolio applications. Other topics will include: the structure of the U.S. bond market, securitization, yield curve, and forward rates. Prerequisite: FIN 3318 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**FIN 4380M. Commercial Credit Analysis.**

This course will examine conceptual issues and various practical applications relevant to the commercial lending activities of banks using finance principles. The course will closely follow the Credit Essentials Course from the Risk Management Association, with the goal of preparing students for the Credit Essentials Certificate Examination through RMA at the end of the semester. Topics will include identifying customer needs, analyzing financial statements, loan structuring and documentation, and problem loan identification. Prerequisite: FIN 3318 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**FIN 4380N. Selling Financial Services.**

This course examines principles and various practical applications involved in selling financial products and services with special focus on the practical implementation of selling these products in the banking industry. Cases, exercises, questions and assignments will be used to supplement textbook materials. Prerequisite: FIN 3313 and MKT 3343 both with grades of "D" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FIN 4390. Internship in Finance.**

Integration of professional and academic experience through an internship with an external employer. Students must have completed at least nine hours of major courses. Credit awarded as pass/fail or grade at departmental election. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Credit/No Credit

**FIN 4395. Independent Study in Finance.**

An in-depth study of a single topic or related problem solved through finance research. May be repeated once for credit with different emphasis. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**Minimum required: 120  
semester credit hours**

**General Requirements**

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional

hours of English literature, six hours of 2000-level modern language courses and a minor. In addition to completing the mathematics and life and physical sciences requirements of the general education core curriculum, students must complete three additional hours from anthropology (biological anthropology only), biology, chemistry, computer science, geography (physical geography only), mathematics, philosophy (logic only), or physics. For this program, the additional literature course may be satisfied by selecting a sophomore literature course for the 040 component of the core curriculum.

- To be eligible to declare the B.A. degree with a major in Economics, students must be in good academic standing.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy degree requirements.
- For transfer students, 12 semester credit hours in Economics (or equivalents) may be transferred from a Texas public institution of higher education for the Economics Field of Study and be applied to the Bachelor of Arts degree with a major in Economics at Texas State University. More information about the [Field of Study](http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/) (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
ECO 2314	Principles of Microeconomics	3
TCCN: ECON 2302		
MATH 1329	Mathematics for Business and Economics II	3
or MATH 2321 Calculus for Life Sciences I		
TCCN: MATH 1325 or MATH 2313		
ANLY 2333	Business Statistics	3
or MATH 1312 College Statistics and Algebra		
TCCN: BUSI 2305 or MATH 1342		
<b>Total Hours</b>		<b>12</b>

- Students must achieve the following minimum grade point averages for graduation:

- a Texas State GPA of 2.00,
- a major(s) GPA of 2.25 (includes major courses and restricted/advanced electives), and
- a GPA of 2.0 in the minor(s).

## Course Requirements

### Freshman

First Semester Hours	Second Semester Hours
Communication Component Code 010	3 Communication Component Code 010
Life and Physical Sciences Component Code 030	3 Life and Physical Sciences Component Code 030
Component Area Option 090	3 American History Component Code 060

MATH 1329 (Mathematics Component 020 [TCCN MATH 1325])	3 ENG Literature (Language, Philosophy, and Culture Component 040) <sup>2</sup>	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 Modern Language 1410	4
US 1100	1	
<b>16</b>		<b>16</b>

### Sophomore

First Semester Hours	Second Semester Hours	
ECO 2314 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 2302] )	3 ECO 2315 (TCCN ECON 2301)	3
ENG Literature (Component Area Option 090/094) <sup>2</sup>	3 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
American History Component Code 060	3 BA Computer Science, Logic, Mathematics or Science	3
Modern Language 1420	4 Modern Language 2310	3
Minor	3 Minor	3
	16	15

### Junior

First Semester Hours		Second Semester Hours	
ECO 3314	3	ECO 3315	3
Creative Arts Component Code 050	3	ECO Advanced Elective <sup>1</sup>	3
Modern Language 2320	3	Minor or Free Electives	9
Minor	6		
15		15	

### Senior

First Semester Hours	Second Semester Hours
ECO Advanced Elective <sup>1</sup>	3 ECO Advanced Electives <sup>1</sup> 6
Free Electives	7 Free Electives 8
Minor or Free Elective	3
13	14

**Total Hours: 120**

<sup>1</sup> The Economics Advanced Electives may be chosen from: ECO 3301, ECO 3304, ECO 3305, ECO 3311, ECO 3313, ECO 3317, ECO 3320, ECO 3327, ECO 3334, ECO 3335, ECO 3353, ECO 4305, ECO 4313, ECO 4381G, ECO 4390, and ECO 4395.

<sup>2</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

**Minimum required: 120 semester credit hours**

## Admission Requirements

Admission to the McCoy College of Business Administration (McCoy College) is competitive, and a student must be admitted to the McCoy

College to pursue a B.B.A. degree. Consideration for admission to McCoy College undergraduate programs is based on specific admission criteria and is conducted as a rolling admission process. For current Texas State students, applications are available online at <http://advising.mccoy.txstate.edu/apply> (<http://advising.mccoy.txstate.edu/apply/>). For students not yet admitted to the University, applications are available online at [www.applytexas.org](http://www.applytexas.org) (<http://www.applytexas.org>). Students should list a business major as their first major choice.

Priority dates are March 1 for summer/fall semester and October 15 for the spring semester. Applications received after the priority date will be considered for admission on a space-available basis. Students not yet admitted to Texas State must meet Texas State admission deadlines. Students attending Texas State who are currently on academic probation are not eligible for admission to McCoy College.

## Freshmen and Students with fewer than 30 Semester Credit Hours

Students with fewer than 30 semester credit hours will be automatically admitted to the McCoy College if they receive assured admission (<http://www.admissions.txstate.edu/future/freshman/admissions-requirements.html>) to Texas State and select a first-choice major in the McCoy College of Business Administration. Students who are admitted to the University but denied admission to McCoy College will be considered for admission to their second choice major or as an exploratory professional major.

## Students with 30 or more Semester Credit Hours

Students who have completed at least 30 semester credit hours, including ENG 1310, ENG 1320, and MATH 1329, either at Texas State or another college or university and who have a minimum 2.5 overall GPA will be considered for admission based upon a competitive index using the grades from ENG 1310, ENG 1320, MATH 1329, and the overall GPA from all colleges and universities attended. Students will be automatically admitted if they have a cumulative GPA of 3.25 or higher and have completed ENG 1310, ENG 1320 and MATH 1329.

## General Requirements

- For the B.B.A. degree, any McCoy College student whose Texas State GPA drops below a 2.0 is placed on probation by Texas State and on restricted status by McCoy College. Students on restricted status must increase their Texas State GPA to at least 2.0 in the subsequent semester or their admission to McCoy College will be voided. Students are required to meet with a representative of the McCoy College Academic Advising Center to remove probation holds; otherwise, the hold will prevent registration or schedule changes. A student whose admission is voided may regain admission to McCoy College by going through the application process and competing with other applicants for openings. Students with a Texas State GPA below a 2.0 are also subject to the University academic probation and suspension policies.
- All students seeking the B.B.A. must complete the following general education core curriculum courses as required by McCoy College. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for other information about the general education core curriculum.
- To provide a common body of knowledge in business, all students seeking the B.B.A. must complete the following common core of

business courses or their equivalents as required by the McCoy College:

Code	Title	Hours
B A 1310	Introduction to Business	3
ISAN 1323	Introduction to Microcomputer Applications	3
ECO 2314	Principles of Microeconomics	3
ECO 2315	Principles of Macroeconomics	3
ANLY 2333	Business Statistics	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
B A 3110	Professional Development I	1
B A 3120	Professional Development II	1
BLAW 3301	Legal Environment of Business	3
MGT 3303	Management of Organizations	3
FIN 3312	Business Finance	3
MKT 3343	Principles of Marketing	3
MGT 3353	Business Communication	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
MGT 4335	Strategic Management and Business Policy	3

- A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.
- Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general sequence of courses specified for the curriculum in this section of the catalog.
- Also, students who did not satisfactorily complete at least two years of the same foreign language in high school must complete two semesters (6-8 hours) of a single foreign language in college.
- Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy degree requirements.
- For transfer students, 24 semester credit hours in the business core curriculum (or their equivalents) may be transferred from a Texas public institution of higher education for the Business Administration and Management Field of Study and be applied to the B.B.A. major in Economics at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional business courses, please contact the McCoy College of Business CenturyLink Academic Advising Center for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. Students who complete MATH 1319 (TCCN: MATH 1324) in the FOS will receive 3 semester credit hours towards free electives.

Code	Title	Hours
ISAN 1323	Introduction to Microcomputer Applications	3
TCCN: BCIS 1305		
B A 1310	Introduction to Business	3
TCCN: BUSI 1301		
ECO 2314	Principles of Microeconomics	3
TCCN: ECON 2302		



ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
ACC 2361	Introduction to Financial Accounting	3
TCCN: ACCT 2301		
ACC 2362	Introduction to Managerial Accounting	3
TCCN: ACCT 2302		
ANLY 2333	Business Statistics (Directed Elective)	3
TCCN: BUSI 2305		
Elective		3
TCCN: MATH 1324		
<b>Total Hours</b>		<b>24</b>

9. Students must achieve the following minimum grade-point averages for graduation:

- a Texas State GPA of 2.00
- a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives); and
- a GPA of 2.0 in the minor(s).

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
MATH 1329 (Mathematics Component 020 [TCCN MATH 1325])	3	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	Life and Physical Sciences Component Code 030	3
B A 1310 (TCCN BUSI 1301)	3	American History Component Code 060	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	ISAN 1323 (TCCN BCIS 1305) <sup>1</sup>	3
US 1100	1		
<b>16</b>		<b>15</b>	

Sophomore			
First Semester Hours		Second Semester Hours	
ACC 2361 (TCCN ACCT 2301)	3	ACC 2362 (TCCN ACCT 2302)	3
ECO 2314 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 2302])	3	ECO 2315 (TCCN ECON 2301)	3
Life and Physical Sciences Component Code 030	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
ANLY 2333 (TCCN BUSI 2305)	3	Creative Arts Component Code 050	3

American History	3	Component Area Option 090	3
Component Code 060			
B A 3110			1
15			16
Junior			
First Semester Hours		Second Semester Hours	
BLAW 3301 (TCCN BUSI 2301)	3	ECO 3315	3
ISAN 3380	3	ECO Advanced Elective <sup>2</sup>	3
ECO 3314	3	FIN 3312	3
ECO Advanced Elective <sup>2</sup>	3	MGT 3353	3
MGT 3303	3	MKT 3343	3
B A 3120	1		
16			15

Senior			
First Semester Hours		Second Semester Hours	
ECO Advanced Elective <sup>2</sup>	3	MGT 4335	3
Business, Advanced Elective <sup>3</sup>	3	ECO Advanced Elective <sup>2</sup>	3
Choose 3 hours from the following:	3	Business, Advanced Electives <sup>3</sup>	6
ECO 4313			
ECO 4381G			
ANLY 3334			
ANLY 3339			
ANLY 3341			
Free Electives	6		
<b>15</b>		<b>12</b>	

**Total Hours: 120**

<sup>1</sup> Credit can be earned by successfully passing a test. Students must pay a fee to take the test.

<sup>2</sup> The Economics Advanced Electives may be chosen from: ECO 3301, ECO 3304, ECO 3305, ECO 3311, ECO 3313, ECO 3317, ECO 3320, ECO 3327, ECO 3334, ECO 3335, ECO 3353, ECO 4305, ECO 4313, ECO 4381G, ECO 4390, and ECO 4395.

<sup>3</sup> The advanced electives in business may be chosen from any 3000-4000 level business course (ACC/B\_A/BLAW/ISAN/ECO/FIN/MGT/MKT/ANLY) not already required in the degree, for which the student meet prerequisites, and available to any business major.

**Minimum required: 120 semester credit hours**

## Admission Requirements

Admission to the McCoy College of Business Administration (McCoy College) is competitive, and a student must be admitted to the McCoy College to pursue a B.B.A. degree. Consideration for admission to McCoy College undergraduate programs is based on specific admission criteria and is conducted as a rolling admission process. For current Texas State students, applications are available online at <http://advising.mccoy.txstate.edu/apply> (<http://advising.mccoy.txstate.edu/apply>). For students not yet admitted to the University, applications are

available online at [www.applytexas.org](http://www.applytexas.org) (<http://www.applytexas.org>). Students should list a business major as their first major choice.

Priority dates are March 1 for summer/fall semester and October 15 for the spring semester. Applications received after the priority date will be considered for admission on a space-available basis. Students not yet admitted to Texas State must meet Texas State admission deadlines. Students attending Texas State who are currently on academic probation are not eligible for admission to McCoy College.

## Freshmen and Students with fewer than 30 Semester Credit Hours

Students with fewer than 30 semester credit hours will be automatically admitted to the McCoy College if they receive assured admission (<http://www.admissions.txstate.edu/future/freshman/admissions-requirements.html>) to Texas State and select a first-choice major in the McCoy College of Business Administration. Students who are admitted to the University but denied admission to McCoy College will be considered for admission to their second choice major or as an exploratory professional major.

## Students with 30 or more Semester Credit Hours

Students who have completed at least 30 semester credit hours, including ENG 1310, ENG 1320, and MATH 1329, either at Texas State or another college or university and who have a minimum 2.5 overall GPA will be considered for admission based upon a competitive index using the grades from ENG 1310, ENG 1320, MATH 1329, and the overall GPA from all colleges and universities attended. Students will be automatically admitted if they have a cumulative GPA of 3.25 or higher and have completed ENG 1310, ENG 1320 and MATH 1329.

## General Requirements

- For the B.B.A. degree, any McCoy College student whose Texas State GPA drops below a 2.0 is placed on probation by Texas State and on restricted status by McCoy College. Students on restricted status must increase their Texas State GPA to at least 2.0 in the subsequent semester or their admission to McCoy College will be voided. Students are required to meet with a representative of the McCoy College Academic Advising Center to remove probation holds; otherwise, the hold will prevent registration or schedule changes. A student whose admission is voided may regain admission to McCoy College by going through the application process and competing with other applicants for openings. Students with a Texas State GPA below a 2.0 are also subject to the University academic probation and suspension policies.
- All students seeking the B.B.A. must complete the following general education core curriculum courses as required by McCoy College. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) section of this catalog for other information about the general education core curriculum.
- To provide a common body of knowledge in business, all students seeking the B.B.A. must complete the following common core of business courses or their equivalents as required by the McCoy College:

Code	Title	Hours
B A 1310	Introduction to Business	3
ISAN 1323	Introduction to Microcomputer Applications	3

ECO 2314	Principles of Microeconomics	3
ECO 2315	Principles of Macroeconomics	3
ANLY 2333	Business Statistics	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
B A 3110	Professional Development I	1
B A 3120	Professional Development II	1
BLAW 3301	Legal Environment of Business	3
MGT 3303	Management of Organizations	3
MKT 3343	Principles of Marketing	3
FIN 3312	Business Finance	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
MGT 3353	Business Communication	3
MGT 4335	Strategic Management and Business Policy	3

- A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.
- Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general sequence of courses specified for the curriculum in this section of the catalog.
- Also, students who did not satisfactorily complete at least two years of the same foreign language in high school must complete two semesters (6-8 hours) of a single foreign language in college.
- Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy degree requirements.
- For transfer students, 24 semester credit hours in the business core curriculum (or their equivalents) may be transferred from a Texas public institution of higher education for the Business Administration and Management Field of Study and be applied to the B.B.A. major in Finance at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional business courses, please contact the McCoy College of Business CenturyLink Academic Advising Center for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. Students who complete MATH 1319 (<http://mycatalog.txstate.edu/search/?P=MATH%201319>) (TCCN: MATH 1324) in the FOS will receive 3 semester credit hours towards free electives.

Code	Title	Hours
ISAN 1323	Introduction to Microcomputer Applications	3
TCCN: BCIS 1305		
B A 1310	Introduction to Business	3
TCCN: BUSI 1301		
ECO 2314	Principles of Microeconomics	3
TCCN: ECON 2302		
ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
ACC 2361	Introduction to Financial Accounting	3

TCCN: ACCT 2301	
ACC 2362 Introduction to Managerial Accounting	3
TCCN: ACCT 2302	
ANLY 2333 Business Statistics	3
TCCN: BUSI 2305	
Elective	3
TCCN: MATH 1324	
<b>Total Hours</b>	<b>24</b>

9. Students must achieve the following minimum grade-point averages for graduation:

- a Texas State GPA of 2.00
- a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives); and
- a GPA of 2.0 in the minor(s); and
- a major GPA of 2.25.

## Course Requirements

		<b>Freshman</b>	
		<b>First Semester Hours</b>	<b>Second Semester Hours</b>
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
MATH 1329 (Mathematics Component 020 [TCCN MATH 1325])	3	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	Life and Physical Sciences Component Code 030	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	American History Component Code 060	3
B A 1310 (TCCN BUSI 1301)	3	ISAN 1323 (TCCN BCIS 1305) <sup>1</sup>	3
US 1100	1		
	<b>16</b>		<b>15</b>

		<b>Sophomore</b>	
		<b>First Semester Hours</b>	<b>Second Semester Hours</b>
ACC 2361 (TCCN ACCT 2301)	3	ACC 2362 (TCCN ACCT 2302)	3
ECO 2314 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 2302])	3	ECO 2315 (TCCN ECON 2301)	3
ANLY 2333 (TCCN BUSI 2305)	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
American History Component Code 060	3	B A 3110	1
Life and Physical Sciences Component Code 030	3	Creative Arts Component Code 050	3

FIN 3312	3
<b>15</b>	<b>16</b>
<b>Junior</b>	
<b>First Semester Hours</b>	<b>Second Semester Hours</b>
ACC 3305	3
BLAW 3301 (TCCN BUSI 2301)	3
ECO 3311	3
ISAN 3380	3
B A 3120	1
MGT 3303	3
<b>16</b>	<b>15</b>

		<b>Senior</b>	
		<b>First Semester Hours</b>	<b>Second Semester Hours</b>
MKT 3343	3	FIN 4319	3
FIN Advanced Electives <sup>2</sup>	6	MGT 4335	3
Support Elective	3	FIN Advanced Elective <sup>2</sup>	3
Free Elective	3	Free Electives	3
	<b>15</b>		<b>12</b>

**Total Hours: 120**

<sup>1</sup> Credit can be earned by successfully passing a test. Students must pay a fee to take the test.

<sup>2</sup> The Finance Advanced Electives may be chosen from: FIN 4315, FIN 4317, FIN 4318, FIN 4320, FIN 4321, FIN 4322, FIN 4331, FIN 4340, FIN 4380A, FIN 4380J, FIN 4380K, FIN 4380L, FIN 4390 and FIN 4395.

## Support Elective

<b>Code</b>	<b>Title</b>	<b>Hours</b>
ACC 3308	Survey of Income Tax	3
ACC 3313	Intermediate Accounting I	3
ACC 3314	Intermediate Accounting II	3
ACC 3365	Cost/Managerial Accounting	3
ACC 3385	Accounting Systems	3
ECO 3301	Economics of Sports	3
ECO 3304	Environmental Economics for Decision Makers	3
ECO 3305	Law and Economics	3
ECO 3313	Labor Economics	3
ECO 3314	Intermediate Microeconomics	3
ECO 3315	Intermediate Macroeconomics	3
ECO 3317	International Economics	3
ECO 3320	Emerging Market Economies	3
ECO 3327	Public Finance	3
ECO 3334	Business Enterprise and Public Policy	3
ECO 3335	Managerial Economics	3
ECO 3353	Comparative Economic Systems	3
ECO 4305	Urban and Regional Economics	3
ECO 4313	Econometrics	3
ECO 4381G	Empirical Data Analysis	3
ECO 4390	Internship in Economics	3
ECO 4395	Independent Study in Economics	3

The minor in Economics requires 18 semester credit hours. Economics majors are not eligible to select the Economics minor.

Code	Title	Hours
<b>Required Courses</b>		
ECO 2314	Principles of Microeconomics	3
ECO 2315	Principles of Macroeconomics	3
<b>Electives</b>		
Choose 12 hours of advanced ECO courses		12
<b>Total Hours</b>		<b>18</b>

McCoy Hall Room 524  
T: 512.245.2571 F: 512.245.2850  
www.mgt.mccoy.txstate.edu (<http://www.mgt.mccoy.txstate.edu>)

The mission of the Department of Management is to educate our students to become successful managers and leaders in a dynamic business world.

To accomplish this mission, we balance effective teaching with scholarly activities and our professional service contributions. Faculty focus on quality in all department course offerings and undertakings to help prepare students for leadership and service in private and public organizations.

The Management program prepares students for challenging careers in a variety of business, non-profit, and governmental organizations. Management majors typically pursue careers in human resource management, retail management, operations and supply chain management, hospital administration, office management, and sales management.

#### Degree Programs Offered

Bachelor of Business Administration (B.B.A.) major in Management

The concentration in Entrepreneurial Studies is designed for students who wish to start, operate, or expand their own businesses or family-owned businesses.

The concentration in Human Resource Management is designed to prepare students for careers in human resource management.

Both concentrations consist of 12 hours of undergraduate coursework that may be accommodated within the 120 hours required in the undergraduate business curriculum. More information is available in the McCoy College Academic Advising Center.

#### AACSB Accreditation

The McCoy College of Business is accredited by the Association to Advance Collegiate Schools of Business (AACSB). AACSB Accreditation is known, worldwide, as the longest standing, most recognized form of specialized/professional accreditation an institution can earn.

Bachelor of Business Administration (B.B.A.)

- Major in Management (p. 179)
- Major in Management (Entrepreneurial Studies Concentration) (p. 181)
- Major in Management (Human Resource Management Concentration) (p. 183)

- Major in Management (Leadership and Decision-Making Studies Concentration) (p. 185)

## Minor

- Innovation and Entrepreneurship (p. 187)

## Courses in Management (MGT)

### MGT 3301. Introduction to Management.

This course is an introductory course in management for non-business majors. The course is a fundamental study of management practices in modern organizations. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### MGT 3303. Management of Organizations.

A study of management functions in modern organizations, the internal and external environmental factors affecting organizational efficiency, and the application of quantitative and behavioral science to management study. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

### MGT 3353. Business Communication.

This course provides an introduction to the uses of communication in business and focuses on communication models, general semantics, effective writing style, selection and organization of content and medium(s), effective oral communication, employment communication, and causes of miscommunication. Students will not receive credit for both MGT 3353 and MGT 3453. (WI) Prerequisites: ENG 1310 and [ENG 1320 or ENG 1321] and [COMM 1310 or COMM 2338 or COMM 2315] all with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

### MGT 3360. Studies in Entrepreneurship.

Students gain personal insights into entrepreneurship as entrepreneurs describe their contributions, reveal the sources of ideas, and discover ways of growth and success. Includes starting and managing businesses as well as ownership forms, sources of funds, location analysis, facility requirements, management, marketing, and feasibility plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 3361. Small Business Operations and Financials.**

This course is a study of funding and financial concepts necessary to effectively operate a successful small business. Students will use software programs to maintain working capital and a complete set of books related to running businesses. Prerequisite: ACC 2301 or ACC 2361 either with a grade of "D" or better. Corequisite: MGT 3360 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 3362. Family Business and Franchising.**

This course addresses the important and unique management aspects of family businesses and franchises. Family business topics include family culture, communication, conflict resolution, succession, and estate planning. Franchising topics include franchise selection, contracts, legal issues, and current trends in franchising. Issues affecting both the franchisee and the franchisor are explored. Prerequisite: MGT 3361 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 3375. International Business.**

International business perspectives underlying different business functions. Concepts, processes, and philosophical bases for international operations in selected global markets are emphasized with culture and global dynamic environment as the basis. A project is required. (MULT) (WI). Prerequisite: MGT 3303 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 3453. Business Communication and Professional Development.**

This course is designed to enhance critical professional skills including interviewing, networking, teamwork, emotional and cultural intelligence, public speaking, and applicable ethical considerations. It introduces theories of business communication including communication models, general semantics, and causes of miscommunication. Students will not receive credit for both MGT 3453 and MGT 3353. (WI) Prerequisites: ENG 1310 and [ENG 1320 or ENG 1321] and [COMM 1310 or COMM 2338 or COMM 2315] all with grades of "D" or better and a 2.0 overall GPA.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4330. Operations Management.**

A study of the various aspects of managing production and operations management functions in manufacturing and service organizations. Methods necessary for analyzing and solving related problems to design, operations, and improvements of the systems that create products and/or services in a global supply chain environment are investigated and emphasized. Prerequisite: MGT 3303 and [IE 3330 or QMST 2333 or TECH 3364 or MATH 2328] both with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4335. Strategic Management and Business Policy.**

An integrative course in strategic management and business policy that utilizes the case method of instruction. A capstone course involving the analysis of business through the application of principles of accounting, communications, economics, finance, management, marketing, quantitative methods, and related disciplines. (Capstone Course) (WI) Prerequisite: MGT 3303 and MKT 3343 and FIN 3312 and [QMST 2333 or MATH 2328] all with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4340. Quality Management and Beyond.**

A conceptual and practical overview of the role of quality as a system for establishing a "world class" competitive position. It explores philosophies and ideas of the leading thinkers in quality management, impact of process improvement methods, quality requirements definition and organizational change as it applies to total quality initiatives. (WI) Prerequisite: [QMST 2333 or MATH 2328] with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4350. Business Plan Development.**

Students work in teams to select, create, and write solid business plans for proposed or real businesses. Prerequisite: MGT 3361 with a grade of "D" or better. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4351. Applied Entrepreneurship.**

Students design, staff, operate, and manage a business or service. Business teams develop financial and operational control systems and procedures for organizational, group, and individual performance evaluations, implement service and business projects, and provide a final public report. Prerequisite: MGT 4350 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter



**MGT 4353. Integrative Field Project.**

Students work directly with entrepreneurs to research projects and recommend solutions. May involve providing business development assistance to entrepreneurs. Students may work individually or in teams. Project results are summarized in a comprehensive written report and a formal oral presentation. Prerequisite: MGT 3360 with a grade of "D" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4370. Business Ethics.**

This course examines a variety of ethical issues in business from the point of view of practicing manager and corporate leaders. This course is designed to enhance moral awareness and facilitate individual development with respect to making ethical decisions that contribute to effective corporate management and leadership. Prerequisite: MGT 3303 and PHIL 1320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4371. Business, Government, and Society.**

An integration of a number of disciplines and value systems which affect and determine the proper role of business in satisfying the needs of customers, creditors, community, government, stockholders, managers, employees, suppliers, and society in general. (WI) Prerequisite: MGT 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4372. Effective Leadership.**

This course facilitates the development of leadership capabilities and addresses the complexities, paradoxes, and decision-making challenges of leadership. Through self-assessments, readings, lectures, and assignments students gain an appreciation of effective leadership approaches and are provided with opportunities to practice new leadership behaviors. Prerequisite: MGT 3303 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4373. Human Resource Management.**

A study of the principles of human resource management in public and private institutions. Stresses the human resource aspects of recruitment, selection and placement, performance appraisal and compensation. Prerequisite: MGT 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4375. Organizational Behavior and Human Relations.**

A study of the role of the individual in formal organizations, group dynamics, motivation theory, communication and leadership. Integrates behavioral science concepts. Prerequisite: MGT 3303 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4377. Labor Relations and Collective Bargaining.**

A study of unions and their impact on private and public employment. Examines union growth and governance, collective bargaining, contract negotiation and administration, and arbitration and mediation. Prerequisite: MGT 4373 with a grade of "D" or better. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4378. Training and Development.**

This course is designed to develop theoretical and applied perspective on needs assessment, design, development, delivery and evaluation of training and development in organizational contexts. Prerequisites: MGT 4373 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4379. Organizational Staffing.**

A study of current theory and practice in the process of selecting the right employees for positions within the organization, including HR planning, EEO, job analysis, recruitment, and selection procedures. Prerequisite: MGT 4373 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4380. Compensation Management.**

A study of the compensation administration in public and private organizations, with stress on the determinants of general wage levels; job analysis and evaluation; incentive, merit, seniority, and executive compensation; fringe benefits, and wage and salary control. Prerequisite: MGT 4373 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4382. Leadership Development: Business as Unusual.**

This course is a directed study and practical application of the principles of "Business as Unusual." Students will develop leadership skills through an intensive, highly interactive class format. Students will be paired with upper-level business professionals for one-on-one coaching and mentoring. Prerequisite: MGT 3303 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4385. Management Thought: Past, Present, and Future.**

This course examines how thinking about management has developed over time. It discusses changing social, political, and technological forces challenging managers to think in new ways. Significant management ideas will be examined in their contexts for the purpose of better understanding how to successfully manage for the future. Prerequisite: MGT 3303 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4386. Professional Skills for the Global Workplace.**

This course provides a survey of relevant skills necessary for workplace communication in an international work setting. Through discussions, site visits, and application activities, students will leave the course with an understanding and ability to apply these skills in their careers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4390A. Advanced Business Communication.**

An advanced study of the uses of business communication in modern organizations. Students gain experience in making decisions involving selection and organization of communication content, and in choosing an appropriate medium for presentation of information. Emphasis is placed on gaining proficiency in various business communication processes. (WI) Prerequisite: MGT 3303 and MGT 3353 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4390G. Cross-Cultural Human Relations.**

This course is designed to develop theoretical and applied perspectives on cross-cultural human relations within a variety of international business contexts. (MULT) Prerequisite: MGT 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**MGT 4390J. Organizational Change & Decision-Making.**

This course presents an overview of the change process and stresses the key decision-making issues involved in reengineering and renewing organizations. Problems dealing with resistance and conflict during major change will be explored. Key decision processes for individuals, teams, and organizations are provided to make change possible and sustainable. Prerequisite: MGT 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**MGT 4390K. Business Creativity and Innovation.**

Focuses on the importance of creativity and innovation to business organizations. Topics include the generation of creative ideas, transformation of ideas into commercially viable products/services, legal protection of new products/services, and environmental factors contributing to innovation success. Course objectives are met primarily through classroom discussion and exercises. Prerequisite: MGT 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**MGT 4390R. Transformative Leadership for Nonprofits (NPs) and Non-Governmental Organizations (NGOs).**

This course provides a practical and strategic understanding of the legal, management and marketing challenges facing nonprofit and non-governmental organizations and the transformative leadership required to guide them as they attempt to do something positive for people, society and/or the environment beyond or between the roles of government and business.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**MGT 4390S. Business Contracts/Negotiation.**

This course focuses on techniques for the development and strategic planning required for successfully negotiating business contracts, negotiation skills, and conflict resolution issues/techniques. Prerequisite: MGT 3303 with a grade of "D" or better. Corequisite: MGT 4373 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**MGT 4390T. Effective Teams and Groups.**

An examination of and the consequent development of those skills necessary to effectively manage and increase the productivity of task-oriented groups and teams. Issues, problems, and concepts frequently encountered are addressed, as well as possible solutions. Prerequisite: MGT 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**MGT 4390U. Management for Sustainability.**

This course is designed to take a broad look at Sustainability from both Ecological and Managerial perspectives with a goal of developing an awareness and understanding of the major issues and shifts that today's organizations and societies are facing as they undertake their journey to become more sustainable. Prerequisite: MGT 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**MGT 4392. Human Resource Management Internship.**

This course integrates professional and academic experience through internship with an external employer. Prerequisites: MGT 4373 with a grade of "D" or better and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4393. Entrepreneurial Internship.**

The internship class provides integration of prior professional and academic experience through an entrepreneurial internship with an external employer. Prerequisite: MGT 3360 with a grade of "D" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4395. Management Internship.**

This course provides an integration of professional and academic experience through internship with an external employer. Credit is pass/fail or grade at department election. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4399. Independent Study in Management.**

Directed research and extensive written assignment(s) on a selected topic related to student's area of interest. Work may consist of literature reviews, integration of literature, or other appropriate independent research, and/or practical application of research. May be repeated once with different emphasis for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### Admission Requirements

Admission to the McCoy College of Business Administration (McCoy College) is competitive, and a student must be admitted to the McCoy College to pursue a B.B.A. degree. Consideration for admission to McCoy College undergraduate programs is based on specific admission criteria and is conducted as a rolling admission process. For current Texas State students, applications are available online at <http://advising.mccoy.txstate.edu/apply> (<http://advising.mccoy.txstate.edu/apply/>). For students not yet admitted to the University, applications are available online at [www.applytexas.org](http://www.applytexas.org) (<http://www.applytexas.org/>). Students should list a business major as their first major choice.

Priority dates are March 1 for summer/fall semester and October 15 for the spring semester. Applications received after the priority date will be considered for admission on a space-available basis. Students not yet admitted to Texas State must meet Texas State admission deadlines. Students attending Texas State who are currently on academic probation are not eligible for admission to McCoy College.

### Freshmen and Students with fewer than 30 Semester Credit Hours

Students with fewer than 30 semester credit hours will be automatically admitted to the McCoy College if they receive assured admission (<http://www.admissions.txstate.edu/future/freshman/admissions-requirements.html>) to Texas State and select a first-choice major in the McCoy College of Business Administration. Students who are admitted to the University but denied admission to McCoy College will be considered for admission to their second choice major or as an exploratory professional major.

### Students with 30 or more Semester Credit Hours

Students who have completed at least 30 semester credit hours, including ENG 1310, ENG 1320, and MATH 1329, either at Texas State or another college or university and who have a minimum 2.5 overall GPA will be considered for admission based upon a competitive index using the grades from ENG 1310, ENG 1320, MATH 1329, and the overall GPA from all colleges and universities attended. Students will be automatically admitted if they have a cumulative GPA of 3.25 or higher and have completed ENG 1310, ENG 1320 and MATH 1329.

### General Requirements

1. For the B.B.A. degree, any McCoy College student whose Texas State GPA drops below a 2.0 is placed on probation by Texas State and on restricted status by McCoy College. Students on restricted

status must increase their Texas State GPA to at least 2.0 in the subsequent semester or their admission to McCoy College will be voided. Students are required to meet with a representative of the McCoy College Academic Advising Center to remove probation holds; otherwise, the hold will prevent registration or schedule changes. A student whose admission is voided may regain admission to McCoy College by going through the application process and competing with other applicants for openings. Students with a Texas State GPA below a 2.0 are also subject to the University academic probation and suspension policies.

- All students seeking the B.B.A. must complete the following general education core curriculum courses as required by McCoy College. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for other information about the general education core curriculum.
- To provide a common body of knowledge in business, all students seeking the B.B.A. must complete the following common core of business courses or their equivalents as required by the McCoy College:

Code	Title	Hours
B A 1310	Introduction to Business	3
ISAN 1323	Introduction to Microcomputer Applications	3
ECO 2314	Principles of Microeconomics	3
ECO 2315	Principles of Macroeconomics	3
ANLY 2333	Business Statistics	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
B A 3110	Professional Development I	1
B A 3120	Professional Development II	1
BLAW 3301	Legal Environment of Business	3
MGT 3303	Management of Organizations	3
FIN 3312	Business Finance	3
MKT 3343	Principles of Marketing	3
MGT 3353	Business Communication	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
MGT 4335	Strategic Management and Business Policy	3

- A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.
- Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general sequence of courses specified for the curriculum in this section of the catalog.
- Also, students who did not complete satisfactorily at least two years of the same foreign language in high school must complete two semesters (6-8 hours) of a single foreign language in college.
- Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy degree requirements.
- For transfer students, 24 semester credit hours in the business core curriculum (or their equivalents) may be transferred from a Texas public institution of higher education for the Business Administration and Management Field of Study and be applied to

the B.B.A. major in Management at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional business courses, please contact the McCoy College of Business CenturyLink Academic Advising Center for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. Students who complete MATH 1319 (TCCN: MATH 1324) in the FOS will receive 3 semester credit hours towards free electives.

Code	Title	Hours
ISAN 1323	Introduction to Microcomputer Applications	3
TCCN: BCIS 1305		
B A 1310	Introduction to Business	3
TCCN: BUSI 1301		
ECO 2314	Principles of Microeconomics	3
TCCN: ECON 2302		
ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
ACC 2361	Introduction to Financial Accounting	3
TCCN: ACCT 2301		
ACC 2362	Introduction to Managerial Accounting	3
TCCN: ACCT 2302		
ANLY 2333	Business Statistics	3
TCCN: BUSI 2305		
Elective		3
TCCN: MATH 1324		
<b>Total Hours</b>		<b>24</b>

- Students must achieve the following minimum grade-point averages for graduation:
  - a Texas State GPA of 2.00
  - a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives); and
  - a GPA of 2.0 in the minor(s).

## Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
MATH 1329 (Mathematics Component 020 [TCCN MATH 1325])	3	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	Life and Physical Sciences Component Code 030	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	American History Component Code 060	3

B A 1310 (TCCN BUSI)	3	ISAN 1323 (TCCN BCIS 1305) <sup>1</sup>	3
US 1100	1		
	16		15

**Sophomore**

First Semester Hours	Second Semester Hours		
ACC 2361 (TCCN ACCT 2301)	3 ACC 2362 (TCCN ACCT 2302)	3	
ECO 2314 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 2302])	3 ECO 2315 (TCCN ECON 2301)	3	
American History Component 060	3 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3	
Life and Physical Sciences Component Code 030	3 Creative Arts Component Code 050	3	
ANLY 2333 (TCCN BUSI 2305)	3 BLAW 3301 (TCCN BUSI 2301)	3	
	B A 3110	1	
	15		16

**Junior**

First Semester Hours	Second Semester Hours		
MGT 3303	3 MGT 3353	3	
MKT 3343	3 FIN 3312	3	
ISAN 3380	3 Business, Advanced Elective <sup>3</sup>	3	
B A 3120	1 Free Electives	6	
Core Curriculum 090 – Component Area Option	3		
Free Electives	3		
	16		15

**Senior**

First Semester Hours	Second Semester Hours		
MGT 4330	3 MGT 4335	3	
MGT 4373	3 MGT Advanced Electives <sup>2</sup>	6	
MGT 4375	3 Business, Advanced Elective <sup>3</sup>	3	
Business, Advanced Electives <sup>3</sup>	6		
	15		12

**Total Hours: 120**

MGT/MKT/ANLY) not already required in the degree, for which the student meet prerequisites, and available to any business major.

## Minimum required: 120 semester credit hours

### Admission Requirements

Admission to the McCoy College of Business Administration (McCoy College) is competitive, and a student must be admitted to the McCoy College to pursue a B.B.A. degree. Consideration for admission to McCoy College undergraduate programs is based on specific admission criteria and is conducted as a rolling admission process. For current Texas State students, applications are available online at <http://advising.mccoy.txstate.edu/apply> (<http://advising.mccoy.txstate.edu/apply/>). For students not yet admitted to the University, applications are available online at [www.applytexas.org](http://www.applytexas.org) (<http://www.applytexas.org>). Students should list a business major as their first major choice.

Priority dates are March 1 for summer/fall semester and October 15 for the spring semester. Applications received after the priority date will be considered for admission on a space-available basis. Students not yet admitted to Texas State must meet Texas State admission deadlines. Students attending Texas State who are currently on academic probation are not eligible for admission to McCoy College.

### Freshmen and Students with fewer than 30 Semester Credit Hours

Students with fewer than 30 semester credit hours will be automatically admitted to the McCoy College if they receive assured admission (<http://www.admissions.txstate.edu/future/freshman/admissions-requirements.html>) to Texas State and select a first-choice major in the McCoy College of Business Administration. Students who are admitted to the University but denied admission to McCoy College will be considered for admission to their second choice major or as an exploratory professional major.

### Students with 30 or more Semester Credit Hours

Students who have completed at least 30 semester credit hours, including ENG 1310, ENG 1320, and MATH 1329, either at Texas State or another college or university and who have a minimum 2.5 overall GPA will be considered for admission based upon a competitive index using the grades from ENG 1310, ENG 1320, MATH 1329, and the overall GPA from all colleges and universities attended. Students will be automatically admitted if they have a cumulative GPA of 3.25 or higher and have completed ENG 1310, ENG 1320 and MATH 1329.

### General Requirements

- For the B.B.A. degree, any McCoy College student whose Texas State GPA drops below a 2.0 is placed on probation by Texas State and on restricted status by McCoy College. Students on restricted status must increase their Texas State GPA to at least 2.0 in the subsequent semester or their admission to McCoy College will be voided. Students are required to meet with a representative of the McCoy College Academic Advising Center to remove probation holds; otherwise, the hold will prevent registration or schedule changes. A student whose admission is voided may regain admission to McCoy College by going through the application process and competing with other applicants for openings. Students with a Texas State GPA

<sup>1</sup> Credit can be earned by successfully passing a test. Students must pay a fee to take the test.

<sup>2</sup> The Management Advanced Electives may be chosen from: MGT 3360, MGT 3361, MGT 3362, MGT 3375, MGT 4340, MGT 4353, MGT 4370, MGT 4371, MGT 4372, MGT 4377, MGT 4378, MGT 4379, MGT 4380, MGT 4382, MGT 4385, MGT 4390G, MGT 4390J, MGT 4390K, MGT 4390R, MGT 4390S, MGT 4390T, MGT 4390U, MGT 4390V, MGT 4395 and MGT 4399.

<sup>3</sup> The advanced electives in business may be chosen from any 3000-4000 level business course (ACC/B\_A/BLAW/ISAN/ECO/FIN/



below a 2.0 are also subject to the University academic probation and suspension policies.

- All students seeking the B.B.A. must complete the following general education core curriculum courses as required by McCoy College. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for other information about the general education core curriculum.
- To provide a common body of knowledge in business, all students seeking the B.B.A. must complete the following common core of business courses or their equivalents as required by the McCoy College:

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ISAN 1323	Introduction to Microcomputer Applications	3
ECO 2314	Principles of Microeconomics	3
ECO 2315	Principles of Macroeconomics	3
ANLY 2333	Business Statistics	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
B A 3110	Professional Development I	1
B A 3120	Professional Development II	1
BLAW 3301	Legal Environment of Business	3
FIN 3312	Business Finance	3
MGT 3303	Management of Organizations	3
MKT 3343	Principles of Marketing	3
MGT 3353	Business Communication	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
MGT 4335	Strategic Management and Business Policy	3

- A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.
- Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general sequence of courses specified for the curriculum in this section of the catalog.
- Also, students who did not complete satisfactorily at least two years of the same foreign language in high school must complete two semesters (6-8 hours) of a single foreign language in college.
- Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy degree requirements.
- For transfer students, 24 semester credit hours in the business core curriculum (or their equivalents) may be transferred from a Texas public institution of higher education for the Business Administration and Management Field of Study and be applied to the B.B.A. major in Management at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional business courses, please contact the McCoy College of Business CenturyLink Academic Advising Center for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University

course number in the following course list. Students who complete MATH 1319 (TCCN: MATH 1324) in the FOS will receive 3 semester credit hours towards free electives.

Code	Title	Hours
ISAN 1323	Introduction to Microcomputer Applications	3
TCCN: BCIS 1305		
B A 1310	Introduction to Business	3
TCCN: BUSI 1301		
ECO 2314	Principles of Microeconomics	3
TCCN: ECON 2302		
ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
ACC 2361	Introduction to Financial Accounting	3
TCCN: ACCT 2301		
ACC 2362	Introduction to Managerial Accounting	3
TCCN: ACCT 2302		
ANLY 2333	Business Statistics	3
TCCN: BUSI 2305		
Elective		3
TCCN: MATH 1324		
<b>Total Hours</b>		<b>24</b>

- Students must achieve the following minimum grade-point averages for graduation:

- a Texas State GPA of 2.00
- a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives); and
- a GPA of 2.0 in the minor(s).

## Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 (TCCN ENGL 1302))	3
MATH 1329 (Mathematics Component Code 020 [TCCN MATH 1325])	3	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	Life and Physical Sciences Component Code 030	3
B A 1310 (TCCN BUSI 1301)	3	American History Component Code 060	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	ISAN 1323	3
US 1100	1		
		<b>16</b>	<b>15</b>

		Sophomore	
		First Semester Hours	Second Semester Hours
ACC 2361 (TCCN ACCT 2301)	3	ACC 2362 (TCCN ACCT 2302)	3

ECO 2314 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 2302])	3 ECO 2315 (TCCN ECO 2301)	3
ANLY 2333 (TCCN BUSI 2305)	3 BLAW 3301 (TCCN BUSI 2301)	3
American History Component Code 060	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
Life and Physical Sciences Component Code 030	3 Creative Arts Component Code 050	3
	B A 3110	1
	<b>15</b>	<b>16</b>

**Junior**

First Semester Hours	Second Semester Hours	
MKT 3343	3 FIN 3312	3
MGT 3303	3 ISAN 3380	3
MGT 3353	3 MGT 3361	3
MGT 3360	3 Business, Advanced Elective <sup>2</sup>	3
Free Elective	3 Free Elective	3
B A 3120	1	
	<b>16</b>	<b>15</b>

**Senior**

First Semester Hours	Second Semester Hours	
MGT 4350	3 MGT 4335	3
MGT 4330	3 Choose 1 course from the following:	3
MGT 4373	3 MGT 3362	
MGT 4375	3 MGT 4351	
Component Area Option 090	3 MGT 4353	
	MGT 4393	
	MKT 3340	
	Business, Advanced Elective <sup>2</sup>	3
	Free Electives	3
	<b>15</b>	<b>12</b>

**Total Hours: 120**

<sup>1</sup> Credit can be earned by successfully passing a test. Students must pay a fee to take the test.

<sup>2</sup> The advanced electives in business may be chosen from any 3000-4000 level business course (ACC/B\_A/BLAW/ISAN/ECO/FIN/MGT/MKT/ANLY) not already required in the degree, for which the student meet prerequisites, and available to any business major.

## Minimum required: 120 semester credit hours

### Admission Requirements

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McCoy College undergraduate programs is based on specific admission criteria and is conducted as a rolling admission process. For current Texas State students, applications are available online at <http://advising.mccoy.txstate.edu/apply> (<http://advising.mccoy.txstate.edu/apply/>). For students not yet admitted to the University, applications are available online at [www.applytexas.org](http://www.applytexas.org) (<http://www.applytexas.org>). Students should list a business major as their first major choice.

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### General Requirements

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ANLY 2333	Business Statistics	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
B A 3110	Professional Development I	1
B A 3120	Professional Development II	1
BLAW 3301	Legal Environment of Business	3
FIN 3312	Business Finance	3
MGT 3303	Management of Organizations	3
MKT 3343	Principles of Marketing	3
MGT 3353	Business Communication	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
MGT 4335	Strategic Management and Business Policy	3

- A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.
- Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general sequence of courses specified for the curriculum in this section of the catalog.
- Also, students who did not complete satisfactorily at least two years of the same foreign language in high school must complete two semesters (6-8 hours) of a single foreign language in college.
- Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy degree requirements.
- For transfer students, 24 semester credit hours in the business core curriculum (or their equivalents) may be transferred from a Texas public institution of higher education for the Business Administration and Management Field of Study and be applied to the B.B.A. major in Management at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional business courses, please contact the McCoy College of Business CenturyLink Academic Advising Center for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. Students who complete MATH 1319 (TCCN: MATH 1324) in the FOS will receive 3 semester credit hours towards free electives.

Code	Title	Hours
ISAN 1323	Introduction to Microcomputer Applications	3
TCCN: BCIS 1305		
B A 1310	Introduction to Business	3
TCCN: BUSI 1301		
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TCCN: ECON 2302		
ECO 2315	Principles of Macroeconomics	3

TCCN: ECON 2301		
ACC 2361	Introduction to Financial Accounting	3
TCCN: ACCT 2301		
ACC 2362	Introduction to Managerial Accounting	3
TCCN: ACCT 2302		
ANLY 2333	Business Statistics	3
TCCN: BUSI 2305		
Elective		3
TCCN: MATH 1324		
<b>Total Hours</b>		<b>24</b>

- Students must achieve the following minimum grade-point averages for graduation:

- a Texas State GPA of 2.00
- a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives); and
- a GPA of 2.0 in the minor(s).

## Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
MATH 1329 (Mathematics Component 020 [TCCN MATH 1325])	3	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	Life and Physical Sciences Component Code 030	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	American History Component Code 060	3
B A 1310 (TCCN BUSI 1301)	3	ISAN 1323 (TCCN BCIS 1305) <sup>1</sup>	3
US 1100	1		
	<b>16</b>		<b>15</b>

		Sophomore	
		First Semester Hours	Second Semester Hours
ACC 2361 (TCCN ACCT 2301)	3	ACC 2362 (TCCN ACCT 2302)	3
ECO 2314 (Social and Behavioral Sciences Component Code 080 [ECON 2302])	3	ECO 2315 (TCCN ECON 2301)	3
ANLY 2333 (TCCN BUSI 2305)	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
Life and Physical Sciences Component Code 030	3	Creative Arts Component Code 050	3
American History Component Code 060	3	BLAW 3301 (TCCN BUSI 2301)	3

B A 3110		1
15		16
		Junior
First Semester Hours		Second Semester Hours
MKT 3343	3 ISAN 3380	3
MGT 3303	3 FIN 3312	3
MGT 3353	3 MGT 4373	3
B A 3120	1 MGT 4375	3
Free Electives	6 Business, Advanced Elective <sup>2</sup>	3
16		15
		Senior
First Semester Hours		Second Semester Hours
MGT 4330	3 MGT 4335	3
Restricted Advanced Business Electives	6 Restricted Advanced Business Elective	3
Business, Advanced Elective <sup>2</sup>	3 Advanced Business Elective <sup>2</sup>	3
Component Area Option 090	3 Free Electives	3
15		12

**Total Hours: 120**

<sup>1</sup> Credit can be earned by successfully passing a test. Students must pay a fee to take the test.

<sup>2</sup> The advanced electives in business may be chosen from any 3000-4000 level business course (ACC/B\_A/BLAW/ISAN/ECO/FIN/MGT/MKT/ANLY) not already required in the degree, for which the student meet prerequisites, and available to any business major.

## Restricted Advanced Business Elective

Code	Title	Hours
MGT 4377	Labor Relations and Collective Bargaining	3
MGT 4378	Training and Development	3
MGT 4379	Organizational Staffing	3
MGT 4380	Compensation Management	3
MGT 4390S	Business Contracts/Negotiation	3
MGT 4392	Human Resource Management Internship	3
BLAW 3367	Employment Law	3

**Minimum required: 120 semester credit hours**

## Admission Requirements

Admission to the McCoy College of Business Administration (McCoy College) is competitive, and a student must be admitted to the McCoy College to pursue a B.B.A. degree. Consideration for admission to McCoy College undergraduate programs is based on specific admission criteria and is conducted as a rolling admission process. For current Texas State students, applications are available online at <http://advising.mccoy.txstate.edu/apply> (<http://advising.mccoy.txstate.edu/apply/>). For students not yet admitted to the University, applications are available online at [www.applytexas.org](http://www.applytexas.org) (<http://www.applytexas.org>). Students should list a business major as their first major choice.

Priority dates are March 1 for summer/fall semester and October 15 for the spring semester. Applications received after the priority date will be considered for admission on a space-available basis. Students not yet admitted to Texas State must meet Texas State admission deadlines. Students attending Texas State who are currently on academic probation are not eligible for admission to McCoy College.

## Freshmen and Students with fewer than 30 Semester Credit Hours

Students with fewer than 30 semester credit hours will be automatically admitted to the McCoy College if they receive assured admission (<http://www.admissions.txstate.edu/future/freshman/admissions-requirements.html>) to Texas State and select a first-choice major in the McCoy College of Business Administration. Students who are admitted to the University but denied admission to McCoy College will be considered for admission to their second choice major or as an exploratory professional major.

## Students with 30 or more Semester Credit Hours

Students who have completed at least 30 semester hours, including ENG 1310, ENG 1320, and MATH 1329, either at Texas State or another college or university and who have a minimum 2.5 overall GPA will be considered for admission based upon a competitive index using the grades from ENG 1310, ENG 1320, MATH 1329, and the overall GPA from all colleges and universities attended. Students will be automatically admitted if they have a cumulative GPA of 3.25 or higher and have completed ENG 1310, ENG 1320 and MATH 1329.

## General Requirements

- For the B.B.A. degree, any McCoy College student whose Texas State GPA drops below a 2.0 is placed on probation by Texas State and on restricted status by McCoy College. Students on restricted status must increase their Texas State GPA to at least 2.0 in the subsequent semester or their admission to McCoy College will be voided. Students are required to meet with a representative of the McCoy College Academic Advising Center to remove probation holds; otherwise, the hold will prevent registration or schedule changes. A student whose admission is voided may regain admission to McCoy College by going through the application process and competing with other applicants for openings. Students with a Texas State GPA below a 2.0 are also subject to the University academic probation and suspension policies.
- All students seeking the B.B.A. must complete the following general education core curriculum courses as required by McCoy College. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for other information about the general education core curriculum.
- To provide a common body of knowledge in business, all students seeking the B.B.A. must complete the following common core of business courses or their equivalents as required by the McCoy College:

Code	Title	Hours
B A 1310	Introduction to Business	3
ISAN 1323	Introduction to Microcomputer Applications	3
ECO 2314	Principles of Microeconomics	3
ECO 2315	Principles of Macroeconomics	3
ANLY 2333	Business Statistics	3

ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
B A 3110	Professional Development I	1
B A 3120	Professional Development II	1
BLAW 3301	Legal Environment of Business	3
FIN 3312	Business Finance	3
MGT 3303	Management of Organizations	3
MKT 3343	Principles of Marketing	3
MGT 3353	Business Communication	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
MGT 4335	Strategic Management and Business Policy	3

- A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.
- Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general sequence of courses specified for the curriculum in this section of the catalog.
- Also, students who did not complete satisfactorily at least two years of the same foreign language in high school must complete two semesters (6-8 hours) of a single foreign language in college.
- Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy degree requirements.
- For transfer students, 24 semester credit hours in the business core curriculum (or their equivalents) may be transferred from a Texas public institution of higher education for the Business Administration and Management Field of Study and be applied to the B.B.A. major in Management at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional business courses, please contact the McCoy College of Business CenturyLink Academic Advising Center for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. Students who complete MATH 1319 (TCCN: MATH 1324) in the FOS will receive 3 semester credit hours towards free electives.

Code	Title	Hours
ISAN 1323	Introduction to Microcomputer Applications	3
TCCN: BCIS 1305		
B A 1310	Introduction to Business	3
TCCN: BUSI 1301		
ECO 2314	Principles of Microeconomics	3
TCCN: ECON 2302		
ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
ACC 2361	Introduction to Financial Accounting	3
TCCN: ACCT 2301		
ACC 2362	Introduction to Managerial Accounting	3
TCCN: ACCT 2302		
ANLY 2333	Business Statistics	3

TCCN: BUSI 2305	
Elective	3
TCCN: MATH 1324	
<b>Total Hours</b>	<b>24</b>

- Students must achieve the following minimum grade-point averages for graduation:

- a Texas State GPA of 2.00
- a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives); and
- a GPA of 2.0 in the minor(s).

## Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
MATH 1329 (Mathematics Component 020 [TCCN MATH 1325])	3	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	Life and Physical Sciences Component Code 030	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	American History Component Code 060	3
B A 1310 (TCCN BUSI 1301)	3	ISAN 1323 (TCCN BCIS 1305)	3
US 1100	1		
	<b>16</b>		<b>15</b>

		Sophomore	
		First Semester Hours	Second Semester Hours
ACC 2361 (TCCN ACCT 2301)	3	ACC 2362 (TCCN ACCT 2302)	3
ECO 2314 (Social and Behavioral Sciences Component Code 080 [ECON 2302])	3	ECO 2315 (TCCN ECON 2301)	3
American History Component Code 060	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
ANLY 2333	3	Creative Arts Component Code 050	3
Life and Physical Sciences Component Code 030	3	BLAW 3301 (TCCN BUSI 2301)	3
		B A 3110	1
	<b>15</b>		<b>16</b>

		Junior	
		First Semester Hours	Second Semester Hours
MKT 3343	3	ISAN 3380	3
MGT 3303	3	FIN 3312	3



MGT 3353	3	MGT 4373	3
Free Electives	6	MGT 4375	3
B A 3120	1	MGT 4372	3
	<b>16</b>		<b>15</b>

First Semester Hours		Second Semester Hours	
MGT 4330	3	MGT 4335	3
MGT 4370	3	MGT 4390J	3
Business, Advanced Elective <sup>2</sup>	6	Restricted Advanced Business Elective	3
Component Area Option 090	3	Free Electives	3
	<b>15</b>		<b>12</b>

**Total Hours: 120**

<sup>1</sup> Credit can be earned by successfully passing a test. Students must pay a fee to take the test.

<sup>2</sup> The advanced electives in business may be chosen from any 3000-4000 level business course (ACC/B\_A/BLAW/ISAN/ECO/FIN/MGT/MKT/ANLY) not already required in the degree, for which the student meet prerequisites, and available to any business major.

## Restricted Advanced Business Elective

Code	Title	Hours
MGT 4340	Quality Management and Beyond	3
MGT 4371	Business, Government, and Society	3
MGT 4390T	Effective Teams and Groups	3
MGT 4390U	Management for Sustainability	3
MGT 4395	Management Internship	3

The minor in Innovation and Entrepreneurship requires 18 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
IEM 2310	Introduction to Innovation & Entrepreneurship	3
IEM 4390	Innovation & Entrepreneurship Capstone	3
<b>Leadership Domain</b>		
Choose 3 hours from the following:		3
COMM 2315	Interpersonal Communication	
COMM 2330	Small Group Communication	
COMM 4336	Diversity and Inclusion Training	
COMM 4347	Leadership and Communication	
CTE 3315	Leadership and Professional Development	
CTE 3370	Introduction to Leadership	
GEO 4323	Conservation Leadership	
HDFS 4356	Administration of Human Service Organizations	
HON 3380A	Design Thinking and the Art of Product Development	
HON 3380B	Idea Lab: Redesigning the Campus Experience	
HON 3393S	Entrepreneurs, Leaders, Teams: Best Practices	
HON 3397J	Extraordinary Leadership: Ownership and Influence	
MGT 3360	Entrepreneurship Studies	
MGT 4370	Business Ethics	
MGT 4372	Effective Leadership	

MGT 4382	Leadership Development: Business as Unusual
MGT 4390K	Business Creativity and Innovation
MGT 4390J	Organizational Change & Decision-Making
MGT 4390R	Transformative Leadership for Nonprofits (NPs) and Non-Governmental Organizations (NGOs)
MGT 4390T	Effective Teams and Groups
PH 4335	Public Health Leadership
PHIL 3322	Professional Ethics

## I&E In Context Domain

Choose 3-4 hours from the following: 3-4

ANTH 3331L	Social Impact: Anthropology of Innovation, Entrepreneurship, & Business
ARTC 2304	Conceptual Strategies
ARTC 4319	Design for Experiences
B A 4300	Independent Study in Global Business
ISAN 3317	E-Business
ISAN 3360	Web Design and Development
COMM 3319	Introduction to Organizational Communication
COMM 3336	Diversity and Communication
CSM 3369	Residential II: Construction Business Practices
CTE 3313M	Creative Thinking
CTE 3313N	Problem Solving and Decision Making
CTE 3313Q	Teamwork
CTE 3324	Entrepreneurship in Schools, Communities, and the Workplace
ECO 2301	Principles of Economics
ENGR 3315	Engineering Economic Analysis
FM 2330	Aesthetics and Branding
FM 3337	Fashion Social Media
FM 4334	Fashion Product Development
GEO 4393B	Business Geography
HIST 3371C	History Behind the Headlines: Current Debates in a Historical Perspective
HIST 4318U	Topics in Industrial Britain
HON 3397Z	Makerspaces: Intersections of Art and Everything
HON 3398I	The Aesthetics of Failure
HON 3398Y	The Creative Spark: Interdisciplinary Perspectives on Creativity
HON 33990	Improvisation & Interdisciplinary Play
IE 4335	Lean Six Sigma Methodologies
MGT 3361	Small Business Operations and Financials
MGT 3362	Issues in Family Business
MGT 4330	Operations Management
MGT 4340	Quality Management and Beyond
MGT 4399	Independent Study in Management
MKT 3340	Entrepreneurial Marketing
MKT 3370	Marketing Research
PHIL 4303	Philosophy of Technology
PHIL 4327	Bioethics
PHIL 4361E	Philosophy and Ethics of Virtual Reality
PHIL 4361F	Ethics of Artificial Intelligence and Big Data
PHYS 3411	Advanced Physics Laboratory
REC 3340	Recreation Facilities Operations and Maintenance

SOCI 3390	Technology and Society	
TECH 3345	Principles of Lean Systems	
TECH 4340	Design for Environment	
TECH 4381	Senior Design I	
TECH 4382	Senior Design II	
TH 1330	P&P 101: Entrepreneurial Theatre-Making	
<b>I&amp;E In Action Domain</b>		
Choose 3-4 hours from the following:		3-4
ANTH 3336	Locally Engaged Research	
ISAN 3380	Enterprise Information Technology and Business Intelligence	
COMM 3324	Professional Skills for the Global Workplace	
COMM 4325	Communication and Technology	
FIN 4380J	Introduction to Finance Analytics	
FM 4338	Enterprise Development	
HIM 4393	Project Management for Health Information Management	
HON 3380C	Entrepreneurial Design: Utilizing Design Thinking to Create Disruptive Companies	
HON 3380E	Exhibition Design & Curatorial Practices	
HON 3380F	Design Across Cultures	
HON 4390B	Honors Capstone	
MC 4328	Digital Media Innovation Capstone	
MC 4342	Strategic Professionalism	
MC 4381	Fundamentals of Digital and Online Media	
MGT 4350	Business Plan Development	
MGT 4351	Applied Entrepreneurship	
MGT 4353	Integrative Field Project	
MKT 3362	Studies in Free Enterprises	
PHYS 3416	Applied Electronics	
SOWK 4300K	Innovative Community Engagement with Vulnerable Populations	
<b>Elective</b>		
Choose 3 hours from the courses listed above. <sup>1</sup>		3
<b>Total Hours</b>		<b>18-20</b>

<sup>1</sup> Students may choose 3 hours from the courses listed above to satisfy the minor requirements if it has not already been taken.

A maximum of 6 credit hours of courses used to satisfy a student's major requirements may be counted towards the I&E minor.

McCoy Hall Room 424  
 Telephone: 512-245-7428 Fax: 512-245-7475  
[www.marketing.mccoy.txstate.edu](http://www.marketing.mccoy.txstate.edu) ([http://](http://www.marketing.mccoy.txstate.edu)  
[www.marketing.mccoy.txstate.edu](http://www.marketing.mccoy.txstate.edu))

The mission of the Department of Marketing is to prepare a diverse student population to become successful marketing professionals and responsible global citizens in a data driven world. The department complements these efforts with research that adds to marketing knowledge while providing solutions to marketing challenges. Marketing majors typically pursue careers in sales, advertising, services, marketing, brand management, retail management, marketing research, and

international marketing. Employers span a variety of industries and include for-profit, non-profit, and governmental agencies.

The department offers a BBA major in Marketing with opportunities to pursue a concentration in sales. The sales concentration is supported by The Center for Professional Sales. Outside of the classroom, students have opportunities to participate in several faculty-led and student-run organizations that enhance their leadership and teamwork skills, as well as their real-world marketing experience. These include the American Marketing Association (AMA), the Entrepreneurial Innovators Group (EIG), and the American Advertising Federation (AAF).

The Marketing faculty contribute to the department's mission by teaching cutting-edge marketing concepts with effective pedagogical techniques; pursuing insightful basic, applied, and instructional scholarship; and engaging in professional and community service.

With a dynamic marketing curriculum, stellar faculty, and exciting professional development opportunities, the Department of Marketing strives to ensure that Texas State marketing students graduate with relevant knowledge, skills, and a portfolio of projects that enable them to succeed in a complex and competitive business environment.

#### AACSB Accreditation

The McCoy College of Business is accredited by the Association Advance Collegiate Schools of Business (AACSB). AACSB Accreditation is known, worldwide, as the longest standing, most recognized form of specialized/professional accreditation an institution can earn.

## Bachelor of Business Administration (B.B.A.)

- Major in Marketing (p. 191)
- Major in Marketing (Professional Sales Concentration) (p. 193)
- Major in Marketing (Services Marketing Concentration) (p. 195)

## Courses in Marketing (MKT)

### MKT 3340. Entrepreneurial Marketing.

Entrepreneurial Marketing is the primary means of fast growth. Students learn to identify and develop the most efficient ways to grow a business with a toolkit of new marketing practices that can help startups and emerging firms gain a foothold in crowded markets. This course is appropriate for the students who have an entrepreneurial mindset, which is a way of thinking or set of skills that enable people to identify and make the most of opportunities, overcome and learn from setbacks, and succeed in various settings. Prerequisite: MKT 3343 and [QMST 2333 or MATH 2328] both with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3343. Principles of Marketing.**

This course studies the strategic marketing process, which creates value for consumers and organizations through integrated production and distribution of products. It examines the marketing process in the context of the global, cultural, economic, legal/regulatory environment. It also examines ethical and socially-responsible marketing and the impact of information technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3350. Consumer Behavior.**

A study of the role of the consumer in marketing. Considers the motivation, personality, attitudes, perceptions, lifestyle, and decision-making processes of consumers. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3355. Retailing.**

A study of the principles of retail store management, including market and trade area analysis, store location and design, organization and operation management, merchandising, inventory control, and promotion and pricing policies. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3358. Professional Selling.**

A study of the professional selling process including strategically planning sales calls, strengthening communication skills, responding helpfully to objections, obtaining commitment and building partnerships. Examines cultivating committed relationships, strategic alliances, and partnering skills to provide total sales quality to the company, suppliers, and customers. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3360. Sales Management.**

A study of issues related to planning for, managing, motivating, directing, and controlling a sales force and related sales territories. Both international and domestic perspectives are addressed. Special emphasis is given to the efficiency (cost consideration) and effectiveness (satisfaction consideration) of sales management. Prerequisite: MKT 3358 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3362. Studies in Free Enterprises.**

The course will focus on developing goal setting, project identification, project planning and management, marketing, financing, and implementing student directed educational programs. The projects are aimed at increasing citizen awareness and understanding of business and economic issues. (WI) Prerequisite: MKT 3343 with a grade of "D" or better and a minimum 2.0 overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MKT 3365. Services Marketing.**

The services sector dominates the U.S. economy and is becoming critical for competitive advantage in companies across the globe and in all industry sectors. This course examines the foundations of services marketing, which are necessary to create, promise, and deliver a successful, interactive customer experience. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3370. Marketing Research.**

This course offers a comprehensive study of marketing research process that includes formulating a problem, developing a research plan, determining a sample, analyzing data, preparing a research report, and linking the consumer, customer, public, and marketer through information. Prerequisite: MKT 3343 and [QMST 2333 or MATH 2328] both with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3375. Marketing for Social Change.**

This class uses marketing principles and techniques to influence a target audience to voluntarily accept, reject, modify, or abandon a behavior for the benefit of individuals, groups, or society as a whole. In this hands-on course students develop and implement marketing campaigns for social change on behalf of non-profit clients. (WI) Prerequisite: MKT 3343 and MKT 3350 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MKT 3380. Sports Marketing.**

Examines four components of sports marketing, including: (1) the foundation of sports marketing, (2) marketing through sports, including sponsorship, endorsement, and licensing strategies, (3) the marketing of sports, including marketing mix strategies, and (4) emerging topics in sports marketing, including relationship marketing, technology, and controversial issues. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3385. Ethnic and Niche Marketing.**

The course introduces students to marketing approaches used to understand and market products/services to U.S. ethnic and/or subgroups of consumers. The course includes consumer behavior and research techniques as well as implications to the marketing mix. Prerequisite: MKT 3350 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3387. Digital Marketing.**

Introduces methods for dynamically and directly reaching customers using digital promotion methods. Through discussion of digital marketing concepts and hands-on projects and assignments, students explore how website design, search engine optimization, paid search, digital display advertising, email marketing, and social media can be utilized to achieve desirable marketing outcomes. Prerequisite: MKT 3343 and [ANLY 2333 or MATH 2328] both with a grade of "C" or better and minimum 2.0 GPA overall.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3390. Marketing Health Care.**

A study of marketing and its role in health care, including buyer and service provider behavior, relevant marketing principles and strategies, and emerging topics, such as medical tourism, universal health care, and health care regulations. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4310. International Marketing.**

A study of the international planning and coordination of marketing functions, marketing policies, and the analysis of marketing on an international scope including environmental and cultural aspects. (MULT). Prerequisite: MKT 3343 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Multicultural Content

**Grade Mode:** Standard Letter

**MKT 4315. Service Design.**

Service Design involves the planning and organizing of people, infrastructure, communication, and material components of a service in order to improve its quality and the interaction between service providers and customers. This course aims to provide hands-on experience that will enable students to develop competences in service design. Prerequisite: MKT 3365 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4325. Advanced Topics in Service Marketing.**

This class is a comprehensive study of services marketing theories, concepts, and strategies; it includes an examination of cost controls, research methodologies, branding, customer service innovation, consumer behavior, and service delivery. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4330. Promotional Strategy.**

Analysis of promotional methods used in marketing and their relation to other business functions. Examines advertising, selling, and sales promotion. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Multicultural Perspective

**Grade Mode:** Standard Letter

**MKT 4337. Marketing Management.**

An integrative course that applies management concepts and techniques to the solution of marketing problems. Analyzes market segments and product positioning, product and product line price, channels of distribution, and promotion. (WI) (MULP) Prerequisite: [QMST 2333 or MATH 2328] and MKT 3343 and six additional hours of marketing courses all with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Multicultural Perspective| Writing Intensive

**Grade Mode:** Standard Letter

**MKT 4340. Marketing Analytics Foundations.**

The course explores data analysis techniques that are applied to real-world business problems. Students will learn how to analyze business data and how to make strategic decisions. In addition, students will learn how to monitor and predict marketing and sales metrics and how to turn data into actionable plans. Through discussions of marketing concepts and hands-on projects and assignments, students will learn how to use analytics to create positive organizational outcomes. Prerequisite: MKT 3343 and [ANLY 2333 or MATH 2328] both with grades of "C" or better and a minimum 2.0 overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4341. Marketing Data Visualization.**

This course delves into the role of data visualization in modern marketing. Students will use the industry's top data visualization tools to analyze and present marketing metrics for actionable insights. We'll tackle best practices for organizing and presenting data using real-world scenarios. All course materials, assignments, and projects will be conducted in cutting-edge, highly demanded data visualization platforms, giving you the skills needed to tell compelling, data-driven stories. By the end of the course, you'll be adept at understanding your data, crafting clear visual narratives, and effectively communicating your findings to a target audience—all through the use of data graphics. Prerequisite: MKT 3343 and [ANLY 2333 or MATH 2328] both with grades of "C" or better and a minimum 2.0 overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4392. Sales Internship.**

This course integrates professional and academic experience through internship with an external employer. Credit awarded as pass/fail or grade at departmental election. Prerequisites: MKT 3343 and MKT 3358 both with grades of "D" or better and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4393. Services Marketing Internship.**

This course integrates professional and academic experience through internship with an external employer. Credit awarded as pass/fail or grade at departmental election. Prerequisites: MKT 3343 and MKT 3365 both with grades of "D" or better and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4395. Independent Study in Marketing.**

Directed research and extensive written assignment on a selected topic related to student's area of interest. Work may consist of literature reviews, integration of literature, or other appropriate independent research. May be repeated once for credit with different emphasis. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MKT 4396. Directed Study in Professional Sales.**

Directed study and research in selected professional sales topics. May be repeated for credit with a different emphasis. Prerequisite: MKT 3343 and MKT 3358 both with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4397. Directed Study in Marketing.**

Directed study and research in selected marketing topics, including the development of a promotional or marketing plan. Course can be offered as individual instruction or as an organized class. Repeatable for credit with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Dual Enrollment Permitted

**Grade Mode:** Standard Letter

**MKT 4399. Marketing Internship.**

Integration of professional and academic experience through internship with an external employer. Credit is awarded as pass/fail or grade at departmental election. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### Admission Requirements

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### Freshmen and Students with fewer than 30 Semester Credit Hours

Students with fewer than 30 semester credit hours will be automatically admitted to the McCoy College if they receive assured admission (<http://www.admissions.txstate.edu/future/freshman/admissions-requirements.html>) to Texas State and select a first-choice major in the McCoy College of Business Administration. Students who are admitted to the University but denied admission to McCoy College will be considered for admission to their second choice major or as an exploratory professional major.

### Students with 30 or more Semester Credit Hours

Students who have completed at least 30 semester credit hours, including ENG 1310, ENG 1320, and MATH 1329, either at Texas State or another college or university and who have a minimum 2.5 overall GPA will be considered for admission based upon a competitive index using the grades from ENG 1310, ENG 1320, MATH 1329, and the overall GPA from all colleges and universities attended. Students will be



automatically admitted if they have a cumulative GPA of 3.25 or higher and have completed ENG 1310, ENG 1320 and MATH 1329.

## General Requirements

- For the B.B.A. degree, any McCoy College student whose Texas State GPA drops below a 2.0 is placed on probation by Texas State and on restricted status by McCoy College. Students on restricted status must increase their Texas State GPA to at least 2.0 in the subsequent semester or their admission to McCoy College will be voided. Students are required to meet with a representative of the McCoy College Academic Advising Center to remove probation holds; otherwise, the hold will prevent registration or schedule changes. A student whose admission is voided may regain admission to McCoy College by going through the application process and competing with other applicants for openings. Students with a Texas State GPA below a 2.0 are also subject to the University academic probation and suspension policies.
- All students seeking the B.B.A. must complete the following general education core curriculum courses as required by McCoy College. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for other information about the general education core curriculum.
- To provide a common body of knowledge in business, all students seeking the B.B.A. must complete the following common core of business courses or their equivalents as required by the McCoy College:

Code	Title	Hours
B A 1310	Introduction to Business	3
ISAN 1323	Introduction to Microcomputer Applications	3
ECO 2314	Principles of Microeconomics	3
ECO 2315	Principles of Macroeconomics	3
ANLY 2333	Business Statistics	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
B A 3110	Professional Development I	1
B A 3120	Professional Development II	1
BLAW 3301	Legal Environment of Business	3
MGT 3303	Management of Organizations	3
FIN 3312	Business Finance	3
MKT 3343	Principles of Marketing	3
MGT 3353	Business Communication	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
MGT 4335	Strategic Management and Business Policy	3

- A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.
- Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general sequence of courses specified for the curriculum in this section of the catalog.

- Also, students who did not complete satisfactorily at least two years of the same foreign language in high school must complete two semesters (6-8 hours) of a single foreign language in college.
- Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy degree requirements.
- For transfer students, 24 semester credit hours in the business core curriculum (or their equivalents) may be transferred from a Texas public institution of higher education for the Business Administration and Management Field of Study and be applied to the B.B.A. major in Marketing at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional business courses, please contact the McCoy College of Business CenturyLink Academic Advising Center for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. Students who complete MATH 1319 (TCCN:MATH 1324) in the FOS will receive 3 semester credit hours towards free electives.

Code	Title	Hours
ISAN 1323	Introduction to Microcomputer Applications (Directed Elective)	3
TCCN: BCIS 1305		
B A 1310	Introduction to Business	3
TCCN: BUSI 1301		
ECO 2314	Principles of Microeconomics	3
TCCN: ECON 2302		
ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
ACC 2361	Introduction to Financial Accounting	3
TCCN: ACCT 2301		
ACC 2362	Introduction to Managerial Accounting	3
TCCN: ACCT 2302		
ANLY 2333	Business Statistics (Directed Elective)	3
TCCN: BUSI 2305		
Elective		3
TCCN: MATH 1324		
<b>Total Hours</b>		<b>24</b>

- Students must achieve the following minimum grade-point averages for graduation:

- a Texas State GPA of 2.00
- a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives); and
- a GPA of 2.0 in the minor(s).

## Course Requirements

		Freshman
First Semester Hours	Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3

MATH 1329 (Mathematics Component 020 [TCCN MATH 1325])	3 PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 Life and Physical Sciences Component Code 030	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 American History Component Code 060	3
B A 1310 (TCCN: BUSI 1301)	3 ISAN 1323 (TCCN BCIS 1305) <sup>1</sup>	3
US 1100	1	
<b>16</b>		<b>15</b>

**Sophomore**

First Semester Hours	Second Semester Hours	
ACC 2361 (TCCN ACCT 2301)	3 ACC 2362 (TCCN ACCT 2302)	3
ECO 2314 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 2302])	3 ECO 2315 (TCCN ECON 2301)	3
Life and Physical Sciences Component Code 030	3 Creative Arts Component Code 050	3
ANLY 2333 (TCCN BUSI 2305)	3 BLAW 3301 (TCCN BUSI 2301)	3
American History Component Code 060	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
	B A 3110	1
<b>15</b>		<b>16</b>

**Junior**

First Semester Hours	Second Semester Hours	
ISAN 3380	3 FIN 3312	3
MGT 3303	3 MKT 3350	3
MKT 3343	3 MKT 3353	3
Component Area Option 090	3 MKT 3370	3
Free Elective	3 Free Elective	3
B A 3120	1	
<b>16</b>		<b>15</b>

**Senior**

First Semester Hours	Second Semester Hours	
MKT 3358	3 MKT 4335	3
MKT 4330	3 MKT 4337	3
Business, Advanced Elective <sup>2</sup>	6 MKT Advanced Electives	6
Free Elective	3	
<b>15</b>		<b>12</b>

**Total Hours: 120**

MGT/MKT/ANLY) not already required in the degree, for which the student meet prerequisites, and available to any business major.

**MKT Advanced Electives**

Code	Title	Hours
MKT 3340	Entrepreneurial Marketing	3
MKT 3355	Retailing	3
MKT 3360	Sales Management	3
MKT 3362	Studies in Free Enterprises	3
MKT 3365	Services Marketing	3
MKT 3375	Marketing for Social Change	3
MKT 3380	Sports Marketing	3
MKT 3385	Ethnic and Niche Marketing	3
MKT 3387	Digital Marketing	3
MKT 3390	Marketing Health Care	3
MKT 4315	Service Design	3
MKT 4325	Advanced Topics in Service Marketing	3
MKT 4340	Marketing Analytics Foundations	3
MKT 4395	Independent Study in Marketing	3
MKT 4397	Directed Study in Marketing	3
MKT 4399	Marketing Internship	3

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<sup>1</sup> Credit can be earned by successfully passing a test. Students must pay a fee to take the test.

<sup>2</sup> The advanced electives in business may be chosen from any 3000-4000 level business course (ACC/B\_A/BLAW/ISAN/ECO/FIN/

## Students with 30 or more Semester Credit Hours

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ECO 2315	Principles of Macroeconomics	3
ANLY 2333	Business Statistics	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
B A 3110	Professional Development I	1
B A 3120	Professional Development II	1
BLAW 3301	Legal Environment of Business	3
MGT 3303	Management of Organizations	3
FIN 3312	Business Finance	3
MKT 3343	Principles of Marketing	3
MGT 3353	Business Communication	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
MGT 4335	Strategic Management and Business Policy	3

- A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division

business electives to complement the major are also required for the B.B.A.

- Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general sequence of courses specified for the curriculum in this section of the catalog.
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ISAN 1323	Introduction to Microcomputer Applications (Directed Elective)	3
TCCN: BCIS 1305		
B A 1310	Introduction to Business	3
TCCN: BUSI 1301		
ECO 2314	Principles of Microeconomics	3
TCCN: ECON 2302		
ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
ACC 2361	Introduction to Financial Accounting	3
TCCN: ACCT 2301		
ACC 2362	Introduction to Managerial Accounting	3
TCCN: ACCT 2302		
ANLY 2333	Business Statistics (Directed Elective)	3
TCCN: BUSI 2305		
Elective		3
TCCN: MATH 1324		
<b>Total Hours</b>		<b>24</b>

- Students must achieve the following minimum grade-point averages for graduation:
  - a Texas State GPA of 2.00
  - a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives); and
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## Course Requirements

Freshman	
First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302]) 3
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B A 1310 (TCCN: BUSI 1301)	3 Life and Physical Sciences Component Code 030 3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 American History Component Code 060 3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 ISAN 1323 (TCCN BCIS 1305) <sup>1</sup> 3
US 1100	1
<b>16</b>	<b>15</b>

Sophomore	
First Semester Hours	Second Semester Hours
ACC 2361 (TCCN ACCT 2301)	3 ACC 2362 (TCCN ACCT 2302) 3
ECO 2314 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 2302])	3 ECO 2315 (TCCN ECON 2301) 3
Life and Physical Sciences Component Code 030	3 Creative Arts Component Code 050 3
ANLY 2333 (TCCN BUSI 2305)	3 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305]) 3
American History Component Code 060	3 BLAW 3301 (TCCN BUSI 2301) 3
	B A 3110 1
<b>15</b>	<b>16</b>

Junior	
First Semester Hours	Second Semester Hours
ISAN 3380	3 MKT 3350 3
MGT 3303	3 MKT 3358 3
MKT 3343	3 MKT 3370 3
Free Electives	6 MKT 3353 3
B A 3120	1 FIN 3312 3
<b>16</b>	<b>15</b>

Senior	
First Semester Hours	Second Semester Hours
MKT 3360	3 MKT 4337 3
MKT 4330	3 MKT 4392 3
Business, Advanced Elective <sup>2</sup>	3 MKT 4396 3
Component Area Option 090	3 MGT 4335 3

Free Electives	3
<b>15</b>	<b>12</b>
<b>Total Hours: 120</b>	

<sup>1</sup> Credit can be earned by successfully passing a test. Students must pay a fee to take the test.

<sup>2</sup> The advanced electives in business may be chosen from any 3000-4000 level business course (ACC/B\_A/BLAW/ISAN/ECO/FIN/MGT/MKT/ANLY) not already required in the degree, for which the student meet prerequisites, and available to any business major.

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### General Requirements

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ANLY 2333	Business Statistics	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
B A 3110	Professional Development I	1
B A 3120	Professional Development II	1
BLAW 3301	Legal Environment of Business	3
MGT 3303	Management of Organizations	3
FIN 3312	Business Finance	3
MKT 3343	Principles of Marketing	3
MGT 3353	Business Communication	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
MGT 4335	Strategic Management and Business Policy	3

- A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.
- Free electives to achieve a minimum total of 120 semester hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general sequence of courses specified for the curriculum in this section of the catalog.
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information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional business courses, please contact the McCoy College of Business CenturyLink Academic Advising Center for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. Students who complete MATH 1319 (TCCN: MATH 1324) in the FOS will receive 3 semester credit hours towards free electives.

Code	Title	Hours
ISAN 1323	Introduction to Microcomputer Applications (Directed Elective)	3
TCCN: BCIS 1305		
B A 1310	Introduction to Business	3
TCCN: BUSI 1301		
ECO 2314	Principles of Microeconomics	3
TCCN: ECON 2302		
ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
ACC 2361	Introduction to Financial Accounting	3
TCCN: ACCT 2301		
ACC 2362	Introduction to Managerial Accounting	3
TCCN: ACCT 2302		
ANLY 2333	Business Statistics (Directed Elective)	3
TCCN: BUSI 2305		
Elective		3
TCCN: MATH 1324		
<b>Total Hours</b>		<b>24</b>

- Students must achieve the following minimum grade-point averages for graduation:

- a Texas State GPA of 2.00
- a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives); and
- a GPA of 2.0 in the minor(s).

## Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
MATH 1329 (Mathematics Component 020 [TCCN MATH 1325])	3	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	Life and Physical Sciences Component Code 030	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	American History Component Code 060	3
B A 1310 (TCCN BUSI 1301)	3	ISAN 1323 (TCCN BCIS 1315) <sup>1</sup>	3



US 1100	1		
	16		15
<b>Sophomore</b>			
<b>First Semester Hours</b>		<b>Second Semester Hours</b>	
ACC 2361 (TCCN ACCT 2301)	3	ACC 2362 (TCCN ACCT 2302)	3
ECO 2314 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 2302])	3	ECO 2315 (TCCN ECON 2301)	3
Life and Physical Sciences Component Code 030	3	Creative Arts Component Code 050	3
ANLY 2333 (TCCN BUSI 2305)	3	POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
American History Component Code 060	3	BLAW 3301 (TCCN BUSI 2301)	3
		B A 3110	1
	15		16
<b>Junior</b>			
<b>First Semester Hours</b>		<b>Second Semester Hours</b>	
ISAN 3380	3	FIN 3312	3
MGT 3303	3	MGT 3353	3
MKT 3343	3	MKT 3350	3
Free Electives	6	MKT 3358	3
		MKT 3365	3
		B A 3120	1
	15		16
<b>Senior</b>			
<b>First Semester Hours</b>		<b>Second Semester Hours</b>	
MKT 3370	3	MGT 4335	3
MKT 4330	3	MKT 4315	3
Restricted Advanced Business Elective <sup>2</sup>	3	MKT 4337	3
Component Area Option 090	3	MKT 4393	3
Free Elective	3		
	15		12

**Total Hours: 120**

<sup>1</sup> Credit can be earned by successfully passing a test. Students must pay a fee to take the test.

<sup>2</sup> The restricted advanced business elective may be chosen from MKT 3355, MKT 3362, MKT 3375, MKT 3380, MKT 3385, MKT 3390 or MKT 4325.

#### Dean

Michael P. O'Malley, Ed.D.  
Education Building Room 2001  
Telephone: 512-245-2150  
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#### Associate Dean for Research and Sponsored Programs

Eric Paulson, Ph.D.

#### Associate Dean for Educator Preparation

Jennifer Porterfield, Ph.D.

#### Associate Dean for Student Success

Kathy Ybañez-Llorente, Ph.D.

#### Associate Dean for Academic Affairs and Educational Partnerships

Joellen Coryell, Ph.D.

#### Associate Dean for Faculty Development and Strategic Planning

Jodi Patrick Holschuh, Ph.D.

#### Department Chairs

Counseling, Leadership, Adult Education, and School Psychology—Elizabeth Hartwig, Ph.D.

Curriculum and Instruction—Glenna M. Billingsley, Ph.D.

Health and Human Performance—Ronald D. Williams, Jr., Ph.D.

Texas State University's legacy as a normal school founded in 1899 with a mission dedicated to preparing new teachers remains with us today in the College of Education's commitment to the highest quality educator and professional preparation across many fields. Our flagship teacher education program prepares aspiring teachers for certification in elementary, middle school, secondary, bilingual, and special education. Our highly regarded and exceptional health and human performance programs offer degrees in exercise and sports science, health and fitness management, public health, and recreation studies, as well as minors in adaptive recreation and sport, exercise and sports science, coaching, outdoor recreation leadership, public health, and recreation and event planning, and recreation and leisure services. The college offers an interdisciplinary Bachelor of General Studies degree and also a popular undergraduate Introduction to Counseling and Psychotherapy course (COUN 3320).

Note: Candidates for teaching agriculture, fine arts, or physical education will major in that field (for example, B.Ag., B.F.A., B.S. in Exercise and Sports Science) and minor in Education. Candidates for other high school teaching areas will double major in their content field along with Education (for example, Bachelor of Science with majors in both Biology and Education).

## Academic Advising Center

Joya Konieczny, Director

Education Building Room 2143

Telephone: 512-245-3050

[www.education.txst.edu/advising](http://www.education.txst.edu/advising) (<https://www.education.txst.edu/advising/>)

The College of Education Undergraduate Advising Center is a student-centered, collaborative resource for students seeking an undergraduate degree through the College of Education. As an integral part of teaching and learning at Texas State, academic advisors cultivate student success by engaging students in educational planning to promote academic, personal, and professional development while considering diverse interests, abilities, and goals. Services available for students include, but are not limited to:

- assistance with selection and declaration of degree programs;
- interpretation of academic policies and procedures;
- guidance on course sequencing and degree requirements;
- referrals to other university resources; and
- verification of graduation requirements.

Ultimately, the academic advisors in the College of Education Advising Center strive to develop a guidance and support system to encourage

student self-reliance, responsibility, and success in achieving academic goals.

## Teacher Certification

### Office of Educator Preparation

Patricia Rocha, Ph.D., Director  
Education Building - Room 2016  
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[www.education.txst.edu/oep](http://www.education.txst.edu/oep) (<https://www.education.txst.edu/oep/>)

Students who wish to teach Early Childhood (EC) through Grade 6 (elementary with specialization in either English as a Second Language or Bilingual Education), Grades 4-8 (middle school), or All-Level Special Education pursue the Bachelor of Science major in Education. Students may acquire an All-level certificate to teach Physical Education in the Department of Health and Human Performance within the College of Education. Students seeking 6, 7, or 8-12 (Grade Six, Seven, or Eight through Grade Twelve) certification or All-level certification in other disciplines should initially declare a major within their chosen teaching field in the department, school and college where that major is housed. Some programs also require a double major or a minor in education, which in most cases can be completed within 120/121 credit hours total. Students should note that teacher certification requirements may differ from degree requirements and that completion of both is necessary for awarding a degree and recommending a student for teacher certification. In order to pursue teacher certification, students must apply and be admitted into the Educator Preparation Program through the Office of Educator Preparation (p. 263).

## Courses in Education Student Teaching (EDST)

### EDST 4170. Teacher Residency Seminar I.

This course is paired with EDST 4370 to provide classroom instruction and discussions with university supervisors on topics students are applying in their clinical practice. As part of the teacher residency program, enrollment requires advanced selection and placement through a competitive process as well as program specific prerequisite and corequisite requirements. Prerequisite: 2.75 Overall GPA and departmental approval. Corequisite: EDST 4370 with a grade of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

### EDST 4171. Teacher Residency Seminar II.

This course is paired with EDST 4371 to provide classroom instruction and discussions with university supervisors on topics students are applying in their clinical practice. As part of the teacher residency program, enrollment requires advanced selection and placement through a competitive process as well as program specific prerequisite and corequisite requirements. Prerequisite: 2.75 Overall GPA and departmental approval. Corequisite: EDST 4371 with a grade of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

### EDST 4370. Teacher Residency I.

This course will allow students to apply knowledge and skills learned during the Educator Preparation Program while engaging in clinical practice with experienced mentor teachers in school settings. Students will receive additional support, instruction, and supervision from program faculty throughout the semester experience. As part of the teacher residency program, enrollment requires advanced selection and placement through a competitive process as well as program specific prerequisite and corequisite requirements. Prerequisite: 2.75 Overall GPA and departmental approval. Corequisite: EDST 4170 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 24 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

### EDST 4371. Teacher Residency II.

This course will allow students to apply knowledge and skills learned during the Educator Preparation Program while engaging in clinical practice with experienced mentor teachers in school settings. Students will receive additional support, instruction, and supervision from program faculty throughout the semester experience. As part of the teacher residency program, enrollment requires advanced selection and placement through a competitive process as well as program specific prerequisite and corequisite requirements. Prerequisite: EDST 4370 and EDST 4170 both with grades of "C" or better and 2.75 Overall GPA and departmental approval. Corequisite: EDST 4171 with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 24 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

### EDST 4380. Clinical Teaching All-Level I.

Students will apply knowledge and skills learned during the teacher preparation program while engaging in clinical practice with experienced EC-6/4-8 mentor teachers in school settings with university instruction and supervision. This culminating experience is required for Texas teacher certification and is a half-semester course designed for students seeking All-Level certification. Prerequisites: Admittance to the Educator Preparation Program; 2.75 Overall GPA; additional coursework may not be taken concurrently except for the co-requisite; for undergraduate students, all other degree-required coursework must be completed; for graduate and post-baccalaureate students, all other certification coursework must be completed; requires departmental approval through Office of Educator Preparation application process. Corequisites: EDST 4381 with a grade of "D" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**EDST 4381. Clinical Teaching All-Level II.**

Students will apply knowledge and skills learned during the teacher preparation program while engaging in clinical practice with experienced 7-12 mentor teachers in school settings with university instruction and supervision. This culminating experience is required for Texas teacher certification and is a half-semester course designed for students seeking All-Level certification. Prerequisites: Admittance to the Educator Preparation Program; 2.75 Overall GPA; additional coursework may not be taken concurrently except for the co-requisite; for undergraduate students, all other degree-required coursework must be completed; for graduate and post-baccalaureate students, all other certification coursework must be completed; requires departmental approval through Office of Educator Preparation application process. Corequisites: EDST 4380 with a grade of "D" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4390. Teaching Internship I.**

In this course students will apply knowledge and skills learned during the teacher preparation program while serving as teacher of record in a public school classroom under supervision of university faculty and mentorship by school district personnel. The internship is available to graduate or post-baccalaureate students who have met all admittance and preparation criteria and hold a Texas probationary or intern teaching certificate. Students serving as interns are expected to follow all district, university, and state policies, and will receive course credit after completion of EDST 4391 and being recommended for standard teacher certification by the university and the school. Prerequisites: A minimum 2.75 Overall GPA and departmental approval.

**3 Credit Hours. 5 Lecture Contact Hours. 35 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4391. Teaching Internship II.**

In this course students will apply knowledge and skills learned during the teacher preparation program while serving as teacher of record in a public school classroom under supervision of university faculty and mentorship by school district personnel. The internship is available to graduate or post-baccalaureate students who have met all admittance and preparation criteria and hold a Texas probationary or intern teaching certificate. Students serving as interns are expected to follow all district, university, and state policies, and will receive course credit after being recommended for standard teacher certification by the university and the school. Prerequisite: EDST 4390 with a grade of "D" or better and a minimum 2.75 Overall GPA and department approval.

**3 Credit Hours. 5 Lecture Contact Hours. 35 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4470. Clinical Teaching in Residency I.**

This course will allow students to apply knowledge and skills learned during the Educator Preparation Program while engaging in clinical practice with experienced mentor teachers in school settings. Students will receive additional support, instruction, and supervision from program faculty throughout the semester experience. As part of the teacher residency program, enrollment requires advanced selection and placement through a competitive process as well as program specific prerequisite requirements. Prerequisite: A minimum 2.75 Overall GPA and departmental approval.

**4 Credit Hours. 4 Lecture Contact Hours. 24 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4471. Clinical Teaching in Residency II.**

This course will allow students to apply knowledge and skills learned during the Educator Preparation Program while engaging in clinical practice with experienced mentor teachers in school settings. Students will receive additional support, instruction, and supervision from program faculty throughout the semester experience. As part of the teacher residency program, enrollment requires advanced selection and placement through a competitive process as well as program specific prerequisite requirements. Prerequisite: EDST 4470 with a grade of "C" or better and minimum 2.75 Overall GPA and departmental approval.

**4 Credit Hours. 4 Lecture Contact Hours. 24 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4680. Clinical Teaching 4-8.**

Students will apply knowledge and skills learned during the teacher preparation program while engaging in clinical practice with experienced 4-8 mentor teachers in school settings with university instruction and supervision. This culminating experience is required for Texas teacher certification. Prerequisites: Admittance to the Educator Preparation Program; 2.75 Overall GPA; additional coursework may not be taken concurrently; for undergraduate students, all other degree-required coursework must be completed; for graduate and post-baccalaureate students, all other certification coursework must be completed; requires departmental approval through Office of Educator Preparation application process.

**6 Credit Hours. 1 Lecture Contact Hour. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4681. Clinical Teaching 7-12.**

Students will apply knowledge and skills learned during the teacher preparation program while engaging in clinical practice with experienced 7-12 mentor teachers in school settings with university instruction and supervision. This culminating experience is required for Texas teacher certification. Prerequisites: Admittance to the Educator Preparation Program; 2.75 Overall GPA; additional coursework may not be taken concurrently; for undergraduate students, all other degree-required coursework must be completed; for graduate and post-baccalaureate students, all other certification coursework must be completed; requires departmental approval through Office of Educator Preparation application process.

**6 Credit Hours. 1 Lecture Contact Hour. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4687. Clinical Teaching EC-6.**

Students will apply knowledge and skills learned during the teacher preparation program while engaging in clinical practice with experienced EC-6 mentor teachers in school settings with university instruction and supervision. This culminating experience is required for Texas teacher certification. Prerequisites: Admittance to the Educator Preparation Program; 2.75 Overall GPA; additional coursework may not be taken concurrently; for undergraduate students, all other degree-required coursework must be completed; for graduate and post-baccalaureate students, all other certification coursework must be completed; requires departmental approval through Office of Educator Preparation application process.

**6 Credit Hours. 1 Lecture Contact Hour. 40 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

Education Building Room 4032  
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[www.txstate.edu/clas](http://www.txstate.edu/clas) (<http://www.txstate.edu/clas/>)

The Department of Counseling, Leadership, Adult Education, and School Psychology (CLAS) offers the Bachelor in General Studies with a major in Integrated Studies. This interdisciplinary degree allows students to develop a degree plan from a range of disciplines across Texas State’s seven academic colleges. The department also offers the popular COUN 3320 ([http://mycatalog.txstate.edu/search/?P=COUN %203320](http://mycatalog.txstate.edu/search/?P=COUN%203320)) Introduction to Counseling & Psychotherapy as a support course for undergraduate programs across the university.

**Bachelor of General Studies (B.G.S.)**

- Major in Integrated Studies (p. 200)

**Minors**

- Human Resource Development and Training (p. 201)

**Counseling (COUN)**

**COUN 3320. Introduction to Counseling and Psychotherapy.**

The course is designed for upper-division undergraduates considering a helping profession or who wish to know more about counseling before entering into graduate study. The course offers introduction to counseling, counseling theories, and interpersonal communication skills that facilitate counseling relationships. Repeatable for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**General Studies (GNST)**

**GNST 4360. Integrated Career Preparation.**

This course is first in a two-part capstone sequence culminating in an applied project. Students will engage in self-analysis, identify marketable skills, and complete occupational and industry research. To complete this course, students will create an individualized career plan integrating three academic minors and identify a preliminary topic for an applied project to be developed in the second capstone course, GNST 4361- Integrated Project. (WI) Prerequisite: A minimum of 2.0 Texas State GPA and departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Perspective|Writing Intensive  
**Grade Mode:** Standard Letter

**GNST 4361. Integrated Project.**

This is the second course in a two-part capstone sequence culminating in an applied project. Students will complete an applied project, beginning with a formal proposal presentation containing career-specific problems or future graduate study research as identified in GNST 4360; a bibliography review; audience analysis; and an applied written solution. Students will end the course by completing a three-minute thesis-style (3MT®) presentation and a career portfolio to synthesize knowledge, skills, and abilities from both courses in the capstone sequence. (WI) Prerequisite: GNST 4360 with a grade of "D" or better and a minimum of 2.0 Texas State GPA and departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Perspective|Writing Intensive  
**Grade Mode:** Standard Letter

**Minimum required: 120 semester credit hours**

**General Requirements**

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
3. Nine semester credit hours must be writing intensive (WI).
4. If two years of the same foreign language were taken in high school, then enough additional hours to total the minimum 120 hours required for the degree will fulfill this requirement. In the absence of such high school language, two semesters of the same foreign language must be taken at the college level.

**Course Requirements**

Freshman		
First Semester Hours		Second Semester Hours
Communication Component Code 010	3	Communication Component Code 010 3
Government/Political Science Component Code 070	3	Government/Political Science Component Code 070 3

Mathematics Component Code 020	3 Life and Physical Sciences Component Code 030	3
Language, Philosophy and Culture Component Code 040	3 Creative Arts Component Code 050	3
Social and Behavioral Sciences Component Code 080	3 Component Area Option Codes 090, 091, 092, 093 and 094	3
US 1100	1	
	<b>16</b>	<b>15</b>

**Sophomore**

First Semester Hours	Second Semester Hours	
American History Component Code 060	3 Life and Physical Sciences Component Code 030	3
Component Area Option Codes 090, 091, 092, 093 and 094	3 American History Component Code 060	3
Electives <sup>2</sup>	9 Electives <sup>2</sup>	6
	<b>15</b>	<b>12</b>

**Junior**

First Semester Hours	Second Semester Hours	
Minor	6 GNST 4300	3
Electives <sup>2</sup>	9 Minor	6
	Electives <sup>2</sup>	9
	<b>15</b>	<b>18</b>

**Senior**

First Semester Hours	Second Semester Hours	
Electives <sup>2</sup>	15 GNST 4350	3
	Minor	6
	Electives <sup>2</sup>	5
	<b>15</b>	<b>14</b>

**Total Hours: 120**<sup>1</sup> US 1100 is only required for PACE students.<sup>2</sup> See advisor for confirmation of exact number of hours needed to reach 36 advanced hours and 120 total hours.

This minor will provide students with introductory skills for employment in Human Resource Development and Training. The minor requires 15 semester hours with at least 3 credit hours of prescribed electives from non-ADED courses.

Code	Title	Hours
<b>Required Courses</b>		
ADED 4322	Foundations of Human Resources Development	3
ADED 4321	Introduction to Adult Learning	3
ADED 4343	Organization Development	3
<b>Prescribed Electives</b>		
Choose 6 hours from the following:		6
ADED 4325	Methods for Teaching Adults	
ADED 4345	Topics in Teaching Adults	
ADED 4384	Internship in Human Resource Development	
CTE 3315	Leadership and Professional Development	

CTE 3321	Work-based Learning in Career and Technical Education
COMM 4336	Diversity and Inclusion Training
COMM 3319	Introduction to Organizational Communication
MGT 4373	Human Resource Management
MGT 4378	Training and Development
PA 3330	Public Personnel and Human Resource Administration
PSY 3333	Industrial Psychology
HA 3341	Project Management & Professional Development in Healthcare
SOCI 3358	Work and Society
ADED 4330	Adult Education Program Planning and Management
<b>Total Hours</b>	<b>15</b>

Education Building Room 3044

Telephone: 512-245-3701

www.txst.edu/ci (<https://www.education.txst.edu/ci/>)

The Department of Curriculum and Instruction at Texas State University offers undergraduate degrees that focus on the preparation and development of teachers and teacher leaders. All undergraduate programs in the department lead to initial teaching certification and have robust field experiences in local schools prior to clinical practice (student teaching).

## Levels of Certification

Students who wish to teach Elementary Core Subjects (Early Childhood through Grade 6 with specialization in English as a Second Language or Bilingual/Biliteracy Education), Middle Level (Grades 4 through 8 with specializations in Mathematics, Science, or English/Language Arts/Reading/Social Studies), or All-Level Special Education pursue the Bachelor of Science major in Education.

Students seeking other All-Level or Secondary (Grade 6, 7, or 8 through 12) certifications will complete an academic major within their chosen teaching field in the department and college where that major is housed and should consult with advisors in that college. A double major or a minor is required except those seeking a major in Special Education.

For a list of teacher certifications available at Texas State, see <https://www.education.txstate.edu/oep/current/initial-certification/certification-exams/list.html>.

## Education Majors

Students seeking this major as their primary major should consult with advisors in the College of Education Undergraduate Advising Center (<https://www.education.txstate.edu/advising/>) for detailed information regarding specific degree requirements, semester-by-semester course sequencing, and referrals to the application processes for Educator Preparation Program Admittance and Field-based Block placements. Students may be required to attend summer sessions in order to complete the program within a 4-year time period.

## Teacher Certification

In addition to an earned baccalaureate degree, there are six criteria for earning certification:



- Admittance to the Educator Preparation Program
- A passing criminal history review
- Completion of Field-Based Block
- Passing scores on all required certification exams
- Satisfactory completion of Clinical Teaching
- Applications for graduation as well as state certification

## Admittance to the Educator Preparation Program

In order to pursue teacher certification, students must apply and be invited to attend the Educator Preparation Program through the Office of Educator Preparation. If a student accepts this invitation, the student must then pay a required \$35 Texas Education Agency technology fee before the student will be officially admitted. Please see <http://www.education.txstate.edu/oep> (<http://www.education.txstate.edu/oep/>) for current admittance requirements and procedures.

For more information about Admittance to the Educator Preparation Program as well as additional required fees, see the Teacher Certification Handbook on the Office of Educator Preparation website: <https://www.education.txst.edu/oep/current/initial-certification.html>

Note that the Texas Educational Agency (TEA) requires multiple background checks for progression through educator preparation programs. If a student has a criminal history, that student is advised to request a Preliminary Criminal History Evaluation from the Texas Education Agency; schedule an appointment for free legal counseling services through Texas State University's Attorney for Students (<https://attorney.dos.txst.edu/>) and disclose this information to the Office of Educator Preparation.

## Admission Requirements

All degree programs within the Department of Curriculum and Instruction require formal admittance into the Educator Preparation Program.

Students must apply and be admitted to the Educator Preparation Program in order to enroll in Block coursework and Student Teaching in the Junior and Senior year. Refer to the requirements for Admittance to the Educator Preparation Program through the Office of Educator Preparation (p. 263).

## Bachelor of Arts (B.A.)

- Major in Education (Secondary Education; Teacher Certification with Double Major in another B.A. teacher certification degree program) (p. 211)

## Bachelor of Science (B.S.)

- Major in Education (Applied Bilingual/Biliteracy Education; Teacher Certification in Early Childhood through Grade Six Core Subjects with Bilingual-Spanish; Instructional Aide Pathway) - via Distance Education (p. 212)
- Major in Education (Applied Elementary Education; Teacher Certification in Early Childhood through Grade Six Core Subjects with English as a Second Language; Instructional Aide Pathway) - via Distance Education (p. 213)
- Major in Education (Applied Special Education; Teacher Certification in Special Education, Early Childhood through Grade Twelve; Instructional Aide Pathway) - via Distance Education (p. 214)

- Major in Education (Bilingual/Biliteracy Education; Teacher Certification in Early Childhood through Grade Six Core Subjects with Bilingual-Spanish) (p. 216)
- Major in Education (Elementary Education; Teacher Certification in Early Childhood through Grade Six Core Subjects with English as a Second Language) (p. 217)
- Major in Education (Middle Level Education; Teacher Certification in Core Subjects, Grades Four through Eight) (p. 218)
- Major in Education (Middle Level Education; Teacher Certification in English Language Arts and Reading/Social Studies, Grades Four through Eight) (p. 219)
- Major in Education (Middle Level Education; Teacher Certification in Mathematics, Grades Four through Eight) (p. 220)
- Major in Education (Middle Level Education; Teacher Certification in Mathematics and Science, Grades Four through Eight) (p. 221)
- Major in Education (Middle Level Education; Teacher Certification in Science, Grades Four through Eight) (p. 223)
- Major in Education (Secondary Education; Teacher Certification with Double Major in another B.S. teacher certification degree program) (p. 224)
- Major in Education (Special Education; Teacher Certification in Special Education, Early Childhood through Grade Twelve) (p. 225)

## Minors

- Education (p. 226)
- Special Education

**Subjects in this department include: BILG (p. 202), CI (p. 204), ECE (p. 207), EDP (p. 208), RDG (p. 208), SPED (p. 210)**

## Courses in Bilingual Education (BILG)

**BILG 3321. Literacy Instruction for Emergent Bilingual Students EC-6.**

This course provides critical analysis and application of current reading and writing methods and materials with a focus on theories associated with literacy/biliteracy development and methodologies for emergent bilinguals. The course is taught in Spanish and English. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 3332. Foundations of Bilingual Education.**

This course introduces the sociocultural, linguistic, cognitive, and policy foundations of bilingual education and ESL education. The course is taught in Spanish and English and is designed for students to gain practice in academic reading and writing in Spanish. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to the Educator Preparation Program and 2.75 Overall GPA and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 4325. Classroom Management and Teacher-Student Relationships in Bilingual Classrooms.**

This course prepares students to build authentic, bilingual classroom communities, including effective methods for establishing shared responsibility, constructive communication, and successful teacher-student relationships. Classroom routines and pedagogical practices are discussed to mitigate difficulties and maximize learning and connection. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and a 2.75 Overall GPA and departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BILG 4350. Mathematics in the Bilingual Education Classroom.**

The course provides an in-depth study of the mathematics content and methodology derived from research-based principles. To develop the mathematical understanding of emergent bilinguals through a field-based approach, the course emphasizes using cognition and bilingualism as learning resources to sustain mathematical knowledge using equity based-instruction and assessment. Prerequisite: 2.75 Overall GPA required. Junior classification required. Must be declared as seeking EC-6 Bilingual Generalist teacher certification. MATH 1315 (or one of the following: MATH 1319 or MATH 2417 or MATH 2471 or MATH 2472); MATH 2311 and MATH 2312 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 4360. Methods and Materials for Teaching ESL in Bilingual Content Areas.**

This course addresses the content, methods, and materials of elementary ESL classroom instruction for English language learners across the curriculum as well as dual language learners learning through two languages. This course is taught in Spanish and English and offers students the opportunity to read and write in Spanish. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to the Educator Preparation Program and a 2.75 Overall GPA and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 4361. Transliterate Communities in Schools.**

This course explores how to provide equitable educational opportunities to emergent bilinguals and their families within and outside of schooling. Using relationship building and instructional practices, learners incorporate the multicultural, translingual and cognitive competencies of bilingual learners that emerge from their community, representing learning resources that advance academic achievement. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to the Educator Preparation Program and a 2.75 Overall GPA and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 4362. Teaching Across the Bilingual Content Areas EC-6.**

This course is a study of research-based content and instructional methods and strategies, materials and resources to teach bilingual learners the EC-6 academic curriculum based on content-related standards associated with the teaching of mathematics, science, social studies, and language arts. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to the Educator Preparation Program and a 2.75 Overall GPA and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 4365. Biliteracy Development for Emergent Bilingual Learners.**

This course targets the dynamic, reciprocal process of literacy development in Spanish and English for emergent bilinguals. Theories, instructional methods and strategies, texts, and materials will be examined through an integrated approach that considers sociocultural, cognitive, linguistic, and political factors. The course will be taught in both Spanish and English. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisites: Admittance to the Educator Preparation Program and a 2.75 Overall GPA and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 4665. Biliteracy Development and Assessment for Emergent Bilingual Learners.**

This course explores the dynamic, unique process of reading and writing development in Spanish and English for emergent bilingual learners. Theoretical frameworks, instructional methods, strategies, and materials for promoting biliteracy development are examined through an integrated approach that considers socio-cognitive, linguistic, historical, and political factors. This course is taught in Spanish and English and includes extensive experience in a bilingual elementary classroom. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and a 2.75 Overall GPA and Departmental Approval.

**6 Credit Hours. 4 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 5365. Biliteracy Development in the Bilingual Education Classroom.**

This course is taught in Spanish and English, targeting the reciprocal process of literacy development in Spanish and English as a second language. Theories, methods, and approaches address learning and teaching processes that support biliteracy development of emergent bilingual within contexts framed by sociocultural, cognitive, linguistic, and affective factors. Prerequisite: CI 5337; CI 5387 SPAN 3308; SPAN 3371; upper levels of SPAN; or advanced studies in SPAN with a grade of B or better; or, Bilingual Education certification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 5367. Policy and Practice in Dual Language Immersion Education.**

This course focuses on current research in bilingual education and language in education policy and practice that shapes program models, curricula, and instruction in two-way and one-way dual language education. The course will be taught in Spanish and English and requires student work in each language. Prerequisites: CI 5387, CI 5337; SPAN 3308; SPAN 3371; or upper level SPAN courses; or advanced studies in SPAN having earned a grade of B or higher; or Bilingual Education certification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 5374. Bilingual/ESL Academic Content Instruction.**

The focus of this course is the integration of native language instruction (Spanish) and English as a second language (ESL) to teach the academic content areas (mathematics, science, social studies, and language arts) for English Language Learners (ELLs) with an emphasis on the cognitive and sociocultural considerations. Prerequisite: SPAN 3308 or SPAN 3371 with a grade of "B" or better; or upper level SPAN course(s); or advanced studies in SPAN with a grade of "B" or better; or Bilingual Education certification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 5388. The Politics of Language.**

Using a critical linguistic perspective, this course examines the sociopolitical aspects of language in local, national, and global contexts. Students learn about language ideologies and gain a profound understanding for how languages and language practices are intricately tied to the racial and economic power relations embedded in schools and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

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## Courses in Curriculum and Instruction (CI)

**CI 2310. Education for Change.**

In this course students will increase their understanding of education, teaching, and learning from a social justice perspective. They will learn about pedagogy as a form of cultural politics and how teachers serve as cultural workers. The course also includes a survey of learning theories and the foundational knowledge bases for schooling, teaching, and learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** EDUC 1301

**CI 2311. Education and Equity in a Diverse Society.**

This course will examine elementary education from a sociocultural, sociopolitical, and sociohistorical lens to reveal the need for equity in the current American schooling system. Students will question, analyze, and evaluate key issues and connections between schooling, community, society and policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 2355. STEM in Early Childhood and Elementary Education.**

This course provides an overview of STEM (Science, Technology, Engineering, Mathematics) teaching and learning, including science and engineering practices. Students will participate in and learn how to facilitate asset-based, culturally responsive, inclusive, inquiry-based, and design-based learning experiences that promote the STEM literacy and identity of early childhood and elementary students. Prerequisite: [PHYS 1310 or PHYS 1315 or PHYS 1320 or PHYS 1325 or PHYS 1360 or PHYS 1365 or PHYS 1370 or PHYS 1410 or PHYS 1420] and [GS 2310 or GS 3310 or GS 3320 or BIO 1320 or BIO 1330] both with grades of C or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 3300. Middle School Curriculum and Instruction.**

Overview of developmentally appropriate curriculum adhering to state and national standards for grades 4-8. Includes the application of learning theory in a safe classroom environment with a focus on cooperative learning, direct instruction, discovery learning, technology, and learner-centered instruction. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. (WI) Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CI 3322. The Design and Application of Curriculum in School Settings.**

This course focuses on design and application of curriculum including content, instructional methodologies, assessment, data-informed decision making, and technology integration. Students will apply foundational theories of human development, learning, and social justice as they focus on the organization of content, instructional planning, classroom environment, and assessment. Prerequisite: A minimum 2.75 overall GPA and departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**CI 3325. Adolescents and Society.**

This course involves a study of contemporary biological, cognitive, and psychological theories and processes of adolescence that prepares prospective teachers to understand abilities, behaviors, and needs of learners and teachers within the context of teacher-student relationships. Roles of family, peer groups, and culture are examined with the aid of contemporary adolescent literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 3332. Foundations of Bilingual and ESL Education.**

This course examines the rationale, history, and philosophy of bilingual and ESL education and develops students' understanding of the cultural and psychological influences that mediate the learning process. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisites: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental approval. (MULT & Mulp).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 3338. Social Studies in the Elementary and Middle School.**

The course provides learner-centered approaches to social studies knowledge, instruction, equity, communication, and professional development and prepares educators with strong foundations for powerful social studies teaching and learning practices including: (a) deep understanding/appreciation, (b) increased awareness of non-traditional approaches, (c) practical methods and applications, and (d) daily integration into teaching. Prerequisite: A minimum 2.75 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 3340. Teaching for Linguistic Diversity.**

This course provides pre-service content-area teachers a foundation to address the needs of multilingual learners in their classes. The course includes fundamental knowledge about language and communication, language acquisition, differentiated instruction and assessment, and ESL program types for pre-service teachers to implement appropriate and effective strategies to support the academic success of English learners. Prerequisite: CI 2310 or CI 2311 with a grade of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 3632. Foundations, Methods, and Materials for Teaching ESL in the Content Areas.**

This course examines the rationale, history, and philosophy of bilingual and ESL education and develops students' understanding of the cultural and psychological influences that mediate the learning process. Students will develop expertise in the content, methods, and materials of elementary ESL classroom instruction, including curricula and strategies for meeting the needs of English language learners in academic content areas. This course includes a field-based experience in a local elementary school that requires prior admittance into the Educator Preparation Program. Prerequisite: Admittance into Educator Preparation Program and Overall GPA 2.75 and [CI 2311 or CI 2310] and ECE 4300 both with a grade of a "C" or better.

**6 Credit Hours. 6 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CI 4270. Residency-Based Building Relationships in the Secondary Classroom.**

This course focuses on the development of appropriate classroom relationships based on current theory and research. This includes culturally responsive practices, social emotional practices, positive behavior interventions and supports, analysis of legal and ethical issues as they relate to classroom relationships, and field experiences in a variety of secondary environments. As this is part of a multi-course, residency-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Department Approval.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CI 4272. Residency-Based Teaching in Communities.**

This course will engage students in collaborative critical analysis and development of culturally responsive practices to respond to the educational needs of diverse learners in communities. Data-driven practices will be used to discuss issues of equity and access as well as to develop the ability to make evidence-based curricular choices. As this is part of a multi-course, residency-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental Approval.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CI 4300. Middle Level Philosophy and Schooling.**

Physical, social, emotional, cognitive, and moral characteristics of young adolescents in contexts of family, community, school, society. History and philosophy of middle school as a developmentally appropriate environment for young adolescents. Continued study of instruction that is affectively and cognitively appropriate for young adolescents. (WI) Prerequisite: A minimum 2.75 overall GPA and departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CI 4325. Classroom Management and Teacher-Student Relationships.**

This course will focus on classroom management theories and models. Personal philosophy, beliefs, and style of teaching will be examined as they relate to the various methods of classroom management, student discipline, and teacher-student relationships. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CI 4332. Secondary Teaching: Curriculum and Technology.**

This course investigates secondary curriculum, its history, organization, development, and representation in instructional materials. Students learn how curriculum is decided, impacted, and assessed, and the role of technology in curriculum. Topics include local, state, and national standards, trends, and roles of culture and technology in teaching and learning. Junior classification required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 4338. Social Studies Curriculum & Pedagogy for the Middle School.**

This course examines how the teaching of social studies is informed by theory and research. In this course students will analyze the foundations of social studies as a discipline, social studies curricular issues, social studies pedagogy, controversial issues pedagogy, and the construction of conceptual, inquiry-based units. (MULT) (WI) Prerequisites: 2.75 Overall GPA; Junior classification; must be declared as seeking 4-8 grade teacher certification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**CI 4343. Instructional Strategies for the Secondary Teacher.**

This course focuses on research-based instructional strategies to engage diverse secondary student populations in rigorous and relevant learning. Preservice teachers develop instructional decision-making skills by creating, implementing, and reflecting on lesson plans that integrate technology and assessment of learning. Prerequisite: CI 2310 and CI 3325 and CI 4332 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 4345. Teaching Mathematics to Diverse Children in Early Childhood through 2nd Grade Classrooms.**

This course provides opportunities to develop knowledge and skills to elicit, understand, and extend children's thinking from early childhood to second grade. Through directed field experiences, students will participate in problem-solving and assessment practices that support inclusive, culturally sustaining mathematics teaching to racially, linguistically, and socioeconomically diverse children. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and MATH 2311 with grade of "C" or better. Corequisite: ECE 4310 or ECE 3610 or BILG 3332 or BILG 4325 with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CI 4348. Teaching Mathematics to Diverse Children in EC-6th grade classrooms.**

This course focuses on providing instruction on and assessing the mathematical thinking of racially, linguistically, and socioeconomically diverse children in early childhood through sixth grade. Through directed field experiences, students will participate in problem-solving and assessment practices that support inclusive and evidence-based mathematics instruction. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and MATH 2311 with grade of "C" or better and 2.75 Overall GPA and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CI 4350. Teaching Mathematics to Diverse Children in 3rd - 6th Grade Classrooms.**

This course focuses on understanding and using children's mathematical thinking to inform teaching in third to sixth grade. Through directed field experiences, students will participate in problem-solving and assessment practices that support inclusive, culturally sustaining mathematics teaching to racially, linguistically, and socioeconomically diverse children. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and CI 4345 with grade of "C" or better and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter



**CI 4351. Middle School Mathematics Methods Course.**

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions). Prerequisites: 2.75 Overall GPA; Junior classification required; must be declared as seeking 4-8 grade teacher certification; MATH 1315 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 with grades of "C" or better must be earned in all prerequisites.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 4355. Science in Elementary Education.**

Course provides an overview of science standards and content, research-based science pedagogy, and the scientific process skills required for a developmentally appropriate, inquiry-driven science curriculum that facilitates the development of scientific literacy for all students, including second language learners. Prerequisite: [PHYS 1310 or PHYS 1315 or PHYS 1320 or PHYS 1325 or PHYS 1360 or PHYS 1365 or PHYS 1370 or PHYS 1410 or PHYS 1420] and [GS 2310 or GS 3310 or GS 3320 or BIO 1320 or BIO 1330] and CI 2355, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 4360. Methods and Materials for Teaching ESL in the Content.**

This course addresses content, methods, and materials of elementary ESL classroom instruction, including curricula, strategies, and materials for meeting the needs of English language learners in all academic content areas. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. (MULT & MULP) Prerequisites: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 4370. Building Relationships in the Secondary Classroom.**

This course focuses on the development of appropriate classroom relationships based on current theory and research. This includes culturally responsive practices, social emotional practices, positive behavior interventions and supports, analysis of legal and ethical issues as they relate to classroom relationships, and field experiences in a variety of secondary environments. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 4372. Teaching in Communities.**

In this course students will engage in critical analysis and development of culturally responsive curriculum for their content and their pedagogical content knowledge. They will develop critical analyses of the educational community from cultural, historical, and social standpoints in order to more effectively respond to the educational needs of diverse learners in communities. Data-driven practices will be used to discuss issues of equity and access as well as to develop the ability to make evidence-based curricular choices. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CI 4378. Problems in Education.**

Individual problems related to areas of selected study for the undergraduate student, designed to meet individual differences for the purpose of certification. A letter following the course title on the permanent record will indicate the area of emphasis according to this code: (i) Elementary, (j) Secondary, and (l) Bilingual. Repeatable for credit with different emphasis. Prerequisite: Admittance to the Educator Preparation Program; 2.75 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Courses in Early Childhood Education (ECE)

**ECE 3610. Early Childhood Education: Teaching and Curriculum in Programs for Young Children.**

This course emphasizes research, program development, and developmentally appropriate teaching strategies, materials and activities for children ages 3-6 and collaboration with families. A critical component will include directed field experiences in observation, participation, problem solving, assessing and teaching in programs for young children. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and ECE 4300 and ECE 4301 both with a grade of a "C" or better. Corequisite: CI 4345 with a grade of "D" or better.

**6 Credit Hours. 5 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 4300. The Languages of Children: Acquisition and Use.**

This course is designed to provide pre-service teachers with pertinent information regarding the development of language and cognition in pre-school and school-aged children. Information regarding language structure, the sequence of development as well as the cognitive and social aspects of language acquisition and use will be included. (MULT) Corequisite: CI 2311 with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ECE 4301. Play in Educational Settings for Diverse Learners.**

This course examines "play" as a fundamental mechanism for learning in schooling and society through historical, sociological, anthropological, and cultural perspectives with a focus on constructive play and sociodramatic play in educational settings. Students will explore equity in children's access to power and voice within play, deconstruct deficit-oriented views of children, examine the impact of play deprivation, and analyze how children acquire powerful cultural tools for problem-solving from home communities. In field experiences students will design inclusive play environments, utilize strategies designed to support and encourage children's play, and observe and document young children as they utilize play-based skills. Corequisite: CI 2311 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 4310. Seminar for Teachers of Young Children.**

This course provides directed field experiences in observation, participation, problem solving, assessing and teaching in programs for young children. In addition to course seminars, students have an approximately three-hour weekly placement in an approved preschool or kindergarten program. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 overall GPA and Departmental approval. Corequisite: CI 4345 with a grade of a "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 4352. Curriculum for Preschool and Kindergarten Children.**

This course emphasizes research, program development, and developmentally appropriate teaching strategies, materials and activities for children ages 3-6 and collaboration with families. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 4380. Independent Study in Early Childhood.**

In-depth study of selected topics of current need or interest in early childhood education. Work due on independent study basis with faculty member and only with permission of department. Repeatable for credit with different emphasis. Prerequisites: Admittance to the Educator Preparation Program; 2.75 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Courses in Educational Psychology (EDP)

**EDP 1350. Effective Learning.**

A study of the acquisition of procedural knowledge through the application of human learning theory, cognitive behavior modifications, and developmental psychology. Generalization and transfer of this knowledge will be emphasized. Repeatable for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** EDUC 1300

**EDP 2150. Strategic Learning.**

Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for college-level academic strategies. Students use assessment instruments to help them identify their own strengths and weaknesses as strategic learners.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Courses in Reading (RDG)

**RDG 3215. Residency-Based Assessing Literacy: Early Childhood Through Grade Six.**

This course will examine principles of literacy assessment to guide literacy instruction for all children, including culturally and linguistically diverse students, and plan appropriate instruction in a residency-based setting. As this is part of a multi-course, residency-based experience, students must apply in advance for placement and meet program-specific prerequisite requirements. Prerequisite: Admittance to Educator Preparation Program and A minimum 2.75 overall GPA and Departmental Approval.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 3221. Residency-Based Literacy Instruction for EC-6.**

This course will allow students to critically analyze and apply current literacy methods and materials with a focus on ESL theories and methodologies. As this is part of a multi-course, residency-based experience, students must apply in advance for placement and meet program-specific prerequisite requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental Approval.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 3311. Teaching English Phonology, Orthography, and Morphology.**

This course focuses on what educators need to know about the English language in order to teach phonics, spelling, and vocabulary effectively. The course is rooted in a linguistic and historical exploration of language change through usage, but focuses on applied understanding of these concepts in PK-12 reading and writing instruction. Topics include the linguistic underpinnings of decoding instruction, the structure of English orthography and its influence on spelling instruction, and the role of etymology/morphology in generative vocabulary instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 3312. Reading and Writing Instruction for Children with Special Needs.**

Course focuses on classroom reading instruction for children not making average progress in literacy. Course topics: nature and identification of literacy difficulties, including dyslexia; modification of instruction for children with special needs; diagnostic teaching, teacher/program effectiveness and legal requirements of special populations. Prerequisite: RDG 3311 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 3315. Assessing Literacy: Early Childhood Through Grade Six.**

This course examines principles of literacy assessment to guide literacy instruction for all children, including culturally and linguistically diverse students, and plan appropriate instruction in a field-based setting. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 3320. Integrating Reading and Writing.**

This course focuses on the integration of reading and writing with other subject areas, especially social studies, with special attention given to ESL methodologies for language arts instruction. The workshop approach for reading and writing is emphasized. (WI) (MULP) Prerequisite: RDG 4320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Writing Intensive

**Grade Mode:** Standard Letter

**RDG 3321. Literacy Instruction for Early Childhood Through Grade Six.**

This course engages students in the critical analysis and application of current literacy methods and materials, with a focus on ESL theories and methodologies. Course is taught in a field-based setting. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. (WI) (MULT) Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**RDG 3323. Teaching Literacies in the Content Areas.**

This course focuses on content-specific literacies in secondary teaching fields with an emphasis on reading, writing, and other 21st Century literacies in support of content-area learning. Topics include strategies for differentiating instruction across a variety of content areas, honoring socio-cultural dimensions of literacy, writing to learn, assessing literacies using various methods, and adapting instruction to meet student learning needs. Numerous content areas will be addressed. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 4310. Content Reading.**

This course provides information about instruction in the elementary content areas with emphasis on the effective use of textbooks and tradebooks. Course topics include: nature and purpose of content instruction and reading, text selection, use of tradebooks, comprehension, inquiry learning and problem solving, and assessment and meeting individual needs in content reading. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 4315. Critical Media Literacy for Educators.**

This course examines critical media literacy and how to critically engage with, and make sense of, the media, including social media.

This course helps students develop the analytic tools needed to examine media content and make more informed choices as an active audience. Students develop the critical skills to analyze, deconstruct, and reconstruct media messages, and develop lessons to help their middle school students to do the same. As this is part of a multi course, field based experience, students must apply in advance for placement and meet program specific prerequisite requirements. Prerequisite: Admittance to Educator Preparation Program and a minimum 2.75 overall GPA and departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**RDG 4320. Language and Literacy in Diverse Communities.**

This course includes the examination of sociolinguistic theories and an introduction to culturally responsive teaching of literacy. Topics address social identity factors, ethnicity, language variation, bilingualism, and the acquisition of Standard American English with implications for effective literacy instruction. (MULT) Prerequisite: CI 2310 or CI 2311 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 4330. Teaching Reading/Language Arts in Middle School.**

This course examines how the teaching of reading/language arts is informed by theory and research. Students will analyze the foundations of reading and language arts as disciplines, reading/language arts curricular issues, reading/language arts pedagogy, controversial issues in reading/language arts pedagogy, and the construction of conceptual, inquiry-based units. Prerequisites: RDG 4320 and (RDG 3311 or RDG 3312 or RDG 3320) both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**RDG 4380. Independent Study in Reading Instruction.**

Analysis and interpretation of selected topics of special interest in reading and language arts instruction. Topics and instructors will vary from semester to semester. Repeatable for credit with different emphasis. Prerequisites: Admittance to the Educator Preparation Program; 2.75 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Courses in Special Education (SPED)

**SPED 2360. Survey of Exceptionalities.**

Course provides for the examination of types, characteristics, and causes of various exceptionalities; identifies federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 3338. Educating Students with Emotional/Behavioral Disorders.**

This course addresses topics associated with teaching students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT) Prerequisites: If SPED 2360 is taken prior to this course, students must have earned a "C" or better. Corequisites: SPED 2360.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 3390. Assessing Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude; academic achievement; social, emotional, and motor development; and includes implications of these results for instruction or remediation. (MULT) Prerequisites: SPED 4345 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 4310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of program. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 4340. Evidence-Based Instructional Practices for Students with Mild or Moderate Disabilities.**

This course delineates evidence-based instructional theories and practices for students with mild or moderate disabilities and targets curricular and instructional design for students who need specialized methods for successful learning. Topics include curriculum-based measurement and progress monitoring, evidence-based strategies matched to presenting characteristics, and evidence-based inclusion models. (MULT) Prerequisite: SPED 2360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 4344. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 4345. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT) Prerequisites: SPED 2360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 4374. Classroom and Behavior Management Strategies for Students with Disabilities.**

Effective strategies for classroom management. Topics include: common management problems, evaluation of classroom management approaches, strategies for preventing behavior problems, teaching new behaviors, increasing desired group and individual behaviors, and positive strategies for reducing inappropriate group and individual behaviors. (MULT) Prerequisites: SPED 2360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 4381. Educating Students with Intellectual and Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques pertaining to individuals with intellectual and developmental disabilities. Techniques include specialized assessment and instructional strategies, functional curriculum development, transition planning, positive behavior supports, and assistive technologies. (MULT) Prerequisites: Must be declared as seeking All-Level Special Education teacher certification or with a Special Education minor; if SPED 2360 is taken prior to this course, students must have earned a "C" or better. Corequisite: SPED 2360.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 4389. Special Education Practicum.**

This course provides opportunities for students to design and apply assessment, planning, and instructional strategies. Students may be required to instruct in one or more content areas including academic, life, social, prevocational or vocational and/or communication skills. Prerequisites: SPED 3338 and SPED 3390 and SPED 4340 and SPED 4374 and SPED 4381 all with grades of "C" or better and a minimum 2.75 overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### Admission Requirements

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (<http://mycatalog.txstate.edu/undergraduate/degree-program-information/>) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses. A minor is typically required for the B.A. degree programs; however, for this program the major in another teacher certification degree program fulfills the requirement for a minor.
3. Nine hours of writing intensive (WI) courses are required for graduation, which can be completed by courses in the major or double major or the general education core curriculum.
4. In addition to the Education major and general education core curriculum requirements, students must also complete a second major in the discipline related to the teacher certification sought. All coursework must be completed prior to enrolling in EDST 4681.
5. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
6. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-)



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%3D&reserved=0).

7. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
8. For transfer students, 6 semester credit hours in Curriculum and Instruction and Special Education may be transferred from a Texas public institution of higher education for the Associate of Arts in Teaching Field of Study and be applied to the Bachelor of Arts degree with a major in Education at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
CI 2310	Education for Change (CI ELNA)	3
TCCN: CI 1301		
SPED 4344	Educating Students with Mild Disabilities (CI ELNA)	3
TCCN: CI 2301		

## Course Requirements

First Semester Hours		Second Semester Hours		Freshman
US 1100	1	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	Life and Physical Sciences Component Code 030	3	
Mathematics Component Code 020	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3	
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	Social and Behavioral Sciences Component Code 080	3	
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	Modern Language 2310 <sup>1</sup>	3	
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3			
	<b>16</b>		<b>15</b>	

First Semester Hours		Second Semester Hours	
Life and Physical Sciences Component Code 030	3 CI 2310		3
American History Component Code 060	3 American History Component Code 060		3

ENG Literature (Component Code 090/094) [Include ENG 092, 093, 2332, 2333, 2327 or 2328]	3 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 1306])	3
Modern Language 2320 <sup>1</sup>	3 Double Major	9
BA Computer Science, Logic, Mathematics or science <sup>2</sup>	3	
Double Major	3	
<b>18</b>		<b>18</b>

**Junior**

First Semester Hours		Second Semester Hours	
Education Core:	6	Block I:	9
CI 3325		CI 4343	
CI 4332		CI 3340	
BA ENG Literature [TCCN ENGL 2322, 2323, 2333, 2327 or 2328]	3	SPED 4344	
Double Major	8	Double Major	6
	<b>17</b>		<b>15</b>

## Senior

	First Semester Hours	Second Semester Hours
Block II:	9 Clinical Practice: Student Teaching	6
CI 4370	EDST 4681	
CI 4372		
RDG 3323		
Double Major	6	
	<b>15</b>	<b>6</b>

**Total Hours: 120**

- <sup>1</sup> Students must complete 6 hours of the same foreign language (2310 and 2320). Most students complete 1410 and 1420 as prerequisites before attempting 2310.
- <sup>2</sup> Students may choose from the following: ANTH 2301 & ANTH 2101, BIO, CHEM, CS, GEO 2410, GEOL, MATH, PHIL 2330, or PHYS. This course must be different from courses taken to satisfy the Life and Physical Sciences Component Code 030.

## Admission Requirements

Declaration into the degree program requires documentation of two years of service as an instructional aide (otherwise known as paraprofessional or teacher's assistant) in a PK-12 public or accredited private school. Degree Progress will require continued employment as an instructional aide and admittance to the Educator Preparation Program (see those separate criteria here (<https://www.education.txst.edu/oep/current/initial-certification/admittance/eligibility.html>)).

## General Requirements

1. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
2. Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All

others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Ccholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7C619c134a14c94d4caf65c424794c8c00%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPhOiwNlwO7zGOMT0ubQv3iERel%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Ccholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7C619c134a14c94d4caf65c424794c8c00%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPhOiwNlwO7zGOMT0ubQv3iERel%3D&reserved=0)).

PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3 American History Component Code 060	3
American History Component Code 060	3 ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
SPAN 3308 or 3307	3 ARTT 3370, MU 3370, or TH 3370	3
GS 3310	3 ESS 3321 or PH 3321	3
	SPAN 3309 or 3371	3
	<b>15</b>	<b>18</b>

**Junior**

First Semester Hours	Second Semester Hours	
Education Core:	12 Bilingual Field-Based Block I:	9
CI 2311	BILG 3332	
CI 4345	BILG 4361	
ECE 4300	RDG 3321	
RDG 4320	CI 4325	3
ECE 4301	3 CI 4350	3
CI 3338	3	
	<b>18</b>	<b>15</b>

**Senior**

First Semester Hours	Second Semester Hours	
Bilingual Field-Based Block II:	12 EDST 4687	6
BILG 4362		
BILG 4365		
CI 4360		
RDG 3315		
CI 4355	3	
SPED 4344	3	
	<b>18</b>	<b>6</b>

**Total Hours: 121**

- While not recommended, previously completed courses in some areas can be substituted for the following degree requirements:
  - MATH 2417 or MATH 2471 with a grade of "C" or better can satisfy the MATH 1315 or MATH 1319 requirement.
  - BIO 1321 or BIO 1330 or BIO 1331 with a grade of "C" or better can satisfy the BIO 1320 requirement.

- SPAN 1410, SPAN 1420, SPAN 2310, and SPAN 2320 are prerequisites for SPAN 3307 and SPAN 3308.

## Course Requirements

	First Semester Hours	Second Semester Hours	Freshman
US 1100	1 MATH 1312, 1315, or 1319 (Mathematics Component Code 020 [TCCN MATH 1342, MATH 1314, or MATH 1324])	3	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3	3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 GS 2310 or PHYS 1365 (Life and Physical Sciences Component Code 030 )	3	3
GS 2310 or PHYS 1365 (Life and Physical Sciences Component Code 030)	3 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1315])	3	3
GEO 1310 or ANTH 1312 (Social and Behavioral Sciences Component Code 080 [TCCN GEOG 1303 or ANTH 2351])	3		
	<b>16</b>	<b>15</b>	

**Sophomore**

First Semester Hours	Second Semester Hours	
MATH 2311 (TCCN MATH 1350)	3 MATH 2312 (TCCN MATH 1351)	3

## Admission Requirements

Declaration into the degree program requires documentation of two years of service as an instructional aide (otherwise known as paraprofessional or teacher's assistant) in a PK-12 public or accredited private school. Degree Progress will require continued employment as an instructional aide and admittance to the Educator Preparation Program (see those

separate criteria here (<https://www.education.txst.edu/oep/current/initial-certification/admittance/eligibility.html>)).

General Requirements

- 1. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of “C” or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
- 2. Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
- 3. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- 4. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

Freshman			
First Semester Hours		Second Semester Hours	
US 1100	1	MATH 1312, 1315, or 1319 (Mathematics Component Code 020 [TCCN MATH 1342, MATH 1314, or MATH 1324])	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3	GS 2310 or PHYS 1365 (Life and Physical Sciences Component Code 030 )	3
PHYS 1365 or GS 2310 (Life and Physical Sciences Component Code 030)	3	COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
CI 2355	3		
16		15	

Sophomore			
First Semester Hours		Second Semester Hours	
MATH 2311 (TCCN MATH 1350)	3	MATH 2312 (TCCN MATH 1351)	3

PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3	ESS 3321 or PH 3321	3
American History Component Code 060	3	American History Component Code 060	3
GEO 1310 or ANTH 1312 (Social and Behavioral Sciences Component Code 080 [TCCN GEOG 1303 or ANTH 2351])	3	ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
ARTT 3370, MU 3370, or TH 3370	3	EDTC 3300	3

15		15	
First Semester Hours		Second Semester Hours	
Education Core:	12	ESL Block:	6
CI 2311		CI 3332	
CI 4345		CI 4360	
ECE 4300		ECE Block:	6
RDG 4320		ECE 4310	
GS 3310	3	ECE 4352	
SPED 4344	3	CI 4350	3
		ECE 4301	3
18		18	

Senior			
First Semester Hours		Second Semester Hours	
Elementary Field-Based Block:	9	EDST 4687	6
RDG 3315			
RDG 3321			
CI 4325			
RDG 3320	3		
CI 4355	3		
CI 3338	3		
18		6	

Total Hours: 121

<sup>1</sup> While not recommended, previously completed courses in some areas can be substituted for the following degree requirements:

- MATH 2321 or MATH 2417 or MATH 2471 with a grade of “C” or better can satisfy the MATH 1315 or MATH 1319 requirement.
- BIO 1321 or BIO 1330 or BIO 1331 with a grade of “C” or better can satisfy the BIO 1320 requirement.

Minimum required: 121 semester credit hours

Admission Requirements

Declaration into the degree program requires documentation of two years of service as an instructional aide (otherwise known as paraprofessional or teacher’s assistant) in a PK-12 public or accredited private school. Degree progress will require continued employment as an instructional

aid and admittance to the Educator Preparation Program (see those separate criteria here (<https://www.education.txst.edu/oep/current/initial-certification/admittance/eligibility.html>)).

General Requirements

- 1. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of “C” or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
- 2. Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
- 3. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- 4. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

Course Requirements

Freshman		
First Hours Semester	Second Hours Semester	
US 1100	1 MATH 1312, 1315, or 1319 (Mathematics Component Code 020 [TCCN MATH 1342, MATH 1314 or 1324])	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3 ENG 1320 (Communic: Component Code 010 [TCCN ENGL 1302])	3

ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Governmen Political Science Component Code 070 [TCCN GOVT 2305])	3 GS 2310 or PHYS 1365 (Life and Physical Sciences Component Code 030)	3
PHYS 1365 or GS 2310 (Life and Physical Sciences Component Code 030)	3 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
GEO 1310 or ANTH 1312 (Social and Behavioral Sciences Component Code 080 [TCCN GEOG 1303])		3

16 15

Sophomore

First Hours Semester	Second Hours Semester	
SPED 2360	3 Education Core:	6
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3 CI 3325	
MATH 2311 (TCCN MATH 1350)	3 CI 4332	

GS 3310	3 MATH 2312 (TCCN MATH 1351)	3
American History Component Code 060	3 American History Component Code 060	3
	ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3

15

15

Junior

First Hours Semester	Second Hours Semester	Summer Hours	
ESL Block:	6 High School Field-Based Block:	9 CI 4350	3
CI 3332	RDG 3321		
CI 4360	CI 4370		
SPED 4345	3 CI 4372		
SPED 4340	3 SPED 3390	3	
SPED 3338	3 SPED 4374	3	
CI 4355	3 SPED 4381	3	
	CI 3338	3	
18	21		3

Senior

First Hours Semester	Second Hours Semester		
Elementary Field-Based Block:	9 Student Teaching:	6	
RDG 3311	EDST 431		
RDG 3321	EDST 4381		
CI 4325			
SPED 4389	3		
12	6		

**Total Hours: 121**

<sup>1</sup> While not recommended, previously completed courses in some areas can be substituted for the following degree requirements:

- MATH 2321 or MATH 2417 or MATH 2471 with a grade of "C" or better can satisfy the MATH 1315 or MATH 1319 requirement.
- BIO 1321 or BIO 1330 or BIO 1331 with a grade of "C" or better can satisfy the BIO 1320 requirement.

## Minimum required: 121 semester credit hours

### Admission Requirements

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

### General Requirements

1. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
2. Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
3. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
4. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Ccholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c420f94%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPbQjwNw%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Ccholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c420f94%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPbQjwNw%3D&reserved=0)).

### Course Requirements

	First Semester Hours	Second Semester Hours	Freshman
US 1100	1	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
MATH 1312, 1315, or 1319 (Mathematics Component Code 020 [TCCN MATH 1342, MATH 1314, or MATH 1324])	3	GS 2310 or PHYS 1365 (Life and Physical Sciences Component Code 030)	3



POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1315])	3
GS 2310 or PHYS 1365 (Life and Physical Sciences Component Code 030)	3 MATH 2311 (TCCN MATH 1350)	3
GEO 1310 or ANTH 1312 (Social and Behavioral Sciences Component Code 080 [TCCN GEOG 1303 or ANTH 2351])	3 ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
<b>16</b>	<b>18</b>	

## Sophomore

First Semester Hours	Second Semester Hours	
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3 American History Component Code 060	3
MATH 2312 (TCCN MATH 1351)	3 ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
American History Component Code 060	3 ARTT 3370, MU 3370, TH 3370, ESS 3321, or PH 3321	3
GS 3310	3 SPAN 3308 or 3307	3
CI 2311	3 RDG 4320	3
<b>15</b>	<b>15</b>	

## Junior

First Semester Hours	Second Semester Hours	
CI 2355	3 Bilingual Field-Based Block I:	15
ECE 4300	3 BILG 3332	
ECE 4301	3 BILG 4361	
CI 3338	3 BILG 3321	
SPED 4344	3 BILG 4325	
SPAN 3309 or 3371	3 CI 4345	
	CI 4355	3
<b>18</b>	<b>18</b>	

## Senior

First Semester Hours	Second Semester Hours	
Bilingual Field-Based Block II:	15 EDST 4687	6
BILG 4362		
BILG 4665		
BILG 4360		
BILG 4350		
<b>15</b>	<b>6</b>	

**Total Hours: 121**

SPAN 1410, SPAN 1420, SPAN 2310, and SPAN 2320 are prerequisites for SPAN 3307 SPAN 3308.

## Minimum required: 121 semester credit hours

### Admission Requirements

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

### General Requirements

1. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
2. Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
3. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
4. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

## Freshman

First Semester Hours	Second Semester Hours	
US 1100	1 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 GS 2310 or PHYS 1365 (Life and Physical Sciences Component Code 030 )	3
PHYS 1365 or GS 2310 (Life and Physical Sciences Component Code 030)	3 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
MATH 1312, 1315, or 1319 (Mathematics Component Code 020 [TCCN MATH 1342], MATH 1314, or MATH 1324))	3 MATH 2311 (TCCN MATH 1350)	3

<sup>1</sup> While not recommended, previously completed courses in some areas can be substituted for the following degree requirements:

- MATH 2417 or MATH 2471 with a grade of "C" or better can satisfy the MATH 1315 or MATH 1319 requirement.

GEO 1310 or ANTH 1312 (Social and Behavioral Sciences Component Code 080 [TCCN GEOG 1303 or ANTH 2351])	3 ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
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16

18

**Sophomore**

First Semester Hours	Second Semester Hours	
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3 ESS 3321 or PH 3321	3
MATH 2312 (TCCN MATH 1351)	3 American History Component Code 060	3
American History Component Code 060	3 RDG 4320	3
GS 3310	3 ARTT 3370, MU 3370, or TH 3370	3
CI 2311	3 ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3

15

15

**Junior**

First Semester Hours	Second Semester Hours	
CI 2355	3 ESL Block:	6
CI 3338	3 CI 3632	
ECE 4300	3 ECE Block:	9
ECE 4301	3 ECE 3610	
RDG 3320	3 CI 4345	
SPED 4344	3 CI 4355	3

18

18

**Senior**

First Semester Hours	Second Semester Hours	
Elementary Field-Based Block:	12 EDST 4687 or 4470 <i>and</i> 4471	6
RDG 3315 or 3215		
RDG 3321 or 3221		
CI 4325		
CI 4350		
EDTC 3300	3	

15

6

**Total Hours: 121**

<sup>1</sup> While not recommended, previously completed courses in some areas can be substituted for the following degree requirements:

- MATH 2321 or MATH 2417 or MATH 2471 with a grade of "C" or better can satisfy the MATH 1315 or MATH 1319 requirement.

## Minimum required: 120 semester credit hours

### Admission Requirements

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

### General Requirements

1. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
2. Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
3. Any degree program of 122 hours or more may be considered a five-year program. To complete the predetermined sequence of courses in 4 years, students will most likely need to attend summer sessions.
4. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
5. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

### Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
US 1100	1 MATH 1315 (Mathematics Component Code 020 [TCCN MATH 1314])	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1315])	3

PHYS 1365 (Life and Physical Sciences Component Code 030 [TCCN PHYS 1310])	3 GS 2310 (Life and Physical Sciences Component Code 030 )	3
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Social and Behavioral Sciences Component Code 080	3	
<b>16</b>		<b>15</b>

First Semester Hours	Second Semester Hours	Sophomore
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American History Component Code 060	3 American History Component Code 060	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3 MATH 2312 (TCCN MATH 1351)	3
MATH 2311 (TCCN MATH 1350)	3 MATH 3315 or CI 2355	3
MATH 2321 (TCCN MATH 2313) <sup>1</sup>	3 RDG 3311	3
HIST 3372	3 CHEM 1310 (TCCN CHEM 1305) <sup>1</sup>	3
ENG Literature (Component Area Option Code 090/094 [TCCN ENGL 2322, 2323, 2332, 2333, 2327, or 2328])	3	
<b>18</b>		<b>15</b>

First Semester Hours	Second Semester Hours	Junior
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Education Core	9 CI 3340	3
CI 2310 or 2311	MATH 2328 (TCCN MATH 1342)	3
CI 3325	PHYS 1340 (TCCN ASTR 1304 or 1303)	3
RDG 4320	BIO 4403	4
BIO 4402	4 SPED 4344	3
RDG 3312	3	
<b>16</b>		<b>16</b>

First Semester Hours	Second Semester Hours	Senior
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Middle School Field-Based Block:	9 EDST 4680	6
RDG 4310		
CI 3300		
RDG 4315		
MATH 4302	3	
GEO 4340	3	
CI 4355 or BIO 4408	3	
<b>18</b>		<b>6</b>

**Total Hours: 120**

- CHEM 1341 or CHEM 1342 can satisfy the CHEM 1310 requirement.
- MATH 2471 can satisfy the MATH 2321 requirement.

## Minimum required: 121 semester credit hours

### Admission Requirements

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

### General Requirements

1. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
2. Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
3. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
4. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

### Course Requirements

First Semester Hours	Second Semester Hours	Freshman
US 1100	1 Mathematics Component Code 020	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 Life and Physical Sciences Component Code 030	3
Life and Physical Sciences Component Code 030	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3

<sup>1</sup> While not recommended, previously completed courses in some areas can be substituted for the following degree requirements.

POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
GEO 1310 (Social and Behavioral Sciences Component Code 080 [TCCN GEOG 1303])	3	
<b>16</b>		<b>15</b>

First Semester Hours		Second Semester Hours	
American History Component Code 060	3	American History Component Code 060	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3	ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
Advanced ENG Elective	3	Advanced PS Elective from Group II	3
Advanced PS Elective from Group II	3	ANTH 3309, 3314, or 3324	3
ECO 2301 or 2314 (TCCN ECON 1301 or 2302)	3	ENG 3386	3
ENG 3303	3	MC 3319	3
<b>18</b>		<b>18</b>	

First Semester Hours		Second Semester Hours	
Education Core	9	RDG 3311	3
CI 2310 or 2311		RDG 3320	3
CI 3325		Advanced HIST Elective	3
RDG 4320		Advanced GEO Elective	3
HIST 3372	3	RDG 4330	3
GEO 4340	3	SPED 4344	3
<b>15</b>		<b>18</b>	

First Semester Hours		Second Semester Hours	
Middle School Field-Based Block:	9	EDST 4680	6
RDG 4310			
CI 3300			
RDG 4315			
CI 3340	3		
CI 3340	3		
<b>15</b>		<b>6</b>	

**Total Hours: 121**

<sup>1</sup> Science Elective: BIO 1320, CHEM 1310, GEO 2310, PHYS 1340, GS 3310, PHYS 1350, GS 2310, PHYS 1365

## Minimum required: 120 semester credit hours

### Admission Requirements

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

### General Requirements

1. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
2. Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
3. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
4. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

### Course Requirements

First Semester Hours		Second Semester Hours	
US 1100	1	MATH 1315 (Mathematics Component Code 020 [TCCN MATH 1314]) <sup>1</sup>	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3	COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
PHYS 1365 (Life and Physical Sciences Component Code 030 [TCCN PHYS 1310])	3	BIO 1320 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1308])	3

Social and Behavioral Sciences Component Code 080	3
<b>16</b>	<b>15</b>

**Sophomore**

First Semester Hours		Second Semester Hours	
American History Component Code 060	3	MATH 2312 (TCCN MATH 1351)	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3	MATH 3315	3
MATH 2311 (TCCN MATH 1350)	3	BIO 1321 (TCCN BIOL 1309)	3
MATH 2321 or 2471 (TCCN MATH 2313 or 2413)	3	American History Component Code 060	3
ENG Literature (Component Area Option Code 090/094 [TCCN ENGL 2322, 2323, 2332, 2333, 2327, or 2328])	3	CI 4350	3
CI 2355	3		
<b>18</b>		<b>15</b>	

**Junior**

First Semester Hours		Second Semester Hours	
MATH 2331 or 2472	3	Education Core:	6
MATH 4302	3	CI 2310 or 2311	
MATH 2328 (TCCN MATH 1342)	3	CI 3325 <sup>1</sup>	
CS 1428 (TCCN COSC 1437) <sup>2</sup>	4	CHEM 1330 or 1350 (TCCN CHEM 1307)	3
CHEM 1310 or 1340 (TCCN CHEM 1305)	3	MATH 4311	3
		MATH 4303	3
<b>16</b>		<b>15</b>	

**Senior**

First Semester Hours		Second Semester Hours	
Middle School Field-Based Block:	9	EDST 4680	6
RDG 4310			
CI 3300			
RDG 4315			
CI 3340	3		
SPED 4344	3		
Elective	3		
<b>18</b>		<b>6</b>	

**Total Hours: 119**

<sup>1</sup> If students take MATH 1315, then they will need to take an additional 1-hour class to reach the 120-hour requirement for the degree.

<sup>2</sup> CS 1308 with a grade of "C" or better can satisfy the CS 1428 requirement.

## Minimum required: 120-121 semester credit hours

### Admission Requirements

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

### General Requirements

1. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
2. Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
3. Any degree program of 122 hours or more may be considered a five-year program. To complete the predetermined sequence of courses in 4 years, students will most likely need to attend summer sessions.
4. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
5. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

### Course Requirements

		Freshman	
First Semester	Second Semester	Summer Hours	
US 1100	1 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3 CHEM 1342 (TCCN CHEM 1312)	3
POSI 2310 (Government Political Science Component Code 070 [TCCN GOVT 2306])	3 POSI 2320 (Government Political Science Component Code 070 [TCCN GOVT 2305])	3 CHEM 1142 (TCCN CHEM 1112)	1



ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	MATH 2321 or 2471 (TCCN MATH 2313 or MATH 2413)	3	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
BIO 1330 or PHYS 1365 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3	CHEM 1341 (TCCN CHEM 1311)	3	Social and Behavioral Sciences Component Code 080	3	MATH 2312 (TCCN MATH 1351)	3
BIO 1130 (TCCN BIOL 1106)	1	CHEM 1141 (TCCN CHEM 1111)	1	PHYS 1365 (Life and Physical Sciences Component Code 030 [TCCN PHYS 1310 or BIOL 1306])	3	MATH 2331 or 2472	3
MATH 1315 or 2417 (Mathematic Component Code 020 [TCCN MATH 1314 or 2412])	3	BIO 1331 (TCCN BIOL 1307)	3	ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3		
		BIO 1131 (TCCN BIOL 1107)	1				
	14		17		18		15
			4				
			Sophomore				
							Junior
First Hours Semester		Second Hours Semester		First Hours Semester		Second Hours Semester	
American History Component Code 060	3	American History Component Code 060	3	BIO 2450 (TCCN BIOL 2416)	4	Education Core:	6
MATH 2311 (TCCN MATH 1350)	3	ENG Literature (Component Area Option Code 090/094) [ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3	BIO 4402	4	CI 2310 or 2311	
				MATH 4302	3	CI 3325	
				MATH 3315, CI 2355, or CI 4355	3	BIO 4403	4
						MATH 2328 (TCCN MATH 1342)	3
						SPED 4344	3
	14				14		16

## Senior

## Course Requirements

First Hours Semester	Second Hours Semester	
Middle School Field-Based Block:	9 EDST 4680	6
RDG 4310		
CI 3300		
RDG 4310		
CI 3340	3	
BIO 4408	4	
<b>16</b>	<b>6</b>	

**Total Hours: 120**

<sup>1</sup> Students should take BIO 2450 prior to/during the first semester of their Junior Year.

**Minimum required: 120  
semester credit hours**

## Admission Requirements

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

## General Requirements

1. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
2. Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
3. Any degree program of 122 hours or more may be considered a five-year program. To complete the predetermined sequence of courses in 4 years, students will most likely need to attend summer sessions.
4. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
5. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

First Semester Hours	Second Semester Hours	Freshman
US 1100	1 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3 BIO 1331 (TCCN BIOL 1307)	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 BIO 1131 (TCCN BIOL 1107)	1
MATH 1315 or 1319 (Mathematics Component Code 020 [TCCN MATH 1314 or 1324])	3 CHEM 1341 (TCCN CHEM 1311)	3
BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3 CHEM 1141 (TCCN CHEM 1111)	1
BIO 1130 (TCCN BIOL 1106)	1 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
ENG Literature (Component Area Option Code 090/094 [TCCN ENGL 2322, 2323, 2332, 2333, 2327, or 2328])	3 Social and Behavioral Sciences Component Code 080	3
<b>17</b>	<b>17</b>	

First Semester Hours	Second Semester Hours	Sophomore
American History Component Code 060	3 American History Component Code 060	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
CHEM 1342 (TCCN CHEM 1312)	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
CHEM 1142 (TCCN CHEM 1112)	1 MATH 2321 (TCCN MATH 2313) <sup>1</sup>	3
PHYS 1365 (Life and Physical Sciences Component Code 030 [TCCN PHYS 1310])	3 MATH 2328 (TCCN MATH 1342)	3
Science Electives <sup>3</sup>	3	
<b>16</b>	<b>15</b>	

First Semester Hours	Second Semester Hours	Junior
Education Core	6 CI 4355	3
CI 2310 or 2311	SPED 4344	3
CI 3325	BIO 4403	4
MATH 3315 or CI 2355	3 PHYS 1340 or 1350 (TCCN ASTR 1304 or 1303)	3

BIO 2450 (TCN BIOL 2416) <sup>2</sup>	4 Science Electives <sup>3</sup>	3
BIO 4402	4	
	17	16

First Semester Hours		Second Semester Hours	Senior
Middle School Field-Based Block:	9 EDST 4680		6
RDG 4310			
CI 3300			
RDG 4315			
CI 3340	3		
BIO 4408	4		
	16		6

Total Hours: 120

- <sup>2</sup> Students should take BIO 2450 prior to/during the first semester of their Junior Year.
- <sup>1</sup> While not recommended, previously completed courses in some areas can be substituted for the following degree requirements:
- MATH 2471 can satisfy the MATH 2321 requirement.
- <sup>3</sup> Science Electives must be chosen from the following: BIO 2@, BIO 3@, BIO 4@, GEOL 3@, OR GEOL 4@.

Minimum required: 121 semester credit hours

Admission Requirements

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

General Requirements

1. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of “C” or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
2. Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
3. Any degree program of 122 hours or more may be considered a five-year program. To complete the predetermined sequence of courses in 4 years, students will most likely need to attend summer sessions.
4. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
5. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you

may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

Course Requirements

First Semester Hours		Second Semester Hours	Freshman
US 1100	1	ENG 1320 (Communication Component Code 010)	3
ENG 1310 (Communication Component Code 010)	3	Life and Physical Sciences Component Code 030	3
Mathematics Component Code 020	3	POSI 2320 (Government/Political Science Component Code 070)	3
COMM 1310 (Component Area Option Code 090/091)	3	Social and Behavioral Sciences Component Code 080	3
POSI 2310 (Government/Political Science Component Code 070)	3	Double Major	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050)	3		
	16		15

First Semester Hours		Second Semester Hours	Sophomore
Life and Physical Sciences Component Code 030	3	CI 2310	3
American History Component Code 060	3	American History Component Code 060	3
ENG Literature (Component Area Option Code 090/094)	3	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040)	3
Double Major	6	Elective	3
Elective	3	Double Major	6
	18		18

First Semester Hours		Second Semester Hours	Junior
Education Core:	6	Block I:	9
CI 3325		CI 4343	
CI 4332		CI 3340	
Double Major	6	SPED 4344	
Electives	6	Double Major	6
	18		15

First Semester Hours		Second Semester Hours	Senior
Block II:	9	EDST 4681	6
CI 4370			
CI 4372			
RDG 3323			

Double Major	6	
	15	6
<b>Total Hours: 121</b>		

## Minimum required: 121 semester credit hours

### Admission Requirements

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

### General Requirements

1. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
2. Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
3. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
4. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

### Course Requirements

Freshman		
First Hours Semester	Second Hours Semester	
US 1100	1 MATH 1312, 1315, or 1319 (Mathematics Component Code 020 [TCCN MATH 1342, MATH 1314 or 1324])	3

ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3 ENG 1320 (Communic: Component Code 010 [TCCN ENGL 1302])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Government Political Science Component Code 070 [TCCN GOVT 2305])	3 GS 2310 or PHYS 1365 (Life and Physical Sciences Component Code 030)	3
PHYS 1365 or GS 2310 (Life and Physical Sciences Component Code 030)	3 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
GEO 1310 or ANTH 1312 (Social and Behavioral Sciences Component Code 080 [TCCN GEOG 1303])		3
		16 15

Sophomore

First Hours Semester	Second Hours Semester	
SPED 2360	3 Education Core:	6

PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3	CI 3325	
MATH 2311 (TCCN MATH 1350)	3	CI 4332	
GS 3310	3	MATH 2312 (TCCN MATH 1351)	3
American History Component Code 060	3	American History Component Code 060	3
		ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
	15		15

**Junior**

First Hours Semester	Second Hours Semester	Summer Hours	
ESL Block:	6 High School Field-Based Block:	9 CI 4348	3
CI 3632	CI 2355		
SPED 4345	3 CI 4370		
SPED 4340	3 CI 4372		
SPED 3338	3 SPED 3390	3	
CI 4355	3 SPED 4374	3	
	SPED 4381	3	
	CI 3338	3	
	18	21	3

**Senior**

First Hours Semester	Second Hours Semester	
Elementary Field-Based Block:	9 Student Teaching:	6

RDG 3311 or 3215	EDST 436 & EDST 4 (OR)
RDG 3321 or 3221	EDST 4470 & EDST 4471 (OR)
CI 4325	EDST 437 & EDST 4 & EDST 4 & EDST 4
SPED 4389	3
	12
	6

**Total Hours: 121**

- <sup>1</sup> While not recommended, previously completed courses in some areas can be substituted for the following degree requirements:
- MATH 2321 or MATH 2417 or MATH 2471 with a grade of "C" or better can satisfy the MATH 1315 or MATH 1319 requirement.
  - BIO 1321 or BIO 1330 or BIO 1331 with a grade of "C" or better can satisfy the BIO 1320 requirement.

The minor in Education requires 21 semester credit hours and includes required education coursework for students seeking teaching certification for high school or all-level subject areas.

Students must declare a major in a subject area for which teacher certification is available to be eligible for this minor. The minor in Secondary Education is not available with all majors. See the Academic Advisor in the College of your major for more information.

To satisfy graduation requirements for teacher certification, students must have an Overall GPA of 2.75 or better, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.

Code	Title	Hours
<b>Education Core:</b>		
CI 3325	Adolescents and Society <sup>1</sup>	3
CI 4332	Secondary Teaching: Curriculum and Technology <sup>2</sup>	3
<b>Field-Based Block</b>		
CI 4370	Building Relationships in the Secondary Classroom	3
CI 4372	Teaching in Communities	3
RDG 3323	Teaching Literacies in the Content Areas	3
<b>Clinical Teaching</b>		
EDST 4681	Clinical Teaching 7-12 <sup>3</sup>	6

<sup>1</sup> Students declared in select majors can apply credit for ARTT 3373, DAN 2365, DAN 3331, ESS 4624, or MU 3340 with either MU 3145 or MU 3147 or MU 3155 or MU 3157 or MU 3242 or MU 3265 to satisfy the CI 3325 course requirement. For guidance, refer to your Degree Audit and/or contact the Advising Center in the college of your major.



<sup>2</sup> Students declared in select majors can apply credit for AG 4311, ARTT 4377, DAN 3330, ESS 4624, MU 1150 with either MU 3253 or MU 3254, or TH 4310 to satisfy the CI 4332 course requirement. For guidance, refer to your Degree Audit and/or contact the Advising Center in the college of your major.

<sup>3</sup> Students declared in select majors can apply credit for AG 4681, EDST 4380 with EDST 4381, or FCS 4681 to satisfy the EDST 4681 course requirement. For guidance, refer to your Degree Audit and/or contact the Advising Center in the college of your major.

The minor in Special Education requires 21 semester credit hours. Students pursuing the minor in Special Education, who are not otherwise declared in a teacher certification-seeking degree plan, do not need to be admitted to the Educator Preparation program. They will, however, encounter prerequisite restrictions when attempting to register for their SPED minor courses since those courses require the 'Teacher Certification Cohort' as a prerequisite. In order to resolve this, those students will need to request prerequisite overrides each semester for each SPED course that they plan to register for by using the CI Department's Prerequisite Override Request form. For more information contact the Department of Curriculum and Instruction (<http://www.education.txstate.edu/ci/>).

Code	Title	Hours
<b>Required Courses</b>		
SPED 2360	Survey of Exceptionalities	3
SPED 3338	Educating Students with Emotional/Behavioral Disorders	3
SPED 3390	Assessing Students with Disabilities	3
SPED 4340	Evidence-Based Instructional Practices for Students with Mild or Moderate Disabilities	3
SPED 4345	Teaching Language Arts to Students with Disabilities	3
SPED 4374	Classroom and Behavior Management Strategies for Students with Disabilities	3
SPED 4381	Educating Students with Intellectual and Developmental Disabilities	3
<b>Total Hours</b>		<b>21</b>

Jowers Center Room A116  
Telephone: 512-245-2561 Fax: 512-245-8678  
[www.hhp.txst.edu](http://www.hhp.txst.edu)

## Exercise and Sports Science

The Bachelor of Science in Exercise and Sports Science (BS) degree has several specializations that allow graduates to prepare for careers and post-graduate training in health and rehabilitation professions, education, exercise prescription, management of exercise programs, and coaching. For students interested in health and rehabilitation careers, the BS with a concentration in Pre-Rehabilitation Science gives students a degree that is well aligned with entrance requirements of advanced study in health care and allied health professions like athletic training, physical therapy, occupational therapy, orthotics/prosthetics, chiropractic, or physician's assistant. For students interested in a career in athletic training, the Pre-Rehabilitation Sciences concentration also offers a 3/2 dual program through which students may complete both BS degree and Master of Science in Athletic Training degree within 5 years. Current information on the 3/2 program admission requirements can be found here. The BS with a concentration in Clinical Exercise Science prepares graduates for

careers in cardiopulmonary, clinical exercise physiology, and diagnostic testing and programming for cardiac rehabilitation and other special populations. The BS with All-level Physical Education (EC-12) Teacher Certification prepares graduates to teach in elementary and secondary schools. The BS with a major in Health and Fitness Management and minor in Business Administration blends exercise science knowledge with the management and leadership skills needed to direct fitness and health/wellness programs in commercial, corporate, and institutional settings. Select advanced course work and field experiences may be required for graduation in these programs and depend on maintenance of GPAs above 2.0 or 2.75.

## Public Health

The Bachelor of Science in Public Health will provide students with the breadth of knowledge, skills, and experiential learning for careers in public health. The purpose of the program is to facilitate development of knowledge and skills to promote health in public health settings (e.g., community, governmental, educational, healthcare) by using evidence-based practices to design, implement, and evaluate public health programs that impact individual behavior, community environments, and public policy. Students can complete the general B.S. in Public Health degree, or they can choose one of the three concentrations: Applied Epidemiology, Health Equity, or Health and Wellness Coaching. Graduates of this program play a vital role in the public health and health promotion workforces. Careers include jobs with governmental public health agencies, industries, non-profit organizations, and various clinical settings with specializations in obesity and diabetes prevention, epidemiology, mental health, substance abuse prevention, public policy, environmental health, maternal, child, and adolescent health, or worksite wellness. Completion of this program may lead to further education opportunities in community and public health, health promotion, allied health, dental, and medical graduate programs. Upon degree completion, students are eligible to sit for the national Certified Health Education Specialist (CHES) and the Certified Wellness Practitioner (CWP) exams.

## Recreation Studies

The Bachelor of Science in Recreation Studies combines classroom learning, field-based learning and on-the-job training in two career tracks: recreation administration and therapeutic recreation. Students study recreation programming, leadership, marketing, evaluation, administration, and therapeutic recreation. Recreation Studies graduates work in camps, nursing homes, recreation centers, resorts, hospitals, rehabilitation facilities, fitness centers, and state and national parks. The program is nationally accredited by the Council on Accreditation, Parks, Recreation, Tourism and Related Professions (COAPRT) in both recreation studies and therapeutic recreation. Graduates of this program are eligible to sit for certification examinations for National Council for Therapeutic Recreation Certification (Certified Therapeutic Recreation Specialist - CTRS) and/or the National Recreation and Park Association (Certified Park and Recreation Professional - CPRP).

## PFW Service Courses

Several Texas State degree programs require Physical Fitness and Wellness (PFW) classes to give students knowledge, skills, and health-related benefits of physical activity. All students may elect to take PFW classes to learn new skills/activities, relieve stress, maintain health, and meet others with similar activity interests. Most students may elect to take PFW 1301 (Social and Behavioral Dimensions of Physical Fitness and Wellness) to satisfy their general education requirement in social and behavioral sciences. The PFW program provides a wide variety of activity

classes that include sports, games, and indoor or outdoor activities both on and off campus. PFW classes are for students of all ages, skill ranges, and abilities. Some PFW classes, however, are restricted to students who are involved in athletics, band, ROTC, and other organizations. Some off-campus classes have an additional activity fee appropriate for the instructor and facilities used. Contact the Director of the PFW Division if you have any questions about PFW classes.

## Admittance to the Educator Preparation Program

The All-Level Physical Education Teacher Certifications requires formal admittance into the Educator Preparation Program by the Office of Educator Preparation (p. 263). Please see <http://www.education.txstate.edu/oep/> for current admittance requirements and procedures.

## Bachelor of Science (B.S.)/M.S. Major in Athletic Training

- Major in Exercise and Sports Science/Major in Athletic Training (<http://mycatalog.txstate.edu/undergraduate/education/health-human-performance/exercise-sports-sci-athletic-trainig-bessms/>)

## Bachelor of Science (B.S.)

- Major in Exercise and Sports Science (Clinical Exercise Science Concentration) (p. 251)
- Major in Exercise and Sports Science (Pre-Rehabilitation Sciences Concentration) (p. 252)
- Major in Exercise and Sports Science (Teacher Certification in Physical Education, Early Childhood Through Grade 12) (p. 253)
- Major in Health and Fitness Management (p. 254)
- Major in Public Health (p. 255)
- Major in Public Health (Applied Epidemiology Concentration) (p. 256)
- Major in Public Health (Health and Wellness Coaching Concentration) (p. 257)
- Major in Public Health (Health Equity Concentration) (p. 258)
- Major in Recreation Studies (Community Recreation Concentration) (p. 259)
- Major in Recreation Studies (Outdoor Recreation Concentration) (p. 260)
- Major in Recreation Studies (Recreational Therapy Concentration) (p. 261)

## Minors

- Adaptive Recreation and Sport (p. 262)
- Coaching
- Exercise and Sports Science
- Public Health
- Outdoor Recreation Leadership
- Recreation and Event Planning

**Subjects in this department include: AT (p. 228), ESS (p. 229), PFW (p. 233), PH, REC (p. 236)**

## Courses in Athletic Training (AT)

### AT 2298. Orientation to Athletic Training Profession.

The purpose of this course is to provide the student with an introduction to the academic and clinical aspects of the profession of athletic training. The course includes the history of the profession, basic knowledge and skills, principles, and techniques used by an athletic trainer. The student will participate in educational observation of clinical experiences with a certified athletic trainer to gain more knowledge of the profession of athletic training. Prerequisite: HIM 2360 with grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### AT 2356. Prevention and Care of Athletic Injuries.

This course focuses on the theoretical and practical aspects of the prevention, treatment, and rehabilitation of athletic injuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### AT 2400. Functional Anatomy.

The students will learn to qualitatively analyze the movements of the human body while integrating musculoskeletal anatomy and neuromuscular physiology principles. Corequisite: BIO 2430 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### AT 3298. Foundations of Athletic Training Practice.

The purpose of this course is to provide the students with a foundation in clinical skills associated with the athletic training profession. The course will include observational experiences. Prerequisite: HIM 2360 and AT 2298 both with grades of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### AT 3311. Clinical Assessment I.

This course instructs students in the knowledge and skills used in the clinical evaluation of injuries and illnesses involving the head and face, brain, cervical spine, upper extremity, thorax, and pulmonary and cardiovascular systems. Prerequisite: AT 2356 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### AT 3312. Clinical Assessment II.

This course instructs students about the preliminary and secondary survey with emphasis on clinical assessment of lumbar spine and lower extremity injuries as well as abdomen, gastrointestinal, genitourinary, endocrine, dermatological, and systemic illnesses. Prerequisite: AT 3311 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 3358. Clinical Pathopharmacology.**

This course combines pathophysiology, the study of dynamic aspects of disease processes and study of drugs prescribed to prevent, diagnose, cure, or care for disease across the lifespan. Content includes etiology, pathogenesis, clinical presentation, implications for treatment, and pharmacological management. Prerequisite: BIO 2430 or [BIO 2451 and BIO 2452] either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 3400. Gross Applied Anatomy.**

This course provides a study of the structure and function of the human body with particular emphasis on the muscular, skeletal, vascular and nervous systems. Attention will be on the anatomy and physiology of the body systems focusing on understanding specific functions of body tissues. Laboratory study of the human cadaver is included. Prerequisite: AT 2400 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 4313. Clinical Therapeutic Interventions.**

This course provides a theoretical and clinical background in the use of therapeutic interventions in physical medicine, both modalities and exercise, for patients with musculoskeletal and neurological injuries. Prerequisite: AT 3311 and AT 3312 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 4360. Internship in Clinical Settings.**

Students will be introduced to the clinical aspects of allied health professions by being assigned to a minimum of two clinical sites. Prerequisite: AT 3311 and AT 3312 both with a grade of "C" or better and a minimum 2.75 Texas State GPA.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Courses in Exercise and Sports Science (ESS)

**ESS 1100. Lifetime Fitness and Wellness.**

This course introduces students to the concepts of health-related physical fitness. Emphasis is placed on learning how to teach these concepts. Students will design and implement an exercise program for enhancing health-related physical fitness. Restricted to majors or minors in Exercise and Sports Science, Athletic Training, or Health and Fitness Management.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PHED 1164

**ESS 1101. Seminar in Exercise and Sport Science.**

This course provides students with an introduction to the various areas of exercise science, including interventions for healthy versus clinical populations, professional opportunities, individual awareness of professional responsibilities, familiarization with current trends and issues, and professional literature.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1128. Aquatic Therapy.**

The course addresses basic principles and concepts of aquatic therapy and aquatic emergency management. This course prepares students for the American Red Cross Basic Water Rescue Certification.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1172. Beginning Field Sports.**

This course prepares students to become proficient instructors of field sports, including softball and soccer. Emphasis is on skill development, instructional practices, peer coaching, rules, terminology, offensive and defensive strategies, team organization, game play, referee skills, skills assessment, and conditioning for field sports. Restricted to majors or minors in Exercise and Sports Science, Coaching, or Health and Fitness Management.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1173A. Practicum for Teaching Individual Sports.**

This course provides for real-life application of concepts learned in ESS 1310. This practicum aligns with an accompanying section of an approved Team Sports ESS/PFW Activity course. Pre-Service teachers seeking All-Level Physical Education teacher certification will gain valuable experience in planning and teaching lessons from a models-based teaching perspective. Prerequisite: ESS 1310 with grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ESS 1173B. Practicum for Teaching Team Sports.**

This course provides for real-life application of concepts learned in ESS 1310. This practicum aligns with an accompanying section of an approved Team Sports ESS/PFW Activity course. Pre-Service teachers seeking All-Level Physical Education teacher certification will gain valuable experience in planning and teaching lessons from a models-based teaching perspective. Prerequisite: ESS 1310 with grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ESS 1173C. Practicum for Teaching Conditioning.**

This course provides for real-life application of concepts learned in ESS 1310. This practicum aligns with an accompanying section of an approved Team Sports ESS/PFW Activity course. Pre-Service teachers seeking All-Level Physical Education teacher certification will gain valuable experience in planning and teaching lessons from a models-based teaching perspective. Prerequisite: ESS 1310 with grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ESS 1175. Beginning Jogging and Conditioning.**

This course presents the proper biomechanics of jogging, safety rules, and conditioning principles relevant to the activity. Course topics include warming-up and cooling-down, hydration, monitoring and modifying intensity, training for road races, and jogging-related injuries. Students will also learn how to train individuals entering into a jogging program. Restricted to majors or minors in Exercise and Sports Science or Health and Fitness Management.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1176. Beginning Tennis, Badminton, and Other Racket Sports.**

This course prepares Exercise and Sports Science majors to be proficient instructors of racket sports, including tennis and badminton. The emphasis is on the fundamentals of racket sports and program development for the beginner. Restricted to majors or minors in Exercise and Sports Science, Health and Fitness Management, or Coaching.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1178. Beginning Volleyball and Basketball.**

This course prepares students to become proficient instructors of volleyball and basketball. Emphasis is on skill development, instructional practices, peer coaching, rules, terminology, offensive and defensive strategies, team organization, communication, game play, referee skills, skills assessment, and conditioning for volleyball and basketball. Restricted to majors or minors in Exercise and Sports Science, Health and Fitness Management, or Coaching.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1179. Beginning Weight Training.**

This course prepares students to be proficient instructors of all forms of resistance training. Emphasis is on understanding the proper, safe, and effective techniques of weight lifting. Students will learn how to develop resistance-training programs for untrained individuals with a variety of conditions.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1201. Group Exercise Instructor Training.**

This course is for students interested in becoming certified group exercise instructors. Students will learn how to safely and effectively conduct group exercise classes. Students will be trained to teach a variety of formats, such as high- and low-impact aerobics, step aerobics, kickboxing, yoga, and resistance training. Prerequisite: Major in Health and Fitness Management or consent of the instructor.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ESS 1298. Foundations of Sports Medicine.**

This introductory course provides an essential foundation for students beginning their course of study in the field of sports medicine. Students will understand key principles of professionalism, responsibilities, ethics and legal aspects, scope of practice, and health care job opportunities in the careers of sports medicine.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1310. Introduction to Teaching Physical Education.**

This course is designed to provide pre-service physical educators an introduction to fundamental principles of teaching physical education in K-12 settings. Progressive steps in developing a basic understanding of pedagogical skills, physical education curriculum, and professional attributes needed to pursue the teaching profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 2320. Motor Development.**

This course provides the exercise science and physical education student with a knowledge base in the study of changes in motor behavior across the lifespan, the processes that underlie these changes, and factors that affect them. Prerequisite: Major or minor in Exercise and Sports Science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 2321. Curriculum Design & Implementation in Physical Activity Settings.**

This course is designed to teach students how to design and implement a comprehensive physical education program in school settings. Concepts from the course can be extended to include before or after school programs as well for all grade levels (K-12).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3117. Laboratory in Exercise Physiology.**

In this laboratory course, students perform experiments that highlight the physiological responses to exercise. This course also introduces students to basic techniques in the assessment of health and human performance, including the assessment of maximal oxygen consumption, body composition, anaerobic power and capacity, muscular fitness, movement economy, and dietary intake. Prerequisite: BIO 2430 or [BIO 2451 and BIO 2452] or [BIO 3425 and BIO 3426] any with grades of "C" or better and a minimum 2.0 Overall GPA. Corequisite: ESS 3317 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3180. Cardiopulmonary Resuscitation (CPR), First Aid, and Basic Life Support (BLS).**

This course will teach the fundamentals of Cardiopulmonary Resuscitation (CPR) and First Aid. An extension of the class will include Basic Life Support (BLS) i.e. epinephrine injection, supplemental oxygen administration, and automated defibrillation administration.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3303. Assistant Dive Instructor.**

This course provides students with the technical knowledge necessary to prepare for the Assistant Diver Instructor Scuba Certification. Topics include advanced diving physiology, air station operations, assisting instructors with beginning open-water dive students, and boat diving operations. Prerequisite: PFW 1201 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3304. Divemaster.**

This course provides students with the technical knowledge necessary to prepare for the National Association of Underwater Instructors Divemaster Scuba Certification. Topics include advanced diving physiology, organizing open-water dives, air station operations, assisting instructors with beginning and advanced open-water dive students, and boat diving operations. Prerequisite: Assistant Instructor Certification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3317. Exercise Physiology.**

Students learn the acute and chronic physiological responses to exercise. Emphasis is on muscle bioenergetics, muscle contractile properties, performance improvement through training and supplementation, as well as cardiopulmonary and endocrine responses to exercise. Prerequisite: BIO 2430 2430, or [BIO BIO 2451 and BIO 2452] 2452, with grades of "C" or [BIO 3425 and BIO 3426] any with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**ESS 3319. Introduction to Cardiopulmonary Exercise Physiology.**

This course introduces students to the cardiovascular and pulmonary systems, discusses the physiological dynamics, control mechanisms, and system interrelationships of the cardiovascular and pulmonary systems, and explores the effects of exercise on these systems, including the physiological factors that limit exercise tolerance across the spectrum of health and chronic disease. Prerequisite: BIO 2430 or [BIO 2451 and BIO 2452] and ESS 1101 all with grades of "C" or better a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3320. Biomechanics.**

This course provides an introduction to the mechanical foundations of anatomical function and human movement. Qualitative and quantitative biomechanical analyses of human movement are introduced to inform the prescription of technique, equipment, and training interventions. Prerequisite: BIO 2430 or [BIO 2451 and BIO 2452] or [BIO 3425 and BIO 3426] all with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3321. Teaching Elementary Children Physical Activity.**

This course introduces students majoring in Elementary Education and/or Exercise and Sports Science to physical education knowledge and movement concepts. It provides innovative techniques for incorporating physical activity within the elementary school setting. The course presents theory and then guides the students in applying those theories in a practical way.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3323. Psychosocial Aspects of Exercise and Sport Science.**

This course examines the psychological and social theories and research related to physical activity. Emphasis is on the determinants that influence exercise behavior and sport participation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3325. Applied Assessment of Physical Activity.**

This course is designed to provide students with a theory to practice approach in the assessment of physical activity within the physical education setting. Particular emphasis is placed on empowering students to use relevant and meaningful physical activity assessments in K-12 schools. Prerequisites: ESS 1310 and ESS 2320. Restricted to majors seeking all level Teacher Certification in Physical Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ESS 3329. Motor Learning.**

This course provides students with an understanding of the physiological, neurological, and psychological factors affecting performance and acquisition of motor skills. Students will examine the structural components underlying the learning of motor skills and draw upon examples from sport, physical activities, and rehabilitation. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ESS 3340. Theory and Principles of Coaching.**

This course examines the theories and principles of effective coaching, including philosophy, ethics, strategies, team motivation and organization, coach-athlete relationships, performance analysis, and the administration of facilities, personnel, and contests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ESS 4100. Professional Development in Health and Fitness Management.**

This course prepares students to obtain a health and fitness internship and to actively participate in professional development activities including conferences, development of resumes, and interaction with health and fitness professionals. Must be taken the last long semester before internship. Prerequisite: A minimum 2.0 Overall GPA.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ESS 4101. Professional Development in Clinical Exercise Science.**

This course prepares students to obtain an internship related to clinical exercise science and to actively participate in professional development activities including conferences, development of professional materials, and interaction with clinical exercise professionals. Must be taken the last long semester before internship. Prerequisite: A minimum 2.0 Overall GPA.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ESS 4317. Fitness Assessment and Programming for Healthy Populations.**

Students are presented with current information on fitness assessment and exercise programming for healthy individuals of all ages and fitness levels. Emphasis is placed on preparation for multiple certifications offered by relevant professional organizations. Prerequisites: ESS 3117 and ESS 3317 both with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ESS 4318. Fitness Assessment and Programming Practicum for Healthy Populations.**

During this 80-hour practicum, students will acquire advanced knowledge and skills associated with appraising health risk, assessing fitness levels, and designing exercise programs for diverse populations through on-line, classroom, and laboratory settings as well as through field-based experiences by working in a variety of venues. Prerequisite: ESS 3117 and ESS 3317 with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ESS 4319. Fitness Assessment and Programming in Clinical Exercise Science.**

This course provides students with an opportunity to develop knowledge, skills, and competence required to assess and prescribe exercise for clinical populations and to gain knowledge related to managed care and rehabilitation with clinical patients. Prerequisites: ESS 3117 and ESS 3317 both with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ESS 4320. Resistance Training and Conditioning.**

This course discusses the development and evaluation of training principles and programs for diverse populations. Emphasis is placed on physiological adaptations and mechanical principles related to the application of resistance training. Prerequisites: ESS 3317 and ESS 3117 both with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**ESS 4321. Fitness Assessment and Programming Practicum in Clinical Exercise Science.**

This course presents current exercise and sports science information on testing and programming for clinical populations. This course provides fundamental knowledge, competence, and skills necessary to conduct safe and valid assessments, interventions, and rehabilitation programs for patients with health problems. Students will spend 80 hours at a practicum site. Prerequisite: ESS 1101 and ESS 3117 and ESS 3317 and ESS 3319 all with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 1 Lecture Contact Hour. 5 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ESS 4323. Adapted Physical Education.**

This introductory course provides All-Level teacher certification candidates in Exercise and Sports Science with content knowledge on legal mandates, evidence-based practices, and the characteristics of selected disabilities and their considerations when designing meaningful individualized physical activity experiences to meet the students with disabilities in school settings. Prerequisites: ESS 1310, ESS 2320 and 2.75 overall GPA. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Course Attribute(s):** Writing Intensive  
**Grade Mode:** Standard Letter

**ESS 4324. Adapted Physical Activity.**

This course introduces students to the field of adapted physical activity, including sport and leisure for persons with disabilities. This course provides content knowledge on how to instruct physical activities to individuals with unique needs in various settings. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ESS 4333. Fitness Assessment and Programming for Populations Requiring Special Considerations.**

This course provides practical information on fitness assessment and programming for persons requiring special considerations due to their age, pregnancy, obesity, diabetes, low back pain or other health conditions. Prerequisite: ESS 1101 and ESS 3117 and ESS 3317 all with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4337. Independent Study in Exercise and Sports Science.**

This course is for students who are interested in research related to Exercise and Sports Science. Students develop a research study, collect data, and analyze the results. Repeatable for credit with different emphasis. Prerequisites: A minimum GPA of 3.00 and special approval.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ESS 4340. Internship in Coaching.**

This 220-hour internship provides students with work-related experience. Students will strengthen their coaching-related knowledge, skills, and abilities by observing and shadowing coaches as well as assisting with a range of tasks, including training athletes, managing the facilities, and organizing practices. Prerequisites: completion of all coursework required for the minor in Coaching and special approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 4351. Measurement & Evaluation in Exercise and Sports Science.**

This course introduces students to the fundamental principles and techniques of measuring human performance related to Exercise and Sports Science, as well as evaluating and interpreting the results of exercise science and human performance tests in children and adults. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4357. Water Safety Instruction for Service Learning.**

This course is designed for students to obtain the Red Cross Water Safety Instruction (WSI) certification, and learn how to teach using a Mastery Motivational Climate/TARGET approach. More than half of the semester will involve providing swim lessons to students grades K-6 from a San Marcos school. Students must be able to perform the following skills: front crawl, back crawl, breaststroke, elementary backstroke and sidestroke for 25 yards; butterfly for 15 yards; back float and tread water for 1 minute. Students with a current WSI certification will be exempt from the required WSI lab at the beginning of the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4624. Principles and Practices for Teaching Physical Education.**

This course provides students with an in-depth study of theory and curriculum encompassing the design and implementation of developmentally appropriate and culturally responsive physical education programs for children and adolescents. Emphasis is on implementing evidenced-based curricula that promote youths' enjoyment of and participation in lifelong physical activity. Prerequisites: ESS 1310 and ESS 2320 and ESS 3325, all with a grade of "D" or better, and 2.75 overall GPA.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4660. Exercise and Sports Science Internship.**

In this 400-hour internship, students will apply theoretical health and fitness management principles and concepts to an organizational setting. This course requires students to participate in a health and fitness organization/agency and complete a semester-long planning and evaluation project. (WI) Prerequisite: A minimum 2.0 Overall GPA and department approval.

**6 Credit Hours. 0 Lecture Contact Hours. 25 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ESS 4661. Internship in Clinical Exercise Science.**

This course places the student in a professional work environment to apply the concepts of exercise rehabilitation in a cardiac care, respiratory therapy, or other healthcare setting, under the supervision of professionals in the field. Students are required to spend 400 hours in this internship position. Prerequisite: Department approval and a minimum 2.0 Overall GPA.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Courses in Physical Fitness/Wellness (PFW)

**PFW 1101. Lifetime Fitness & Wellness.**

To develop knowledge, skills, and physical activity behaviors associated with personal fitness and wellness.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1110A. Aerobic Conditioning.**

This course covers a variety of aerobic conditioning formats.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** PHED 1164

**PFW 1110B. Group Fitness.**

This course will include various types of aerobic/cardio exercise formats.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** PHED 1164

**PFW 1110E. Beginning Jogging & Conditioning.**

Beginning Jogging/Conditioning.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1110G. Beginning Weight Lifting.**

Beginning Weight Lifting.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1110K. Restricted Fitness Activities.**

Restricted Fitness Activities.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1130A. Beginning Basketball.**

Beginning Basketball.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1130B. Soccer.**

Soccer.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140A. Football Varsity.**

Football Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140B. Basketball–Men's Varsity.**

Basketball–Men's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140C. Basketball–Women's Varsity.**

Basketball–Women's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140D. Track & Field–Men's Varsity.**

Track & Field–Men's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140E. Track & Field–Women's Varsity.**

Track & Field–Women's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140F. Volleyball – Women's Varsity.**

Volleyball – Women's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140G. Baseball–Men's Varsity.**

Baseball–Men's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140H. Softball–Women's Varsity.**

Softball–Women's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140I. Soccer-Women's Varsity.**

Soccer-Women's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1149. Strutters.**

Strutters.

**1 Credit Hour. 1 Lecture Contact Hour. 9 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1150B. Beginning Bowling.**

Beginning Bowling.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1150D. Beginning Golf.**

Beginning Golf.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1150G. Restricted Leisure Activities.**

Restricted Leisure Activities.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1154. Leisure/Recreation Activities.**

Leisure/Recreation Activities.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing|Header**Grade Mode:** Standard Letter**PFW 1154B. Challenge Course Facilitation.**

This course provides an overview of leadership theories and skill development for indoor/outdoor challenge course activities, with an emphasis on safety management. Students will develop skills necessary to facilitate either high or low elements of a challenge course. May be repeated once with different emphasis for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**TCCN:** PHED 1164**PFW 1154C. Backpacking.**

Backpacking.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1155G. Racquetball.**

Racquetball.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1155H. Beginning Tennis.**

Beginning Tennis.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1155N. Pocket Billiards.**

Pocket Billiards.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1160B. Beginning Volleyball.**

Beginning Volleyball.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1165A. Golf–Men's Varsity.**

Golf–Men's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1165C. Tennis–Women's Varsity.**

Tennis–Women's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1165D. Golf – Women's Varsity.**

Golf – Women's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1165E. Varsity Cheerleaders.**

Varsity Cheerleaders.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1190A. Canoeing.**

Canoeing.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter

**PFW 1190F. Beginning Scuba.**

Beginning Scuba.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**TCCN:** PHED 1164**PFW 1201. Advanced and Master Scuba Diving.**

Students will gain advanced level scuba diving skills. Prerequisite:

PFW 1190F with a grade of "D" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1204. Underwater Photography.**

Underwater Photography.

**2 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1301. Social and Behavioral Dimensions of Physical Fitness and Wellness.**

Students will explore the role of physical activity in a healthy and productive society. The course focuses on social and cultural influences on motivation, values and beliefs related to physical activity, as well as the impact of physical activity on individual, community, and population.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.****Course Attribute(s):** Soc & Behav Sciences Core 080**Grade Mode:** Standard Letter**PFW 2301. Rescue SCUBA Diver /Diving First Aid for Professional Divers.**

This course trains divers in the knowledge and skills needed to manage risks and effectively handle limited in-water problems and diving related emergencies. The rescue portion includes assists, transports, surface rescues and rescues from depth involving both boat- and shore-based skin and scuba divers. The first aid portion includes duty of care and emotional response, dive emergency preparation, response and assessment, Oxygen first aid, AED, CPR for the healthcare professional, secondary care, and hazardous marine life injuries/first aid. Students with a SCUBA Diver or Advanced SCUBA Diver certification from another agency or institution will be accepted provided the student's diving. Prerequisite: PFW 1190F or PFW 1201 or equivalent any with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter

All PFW courses meet two clock hours per week for one semester hour credit unless otherwise designated.

## Courses in Public Health (PH)

**PH 1310. Foundations of Personal Health.**

This course provides an introduction to personal health and wellness topics including nutrition, mental health, sexual health, and physical fitness with an emphasis on health trends and health behaviors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.****Grade Mode:** Standard Letter**TCCN:** PHED 1304**PH 1320. Introduction to Public Health.**

This course provides students a basic understanding of U.S. and global public health systems. Students are also introduced to various public health settings, specific careers in public health, and public health certifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.****Grade Mode:** Standard Letter**PH 2338. Substance Use and Abuse.**

This course explores the impact of substance use and abuse on personal, public, and population health. Course content includes current statistics and information on substance use and abuse issues and substance prevention interventions with a focus on public health prevention strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.****Grade Mode:** Standard Letter**TCCN:** PHED 1346**PH 2340. Community Health.**

This course acquaints students with issues, trends, developments, and principles in community health. The course also provides an overview of selected topics, such as epidemiology, community organization, and program planning. Corequisite: PH 1320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.****Grade Mode:** Standard Letter**PH 3301. Environmental Health.**

This course is an examination of the ecological impact resulting from contemporary sociopolitical action and its resulting influence on human health.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.****Grade Mode:** Standard Letter**PH 3315. Statistics in Public Health.**

This course emphasizes analysis and interpretation of health-related data. Descriptive and inferential statistics (including measures of central tendency and variability, estimation, ANOVA, and regression) will be used to understand factors associated with current health-related issues. (WI) Prerequisites: MATH 1312 or MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.****Course Attribute(s):** Writing Intensive**Grade Mode:** Standard Letter



**PH 3321. Health in the School Setting.**

This course offers a foundation in health methods and activities to provide resources for the elementary and secondary school teacher. Provides an overview of current school health issues: Whole School, Whole Community, Whole Child model, mental health, personal health, family life, substance abuse, and violence in the school setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3330. Inclusion and Diversity in Women's Health.**

This course is designed to explore the health care concerns unique to women and to provide students with opportunities to create strategies to improve women's health. Particular attention will be given to issues that affect women in under-served populations and how to more effectively serve their needs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3348. Prevention of Disease.**

This course provides an overview of the etiology of communicable and chronic diseases with special emphasis on health promotion activities to reduce the incidence of disease in communities and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3350. Consumer Health.**

This course focuses on consumer health and decision making with regard to the selection of health products and services. Students will learn how to effectively evaluate health information with emphasis on consumer literacy, public policy, and consumer products and services.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3360. Issues in Human Sexuality.**

The course provides a study of human sexuality as a lifelong process of acquiring information and forming healthy attitudes, beliefs, and values regarding sexuality. Human sexuality's impact on personal and public health will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3370. Epidemiology.**

This course introduces students to epidemiological concepts including determinants of health and patterns of disease in populations, population health descriptive techniques, use of health indicators and secondary data sources. Students will focus on epidemiology in community health assessment and program evaluation, and development of public health strategies and policy. Prerequisite: MATH 1312 or MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 or HON 2302A or HON 2302B and with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3374. Global Health.**

This course focuses on principles of international health in global populations. Students explore roles of health educators collaborating with providers of health services to diverse populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3376. Worksite Health Promotion.**

The purpose of this course is to introduce students to worksite health promotion. The focus of the course is on planning, implementing, and evaluating worksite health promotion programs. The course addresses other contemporary health issues, policies, and considerations that affect worksite health promotion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 4100. Professional Development in Public Health.**

This course provides the opportunity for students to obtain a community or public health promotion internship and to actively participate in professional development activities including conferences, development of resumes and interaction with health professionals. If a student is planning to complete an internship, this course must be completed during the semester immediately prior.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 4331. Health Disparities.**

This course explores social determinants of health and health disparities in the U.S. and globally. Students explore past and existing public health initiatives to address health disparities in various U.S. and global communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 4335. Public Health Leadership.**

This course allows students to develop discipline-specific leadership skills and a personal leadership philosophy which will help in managing public health and health promotion programs. Topics include leadership philosophy, staffing, programming, budgeting, public relations, facilities, and evaluations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PH 4336. Health Behavior Theory.**

This course introduces students to health behavior theory, including cognitive, operant, and social theories of motivation and behavior, behavior change theory, social marketing, and social ecology. Students will also learn about the role of behavior theory in health promotion practice and public health interventions. (WI) Prerequisites: PH 1320 and PH 2340 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PH 4347. Independent Study in Public Health.**

This course is designed for undergraduate students who display potential for independent research in public health. Students work individually with faculty to develop an independent research study/project in public health. Open on an individual basis by arrangement with the division chair. May be repeated for credit with different emphasis. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PH 4360. Internship in Public Health.**

This part-time internship involves the application of public health concepts to a community or public health setting. Students participate in the work of a health organization/agency and complete a semester-long project. A minimum of 200 contact hours is required. (WI) Prerequisite: PH 4100 with a grade of "C" or better and a minimum 3.0 major GPA and departmental approval. Corequisite: PH 4640 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**PH 4640. Public Health Program Planning and Evaluation.**

Students apply professional knowledge and skills to the development of public health programs. Topics include needs assessment, data gathering techniques, instrument design, data and statistics, and the interpretation, reporting, and application of findings for program development. Cultural competency and communication are covered. (WI) Prerequisite: PH 1320 and PH 2340 both with grades of "C" or better. Corequisite: PH 4336 with a grade of "C" or better.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PH 4660. Internship in Public Health.**

This internship involves the application of public health concepts to a community or public health setting. Students participate in the work of a health organization/agency and complete a semester-long project. A minimum of 400 contact hours is required. (WI) Prerequisites: PH 4100 and PH 4640 both with grades of "C" or better and a minimum 3.0 major GPA and departmental approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Recreational Administration (REC)

**REC 1310. Introduction to Recreation and Leisure Services.**

This course includes brief historical backgrounds, professional opportunities, present status, past and present leaders of the recreation services profession. Role of leisure time in our social structure, professional responsibility, familiarization with current issues and trends, and professional literature. Lecture and field trips. A grade of "C" or better in this course is required to enroll in any upper division Recreation Studies courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PHED 1336

**REC 1330. Introduction to Outdoor Recreation.**

This course provides students with an overview of the role the natural world plays in recreation and leisure services. The course will focus on values of outdoor recreation, adventure recreation, environmental impact, and the role of government in the provision and protection of outdoor recreation programs and resources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 1370. Introduction to Recreational Therapy.**

This course surveys history, philosophy, terminology, and professional opportunities within recreational therapy. An overview of interventions, settings, clientele, and services supporting functional improvements and enhancing quality of life are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 2330. Leadership in Recreation and Leisure Services.**

Discussion of leadership theories and skill development for indoor-outdoor games and sports. A weekly required lab includes leading and participating in group activities to develop leadership skills.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 2335. Recreation Program Development.**

This course introduces students to basic principles and procedures for developing recreation programs that respond to human needs. This course provides students with opportunities to acquire and utilize recreation programming skills. Prerequisite: REC 1310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PHED 1336

**REC 2336. Directed Field Experience in Programming Recreation.**

This course provides field-based experiences in programming and leadership with a selected recreation agency. Online learning modules and communications guide the work and professional reflections. Prerequisite: REC 2335 with a grade of "C" or better and a minimum 2.0 Texas State GPA and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 2370. Planning Recreational Therapy Services.**

This course engages students in course content and service learning to develop knowledge and skills in program planning and implementation used in a variety of therapeutic recreation settings. Students will gain an understanding of theoretical models and learn how to apply these models to activity and task analysis. Prerequisites: REC 1370 with a grade of "C" or better. Corequisites: REC 1310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 3325. Recreation Administration.**

This course covers administrative practices relevant to entry-level professionals in the recreation industry. Topics include foundations of management, decision-making, planning, coordination of resources, and ethics. Prerequisite: REC 2335 with a grade of "C" or better and [MATH 1312 or MATH 1315 or MATH 1316 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 or HON 2302A] with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 3335. Advanced Recreation Program Development.**

Students will develop advanced program planning skills through the integration of theories and models of program development, consideration of diverse target markets, performing needs assessments, and planning for risk management issues. Students will apply these planning skills through an applied project. Prerequisite: REC 2335 with a grade of "C" or better. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REC 3340. Recreation Facilities Operations and Maintenance.**

This course content includes theories and processes in the development, operation, maintenance, and management of various recreational facilities. Prerequisite: REC 2335 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 3351. Evaluation of Leisure Service Programming.**

This course focuses on methods, techniques, and application of the evaluation process related to a wide variety of leisure service functions including clientele and prospective participants, programs, personnel, facilities, organizations, and literature. (WI) Prerequisite: REC 2335 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REC 3370. Assessment and Documentation in Recreational Therapy.**

This course introduces students to selecting, utilizing, and interpreting assessment instruments, and to the processes used to document assessment results and client progress used in recreational therapy practice. Prerequisite: HIM 2360 and REC 1370 and REC 2370 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 3371. Facilitation and Processing in Recreational Therapy.**

This course presents an overview of concepts, methods, and techniques used in the selection and implementation of therapeutic facilitation and interventions used in recreational therapy practice. Students will apply current research and theoretical perspectives to the selection and implementation of therapeutic interventions. In addition, processes for leading therapeutic groups, facilitation techniques, and counseling techniques will be introduced in relation to recreational therapy practice. Focus will be on development of skills necessary to implement evidence-based goal-directed outcomes. Prerequisite: REC 1370 and REC 2370 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 3380. Practicum in Outdoor Recreation.**

This practicum involves a 200 hour field-based experience during which a student will complete leadership and administrative tasks in an approved outdoor recreation services agency. The practicum is co-supervised by a faculty and an agency representative. This course may be taken two times with different outdoor recreation services agencies. Prerequisite: REC 1310 and REC 1330 both with grades of "C" or better and a minimum 2.25 Major GPA and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 13 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**REC 4318G. Cross Cultural Studies in Recreation & Sport Facility Design.**

This course will introduce theories and provide practical experience in the design, development, operation, maintenance, administration of various recreation and sport facilities. Students will compare facility amenities from the United States with those in another country. Students will have behind the scenes tours of recreation and sport facilities and parks, meet with managers from all sectors of the recreation and sport industry, and learn from faculty abroad. It is specifically for students participating in the Study Abroad program offered by Recreation Studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**REC 4318H. Recreation & Sport Research in a Cross-Cultural Context.**

This course involves the examination of concepts, techniques, and processes that are applied in conducting evaluation/research. Students will identify an area of interest related to recreation, sport or leisure and complete a research project comparing the subject area in the United States to the country being visited. Students will tour recreation and sport facilities as well as visit cultural, historic and scenic locations in and around the city where we will be staying. It is specifically for students participating in the Study Abroad program offered by Recreation Studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**REC 4330. Entrepreneurial Management in Recreation Services.**

This course provides a study of entrepreneurial management of leisure services. The focus will be on financial management related to profit centers including planning, legal liability, record keeping, and revenue management. Prerequisite: REC 2335 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 4335. Outdoor Recreation Programming.**

In this course, students apply principles and procedures for developing and leading recreation programs in a variety of specialized, outdoor environments. Students will demonstrate competencies for Leave No Trace certification. Prerequisite: REC 1330 and REC 2335 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 4337. Independent Study in Recreation Administration.**

This course consists of individual study related to recreation administration under direct supervision of a faculty member. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**REC 4350. Employee Supervision in Recreation and Leisure Services.**

This course presents theories and methods relating to recruitment, selecting, hiring, training, disciplining, and discharging employees. This course also addresses legal issues related to personnel supervision.

Prerequisite: REC 2335 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 4370. Principles of Recreational Therapy.**

This course will cover the principles and administrative aspects of recreational therapy services including standards of practice, code of ethics, comprehensive program design, and issues related to professionalism. Prerequisite: REC 1370 and REC 2370 and REC 3370 and REC 3371 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 4371. Application of Evidence-Based Practice in Recreational Therapy.**

This course provides a theoretical and practical foundation for applying the recreational therapy process with persons with various types of disabilities across the lifespan. Focus will be on developing skills necessary to implement evidence-based interventions culminating in the design and application of a comprehensive case study. Prerequisite: REC 1370 and REC 2370 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 4380. Seminar in Recreation Trends and Issues.**

This capstone seminar addresses trends in leisure services. Emphasis is on the interactional effects of diverse services, consumers, and environments. The course should be taken in the last spring semester preceding enrollment in REC 4680 or REC 4681. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REC 4680. Internship in Community Recreation.**

This internship involves a 400 hour field-based experience during which a student will complete administrative tasks in an approved recreation services agency. The work is co-supervised by a faculty and an agency representative trained in the recreation field. Prerequisites: REC 1310 and REC 2335 and REC 2336 and REC 3325 and REC 4380 all with grades of "C" or better and all major coursework must be completed and a minimum 2.25 Major GPA and instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 30 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 4681. Internship in Recreational Therapy.**

This internship involves experiential learning over a long semester during which a student will work (a minimum of 14 weeks and 560 hours) in a recreational therapy setting under direct professional supervision by a Certified Therapeutic Recreation Specialist (CTRS) and a faculty member with CTRS credential. Prerequisites: REC 1310 and REC 1370 and REC 2335 and REC 2336 and REC 2370 and REC 3325 and REC 3370 and REC 3371 and REC 4370 and REC 4371 and REC 4380 all with grades of "C" or better and all major coursework completed and a minimum 2.25 Major GPA and instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 35 Lab Contact Hours.**

**Grade Mode:** Standard Letter

The dual degree program (3/2) allows undergraduate Exercise and Sports Science students to enter the Master of Science in Athletic Training program beginning during the summer of their 4<sup>th</sup> year and earn a BESS in Exercise & Sport Science and a Master of Science in Athletic Training.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

## Admission Requirements

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from an accredited university

or

- Texas State Exercise & Sports Science majors who have at least a 3.0 GPA by the end of the spring semester of their junior year and who will have completed all their prescribed courses by the spring of their junior year will be eligible to apply for the program
- official transcripts from **each institution** where course credit was granted
- minimum overall 3.0 GPA or 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in all pre-requisite courses. As required pre-requisite course work, there is a set of 10 pre-requisites that will prepare the student for the rigors of the program. Each of these courses is necessary for a basic understanding of the fundamentals of the various courses that the student will be taking in the professional master's curriculum. The following is the list of pre-requisites that students must have completed in their undergraduate degree or are in progress of completing prior to admission:
  - Physics I with lab
  - Chemistry I with lab

- Introduction to Nutrition
- Introduction to Psychology
- Introduction to Statistics
- Exercise Physiology
- Biomechanics
- Medical Terminology
- Anatomy & Physiology with lab
- Care & Prevention (or equivalent course)

- GRE not required
- Confirmation of 75 observation hours signed by a certified (ATC) and/or licensed (LAT) professional who has guided the observational experiences
- resume
- statement of purpose (maximum two pages) that discusses the student's reasons for pursuing professional master's degree in athletic training at Texas State University
- three forms of recommendation
- Interview process by faculty & staff

The program does not offer admission if the above requirements are not met.

Students will follow departmental requirements for admission into the professional phase of the BS in Exercise & Sports Science (pre-rehabilitation concentration). Exercise & Sports Science majors who have at least a 3.0 GPA by the spring semester of their junior year and who have completed all of their prescribed courses by the spring of their junior year will be eligible to apply for the five-year program.

Applicants to the five-year program will submit materials as other MSAT applicants by the spring deadline of their junior year and those that meet all the minimum requirements, including having earned a B or better in (AT 2298, AT 2356, AT 2400, AT 3298 ), along with an interview process, will receive placement in the MSAT program. The admission criteria for the five-year program will be the same as for other (post-baccalaureate) MSAT students.

## General Requirements

1. Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
2. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
3. The dual degree program (3/2) allows undergraduate exercise and sports science students to enter the Master of Science in Athletic Training program beginning during the summer of their 4<sup>th</sup> year and earn a BS in Exercise & Sport Science and a Master of Science in Athletic Training.
4. Students must first be admitted in the ESS-PRS major in the Department of Health & Human Performance. Students will declare ESS-PRS with cohort code for interest in (3/2) program during freshman orientation. Students will follow departmental requirements for admission into the professional phase of the BS in Exercise &



- Sport Science. Exercise & Sport Science majors who have at least a 3.0 GPA and who will have completed all of their prescribed courses by the spring of their junior year will be eligible to apply for the five-year program (MSAT).
- Applicants to the five-year program will submit the same materials as other MSAT applicants by spring deadline of their junior year, and those who meet all minimum requirements, including having a “B” or better in AT 2298, AT 2356, AT 2400 and AT 3298 will receive interview for admission to the program. The admission criteria for the five-year program will be the same as for other MSAT students.
  - Students continuing into the 4<sup>th</sup> year of the 3/2 program must finish the entire 120 hours and then will be eligible for the Bachelor’s degree at the end of their 4<sup>th</sup> year. Students will then continue into their 5<sup>th</sup> year and be conferred the Master’s degree in athletic training at the end of their 5<sup>th</sup> and final year.
  - Students in the 3/2 program will be required to complete the same two-year, 55 hour curriculum as other students admitted to the MSAT program. Students will take 99 hours of undergraduate courses and 55 hours of graduate course work, of which 21 hours will be applied to the undergraduate degree. Students are required to maintain a 3.0 GPA through the first 21 hours of graduate coursework.
  - Students that are not accepted or unable to continue with the 3/2 program may complete the remaining requirements for the BS in Exercise & Sport Sciences Pre-Rehabilitation Concentration (ESS-PRS).
  - This degree plan has been laid out showing the students the number of hours they must take each semester in order to complete the dual degree program. The undergraduate portion of the plan is a suggested plan that must be followed closely to ensure specific courses are completed by spring of 3<sup>rd</sup> year (junior year). There may be some modifications in course order that can occur but students should consult with academic advisors for dual degree program before changes are made to ensure they are meeting degree requirements.

Course Requirements

Freshman		
First Hours Semester	Second Hours Semester	
AT 2356	3 CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3
MATH 1315 (Mathematics Component Code 020 [TCCN MATH 1314])	3 CHEM 1141	1

US 1100	1 PHIL 1305 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301])	3
ESS 1100	1 ENG 1320 (Communications Component Code 010 (TCCN ENGL 1302))	3
PSY 1300 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301])	3 HIM 2360	3
ENG 1310 (Communications Component Code 010 [TCCN ENGL 1301])	3 BIO 2430	4
14		17

Sophomore

First Hours Semester	Second Hours Semester	
PHYS 1115	1 HIST 2310 (American History Component Code 060 [TCCN HIST 1301])	3
PHYS 1315 (Life and Physical Sciences Component Code 030 [TCCN PHYS 1301])	3 POSI 2320 (Government Political Science Component Code 070 [TCCN GOVT 2305])	3

HIST 1320 (American History Component Code 060 [TCCN HIST 1302])	3 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
POSI 2310 (Governmen Political Science Component Code 070 [TCCN GOVT 2306])	3 ENG 2330 (Component Area Option Code 090/094 [TCCN ENGL 2332])	3
ART 2313 (Creative Arts Component Code 050 [HUMA 1315])	3 AT 2298	2
AT 2400	4 AT 3311	3
<b>17</b>	<b>17</b>	

**Junior**

First Hours Semester	Second Hours Semester	Summer Hours	
AT 3298	2 ESS 3329	3 AT 5400	4
AT 3312	3 ESS 1179	1 AT 5320	3
NUTR 3362	3 AT 3358	3 AT 5120	1
ESS 3317	3 AT 4313	3 AT 5230	2
ESS 3117	1 PSY 3336	3	
ESS 3320	3 HP 3325	3	
ESS 3323	3		
<b>18</b>	<b>16</b>	<b>10</b>	

**Senior**

First Hours Semester	Second Hours Semester	Summer Hours	
AT 5301	3 AT 5305	3 AT 5333	3
AT 5300	3 AT 5314	3 AT 5341	3
AT 5313	3 AT 5232	2	
AT 5231	2 AT 5340	3	
<b>11</b>	<b>11</b>	<b>6</b>	

**Fifth Year**

First Hours Semester	Second Hours Semester	
AT 5342	3 AT 5192	1
AT 5343	3 AT 5344	3
AT 5334	3 AT 5335	3
AT 5191	1	
<b>10</b>	<b>7</b>	

**Total Hours: 154**

## Courses Offered: AT, (p. 243) ESS (p. 246)

### Athletic Training (AT)

#### AT 2298. Orientation to Athletic Training Profession.

The purpose of this course is to provide the student with an introduction to the academic and clinical aspects of the profession of athletic training. The course includes the history of the profession, basic knowledge and skills, principles, and techniques used by an athletic trainer. The student will participate in educational observation of clinical experiences with a certified athletic trainer to gain more knowledge of the profession of athletic training. Prerequisite: HIM 2360 with grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### AT 2356. Prevention and Care of Athletic Injuries.

This course focuses on the theoretical and practical aspects of the prevention, treatment, and rehabilitation of athletic injuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### AT 2400. Functional Anatomy.

The students will learn to qualitatively analyze the movements of the human body while integrating musculoskeletal anatomy and neuromuscular physiology principles. Corequisite: BIO 2430 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### AT 3298. Foundations of Athletic Training Practice.

The purpose of this course is to provide the students with a foundation in clinical skills associated with the athletic training profession. The course will include observational experiences. Prerequisite: HIM 2360 and AT 2298 both with grades of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### AT 3311. Clinical Assessment I.

This course instructs students in the knowledge and skills used in the clinical evaluation of injuries and illnesses involving the head and face, brain, cervical spine, upper extremity, thorax, and pulmonary and cardiovascular systems. Prerequisite: AT 2356 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 3312. Clinical Assessment II.**

This course instructs students about the preliminary and secondary survey with emphasis on clinical assessment of lumbar spine and lower extremity injuries as well as abdomen, gastrointestinal, genitourinary, endocrine, dermatological, and systemic illnesses. Prerequisite: AT 3311 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 3358. Clinical Pathopharmacology.**

This course combines pathophysiology, the study of dynamic aspects of disease processes and study of drugs prescribed to prevent, diagnose, cure, or care for disease across the lifespan. Content includes etiology, pathogenesis, clinical presentation, implications for treatment, and pharmacological management. Prerequisite: BIO 2430 or [BIO 2451 and BIO 2452] either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 3400. Gross Applied Anatomy.**

This course provides a study of the structure and function of the human body with particular emphasis on the muscular, skeletal, vascular and nervous systems. Attention will be on the anatomy and physiology of the body systems focusing on understanding specific functions of body tissues. Laboratory study of the human cadaver is included. Prerequisite: AT 2400 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 4313. Clinical Therapeutic Interventions.**

This course provides a theoretical and clinical background in the use of therapeutic interventions in physical medicine, both modalities and exercise, for patients with musculoskeletal and neurological injuries. Prerequisite: AT 3311 and AT 3312 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 4360. Internship in Clinical Settings.**

Students will be introduced to the clinical aspects of allied health professions by being assigned to a minimum of two clinical sites. Prerequisite: AT 3311 and AT 3312 both with a grade of "C" or better and a minimum 2.75 Texas State GPA.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5101. Graduate Assistant Development.**

This course is required of all graduate assistants and provides regular in-service and planned periodic evaluations of instructional responsibilities. Graduate assistants are required to register for this course in the spring semester of their employment. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**AT 5120. Principles in Athletic Training.**

This course builds upon current competence of health and exercise sciences to instill an evidence based, graduate-level proficiency of best practices in athletic training and healthcare.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AT 5191. Capstone I.**

This course is a supervised project to analyze outcomes in a defined area of clinical practice. The course includes patient outcomes data collection in a practice-based research environment. Completion of full research sequence is required for graduation.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5192. Capstone II.**

This course is a continuation of the research sequence that culminates in a supervised project to analyze outcomes in a defined area of clinical practice. The course includes completion of data collection and analysis for an oral presentation and final paper and poster. Completion of this last course is required Prerequisite: AT 5191.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AT 5201. Graduate Assistant Development.**

This course is required of all graduate assistants and provides in-service and planned periodic evaluations of instructional responsibilities. Graduate assistants are required to register for this course in the fall semester of their employment. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**AT 5230. Clinical Experience I.**

This course will integrate topics in athletic injury evaluation, management and intervention into an immersive clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 5320.

**2 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5231. Clinical Experience II.**

This course will integrate topics in athletic injury evaluation, management and intervention into an immersive clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 5230.

**2 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5232. Clinical Experience III.**

This course will integrate topics in athletic injury evaluation, management and intervention into an immersive clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 5230; AT 5231.

**2 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AT 5300. Musculoskeletal Assessment of the Lower Extremities.**

This course will present students with a study and critical analysis of injury and illness signs and symptoms. Specific tests and skills used in the clinical evaluation and assessment involving the lower extremities will be included. Prerequisite: AT 5400 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AT 5301. Musculoskeletal Assessment of the Upper Extremity.**

This course will present students with a study and critical analysis of injury and illness signs and symptoms. Specific tests and skills used in the clinical evaluation and assessment involving the upper extremities will be included. Prerequisite: AT 5400 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AT 5305. Musculoskeletal Assessment of Head/Face/Spine and Neurological Systems.**

This course will enable the student to critically analyze the specific tests and skills used in the clinical evaluation and assessment involving the head, spine and neurological systems. Prerequisite: AT 5300 and AT 5301 and AT 5400 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AT 5313. Therapeutic Interventions I.**

This course is designed to provide both a theoretical and clinical basis for the standardized systems approach to therapeutic modality applications to treat patients with musculoskeletal conditions and injury. Prerequisite: AT 5400 with a grade of "B" or better. Corequisite: AT 5301 and AT 5300 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5314. Therapeutic Interventions II.**

This course is designed to examine both a theoretical and clinical basis for the standardized systems approach to therapeutic exercise applications to treat patients with musculoskeletal conditions and injury. Prerequisite: AT 5313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AT 5320. General Medical Conditions Assessment and Care.**

This course will enable the student to recognize, evaluate, differentiate and manage common systemic and traumatic conditions and diseases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5333. Internship in Athletic Training.**

This 400-hour internship provides students with professionally related experience. Students may work with diverse clinical populations in varying athletic training settings. Internship is approved and supervised by Program Coordinator or assigned faculty. Prerequisite: Departmental approval.

**3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5334. Clinical Experience IV.**

This course will integrate topics in athletic injury evaluation, management and intervention into an immersive clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 5230; AT 5231; AT 5232; AT 5333.

**3 Credit Hours. 0 Lecture Contact Hours. 30 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5335. Clinical Experience V.**

This course will integrate topics in athletic injury evaluation, management and intervention into an immersive clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 5230; AT 5231; AT 5232; AT 5333; AT 5334.

**3 Credit Hours. 0 Lecture Contact Hours. 30 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5340. Research Methods and Evidence Based Practice in Athletic Training.**

This course is designed to provide the student with an understanding of the statistical terminology when reading and appraising research studies in order to use evidence to inform clinical practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5341. Pathopharmacology.**

This course will examine the physiological responses and progression of injuries, illnesses, and diseases to the physically active individual. Additionally, this course will provide instruction in the principles and issues of the physiological and psychological response to the pharmacological use and/or abuse of substances. Prerequisite: AT 5320.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5342. Administration and Leadership in Athletic Training.**

This course will evaluate administrative aspects of an athletic training program management such as: risk management, medical record keeping, facilities, third-party reimbursement, health informatics and other current professional issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5343. Interdisciplinary Approach to Athletic Training.**

This course will examine the practice and educational implications of effective and efficient interprofessional teamwork and collaboration in patient care.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5344. Advanced Clinical Decision Making.**

This course provides students various settings to explore aspects of patient evaluation, intervention and outcomes in a simulated learning environment. Students will identify issues in patient care including physical and psychosocial characteristics. Students will apply clinical decision-making skills learned in all courses leading up this final semester class.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5347. Independent Study in Athletic Training.**

This course may be taken by a student who desires to work on a research problem or investigation in Athletic Training. The student gathers and analyzes pertinent data and submits a report of the results of the research. Repeatable once for credit. Prerequisite: ESS 5346 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in AT 5399B. Graded on a credit (CR), progress (PR), no credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AT 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AT 5400. Gross Applied Anatomy.**

This course will examine the structure and function of the human body with emphasis on the skeletal and muscular systems. The course focuses on anatomy and physiology of systems of special interest to students preparing to become athletic trainers. Laboratory study of the human cadaver is included.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Exercise Sports Science (ESS)****ESS 1100. Lifetime Fitness and Wellness.**

This course introduces students to the concepts of health-related physical fitness. Emphasis is placed on learning how to teach these concepts. Students will design and implement an exercise program for enhancing health-related physical fitness. Restricted to majors or minors in Exercise and Sports Science, Athletic Training, or Health and Fitness Management.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PHED 1164



**ESS 1101. Seminar in Exercise and Sport Science.**

This course provides students with an introduction to the various areas of exercise science, including interventions for healthy versus clinical populations, professional opportunities, individual awareness of professional responsibilities, familiarization with current trends and issues, and professional literature.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1128. Aquatic Therapy.**

The course addresses basic principles and concepts of aquatic therapy and aquatic emergency management. This course prepares students for the American Red Cross Basic Water Rescue Certification.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1172. Beginning Field Sports.**

This course prepares students to become proficient instructors of field sports, including softball and soccer. Emphasis is on skill development, instructional practices, peer coaching, rules, terminology, offensive and defensive strategies, team organization, game play, referee skills, skills assessment, and conditioning for field sports. Restricted to majors or minors in Exercise and Sports Science, Coaching, or Health and Fitness Management.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1173A. Practicum for Teaching Individual Sports.**

This course provides for real-life application of concepts learned in ESS 1310. This practicum aligns with an accompanying section of an approved Team Sports ESS/PFW Activity course. Pre-Service teachers seeking All-Level Physical Education teacher certification will gain valuable experience in planning and teaching lessons from a models-based teaching perspective. Prerequisite: ESS 1310 with grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ESS 1173B. Practicum for Teaching Team Sports.**

This course provides for real-life application of concepts learned in ESS 1310. This practicum aligns with an accompanying section of an approved Team Sports ESS/PFW Activity course. Pre-Service teachers seeking All-Level Physical Education teacher certification will gain valuable experience in planning and teaching lessons from a models-based teaching perspective. Prerequisite: ESS 1310 with grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ESS 1173C. Practicum for Teaching Conditioning.**

This course provides for real-life application of concepts learned in ESS 1310. This practicum aligns with an accompanying section of an approved Team Sports ESS/PFW Activity course. Pre-Service teachers seeking All-Level Physical Education teacher certification will gain valuable experience in planning and teaching lessons from a models-based teaching perspective. Prerequisite: ESS 1310 with grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ESS 1175. Beginning Jogging and Conditioning.**

This course presents the proper biomechanics of jogging, safety rules, and conditioning principles relevant to the activity. Course topics include warming-up and cooling-down, hydration, monitoring and modifying intensity, training for road races, and jogging-related injuries. Students will also learn how to train individuals entering into a jogging program. Restricted to majors or minors in Exercise and Sports Science or Health and Fitness Management.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1176. Beginning Tennis, Badminton, and Other Racket Sports.**

This course prepares Exercise and Sports Science majors to be proficient instructors of racket sports, including tennis and badminton. The emphasis is on the fundamentals of racket sports and program development for the beginner. Restricted to majors or minors in Exercise and Sports Science, Health and Fitness Management, or Coaching.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1178. Beginning Volleyball and Basketball.**

This course prepares students to become proficient instructors of volleyball and basketball. Emphasis is on skill development, instructional practices, peer coaching, rules, terminology, offensive and defensive strategies, team organization, communication, game play, referee skills, skills assessment, and conditioning for volleyball and basketball. Restricted to majors or minors in Exercise and Sports Science, Health and Fitness Management, or Coaching.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1179. Beginning Weight Training.**

This course prepares students to be proficient instructors of all forms of resistance training. Emphasis is on understanding the proper, safe, and effective techniques of weight lifting. Students will learn how to develop resistance-training programs for untrained individuals with a variety of conditions.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1201. Group Exercise Instructor Training.**

This course is for students interested in becoming certified group exercise instructors. Students will learn how to safely and effectively conduct group exercise classes. Students will be trained to teach a variety of formats, such as high- and low-impact aerobics, step aerobics, kickboxing, yoga, and resistance training. Prerequisite: Major in Health and Fitness Management or consent of the instructor.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ESS 1298. Foundations of Sports Medicine.**

This introductory course provides an essential foundation for students beginning their course of study in the field of sports medicine. Students will understand key principles of professionalism, responsibilities, ethics and legal aspects, scope of practice, and health care job opportunities in the careers of sports medicine.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1310. Introduction to Teaching Physical Education.**

This course is designed to provide pre-service physical educators an introduction to fundamental principles of teaching physical education in K-12 settings. Progressive steps in developing a basic understanding of pedagogical skills, physical education curriculum, and professional attributes needed to pursue the teaching profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 2320. Motor Development.**

This course provides the exercise science and physical education student with a knowledge base in the study of changes in motor behavior across the lifespan, the processes that underlie these changes, and factors that affect them. Prerequisite: Major or minor in Exercise and Sports Science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 2321. Curriculum Design & Implementation in Physical Activity Settings.**

This course is designed to teach students how to design and implement a comprehensive physical education program in school settings. Concepts from the course can be extended to include before or after school programs as well for all grade levels (K-12).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3117. Laboratory in Exercise Physiology.**

In this laboratory course, students perform experiments that highlight the physiological responses to exercise. This course also introduces students to basic techniques in the assessment of health and human performance, including the assessment of maximal oxygen consumption, body composition, anaerobic power and capacity, muscular fitness, movement economy, and dietary intake. Prerequisite: BIO 2430 or [BIO 2451 and BIO 2452] or [BIO 3425 and BIO 3426] any with grades of "C" or better and a minimum 2.0 Overall GPA. Corequisite: ESS 3317 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3180. Cardiopulmonary Resuscitation (CPR), First Aid, and Basic Life Support (BLS).**

This course will teach the fundamentals of Cardiopulmonary Resuscitation (CPR) and First Aid. An extension of the class will include Basic Life Support (BLS) i.e. epinephrine injection, supplemental oxygen administration, and automated defibrillation administration.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3303. Assistant Dive Instructor.**

This course provides students with the technical knowledge necessary to prepare for the Assistant Diver Instructor Scuba Certification. Topics include advanced diving physiology, air station operations, assisting instructors with beginning open-water dive students, and boat diving operations. Prerequisite: PFW 1201 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3304. Divemaster.**

This course provides students with the technical knowledge necessary to prepare for the National Association of Underwater Instructors Divemaster Scuba Certification. Topics include advanced diving physiology, organizing open-water dives, air station operations, assisting instructors with beginning and advanced open-water dive students, and boat diving operations. Prerequisite: Assistant Instructor Certification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3317. Exercise Physiology.**

Students learn the acute and chronic physiological responses to exercise. Emphasis is on muscle bioenergetics, muscle contractile properties, performance improvement through training and supplementation, as well as cardiopulmonary and endocrine responses to exercise. Prerequisite: BIO 2430 2430, or [BIO BIO 2451 and BIO 2452] 2452, with grades of "C" or [BIO 3425 and BIO 3426] any with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**ESS 3319. Introduction to Cardiopulmonary Exercise Physiology.**

This course introduces students to the cardiovascular and pulmonary systems, discusses the physiological dynamics, control mechanisms, and system interrelationships of the cardiovascular and pulmonary systems, and explores the effects of exercise on these systems, including the physiological factors that limit exercise tolerance across the spectrum of health and chronic disease. Prerequisite: BIO 2430 or [BIO 2451 and BIO 2452] and ESS 1101 all with grades of "C" or better a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3320. Biomechanics.**

This course provides an introduction to the mechanical foundations of anatomical function and human movement. Qualitative and quantitative biomechanical analyses of human movement are introduced to inform the prescription of technique, equipment, and training interventions. Prerequisite: BIO 2430 or [BIO 2451 and BIO 2452] or [BIO 3425 and BIO 3426] all with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3321. Teaching Elementary Children Physical Activity.**

This course introduces students majoring in Elementary Education and/or Exercise and Sports Science to physical education knowledge and movement concepts. It provides innovative techniques for incorporating physical activity within the elementary school setting. The course presents theory and then guides the students in applying those theories in a practical way.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3323. Psychosocial Aspects of Exercise and Sport Science.**

This course examines the psychological and social theories and research related to physical activity. Emphasis is on the determinants that influence exercise behavior and sport participation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3325. Applied Assessment of Physical Activity.**

This course is designed to provide students with a theory to practice approach in the assessment of physical activity within the physical education setting. Particular emphasis is placed on empowering students to use relevant and meaningful physical activity assessments in K-12 schools. Prerequisites: ESS 1310 and ESS 2320. Restricted to majors seeking all level Teacher Certification in Physical Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3329. Motor Learning.**

This course provides students with an understanding of the physiological, neurological, and psychological factors affecting performance and acquisition of motor skills. Students will examine the structural components underlying the learning of motor skills and draw upon examples from sport, physical activities, and rehabilitation. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3340. Theory and Principles of Coaching.**

This course examines the theories and principles of effective coaching, including philosophy, ethics, strategies, team motivation and organization, coach-athlete relationships, performance analysis, and the administration of facilities, personnel, and contests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4100. Professional Development in Health and Fitness Management.**

This course prepares students to obtain a health and fitness internship and to actively participate in professional development activities including conferences, development of resumes, and interaction with health and fitness professionals. Must be taken the last long semester before internship. Prerequisite: A minimum 2.0 Overall GPA.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4101. Professional Development in Clinical Exercise Science.**

This course prepares students to obtain an internship related to clinical exercise science and to actively participate in professional development activities including conferences, development of professional materials, and interaction with clinical exercise professionals. Must be taken the last long semester before internship. Prerequisite: A minimum 2.0 Overall GPA.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4317. Fitness Assessment and Programming for Healthy Populations.**

Students are presented with current information on fitness assessment and exercise programming for healthy individuals of all ages and fitness levels. Emphasis is placed on preparation for multiple certifications offered by relevant professional organizations. Prerequisites: ESS 3117 and ESS 3317 both with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4318. Fitness Assessment and Programming Practicum for Healthy Populations.**

During this 80-hour practicum, students will acquire advanced knowledge and skills associated with appraising health risk, assessing fitness levels, and designing exercise programs for diverse populations through on-line, classroom, and laboratory settings as well as through field-based experiences by working in a variety of venues. Prerequisite: ESS 3117 and ESS 3317 with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4319. Fitness Assessment and Programming in Clinical Exercise Science.**

This course provides students with an opportunity to develop knowledge, skills, and competence required to assess and prescribe exercise for clinical populations and to gain knowledge related to managed care and rehabilitation with clinical patients. Prerequisites: ESS 3117 and ESS 3317 both with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4320. Resistance Training and Conditioning.**

This course discusses the development and evaluation of training principles and programs for diverse populations. Emphasis is placed on physiological adaptations and mechanical principles related to the application of resistance training. Prerequisites: ESS 3317 and ESS 3117 both with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ESS 4321. Fitness Assessment and Programming Practicum in Clinical Exercise Science.**

This course presents current exercise and sports science information on testing and programming for clinical populations. This course provides fundamental knowledge, competence, and skills necessary to conduct safe and valid assessments, interventions, and rehabilitation programs for patients with health problems. Students will spend 80 hours at a practicum site. Prerequisite: ESS 1101 and ESS 3117 and ESS 3317 and ESS 3319 all with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 1 Lecture Contact Hour. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4323. Adapted Physical Education.**

This introductory course provides All-Level teacher certification candidates in Exercise and Sports Science with content knowledge on legal mandates, evidence-based practices, and the characteristics of selected disabilities and their considerations when designing meaningful individualized physical activity experiences to meet the students with disabilities in school settings. Prerequisites: ESS 1310, ESS 2320 and 2.75 overall GPA. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ESS 4324. Adapted Physical Activity.**

This course introduces students to the field of adapted physical activity, including sport and leisure for persons with disabilities. This course provides content knowledge on how to instruct physical activities to individuals with unique needs in various settings. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ESS 4333. Fitness Assessment and Programming for Populations Requiring Special Considerations.**

This course provides practical information on fitness assessment and programming for persons requiring special considerations due to their age, pregnancy, obesity, diabetes, low back pain or other health conditions. Prerequisite: ESS 1101 and ESS 3117 and ESS 3317 all with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4337. Independent Study in Exercise and Sports Science.**

This course is for students who are interested in research related to Exercise and Sports Science. Students develop a research study, collect data, and analyze the results. Repeatable for credit with different emphasis. Prerequisites: A minimum GPA of 3.00 and special approval.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ESS 4340. Internship in Coaching.**

This 220-hour internship provides students with work-related experience. Students will strengthen their coaching-related knowledge, skills, and abilities by observing and shadowing coaches as well as assisting with a range of tasks, including training athletes, managing the facilities, and organizing practices. Prerequisites: completion of all coursework required for the minor in Coaching and special approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 4351. Measurement & Evaluation in Exercise and Sports Science.**

This course introduces students to the fundamental principles and techniques of measuring human performance related to Exercise and Sports Science, as well as evaluating and interpreting the results of exercise science and human performance tests in children and adults. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4357. Water Safety Instruction for Service Learning.**

This course is designed for students to obtain the Red Cross Water Safety Instruction (WSI) certification, and learn how to teach using a Mastery Motivational Climate/TARGET approach. More than half of the semester will involve providing swim lessons to students grades K-6 from a San Marcos school. Students must be able to perform the following skills: front crawl, back crawl, breaststroke, elementary backstroke and sidestroke for 25 yards; butterfly for 15 yards; back float and tread water for 1 minute. Students with a current WSI certification will be exempt from the required WSI lab at the beginning of the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4624. Principles and Practices for Teaching Physical Education.**

This course provides students with an in-depth study of theory and curriculum encompassing the design and implementation of developmentally appropriate and culturally responsive physical education programs for children and adolescents. Emphasis is on implementing evidenced-based curricula that promote youths' enjoyment of and participation in lifelong physical activity. Prerequisites: ESS 1310 and ESS 2320 and ESS 3325, all with a grade of "D" or better, and 2.75 overall GPA.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4660. Exercise and Sports Science Internship.**

In this 400-hour internship, students will apply theoretical health and fitness management principles and concepts to an organizational setting. This course requires students to participate in a health and fitness organization/agency and complete a semester-long planning and evaluation project. (WI) Prerequisite: A minimum 2.0 Overall GPA and department approval.

**6 Credit Hours. 0 Lecture Contact Hours. 25 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ESS 4661. Internship in Clinical Exercise Science.**

This course places the student in a professional work environment to apply the concepts of exercise rehabilitation in a cardiac care, respiratory therapy, or other healthcare setting, under the supervision of professionals in the field. Students are required to spend 400 hours in this internship position. Prerequisite: Department approval and a minimum 2.0 Overall GPA.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

2. This degree program can lead to careers in cardiopulmonary, clinical exercise, and diagnostic testing and programming for cardiac rehabilitation and other special populations. Additional requirements may be necessary to enter these fields.
3. Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
4. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

## Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
MATH 1315 (Mathematics Component Code 020 [TCCN MATH 1314]) <sup>1</sup>	3	BIO 2430 (TCCN BIOL 2404)	4
AT 2356	3	ESS 1100	1
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	ESS/PFW Major Activity <sup>4</sup>	1
US 1100	1	PH 1320	3
		<b>16</b>	<b>15</b>
		Sophomore	
		First Semester Hours	Second Semester Hours
PH 2340	3	NUTR 3362 <sup>1</sup>	3
American History Component Code 060	3	American History Component Code 060	3
ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3	ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
Life and Physical Sciences Component Code 030 <sup>3</sup>	4	Life and Physical Sciences Component Code 030 <sup>3</sup>	4
Social and Behavioral Sciences Component Code 080	3	ESS 1179	1
ESS 1101	1	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
		<b>17</b>	<b>17</b>

**Minimum required: 120 semester credit hours**

## General Requirements

1. The Bachelor of Science (B.S.) degree with a major in Exercise and Sports Science program is designed to prepare graduates for study towards a master's degree in Exercise Physiology, Biomechanics, or a similar field of study. Completion of this degree does not guarantee admission to a graduate program.



		Junior
First Semester Hours	Second Semester Hours	
PH 4336	3 ESS 3319	3
ESS 3317	3 ESS 3320	3
ESS 3117	1 ESS 4351	3
ESS 3329	3 Life and Physical Sciences <sup>3</sup>	4
Clinical Elective <sup>5</sup>	3 ENG 3303	3
AT 3358	3	
ESS/PFW Major Activity <sup>4</sup>	1	
<b>17</b>		<b>16</b>
		Senior
First Semester Hours	Second Semester Hours	
ESS 4101	1 ESS 4661	6
ESS 4319	3	
ESS 4320	3	
ESS 4321	3	
Clinical Elective Choose 2 <sup>5</sup>	6	
<b>16</b>		<b>6</b>

**Total Hours: 120**

<sup>1</sup> While not recommended, previously completed courses in some areas can be substituted for the following degree requirements:

- Any course approved for 020 General Education Core Curriculum, except MATH 1316, can satisfy the MATH 1315 requirement.
- BIO 2451 and BIO 2452 can be used together to satisfy the BIO 2430 requirement.
- NUTR 2360 can satisfy the NUTR 3362 requirement.

<sup>2</sup> A 2.5 Overall GPA is required to enroll in this internship. All other coursework must be completed prior to the internship.

<sup>3</sup> Life and Physical Sciences courses must be chosen from: BIO 1330, BIO 1130, BIO 1331, BIO 1131, CHEM 1341, CHEM 1141, CHEM 1342, CHEM 1142, PHYS 1315, PHYS 1115, PHYS 1325, PHYS 1125, PHYS 1335, and PHYS 1345. Students must take 12 hours (i.e. three courses and three corresponding labs).

<sup>4</sup> ESS/PFW Major Activity courses must be chosen from: ESS 1172, ESS 1175, ESS 1176, ESS 1178, PFW 1110A, PFW 1110B, PFW 1110E, PFW 1110F, PFW 1110G, PFW 1130B, PFW 1135B, PFW 1155A, PFW 1155G, PFW 1155H, PFW 1155I, PFW 1160B, PFW 1160C, PFW 1190B, and PFW 1190C.

<sup>5</sup> Clinical Elective courses must be chosen from: ESS 4333, ESS 4324, HIM 2360, and NUTR 3364, PH 3348

## Minimum required: 120 semester credit hours

### General Requirements

- The Bachelor of Science (B.S.) degree with a major in Exercise and Sports Science is a 120 credit-hour degree program and blends rigorous basic sciences, athletic training, and exercise science courses relevant to physical rehabilitation. The main focus of this pre-professional program is to combine the prerequisite coursework required for entrance to a graduate-level allied health program with quality support courses from the Athletic Training and Exercise and Sports Science programs. This degree program will prepare students for several other graduate programs such as: Physical Therapy,

Athletic Training, Occupational Therapy, Chiropractic, Physician Assistant, Orthotic/Prosthetic, and Exercise Physiology.

- Graduate programs may require additional or modified prerequisite coursework for admission not included in this program. Students are ultimately responsible for knowing and completing prerequisite requirements for professional graduate programs of interest. Completion of this program does not guarantee admission to a graduate program.
- Students are advised to follow the approved 4-year academic plan provided by the College of Education Advising Center. Students must enroll in AT 3311 or AT 3312, prior to enrolling in AT 4313. Students are eligible to enroll in AT 4313 after AT 3311 and AT 3312 have been completed.
- Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course, but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

## Course Requirements

		Freshman
First Semester Hours	Second Semester Hours	
MATH 1315 (Mathematics Component Code 020 [TCCN MATH 1314])	3 CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 CHEM 1141 (TCCN CHEM 1111)	1
PSY 1300 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
Prescribed Elective	4 HIM 2360	3
US 1100	1 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
	AT 2356	3
<b>14</b>		<b>16</b>

		Sophomore
First Semester Hours	Second Semester Hours	
BIO 2430 (TCCN BIOL 2404)	4 AT 2400	4
CHEM 1342 (Life and Physical Sciences Component Code 030 [TCCN CHEM CHEM 1312])	3 PHYS 1315 or 1335 (TCCN PHYS PHYS 1301)	3
CHEM 1142 (TCCN CHEM 1112)	1 PHYS 1115 (TCCN PHYS 1101)	1
American History Component Code 060	3 American History Component Code 060	3

POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
<b>17</b>	<b>17</b>	

First Semester Hours		Second Semester Hours		Junior
AT 3311	3	AT 3312	3	
PHYS 1325 or 1345 (TCCN PHYS 1302)	3	ESS 3317	3	
PHYS 1125 (TCCN PHYS 1102)	1	ESS 3117	1	
ESS 3329	3	ESS 3320	3	
ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3	Select 3 hours from the following:	3	
PSY 3300 or 3315	3	PSY 2301 (TCCN PSYC 2317)		
		HP 3325		
		MATH 2328		
		PH 3315		
		SOCI 3307		
<b>16</b>		<b>13</b>		

First Semester Hours		Second Semester Hours		Senior
AT 4313	3	AT 3358	3	
NUTR 3362 or 3364 <sup>1</sup>	3	ESS 4317 or 4319	3	
Prescribed Electives	5	Prescribed Electives	9	
ESS 1179	1			
<b>12</b>		<b>15</b>		

**Total Hours: 120**

<sup>1</sup> Prescribed Elective courses must be chosen from:  
ANTH 3311, AT 2298, AT 3298, AT 3400, AT 4360, BIO 1130,  
BIO 1131, BIO 1330, BIO 1331, BIO 2400, BIO 2440, BIO 2450, BIO 3421,  
BIO 4326, CHEM 2341, CHEM 2141, CHEM 2342, CHEM 2142,  
CHEM 4375, ENG 3303, ESS 1101, ESS 1128, ESS 1298, ESS 3323, ESS  
4324, ESS 4333, PH 3348, PSY 3322, PSY 3336, REC 1370, SOCI 1310,  
SOCI 3363.

<sup>2</sup> AT 4360 is a highly recommended elective. It is suggested that it be  
taken after AT 3312.

<sup>3</sup> While not recommended, previously completed courses in some areas  
can be substituted for the following degree requirements:

- BIO 2451 and BIO 2452 can be used together to satisfy the  
BIO 2430 requirement.
- NUTR 2360 can satisfy the NUTR 3362 or NUTR 3364 requirement.
- HP 3325 can satisfy the HP 3302 requirement.
- Any course approved for 020 General Education Core Curriculum  
except for MATH 1312 and MATH 1316, can satisfy the MATH 1315  
requirement.

## Minimum required: 120 semester credit hours

### Admission Requirement

1. All students pursuing teacher certification must apply and be  
accepted to the Office of Educator Preparation (p. 263).

### General Requirements

1. This degree program is designed to fully prepare students for all-  
level teacher certification in Physical Education as well as provide  
initial preparation for a potential second certification area; as such,  
students are required to declare and complete both a minor in  
Education and a second minor tied directly to an additional teaching  
certification area. The degree plan below accounts for 18 credit hours  
within the second minor; certain minors, however, may increase the  
total number of credit hours required for degree completion. This  
program does not allow for declaration of Second Teaching Fields.  
Consult an academic advisor for a list of allowable minors.
2. To satisfy graduation requirements for teacher certification, students  
must have an Overall GPA of at least 2.75, as well as grades of  
"C" or better in all courses within the Major(s), Teaching Field(s),  
Certification area(s), and/or in the Education Minor.
3. Students entering Texas State with fewer than 16 hours completed  
after high school graduation will be required to take US 1100. All  
others will be exempt from taking this course, but will be required to  
earn an additional free elective, if needed, to reach the 120 minimum  
total hour requirement for the awarding of a degree.
4. To complete the predetermined sequence of courses in 4 years,  
students will most likely need to attend summer sessions.
5. The general education core curriculum courses are listed in the  
degree plan below along with the statewide component code number.  
See the General Education Core Curriculum (p. 58) section of this  
catalog for the Texas State requirements and options in the core  
curriculum, including Honors courses.
6. The Texas Education Agency (TEA) requires multiple background  
checks for progression through the Educator Preparation Program.  
Based on information recorded in your criminal history, you may be  
ineligible for issuance of a teaching certificate upon completion of  
the Educator Preparation Program. If you have a criminal history, you  
may obtain a Preliminary Criminal History Evaluation from TEA. For  
more information, go to: [https://tea.texas.gov/Texas\\_Educators/  
Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

### Course Requirements

Freshman	
First Semester Hours	Second Semester Hours
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 MATH 1315 (Mathematics Component Code 020 [TCCN MATH 1314])
ESS 1310	3 Life and Physical Sciences Component Code 030

POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 PHIL 1305 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
Life and Physical Sciences Component Code 030	3 ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
US 1100	1 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3

16

18

**Sophomore**

First Semester Hours	Second Semester Hours	
ESS 2321	3 ESS/PFW Major Activity (taken twice) <sup>2</sup>	2
BIO 2430 (TCCN BIOL 2404) <sup>1</sup>	4 ESS 1173 <sup>2</sup>	1
American History Component Code 060	3 American History Component Code 060	3
ESS 2320	3 Minor or Second Teaching Field	6
ESS 1100	1 Social and Behavioral Sciences Component Code 080	3
ESS 1179	1 ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
Minor or Second Teaching Field	3	
18	18	

**Junior**

First Semester Hours	Second Semester Hours	
ESS 3329	3 ESS 3320	3
ESS 3325	3 ESS 3317	3
Minor or Second Teaching Field	6 ESS 3117	1
	H.S. Field-Based Block:	9
	CI 4372	
	CI 4370	
	RDG 3323	
12	16	

**Senior**

First Semester Hours	Second Semester Hours	
ESS 4323	3 EDST 4380	3
ESS 4624	6 EDST 4381	3
ESS 3180	1	
ESS Advanced Elective <sup>3</sup>	3	
Minor or Second Teaching Field	3	
16	6	

**Total Hours: 120**

<sup>1</sup> While not recommended, previously completed courses in some areas can be substituted for the following degree requirements:

- Any course approved for 020 General Education Core Curriculum, except MATH 1316, can satisfy the MATH 1315 requirement.
- BIO 2451 and BIO 2452 can be used together to satisfy the BIO 2430 requirement.

<sup>2</sup> ESS/PFW Activity/Practicum. Students are required to take three one hour ESS/PFW Major Activity courses in the following specific areas: Team Sports, Individual Sports, and Conditioning. Chose one of the three areas to serve as a practicum (ESS 1173).

- Team Sports: ESS 1172 or ESS 1178.
- Individual Sports: ESS 1128 or ESS 1176.
- Conditioning: ESS 1175, PFW 1110A, PFW 1110B, PFW 1110F, PFW 1135B, or PFW 1190B.

<sup>3</sup> ESS Advanced Elective course must be chosen from: ESS 3321, ESS 3323, ESS 3340, ESS 4357, and ESS 4337.

## Minimum required: 120 semester credit hours

### General Requirements

1. Students must complete a minor in Business Administration, which includes the following courses. An Overall GPA of 2.0 or higher is required to enroll in advanced Business courses. A 2.0 GPA in the minor is required to graduate.

Code	Title	Hours
ECO 2301	Principles of Economics	3
ACC 2301	Accounting in Organizations and Society	3
Select 12 elective hours from the following:		12
BLAW 3301	Legal Environment of Business	
MGT 3301	Introduction to Management	
ISAN 3317	E-Business	
FIN 3340	Fundamentals of Business Finance	
MKT 3343	Principles of Marketing	
<b>Total Hours</b>		<b>18</b>

2. Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
3. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

### Course Requirements

**Freshman**

First Semester Hours	Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3

Life and Physical Sciences Component Code 030 <sup>3</sup>	3 Life and Physical Sciences Component Code 030 <sup>3</sup>	4
MATH 1319 (Mathematics Component Code 020 [TCCN MATH 1324]) <sup>1</sup>	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 AT 2356	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 ESS 1201	2
US 1100	1 ESS 1101	1
	<b>16</b>	<b>16</b>

**Sophomore**

First Semester Hours	Second Semester Hours	
BIO 2430 (TCCN BIOL 2404)	4 ECO 2301 (TCCN ECON 1301)	3
ACC 2301	3 ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
ENG Literature (Component Area Option Code 090/094) [ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3 ESS 1179	1
ESS 1100	1 American History Component Code 060	3
ESS/PFW Major Activity <sup>6</sup>	2 PSY 1300, PFW 1301, or SOCI 1310 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301 or SOCI 1301])	3
American History Component Code 060	3 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
	<b>16</b>	<b>16</b>

**Junior**

First Semester Hours	Second Semester Hours	
ESS 3317	3 ESS 4317	3
ESS 3117	1 Major Elective	3
Major Elective	3 Minor Elective	3
Minor Elective	3 ESS 3320	3
ESS 3329	3 ESS 4351	3
Support Elective	3 PH 3376	3
	<b>16</b>	<b>18</b>

**Senior**

First Semester Hours	Second Semester Hours	
ESS 4318	3 ESS 4660	6
ESS 4320	3	
ESS 4333	3	
Minor Elective	6	

ESS 4100	1
	<b>16</b>
<b>Total Hours: 120</b>	<b>6</b>

<sup>1</sup> While not recommended, previously completed courses in some areas can be substituted for the following degree requirements:

- Any course approved for 020 General Education Core Curriculum, except MATH 1316, can satisfy the MATH 1319 requirement.
- BIO 2451 and BIO 2452 can be used together to satisfy the BIO 2430 requirement.
- ACC 2361 and ACC 2362 can be used together to satisfy the ACC 2301 requirement.
- ECO 2314 and ECO 2315 can be used together to satisfy the ECO 2301 requirement.

<sup>2</sup> Students must complete ESS 4660. A 2.5 Overall GPA is required to enroll in the internship. All other coursework must be completed prior to the internship.

<sup>3</sup> Life and Physical Sciences Component Code 030 courses must be chosen from: BIO 1330, BIO 1331, CHEM 1341, CHEM 1342, PHYS 1315, and PHYS 1325, PHYS 1335, PHYS 1345. The Life and Physical Sciences lab must be chosen from: BIO 1130, BIO 1131, CHEM 1141, CHEM 1142, PHYS 1115, and PHYS 1125.

<sup>4</sup> Major Elective courses must be chosen from: ESS 3319, ESS 3323, ESS 3340, ESS 4324, ESS 4357, and REC 4330.

<sup>5</sup> Support Elective course must be chosen from: NUTR 3362, NUTR 3364, PSY 3336, PSY 3350, and PSY 3361.

<sup>6</sup> ESS/PFW Major Activity courses must be chosen from: ESS 1172, ESS 1175, ESS 1176, ESS 1178, PFW 1110A, PFW 1110B, PFW 1110E, PFW 1110F, PFW 1110G, PFW 1130B, PFW 1135B, PFW 1155A, PFW 1155G, PFW 1155H, PFW 1155I, PFW 1160B, PFW 1160C, PFW 1190B, and PFW 1190C.

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.
- Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Students must complete all required Public Health (PH) courses with grades of "C" or better, excluding additional PH courses taken as Open Electives.
- Students with a PH major are not permitted to select the PH minor

## Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
Mathematics Component Code 020 <sup>2</sup>	3	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
American History Component Code 060	3	American History Component Code 060	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
PH 1310 (TCCN PHED 1304)	3	PH 1320	3
US 1100	1		
	<b>16</b>		<b>15</b>

		Sophomore	
First Semester Hours		Second Semester Hours	
Life and Physical Sciences Component Code 030	3	Choose 1 of the following:	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3	CJ 3347	
PH 2340	3	MATH 2328	
Social and Behavioral Sciences Component Code 080	3	PA 3311	
PH 3348	3	PH 3315	
		PSY 2301 (TCCN PSYC 2317)	
		SOCI 3307	
		PH Elective <sup>1</sup>	3
		Life and Physical Sciences Component Code 030	3
		COMM 1310 (Component Area Option 090/091 [TCCN SPCH 1311])	3
		ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
	<b>15</b>		<b>15</b>

		Junior	
First Semester Hours		Second Semester Hours	
PH 3350	3	PH 3301	3
PH 3370	3	Minor	6
Minor	6	Open Elective	7
Open Elective	3		
	<b>15</b>		<b>16</b>

		Senior	
First Semester Hours		Second Semester Hours	
PH 4100	1	PH 4335	3
Minor	6	PH 4640	6
PH 4336	3	PH Elective <sup>1</sup>	3
PH Elective <sup>1</sup>	3		
Open Elective	3		
	<b>16</b>		<b>12</b>
<b>Total Hours: 120</b>			

<sup>1</sup> PH Electives may be chosen from the following: PH 2338, PH 3321, PH 3330, PH 3360, PH 3374, PH 3376, PH 4331, PH 4347, PH 4360, PH 4660,

<sup>2</sup> Any course approved for 020 General Education Core Curriculum, except MATH 1316, can satisfy the requirement.

**Minimum required: 120 semester credit hours**

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.
- Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Students must complete all required Public Health (PH) courses with grades of "C" or better.
- Students with a PH major are not permitted to select the PH minor.

## Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
ENG 1310 (Communication Component Code 010)	3	ENG 1320 (Communication Component Code 010)	3
Mathematics Component Code 020 <sup>3</sup>	3	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040)	3
American History Component Code 060	3	American History Component Code 060	3
POSI 2310 (Government/Political Science Component Code 070)	3	POSI 2320 (Government/Political Science Component Code 070)	3
PH 1310	3	PH 1320	3



US 1100	1		
	16		15
<b>Sophomore</b>			
<b>First Semester Hours</b>		<b>Second Semester Hours</b>	
Life and Physical Sciences Component Code 030	3	CJ 3347, MATH 2328, PA 3311, PH 3315, PSY 2301, or SOCI 3307	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050)	3	Life and Physical Sciences Component Code 030	3
PH 2340	3	COMM 1310 (Component Area Option Code 090/091)	3
Social and Behavioral Sciences Component Code 080	3	ENG Literature (Component Area Option Code 090/094)	3
PH 3348	3	BIO 2430 or 2440	4
	15		16
<b>Junior</b>			
<b>First Semester Hours</b>		<b>Second Semester Hours</b>	
PH 3350	3	PH 3301	3
PH 3370	3	Minor	6
Minor	6	PA 3340, HA 3347, HIM 3350, or PA 4340	3
PA 3300, 3310, 3330, or 3350	3	ANTH 3336, GEO 3301, SOCI 3318, SOCI 4308, or SOCI 4309	3
	15		15
<b>Senior</b>			
<b>First Semester Hours</b>		<b>Second Semester Hours</b>	
PH 4100	1	PH 4335	3
Minor	3	PH 4640	6
PH 4336	3	PH Elective <sup>1</sup>	3
ANTH 3325, CA 3342, COMM 3318J, COMM 3329, COMM 4326, COMM 4345, COMM 4347, GEO 3349, GEO 3351, HA 3309, MC 3343, MC 3355, MC 4322, PH 4331, or SOCI 3363 <sup>2</sup>	3	Minor	3
PH Elective <sup>1</sup>	3		
	13		15
<b>Total Hours: 120</b>			

<sup>1</sup> PH Electives may be chosen from the following: PH 2338, PH 3321, PH 3330, PH 3360, PH 3374, PH 3376, PH 4331, PH 4347, PH 4360, PH 4660.

<sup>2</sup> PH 4331 can meet the concentration course requirement or the Public Health Elective requirement, but may not count as both.

<sup>3</sup> Any course approved for 020 General Education Core Curriculum, except MATH 1316, can satisfy the requirement.

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.
- Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
- Students must select [a minor from the approved list of Undergraduate Minors](#).
- Students must complete all required Public Health (PH) courses with grades of "C" or better, excluding additional PH courses taken as Prescribed Support Electives.
- [Students with a PH major are not permitted to select the PH minor](#)

### Course Requirements

<b>Freshman</b>			
<b>First Semester Hours</b>		<b>Second Semester Hours</b>	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
Mathematics Component Code 020 <sup>3</sup>	3	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or PHIL 2306])	3
American History Component Code 060	3	American History Component Code 060	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
PH 1310	3	PH 1320	3
US 1100	1		
	16		15

<b>Sophomore</b>			
<b>First Semester Hours</b>		<b>Second Semester Hours</b>	
Life and Physical Sciences Component Code 030	3	CJ 3347, MATH 2328, PA 3311, PH 3315, PSY 2301, or SOCI 3307	3
ART 2313 (Creative Arts Component Code 050 [HUMA 1315])	3	ESS 1100 or PFW 1101	1
PH 2340	3	Life and Physical Sciences Component Code 030	3

PH 3348	3 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
PSY 1300 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301])	3 ENG Literature (Component Area Option Code 090/094)	3

15

13

**Junior**

First Semester Hours	Second Semester Hours	
PH 3350	3 PH 3301	3
PH 3370	3 PH 3376, ESS 3323, PFW 1301, or PFW 11** <sup>2</sup>	4
Minor	3 NUTR 3362, 3364, 2360, or 2361	3

ESS 1175 or PFW 1110E <sup>2</sup>	1 Minor	3
ESS 1179 <sup>2</sup>	1 PH Elective	3

Choose 6 hours from the following:

COUN 3320		
PSY 3300		
PSY 3325		
PSY 3336		
PSY 3350		
PSY 3361		

17

16

**Senior**

First Semester Hours	Second Semester Hours	
PH 4100	1 PH 4335	3
Minor	9 PH 4640	6
PH 4336	3 PH Elective <sup>1</sup>	3
	Minor	3

13

15

**Total Hours: 120**

<sup>1</sup> PH Electives may be chosen from the following: PH 2338, PH 3321, PH 3330, PH 3360, PH 3374, PH 3376, PH 4331, PH 4347, PH 4360, PH 4660,

<sup>2</sup> PH 3376 can meet the concentration course requirement or the Public Health Elective requirement, but may not count for both.

<sup>3</sup> Any course approved for 020 General Education Core Curriculum, except MATH 1316, can satisfy the requirement.

<sup>4</sup> Students may take only one PFW activity course to meet the concentration requirement.

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.
- Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Students must complete all required Public Health (PH) courses with grades of "C" or better.
- Students with a PH major are not permitted to select the PH minor.

## Course Requirements

**Freshman**

First Semester Hours	Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 ENG 1320 (Communication Component Code 010 (TCCN ENGL 1302))	3
Mathematics Component Code 020 <sup>3</sup>	3 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or PHIL 2306])	3
American History Component Code 060	3 American History Component Code 060	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
PH 1310	3 PH 1320	3
US 1100	1	

16

15

**Sophomore**

First Semester Hours	Second Semester Hours	
Life and Physical Sciences Component Code 030	3 CJ 3347, MATH 2328, PA 3311, PH 3315, PSY 2301, or SOCI 3307	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [HUMA 1315])	3 Life and Physical Sciences Component Code 030	3
PH 2340	3 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
Social and Behavioral Sciences Component Code 080	3 ENG Literature (Component Area Option Code 090/094)	3
PH 3348	3 PH 3330	3

15

15

**Junior**

First Semester Hours	Second Semester Hours	
PH 3350	3 PH 3301	3
PH 3370	3 Minor	6

Minor	6 Health Equity Concentration Elective <sup>3,4</sup>	6
PH 4331	3	
	<b>15</b>	<b>15</b>

**Senior**

First Semester Hours	Second Semester Hours	
PH 4100	1 PH 4335	3
Minor	3 PH 4640	6
PH 4336	3 PH Elective <sup>1</sup>	3
PH Elective <sup>1</sup>	3 Minor	3
Health Equity Concentration Elective <sup>3,4</sup>	4	
	<b>14</b>	<b>15</b>

**Total Hours: 120**

<sup>1</sup> PH Electives may be chosen from the following: PH 2338, PH 3321, PH 3360, PH 3374, PH 3376, PH 4347, PH 4348

<sup>2</sup> Any course approved for 020 General Education Core Curriculum, except MATH 1316, can satisfy the requirement.

<sup>3</sup> Health Equity Concentration Electives may be chosen from the following: ANTH 3303, ANTH 3322, ANTH 3324, ANTH 3331E, ANTH 3331F, ANTH 3350, ANTH 3360, ANTH 4309, COMM 3329, COMM 4336, COMM 4341, DVST 3301, DVST 3320, GEO 1310, LATS 2300, PFW 11@ Activity, SOCI 3322, SOCI 3324, SOCI 3327, SOCI 3330, SOCI 3350, SOCI 3363, SOCI 3372, SOCI 3331, SOCI 3383, SOCI 3395, SOWK 4310, SOWK 4355, WS 3376, WS 3377.

<sup>4</sup> Only one PFW Activity course may be taken to meet Health Equity Concentration requirements.

## Minimum required: 120 semester credit hours

### General Requirements

- Graduates are prepared to take the national examination to obtain the Certified Park and Recreation Professional certification endorsed by the National Recreation and Park Association.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>) but are not eligible for the Minor in Recreation Administration.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours. REC 4335 is available as an elective. Consult with an academic advisor for further recommendations on elective choices.
- Students should be aware that some REC courses may only be offered once a year, during a Fall or Spring semester.
- Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.

7. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

8. Prior to graduation, students will complete a 400 hour internship. In order to be approved for an internship students must have a Major GPA of 2.25 or higher.

## Course Requirements

**Freshman**

First Semester Hours	Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
Life and Physical Sciences Component Code 030	3 Life and Physical Sciences Component Code 030	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 REC 1330	3
REC 1310 (TCCN PHED 1336)	3 MATH 1315 (Mathematics Component Code 020 [TCCN 1314]) <sup>1</sup>	3
US 1100	1 Social & Behavioral Sciences Core 080 <sup>4</sup>	3
REC 2330	3	
	<b>16</b>	<b>15</b>

**Sophomore**

First Semester Hours	Second Semester Hours	
American History Component Code 060	3 American History Component Code 060	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
REC 2335	3 REC 2336	3
ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
Electives	1 REC 1370	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3 Electives	1
	<b>16</b>	<b>16</b>

**Junior**

First Semester Hours	Second Semester Hours	
Minor	6 Minor	6
REC 3325	3 REC 3335	3
REC 3340	3 REC 3351	3
Electives	3 REC 4330	3
Choose 1 of the following:	3 Choose 1 of the following:	3

COMM 2315 (TCCN SPCH 1318)	MC 3319
COMM 2330 (TCCN SPCH 2333)	MC 3343
COMM 2338 (TCCN SPCH 1315)	MC 3355
TH 3370	MC 3367
	MC 4381
<b>18</b>	<b>18</b>

	First Semester Hours	Second Semester Hours	
Minor	6 REC 4680		6
REC 4350	3		
REC 4380	3		
Electives	3		
	<b>15</b>		<b>6</b>

**Total Hours: 120**

- <sup>1</sup> Any course approved for 020 General Education Core Curriculum can satisfy the MATH 1315 requirement
- <sup>2</sup> All major coursework must be completed prior to students enrolling in the required internship, REC 4680.
- <sup>3</sup> Students must earn grades of "C" or better in REC 2335, REC 2336, REC 3325 and REC 4380 as partial fulfillment of gaining Departmental Approval to enroll in REC 4680.
- <sup>4</sup> It is recommended that students take PFW 1301.

## Minimum required: 120 semester credit hours

### General Requirements

- Graduates are prepared to take the national examination to obtain the Certified Park and Recreation Professional certification endorsed by the National Recreation and Park Association.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>) but are not eligible for the Minor in Recreation Administration.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours. Consult with an academic advisor for further recommendations on elective choices.
- Students should be aware that some REC courses may only be offered once a year, during a Fall or Spring semester.
- Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this

catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

- Prior to graduation, students will complete a 400 hour internship. In order to be approved for an internship students must have a Major GPA of 2.25 or higher.

## Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
Life and Physical Sciences Component Code 030	3	Life and Physical Sciences Component Code 030	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	PFW 1301 (Social and Behavioral Sciences Component Code 080)	3
REC 1310 (TCCN PHED 1336)	3	REC 2330	3
US 1100	1	MATH 1315 (Mathematics Component Code 020 [TCCN 1314]) <sup>1</sup>	3
REC 1330	3		
	<b>16</b>		<b>15</b>

		Sophomore	
		First Semester Hours	Second Semester Hours
American History Component Code 060	3	American History Component Code 060	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
REC 2335	3	REC 2336	3
ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3	REC 1370	3
Choose 2 of the following:	2	GEO 1309 or 1310	3
PFW 1154B			
PFW 1154C			
PFW 1190A			
PFW 1190B			
PFW 1190C			

		Junior	
		First Semester Hours	Second Semester Hours
Minor	6	Minor	6
REC 3325	3	REC 4330	3
Electives	3	REC 4335	3
REC 3351	3	Choose 1 of the following:	3

Choose 1 of the following:	3	MC 3319
GEO 3329		MC 3367
GEO 4326		MC 4381
NHT 4301		
PH 3301		
	<b>18</b>	<b>15</b>

	First Semester Hours	Second Semester Hours	Senior
Minor	6	Internship/ Practicum	6
REC 4350	3	Choose 6 hours from the following:	
REC 4380	3	REC 3380 (Can be taken twice.)	
Electives	3	REC 4680	
		ESS 4357	
	<b>15</b>		<b>6</b>

**Total Hours: 120**

<sup>1</sup> Any course approved for 020 General Education Core Curriculum can satisfy the MATH 1315 requirement

<sup>2</sup> All major coursework must be completed prior to students enrolling in the required internship, REC 4680.

<sup>3</sup> Students must earn grades of "C" or better in REC 2335, REC 2336, REC 3325 and REC 4380 as partial fulfillment of gaining Departmental Approval to enroll in REC 4680.

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students entering Texas State with fewer than 16 hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course but will be required to earn an additional free elective, if needed, to reach the 120 minimum total hour requirement for the awarding of a degree.
- Students should be aware that some REC courses may only be offered once a year, during a Fall or Spring semester.
- Graduates are eligible to sit for examinations for the National Council for Therapeutic Recreation Certification (NCTRC) and the Certified Parks and Recreation Professional (CPRP).
- No minor is required in this degree plan because the Therapeutic Recreation courses that are necessary for the NCTRC and CPRP certifications serve to broaden the study of the Recreation Administration major.

### Course Requirements

	First Semester Hours	Second Semester Hours	Freshman
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
Life and Physical Sciences Component Code 030	3	Life and Physical Sciences Component Code 030	3
MATH 1315 (Mathematics Component Code 020 [TCCN MATH 1314]) <sup>4</sup>	3	REC 2330	3
REC 1310 (TCCN PHED 1336)	3	COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
PSY 1300 (Social and Behavioral Sciences Component Code 080)	3	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
US 1100	1		
	<b>16</b>		<b>15</b>

	First Semester Hours	Second Semester Hours	Sophomore
American History Component Code 060	3	American History Component Code 060	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
REC 1370	3	REC 2370	3
REC 2335	3	PSY 3300	3
ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3	ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
		HIM 2360	3
	<b>15</b>		<b>18</b>

	First Semester Hours	Second Semester Hours	Junior
PSY 3315	3	REC 3371	3
REC 3370	3	REC 3351	3
REC 2336	3	NCTRC Eligibility Course	3
REC 3325	3	Select 1 of the following:	3
Select 1 of the following:	3	REC 1330	
REC 1330		REC 3340	
REC 3340		REC 4330	
REC 4330		REC 4335	
REC 4335		BIO 2430 (TCCN BIOL 2404)	4
NCTRC Eligibility Course	3		
	<b>18</b>		<b>16</b>

	First Semester Hours	Second Semester Hours	Senior
REC 4350	3	REC 4681	6
REC 4380	3		



REC 4370	3
REC 4371	3
NCTRC Eligibility Course	3
Elective	1
<b>16</b>	<b>6</b>

**Total Hours: 120**

<sup>1</sup> While not recommended, previously completed courses in some areas can be substituted for the following degree requirements:

- BIO 2451 and BIO 2452 can be used together to satisfy the BIO 2430 requirement.

<sup>2</sup> All other coursework must be completed prior to students enrolling in the required internship, REC 4681. Students should be aware that this internship must be completed during a Fall or Spring semester - it cannot be completed in a Summer semester.

<sup>3</sup> Students must earn grades of "C" or better in each TR sequence course (REC 1370, REC 2370, REC 3370, REC 3371, REC 4370, REC 4371), as well as in REC 4380 as partial fulfillment of requirements to gain Departmental Approval to enroll in REC 4681.

<sup>4</sup> Any course approved for 020 General Education Core Curriculum can satisfy the MATH 1315 requirement

**NCTRC Eligibility Courses**

Code	Title	Hours
ESS 3320	Biomechanics	3
ESS 3329	Motor Learning	3
PSY 3312	Adolescent Psychology	3
PSY 3313	Psychology of Adulthood and Aging	3
PSY 3350	Cognitive Behavioral Therapies	3
PSY 3361	Health Psychology	3
SOCI 1310	Introduction to Sociology	3
SOCI 3338	Family Problems	3
SOCI 3343	Criminology	3
SOCI 3347	Juvenile Delinquency	3
SOCI 3383	Aging and Society	3
SOCI 3384	The Sociology of Death and Dying	3
SPED 2360	Survey of Exceptionalities	3
SPED 3338	Educating Students with Emotional/Behavioral Disorders	3
SPED 4344	Educating Students with Mild Disabilities	3
SPED 4381	Educating Students with Intellectual and Developmental Disabilities	3

The minor in Adaptive Recreation and Sport requires 18 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
REC 1310	Introduction to Recreation and Leisure Services	3
REC 1370	Introduction to Recreational Therapy	3
REC 2370	Planning Recreational Therapy Services	3
REC 4371	Application of Evidence-Based Practice in Recreational Therapy	3
<b>Choose 6 hours from the list of prescribe electives</b>		<b>6</b>
REC 2330	Leadership in Recreation and Leisure Services	

REC 2335	Recreation Program Development
REC 3340	Recreation Facilities Operations and Maintenance
REC 4318H	Recreation & Sport Research in a Cross-Cultural Context
REC 4330	Entrepreneurial Management in Recreation Services
REC 4335	Outdoor Recreation Programming
<b>Total Hours</b>	<b>18</b>

The minor in Coaching requires 22 semester credit hours. A minor in Coaching is designed to provide basic expertise in coaching based on the national standards for sport coaches. The minor is not allowed for students majoring in Exercise and Sports Science or in Health and Fitness Management.

Code	Title	Hours
<b>Required Courses</b>		
AT 2356	Prevention and Care of Athletic Injuries	3
BIO 2430	Human Physiology and Anatomy <sup>1</sup>	4
ESS 3317	Exercise Physiology	3
or ESS 3320	Biomechanics	
ESS 3323	Psychosocial Aspects of Exercise of Sport Sciene	3
ESS 3340	Theory and Principles of Coaching	3
ESS 4320	Resistance Training and Conditioning	3
Choose 3 hours from the following:		3
ESS 1172	Beginning Field Sports	
ESS 1176	Beginning Tennis, Badminton, and Other Racket Sports	
ESS 1178	Beginning Volleyball and Basketball	
ESS 1179	Beginning Weight Training	
<b>Total Hours</b>		<b>22</b>

<sup>1</sup> BIO 2451 and BIO 2452 can be used together to satisfy the BIO 2430 requirement.  
BIO 3425 and BIO 3426 can be used together to satisfy the BIO 2430 requirement.

The minor in Exercise and Sports Science requires 22 semester credit hours. This minor is not available to students who major in Exercise and Sports Science or in Health and Fitness Management.

Code	Title	Hours
<b>Required Courses</b>		
AT 2356	Prevention and Care of Athletic Injuries	3
BIO 2430	Human Physiology and Anatomy <sup>1</sup>	4
ESS 1100	Lifetime Fitness and Wellness	1
ESS 1179	Beginning Weight Training	1
ESS 3117	Laboratory in Exercise Physiology	1
ESS 3317	Exercise Physiology	3
ESS 3320	Biomechanics	3
ESS 4324	Adapted Physical Activity	3
ESS 4351	Measurement & Evaluation in Exercise and Sports Science	3
<b>Total Hours</b>		<b>22</b>

<sup>1</sup> BIO 2451 and BIO 2452 can be used together to satisfy the BIO 2430 requirement. BIO 3425 and BIO 3426 can be used together to satisfy the BIO 2430 requirement.

The minor in Public Health requires 18 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
PH 1310	Foundations of Personal Health	3
PH 1320	Introduction to Public Health	3
PH 2340	Community Health	3
PH 4336	Health Behavior Theory	3
<b>Prescribed Electives</b>		
Choose 6 hours from the following:		6
PH 2338	Substance Use and Abuse	
PH 3301	Environmental Health	
PH 3321	Health in the School Setting	
PH 3330	Inclusion and Diversity in Women's Health	
PH 3348	Prevention of Disease	
PH 3350	Consumer Health	
PH 3360	Issues in Human Sexuality	
PH 3370	Epidemiology	
PH 3374	Global Health	
PH 3376	Worksite Health Promotion	
PH 4347	Independent Study in Public Health	
PH 4331	Health Disparities	
PH 4335	Public Health Leadership	
<b>Total Hours</b>		<b>18</b>

The minor in Outdoor Recreation Leadership requires 18 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
REC 1310	Introduction to Recreation and Leisure Services	3
REC 1330	Introduction to Outdoor Recreation	3
REC 2335	Recreation Program Development	3
REC 4335	Outdoor Recreation Programming	3
<b>Prescribed Electives</b>		<b>6</b>
REC 2330	Leadership in Recreation and Leisure Services	
REC 3380	Practicum in Outdoor Recreation	
REC 3325	Recreation Administration	
REC 3335	Advanced Recreation Program Development	
REC 3351	Evaluation of Leisure Service Programming	
REC 4330	Entrepreneurial Management in Recreation Services	
ESS 4357	Water Safety Instruction for Service Learning	
PFW 1154B	Challenge Course Facilitation	
PFW 1154C	Backpacking	
PFW 1190A	Canoeing	
PFW 1190F	Beginning Scuba	
PFW 1201	Advanced and Master Scuba Diving	
PFW 1110E	Beginning Jogging & Conditioning	

PFW 1110A	Aerobic Conditioning	
PFW 1204	Underwater Photography	
<b>Total Hours</b>		<b>18</b>

The minor in Recreation and Event Planning requires 18 semester credit hours. This minor is not available to students who major in Recreation Administration.

Code	Title	Hours
<b>Required Courses</b>		
REC 1310	Introduction to Recreation and Leisure Services	3
REC 2330	Leadership in Recreation and Leisure Services	3
REC 2335	Recreation Program Development	3
REC 3335	Advanced Recreation Program Development	3
Choose 6 hours from the following:		6
REC 3325	Recreation Administration	
REC 3340	Recreation Facilities Operations and Maintenance	
REC 3351	Evaluation of Leisure Service Programming	
REC 4330	Entrepreneurial Management in Recreation Services	
REC 4350	Employee Supervision in Recreation and Leisure Services	
<b>Total Hours</b>		<b>18</b>

Education Building Room 2016  
Telephone: 512-245-7880 Fax: 512-245-8345  
[www.education.txst.edu/oep](http://www.education.txst.edu/oep) (<https://www.education.txst.edu/oep/>)

The Office of Educator Preparation (OEP) collaborates with all university departments and schools involved in educator certification. The OEP assists departments and schools in certification program alignment and compliance with federal, state, and university policies and procedures that lead to educator certification through baccalaureate, graduate, and certification-only programs: namely, programs in the colleges of Applied Arts, Education, Fine Arts and Communication, Liberal Arts, and Science and Engineering.

**Because of the nature of the teaching profession--and because of the extensive field-based component of educator certification--all interested students must be aware of the following:**

Students in teacher certification programs are preservice teacher candidates who are expected to **exhibit professional dispositions and behaviors** that are appropriate to the school environment and that supports learners' academic success. These dispositions and behaviors include professional attitudes, values, and beliefs demonstrated through both verbal and non-verbal behaviors as candidates interact with students, families, colleagues, and communities.

A candidate who does not meet the expectations for the behaviors and dispositions for the profession will be identified by a professor, supervisor, cooperating teacher, or principal and will meet with a department administrator and/or the Office of Educator Preparation to discuss the case. If further action is necessary, the candidate's case will be reviewed by the chair of the appropriate department with input from faculty, as appropriate, to determine eligibility for the Educator Preparation Program. Appeals regarding the candidate's eligibility should be made to the Dean of the College of Education whose decision is final.

**Criminal background checks are required for participation in field-based coursework and for progression through the Educator Preparation Program.** Based on information recorded in an individual's criminal history, a candidate may be ineligible for issuance of a certification upon completion of the Educator Preparation Program. If a candidate has a criminal history, that student is advised to request a Preliminary Criminal History Evaluation from the Texas Education Agency; schedule an appointment for free legal counseling services through Texas State University's Attorney for Students (<http://attorney.dos.txstate.edu/>); and disclose this information to the Office of Educator Preparation.

**Certification requirements are subject to change regardless of catalog year.** Teacher Certification at Texas State University is governed by state/federal statute and rules. Certification coursework, exam approval, and exam scores may expire in response to changes from either the state or federal government.

## Major with Teacher Certification

Students who wish to teach Early Childhood (EC) through Grade 6 (elementary with specialization in either English as a Second Language or Bilingual Education), Grades 4-8 (middle school), or All-Level Special Education pursue the Bachelor of Science major in Education. Students seeking all other teacher certifications should initially declare a major within their chosen teaching field in the department, school and college where that major is housed. Students should note that teacher certification requirements may differ from degree requirements and that completion of both is necessary for awarding a degree and recommending a student for teacher certification.

## Sequence of Coursework

Students should refer to their Advising Center for guidance in following the Educator Preparation course sequence in their degree plan. At a minimum, each Educator Preparation sequence consists of introductory "Education Core" classes, at least one 15-week semester of a Field-Based Block of coursework and a final 15-week semester of Clinical Teaching that occurs after all other coursework has been completed. Students must apply a semester in advance for Field-Based Block coursework at [www.education.txstate.edu/oep/Applications/apply-for-fieldblock-experience.html](http://www.education.txstate.edu/oep/Applications/apply-for-fieldblock-experience.html) (<http://www.education.txstate.edu/oep/Applications/apply-for-fieldblock-experience.html>) and for Clinical Teaching coursework at [www.education.txstate.edu/oep/current/initial-certification/clinical-teaching/application.html](http://www.education.txstate.edu/oep/current/initial-certification/clinical-teaching/application.html) (<https://www.education.txstate.edu/oep/current/initial-certification/clinical-teaching/application.html>).

## Teacher Certification

In addition to an earned baccalaureate degree, there are six criteria for earning certification:

- Admittance to the Educator Preparation Program
- A passing criminal history review
- Completion of Field-Based Blocks
- Passing scores on all required certification exams
- Satisfactory completion of Clinical Teaching
- Applications for graduation as well as state certification

## Admittance to the Educator Preparation Program

In order to pursue teacher certification, students must apply and be invited to attend the Educator Preparation Program through the Office of Educator Preparation. If a student accepts this invitation, the student

must then pay a required \$35 Texas Education Agency technology fee before the student will be officially admitted. Please see <http://www.education.txstate.edu/oep> (<http://www.education.txstate.edu/oep/>) for current admittance requirements and procedures.

For more information about Admittance to the Educator Preparation Program, see the Teacher Certification Handbook on the Office of Educator Preparation website: [www.education.txstate.edu/oep](http://www.education.txstate.edu/oep) (<http://www.education.txstate.edu/oep/>).

## Field-Based Blocks: Elementary, Middle School, High School, and All-Level Certification

Students in any undergraduate teacher certification program must participate in one or more field-based block(s) of integrated courses that provide authentic experience in classrooms, prior to Clinical Teaching. Texas State partners with Central Texas public schools to provide these rich, hands-on experiences. All students being placed in field experiences must complete criminal background checks.

For more information about Field-Based Blocks, see the Department of Curriculum and Instruction website: [www.education.txstate.edu/ci/resources/student-resources/Block-Information.html](http://www.education.txstate.edu/ci/resources/student-resources/Block-Information.html) (<https://www.education.txstate.edu/ci/resources/student-resources/Block-Information.html>).

## Certification Exams

Students must apply to the OEP for test approval for each attempt of the state-required Texas Examination of Educator Standards (TExES).

**State statute limits candidates to FIVE (5) attempts of each exam.** If a candidate does not pass the Pedagogy and Professional Responsibility (PPR) exam within five attempts, the candidate will not be eligible to become a certified teacher in the state of Texas.

For more information about the Certification Exams, see the Teacher Certification Handbook on the Office of Educator Preparation website: <https://www.education.txst.edu/oep/current/initial-certification/certification-exams.html>

## Clinical Teaching

All other degree-required coursework must be completed prior to Clinical Teaching, which should occur during a student's final semester. Contact your advisor regularly for updated degree audit and certification requirements. Criminal background checks are required for all Clinical Teaching Placements.

Clinical Teaching is a mandatory and traditionally, unpaid professional experience that requires the time commitment of a full-time job. Students may request a particular district, but the district HR staff is in charge of placement. While clinical teaching, students are responsible for transportation and lodging arrangements. Students must be available for mandatory district orientation up to 5 weeks prior to the first day of Clinical Teaching placement. Because Student Teaching is 6 credit hours, students must determine, with the assistance of the Financial Aid Office, if and how their financial aid or scholarships may be affected by half-time enrollment.

For more information about Clinical Teaching, see the Teacher Certification Handbook on the Office of Educator Preparation website: [www.education.txst.edu/oep/current/initial-certification.html](http://www.education.txst.edu/oep/current/initial-certification.html) (<https://www.education.txst.edu/oep/current/initial-certification.html>)

## Graduation and Certification

### Graduation

In addition to the other graduation requirements listed in this catalog, the following graduation requirements must be met by students seeking teacher certification:

1. An Overall GPA of at least 2.75.
2. Grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/ or in the Education minor.
3. Successful completion of Clinical Teaching.

### Standard Certification

Eligible students should apply for a Texas Educator Certificate through the State Board for Educator Certification. The Certification Officer in the OEP will recommend the issuance of the appropriate certificate by the State of Texas. The certification process includes the following steps:

1. Completion of at least a baccalaureate degree and the posting of the degree to the official transcript.
2. Verification of satisfactory completion of Clinical Teaching experience.
3. Passing scores on the appropriate Texas Examination of Educator Standards (TExES).

For more information about Certification Exams, Test Prep, and Issuance of Standard Certification, see the Teacher Certification Handbook on the Office of Educator Preparation website: [www.education.txst.edu/oep](http://www.education.txst.edu/oep) (<https://www.education.txst.edu/oep/>).

## Post-Baccalaureate Certificate Requirement

Persons who hold at least a bachelor's degree who are seeking initial Texas teacher certification or professional certification need to follow information listed in The Graduate Catalog.

### Dean

John Fleming, Ph.D.  
Old Main Building Room 112  
Telephone: 512.245.2308 Fax: 512.245.8386  
<http://www.finearts.txstate.edu/>

### Associate Dean

Laurie H. Fluker, Ph.D.

### Associate Dean

Lynn M. Brinckmeyer, Ph.D.

### Department Chairs/School Directors

Art and Design—Beth A. Thomas, Ph.D.  
Communication Studies—Marian Houser, Ph.D.  
Journalism and Mass Communication—Judith B. Oskam, Ed.D.  
Music—Todd Sullivan, Ph.D.  
Theatre and Dance—Sarah Maines, M.F.A.

The College of Fine Arts and Communication offers four undergraduate degrees:

- the Bachelor of Arts (B.A.),
- the Bachelor of Fine Arts (B.F.A.),

- the Bachelor of Music (B.M.), and
- the Bachelor of Science (B.S.).

A wide range of programs are available within the disciplines of art and design, theatre and dance, music, mass communication, journalism and communication studies.

In addition to the college's formal degree programs, students have the opportunity to pursue a number of co-curricular programs. These are available to all Texas State students, regardless of major or minor, and range from acting, marching band, wind ensemble, choir, orchestra, jazz bands, classical guitar, concert bands, Latin ensembles, debate, attendance of art exhibits, lectures and workshops, to production work for KTSW, the campus radio station, or the student newspaper, The University Star.

## Academic Advising Center

Old Main Building Room 118

Telephone: 512-245-1932 Fax: 512-245-8334  
[www.advising.finearts.txstate.edu](http://www.advising.finearts.txstate.edu) (<http://www.advising.finearts.txstate.edu>)

The College of Fine Arts and Communication Academic Advising Center provides students with advising on academic and administrative issues. Students are informed about matters related to academic majors and career possibilities, the selection of appropriate courses, and the choice of an education program leading to a Bachelor's degree. The Advising Center is a resource for current students and for prospective students who are considering a major or minor in the College of Fine Arts and Communication.

Joann Cole Mitte Building Room 2112

Telephone: 512-245-2611 Fax: 512-245-7969  
[www.finearts.txstate.edu/Art/art.html](http://www.finearts.txstate.edu/Art/art.html) (<http://www.finearts.txstate.edu/Art/art.html>)

The School of Art and Design at Texas State University is dedicated to advancing the dynamic potential of art and design to positively impact individuals, communities, and the world. Our students build meaningful, sustainable futures by engaging in inclusive learning environments where diverse perspectives provide insights that support innovative thinking, conceptual and technical expertise, and career and professional readiness. Graduates from the School of Art and Design are flexible, highly skilled, and make significant contributions in and beyond the art and design fields. The faculty come from diverse educational, professional, and cultural backgrounds, and are actively engaged in their disciplines as regionally, nationally, and internationally recognized practitioners and scholars. Exceptional teaching and mentoring within a welcoming, collaborative community positions our students to achieve excellence in their individual, artistic, and career goals.

The School of Art and Design offers six programs leading to the following degrees:

- Bachelor of Fine Arts (B.F.A.) degree with a major in Communication Design;
- Bachelor of Fine Arts (B.F.A.) degree with a major in Photography;
- Bachelor of Fine Arts (B.F.A.) degree with a major in Studio Art
- Bachelor of Fine Arts (B.F.A.) degree with a major in Studio Art (Teacher Certification in Art, Early Childhood through Grade Twelve)

that prepares students for teaching art in elementary and secondary schools;

- Bachelor of Arts (B.A.) degree with a major in Art History;
- Bachelor of Arts (B.A.) degree with a major in Art.

All Art and Design majors are encouraged to enter the annual student juried exhibition and to take advantage of the opportunities offered by the Texas State Galleries, the Multidisciplinary Innovation Lab (MiL), and the Art and Design

## Special Requirements

Students majoring in the B.F.A. Studio Art or B.F.A. Photography programs are required to participate in Portfolio, Practice and Exhibition (ARTS 4200) and the Senior Art Exhibition (ARTS 4000) within the academic year they plan to graduate. Students majoring in the B.F.A. Studio Art (Teacher Certification in Art, Early Childhood through Grade Twelve) program are required to meet teacher certification requirements. Refer to the Office of Educator Preparation (OEP). All students majoring in B.F.A. Communication Design program are required to meet the program's admission requirements (<http://mycatalog.txstate.edu/undergraduate/fine-arts-communication/art-design/communication-design-bfa/>). These students are also required to participate in Senior Portfolio Presentation and Self-Promotion (ARTC 4315) and Senior Show and Review (ARTC 4200) within the academic year they plan to graduate. All students majoring in the B.A. Art History program are required to complete a theories and methods course (ARTH 4323).

## School of Art and Design Program Standards

Students enrolled in the School of Art and Design B.A., B.F.A., or M.F.A. programs must maintain high scholastic standards and develop a mastery of the knowledge and methods of their respective discipline. Students accepted into Art and Design programs are required to conform to and follow the University's Student Code of Conduct, and to meet program standards within the School of Art and Design in order to remain in their program. The administration and faculty of the School of Art and Design are responsible for verifying that only those students who continue to meet program standards are allowed to continue in any program.

## Evaluation of Student Fitness and Performance

Members of the faculty continuously evaluate student performance and progress within Art and Design programs. The criteria used by the faculty to make judgments include instructors' observations of student performance in class and in activities related to courses. Students who are not making satisfactory progress or who are not meeting program standards are encouraged to seek mentorship, and may consider withdrawing from the program.

Disciplinary matters are referred to the Dean of Students.

## Student Review Process

1. When a faculty member believes that a student is not making satisfactory progress or meeting program standards, they will discuss the situation with the student.
2. When the faculty member believes that the student's performance cannot improve to acceptable standards, the faculty member will refer the student to the School of Art and Design Standards Committee. The Committee consists of three Art and Design faculty

members appointed by the Director in consultation with the School's Area Program Coordinators.

3. The Committee will notify the student of the reasons that he or she is not making satisfactory progress or meeting program standards. The student will be given an opportunity to meet with the Committee to respond and to present information and witnesses to the Committee. The Committee will also meet with the faculty member who referred the student.
4. After considering the matter, and within ten working days of meeting with the student, the Committee will report its decision to the student and the school Director, stating that the student should either remain in the program, or leave the program. The Committee may make other decisions, such as placing restrictions or conditions on the student's continuance in the program. Within ten working days of receiving the Committee's decision, the student will notify the school Director of the student's acceptance or rejection of the Committee's decision. If the student rejects the Committee's decision, he or she may appeal directly to the school Director.
5. Within ten working days of receiving the student's appeal, the Director will decide as to the student's continued presence in the program. Before making the decision, the Director will meet with the student. However, before deciding, the Director need not meet with the student if the student was given a reasonable opportunity to meet and either failed or refused to meet. The Director will notify the student of the decision.
6. If the student is dissatisfied with the Director's decision, he or she may appeal to the Dean of The College of Fine Arts and Communications. However, in order for the Dean to consider an appeal, the student must submit a written notice of appeal to the Director and the Dean within ten working days of receiving the Director's decision. The Dean will consider the matter based on information compiled by the Director and notify the student of the decision within ten working days of the Dean's receipt of the appeal from the Director. The Dean may meet with the student and give the student an opportunity to address the issues. The Dean's decision is final.

## Bachelor of Arts (B.A.)

- Major in Art (p. 282)
- Major in Art History (p. 283)

## Bachelor of Fine Arts (B.F.A.)

- Major in Communication Design (p. 284)
- Major in Photography (p. 287)
- Major in Studio Art (p. 288)
- Major in Studio Art (Teacher Certification in Art, Early Childhood Through Grade 12) (p. 290)

## Minors

- Art
- Art History

**Subjects in this school include: ART (p. 267), ARTC (p. 267), ARTF (p. 270), ARTH (p. 271), ARTS (p. 274), ARTT (p. 280)**



## Courses in Art (ART)

### ART 1301. Core I: Collaboration.

This course introduces practical and theoretical content in disciplinary and interdisciplinary art and design practices. Through thematic collaborative projects, students will engage various 2D, 3D, and 4D materials, methods, tools, and concepts independently and in relation to each other.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** ARTS 1311

### ART 1303. Core II: Archive.

This course builds upon interdisciplinary practices introduced in Core I. By creating and engaging with archives and collections, students will build a personal archive of inspiration and source material that uses different research and working methods from all five program areas of the School of Art and Design. Students utilize this personal archive to create a series of interdisciplinary outcomes.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2348

### ART 2313. Introduction to Fine Arts.

An introductory course designed to give the student a fundamental understanding of the creation and appreciation of diverse modes of expression through the visual and performing arts. This course may not be repeated for credit by taking MU 2313, TH 2313, or DAN 2313.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050

**Grade Mode:** Standard Letter

**TCCN:** HUMA 1315

## Courses in Communication Design (ARTC)

### ARTC 1301. Introduction to Communication Design.

This course introduces the field of Communication Design including terminology, creative visual thinking/problem solving, layout design, tools, and materials.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ARTC 1302. Imaging I.

This course is an introduction to digital imaging emphasizing visual strategies, techniques, and concepts. Prerequisites: ARTC 1301 with a grade of "B" or better and [ART 1301 or ART 1303 with a grade of "C" or better]. Corequisite: ARTC 2000 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ARTC 2000. Admission Portfolio Review.

During this course, students will prepare and present an entry-level design portfolio. Communication Design majors must pass Admission Portfolio Review to gain entrance into the program. Course is repeatable one time. Prerequisite: ARTC 1301 with a grade of "B" or better and ART 1301 and with a grade of "C" or better. Corequisite: ARTC 1302 with a grade of "B" or better.

**0 Credit Hours. 0 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### ARTC 2303. Typography I.

This course introduces the evolution and development of alphabets, letter forms, and typography in relationship to visual expression and communication. Prerequisites: ART 1301 and ART 1303 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ARTC 2304. Conceptual Strategies.

This course focuses on concept development and ideation strategies through the production of various design forms. Prerequisites: ART 1301 and ART 1303 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ARTC 2305. Visualization and Presentation Techniques.

Introduces rendering techniques, three-dimensional graphics, and digital imaging for visual presentations. Prerequisites: ARTF 1302 and ID 1310 and ID 1320 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ARTC 3301. Art Direction I.

Students will develop advertising concepts that relate to the creative strategies, marketing platforms, and psychology specific to client-based communication, and the type of media used. Prerequisites: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ARTC 3303. Trademark Design.

Focuses on the design process and concept development of trademark design (i.e., logo design, corporate identity, iconographic systems). The class emphasizes incorporating historic and contemporary methodologies and practices of trademark design within the context of the communication design discipline. Prerequisites: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 3304. Branding Systems.**

Focuses on the creation and application of integrated brand communication systems. Students will develop comprehensive brand identities, typographic elements and layout designs for print and digital media. Prerequisites: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 3307. Interactive Media I.**

This course introduces web site design, construction, basic user interface design, and explores the elements of HTML and CSS. Prerequisites:

ARTC 2303 and ARTC 2304 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 3313. Imaging II.**

This course uses advanced digital and traditional imaging as it applies to visual and verbal problem solving. The class emphasizes incorporating drawing, photography and appropriated images in order to reinforce and extend the possibilities of sourcing and manipulation of images digitally. Prerequisites: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 3320. Typography II.**

Introduces advanced issues in page structure and composition, content organization and management, typographic hierarchies, typeface selection, and typesetting. Prerequisites: ARTC 2303 and ARTC 2304 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4000. Senior Exit Review.**

A course in which all graduating seniors must participate during their last academic year. Work will be examined and evaluated while displayed in the Exit Review. Prerequisites: ARTC 4308 with a grade of "D" or better and instructor approval. Corequisite: ARTC 4315 with a grade of "D" or better.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ARTC 4200. Senior Show & Review.**

Students will be given the guidance and the studio time needed to polish their portfolios and to organize and produce the Communication Design Exit Review. Lectures will focus on best practices for professionals in communication design. Final portfolios will be evaluated while exhibited in the Exit Review. Prerequisite: ARTC 3304 and ARTC 4308 both with grades of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ARTC 4302. Art Direction II.**

Students develop strategic messages across print, digital, and social media and evaluate how conceptual direction and message must shift to accommodate various media. Students strengthen their verbal and visual conceptual skills and elevate their research abilities to create dynamic advertising campaigns, and unify brand position with communication.

Prerequisites: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4303. Art Direction III.**

This course allows students to create art direction projects based on individual professional goals. Faculty will assess each portfolio at the beginning of the course. Students will then address their portfolio content and work to create a body of art direction pieces. Prerequisite: ARTC 4302 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4305. Typography III.**

This course continues the study of letter form, typography, image and concept relationships for effective communication. Prerequisites: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4306. Environmental Graphic Design.**

Introduces a multidiscipline-based design practice centered around exterior and interior built environments. Students examine the visual, theoretical and applied aspects of defining a place through wayfinding, identity and information design. Prerequisites: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4308. Interactive Media II.**

This course explores advanced Web Site design, construction and User Interface design, advanced Web authoring for multiple platforms, and advanced Web typography. Prerequisites: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4309. Interactive Media III.**

Mobile application design. Exploration of User Interface design and Experience design for mobile devices. Students will learn to prototype applications that connect the physical and digital worlds. Prerequisite: ARTC 4308 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4310. Communication Design Practicum.**

Students are placed in regional graphic design firms and advertising agencies to gain professional design/art experience. May be repeated with different emphasis for additional credit. Prerequisite: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTC 4311. Digital Illustration.**

This is an illustration course using digital media to execute illustrations in a wide range of genres. Emphasis will be placed on developing unique approaches to manipulate traditional illustration techniques through digital means, as well as the creation of original digital illustration solutions. Prerequisites: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4313. Communication Design Special Problems.**

This course is an independent study requiring complex problem solving in Communication Design. Goals and objectives will be outlined in a written format. May be repeated with different emphasis for additional credit. Prerequisite: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTC 4314B. Legal Issues in Communication Design.**

This course introduces students to the business and legal issues relating to communication design. Prerequisites: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314H. Poster Design.**

Exploration and experimental usage of the written word integrated with visual imagery by using digital and traditional photographic, illustration, and other graphic elements utilized in poster design. Prerequisites: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314I. Learning from the Land of Design.**

The intent of this course is to broaden the students' understanding of the rich culture of Italian design from the Renaissance to modern Italy. Additionally, the student will learn how intense observation of design principles through sketching, photography and keeping a journal, becomes a method for design inspiration and problem solving. Prerequisites: ARTC 2303 and ARTC 2304 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314K. Introduction to Hand Painted Signs and Lettering.**

This course explores the historic underpinnings, proven techniques, materials and iterative processes associated with hand painted signs and lettering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314L. Guerilla Art Direction.**

This course examines guerilla advertising art direction strategies. Students will develop non-traditional advertising concepts that promote social causes, consumer products, and public events. Guerilla creative strategy concepts will integrate various types of media including social and mobile interactions with the targeted audiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314M. Design Portfolio Preparation.**

Design Portfolio provides students with a published ePortfolio that demonstrates unique problem-solving skills by design thinking methods, well-defined messaging, systems thinking, expansion of sophomore and junior projects, creation of one new project system, clearly stated project briefs and narratives, and exceptional final portfolio execution. Prerequisite: ARTC 3301 and ARTC 3303 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314O. Entrepreneurial Design.**

Students will focus on the interconnection between entrepreneurial thinking and innovation. They will develop innovation-driven venture skills and will gain open and critical thinking skills with a focus on community, understanding of calculated risk and the initiative to follow-through. Prerequisite: ARTC 1301 and ARTC 1302 and ARTC 2000 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314P. Design Research.**

Design Research provides students with an applied foundation in the role of research and analysis in the communication design discipline. Prerequisite: ARTC 2000 and ARTC 2303 and ARTC 2304 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314R. Information and Data Visualization.**

This course teaches students how to utilize design thinking, conceptual strategies, and method-based approaches to create effective information and data visualizations. The course guides students to develop contextualized understanding of information and data by visually clarifying and organizing the key concepts and patterns within information and data sets. Prerequisite: ARTC 2303 and ARTC 2304 and ARTC 3307 and ARTC 3320 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314T. Design Across Cultures.**

Students work cross-culturally through collaborative projects with students from a university program outside the US. Students work collaboratively to research design values and culture in an international context. The course concludes with at least one extensive communication design project that showcases student research. Prerequisite: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ARTC 4314U. An Introduction to Artificial Intelligence (AI) for Communication Design.**

This course is an introduction to Artificial Intelligence (AI) for Communication Design which explores how designers interact with and use Artificial Intelligence (AI) for design outcomes and the ways designers create for AI. Prerequisite: ARTC 3301 and ARTC 3303 and ARTH 3316 all with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4315. Senior Portfolio Presentation and Self-Promotion.**

This capstone course focuses on preparations for entry into professional practice via production of a final portfolio presentation; creation of a resume, business card, and self-promotions; and preparation for the interview process. Prerequisite: ARTC 3304 and ARTC 4308 both with grades of "D" or better. Corequisite: ARTC 4200 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4316. Book Design.**

This course will cover concept and content development, design, and execution of single edition and limited edition books through lectures, demonstrations, and studio work. Emphasis placed on creativity, problem solving, organizational ability, technical precision, and independent work ethic. Prerequisite: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4317. Motion Graphics.**

This course introduces theories, techniques, and practices of motion graphics. This course focuses on the successful integration of images, typography, and sound over time to create nuanced and complex messages. Experimentation, research, critical analysis, and concept development are emphasized. Focus is placed upon design concepts and process. Prerequisite: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4318. Package Design.**

In this course students explore the role of the communication designer by creating well-designed packaging that reinforces brand experience and meets global industry standards. Students design and create packaging through extensive research, ideation, and prototyping. They explore sustainable packaging solutions. Prerequisite: ARTC 3301 and ARTC 3303 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4319. Design for Experiences.**

This course addresses the creation of user experiences informed by research, customer empathy, experience mapping, and design thinking. Projects involve creating research and problem framing documents, user flow and system diagrams, pattern libraries, and experience prototypes. Students also study design and innovation roles at enterprise-scale companies and independent consultancies. Prerequisite: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Courses in Art Foundations (ARTF)

**ARTF 1302. Basic Drawing for Non-Majors.**

This class introduces a variety of media and techniques for exploring descriptive and expressive possibilities in drawing.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTF 1304. Color Theory.**

Introduction to color as a descriptive and expressive element of art, focusing on color perception and application.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2311

## Courses in Art History (ARTH)

**ARTH 2301. Ancient to Medieval Art.**

A survey of the history of painting, sculpture, and architecture from pre-historic through medieval periods. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ARTS 1303

**ARTH 2302. Renaissance to Modern Art.**

A survey of art history from the fourteenth century through the twenty-first century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ARTS 1304

**ARTH 3300. Art Criticism and Writing.**

This course introduces students to the history and practice of art criticism and provides them with relevant tools and experiences to craft their own body of art criticism. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 3301. History of Modern Art.**

In this course students survey the stylistic trends, aesthetic issues, and evolving philosophies of modern art in Europe and the Americas from 1850 to 1965, emphasizing modern art's transcultural characteristics and its connections to its social and historical contexts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ARTH 3306. History of Photography.**

This course surveys the history of photography from its earliest manifestations until the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTH 3307. Issues in Contemporary Art.**

An issue-oriented survey of the diverse forms and concepts in contemporary art making practices, mostly from the United States, from 1965 to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTH 3316. History of Design.**

This course surveys movements in the history of design from the nineteenth to the twenty-first centuries. Graphic design is situated within the contexts of architecture, media, and other design disciplines. The course is organized chronologically and examines stylistic, national, and international trends. A main focus is the impact of ideology on design and the way design generates or reinforces social, political, and cultural values in particular places and times. Topics include the significance of the European avant-garde; the development of the New Typography; the rise of mass-market magazines; propaganda, war, and revolution; Olympic design; postmodernism; and more.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTH 4300. History of American Art.**

This course provides an introduction to American art and visual culture from ancient times to the 1950s. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4302. Latin American Art.**

This course surveys the rich and varied visual art of Latin American and Caribbean countries from the wars of independence to the present day with a focus on recurring themes that have resonated in art throughout the region, such as modernism, internationalism, nationalism, race, identity, and political activism. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4303. Pre-Columbian Art.**

A survey of the art of Pre-Columbian sites and cultures in Mesoamerica and the Central Andes, from pre-history to the European conquest. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter



**ARTH 4304. Global History of Cinema.**

This course is a transnational survey of the evolution of cinematic form, production and reception. Students will analyze the regional and global context of selected major film styles, philosophies and industries. Movement across geographical and cultural borders will be a narrative theme that unites the films discussed. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4306. Renaissance Art.**

An in-depth survey of the history of Italian Renaissance art, including key works of art representative of the Northern Renaissance. Course emphasizes the study of iconography and stylistic change, in conjunction with larger cultural developments. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4308. Asian Art.**

A broad survey of the art of Asian cultures including India, Japan, and China from pre-history to the present. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4309. Gender and Visual Representation.**

This course provides an introduction to art, theory, and visual culture concerned with issues of sexuality, gender experience and difference. It explores, questions and looks beyond the power dynamics involved in traditional categories of femininity and masculinity through their symbolic expression. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4310. Race and Representation.**

This course explores the variegated ways that race, and, by implication, identity and difference, is figured and represented in a range of cultural productions, including art, film and visual culture. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4311. History of Italian Art.**

Taught on-site and centered in Florence, Italy, this course represents a targeted immersion into Renaissance art and culture and includes the study of pivotal works of art and architecture across the Italian peninsula. May be substituted for ARTH 2301 or ARTH 2302. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ARTH 4312. The Arts in Popular Culture.**

This course examines popular culture, including the emergence of mass culture, and its complex intersection with the fine arts from the nineteenth century onwards. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4313. Hellenistic Art and Culture.**

This course focuses on the Greek aesthetic tradition from the fourth century BCE to the end of the first century C.E., with a cross-disciplinary emphasis on the interaction of Greek and non-Greek cultures from Northern India to the Italian peninsula. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4314. Art and Politics.**

This course explores various ways in which artists and patrons have worked to change or endorse political policy, exploring art both as a tool for social cohesion in support of a particular political party or ideal and as a means of political protest. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4315. History of Experimental Film.**

This course provides an overview of experiments in avant-garde and artists' films from 1920 until the present. Students will learn how to analyze the meaning in moving images that exhibit unconventional narratives and will examine reactions these films have provoked in audiences past and present.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4316. Islamic Art.**

This course will survey the art, architecture, and urban formations associated with the religion of Islam across Asia, Africa, and Europe. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4317. Spanish Colonial Art of the Americas.**

From a critical postcolonial perspective, this course surveys art and architecture created in the Spanish viceroyalties of the Americas between 1521 and 1821. The roles that art and architecture played in religion, government, social structuring, and identity formation are examined, with attention to unique styles and approaches that emerged as the cultures of indigenous Americans, Europeans, and Africans converged. The period is considered with attention not just to European culture, as it was imposed through colonialism, but also to the perspectives and cultural contributions of colonized people, both indigenous American and African. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4318. Postmodernism and Design.**

This course explores postmodern design as it emerged in the late 20th-century. Students study iconic examples of postmodern architecture, graphic design, furniture and interiors, as well as the political, social, and cultural contexts that impacted their production and reception. Students also study the representation of architecture and design in films and other forms of visual culture. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4320A. Documentary Photography.**

This course explores key issues in the theory, history, and practice of documentary photography. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4320C. Art and Activism.**

In this course, students learn about contemporary art activism, including its historical antecedents, theorization, and global trajectories.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4320D. Art and the Environment.**

This course examines the intersections of art and the environment. A range of interdisciplinary theories and concepts are considered as frameworks for understanding complex relationships between creative production and ecologies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4321P. Artists' Writing.**

This course explores ways in which visual artists have engaged with the written word in relationship to their art work. Readings will be taken from diaries, manifestos, critical and experimental essays, and works of fiction. Students will create their own writings and/or art work in response to weekly readings. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4321U. Contemporary Art in Italy.**

Taught on-site and centered in Florence, Italy, students consider a number of contemporary art and exhibition practices, with emphasis on discursive formations of the global. May be substituted for ARTH 3307. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ARTH 4321W. Contemporary Art in Mexico.**

This course explores contemporary art practices in Mexico through site visits, studio visits, readings and writing. Capitalizing on the city's dynamic artists, project spaces and museums, students will interact with some of the leading professionals in the arts. (MULT).

**3 Credit Hours. 12 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ARTH 4321Y. Modernism and Design.**

This seminar explores movements in modern design in the early and mid 20th-century. Topics include: graphic design's relation to art, architecture, and film; the rise of the avant-garde and the impact of ideology on design; synergies between design and commerce; and international developments in the post-WWII period. This course is conducted online; we will meet in person as a group approximately 4-5 times during the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4321Z. U.S. Latinx Art Histories.**

In this course, students will examine art created by Latinx diaspora communities across the United States and its histories.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4322. Special Problems.**

An advanced level, independent study in art history, aesthetics, and criticism. The emphasis of the course is on scholarship, research, and writing. May be repeated with different emphasis for additional credit. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4323. Art History Theories and Methods.**

This course introduces students to major theories and methods involved in the study of art and visual culture. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4325. Art History Internship.**

This course offers students the opportunity to experience and receive academic credit for professional activities related to the field of art history. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTH 4326. Art History Thesis.**

This course is designed for students to pursue a thesis project through independent research on art history or visual culture. The student will work closely with the faculty member to develop a rigorous academic project that may take the form of a research paper, art exhibition, or other scholarly endeavor. Prerequisite: ARTH 4323 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTH 4327. Video Art.**

This course follows the evolution of video art from the analog to the digital era. Video art that explores and critiques technologies of spectacle (cinema, television, the internet and virtual reality) is a special focus among the artworks that students view, discuss, research and interpret. Students learn how to identify and theorize liveness, closed circuit transmission, compositing and playback as medium-specific characteristics of video art. The course provides a nuanced examination of video art's existence between the contemporary art world and popular culture at large. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4328. Curatorial Practices.**

This course considers the history and cultural significance of the practice of curating and exhibition making, examines the role that exhibitions play in communicating knowledge, and explores the variety of display methods within the language of exhibits.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4329. Baroque Art.**

This course explores developments in the art of the seventeenth and eighteenth centuries that are typically brought under the heading Baroque. Students investigate the reasons for the global spread of Baroque style and study its manifestations in particular regions and locales.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Studio Art (ARTS)

**ARTS 1301. Studio Art Foundations I.**

This course emphasizes a hands-on experience with drawing and two-dimensional design. Students engage in a series of short exercises and longer projects that incorporate contemporary art-making methods such as collage, photography, sculptural exercises, digital technologies, collaborative processes and interdisciplinary activities.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 1316

**ARTS 1302. Studio Art Foundations II.**

This course emphasizes a hands-on experience with three- and four-dimensional artmaking. Students engage in a series of short exercises and longer projects that incorporate contemporary art-making methods such as collage, video, drawing, sculpture, installation, performance, digital technologies, collaborative processes and interdisciplinary activities.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 1312

**ARTS 1303. Photography Foundations I.**

This is an introductory photography foundations course that introduces basic concepts in photography. The class focuses on creating photographs and interpreting their meanings. While this course introduces the technical aspects of shooting, editing, and printing photographs, the course's primary concern is the exploration of ideas. Assignments incorporate a large degree of self-direction as well as opportunities for collaborative reflection with their peers. Students form questions about the world and experiment with photographic form and technique in order to best express individual conceptual explorations.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2356

**ARTS 1304. Photography Foundations II.**

This course introduces students to photography's significant role in the construction of social and political narratives through the use of book making and relying on the marriage of digital and traditional methods and skills. Prerequisite: ARTS 1303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 2301. Beginning Expanded Media.**

In this course, students explore video as an interdisciplinary vehicle for creative expression, developing a technical and conceptual foundation in the medium. Topics include the fundamentals of moving image and sound production, screen culture, and video as a vehicle for artistic expression and social inquiry.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 2311. Beginning Ceramics.**

In this course, students explore clay as a vehicle for creative expression, developing a technical and conceptual foundation in the medium. Topics include an introduction to hand building, surface design, and the kiln-firing process.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2346

**ARTS 2321. Beginning Drawing.**

In this course, students explore drawing as a vehicle for creative expression, developing a technical and conceptual foundation in the medium. Topics include perceptual drawing from life, drawing from the human form, and descriptive and expressive drawing explored through a range of subject matters and material approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2323

**ARTS 2332. Queer Art and Visual Culture.**

This course explores the contributions to visual culture by queer (LGBTQIA+) artists and designers, highlighting the history of queer art through the twentieth century and examining the diverse, often cross-disciplinary manifestations of queer art and design. Students apply various artistic strategies and conceptual viewpoints of queer artists to their own works in a series of hands-on creative projects.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 2341. Beginning Metals.**

In this course, students explore metals as a vehicle for creative expression, developing a technical and conceptual foundation in the medium. Topics include design and fabrication, and using basic metalsmithing techniques with emphasis on sculptural forms and personal adornment.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2341

**ARTS 2351. Beginning Painting.**

In this course, students explore paint as a vehicle for creative expression, developing a technical and conceptual foundation in the medium. Topics include color, composition, and paint application.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2316

**ARTS 2371. Beginning Printmaking.**

In this course, students explore screen and relief printing as vehicles for creative expression, developing a technical and conceptual foundation in the medium. Topics include color, layer registration, and the formal elements of image making.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 2381. Beginning Sculpture.**

In this course, students explore sculptural materials and processes as vehicles for creative expression, developing a technical and conceptual foundation in the medium. Topics include reductive and additive processes, welding, wood-working, and introduction to other materials including plaster and paper mache to develop ideas.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2326

**ARTS 3302. Intermediate Expanded Media.**

In this course, students continue exploring formal, critical and technical approaches to video as an interdisciplinary medium. Topics include sound-image relationships and audio post-production techniques. Prerequisite: ARTS 2301 and ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3304. Advanced Expanded Media.**

In this course, students engage with and pursue a personal direction for their work. Emphasis is placed on research, experimentation, advanced processes and conceptual approaches in time-based media with an additional focus on historical and contemporary forms. Prerequisite: ARTS 3302 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3312. Intermediate Ceramics.**

In this course, students continue exploring formal, critical and technical approaches to the ceramic medium. Topics include wheel throwing, glaze calculation, and developing a studio practice. Prerequisite: ARTS 2311 and ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3314. Advanced Ceramics.**

In this course, students engage with and pursue a personal direction for their work. Emphasis is placed on research, experimentation, advanced processes and conceptual approaches in ceramic art practices, with an additional focus on historical and contemporary forms. Prerequisite: ARTS 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3322. Intermediate Drawing.**

In this course, students continue exploring formal, critical and technical approaches to drawing. Topics include narrative, process, and experimentation within the practice of contemporary drawing. Prerequisite: ARTS 2321 and ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3324. Advanced Drawing.**

In this course, students engage with and pursue a personal direction for their work. Emphasis is placed on research, experimentation, advanced processes and conceptual approaches in drawing with an additional focus on historical and contemporary forms. Prerequisite: ARTS 3322 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3342. Intermediate Metals.**

In this course, students continue exploring formal, critical, and technical approaches to develop personal conceptual direction related to metalsmithing and jewelry. Topics include exploration of materials and methods with an emphasis on industrial technology. Prerequisites: ARTS 2341 and ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3344. Advanced Metals.**

In this course, students engage with and pursue a personal, comprehensive body of work. Emphasis is placed on research, experimentation, advanced processes, and conceptual approaches related to the discipline of metalsmithing with an additional focus on historical and contemporary forms. Prerequisite: ARTS 3342 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3352. Intermediate Painting.**

In this course, students continue exploring formal, critical and technical approaches to painting. Topics include advanced exercises in color theory, personal imagery building, and the history and context of painting. Prerequisites: ARTS 2351 and ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3354. Advanced Painting.**

In this course, students engage with and pursue a personal direction for their work. Emphasis is placed on research, experimentation, advanced processes and conceptual approaches in painting with an additional focus on historical and contemporary forms. Prerequisite: ARTS 3352 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**ARTS 3361. Darkroom.**

This course introduces black and white aesthetics and techniques within a traditional and digital context.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3364. Introduction to Digital Photography.**

This course introduces students to the aesthetics of current digital imaging technology, including new digital cameras, scanning equipment, Macintosh computers, image-manipulation programs and printing devices. Prerequisite: ARTS 1303 with grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3365. Lighting.**

This course uses diverse environments to explore issues in controlled lighting in photography. Prerequisite: ARTS 1304 and ARTS 3364 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3367. Large Format Photography.**

This course introduces the basic materials, processes, techniques, and aesthetics of large format photography. Prerequisite: ARTS 3364 and ARTS 1304 and ARTS 3361 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3372. Intermediate Printmaking.**

In this course, students explore intaglio and lithographic printing as vehicles for creative expression, developing a technical and conceptual foundation in the medium. Topics include etching, stone and plate lithography, and the formal elements of image making.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3374. Advanced Printmaking.**

In this course, students engage with and pursue a personal direction for their work. Emphasis is placed on research, experimentation, advanced processes and conceptual approaches in any of the print mediums which the student has already been introduced to (screen, relief, intaglio, lithography) with an additional focus on historical and contemporary forms. Prerequisite: ARTS 2371 or ARTS 3372 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3382. Intermediate Sculpture.**

In this course, students continue exploring formal, critical and technical approaches to sculptural materials and processes. Topics include refining and expanding sculptural techniques with wood, metal, and casting with a focus on strategies for installation and display. Prerequisite: ARTS 2381 and ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3384. Advanced Sculpture.**

In this course, students engage with and pursue a personal direction for their work. Emphasis is placed on research, experimentation, advanced processes and conceptual approaches in the field of sculpture with an additional focus on historical and contemporary forms. Prerequisite: ARTS 3382 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3392. Experimental Wet Media.**

In this course, students explore water-based media as a vehicle for creative expression, developing a technical and conceptual foundation in the medium. Prerequisite: ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4000. Senior/Thesis Art Exhibition.**

A senior level course in which all graduating students majoring in Studio Art with a studio specialization, Studio Art leading to All Level Certification, or in Photography, must participate during their last academic year. In consultation with thesis faculty, studio art and photography students will select work to exhibit from their Thesis I and Thesis II courses. Students earning teaching certification will select work to exhibit in consultation with art education faculty advisors.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4100. Special Problems in Studio Art.**

This course provides the skills to prepare, package, and present written and professional documents and documentation of the creative work. The course also covers additional topics required for pursuing a professional career in the arts, building community, and preparing for post-BFA opportunities.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4200. Professional Practice and Portfolio.**

This course covers professional topics required for pursuing a career in the arts, building community, and preparing for post-BFA opportunities. It is taken in conjunction with Thesis I-level classes; students develop written and professional documents and documentation of creative work.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4305. Issues in Expanded Media.**

In this course, students investigate contemporary issues in the discipline of expanded media. Potential course topics include but are not limited to animation, multimedia installation, and performance. Prerequisite: ARTS 3302 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4308D. Natural and Human Environment of Italy.**

This course uses Italy as the backdrop to enhance aesthetic understanding of both color (slide transparency) and black and white photography. A strong emphasis is placed on developing visual, conceptual and technical aspects of photography using advanced camera knowledge, chemistry, and sensitivity to local visual stimuli.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTS 4308Z. Casting as Copy, Effigy, and Replacement in Art.**

This course, students practice lost wax casting, direct method casting, and mold making techniques across a variety of disciplines and 3D mediums. Students use cast forms as a language to explore concepts of verisimilitude in art, the use of multiples, and the relationship between constructed forms and found objects. This class is a blend of contemporary ideas, cutting edge technologies and historic, time-honored hand-working traditions. Prerequisite: ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with grades of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTS 4309A. Chinese Culture and Calligraphy.**

This course explores Chinese art, culture, and language through calligraphy. By learning the Chinese language through calligraphy, students will identify the influence different written language systems can have on culture.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTS 4309B. The Unsettlements: Place, History, & Ancestry in Creative Work.**

This course introduces students to the creative and critical framework of the exhibition, The Unsettlements: Moms at the Texas State Galleries. The course will allow students to develop their own creative and critical abilities to imagine large-scale projects and long-term explorations through a sustained attention to issues of place, history, ancestry, relation, site-specificity, object ontology, and more.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTS 4309C. Illustration and Graphic Styles.**

In this course, students will explore the creation of illustrations and respond to diverse prompts across various media. Emphasis will be placed on research, idea generation and the development of a cohesive style, voice, and portfolio. Various analog and digital techniques will be demonstrated and practiced.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTS 4309D. Graphic Novels and 'Zines II.**

In this course, students will explore the development and creation of a sequential art short story that will be fully realized as a physically printed book. Emphasis will be placed on outlining story arcs, writing scripts, creating and editing page layouts for a visual narrative, and developing and following production timelines. The creation of a multi-page graphic art story through sketching, inking, and coloring will be demonstrated and practiced, as well as the printing of high resolution artworks and various bookbinding techniques. Prerequisite: ARTS 4321 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTS 4309E. Casting II.**

This course introduces the intermediate and advanced skills of lost wax casting, direct method casting, and mold making techniques as students develop a mature and marketable body of work. Cast forms will be utilized as a language to explore concepts of verisimilitude in art, the use of multiples, and the relationship between constructed forms and found objects. This class is a blend of contemporary ideas, cutting edge technologies and historic, time-honored hand-working. There is an emphasis on a continued and deeper exploration of casting concepts and processes as student incorporating advanced casting outcomes into the development of their own work. Prerequisite: ARTS 4308Z with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTS 4312. Studio Art Internship.**

A course designed to offer students the opportunity to experience and receive academic credit for professional related activities in the field of the studio arts. Requires consent of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4315. Issues in Ceramics.**

In this course, students investigate contemporary issues in the discipline of ceramics. Potential course topics include but are not limited to figurative sculpture, mold making, printing on ceramic, and digital designing for the ceramic artist. Prerequisite: ARTS 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4321. Graphic Novels and 'Zines.**

This class explores comics, sequential art, and graphic storytelling as contemporary media. Students are introduced to historical and contemporary examples of narrative art, including cinema, comic books and graphic novels. Students explore the theory and practice of sequential art, while creating original comics concerned with historical, personal, and literary subject matter.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4322. Disegno a Firenze: Drawing in Florence.**

This course focuses on drawing from various subjects in and around the city of Florence. Through daily hands-on practice, students address not only the fundamentals of monochromatic drawing, but also the increased perception that the act of observational drawing engenders. The subjects of students' drawings include: a variety of Renaissance artworks, historical architectural spaces, as well as city and landscape views. Corequisite: ARTH 4311 with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4325. Issues in Drawing.**

In this course, students investigate contemporary issues in the discipline of drawing. Potential course topics include but are not limited to drawing in space and time, collage, and drawing in plein air. Prerequisite: ARTS 3322 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4341. Digital Fabrication.**

This class provides the fundamental skills for integrating digital fabrication technologies with other art and design processes. Students are introduced to digital design and fabrication using 3D modeling software, 3D printers, and computer controlled machines. A variety of materials are taught through conceptual, technical, and creative problem solving. Prerequisite: [ART 1301 or ART 1303] with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4345. Issues in Metals.**

In this course, students investigate contemporary issues in the discipline of metals. Potential course topics include but are not limited to casting, forming and forging, enameling, mechanisms, and stone setting processes. Prerequisite: ARTS 3342 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4355. Issues in Painting.**

In this course, students investigate contemporary issues in the discipline of painting. Potential course topics include but are not limited to color theory, abstraction, and writing about painting. Prerequisite: ARTS 3352 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4360. Readings in Photography.**

In this course, students read, write, and create studio projects in reaction to historical and contemporary written accounts of the history, practice, and interpretation of photography. (WI) Prerequisite: ARTH 3306 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ARTS 4361. The Photographic Project.**

In this course, students define, research, and create two extended photographic projects focused on a single theme. Students explore various methodologies to conceptualize, execute, and evaluate a series of related photographs, based on a broad theme suggested by the instructor, such as identity, politics, place, or social media. In addition, students choose a field of inquiry within that theme to create works to be installed in a professional setting. Prerequisite: ARTS 3367 and ARTS 4360 both with grades of "D" or better. Corequisite: ARTS 4200 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4364. Advanced Digital Photography.**

This course explores advanced concepts and techniques in digital photography. Prerequisite: ARTS 3364 and ARTS 1304 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4367. Photography Thesis.**

This course is the Senior Thesis for photography majors, requiring a series of lens-based works and a written creative statement. It culminates in a senior thesis exhibition in the gallery. Prerequisite: ARTS 3367 and ARTS 4360 both with grades of "D" or better. Corequisite: ARTS 4000 with a grade of "CR".

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4368. Fine Art Photography Special Problems.**

An advanced level, independent study in photography which requires students to pursue a personal conceptual direction and to develop the appropriate technical and critical skills necessary for creating a cohesive body of artwork. May be repeated with different emphasis for additional credit. Must be an Art major or minor to enroll. Prerequisites: ARTS 2361; ARTF 1301, ARTF 1302.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4371. Risograph 101.**

This course introduces the operation of a Risograph Duplicator. Students learn how to create multi-color prints and small publications. The course approaches image creation and editing through a number of digital and analogue techniques. Technical understanding of the machine and traditional and experimental approaches to print is covered in this course. Prerequisite: ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4375. Issues in Printmaking.**

In this course, students investigate contemporary issues in the discipline of print. Potential course topics include but are not limited to conceptual aspects of print, new technologies including laser engraving, book-binding techniques, and experimental forms. Prerequisite: ARTS 2371 or ARTS 3372 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4381. Soft Sculpture.**

This course emphasizes aesthetic direction in sculpture through the study of numerous materials that are fiber based with a focus on contemporary practices in papermaking, surface design, and material manipulation. Prerequisite: ARTS 2381 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4385. Issues in Sculpture.**

In this course, students investigate contemporary issues in the discipline of sculpture. Potential course topics include but are not limited to advanced casting, installation and working with found objects and readymades. Prerequisite: ARTS 3382 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4387. Thesis.**

In this course, students will create an original body of artwork and supporting material, including a written statement of intent, outlining the scope and objectives of the proposed thesis project. Selections from the thesis project will be presented to the public. Prerequisite: ARTS 4200 and [ARTS 3304 or ARTS 3314 or ARTS 3324 or ARTS 3344 or ARTS 3354 or ARTS 3374 or ARTS 3384] both with a grade of "D" or better. Corequisite: ARTS 4000 with a grade of "CR".

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4388. Special Problems in Studio Art.**

In this independent study course, students in studio art pursue a personal conceptual direction and develop the appropriate technical and critical skills necessary for creating a cohesive body of artwork. Prerequisite: ARTS 3304 or ARTS 3314 or ARTS 3324 or ARTS 3344 or ARTS 3354 or ARTS 3374 or ARTS 3384 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Courses in Art Theory and Practice (ARTT)

**ARTT 2371. Fundamentals of Art Theory and Practice.**

A survey and analysis of the theories and practices of art learning. Topics include: philosophy; history and theory of art learning; technology; artistic development; learning theories; assessment tools; program development; presentations and current realities; trends and issues. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTT 2372. Learning and Digital Media.**

In this course students examine theories and practices of using electronic media for the creation of art as well as for enhancement of the art learning process. Prerequisite: ART 1301 and ARTT 2371 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 3370. Art Theory and Practice.**

Introduces the theories and practices of children's art learning for the non-art major.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 3372. Art Theory and Practice for Children.**

This course is a survey and analysis of the theories and practices of teaching art to children. Topics include artistic development, art programming, content, philosophies, methodologies, objectives and assessment. It requires ten clock hours of field experience in an elementary-art-learning setting. Prerequisites: ART 1303 and ARTT 2371 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 3373. Art Theory and Practice for Adolescents.**

This course covers the theories and practices of adolescent art learning. Topics include: learning environments, artistic development, presentation methodologies, objectives and assessment, and other current topics. It requires ten clock hours of field experience in a secondary school art setting. Prerequisite: ARTT 2371 and ARTT 2372 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 4000. Senior Art Education Exhibition.**

A senior level course in which all graduating Art Education Seniors must participate during their last academic year. Work will be examined and produced leading to a showing in one of the Senior Student Exhibitions.

**0 Credit Hours. 0 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ARTT 4375. Pedagogy of Art Criticism, History & Aesthetics.**

In this course students will learn about the philosophies and practices of art criticism, art history, and aesthetics, as well as contemporary methodologies for analyzing and engaging with art. Prerequisites: ARTT 3372 or ARTT 3373 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTT 4376. Special Problems in Art Theory and Practice.**

Individualized study focusing on personal skill and knowledge development related to art learning experiences. Research will include a review of literature, a design for practical experience, and documentation of results and conclusions. May be repeated with different emphasis for additional credit. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ARTT 4377. Professional Practices for Art Educators.**

This course prepares art education majors to pursue a career in EC-12 art education. The focus supports the development of secondary curricula, an art teaching portfolio, and advanced analysis of the roles of culture and technology in art teaching and learning. Prerequisite: ARTT 4378 and [ARTT 3372 or ARTT 3373] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTT 4378. Emergent Issues & Advanced Topics in Art Education.**

This course introduces students to emerging ideas and advanced topics in the field of art education. Students address these issues through studio art practices and by developing relevant components for their teaching portfolio. Prerequisite: ARTT 3373 or ARTT 3372 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 4379. Art Education in the Community.**

In this course, students learn about community-based research, art, and methodologies. They participate in collaborations and field experiences/ internships with community partners in art/cultural centers, museums, schools (PK-12), businesses, and diverse learning communities and organizations. Prerequisite: ARTT 3373 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ARTT 4380A. Technology Applications in Art Education.**

In this course students will explore various ideas, techniques, and processes of creating computer art and digital media for use in teaching art in EC-12 grade levels. Prerequisite: [ARTT 2371] and [ARTT 2372] both with grades of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ARTT 4380E. Storying Identity in Art & Culture.**

This course explores identity as a construct made of individual and cultural components. Coursework is informed by auto-ethnographic traditions that consider artmaking (e.g., stories, poems, visual art) as an indicator of learning and development. Activities include daily journaling, peer critique, and making creative multimedia life-stories.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTT 4390. Art Education Thesis I.**

In this course students engage in exploratory and intermediate art education research and art making to outline the scope of their thesis exhibition. Students also develop a preliminary artist statement exploring art and art education objectives that lead to a thesis proposal and related body of work in a future semester. Prerequisite: ARTT 2372 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 4391. Art Education Thesis II.**

In this course students engage in advanced-level research in art education and art to focus and refine their thesis project. Students also participate in art education professional development, conceptualize and write an artist statement articulating the context of their artistic inquiry, and produce a cohesive body of work that culminates in their BFA Thesis Exhibition. Prerequisite: [ARTT 4378 or ARTT 4379] and ARTT 4390 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

Minimum required: 120 semester credit hours

General Requirements

1. A minimum of 120 hours is required in this degree program, including:
  - a. US 1100: Check with your Academic Advisor prior to enrolling in this class because it is not required for all students.
    - i. To complete the minimum 120 hours required for this degree program, students who are not required to take US 1100 and who do not have credit for open elective hours, will need to make up that 1 hour of credit. Only students who are in a FTIC Cohort are required to take US 1100..
  - b. 42 hours in the General Education Core Curriculum. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for Texas State requirements and options, including Honors courses.
  - c. 39 hours in the major.
  - d. 36 advanced hours. Students must be aware that advanced open electives will be required if the number of advanced hours from required courses (major, minor, and options in the BA requirements) do not equal a minimum of 36 advanced hours.
2. All graduation requirements (p. 34) must be met.

3. All course requirements must be met.
4. In addition to the General Education Core Curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires:
  - a. 3 additional hours of English literature,
  - b. 3 hours of math/science/logic/computer science courses, and
  - c. 14 hours of a single modern language including two 2000-level courses.
5. A minor is required and must be selected from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). Some minors may exceed 24 hours.
6. Prerequisites for all advanced classes in the Major in Art must be met. Students must be aware that the 2000-level ARTS classes chosen will determine which advanced ARTS classes they are eligible to take.

Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 (TCCN ENGL 1301))	3	ENG 1320 (Communication Component Code 010 (TCCN ENGL 1302))	3
ART 1301 (TCCN ARTS 1311)	3	ART 1303 (TCCN ARTS 2348)	3
ARTS 1301 or 1303 (TCCN ARTS 1316 or ARTS 2356)	3	ARTS 1302 or 1304 (TCCN ARTS 1312)	3
ARTH 2301	3	Modern Language 1410	4
US 1100	1		
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3		
		16	13

		Sophomore	
		First Semester Hours	Second Semester Hours
ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327, or 2328]	3	ARTH 2302 (TCCN ARTS 1303)	3
Modern Language 1420	4	Mathematics Component Code 020	3
Minor	3	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
2D Beginning Studio <sup>1</sup>	3	American History Component Code 060	3
3D Beginning Studio <sup>2</sup>	3	Minor	3
		16	15

		Junior	
		First Semester Hours	Second Semester Hours
ARTH 3301	3	Modern Language 2320	3
Life and Physical Sciences Component Code 030	3	Upper-level ARTH, ARTS or ATT Art Elective <sup>4,5</sup>	3

POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 American History Component Code 060	3
Creative Arts Component Code 050 (TCCN HUMA 1315) <sup>3</sup>	3 Life and Physical Sciences Component Code 030	3
Modern Language 2310	3 Minor	3
<b>15</b>		<b>15</b>
		<b>Senior</b>
<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
ARTH 3307	3 Social and Behavioral Sciences Component Code 080	3
Upper-level ARTH, ARTS or ARTT Art Elective <sup>4,5</sup>	3 Upper-level ARTH, ARTS or ARTT Art Elective <sup>4,5</sup>	3
BA ENG Literature [TCCN ENGL 2322, 2323, 2332, 2333, 2327, or 2328]	3 BA Computer Science, Logic, Mathematics or Life & Physical Science	3
Minor	3 Minor	6
POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3	
<b>15</b>		<b>15</b>

**Total Hours: 120**

<sup>3</sup> It is recommended that Studio Art majors take the Dance (DAN 2313), Music (MU 2113), or Theater (TH 2113) versions of this course.

<sup>4</sup> Choose three 3000-level or 4000-level ARTH, ARTS, or ARTT courses which are not otherwise required in the major.

Code	Title	Hours
<b>Course Options in the Major<sup>1 2</sup></b>		
Choose 1 course in 2D Beginning Studio from the following:		
ARTS 2301	Beginning Expanded Media	3
ARTS 2321	Beginning Drawing	3
ARTS 2351	Beginning Painting	3
ARTS 2371	Beginning Printmaking	3
<b>Code Title Hours</b>		
Choose 1 course in 3D Beginning Studio from the following:		
ARTS 2311	Beginning Ceramics	3
ARTS 2341	Beginning Metals	3
ARTS 2381	Beginning Sculpture	3
<b>Code Title Hours</b>		
<b>Upper-level ARTS Electives</b>		
ARTS 3302	Intermediate Expanded Media	3
ARTS 3312	Intermediate Ceramics	3
ARTS 3322	Intermediate Drawing	3
ARTS 3342	Intermediate Metals	3
ARTS 3352	Intermediate Painting	3
ARTS 3372	Intermediate Printmaking	3
ARTS 3382	Intermediate Sculpture	3

ARTS 3304	Advanced Expanded Media *	3
ARTS 3314	Advanced Ceramics *	3
ARTS 3324	Advanced Drawing *	3
ARTS 3344	Advanced Metals *	3
ARTS 3354	Advanced Painting *	3
ARTS 3361	Darkroom	3
ARTS 3364	Introduction to Digital Photography	3
ARTS 3365	Lighting	3
ARTS 3374	Advanced Printmaking *	3
ARTS 3384	Advanced Sculpture *	3
ARTS 4305	Issues in Expanded Media *	3
ARTS 4315	Issues in Ceramics *	3
ARTS 4325	Issues in Drawing *	3
ARTS 4345	Issues in Metals *	3
ARTS 4355	Issues in Painting *	3
ARTS 4364	Advanced Digital Photography	3
ARTS 4375	Issues in Printmaking *	3
ARTS 4385	Issues in Sculpture *	3

\*may be repeated up to three times for credit

## Minimum required: 120 semester credit hours

### General Requirements

- A minimum of 120 hours is required in this degree program, including:
  - US 1100: Check with your Academic Advisor prior to enrolling in this class because it is not required for all students.
    - Students who are not required to take US 1100 and who do not have credit for open elective hours will need to make up that 1 hour of credit. Only students who are in a PACE Cohort are required to take US 1100.
- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for Texas State requirements and options, including Honors courses.
- In addition to the General Education Core Curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, and a minor.
- Students must complete 39 hours within the major.
- A minor is required. A modern foreign language is recommended. Some minors may exceed 24 hours. Minors may be found in the list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>)
- Students must complete 36 advanced hours.
- The minimum number of hours required for this degree program is 120. The number of open elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

## Course Requirements

First Semester Hours		Second Semester Hours		Freshman
ART 1301 (TCCN ARTS 1311)	3	ART 1303 (TCCN ARTS 2348)	3	3
ARTH 2301 (TCCN ARTS 1303)	3	ARTH 2302 (TCCN ARTS 1304)	3	3
Modern Language 1410	4	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	Modern Language 1420	4	4
US 1100	1	COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	3
<b>14</b>		<b>16</b>		

First Semester Hours		Second Semester Hours		Sophomore
ARTH Required Electives	6	ARTH Required Electives	3	3
Modern Language 2310	3	Modern Language 2320	3	3
American History Component Code 060	3	American History Component Code 060	3	3
Creative Arts Component Code 050 (TCCN HUMA 1315)	3	Language, Philosophy, and Culture Component Code 040	3	3
		ENG Literature (Component Area Option Code 090/094)	3	3
<b>15</b>		<b>15</b>		

First Semester Hours		Second Semester Hours		Junior
ARTH 4323 <sup>1</sup>	3	ARTH Advanced Electives	3	3
BA ENG Literature [TCCN ENGL 2322, 2323, 2332, 2333, 2327, or 2328]	3	Life and Physical Sciences Component Code 030	3	3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3	Social and Behavioral Sciences Component Code 080	3	3
Mathematics Component Code 020	3	Minor <sup>2</sup>	3	3
Minor <sup>2</sup>	3			
<b>15</b>		<b>12</b>		

First Semester Hours		Second Semester Hours		Senior
ARTH Advanced Electives	6	ARTH Advanced Electives	6	6
Life and Physical Sciences Component Code 030	3	BA Computer Science, Logic, Mathematics or Science	3	3
Minor <sup>2</sup>	3	Minor <sup>2</sup>	6	6

POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3	Open Elective	3
<b>15</b>		<b>18</b>	

**Total Hours: 120**

### Electives

Code	Title	Hours
ARTH Required Electives:		
Choose 3 courses from the following list:		
ARTH 3300	Art Criticism and Writing	
ARTH 3301	History of Modern Art	
ARTH 3306	History of Photography	
ARTH 3307	Issues in Contemporary Art	
ARTH 3316	History of Design	

Code	Title	Hours
ARTH Advanced Electives:		
Choose 5, 3000-level or 4000-level ARTH courses which are not otherwise required in the major.		

- <sup>1</sup> Students who have completed ARTH 4323 will be advised that they can also develop a thesis project (optional) as a Special Problems course (ARTH 4326). This will allow students to complete thesis projects that are in line with their desired career. ARTH 4323 is only offered once per year, usually in the Fall semester, so students should plan accordingly.
- <sup>2</sup> Students who choose a 15-credit hour minor, such as the recommended minor in a modern foreign language, must complete an open elective to meet the minimum 120-credit hours required for a bachelor's degree. Students who choose a minor that requires a minimum of 18-credit hours, may not need the open elective to reach the minimum 120-credit hours.

**Minimum required: 120 semester credit hours**

## Admission Requirements

- The Bachelor of Fine Arts (B.F.A.) degree with a major in Communication Design requires admission to the university and admission to the program.
- Admission requirements for the B.F.A. major in Communication Design are more restrictive than those of the University, and enrollment is limited to provide students with a quality experience. All applicants who indicate Communication Design as their preferred major will be assigned a temporary status code of Pre-Communication Design. In addition to meeting Texas State's general admission criteria, all students intending to major in Communication Design must pass ARTC 2000, earn a minimum grade of B in ARTC 1301 and ARTC 1302, and have a minimum Overall GPA of 2.75 to be admitted into the program. Admission Portfolio Review is a formal review of creative work exclusively from ARTC 1301 and ARTC 1302, conducted by Communication Design faculty, using the following rubric ([https://gato-docs.its.txst.edu/jcr:8350449e-f12b-48bb-b09f-42847b6b5308/ARTC%20Admission%20Portfolio%20Evaluation%20Form%20\(2\).pdf](https://gato-docs.its.txst.edu/jcr:8350449e-f12b-48bb-b09f-42847b6b5308/ARTC%20Admission%20Portfolio%20Evaluation%20Form%20(2).pdf)). A score of 60% or above is required to pass the portfolio review. Native and transfer students

will register for ARTC 2000 during the earliest semester in which they will meet all eligibility requirements. Students who do not pass ARTC 2000 may register for a future review, but will be allowed only one more attempt. Pre-Communication Design majors will not be permitted to enroll in 2000 – 4000 level Communication Design courses until they have met all requirements and have been formally admitted to the program. Requirements for admission to the Communication Design program are:

- A minimum Overall GPA of 2.75
- A passing grade of "CR" in ARTC 2000
- A minimum grade of "B" in ARTC 1301
- A minimum grade of "B" in ARTC 1302

## General Requirements

1. The major is a three-and-a-half year, sequenced curriculum that requires a minimum three-year residency at Texas State.
2. All Communication Design (ARTC) courses must be completed at Texas State.
3. A minimum of 120 hours is required in this degree program including:

a) US 1100. Check with your Academic Advisor prior to enrolling in this course because it is not required for all students.

b) 42 hours in the General Education Core Curriculum. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

c) 77 hours in the major.

4. All course requirements must be met.

5. All general graduation requirements (p. 34) must be met.

6. A minimum 2.75 Major GPA is required for graduation.

7. A maximum of 12 hours are recommended each fall and spring semester to allow time for intensive work in ARTC courses. Students who are required to take US 1100 will enroll in 13 hours in the first semester.

a) Attendance during summer terms is recommended for students who must complete more than 24 hours in an academic year, and for students who must graduate within 4 calendar years.

8. ARTC 4200 must be taken concurrently with ARTC 4315.

9. The required/sequenced ARTC courses, including ARTC 4200 and ARTC 4315, are not offered in the summer.

10. To meet degree requirements in four years:

a) Complete ART 1301 and ART 1303 during the freshman year;

b) Meet all admission requirements, no later than the first semester of the Sophomore year;

c) Stay on sequence with ARTC courses and pass all ARTC courses on the first attempt; and

d) Complete a minimum of 30 hours of coursework per academic year.

## Course Requirements

### Freshman

Fall Hours Semester	Spring Hours Semester	
ART 1301 (TCCN ARTS 1311)	3 ART 1303 (TCCN ARTS 2348)	3
ARTC 1301	3 ARTC 1302	3
ARTH 2301 (TCCN ARTS 1303)	3 ARTC 2000	0
US 1100 <sup>2</sup>	1 ENG 1320 (Communic: Component Code 010 [TCCN ENGL 1302])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 ARTH 2302 (TCCN ARTS 1304)	3
<b>13</b>	<b>12</b>	

### Sophomore

Fall Hours Semester	Spring Hours Semester	Summer Hours	
ARTC 2303	3 ARTC 3307	3 ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
ARTC 2304	3 ARTC 3320	3 American History Component Code 060	3
Mathematics Component Code 020	3 3D Studio Art	3 2D Studio Art	3
2D Studio Art	3 American History Component Code 060	3 Component Area Option Code 090	3
<b>12</b>	<b>12</b>	<b>12</b>	

			Junior
Fall Hours Semester	Spring Hours Semester	Summer Hours	
ARTC 3301	3 ARTC 3304	3 Advanced ARTC Elective	3
ARTC 3303	3 ARTC 4308	3 Advanced ART Elective	3
ARTH 3316	3 2D Studio Art	3 Social and Behavioral Sciences Component Code 080	3
Life and Physical Sciences Component Code 030	3 Life and Physical Sciences Component Code 030	3 POSI 2310 (Governmen Political Science Component Code 070 [TCCN GOVT 2306])	3
12	12	12	

			Senior
Fall Hours Semester	Spring Hours Semester		
Advanced ARTC Electives	6 ARTC 4200 <sup>1</sup>	2	
Language, Philosophy, and Culture Component Code 040	3 ARTC 4315	3	
POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3 Advanced ARTC Elective	3	
	ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3	
12	11		

**Total Hours: 120**

<sup>1</sup> ARTC 4200 is a 2-hour course. Speak with your Academic Advisor prior to junior year if you will need to take more than 11 hours of coursework during the final semester.

<sup>2</sup> To complete the minimum 120 hours required for this degree program, students who are not required to take US 1100 and who do not have credit for open elective hours, will need to make up that 1 hour of credit. Only students who are in a PACE Cohort are required to take US 1100.

## Course Options

**Code Title Hours**

Choose 3 courses in 2D Studio Art from the following:

ARTS 1303	Photography Foundations I	
ARTS 2301	Beginning Expanded Media (Will be used to meet one course requirement, as either a 2D Studio Art course or a 3D Studio Art course. It will not count in more than one area.)	
ARTS 2351	Beginning Painting	
ARTS 2371	Beginning Printmaking	
ARTS 2391		
ARTS 3372	Intermediate Printmaking	
ARTS 4321	Graphic Novels and 'Zines	
Any 2D ARTS Topics Course from ARTS 4308 or ARTS 4309		

**Code Title Hours**

Choose 1 course in 3D Studio Art from the following:

ARTS 2301	Beginning Expanded Media (Will be used to meet one course requirement, as either a 2D Studio Art course or a 3D Studio Art course. It will not count in more than one area.)	
ARTS 2311	Beginning Ceramics	
ARTS 2341	Beginning Metals	
ARTS 2381	Beginning Sculpture	
Any 3D ARTS Topics Course from ARTS 4308 or ARTS 4309		

**Code Title Hours**

Choose 1 Advanced Art Elective from:

3000-level or 4000-level ARTC, ARTH, ARTS, or ARTT courses which are not otherwise required in the major.

Transfer courses that are evaluated as Advanced Electives (ELADV) in ARTC, ARTH, ARTS and/or ARTT will meet this requirement.

Co-requisites and/or prerequisites will not be waived.

**Code Title Hours**

Choose 4 Advanced ARTC Electives from:

3000-level or 4000-level ARTC courses which are not otherwise required in the major.

This requirement can also be completed by a 4000-level capstone research project prior to ARTC 4315.

Co-requisites and/or prerequisites will not be waived.



## Minimum required: 120 semester credit hours

### General Requirements

- The major requires a minimum three-year residency at Texas State.
- A minimum of 120 hours is required in this degree program including:
  - US 1100: Check with your Academic Advisor prior to enrolling in this course because it is not required for all students.
  - 42 hours in the General Education Core Curriculum. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
  - 77 hours in the major
- All graduation requirements (p. 34) must be met.
- All course requirements must be met.
- A maximum of 15 hours is recommended each fall and spring semester to allow time for intensive work in Photography. Students who are required to take US 1100 will enroll in 16 hours in the first semester.
  - Attendance during summer terms is recommended for students who are unable to complete 15 each fall and spring, and intend to graduate within 4 calendar years.
- ARTS 4200 must be taken concurrently with ARTS 4361.
- ARTS 4000 must be taken concurrently with ARTS 4367.
- ARTS 4200, ARTS 4361, ARTS 4000 and ARTS 4367 are not offered in the summer.
- To meet degree requirements in four years:
  - Complete all required major courses in the freshman year: ART 1301, ART 1303, ARTS 1303, ARTS 1304, ARTS 3361, ARTS 3364, ARTH 2301, and ARTH 2302.
  - Stay on sequence with Photography courses; and
  - Complete a minimum of 15 hours of coursework each fall and spring semester.

### Course Requirements

		Freshman	
Fall Semester Hours		Spring Semester Hours	
ART 1301 (TCCN ARTS 1311)	3	ART 1303 (TCCN ARTS 2348)	3
ARTS 3361	3	ARTS 3364	3
ARTS 1303 (TCCN ARTS 2348)	3	ARTS 1304	3
ARTH 2301 (TCCN ARTS 1303)	3	ARTH 2302 (TCCN ARTS 1304)	3
US 1100 <sup>2</sup>	1	Communication Component Code 010	3

ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3		
16		15	
		Sophomore	
Fall Semester Hours		Spring Semester Hours	
ARTH 3306	3	4D Art Elective	3
Mathematics Component Code 020	3	ARTS 4364	3
ARTS 2301	3	American History Component Code 060	3
ARTS 3365	3	ARTH 3301	3
American History Component Code 060	3	COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
15		15	
		Junior	
Fall Semester Hours		Spring Semester Hours	
ARTS 3367	3	ARTS 4360	3
ARTH 3307	3	Life and Physical Sciences Component Code 030	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN 2306])	3	Social and Behavioral Sciences Component Code 080	3
3D Studio Art Elective	3	Art Elective	3
Life and Physical Sciences Component Code 030	3	Creative Arts Component Code 050 [TCCN HUMA 1315]	3
15		15	
		Senior	
Fall Semester Hours		Spring Semester Hours	
ARTS 4361	3	ARTS 4000	0
ARTS 4200	2	ARTS 4367	3
ART Elective	3	Open Elective <sup>3</sup>	3
2D Studio Art <sup>1</sup>	3	ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3	Language, Philosophy, and Culture Component Code 040	3
		Art Elective	3
14		15	

#### Total Hours: 120

<sup>1</sup> ARTS 4200 is a 2-hour course. Speak with your Academic Advisor prior to junior year if you will need to take more than 14 hours of coursework during the Senior fall semester.

<sup>2</sup> To complete the minimum 120 hours required for this degree program, students who are not required to take US 1100 and who do not have credit for open elective hours, will need to make up that 1 hour of credit. Only students who are in a PACE Cohort are required to take US 1100.

<sup>3</sup> Open elective classes cannot be from ART, ARTC, ARTF, ARTH, ARTS, or ARTT.

Course Options in the Major

Code Title Hours

Choose 1 course in 2D Studio Art from the following:

ARTS 2351	Beginning Painting (TCCN ARTS 2316)	
ARTS 2371	Beginning Printmaking (TCCN ARTS 2333)	
ARTS 3322	Intermediate Drawing	

Code Title Hours

Choose 1 course in 3D Studio Art from the following:

ARTS 2341	Beginning Metals (TCCN ARTS 2341)	
ARTS 2381	Beginning Sculpture (TCCN ARTS 2326)	
ARTS 2311	Beginning Ceramics (TCCN ARTS 2346)	

Code Title Hours

Choose 1 course in 4D Studio Art from the following:

ARTS 3302	Intermediate Expanded Media	3
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Code Title Hours

ART Electives:

Choose 3 ARTC, ARTF, ARTH, ARTS, or ARTT courses which are not otherwise required in the major, or TH 4368.

TH 4368 Cinematography is the only TH course available (prerequisite is waived for photo majors. Contact the Theater Department for a prerequisite override.

Transfer courses that are evaluated as Electives (ELNA) in ARTC, ARTF, ARTH, ARTS and/or ARTT will meet this requirement.

Transfer courses that are evaluated as Advanced Electives (ELADV) in ARTC, ARTH, ARTS and/or ARTT will meet this requirement.

Co-requisites and/or prerequisites will not be waived.

Only Communication Design students may enroll in 2000-level, 3000-level and 4000-level ARTC courses.

Code Title Hours

Open Elective

Open elective classes cannot be from ART, ARTC, ARTF, ARTH, ARTS, or ARTT.

Minimum required: 120 semester credit hours

General Requirements

1. This major requires a minimum two-year residency at Texas State.
2. A minimum of 120 hours is required in this degree program including:
  - a) US 1100: Check with your Academic Advisor prior to enrolling in this course because it is not required for all students.
  1. To complete the minimum 120 hours required for this degree program, students who are not required to take US 1100 #and who do not have credit for open elective hours, will need to make up that 1 hour

of credit. Only students who are in a FTIC Cohort are required to take US 1100.

b) 42 hours in the General Education Core Curriculum. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

c) 77 hours in the major

3. All graduation requirements (p. 34) must be met.
4. All course requirements must be met.

5.It is recommended that students take 15 credit hours each semester. Students who are required to take US 1100 will enroll in 16 hours in the first semester.

6. ARTS 4000 and an Advanced Studio must be taken concurrently with ARTS 4387.
7. ARTS 4200, ARTS 4387, and ARTS 4000 are not offered in the summer.
9. To meet degree requirements in four years:

- a) Complete all required major courses in the freshman year: ART 1301, ART 1303, ARTS 1301, and ARTS 1302; as well as two Beginning Studio courses in (2D, 3D, or 4D).
- b) Complete a minimum of 30 hours of coursework per academic year.

Course Requirements

		Freshman	
		Fall Semester Hours	Spring Semester Hours
ART 1301 (TCCN ARTS 1311)	3	ART 1303 (TCCN ARTS 2348)	3
ARTS 1301 (TCCN ARTS 1316)	3	ARTS 1302 (TCCN ARTS 1312)	3
ARTH 2301 (TCCN ARTS 1303)	3	ARTH 2302 (TCCN ARTS 1304)	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	Communication Component Code 010	3
US 1100 <sup>1</sup>	1	3D Beginning Studio	3
2D Beginning Studio	3		
		16	15
		Sophomore	
		Fall Semester Hours	Spring Semester Hours
4D Studio Art	3	ARTH 3301	3
ARTS 2321 (TCCN ARTS 2323)	3	Intermediate Studio	3
Intermediate Studio	3	3D Beginning Studio	3
Mathematics Component Code 020	3	Creative Arts Component Code 050 [TCCN HUMA 1315]	3
COMM 1310 (Component Area Option Code 090/091 (TCCN SPCH 1311))	3	American History Component Code 060	3
		15	15

Fall Semester Hours		Spring Semester Hours		Junior
Advanced Studio	3	Advanced Studio	3	
2D Beginning Studio	3	Upper Level Art Elective	6	
Art Elective	3	American History Component Code 060	3	
ARTH 3307	3	Life and Physical Sciences Component Code 030	3	
Life and Physical Sciences Component Code 030	3			

15

15

Fall Semester Hours		Spring Semester Hours		Senior
ARTS 4200	2	ARTS 4000	0	
POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3	ARTS 4387 <sup>1</sup>	3	
Social and Behavioral Sciences Component Code 080	3	Language, Philosophy, and Culture Component Code 040	3	
Advanced Studio	3	Advanced Studio	3	
Upper Level Art Elective	3	ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3	
		Language, Philosophy, and Culture Component Code 040	3	

14

15

**Total Hours: 120**

<sup>1</sup> An Advanced Studio class must be taken concurrently with Studio Thesis.

**Course Options in the Major**

Code	Title	Hours
Choose 2 courses in 2D Beginning Studio Art from the following:		

ARTS 2371	Beginning Printmaking (TCCN ARTS 2333)	3
ARTS 2351	Beginning Painting	3

Code	Title	Hours
Choose 2 courses in 3D Beginning Studio Art from the following:		

ARTS 2311	Beginning Ceramics	3
ARTS 2341	Beginning Metals (TCCN ARTS 2341)	3
ARTS 2381	Beginning Sculpture (TCCN ARTS 2326)	3

Code	Title	Hours
Choose 1 course in 4D Beginning Studio Art from the following:		

ARTS 2301	Beginning Expanded Media	3
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Code	Title	Hours
<b>Intermediate Studios</b>		

Choose 2 courses in Intermediate Studio from the following:

ARTS 3302	Intermediate Expanded Media	3
ARTS 3312	Intermediate Ceramics	3

ARTS 3322	Intermediate Drawing	3
ARTS 3342	Intermediate Metals	3
ARTS 3352	Intermediate Painting	3
ARTS 3372	Intermediate Printmaking	3
ARTS 3382	Intermediate Sculpture	3

Code	Title	Hours
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**Advanced Studios**

Choose 4 courses in Advanced Studio from the following\*:

ARTS 3304	Advanced Expanded Media	3
ARTS 3314	Advanced Ceramics	3
ARTS 3324	Advanced Drawing	3
ARTS 3344	Advanced Metals	3
ARTS 3354	Advanced Painting	3
ARTS 3374	Advanced Printmaking	3
ARTS 3384	Advanced Sculpture	3
ARTS 4305	Issues in Expanded Media	3
ARTS 4315	Issues in Ceramics	3
ARTS 4325	Issues in Drawing	3
ARTS 4345	Issues in Metals	3
ARTS 4355	Issues in Painting	3
ARTS 4375	Issues in Printmaking	3
ARTS 4385	Issues in Sculpture	3

\*may be repeated up to three times for credit

Code	Title	Hours
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Art Electives:

Choose 1 course from ARTC, ARTF, ARTH, ARTS, or ARTT course which is not otherwise required in the major.

Transfer courses that are evaluated as Electives (ELNA) in ARTC, ARTF, ARTH, ARTS and/or ARTT will meet this requirement.

Co-requisites and/or prerequisites will not be waived.

Only Communication Design Majors may enroll in 2000-level, 3000-level and 4000-level ARTC courses.

Majors in the School of Art and Design may not enroll in ARTF 1302- Basic Drawing for non-majors.

Code	Title	Hours
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Upper-level Art Electives:

Choose 3, 3000-level or 4000-level ARTC, ARTH, ARTS, or ARTT courses which are not otherwise required in the major.

Transfer courses that are evaluated as Advanced Electives (ELADV) in ARTC, ARTH, ARTS and/or ARTT will meet this requirement.

Co-requisites and/or prerequisites will not be waived.

Only Communication Design students may enroll in 2000-level, 3000-level and 4000-level ARTC courses.

Students are encouraged to consider ARTS 4312 Studio Art Internship as one of their Upper-level Art Electives.

## Minimum required: 121 semester credit hours

### Admission Requirement

1. All students pursuing teacher certification must apply for, and meet admittance requirements for the Educator Preparation Program through the Office of Educator Preparation.

### General Requirements

1. This major requires a minimum three-year residency at Texas State.
2. After successful completion of this degree program and earning passing scores on the required certification exams, graduates may apply to the Texas Education Agency for All Level Teacher Certification in Art, grades EC-12.
3. A minimum of 121 semester credit hours is required in this degree program including:
  - a. US 1100: Check with your Academic Advisor prior to enrolling in this course because it is not required of all students.
    - i. To complete the minimum 120 hours required for this degree program, students who are not required to take US 1100 and who do not have credit for open elective hours, will need to make up that 1 hour of credit. Only students who are in a FTIC Cohort are required to take US 1100<sup>1</sup>.
  - b. 42-credit hours in the General Education Core Curriculum. See the General Education Core Curriculum for requirements and options including Honors courses. See the Office of Educator Preparation for General Education Core Curriculum requirements that are unique to Teacher Certification.
  - c. 63-credit hours in the School of Art and Design including courses in Art Foundation, Art History, Studio Art and Art Theory.
  - d. The College of Education requires a Minor in Education for all students seeking certification in fine arts teaching fields. The Minor requires 21-hours including 6 hours in ARTT that count toward this requirement.
4. All graduation requirements (p. 34) must be met.
5. In addition to the general graduation requirements listed in this catalog, the following graduation requirements must be met by students seeking teacher certification:
  - a. Minimum 2.75 Overall GPA as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
  - b. All course work other than Student Teaching (EDST 4380 and 4381) must be completed prior to EDST 4380 and EDST 4381.
  - c. Successful completion of Student Teaching courses EDST 4380 and EDST 4381.
  - d. GPA of at least 2.50 in all assigned courses in the professional sequence and in the major(s) or teaching field(s) or concentration(s) with no grade below a "C" in these courses.
6. Art Theory classes are sequential. These courses are rotated as follows
  - a. Fall semester courses: ARTT 2371, ARTT 3372, ARTT 4378
  - b. Spring semester : ARTT 2372, ARTT 3373, ARTT 4379
7. To meet degree requirements in four years (of first declaring this major)
  - a. Complete all required Art Foundation and Art Theory courses in the first year as listed in the curriculum plan below.

- b. Complete a first level 2D and 3D Studio Art class in the third semester.
  - c. Choose a single area of Studio Art as an advanced level track and take one course in that area at the 3000 level and three additional courses at the 4000 level.
8. Only the Student Teaching courses, EDST 4380 (<http://mycatalog.txstate.edu/search/?P=EDST%204380>) and EDST 4381 (<http://mycatalog.txstate.edu/search/?P=EDST%204381>) will be taken in the final semester.

- a. To complete hours that cannot be taken simultaneously with Student Teaching an additional 9 credits must be taken either in summer, in an additional fall or spring semester, or by taking 18 credits during three fall or spring semesters
9. [The Texas Education Agency \(TEA\) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/.](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/)

### Course Requirements

Freshman

Fall Hours Semester	Spring Hours Semester	
ART 1301 (TCCN ARTS 1311)	3 ART 1303 (TCCN ARTS 2348)	3
ARTS 1301 (TCCN ARTS 1316)	3 ARTT 2372	3
ARTT 2371	3 ARTH 2301 (TCCN ARTS 1303)	3
US 1100 <sup>1</sup>	1 Mathematic Component Code 020	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 Communication Component Code 010	3
Creative Arts Component Code 0502 [TCCN HUMA 1315] <sup>2</sup>	3	
<b>16</b>	<b>15</b>	

Sophomore			Life & Physical Sciences Component Code 030	3
Fall Hours Semester	Spring Hours Semester	Summer Hours	COMM 131C (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
ARTT 3372	3 ARTT 3373 (Substitutes for CI 3325)	3 ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]		
2D Studio Art <sup>2</sup>	3 Studio Art Track 1 <sup>3</sup>	3 American History Component Code 060		
3D Studio Art <sup>2</sup>	3 ARTH 3301	3 POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])		
ARTH 2302 (TCCN ARTS 1304)	3 Language, Philosophy, and Culture Component Code 040	3		
Life and Physical Sciences Component Code 030	3 Social and Behavioral Sciences Component Code 080	3		
15	15	9	18	12
Junior			Senior	
Fall Hours Semester	Spring Hours Semester		Fall Hours Semester	Spring Hours Semester
ARTT 4378 (Substitutes for CI 4332)	3 ARTT 4379	3	CI 4370	3 EDST 4380 <sup>4</sup>
Studio Art Track 2 <sup>3</sup>	3 Studio Art Track 3 <sup>3</sup>	3	CI 4372	3 EDST 4381 <sup>4</sup>
ARTT Advanced Elective	3 ARTS Elective	3	RDG 3323	3
ARTS Elective	3 POSI 2320 (Government Political Science Component Code 070 [TCCN GOVT 2305])	3	Studio Art Track 4 <sup>3</sup>	3
			HIST 1320 (American History Component Code 060) [TCCN HIST 1302]	3
			15	6
Total Hours: 121				

<sup>1</sup> To complete the minimum 121 hours required for this degree, students who are not required to take US 1100 and who do not have credit for open elective hours, will need to make up that one hour of credit.

<sup>2</sup> Studio Art courses that are taken to complete the 2D and 3D Studio Art requirements will determine options for the Studio Art track. See **Course Options in the Major** section below.

<sup>3</sup> After completing 2D and 3D Studio Art classes, students will choose an area of Studio Art as a track and complete a total of 4 upper level courses in that specific area. See **Course Options in the Major** section below.

<sup>4</sup> Only the Student Teaching courses EDST 4380 and EDST 4381 are allowed to be taken in the final semester; therefore, enrollment will be part-time. Part time status may affect various forms of financial aid, scholarship awards and veteran's benefits. Contact appropriate offices for information ahead of time, and plan accordingly.

### Course Options in the Major

Code	Title	Hours
Courses taken to meet 2D and 3D option determine which 2D or 3D tracks may be chosen.		
Choose 1 course in 2D Studio Art from the following:		
ARTS 2301	Beginning Expanded Media	
ARTS 2351	Beginning Painting (TCCN ARTS 2316)	
ARTS 1303	Photography Foundations I (TCCN ARTS 2356)	
ARTS 2371	Beginning Printmaking (TCCN ARTS 2333)	



Choose 1 course in 3D Studio Art from the following:

ARTS 2311	Beginning Ceramics (TCCN ARTS 2346)
ARTS 2341	Beginning Metals (TCCN ARTS 2341)
ARTS 2381	Beginning Sculpture (TCCN ARTS 2326)

Code	Title	Hours
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Choose 1 of the following Studio Art Tracks:

**Ceramics Track:**

ARTS 3312	Intermediate Ceramics
ARTS 3314	Advanced Ceramics (repeatable for credit)
ARTS 4315	Issues in Ceramics

**Expanded Media Track:**

ARTS 3302	Intermediate Expanded Media
ARTS 3304	Advanced Expanded Media (repeatable for credit)
ARTS 4305	Issues in Expanded Media (repeatable for credit)

**Metals Track:**

ARTS 3342	Intermediate Metals
ARTS 3344	Advanced Metals (repeatable for credit)
ARTS 4341	Digital Fabrication
ARTS 4345	Issues in Metals (repeatable for credit)

**Painting Track:**

ARTS 3352	Intermediate Painting
ARTS 3354	Advanced Painting (repeatable for credit)
ARTS 4355	Issues in Painting (repeatable for credit)

**Photography Track:**

ARTS 1304	Photography Foundations II
ARTS 3361	Darkroom
ARTS 3364	Introduction to Digital Photography
ARTS 3365	Lighting

**Drawing and Printmaking Track:**

ARTS 2321	Beginning Drawing (TCCN ARTS 2323)
ARTS 3372	Intermediate Printmaking
ARTS 3374	Advanced Printmaking (repeatable for credit)
ARTS 4375	Issues in Printmaking (repeatable for credit)

**Sculpture Track:**

ARTS 3382	Intermediate Sculpture
ARTS 4381	Soft Sculpture
ARTS 3384	Advanced Sculpture (repeatable for credit)
ARTS 4385	Issues in Sculpture (repeatable for credit)

Code	Title	Hours
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ARTT Advanced Elective:

Choose 1 from the following:

ARTT 4375	Pedagogy of Art Criticism, History & Aesthetics
ARTT 4376	Special Problems in Art Theory and Practice
ARTT 4380A	Technology Applications in Art Education
ARTT 4380E	Storying Identity in Art & Culture

The Minor in Art is restricted to students not pursuing a B.A. in Art.

The minor in Art requires 24 semester credit hours. All prerequisites must be met for any course chosen to satisfy requirements for the minor in Art.

Students who are pursuing a Bachelor of Arts degree with a major in Art History, who also choose to complete the minor in Art, must complete a minimum of 9 unique hours in the minor. It must be noted that a combination of the Bachelor of Arts degree with a major in Art History and a minor in Art, may result in the need for advanced open electives in order to complete the minimum 120 overall hours and/or the minimum 36 advanced hours that are required for graduation.

Students who are pursuing a Bachelor of Fine Arts degree with a major in Communication Design, Studio Art, and Photography who also choose to complete the minor in Art, must complete a minimum of 9 unique hours in the minor. It must be noted that a combination of these Bachelor of Fine Arts degrees with a minor in Art, may result in the need for advanced open electives in order to complete the minimum 120 overall hours and/or the minimum 36 advanced hours that are required for graduation.

Code	Title	Hours
<b>Required Courses</b>		
ART 1301	Core I: Collaboration	3
ART 1303	Core II: Archive	3
ARTS 1301	Studio Art Foundations I	3
ARTS 1302	Studio Art Foundations II	3
Choose 6 hours from ARTC, ARTF, ARTH, ARTS, or ARTT courses		6
Choose 6 hours from advanced level ARTC, ARTH, ARTS, or ARTT courses <sup>1</sup>		6
<b>Total Hours</b>		<b>24</b>

<sup>1</sup> Students should consult with their major advisor about the number of advanced hours required for graduation.

The Minor in Art History is restricted to students not majoring in Art History.

The minor in Art History requires 18 semester credit hours. The minor will offer students, who are interested in art history but do not want to major in it, the opportunity to acquire important visual and critical thinking skills central to the discipline. The minor in Art History will help students increase their competitiveness in a job market where employers are particularly interested in well-rounded job applicants who not only have specific technical skills but also a wider understanding of history and culture.

All prerequisites must be met for any course chosen to satisfy requirements for the minor in Art History.

Students who are pursuing the Bachelor of Arts degree major in Art, the Bachelor of Fine Arts degree with a major in Communication Design, the Bachelor of Fine Arts degree with a major in Studio Art, or the Bachelor of Fine Arts degree with a major in Photography within the School of Art and Design, who also choose to complete the minor in Art History, must complete a minimum of 9 unique hours in the minor. It must be noted that a combination of the Bachelor of Arts degree major in Art with a minor in Art History, may result in the need for advanced open electives in order to complete the minimum 120 overall hours and/or the minimum 36 advanced hours that are required for graduation.

Code	Title	Hours
<b>Required Courses</b>		
ARTH 2301	Ancient to Medieval Art	3
ARTH 2302	Renaissance to Modern Art	3

### Electives

Choose 12 hours from the advanced level lecture and seminar ARTH 12 courses<sup>1</sup>

**Total Hours** 18

<sup>1</sup> With the exception of ARTH 4325: Art History Internship, offered every semester, the 4000 level courses are taught in rotation on a three-year cycle.

Centennial Hall Room 205

Telephone: 512-245-2165 Fax: 512-245-3138

<https://www.commstudies.txstate.edu>

Communication studies examines the creation, expression, and analysis of messages in our personal, professional, and public lives. Communication Studies majors acquire social intelligence, critical thinking, collaboration, and problem-solving skills, which help them to manage message processes within and among individuals, groups, organizations, and societies. Students explore verbal and nonverbal communication in relationships, organizational and corporate communication, rhetoric and criticism, argumentation and persuasion, and health communication. Alumni excel in diverse cultural, professional, social, and personal settings as influential leaders, solution-oriented collaborators, highly trained researchers, talented writers, and engaging speakers. The undergraduate degree offers concentrations in:

- Relationship Management and Well-being
- Professional and Organizational Advancement
- Persuasion, Advocacy, and Civic Engagement
- Teacher Certification in Communication Studies

In addition to the minor in Communication Studies, the Department offers three interdisciplinary minors: Leadership Studies, Political Communication, and Health Communication.

Key to our students' and program's success is our dedicated faculty and staff—a cohesive team that draws from their unified expertise to help students understand the vital connections between research and teaching inside and outside the classroom. Our faculty members are active in national and international association; publish their research in books, professional and academic journals; secure funding to support cutting-edge research; create podcasts; win awards for teaching excellence; and serve our communities.

## Areas of Specialization

Students may wish to concentrate on a particular aspect of communication study. Although there is no required sequence of courses for any single area of interest, the following general guide may be used to assist students in providing a focal point for their communication study.

### Relationship Management and Well-being

Courses that focus on relationship management and well-being are designed to provide students with skills and knowledge to pursue a variety of career goals that involve interpersonal interactions with others. This area of interest is appropriate for students seeking careers in business, non-profit organizations, sales, customer service, hospitality services (e.g. travel or hotel industry), counseling, or other careers or professions which emphasize effective human relationship skills.

## Professional and Organizational Advancement

Courses that focus on professional and organizational advancement are designed to enhance student's capacity for success in careers requiring skills in the management of human relationships, communication flow, leadership and training within contemporary business, public service, non-profit, and professional organizations.

## Persuasion, Advocacy and Civic Engagement

Courses that focus on persuasion, advocacy, and civic engagement examine messages that are designed to create change. Courses address topics such as rhetoric, public address, and argumentation. This area of interest is appropriate for students planning careers in business and industry, non-profit organizations, sales and marketing, the ministry, law, politics or other careers in which persuasion, rhetorical, and analytical skills are important.

## Specialized Courses and Programs

### Departmental Internship Elective

Some students may wish to enroll in the Internship course COMM 4390. Requirements for the course may be found in the Courses section of the catalog.

### Communication Studies Career Readiness Program

The Communication Studies Career Readiness (CSCR) program is an innovative experience for select students to discover and examine career options in the communication field by building a personalized career pathway comprised of hands-on experience, alumni-mentoring, networking, internships, and specialized advising. This program does not follow the traditional career counseling model, which starts with a singular job that students work toward. Instead, the CSCR program starts with our students' skillsets, interests, and passions to explore multiple career opportunities before narrowing. CSCR students are better prepared for life post-graduation. The CSCR program only accepts 10-14 students per year.

CSCR students will have experiences that most universities of our size cannot provide. This program is perfect for the motivated student who is focused upon learning how the major can help them advance their personal and professional goals. Key benefits include:

- Enrollment in the exclusive Career Readiness Course that is unlike any college class
- Connecting with an Alumni Mentor with similar interests
- Participating in exclusive workshops and networking opportunities
- Receiving specialized internship coaching and academic advising
- Building a Personalized Career Pathway that guides students to graduation
- Specialized job search training

## Student Organizations

The department also proudly sponsors the Delta Beta Chapter of Lambda Pi Eta, the Communication Guild, the Elton Abernathy Forensics Society, and the LBJ Debate Society. The Elton Abernathy Forensics Society is Texas State's competitive speech team. The LBJ Debate Society is named for former President Lyndon B. Johnson, who was involved in debate as a student at Texas State University. Both teams travel locally, regionally, and nationally.

## Bachelor of Arts (B.A.)

- Major in Communication Studies (p. 298)
- Major in Communication Studies ( (p. 299)[Relationship Management and Well-being](#) Concentration)
- Major in Communication Studies (Professional and Organizational Advancement Concentration) (p. 300)
- Major in Communication Studies (Persuasion, Advocacy, and Civic Engagement Concentration) (p. 302)
- Major in Communication Studies (Teacher Certification in Speech, Grades 7-12) (p. 303)

## Minors

- Communication Studies
- Health Communication (p. 304)
- Leadership Studies
- Political Communication
- Second Teaching Field in Speech (Grades 7-12)

## Courses in Communication Studies (COMM)

### COMM 1310. Fundamentals of Human Communication.

This course examines the speaking and listening principles and techniques that are fundamental for human communication. The course aids students in the development of basic verbal and nonverbal communication knowledge and skills in a variety of specific contexts including interpersonal, small group, and public speaking. The course has a specific multicultural focus with an emphasis on ethics and diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Communication Core 010|Component Area Core 090|Communication CAO 091|Lab Required|Time Conflicts Permitted

**Grade Mode:** Standard Letter

**TCCN:** SPCH 1311

### COMM 2111. Speech and Debate Activities.

A course designed to provide credit for participation in speech and debate activities. May be repeated for a total of four credits.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### COMM 2315. Interpersonal Communication.

This course studies communication principles and theories exploring interpersonal interactions with emphasis on conceptual foundations, personal growth and skill enhancement. Prerequisite: COMM 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** SPCH 1318

### COMM 2326. Interpretive Reading.

A study of the techniques of the oral interpretation of literature with an emphasis on performance. Prerequisite: COMM 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### COMM 2330. Small Group Communication.

This course focuses on communication in small groups and teams including an analysis of the structure and skills involved in managing the task and relational components of group work. Special emphasis is placed on problem solving discussion, effective meeting leadership and participation, and critical thinking. Prerequisite: COMM 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** SPCH 2333

### COMM 2338. Public Speaking.

This course helps the student to develop personal speaking skills and introduces principles of contemporary types of speeches. Prerequisite: COMM 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** SPCH 1315

### COMM 3301. Empirical Research Methods.

This course explores how to conduct and interpret communication research through the scientific method.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### COMM 3302. Rhetorical Research Methods.

Students will explore and apply methods of analysis and evaluation of rhetorical discourse with emphasis on developing critical research and writing skills. Students should complete COMM 3302 before enrolling in other advanced rhetorical studies courses. (WI) Prerequisite: COMM 1310 and COMM 2338 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

### COMM 3310. Communication Theory.

This course explores the practical ways in which communication theory operates to foster self-awareness, to make sense of personal experiences, and to cultivate critical thinking.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3316F. Rhetoric, Race, and Memory.**

This course explores how public articulations about what happened in the past inform our present and future. Through an exploration of how communities remember civil rights and racism, the course offers students with deeper insight into how communicative practices enable communal transformation and can sustain or disrupt communal identity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 3316I. LGBTQ+ Communication Studies.**

This course investigates how communication impacts LGBTQ+ people's experiences across their lives in relationships, organizations, healthcare, media, and society. Students examine how communication sustains both discrimination against LGBTQ+ people and their resistance, theorize how LGBTQ+ people navigate their holistic identities, and create LGBTQ+ justice across communication practices, cultures, and structures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**COMM 3318J. Communication in Health Organizations.**

This course examines the delivery and exchange of messages within health organizations. Specific communication contexts to be emphasized will include interpersonal conflict, negotiating, communication networks, communication environments, virtual systems of communication, channel/media selection strategies, communication climate, communities of practice, public relations communication campaigns, and organizational crisis management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 3319. Introduction to Organizational Communication.**

Applies communication and management theory along with contemporary research to understand messages in corporate, nonprofit, and volunteer organizations. Prepares the students to think critically about their organizational experiences and use theory to assess and manage communication processes including supervisor-subordinate communication, conflict, and cultures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**COMM 3320. Sport Communication.**

Sport Communication provides a theoretical foundation to understand and apply interpersonal, organizational, team, and public communication skills in sport settings. Sample topics include: fan culture, racial identity and gender, player/coach interactions, and crisis communication. Students gain practical knowledge and skills to optimize verbal and nonverbal messages in sport contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3322. Communication Career Readiness.**

This course helps students discover communication careers by assisting them in building a personalized career pathway through hands-on experiences, mentoring, networking, and examining the field of communication studies. Prerequisite: COMM 1310 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3324. Professional Skills for the Global Workplace.**

This course provides a survey of relevant skills necessary to work in an international work setting. Through discussion, site-visits, and application activities, students will leave the course with an understanding and ability to apply these skills in their careers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3325. Communication and Conflict Management.**

Demonstrates the ways communication skills can be used to manage conflict. The class also provides an analytic framework for diagnosing conflict, negotiation, and mediation. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**COMM 3326. Family Communication.**

This course examines theory and research trends regarding the dynamics of family communication. Topics include parent-child, sibling, marital, and inter-generational interactions; family culture and roles; divorce and stepfamilies; conflict; stress and well-being.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**COMM 3328. Communication and Gender.**

Investigates the interactive nature of communication and gender, the creation of gender identities, and the role of gender and communication in a variety of settings. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**COMM 3329. Intercultural Communication.**

Presents theory and application of communication skills for a culturally diverse world. Develops verbal and nonverbal abilities in social and professional intercultural contexts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COMM 3330. Nonverbal Communication.**

Introduces the conceptual foundations of nonverbal communication. Theoretical components, research methods and applications of nonverbal communication are also explored in a variety of contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3332. The Dark Side of Communication.**

This course examines communication that is considered challenging, complicated, stressful, or unpleasant. Topics include (but are not limited to) deception, teasing/bullying, jealousy, topic avoidance, and aggression. The phenomena covered range from the everyday to the extreme, and impact our well-being as well as our relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3335. Communication and Identity in International Work Cultures.**

This course explores how personal, cultural, organizational, and occupational identities shape workplaces.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3336. Diversity and Communication.**

This course examines various styles of formal and informal communication, and builds awareness and understanding of diversity. It will address diversity issues in social characteristics such as age, gender, race, and sexual orientation. It will address how society communicates about issues related to diversity. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COMM 3342. Interviewing Principles and Practices.**

This course explores the components and techniques that differentiate the interviewing process from other forms of communication. By understanding the intricacies of interviewing (goals, structure, question formats), students improve their ability to apply interview principles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3345. Argumentation and Debate.**

A study of basic principles of argumentation emphasizing analysis, evidence, reasoning, and refutation and their applications in formal and informal debate contexts. Students will do laboratory work with the University forensics squad. Prerequisite: COMM 1310.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3350. Public Advocacy and Civic Engagement.**

This course provides a theoretical foundation to understand the fundamentals of public deliberation, the individual's role in advocacy, and civic engagement in a democratic society. Sample topics include practices of engagement and inquiry, communication ethics, free expression and the responsibility of advocates.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3358. Professional Communication.**

Application of self-presentation and interaction concepts and skills to the transition from undergraduate studies to professional life, including job selection, resume preparation and presentation, interviewing, and interaction management in business and professional settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4111. Practicum in Communication Studies.**

On-the-job experience working with faculty to assist with the department missions of teaching, research or service. Students may work in the department communication lab, assist faculty in the classroom, serve as faculty research assistants or other academic support tasks. May be repeated one time for additional credit. Prerequisite: Departmental approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 4307. Media Criticism.**

Explores the influence of media messages based upon communication and rhetorical theories in shaping perceptions and values. Focus is upon the rhetorical analysis of how the visual media of film and television communicate social, political, and personal attitudes and behaviors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4310. Methods of Teaching Communication Studies.**

A study of methods of teaching communication studies principles and skills for secondary school teachers. Students enrolled in teacher certification programs with a major in Nutrition, Consumer Affairs, Communication Studies or a second teaching field in Communication Studies should contact the Department of Communication Studies for approval to register. (WI) Prerequisite: COMM 1310, COMM 2315, COMM 2330, or COMM 2338; with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter



**COMM 4311. Instructional Communication Practicum.**

This course provides students with an overview of instructional communication research, including teacher immediacy and clarity, and student responsiveness and engagement. Students will also work with a faculty supervisor as an instructional aide in which they will facilitate experiential activities and learn to assess lower-division assignments. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**COMM 4315. Directed Research in Communication Studies.**

Individual or group research projects at the advanced level that are not offered in the present curriculum. Permission and project approval must be obtained from the departmental chair prior to registration. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dual Enrollment Permitted

**Grade Mode:** Standard Letter

**COMM 4320. Planning Communication Studies Activities and Events.**

This course is designed to assist individuals in the management and implementation of communication activities and events. The course includes practical experience in planning and directing individual events.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 4321. American Speeches.**

Analysis and evaluation of major American speeches and their influence on the history and culture of the United States from 1630 to the present. Prerequisite: COMM 2338.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4322. Rhetoric of Protest Movements.**

Explores the persuasive strategies used by protest and political movements to promote social and political change. Focuses upon the application of critical perspectives in understanding the stages, leadership styles, and rhetorical appeals characteristics of movements in American society. (MULT) Prerequisite: COMM 2338.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COMM 4324. Organizational Rhetoric.**

Guided by principles of rhetoric, students will investigate a variety of functions for internal and external audiences. Functions will include building identity; managing issues, impressions, and crisis; and influencing organizational culture. Students will use this knowledge to create and analyze organizational messages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4325. Communication and Technology.**

This course explores how the use of information and communication technologies relates to interpersonal, organizational, public, political, and intercultural communication practices and outcomes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4326. Health Communication.**

This course provides students with an overview of major theoretical and practical issues for communicating about health issues in clinical, organizational, relational, and public contexts. Students will gain knowledge and skills to improve patient health outcomes through effective message strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4327. Social Media in Organizations.**

Social Media in Organizations prepares students to be effective social media writers, resourceful workers, critical consumers, and savvy job seekers. We will consider members' use of social media inside organizations as well as explore our peripheral connection with organizations as consumers and prospective employees.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4329. Communication Training and Human Resource Development.**

This course presents the principles and skills of developing and presenting communication training programs. An emphasis is placed upon applications of communication skill development, communication theory, and instructional communication research in organizational contexts. Prerequisite: COMM 2315, COMM 2330, or COMM 2338.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4331. Persuasion.**

An investigation of rhetorical and behavioral theories of persuasion, the devising of persuasive campaigns, as well as the consumption and generation of persuasive messages in a variety of communication settings. Applicable for careers in business, law, and human relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4336. Diversity and Inclusion Training.**

In this course, we recognize, challenge, and seek to change imbalances in power structures that deny equal respect, dignity, and rights to inclusion for the socially marginalized. Within an immersive educational environment, students apply diversity-related topics and instructional communication methods to conduct diversity and inclusion training sessions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4338. Advanced Public Speaking.**

In-depth critical analysis of speech construction and the development of presentation skills. Prerequisite: COMM 2338.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4341. Intercultural Communication in the Americas.**

This course investigates intercultural communication in various contexts of North, Central, Latin America and the Caribbean covered over two sections: (1) understanding the cultural differences (i.e., values, nonverbal communication, negotiation, business communication, family communication), and (2) understanding transitional experiences of migrants from Central and Latin America, and the Caribbean. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COMM 4345. Political Communication.**

A study of historical and contemporary political campaigns in the United States analyzing management strategies, promotional techniques, and rhetorical messages. Prerequisite: COMM 2338.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4346. Environmental Communication and Sustainability.**

In this course, students learn how to analyze environmental communication messages and how they influence our understanding of environmental issues. Students will examine public discourse including formal oratory, public debate, political communication, organizational communication, and mass mediated messages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4347. Leadership and Communication.**

An advanced course in communication designed to examine in detail the phenomenon of leadership in groups and organizations. Various theories and approaches to leadership will be surveyed with an emphasis on applying leadership principles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4350. Communication and Coping across the Lifespan.**

This course reviews research regarding the communicative management of stress during life transitions. We explore theoretical and practical implications of leading models of stress, coping, and support from communication and related disciplines with a specific emphasis on communicative processes (e.g., support and advice, disclosure and avoidance, advocacy) that facilitate and hinder the adjustment (e.g., psychological, relational, and physiological health) to stressors across the lifespan (e.g., emerging adulthood, family transitions and caregiving, chronic illness and end-of-life).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4351. Relational Communication.**

The study of theory and research trends regarding communication in close relationships, including attraction and intimacy; relationship development, maintenance, and dissolution; affection and support; and conflict. The theoretical and practical relevance of the social, emotional, and relational consequences of messages is emphasized throughout the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4390. Communication Internship.**

This course provides on the job experience in a communication related role in an approved organization. Enrollment requires permission of the instructor, a minimum of 150 clock hours on the job, a written contract with the internship coordinator, and a final portfolio of work. May be repeated for additional credit. Prerequisites: 6 hours of upper level communication electives completed with a grade of "C" or higher. Restricted to full majors or minors in their junior or senior year. Good academic standing required.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses and a minor.
3. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
4. The core courses required of all Communication Studies students are COMM 1310, COMM 2315, COMM 2330, COMM 2338, COMM 3301 and COMM 3302.
5. For transfer students, 12 semester credit hours in Communications (or equivalents) may be transferred from a Texas public institution of higher education for the Communications Field of Study (FOS) and be applied to the Bachelor of Arts degree with a major in Communication Studies at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. In the case where there is no Texas State University course number equivalent to a TCCN number, an elective will be counted.

Code	Title	Hours
COMM 1310	Fundamentals of Human Communication	3
TCCN: SPCH 1311		
COMM 2338	Public Speaking	3
TCCN: SPCH 1315		
COMM 2315	Interpersonal Communication	3
TCCN: SPCH 1318		
COMM Elective		3
TCCN: SPCH 1321		
<b>Total Hours</b>		<b>12</b>

6. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

## Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	COMM 2315 (TCCN SPCH 1318)	3
Mathematics Component Code 020	3	COMM 2338 (TCCN SPCH 1315)	3
Social and Behavioral Sciences Component Code 080	3	Creative Arts Component Code 050	3
US 1100	1		
<b>16</b>		<b>15</b>	

		Sophomore	
First Semester Hours		Second Semester Hours	
ENG Literature (Component Code 090/094) [TCCN ENGL 2322, 2323, 2327, 2328 2332 or 2333]	3	Life and Physical Sciences Component Code 030	3
COMM 2330 (TCCN SPCH 2333)	3	American History Component Code 060	3
Modern Language 1410	4	Modern Language 1420	4
Life and Physical Sciences Component Code 030	3	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040) TCCN PHIL 1301 or 2306	3
American History Component Code 060	3		
<b>16</b>		<b>13</b>	

		Junior	
First Semester Hours		Second Semester Hours	
COMM 3301	3	COMM 3302	3

BA ENG Literature [TCCN ENGL 2322, 2323, 2327, 2328 2332 or 2333]	3	COMM Advanced Elective	3
Modern Language 2310	3	BA Computer Science, Logic, Mathematics or Science	3
COMM Elective	3	Minor	6
Minor	3		
<b>15</b>		<b>15</b>	
		<b>Senior</b>	
<b>First Semester Hours</b>		<b>Second Semester Hours</b>	
COMM Advanced Electives	6	COMM Advanced Elective	6
Modern Language 2320	3	Minor	3
Minor	6	Free Electives	6
<b>15</b>		<b>15</b>	

**Total Hours: 120**

## Minimum required: 120 semester credit hours

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires six hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses and a minor.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- The core courses required of all Communication Studies students are COMM 1310, COMM 2315, COMM 2330, COMM 2338, COMM 3301 and COMM 3302.
- For transfer students, 12 semester credit hours in Communications (or equivalents) may be transferred from a Texas public institution of higher education for the Communications Field of Study (FOS) and be applied to the Bachelor of Arts degree with a major in Communication Studies at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. In the case where there is no Texas State University course number equivalent to a TCCN number, an elective will be counted.

Code	Title	Hours
COMM 1310	Fundamentals of Human Communication	3
TCCN: SPCH 1311		
COMM 2338	Public Speaking	3
TCCN: SPCH 1315		
COMM 2315	Interpersonal Communication	3
TCCN: SPCH 1318		

COMM Elective	3
TCCN: SPCH 1321	
<b>Total Hours</b>	<b>12</b>

6. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

## Course Requirements

<b>Freshman</b>	<b>Hours</b>
COMM 1310 (Component Area Option Code 090/091)	3
ENG 1310 (Communication Component Code 010)	3
ENG 1320 (Communication Component Code 010)	3
Mathematics Component Code 020	3
US 1100	1
POSI 2310 (Government/Political Science Component Code 070)	3
POSI 2320 (Government/Political Science Component Code 070)	3
COMM 2315	3
COMM 2338	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050)	3
Social and Behavioral Sciences Component Code 080	3
	<b>31</b>
<b>Sophomore</b>	<b>Hours</b>
ENG Literature (Component Area Option Code 090/094)	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040)	3
COMM 2330	3
Life and Physical Sciences Component Code 030	6
Modern Language 1410	4
Modern Language 1420	4
HIST 1310 (American History Component Code 060)	3
HIST 1320 (American History Component Code 060)	3
	<b>29</b>
<b>Junior</b>	<b>Hours</b>
COMM 3301	3
COMM 3302	3
COMM Advanced Electives (Relationship Management and Well-being)	6
Minor	9
BA ENG Literature	3

Modern Language 2310	3
BA Computer Science, Logic, Mathematics or science	3
	<b>30</b>
<b>Senior</b>	<b>Hours</b>
COMM Advanced Electives (Relationship Management and Well-being)	12
Modern Language 2320	3
Minor	9
Free Electives	6
	<b>30</b>

### Total Hours: 120

<b>Code</b>	<b>Title</b>	<b>Hours</b>
<b>COMM Advanced Electives (Relationship Management and Well-being)</b>		
COMM 3310	Communication Theory	
COMM 3316G		
COMM 3316H		
COMM 3316I	LGBTQ+ Communication Studies	
COMM 3325	Communication and Conflict Management	
COMM 3326	Family Communication	
COMM 3328	Communication and Gender	
COMM 3329	Intercultural Communication	
COMM 3330	Nonverbal Communication	
COMM 3332	The Dark Side of Communication	
COMM 3336	Diversity and Communication	
COMM 3358	Professional Communication	
COMM 4325	Communication and Technology	
COMM 4326	Health Communication	
COMM 4331	Persuasion	
COMM 4351	Relational Communication	
COMM 4390	Communication Internship	

**Minimum required: 120 semester credit hours**

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires six hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses and a minor.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).

4. The core courses required of all Communication Studies students are COMM 1310, COMM 2315, COMM 2330, COMM 2338, COMM 3301 and COMM 3302.
5. For transfer students, 12 semester credit hours in Communications (or equivalents) may be transferred from a Texas public institution of higher education for the Communications Field of Study (FOS) and be applied to the Bachelor of Arts degree with a major in Communication Studies at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. In the case where there is no Texas State University course number equivalent to a TCCN number, an elective will be counted.

Code	Title	Hours
COMM 1310	Fundamentals of Human Communication	3
	TCCN: SPCH 1311	
COMM 2338	Public Speaking	3
	TCCN: SPCH 1315	
COMM 2315	Interpersonal Communication	3
	TCCN: SPCH 1318	
COMM Elective		3
	TCCN: SPCH 1321	
<b>Total Hours</b>		<b>12</b>

6. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

## Course Requirements

Freshman	Hours
COMM 1310 (Component Area Option Code 090/091)	3
ENG 1310 (Communication Component Code 010)	3
ENG 1320 (Communication Component Code 010)	3
Mathematics Component Code 020	3
US 1100	1
POSI 2310 (Government/Political Science Component Code 070)	3
POSI 2320 (Government/Political Science Component Code 070)	3
COMM 2315	3
COMM 2338	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050)	3
Social and Behavioral Sciences Component Code 080	3
	<b>31</b>

Sophomore	Hours
ENG Literature (Component Area Option Code 090/094)	3

PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040)	3
COMM 2330	3
Life and Physical Sciences Component Code 030	6
Modern Languages 1410	4
Modern Languages 1420	4
American History Component Code 060	6
	<b>29</b>

Junior	Hours
COMM 3301	3
COMM 3302	3
COMM Advanced Electives (Professional and Organizational Advancement)	6
Minor	9
BA ENG Literature	3
Modern Language 2310	3
BA Computer Science, Logic, Mathematics or science	3

	<b>30</b>
Senior	Hours
COMM Advanced Electives (Professional and Organizational Advancement)	12
Modern Language 2320	3
Minor	9
Free Electives	6
	<b>30</b>

**Total Hours: 120**

Code	Title	Hours
<b>COMM Advanced Electives (Professional and Organizational Advancement)</b>		
COMM 3310	Communication Theory	
COMM 3316I	LGBTQ+ Communication Studies	
COMM 3319	Introduction to Organizational Communication	
COMM 3322	Communication Career Readiness	
COMM 3324	Professional Skills for the Global Workplace	
COMM 3325	Communication and Conflict Management	
COMM 3329	Intercultural Communication	
COMM 3330	Nonverbal Communication	
COMM 3335	Communication and Identity in International Work Cultures	
COMM 3336	Diversity and Communication	
COMM 3342	Interviewing Principles and Practices	
COMM 3358	Professional Communication	
COMM 4320	Planning Communication Studies Activities and Events	
COMM 4324	Organizational Rhetoric	
COMM 4325	Communication and Technology	
COMM 4327	Social Media in Organizations	



COMM 4329	Communication Training and Human Resource Development
COMM 4331	Persuasion
COMM 4336	Diversity and Inclusion Training
COMM 4347	Leadership and Communication
COMM 4390	Communication Internship

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires six additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses and a minor.
3. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
4. The core courses required of all Communication Studies students are COMM 1310, COMM 2315, COMM 2330, COMM 2338, COMM 3301 and COMM 3302.
5. For transfer students, 12 semester credit hours in Communications (or equivalents) may be transferred from a Texas public institution of higher education for the Communications Field of Study (FOS) and be applied to the Bachelor of Arts degree with a major in Communication Studies at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. In the case where there is no Texas State University course number equivalent to a TCCN number, an elective will be counted.

Code	Title	Hours
COMM 1310	Fundamentals of Human Communication	3
	TCCN: SPCH 1311	
COMM 2338	Public Speaking	3
	TCCN: SPCH 1315	
COMM 2315	Interpersonal Communication	3
	TCCN: SPCH 1318	
COMM Elective		3
	TCCN: SPCH 1321	
<b>Total Hours</b>		<b>12</b>

6. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

### Course Requirements

Freshman	Hours
COMM 1310 (Component Area Option Code 090/091)	3
ENG 1310 (Communication Component Code 010)	3
ENG 1320 (Communication Component Code 010)	3
Mathematics Component Code 020	3
US 1100	1
POSI 2310 (Government/Political Science Component Code 070)	3
POSI 2320 (Government/Political Science Component Code 070)	3
COMM 2315	3
COMM 2338	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050)	3
Social and Behavioral Sciences Component Code 080	3
	<b>31</b>
Sophomore	Hours
ENG Literature (Component Area Option Code 090/094)	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040)	3
COMM 2330	3
Life and Physical Sciences Component Code 030	6
Modern Language 1410	4
Modern Language 1420	4
American History Component Code 060	6
	<b>29</b>
Junior	Hours
COMM 3301	3
COMM 3302	3
COMM Advanced Electives (Persuasion, Advocacy, and Civic Engagement)	6
Minor	9
BA ENG Literature	3
Modern Language 2310	3
BA Computer Science, Logic, Mathematics or science	3
	<b>30</b>
Senior	Hours
COMM Advanced Electives (Persuasion, Advocacy, and Civic Engagement)	12
Modern Language 2320	3
Minor	9

Free Electives	6
	<b>30</b>

**Total Hours: 120**

Code	Title	Hours
<b>COMM Advanced Electives (Persuasion, Advocacy, and Civic Engagement)</b>		
COMM 3310	Communication Theory	
COMM 3316F	Rhetoric, Race, and Memory	
COMM 3316I	LGBTQ+ Communication Studies	
COMM 3325	Communication and Conflict Management	
COMM 3336	Diversity and Communication	
COMM 3345	Argumentation and Debate	
COMM 3350	Public Advocacy and Civic Engagement	
COMM 4307	Media Criticism	
COMM 4321	American Speeches	
COMM 4322	Rhetoric of Protest Movements	
COMM 4324	Organizational Rhetoric	
COMM 4331	Persuasion	
COMM 4338	Advanced Public Speaking	
COMM 4345	Political Communication	
COMM 4346	Environmental Communication and Sustainability	
COMM 4347	Leadership and Communication	
COMM 4390	Communication Internship	

**Minimum required: 120  
semester credit hours**

## Admission Requirements

- All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) in Communication Studies with Teacher Certification requires three additional hours of English literature, three additional hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor. For this program, the additional math/science/logic/computer science course may be satisfied by COMM 3301, and the second major in Education fulfills the minor requirement.
- The core courses required of all Communication Studies students are COMM 1310, COMM 2315, COMM 2330, COMM 2338, COMM 3301 and COMM 3302.
- A second major in Education is required.
- To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.

- This degree program is designed to prepare students for secondary teacher certification in Speech and requires that students pursue a double major by declaring and completing requirements for both the major in Communication Studies and the major in Education. The following courses are required for the major in Education:

Code	Title	Hours
CI 2310	Education for Change	3
CI 3325	Adolescents and Society	3
CI 4332	Secondary Teaching: Curriculum and Technology	3
CI 4343	Instructional Strategies for the Secondary Teacher	3
CI 3340	Teaching for Linguistic Diversity	3
SPED 4344	Educating Students with Mild Disabilities	3
CI 4370	Building Relationships in the Secondary Classroom	3
CI 4372	Teaching in Communities	3
RDG 3323	Teaching Literacies in the Content Areas	3
EDST 4681	Clinical Teaching 7-12	6
<b>Total Hours</b>		<b>33</b>

- The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Ccholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c420f9a%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPbQjwNv%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Ccholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c420f9a%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPbQjwNv%3D&reserved=0)).
- For transfer students, 6 semester credit hours in Curriculum and Instruction and Special Education may be transferred from a Texas public institution of higher education for the Associate of Arts in Teaching Field of Study and be applied to the Bachelor of Arts degree with a major in Education at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
CI 2310	Education for Change	3
TCCN: EDUC 1301		
SPED 4344	Educating Students with Mild Disabilities	3
TCCN: EDUC 2301		

- For transfer students, 12 semester credit hours in Communications (or equivalents) may be transferred from a Texas public institution of higher education for the Communications Field of Study (FOS) and be applied to the Bachelor of Arts degree with a major in Communication Studies at Texas State University. More information about the Field

of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. In the case where there is no Texas State University course number equivalent to a TCCN number, an elective will be counted.

Code	Title	Hours
COMM 1310	Fundamentals of Human Communication	3
TCCN: SPCH 1311		
COMM 2338	Public Speaking	3
TCCN: SPCH 1315		
COMM 2315	Interpersonal Communication	3
TCCN: SPCH 1318		
COMM Elective		3
TCCN: SPCH 1321		
Total Hours		12

10. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

Course Requirements

Freshman	Hours
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3
ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
Mathematics Component Code 020	3
US 1100	1
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3
POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
COMM 2315	3
COMM 2338	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [HUMA 1315])	3
Social and Behavioral Sciences Component Code 080	3

31	
Sophomore	Hours
ENG Literature (Component Area Option Code 090/094/040)	6
COMM 2330	3
American History Component Code 060	6

Life and Physical Sciences	6
Component Code 030	
Modern Language 1410	4
Modern Language 1420	4
CI 2310	3

32	
Junior	Hours
COMM 3301	3
COMM 3302	3
COMM 3345	3
CI 3325	3
CI 3340	3
CI 4332	3
CI 4343	3
SPED 4344	3
Choose one of the following:	3
COMM 2326	
COMM 3310	
COMM 3358	
COMM 4320	
Modern Language 2310	3
COMM Advanced Elective	6

36	
Senior	Hours
COMM 4310	3
Modern Language 2320	3
CI 4370	3
CI 4372	3
RDG 3323	3
EDST 4681	6

Total Hours: 120

The minor in Communication Studies requires 21 semester credit hours. COMM 2111 and COMM 4111 will not be counted toward the minor.

Code	Title	Hours
Required Courses		
COMM 1310	Fundamentals of Human Communication	3
COMM 2315	Interpersonal Communication	3
COMM 2330	Small Group Communication	3
COMM 2338	Public Speaking	3
Electives		
Choose 9 hours of COMM electives, 3 of which must be advanced.		9
Total Hours		21

The minor in Health Communication requires 21 semester credit hours. The minor includes a unique blend of theory, research, and application. The study of health communication can contribute to disease prevention and health promotion in areas such as provider-patient communication, patient-family communication, public health messages and campaigns, health in mass media, public health, and technology and health. The minor is interdisciplinary, including courses from the Department of Communication Studies, the School of Health Administration, the

School of Journalism and Mass Communication, and the Department of Psychology.

If a student is a Communication Studies major, only the core courses in Communication Studies (COMM 1310, COMM 2315, COMM 2330, COMM 2338, COMM 3301, COMM 3302) may count towards their minor in Health Communication.

If a student is a Healthcare Administration major, no courses may count for their major and minor.

Code	Title	Hours
<b>Required Courses</b>		
COMM 2315	Interpersonal Communication <sup>1</sup>	3
or COMM 2330	Small Group Communication	
COMM 4326	Health Communication	3
MC 4322	Health Communication Campaigns	3
Choose 6 hours from the following:		6
COMM 3316G		
COMM 3316H		
COMM 3318J	Communication in Health Organizations	
COMM 3319	Introduction to Organizational Communication	
COMM 3325	Communication and Conflict Management	
COMM 3326	Family Communication <sup>2</sup>	
COMM 3328	Communication and Gender	
COMM 3329	Intercultural Communication	
COMM 3330	Nonverbal Communication	
COMM 3336	Diversity and Communication	
COMM 3342	Interviewing Principles and Practices	
COMM 3358	Professional Communication	
COMM 4324	Organizational Rhetoric	
COMM 4329	Communication Training and Human Resource Development	
COMM 4331	Persuasion	
COMM 4336	Diversity and Inclusion Training	
COMM 4345	Political Communication	
COMM 4347	Leadership and Communication	
COMM 4351	Relational Communication	
COMM 4390	Communication Internship	
Choose 6 hours from the following:		6
HA 3308	Healthcare Organization	
HA 3309	Ethics in the Health Professions	
HA 3315	Healthcare Administration History, Culture, and Language	
HA 3341	Project Management & Professional Development in Healthcare	
HIM 2360	Medical Terminology	
MC 3355	Mass Media and Society	
MC 3343	Introduction to Public Relations	
MC 4309	Visual Literacy: Film	
PH 3348	Prevention of Disease	
PH 3350	Consumer Health	
PH 3374	Global Health	
PSY 3315	Psychopathology <sup>3</sup>	
PSY 3325	Psychology of Persuasion <sup>3</sup>	

PSY 3300	Lifespan Development <sup>3</sup>
PSY 3331	Social Psychology <sup>3</sup>
PSY 3333	Industrial Psychology <sup>3</sup>
PSY 3361	Health Psychology <sup>3</sup>
<b>Total Hours</b>	<b>21</b>

<sup>1</sup> COMM 2315 and COMM 2330 both have a prerequisite of COMM 1310.

<sup>2</sup> This course has a prerequisite of COMM 2315. Students should select that option as one of the required Communication Studies courses.

<sup>3</sup> All Psychology courses require the completion of PSY 1300 with a grade of C.

The minor in Leadership Studies requires 21 semester credit hours.

The minor is interdisciplinary, including courses from the following departments: Communication Studies, Management, Philosophy, Aerospace Studies, Psychology, and the School of Health Administration. Students select two courses (6 hours) which emphasize leadership skill development and two courses (6 hours) which provide a theoretical or conceptual approach to leadership. All students in this minor will be advised by the Department of Communication Studies. Students entering the program will be contacted by the department and will be required to see an advisor before selecting elective courses. If a student is a Communication Studies major, only the core courses in Communication Studies (COMM 1310, COMM 2315, COMM 2330, COMM 2338, COMM 3301, COMM 3302) may count towards their minor in Leadership Studies.

Code	Title	Hours
<b>Required Courses</b>		
COMM 2330	Small Group Communication <sup>1</sup>	3
COMM 4347	Leadership and Communication	3
PHIL 3322	Professional Ethics	3
<b>Skill Development</b>		
Choose 6 hours from the following:		6
COMM 2338	Public Speaking <sup>1</sup>	
COMM 3324	Professional Skills for the Global Workplace	
COMM 3325	Communication and Conflict Management	
COMM 3330	Nonverbal Communication	
COMM 3342	Interviewing Principles and Practices	
COMM 3345	Argumentation and Debate	
COMM 3350	Public Advocacy and Civic Engagement	
COMM 3358	Professional Communication	
COMM 4329	Communication Training and Human Resource Development	
COMM 4336	Diversity and Inclusion Training	
COMM 4390	Communication Internship	
<b>Theoretical Concepts or Approaches</b>		
Choose 6 hours the following:		6
COMM 3316F	Rhetoric, Race, and Memory	
COMM 3319	Introduction to Organizational Communication	
COMM 3329	Intercultural Communication	
COMM 3335	Communication and Identity in International Work Cultures	
COMM 3336	Diversity and Communication	
COMM 4327	Social Media in Organizations	

COMM 4331	Persuasion	
COMM 4341	Intercultural Communication in the Americas	
COMM 4324	Organizational Rhetoric	
AG 3341	Leadership Development in Agricultural Sciences	
A S 3311	Leadership and Management I	
A S 3312	Leadership and Management II	
HA 3309	Ethics in the Health Professions	
HA 3324	Supervisory Management for Healthcare Managers	
MGT 3303	Management of Organizations	
PH 4335	Public Health Leadership	
PSY 3331	Social Psychology <sup>2</sup>	
PSY 3333	Industrial Psychology <sup>2</sup>	
<b>Total Hours</b>		<b>21</b>

<sup>1</sup> This course has a prerequisite of COMM 1310.

<sup>2</sup> PSY 1300 with a grade of C is a prerequisite for PSY 3331 and PSY 3333.

The minor in Political Communication requires 24 semester credit hours, including 12 hours from the Department of Communication Studies and 12 hours of selected courses from the Department of Political Science. The minor addresses a variety of theories, principles, and skills related to the political communication process. The minor is designed for students interested in law, politics, public administration, public policy, or other professions related to issues and ideas in a political communication context.

If a student is a Communication Studies major, only the core courses in Communication Studies (COMM 1310, COMM 2315, COMM 2330, COMM 2338, COMM 3301, and COMM 3302) may count towards their minor in Political Communication.

If a student is a Political Science major, no course may count for both their major and minor.

Code	Title	Hours
<b>Required: Communication Studies</b>		
COMM 2338	Public Speaking <sup>1</sup>	3
COMM 4345	Political Communication	3
<b>Electives: Communication Studies</b>		
Choose 6 hours from the following:		6
COMM 3316F	Rhetoric, Race, and Memory	
COMM 3302	Rhetorical Research Methods	
COMM 3345	Argumentation and Debate	
COMM 3350	Public Advocacy and Civic Engagement	
COMM 4307	Media Criticism	
COMM 4321	American Speeches	
COMM 4322	Rhetoric of Protest Movements	
COMM 4324	Organizational Rhetoric	
COMM 4331	Persuasion	
COMM 4338	Advanced Public Speaking	
COMM 4390	Communication Internship	
<b>Required: Political Science and Public Administration</b>		
PS 3321	Campaigns and Elections	3
or PS 4326	Media and Public Opinion	

### Electives: Political Science and Public Administration

Choose 9 hours from the following:		9
PS 3314	Politics and Personality	
PS 3315	Quantitative Research in Political Science	
PS 3321	Campaigns and Elections (if not taken as "required")	
PS 3322	Political Parties and Party Politics	
PS 3323	Congress and the Legislative Process	
PS 3324	The American Presidency	
PS 3326	Issues and Interest Groups: Power and Pressure in America	
PS 3328	Politics in Film	
PS 3331	The Supreme Court and the Judicial Process	
PS 3341	Comparative Politics	
PA 3350	Public Policy Process	
PS 3351	Introduction to International Studies	
PS 4322	African American Politics	
PS 4323	Latina/o Politics	
PS 4324	Women in Politics	
PS 4326	Media and Public Opinion (if not taken as "required")	
PS 4327	Religion and American Public Life	
PA 4362	Government, Nonprofit and American Business	
<b>Total Hours</b>		<b>24</b>

<sup>1</sup> COMM 2338 has a prerequisite of COMM 1310.

For students who are seeking a teacher certification within their major and would like a second teaching field in Speech, the requirements are:

Code	Title	Hours
COMM 1310	Fundamentals of Human Communication	3
COMM 2315	Interpersonal Communication	3
COMM 2330	Small Group Communication	3
COMM 2338	Public Speaking	3
COMM 3345	Argumentation and Debate	3
COMM 4310	Methods of Teaching Communication Studies	3
COMM Advanced Electives		3
Choose one of the following:		3
COMM 2326	Interpretive Reading	
COMM 3310	Communication Theory	
COMM 3358	Professional Communication	
COMM 4320	Planning Communication Studies Activities and Events	
<b>Total Hours</b>		<b>24</b>

All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information,



go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/)

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[www.masscomm.txstate.edu](http://www.masscomm.txstate.edu) (<http://www.masscomm.txstate.edu>)

The School of Journalism and Mass Communication is accredited by the Accrediting Council on Education in Journalism and Mass Communication (ACEJMC). Our program offers a curriculum that introduces students to the broad framework of mass communication, emphasizing what is common and fundamental to advertising, digital media, electronic media, journalism and public relations.

The mission of the School of Journalism and Mass Communication is to pursue excellence. Our programs strive to cultivate strong professional, research, theoretical, critical and ethical skills in a diverse and engaging environment that prepares students to be socially responsible media professionals, scholars and citizens. Students may earn a Bachelor of Arts in Mass Communication or a Bachelor of Science degree with a major in Advertising, Digital Media Innovation, Electronic Media, Journalism, or Public Relations.

Students may gain experience by working in student media, such as the *University Star*, KTSW 89.9 FM, *Bobcat Update*, Live Oak Studio Production, Bobcat Promotions, and through internships outside the school. They also have the opportunity to participate in intercollegiate competitions through organizations such as the American Advertising Federation, Public Relations Society of America, Texas Intercollegiate Press Association, College Broadcasters, Inc, and the Society of Professional Journalists.

To earn a Bachelor of Science degree students must complete 120 semester hours, which includes the general education core curriculum requirements, B.S. support coursework requirements, 40 hours in the major, and a minor outside the school.

To earn a Bachelor of Arts degree in Mass Communication, students must complete 120 semester hours, which includes the general education core curriculum requirements, B.A. degree requirements, 40 hours in Mass Communication, and a minor outside the school.

For both the Bachelor of Science and Bachelor of Arts degrees community college transfer students may apply no more than 13 semester credit hours of mass communication transfer courses to the major portion of their degree. Transfer students from four-year institutions may apply no more than 19 semester credit hours of mass communication transfer courses to the major portion of their degree. Regardless of transfer coursework at least 21 hours of the major coursework must be earned at Texas State.

In an effort to promote the academic welfare of all Mass Communication students, the school strongly recommends that all students seek academic advising each semester. In certain situations, students may have an advising hold placed on their records. Advisors are available year round to assist students with academic issues and concerns. Students can call 512-245-1932 to make an advising appointment.

## Field of Study

The School of Journalism and Mass Communication (SJMC) will accept up to a 13 hour semester credit hour (15 hours from the Journalism field of study) block of coursework from the Communication Field of Study\* from Texas two-year colleges towards any major in the SJMC. The SJMC

will accept up to a 19 hour SCH block of coursework from Texas four-year colleges and universities toward any BS major in the SJMC and up to a 13 hour SCH block of coursework toward the BA major in the SJMC.

\* Coursework from the first three sub-areas of the Communication field of study. These are (1) Advertising/Public Relations, (2) Journalism/Mass Communication and (3) Radio & Television Broadcasting/Broadcast Journalism. The curriculum in the fourth sub-area of Communication falls under another major and degree program at Texas State and would be applied to that major and degree accordingly, but not to degree programs in the SJMC.

## Majors

### San Marcos Campus

### Advertising

The Advertising (B.S.) program is dedicated to teaching students the strategic and creative skills necessary to solve clients' real world, real time, business problems. To that end, the Advertising program offers courses that cover the major job descriptions of advertising and marketing such as creative development, social media management and contend development, strategic research and planning, business strategy and account management, ad media planning, buying and analytics. Through the sequence of courses, students are exposed to various job opportunities within the field and learn the skills necessary to become a professional in an advertising agency, company or specialized communications firm. Further, students may participate in Texas State's national, award winning AAF (American Advertising Federation) National Student Advertising Competition (NSAC) team.

### Digital Media Innovation

The Digital Media Innovation (B.S.) program immerses students in the breadth of digital knowledge to prepare them for new and emerging media roles. These roles, requiring advanced technology skills and digital perspective, include news application developers, multimedia experience producers, social media editors, engagement managers, web designers, and data analysts, and can include positions in traditional media organizations, technology companies and media start-ups. Students in this sequence focus on digital strategy and experimentation associated with new models of storytelling and innovative applications of media.

### Electronic Media

The Electronic Media (B.S.) program offers courses designed to prepare students for careers in a wide variety of media production industries, including news and sports broadcasting, cable, satellite, and streaming. Courses emphasize journalism, audio and video production, storytelling, management, and programming by combining skills instruction with hands-on experience while working in our new state-of-the-art Live Oak Hall production studio and our student-run radio station KTSW. Many students also secure internships in professional media organizations off-campus. Our graduates work for professional sports teams, film production studios, and at many television and radio stations nationwide.

### Mass Communication

The Mass Communication (B.A.) program offers students the opportunity to acquire a broad, flexible education aimed at a comprehensive understanding of the changing dynamics of mass communication in society. Whether it's telling a story through multiple platforms, building a personal brand, or engaging in research, the major helps prepare students to reach across the various communication disciplines for new insight,

skills, forms of expression, and expanding employment opportunities in mass media.

## Journalism

The Journalism (B.S.) program prepares students to be multimedia, digital and print journalists with a solid foundation in writing, data analysis, editing and ethics in a career that is crucial to a democratic society. It offers students the opportunity to improve their storytelling, interviewing and research skills as well as develop the strategy and problem-solving skills required of today's workforce. Students are expected to produce professional quality work and are encouraged to gain additional experience through campus media outlets, including the University Star newspaper, and to seek internships with media organizations off campus.

## Public Relations

The Public Relations (B.S.) program prepares students for rewarding careers in the management of communication across all media platforms. The program focuses on research, innovation, and problem solving in a diverse and global society through creative and strategic thinking and the highest legal and ethical standards. Students have opportunities to practice their skills in Bobcat PRomotions, the student-run public relations agency, and in internships in Texas and major cities in the United States.

## Concentration in Sports Media

Any student pursuing a B.S. degree in the School of Journalism and Mass Communication may add a concentration in Sports Media. Students who elect to add a concentration can apply the 9-hour concentration towards the 12 hours of advanced MC electives required of the B.S. degree.

### Round Rock Campus

## Mass Communication

The Mass Communication (B.A.) program offers students the opportunity to acquire a broad, flexible education aimed at a comprehensive understanding of the changing dynamics of mass communication in society. Whether it's telling a story through multiple platforms, building a personal brand, or engaging in research, the major helps prepare students to reach across the various communication disciplines for new insight, skills, forms of expression, and expanding employment opportunities in mass media.

## Public Relations

The Public Relations (B.S.) program prepares students for rewarding careers in the management of communication across all media platforms. The program focuses on research, innovation, and problem solving in a diverse and global society through creative and strategic thinking and the highest legal and ethical standards. Students have opportunities to practice their skills in Bobcat Promotions, the student-run public relations agency, and in internships in Texas and major cities in the United States.

### Online/TXST Global

## Mass Communication

The Mass Communication (B.A.) program offers students the opportunity to acquire a broad, flexible education aimed at a comprehensive understanding of the changing dynamics of mass communication in society. Whether it's telling a story through multiple platforms, building a personal brand, or engaging in research, the major helps prepare students to reach across the various communication disciplines for new insight,

skills, forms of expression, and expanding employment opportunities in mass media.

## Bachelor of Arts (B.A.)

- Major in Mass Communication (p. 317)

## Bachelor of Science (B.S.)

- Major in Advertising (p. 318)
- Major in Advertising (Sports Media Concentration) (p. 320)
- Major in Digital Media Innovation (p. 322)
- Major in Digital Media Innovation (Sports Media Concentration) (p. 323)
- Major in Electronic Media (p. 324)
- Major in Electronic Media (Sports Media Concentration) (p. 326)
- Major in Journalism (p. 328)
- Major in Journalism (Sports Media Concentration) (p. 329)
- Major in Public Relations (p. 331)
- Major in Public Relations (Sports Media Concentration) (p. 332)

## Minors

- Journalism
- Mass Communication
- Second Teaching Field in Journalism (Grades 8-12)

## Courses in Mass Communication (MC)

### MC 1100S. Interviewing for Storytelling.

This course students cover source selection, interview preparation, interviewing techniques, and how to use material from the interview. Students will learn and practice interviewing skills over the course of the semester. They will also discuss what makes a successful interview. Prerequisite: MC 1313 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

### MC 1301. Introduction to Mass Communication.

A survey of the mass media and other areas of mass communication designed to acquaint the student with the field of communication and what it offers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** COMM 1307

### MC 1313. Media Writing.

This course is an introduction to the major forms of Media Writing: electronic media, journalism and digital. (WI).

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** COMM 2311

**MC 2111. Media Practicum.**

Students perform supervised media work of at least 60 hours for the semester. Credit requires prior written contract with a supervising faculty member. May be repeated twice. Prerequisite: Minimum 2.0 Overall GPA and instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MC 3100. Grammar for Media Professionals.**

Students will refine their English grammar skills to a proficiency level needed to be successful communication professionals and media practitioners.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3111. Drone Bootcamp.**

This course explores new tools and skills relevant to the digital age, particularly the usage of drones in reporting, videography and multimedia. This course introduces the concepts and practical usage of drone storytelling and prepares students to take the FAA Part 107 exam.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3112. Social Media Analytics Platforms.**

This course prepares students for and assists them in achieving industry-recognized social media certifications.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3113. 3D Drone Modeling.**

This course explores new tools and skills relevant to the digital age. Students explore the growing field of photogrammetry and using drones to produce 3D models.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3114. Career Exploration: Destination America.**

This career exploration course provides opportunities for students to visit and network with media professionals in the United States. It immerses students in a wide range of organizations. Meetings could include PR firms, ad agencies, governmental organizations, professional sports teams and museums.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3115. Digital Media Tools and Skills.**

This course explores new tools and skills relevant to the digital age.

Topics can include data visualization, spreadsheet usage, media-creation software, mobile reporting, drones and sensors in journalism and video editing.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 3116. Digital Media Innovation Concepts.**

This course explores concepts relevant to the digital age. Topics may include digital media history, ethics, law and will address online privacy, security, crime, identity and censorship.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3117. Freelancing for Media Professionals.**

This course provides a practical overview of business topics related to all media and communication fields. Students learn the art of freelancing, networking, negotiating and other topics designed to assist in developing their career.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3118. Careers in Media.**

This course allows students to engage in career exploration in the media professions.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3119. Fundamentals of Layout and Design.**

Students learn desktop publishing basics using appropriate software. The course covers topics including creating documents for print or digital use, mastering tools required to create a simple page layout consisting of text and imagery and preparing files for review or publication.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3120. Editing and Enhancing Digital Imagery.**

In this course students learn how to edit, enhance, and create digital imagery for print and web use.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3121. TV News Production.**

In this course, students will serve as the production crew for the TV News course.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 3122. Search Engine Optimization Fundamentals.**

In this course, students will examine the strategic use of search engine optimization (SEO) in relation to website design, content creation and marketing. Students will explore the fundamentals of SEO and skills like link building and keyword research, which are needed to perform SEO tasks for businesses and organizations. Prerequisite: MC 4381 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3306. Writing for the Electronic Media.**

The study and practice of writing copy for the electronic media, including the composition of commercials, news stories, public service announcements, promotions and documentaries. (WI) Prerequisites: MC 1313 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MC 3307. Audio Production.**

This course covers the basics of digital audio production with emphasis on techniques used in producing commercials, public service announcements and promotions. Lab requirements include various studio and field recording experiences and structured group meetings.

**3 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MC 3311. Video Production.**

In this course, students will explore the basics of analog and digital video production. Emphasis on techniques used in producing newscasts, commercials, public service announcements, promotions. Lab requirements include field and studio production.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MC 3312. Television News.**

In this course, students will explore standard theory and practice of electronic news gathering and production, including writing copy to match video and synchronization of audio and video in news stories. Students work on a campus news program. (WI) Prerequisites: [MC 3306 or MC 3321] and [MC 3311 or MC 4323 or MC 4324] both with grades of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MC 3313. Foundations of Public Relations Writing.**

This course introduces students to a wide range of print & digital publications and writing assignments found in public relations.

Prerequisite: MC 3343 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MC 3314. Social Media for Strategic Communication.**

This course explores emerging technologies and media influencing strategic communication research and practices. Prerequisite: [MC 3343 or MC 3367] and MC 4381 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3319. Visual Communication.**

This course studies the principles, theories, and language of visual communication, emphasizing the evaluation and use of images in mass media. It is designed to help you integrate words and pictures in mass communication and to gain a greater appreciation of our visual world.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3321. News Writing and Reporting I.**

Integrating writing and reporting skills to produce stories across media platforms, including print and online, with an emphasis on storytelling. The study of techniques for locating and assessing information from multiple sources, including interviewing, fact verification, online research and the use of libraries. (WI) Prerequisites: MC 1313 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MC 3343. Introduction to Public Relations.**

This is the introductory course for the public relations sequence. Students will explore the functions of public relations in the digital age in the development of strategic communications for corporations, companies, government offices, non-profit organizations and public relations agencies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3355. Mass Media and Society.**

This course offers an examination of the roles of the mass media in American society, including an analysis of the philosophical basis of media structure; mass media as business; media effects of public issues, morals and tastes; and other contemporary issues within a global media context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3360. Public Relations Research.**

Students study the principles, techniques and problems of social science research and digital analytics as they relate to the planning and evaluation of strategic communication. Prerequisite: MC 3343 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3367. Advertising.**

A broad overview of advertising including history, role and responsibility, and impact of the digital revolution. Key topics will be research, account service, media planning, creative, sales promotion, public relations, campaigns, and the advertising agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3372. Advertising Media Planning.**

This course is the study of planning and buying messages in traditional and new media to creatively and effectively reach targeted prospects. Attention is given to media characteristics, scheduling, testing and buying efficiencies. Prerequisite: MC 3367 and MC 4317, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3375. Electronic Media as Entertainment.**

This course will explore the principles and strategies of winning audiences for the electronic media: television radio, cable, satellite and the internet.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3379. Client Management.**

This course is the study of managerial methods in strategic communications. Students develop leadership skills, demonstrate managerial tactics and grow professional communications abilities including: setting goals, managing strategic brand building, new business development, budgeting and growing and maintaining client-agency relationships. Prerequisite: MC 3343 or MC 3367 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3383. Editing and Managing Content.**

In this course students will incorporate words, images, sound and data into storytelling across platforms. This course tightens the focus on audience, accuracy, meaning, logic, organization, style and form. (WI). Prerequisites: MC 1313 or MC 3313 either with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MC 3390. Media Design.**

This course is the study and application of advanced principles of media design including: basic design principles, typography, color, photography, video, and multimedia.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Dual Enrollment Permitted|Lab Required|Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MC 3394. Management of Electronic Media.**

The study of the management of electronic media, including sales, federal regulation, and responsibilities to society, community and stockholders.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4130. Internship.**

This course requires a minimum of 100 hours of off-campus experience, written contract with internship coordinator and portfolio of completed work. Students cannot gain more than six hours of credit for any combination of: MC 4130, MC 4230 and MC 4330. Prerequisites: 30 credit hours, good academic standing, and appropriate sequence coursework.

**1 Credit Hour. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 4230. Internship.**

This course requires a minimum of 150 hours of off-campus experience, written contract with internship coordinator and portfolio of completed work. Students cannot gain more than six hours of credit for any combination of: MC 4130, MC 4230 and MC 4330. Prerequisites: 30 credit hours, good academic standing, and appropriate sequence coursework.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 4301. Media Law and Ethics.**

This course offers a study of law governing journalism, advertising, electronic media and public relations. Restricted to junior standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4302. History of Mass Media.**

Students will study the development of mass media, advertising and public relations in the United States from 1690 to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4303. International Advertising.**

Overview of international marketing and advertising; problems and opportunities of a global economy. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**MC 4304. Advertising Portfolio.**

In this course students create and produce professional advertising portfolios by serving as copywriters and art directors as part of collaborative teams. Prerequisites: MC 3367 and MC 4333 both with grades of "C" or better. Corequisite: MC 4338 with a grade of "D" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MC 4305. Theories of Mass Communication.**

A study of the predominant theories of communication, including mass media effects, functions and controls. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MC 4306. Advertising Competition.**

This course focuses on developing an integrated marketing communications campaign for a national client as part of the National Student Advertising Competition. Students will create a campaign from the developmental through the execution process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 4307. Advertising Campaigns.**

In this course students develop, coordinate and evaluate a complete advertising campaign for specific clients. Students conduct market research, formulate objectives and strategies, recommend media plans and develop creative executions through plans books and presentations. (WI) Prerequisites: MC 3372 and MC 4317 and MC 4333 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MC 4308. Women and Minorities in the Media.**

Analysis of the images of women and minorities in the media and their status as media professionals. Includes study of the alternative media. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 4309. Visual Literacy: Film.**

The course will teach how meaning is constructed in visual images by using film as a practical medium. It provides the necessary skills to critique and create effective images. It is especially useful for students majoring in image-based sequences of the mass communication major, particularly broadcasting and advertising.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4310. International Communication.**

A study of media systems worldwide in different socioeconomic contexts and an examination of patterns of international communication flow. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 4311. Independent Study.**

Students complete an academic project requiring the equivalent of 160 hours work. Requires prior written contract with faculty member and portfolio of completed work. Cannot be repeated.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 4312. Photojournalism.**

In this course students develop skills in camera operation, learn computer software applications and learn how to combine words with stories.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4313. Advanced Writing for Public Relations.**

This course provides an examination and application of digital and traditional communication tools required for effective public relations. Emphasis is placed on the strategic use of digital media in a modern communication society. (WI) Prerequisites: MC 3313 and MC 3343 both with grades of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MC 4315. Web Design Publishing.**

In this course students develop skills in web page construction including Web editing, image and graphic manipulation, animation, and audio and video editing. Prerequisite: [MC 1313 or MC 3313] and MC 4381 both with grades of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4316D. Advertising Media Sales.**

An overview of advertising, media selling, and salesmanship, sales strategies, sales management, and case histories designed to acquaint students with a vital function of the business. Prerequisite: MC 3367 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 4317. Advertising Strategic Planning.**

This course is a hands-on introduction to applied advertising research and account planning. Primary, survey and qualitative research methods are designed, executed and presented by students for the purpose of integrating the consumer's perspective into creative strategy.

Prerequisites: MC 3367 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4318. Media Ethics.**

The study of freedom and responsibilities of the mass media practitioners and institutions, explored within the framework of ethical theories. Consideration of values, codes of ethics, moral development, professionalism and institutional constraints as applied to the media of information, persuasion and entertainment will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4319. Latinas/Latinos and the Media.**

The course focuses on demographic developments related to Latinos in the US; their portrayals in the media; the effects those portrayals; the history and current status of selected Latino-oriented media and ancillary media companies and organizations; and the role of the media in Latino politics. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 4320. Public Relations Campaigns.**

This course is a comprehensive study of effective public relations in a modern society. Students learn the professional approach to the practice of public relations that includes internet applications and how to evaluate its function and value while applying ethical standards of conduct. (WI).

Prerequisite: MC 3360 and MC 3314 and MC 4313 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MC 4322. Health Communication Campaigns.**

This class will provide an overview of the theory and practice of designing, producing and evaluating health-communication campaigns. We will examine persuasive approaches to behavioral change; audience, message and channel factors in campaign development. Our work will emphasize communication approaches, including mass media, social marketing and "new media".

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4323. Multimedia Journalism.**

Students will be introduced to topics related to online journalism. Topics covered will include the online journalism profession, Web credibility, online reporting sources, cyberlaw including libel and copyright, blogging and podcasting, and basic multimedia design. Students will both critique and create online materials. Prerequisites: MC 1313 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4324. Visual Storytelling.**

This course is an introduction to basic elements of video journalistic storytelling for today's converged newsrooms. Students gather information using journalism practices, such as in-person interviews, and learn to use video newsgathering technologies to produce stories for online and other digital platforms.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4325. Coding and Data Skills for Communicators.**

Students are introduced to programming and data concepts relevant to communicators. Data visualization and storytelling tools and techniques are covered as related to journalism, advertising and public relations.

Prerequisites: MC 4315 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4326. Advanced Social Media and Analytics.**

This course will provide students with an advanced understanding of social media, marketing plans and social media analytics. Students will build company and/or journalistic profiles on social networks - Facebook, Twitter, Pinterest, YouTube, Instagram and more - to engage with audiences and communities and utilize analytical tools to track success. Prerequisite: MC 4381 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MC 4327. Mobile Media and Development.**

This course will introduce students to mobile communication and production that is relevant to mass communication. As mobile devices are a vital communication medium in our everyday life, it is essential to understand how mobile communication works and how to effectively produce online content for mobile devices. Prerequisite: MC 4315 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4328. Digital Media Innovation Capstone.**

In this course students explore innovation, creativity and product development associated with digital entrepreneurship. Through a speaker series, students will be introduced to important concepts and ideas from thought leaders and innovators at the intersection of media and technology. Prerequisites: MC 4315 and MC 4326 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 4329. Sports Media.**

Sports Media explores the synergy among sports, athletes, media, public relations, advertising-marketing-promotion, and sports information disciplines and audiences in a multi-platform media environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 4330. Internship.**

This course requires 180 hours of off-campus experience, written contract with internship coordinator and portfolio of completed work. Students cannot gain more than six hours of credit for any combination of: MC 4130, MC 4230 and MC 4330. Prerequisites: 30 credit hours, good academic standing, and appropriate sequence coursework.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**MC 4331. Strategic Sports Communication.**

This course focuses on the application of communication strategies and tactics used by sports teams and leagues to manage relationships with various stakeholders and promote their brand using multiple mass media channels. Students will learn about emerging trends in strategic sports communication and the sociological aspects of sports fans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 4332. Public Relations Fundraising and Special Events.**

This is a specialized course dealing with the development and implementation of fundraising. Topics include grants, special events, and annual/capital campaigns. Prerequisite: MC 3313 and MC 3343 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 4333. Creative Thinking & Advertising Concepting.**

This course focuses on the advancement of creative thinking and translating those skills into developing a creative concept to support an advertising strategy. This class will provide tools to develop ideas, and an understanding how the creative team works with other teams in advertising. Prerequisite: MC 3367 and MC 4317; A minimum grade of "C" is required in all prerequisites.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**MC 4335. Mass Communication Capstone.**

This course integrates a variety of mass communication skills to produce a substantial project or research for the mass communication major capstone. Prerequisite: MC 3360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Writing Intensive  
**Grade Mode:** Standard Letter

**MC 4336B. Documentaries.**

A course in reporting and production of comprehensive public affairs and feature stories for the electronic media. Prerequisite: MC 3312. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive  
**Grade Mode:** Standard Letter

**MC 4336H. Web Content Strategy for Organizations.**

This course builds on students' web development skills to focus on strategic content creation and management with an emphasis on building sites for small- to medium-sized organizations. Students will learn to understand an organization's messaging needs and create effective websites using state of the art content management techniques. Prerequisite: MC 4315 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

**MC 4336I. Video and Broadcast Production for Sports.**

In this course, students will develop the production skills required in sports broadcast and production. This includes field producing live sport broadcasts, control room operation, interviewing for sports, and shooting video and editing video and audio for sports. This course will also include a section on announcing, reporting and interviewing for sports.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

**MC 4337. Data Journalism.**

Students will use a variety of tools and software to acquire and analyze data to produce news stories and data visualizations. Prerequisite: MC 1313, MC 4381; with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 4338. Advanced Advertising Copy and Layout.**

This course is an advanced copywriting and advertising layout course. Students expand their creative concepting abilities, digital techniques, art direction skills and writing capabilities to create professional-level creative ad campaigns. Prerequisite: MC 4333 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 4339. Advanced Strategic Planning.**

In this course students expand upon skills learned in account planning to further students' ability to define business problems, analyze data, discover insights and define appropriate communications strategy.

Prerequisite: MC 3372 or MC 4333 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4340. Media Analytics and Strategy.**

In this course students strategically and creatively analyze media metrics to identify problems/challenges and use insights gathered to develop a strategic media plan. Prerequisite: MC 3372 and SOCI 3307 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4341. The Power of Brands.**

This course explores how companies use their brands to create awareness, shift perceptions, gain market share and connect emotionally to consumers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4342. Strategic Professionalism.**

This course provides students with the knowledge and skills necessary to present themselves and their creative ideas in a professional and strategic way. This course provides students skills for creative and strategic presentations, business etiquette, business communications/writing, job search skills/tactics and professional self-promotion with the Strategic Communications industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4343. Immersive Storytelling.**

This course examines storytelling opportunities brought on by immersive technology (virtual, augmented and mixed reality). Providing hands-on experience with 360 video cameras, virtual reality headsets, smartphones and other applications, students explore new ways for the media to communicate with audiences and consumers. Prerequisite: MC 4381 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4345. Drone Storytelling.**

This course explores storytelling opportunities using drones – both traditional photography and videography from the air and innovative methods like photogrammetry, or the use of 3D modeling technology. Prerequisite: MC 4381 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4346. Artificial Intelligence and Automation for Media Professionals.**

This course focuses on new storytelling opportunities brought on by advances in artificial intelligence in the digital media industry. From generative AI to virtual assistants, students will learn machine-learning techniques and gain hands-on experience building automated experiences. Prerequisite: MC 4381 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4347. Social Media Video.**

This course provides students an opportunity to produce short-form and long-form video storytelling for social media. Students learn how to develop a brand's video marketing strategy across multiple social media platforms. Prerequisite: MC 4381 with a letter grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4348. Visual Production Capstone.**

This course exposes students to immersive and in-depth visual storytelling, including photography and video techniques. Students create long-form, documentary-style visual content in the field and in a studio and will learn emerging techniques in visual storytelling. Prerequisite: [MC 3306 or MC 3321] and [MC 3311 or MC 4323 or MC 4324] both with a letter grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4356A. Science Writing and Reporting.**

Students learn to interpret complex concepts and present accurate, engaging news and feature stories about the latest research. Prerequisite: MC 1313 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 4356B. Editorials, Columns, and Reviews.**

The study and writing of newspaper, magazine and online editorials, columns, and books, film and music reviews. Prerequisite: MC 1313 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MC 4356C. Community Affairs.**

A lecture-discussion course, dealing with the coverage of local economy and business, government and social services functions as well as political activities like elections and lobbying efforts. Prerequisite: MC 1313 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MC 4356F. Feature Writing.**

A course designed to expose students to the art of feature writing through the study of acclaimed works of literary journalism. Students will develop a narrative voice of their own while studying and analyzing the techniques of a diverse group of writers. (WI) Prerequisite: MC 1313 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MC 4357. Sports as News.**

In this course students report, write and produce content for both print and electronic media. Students interview players, coaches and administrators of collegiate athletics and work with media professionals to better understand challenges and demands of contemporary sports coverage. Prerequisites: MC 1313 or MC 3313 either with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4376C. Public Relations Case Studies.**

Public Relations Case Studies will seek, with case studies and problems, to help future practitioners develop agility in the principles and the application of effective two-way communications in a wide variety of situations likely to confront them and their employers. Prerequisite: MC 3343 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 4376D. Public Relations Writing & Design.**

Students will gain a broad understanding of the wide range of print publications and writing assignments found in public relations. They will learn how to research, organize, write and design a variety of print pieces for targeted audiences using a popular design and layout program. (WI) Prerequisites: MC 3313 and MC 3343 both with grades of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MC 4376F. International Strategic Communication.**

This course will explore advertising and public relations practices in foreign countries through readings, discussion and site visits within media organizations in foreign countries. Marketing practices abroad will be compared to those in the United States. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**MC 4376G. Media Relations.**

This course is an introduction to the role that media relations play in strategic communication. It explores the strategies and tools used by public relations professionals to form beneficial relationships with the media. Topics include analyzing the media landscape, creating media lists, analyzing news opportunities, handling media interviews and live news events, developing media training, producing strategic media plans, employing new media strategies, and evaluating media relations efforts. Prerequisite: [MC 3313 or MC 1313] with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 4377. Crisis Communication for Strategic Communication.**

This course examines strategic communication practices throughout the three stages of a crisis event. Special emphasis is placed on crisis planning, media relationships, image restoration, ethical responses, and organizational learning. Prerequisite: MC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4381. Fundamentals of Digital and Online Media.**

Students will be introduced to topics related to digital/online media and mass communication. Course covers the effects of the Internet and related technologies on the fields of journalism, interactive advertising and public relations, search engines, personal branding, social networking and mobile platforms.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MC 4382L. Feature Writing and Freelancing.**

This course is designed to introduce students to the technical expertise, research methods, interviewing skills and narrative techniques pertinent to feature writing. The course also explores how to target a feature story to a specific audience and how to submit feature stories for publication to newspapers and magazines. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MC 4382O. Travel Journalism.**

Exploration of techniques of writing journalistic travel narratives for the media. The course may involve travel at the student's own expense.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter



**MC 4382Q. Media in Asia and Southeast Asia.**  
This course will study media systems in Asia and Southeast Asia and examine the different socioeconomic contexts and patterns of information flow. (MULT).  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics  
**Grade Mode:** Standard Letter

**MC 4382Y. Mobile Storytelling in the Outdoors.**  
This course explores mobile tools and skills relevant to the digital age, particularly the usage of smart phones in storytelling. Students will use those skills to produce video and social content in the outdoors.  
**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

**MC 4386. Journalism Project.**  
This is a senior portfolio course integrating a variety of journalism skills to produce a substantial work ready for publication online and in print. (WI) Prerequisites: MC 3321 and MC 3383 and [MC 4323 or MC 4324] all with grades of "C" or better.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Lab Required|Writing Intensive  
**Grade Mode:** Standard Letter

**MC 4387. Storytelling and the Border.**  
In this course students will be introduced to long-form nonfiction writing. Students will concentrate on multimedia reporting while focusing their reporting on the relationship between Central Texas and the U.S.-Mexico border. Students will provide coverage and analysis of news and trends. (WI) Prerequisite: MC 1313 and [MC 4323 or MC 4324] both with grades of "C" or better.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Writing Intensive  
**Grade Mode:** Standard Letter

**MC 4388. Advanced Photojournalism.**  
This course builds upon the skills acquired in MC 4312-Photojournalism. Students develop their photojournalism skills by using advanced photojournalism techniques to produce projects, such as those that profile a segment of an area population and others. Prerequisite: MC 4312 with a letter grade of "C" or better.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**Minimum required: 120 semester credit hours**  
**Admission Requirements**

1. Any student admitted to Texas State University with an overall GPA of at least a 2.25 and a "C" or higher in MC 1301 (<http://mycatalog.txstate.edu/search/?P=MC%201301>) will automatically be admitted to their selected major in the School of Journalism

and Mass Communication. If a student does not meet these requirements upon admission, they will be temporarily classified as a pre-major in the School of Journalism and Mass Communication. As soon as the student meets any missing requirements, they will be admitted to their selected major in the School of Journalism and Mass Communication.

**General Requirements**

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. All students seeking B.S. or B.A. degrees within the School of Journalism and Mass Communication must complete ENG 1310, ENG 1320 and COMM 1310 or their equivalent courses to meet degree requirements. Most students will meet these requirements through their general education core curriculum.
3. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses and a minor.
4. For transfer students, 12 semester credit hours (1 additional hour may also be acceptable at Texas State) may be transferred from a Texas public institution of higher education for the Communication Field of Study Sub-Areas of Advertising/Public Relations, Journalism/ Mass Communication and Radio & Television Broadcasting/ Broadcast Journalism and be applied to the Bachelor of Arts degree with a major in Mass Communication at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
<b>Competency Area 1 choose 3 hours from the following:</b>		<b>3</b>
MC 1301	Introduction to Mass Communication	3
TCCN: COMM 1307		
<b>Competency Area 2 Choose 3 hours from the following:</b>		<b>3</b>
MC 1313	Media Writing	3
TCCN: COMM 2311		
<b>Competency Area 3 Choose 3 hours from the following:</b>		<b>3</b>
MC ELNA		
TCCN: COMM 1316		
MC ELNA		
TCCN: COMM 1336		
MC ELNA		
TCCN: COMM 2303		
MC ELNA		
TCCN: COMM 2315		
MC ELNA		
TCCN: COMM 2324		
MC ELNA		
TCCN: COMM 2332		

<b>Competency Area 4 Choose 3 hours from the following:</b>	<b>3</b>
MC ELNA TCCN: COMM 1335	
MC ELNA TCCN: COMM 2300	
MC ELNA TCCN: COMM 2302	
<b>Total Hours</b>	<b>18</b>

5. All students in this degree program must earn a "C" or higher in each of three core courses in Mass Communication, which include:

Code	Title	Hours
MC 1301	Introduction to Mass Communication	3
MC 4301	Media Law and Ethics	3
MC 4381	Fundamentals of Digital and Online Media	3

6. All students in this degree program must earn a "C" or higher in all prerequisite courses and MC 4335.
7. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
8. The minimum number of hours required for this degree program is 120.

Freshman			
First Semester Hours		Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
MC 1301 (TCCN COMM 1307)	3	Life and Physical Sciences Component Code 030	3
Mathematics Component Code 020	3	MC 4381	3
Social and Behavioral Sciences Component Code 080	3	COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
US 1100, MC 3117, or MC 3118 <sup>1</sup>	1		
<b>16</b>		<b>15</b>	

Sophomore			
First Semester Hours		Second Semester Hours	
MC 1313 (TCCN COMM 2311)	3	MC 3355	3
MC 3343	3	Modern Language 1420	4
Modern Language 1410	4	PHIL 1305 or 1320 (Language, Philosophy and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
Life and Physical Sciences Component Code 030	3	ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3

American History Component Code 060	3	American History Component Code 060	3
16		16	
Junior			
First Semester Hours		Second Semester Hours	
MC 3360	3	MC 3319	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3	Modern Language 2320	3
BA ENG Literature [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3	Minor	6
Modern Language 2310	3	SOCI 3307	3
12		15	
Senior			
First Semester Hours		Second Semester Hours	
MC 3383	3	MC 4305	3
MC 4301	3	MC 4342	3
MC 3390	3	MC 4335	3
Minor	6	Minor	6
15		15	

**Total Hours: 120**

<sup>1</sup> Students not subject to US 1100 per university policy will take MC 3117 or MC 3118.

## Minimum required: 120 semester credit hours

### Admission Requirements

- Any student admitted to Texas State University with an overall GPA of at least a 2.25 and a "C" or higher in MC 1301 will automatically be admitted to their selected major in the School of Journalism and Mass Communication. If a student does not meet these requirements upon admission, they will be temporarily classified as a pre-major in the School of Journalism and Mass Communication. As soon as the student meets any missing requirements, they will be admitted to their selected major in the School of Journalism and Mass Communication.

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- All students seeking B.S. or B.A. degrees within the School of Journalism and Mass Communication must complete ENG 1310, ENG 1320 and COMM 1310 or their equivalent courses to meet degree requirements. Most students will meet these requirements through their general education core curriculum.
- In addition to the general education core curriculum, this major requires three hours of English literature, three hours of math/science/computer science courses and a minor.

4. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
5. For transfer students, 12 semester credit hours (7 additional hour may also be acceptable at Texas State) may be transferred from a Texas public institution of higher education for the Communication Field of Study Sub-Area Advertising/Public Relations and be applied to the Bachelor of Science degree with a major in Advertising at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. In some cases there are no direct equivalents for FOS courses, so the student would receive elective credit as indicated below with MC ELNA.

Code	Title	Hours
<b>Competency Area 1 choose 9 hours from the following:</b>		<b>9</b>
MC 1301	Introduction to Mass Communication	
TCCN: COMM 1307		
MC 3343	Introduction to Public Relations	
TCCN: COMM 2330		
MC 3367	Advertising	
TCCN: COMM 2327		
MC ELNA		
TCCN: COMM 2300		
MC ELNA		
TCCN: COMM 2301		
<b>Competency Area 2 choose 3 hours from the following:</b>		<b>3</b>
MC 1313	Media Writing	
TCCN: COMM 2311		
MC 3306	Writing for the Electronic Media	
TCCN: COMM 2339		
MC 3311	Video Production	
TCCN: COMM 1336		
MC 3321	News Writing and Reporting I	
TCCN: COMM 2315		
MC 3383	Editing and Managing Content	
TCCN: COMM 2305		
MC 4312	Photojournalism	
TCCN: COMM 1318		
MC ELNA		
TCCN: COMM 1319		
MC ELNA		
TCCN: COMM 1337		
MC ELNA		
TCCN: COMM 2328		
MC ELNA		
TCCN: COMM 2329		
MC ELNA		
TCCN: COMM 2332		
<b>Total Hours</b>		<b>12</b>

6. All students in this degree program must earn a "C" or higher in each of three core courses in Mass Communication, which include:

Code	Title	Hours
MC 1301	Introduction to Mass Communication	3
MC 4301	Media Law and Ethics	3
MC 4381	Fundamentals of Digital and Online Media	3

7. All students in this degree program must earn a "C" or higher in all prerequisite courses and in the following major courses:

Code	Title	Hours
MC 3367	Advertising	3
MC 3372	Advertising Media Planning	3
MC 4333	Creative Thinking & Advertising Concepting	3
MC 4317	Advertising Strategic Planning	3
MC 4307	Advertising Campaigns	3
or MC 4306 Advertising Competition		
Select one of the following:		
MC 4338	Advanced Advertising Copy and Layout	
MC 4339	Advanced Strategic Planning	
MC 4340	Media Analytics and Strategy	

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	MC 4381	3
Mathematics Component Code 020	3	ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component 050 [TCCN HUMA 1315])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
MC 1301 (TCCN COMM 1307)	3	Social and Behavioral Sciences Component Code 080	3
US 1100	1		
16		15	
Sophomore			
First Semester Hours		Second Semester Hours	
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3	MC 4317	3
MC 3367	3	ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
Life and Physical Sciences Component Code 030	3	Life and Physical Sciences Component Code 030	3

SOCI 3307	3 American History Component Code 060	3
American History Component Code 060	3 MC Elective	3
<b>15</b>		<b>15</b>

**Junior**

First Semester Hours	Second Semester Hours	
Computer Science, Logic, Mathematics or Science <sup>1</sup>	3 MC 4338, 4339, or 4340	3
ENG Literature [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3 MC Elective	3
MC 4333	3 MC Advanced Elective	3
MC 3372	3 Minor	6
Minor	3	
<b>15</b>		<b>15</b>

**Senior**

First Semester Hours	Second Semester Hours	
MC 4307 or 4306	3 MC 4301	3
MC Advanced Elective	3 Minor	3
Minor	6 Free Electives	7
Free Electives	3 Media Performance	1
<b>15</b>		<b>14</b>

**Total Hours: 120**

Code	Title	Hours
<b>Media Performance</b>		
Choose 1 course from the following:		
MC 2111	Media Practicum	
MC 3100	Grammar for Media Professionals	
MC 3111	Drone Bootcamp	
MC 3112	Social Media Analytics Platforms	
MC 3113	3D Drone Modeling	
MC 3114	Career Exploration: Destination America	
MC 3115	Digital Media Tools and Skills	
MC 3116	Digital Media Innovation Concepts	
MC 3117	Freelancing for Media Professionals	
MC 3118	Careers in Media	
MC 3119	Fundamentals of Layout and Design	
MC 3120	Editing and Enhancing Digital Imagery	
MC 3121	TV News Production	
MC 3122	Search Engine Optimization Fundamentals	
MC 4130	Internship	

<sup>1</sup> Any mathematics course from the general education core curriculum Mathematics Component may be chosen except MATH 1316.

**Minimum required: 120  
semester credit hours**

## Admission Requirements

- Any student admitted to Texas State University with an overall GPA of at least a 2.25 and a "C" or higher in MC 1301 will automatically

be admitted to their selected major in the School of Journalism and Mass Communication. If a student does not meet these requirements upon admission, they will be temporarily classified as a pre-major in the School of Journalism and Mass Communication. As soon as the student meets any missing requirements, they will be admitted to their selected major in the School of Journalism and Mass Communication.

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- All students seeking B.S. or B.A. degrees within the School of Journalism and Mass Communication must complete ENG 1310, ENG 1320 and COMM 1310 or their equivalent courses to meet degree requirements. Most students will meet these requirements through their general education core curriculum.
- In addition to the general education core curriculum, this major requires three hours of English literature, three hours of math/science/computer science courses and a minor.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- For transfer students, 12 semester credit hours (7 additional hour may also be acceptable at Texas State) may be transferred from a Texas public institution of higher education for the Communication Field of Study Sub-Area Advertising/Public Relations and be applied to the Bachelor of Science degree with a major in Advertising at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
<b>Competency Area 1 choose 9 hours from the following:</b>		<b>9</b>
MC 1301	Introduction to Mass Communication	
TCCN: COMM 1307		
MC 3343	Introduction to Public Relations	
TCCN: COMM 2330		
MC 3367	Advertising	
TCCN: COMM 2327		
MC ELNA		
TCCN: COMM 2300		
MC ELNA		
TCCN: COMM 2301		
<b>Competency Area 2 choose 3 hours from the following:</b>		<b>3</b>
MC 1313	Media Writing	
TCCN: COMM 2311		
MC 3306	Writing for the Electronic Media	
TCCN: COMM 2339		
MC 3311	Video Production	
TCCN: COMM 1336		

MC 3321	News Writing and Reporting I
TCCN: COMM 2315	
MC 3383	Editing and Managing Content
TCCN: COMM 2305	
MC 4312	Photojournalism
TCCN: COMM 1318	
MC ELNA	
TCCN: COMM 1319	
MC ELNA	
TCCN: COMM 1337	
MC ELNA	
TCCN: COMM 2328	
MC ELNA	
TCCN: COMM 2329	
MC ELNA	
TCCN: COMM 2332	
Total Hours	

12

6. All students in this degree program must earn a "C" or higher in each of three core courses in Mass Communication, which include:

Code	Title	Hours
MC 1301	Introduction to Mass Communication	3
MC 4301	Media Law and Ethics	3
MC 4381	Fundamentals of Digital and Online Media	3

7. All students in this degree program must earn a "C" or higher in all prerequisite courses and in the following major courses:

Code	Title	Hours
MC 3367	Advertising	3
MC 4317	Advertising Strategic Planning	3
MC 4333	Creative Thinking & Advertising Concepting	3
MC 3372	Advertising Media Planning	3
MC 4307	Advertising Campaigns	3
or MC 4306	Advertising Competition	
Choose 1 course from the following:		
MC 4338	Advanced Advertising Copy and Layout	
MC 4339	Advanced Strategic Planning	
MC 4340	Media Analytics and Strategy	

MC 1301	3
MC 4381	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050)	3
Social and Behavioral Sciences Component Code 080	3

31

Sophomore	Hours
ENG Literature (Component Area Option Code 090/094)	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040)	3
MC 3367	3
MC 4317	3
Life and Physical Sciences Component Code 030	6
MC 4329	3
SOCI 3307	3
American History Component Code 060	6

30

Junior	Hours
Computer Science, Logic, Mathematics or science <sup>1</sup>	3
ENG Literature	3
MC 4333	3
MC 3372	3
MC 4338, 4339, or 4340	3
Minor	9
Select six hours from the following:	6
MC 4330	
MC 4331	
MC 4336I	
MC 4357	

30

Senior	Hours
MC 4307 or 4306	3
MC Elective	3
MC 4301	3
Choose 1 of the following:	1
MC 2111	
MC 3100	
MC 3111	
MC 3112	
MC 3113	
MC 3114	
MC 3115	
MC 3116	
MC 3117	
MC 3118	
MC 3119	

Course Requirements

Freshman	Hours
COMM 1310 (Component Area Option Code 090/091)	3
ENG 1310 (Communication Component Code 010)	3
ENG 1320 (Communication Component Code 010)	3
Mathematics Component Code 020 <sup>1</sup>	3
US 1100	1
POSI 2310 (Government/Political Science Component Code 070)	3
POSI 2320 (Government/Political Science Component Code 070)	3



MC 3120	
MC 3121	
MC 3122	
MC 4130	
Minor	9
Free Electives	10
	29
Total Hours: 120	

<sup>1</sup> Any mathematics course from the general education core curriculum Mathematics Component may be chosen except MATH 1316.

Minimum required: 120 semester credit hours

Admission Requirements

1. Any student admitted to Texas State University with an overall GPA of at least a 2.25 and a “C” or higher in MC 1301 will automatically be admitted to their selected major in the School of Journalism and Mass Communication. If a student does not meet these requirements upon admission, they will be temporarily classified as a pre-major in the School of Journalism and Mass Communication. As soon as the student meets any missing requirements, they will be admitted to their selected major in the School of Journalism and Mass Communication.

General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. All students seeking B.S. or B.A. degrees within the School of Journalism and Mass Communication must complete ENG 1310, ENG 1320 and COMM 1310 or their equivalent courses to meet degree requirements. Most students will meet these requirements through their general education core curriculum.
3. In addition to the general education core curriculum, this major requires three hours of English literature, three hours of math/science/computer science courses and a minor.
4. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
5. All students in this degree program must earn a "C" or higher in each of the core courses in Mass Communication and the following major courses:

Code	Title	Hours
MC 1301	Introduction to Mass Communication	3
MC 1313	Media Writing	3
or MC 3313	Foundations of Public Relations Writing	
MC 4301	Media Law and Ethics	3
MC 4315	Web Design Publishing	3
MC 4326	Advanced Social Media and Analytics	3

MC 4381	Fundamentals of Digital and Online Media	3
MC 4328	Digital Media Innovation Capstone	3

Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	MC 4381	3
Mathematics Component Code 020 <sup>1</sup>	3	ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
MC 1301 (TCCN COMM 1307)	3	Social and Behavioral Sciences Component Code 080	3
US 1100	1		
	16		15

		Sophomore	
		First Semester Hours	Second Semester Hours
MC 1313 or 3313 (TCCN COMM 2311)	3	MC 4315	3
Life and Physical Sciences Component Code 030	3	ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3	American History Component Code 060	3
MC Elective	3	Life and Physical Sciences Component Code 030	3
American History Component Code 060	3	SOCI 3307	3
	15		15

		Junior	
		First Semester Hours	Second Semester Hours
MC 4326	3	Computer Science, Logic, Mathematics or Science <sup>1</sup>	3
MC Elective	3	Minor	6
ENG Literature	3	Digital Media Innovation Electives	6
Free Elective	3		
Minor	3		
	15		15

First Semester Hours		Second Semester Hours		Senior
MC 4328	3	MC 4301	3	
MC Advanced Elective	3	MC Advanced Elective	3	
Minor	6	Electives	7	
Media Performance	1	Minor	3	
13		16		

Total Hours: 120

Code	Title	Hours
<b>Digital Media Innovation Electives</b>		
Select 6 hours from the following:		
MC 3111	Drone Bootcamp	1
MC 3112	Social Media Analytics Platforms	1
MC 3113	3D Drone Modeling	1
MC 3115	Digital Media Tools and Skills	1
MC 3116	Digital Media Innovation Concepts	1
MC 3119	Fundamentals of Layout and Design	1
MC 3120	Editing and Enhancing Digital Imagery	1
MC 3122	Search Engine Optimization Fundamentals	1
MC 3390	Media Design	3
MC 4323	Multimedia Journalism	3
MC 4324	Visual Storytelling	3
MC 4325	Coding and Data Skills for Communicators	3
MC 4327	Mobile Media and Development	3
MC 4336B	Documentaries	3
MC 4336H	Web Content Strategy for Organizations	3
MC 4337	Data Journalism	3
MC 4343	Immersive Storytelling	3
MC 4345	Drone Storytelling	3
MC 4346	Artificial Intelligence and Automation for Media Professionals	3
MC 4382Y	Mobile Storytelling in the Outdoors	3

Code	Title	Hours
<b>Media Performance</b>		
Select 1 of the following:		
MC 2111	Media Practicum	1
MC 3100	Grammar for Media Professionals	1
MC 3111	Drone Bootcamp	1
MC 3112	Social Media Analytics Platforms	1
MC 3113	3D Drone Modeling	1
MC 3114	Career Exploration: Destination America	1
MC 3115	Digital Media Tools and Skills	1
MC 3116	Digital Media Innovation Concepts	1
MC 3117	Freelancing for Media Professionals	1
MC 3118	Careers in Media	1
MC 3119	Fundamentals of Layout and Design	1
MC 3120	Editing and Enhancing Digital Imagery	1
MC 3121	TV News Production	1
MC 3122	Search Engine Optimization Fundamentals	1
MC 4130	Internship	1

<sup>1</sup> Any mathematics course from the general education core curriculum Mathematics Component may be chosen except MATH 1316 .

## Minimum required: 120 semester credit hours

### Admission Requirements

- Any student admitted to Texas State University with an overall GPA of at least a 2.25 and a "C" or higher in MC 1301 will automatically be admitted to their selected major in the School of Journalism and Mass Communication. If a student does not meet these requirements upon admission, they will be temporarily classified as a pre-major in the School of Journalism and Mass Communication. As soon as the student meets any missing requirements, they will be admitted to their selected major in the School of Journalism and Mass Communication.

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- All students seeking B.S. or B.A. degrees within the School of Journalism and Mass Communication must complete ENG 1310, ENG 1320 and COMM 1310 or their equivalent courses to meet degree requirements. Most students will meet these requirements through their general education core curriculum.
- In addition to the general education core curriculum, this major requires three hours of English literature, three hours of math/science/computer science courses and a minor.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- All students in this degree program must earn a "C" or higher in each core courses in Mass Communication and the following major courses:

Code	Title	Hours
MC 1301	Introduction to Mass Communication	3
MC 1313	Media Writing	3
or MC 3313	Foundations of Public Relations Writing	
MC 4301	Media Law and Ethics	3
MC 4315	Web Design Publishing	3
MC 4326	Advanced Social Media and Analytics	3
MC 4381	Fundamentals of Digital and Online Media	3
MC 4328	Digital Media Innovation Capstone	3

### Course Requirements

Freshman	Hours
COMM 1310 (Component Area Option Code 090/091)	3
ENG 1310 (Communication Component Code 010)	3

ENG 1320 (Communication Component Code 010)	3
Mathematics Component Code 020 <sup>1</sup>	3
US 1100	1
POSI 2310 (Government/Political Science Component Code 070)	3
POSI 2320 (Government/Political Science Component Code 070)	3
MC 1301	3
MC 4381	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050)	3
Social and Behavioral Sciences Component Code 080	3

**31**

<b>Sophomore</b>	<b>Hours</b>
ENG Literature (Component Area Option Code 090/094)	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040)	3
MC 1313 or 3313	3
Life and Physical Sciences Component Code 030	6
MC 4315	3
MC 4329	3
American History Component Code 060	6
SOCI 3307	3

**30**

<b>Junior</b>	<b>Hours</b>
ENG Literature	3
MC 4326	3
Computer Science, Logic, Mathematics or science <sup>1</sup>	3
Select 6 hours from the following:	6

MC 3111

MC 3112

MC 3113

MC 3115

MC 3116

MC 3119

MC 3120

MC 3122

MC 3390

MC 4323

MC 4324

MC 4325

MC 4327

MC 4336B

MC 4336H

MC 4336I

MC 4343

MC 4345

MC 4346

MC 4337

MC 4343

MC 4382Y

Minor 9

Select six hours from the following: 6

MC 4330

MC 4331

MC 4357

**30****Senior** **Hours**

MC 4328 3

MC 4301 3

MC Elective 3

Select one of the following: 1

MC 2111

MC 3100

MC 3111

MC 3112

MC 3113

MC 3114

MC 3115

MC 3116

MC 3117

MC 3118

MC 3119

MC 3120

MC 3121

MC 3122

MC 4130

Minor 9

Free Electives 10

**29****Total Hours: 120**

<sup>1</sup> Any mathematics course from the general education core curriculum Mathematics Component may be chosen except MATH 1316.

**Minimum required: 120  
semester credit hours**

## Admission Requirements

- Any student admitted to Texas State University with an overall GPA of at least a 2.25 and a "C" or higher in MC 1301 will automatically be admitted to their selected major in the School of Journalism and Mass Communication. If a student does not meet these requirements upon admission, they will be temporarily classified as a pre-major in the School of Journalism and Mass Communication. As soon as the student meets any missing requirements, they will

be admitted to their selected major in the School of Journalism and Mass Communication.

## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. All students seeking B.S. or B.A. degrees within the School of Journalism and Mass Communication must complete ENG 1310, ENG 1320 and COMM 1310 or their equivalent courses to meet degree requirements. Most students will meet these requirements through their general education core curriculum.
3. In addition to the general education core curriculum, this major requires three hours of English literature, three hours of math/science/computer science courses and a minor.
4. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
5. For transfer students, 12 semester credit hours (7 additional hour may also be acceptable at Texas State) may be transferred from a Texas public institution of higher education for the Communication Field of Study Sub-Area Radio & Television Broadcasting/Broadcast Journalism and be applied to the Bachelor of Science degree with a major in Electronic Media at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
<b>Competency Area 1 choose 3 hours from the following:</b>		<b>3</b>
MC 1301	Introduction to Mass Communication	
TCCN: COMM 1307		
MC ELNA		
TCCN: COMM 1335		
<b>Competency Area 2 choose 3 hours from the following:</b>		<b>3</b>
MC 1313	Media Writing	
TCCN: COMM 2311		
MC ELNA		
TCCN: COMM 2339		
<b>Competency Area 3 choose 3 hours from the following:</b>		<b>3</b>
MC 3311	Video Production	
TCCN: COMM 1336		
<b>Competency Area 4 choose 3 hours from the following:</b>		<b>3</b>
MC ELNA		
TCCN: COMM 2303		
<b>Total Hours</b>		<b>12</b>

6. All students in this degree program must earn a "C" or higher in each of three core courses in Mass Communication, which include:

Code	Title	Hours
MC 1301	Introduction to Mass Communication	3
MC 4301	Media Law and Ethics	3
MC 4381	Fundamentals of Digital and Online Media	3

7. All students in this degree program must earn a "C" or higher in all prerequisite courses and in the following major courses:

Code	Title	Hours
MC 1313	Media Writing	3
MC 3306	Writing for the Electronic Media	3
or MC 3321	News Writing and Reporting I	
MC 3311	Video Production	3
or MC 4323	Multimedia Journalism	
or MC 4324	Visual Storytelling	
MC 3312	Television News	3
or MC 4348	Visual Production Capstone	
or MC 4386	Journalism Project	
or MC 4387	Storytelling and the Border	

## Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	MC 4381	3
Mathematics Component Code 020	3	ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
MC 1301 (TCCN COMM 1307)	3	Social and Behavioral Sciences Component Code 080	3
US 1100	1		
		<b>16</b>	<b>15</b>

		Sophomore	
		First Semester Hours	Second Semester Hours
MC 1313 (TCCN COMM 2311)	3	ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
Life and Physical Sciences Component Code 030	3	American History Component Code 060	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3	Life and Physical Sciences Component Code 030	3

American History Component Code 060	3 SOCI 3307	3
MC 4323	3 MC 3311 or 4324	3
MC Elective	3	
	<b>18</b>	<b>15</b>

**Junior**

First Semester Hours	Second Semester Hours	
MC 3306 or 3321	3 Computer Science, Logic, Mathematics or Science <sup>1</sup>	3
ENG literature [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3 MC 3394	3
MC Elective	3 MC Advanced Elective	3
Elective	3 Minor	6
Minor	3	
	<b>15</b>	<b>15</b>

**Senior**

First Semester Hours	Second Semester Hours	
MC 3312, 4348, 4386, or 4387	3 Select 1 of the following:	3
MC 4301	3 MC 3307	
Minor	6 MC 3375	
Media Performance	1 MC 4315	
	MC 4336I	
	MC 4343	3
	MC 4345	
	MC 4346	3
	MC 4357	
	MC Advanced Elective	3
	Electives	7
	Minor	3
	<b>13</b>	<b>22</b>

**Total Hours: 129**

Code	Title	Hours
<b>Media Performance</b>		
Select 1 of the following:		
MC 2111	Media Practicum	
MC 3100	Grammar for Media Professionals	
MC 3111	Drone Bootcamp	
MC 3112	Social Media Analytics Platforms	
MC 3113	3D Drone Modeling	
MC 3114	Career Exploration: Destination America	
MC 3115	Digital Media Tools and Skills	
MC 3116	Digital Media Innovation Concepts	
MC 3117	Freelancing for Media Professionals	
MC 3118	Careers in Media	
MC 3119	Fundamentals of Layout and Design	
MC 3120	Editing and Enhancing Digital Imagery	
MC 3121	TV News Production	
MC 3122	Search Engine Optimization Fundamentals	
MC 4130	Internship	

<sup>1</sup> Any mathematics course from the general education core curriculum Mathematics Component may be chosen except MATH 1316 .

## Minimum required: 120 semester credit hours

### Admission Requirements

- Any student admitted to Texas State University with an overall GPA of at least a 2.25 and a "C" or higher in MC 1301 will automatically be admitted to their selected major in the School of Journalism and Mass Communication. If a student does not meet these requirements upon admission, they will be temporarily classified as a pre-major in the School of Journalism and Mass Communication. As soon as the student meets any missing requirements, they will be admitted to their selected major in the School of Journalism and Mass Communication.

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- All students seeking B.S. or B.A. degrees within the School of Journalism and Mass Communication must complete ENG 1310, ENG 1320 and COMM 1310 or their equivalent courses to meet degree requirements. Most students will meet these requirements through their general education core curriculum.
- In addition to the general education core curriculum, this major requires three hours of English literature, three hours of math/science/computer science courses and a minor.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- For transfer students, 12 semester credit hours (7 additional hour may also be acceptable at Texas State) may be transferred from a Texas public institution of higher education for the Communication Field of Study Sub-Area Radio & Television Broadcasting/Broadcast Journalism and be applied to the Bachelor of Science degree with a major in Electronic Media at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
<b>Competency Area 1 choose 3 hours from the following:</b>		<b>3</b>
MC 1301	Introduction to Mass Communication	
TCCN: COMM 1307		
MC ELNA		
TCCN: COMM 1335		
<b>Competency Area 2 choose 3 hours from the following:</b>		<b>3</b>
MC 1313	Media Writing	



TCCN: COMM 2311	
MC ELNA	
TCCN: COMM 2339	
<b>Competency Area 3 choose 3 hours from the following:</b>	<b>3</b>
MC 3311 Video Production	
TCCN: COMM 1336	
<b>Competency Area 4 choose 3 hours from the following:</b>	<b>3</b>
MC ELNA	
TCCN: COMM 2303	
<b>Total Hours</b>	<b>12</b>

6. All students in this degree program must earn a "C" or higher in each of three core courses in Mass Communication, which include:

Code	Title	Hours
MC 1301	Introduction to Mass Communication	3
MC 4301	Media Law and Ethics	3
MC 4381	Fundamentals of Digital and Online Media	3

7. All students in this degree program must earn a "C" or higher in all prerequisite courses and in the following major courses:

Code	Title	Hours
MC 1313	Media Writing	3
MC 3306	Writing for the Electronic Media	3
or MC 3321	News Writing and Reporting I	
MC 3311	Video Production	3
or MC 4324	Visual Storytelling	
or MC 4324	Visual Storytelling	
MC 3312	Television News	3
or MC 4348	Visual Production Capstone	
or MC 4386	Journalism Project	
or MC 4387	Storytelling and the Border	

Social and Behavioral Sciences	3
Component Code 080	

<b>Sophomore</b>	<b>31</b>
<b>Hours</b>	
ENG Literature (Component Area Option Code 090/094)	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040)	3
MC 1313	3
MC 3311, 4324, or 4323	3
Life and Physical Sciences	6
Component Code 030	
MC 4329	3
SOCI 3307	3
American History Component Code 060	6

<b>Junior</b>	<b>30</b>
<b>Hours</b>	
ENG Literature	3
Computer Science, Logic, Mathematics or science <sup>1</sup>	3
MC 3306 or 3321	3
MC 3394	3
Minor	9
Select six hours from the following:	6
MC 4330	
MC 4331	
MC 4336I	
MC 4357	

<b>Senior</b>	<b>27</b>
<b>Hours</b>	
MC 3312, 4348, 4386, or 4387	3
MC 4301	3
Select one of the following:	3
MC 3307	
MC 3375	
MC 4315	
MC 4336I	
MC 4343	
MC 4345	
MC 4346	
MC 4357	
MC Elective	3

Select one of the following:	1
MC 2111	
MC 3100	
MC 3111	
MC 3112	
MC 3113	
MC 3114	
MC 3115	
MC 3116	

## Course Requirements

<b>Freshman</b>	<b>Hours</b>
COMM 1310 (Component Area Option Code 090/091)	3
ENG 1310 (Communication Component Code 010)	3
ENG 1320 (Communication Component Code 010)	3
Mathematics Component Code 020 <sup>1</sup>	3
US 1100	1
POSI 2310 (Government/Political Science Component Code 070)	3
POSI 2320 (Government/Political Science Component Code 070)	3
MC 1301	3
MC 4381	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050)	3

MC 3117	
MC 3118	
MC 3119	
MC 3120	
MC 3121	
MC 3122	
MC 4130	
Minor	9
Electives	10
	<b>32</b>
<b>Total Hours: 120</b>	

<sup>1</sup> Any mathematics course from the general education core curriculum Mathematics Component may be chosen except MATH 1316.

## Minimum required: 120 semester credit hours

### Admission Requirements

- Any student admitted to Texas State University with an overall GPA of at least a 2.25 and a "C" or higher in MC 1301 will automatically be admitted to their selected major in the School of Journalism and Mass Communication. If a student does not meet these requirements upon admission, they will be temporarily classified as a pre-major in the School of Journalism and Mass Communication. As soon as the student meets any missing requirements, they will be admitted to their selected major in the School of Journalism and Mass Communication.

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- All students seeking B.S. or B.A. degrees within the School of Journalism and Mass Communication must complete ENG 1310, ENG 1320 and COMM 1310 or their equivalent courses to meet degree requirements. Most students will meet these requirements through their general education core curriculum.
- In addition to the general education core curriculum, this major requires three hours of English literature, three hours of math/science/computer science courses and a minor.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- For transfer students, 12 semester credit hours (7 additional hour may also be acceptable at Texas State) may be transferred from a Texas public institution of higher education for the Communication Field of Study Sub-Area Journalism/Mass Communication and be applied to the Bachelor of Science degree with a major in Journalism at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas

Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
<b>Competency Area 1 choose 3 hours from the following:</b>		<b>3</b>
MC 1301	Introduction to Mass Communication	
TCCN: COMM 1307		
<b>Competency Area 2 choose 3 hours from the following:</b>		<b>3</b>
MC 1313	Media Writing	
TCCN: COMM 2311		
<b>Competency Area 3 choose 3 hours from the following:</b>		<b>3</b>
MC ELNA		
TCCN: COMM 1316		
MC ELNA		
TCCN: COMM 1336		
MC ELNA		
TCCN: COMM 2303		
MC ELNA		
TCCN: COMM 2315		
MC ELNA		
TCCN: COMM 2324		
MC ELNA		
TCCN: COMM 2332		
<b>Competency Area 4 choose 3 hours from the following:</b>		<b>3</b>
MC ELNA		
TCCN: COMM 1335		
MC ELNA		
TCCN: COMM 2300		
MC ELNA		
TCCN: COMM 2302		
<b>Total Hours</b>		<b>12</b>

- All students in this degree program must earn a "C" or better in each of three core courses in Mass Communication, which include:

Code	Title	Hours
MC 1301	Introduction to Mass Communication	3
MC 4301	Media Law and Ethics	3
MC 4381	Fundamentals of Digital and Online Media	3

- All students in this degree program must earn a "C" or better in all prerequisite courses, MC 4337 and in MC 3312 or MC 4348 or MC 4386 or MC 4387.

### Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3

COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 MC 4381	3
MC 1301 (TCCN COMM 1307)	3 ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
US 1100	1 Social and Behavioral Sciences Component Code 080	3
Mathematics Component Code 020 <sup>1</sup>	3	

**16** **15**

#### Sophomore

First Semester Hours	Second Semester Hours	
MC 1313 (TCCN COMM 2311)	3 MC 3383	3
Life and Physical Sciences Component Code 030	3 ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3 American History Component Code 060	3
MC Elective	3 Life and Physical Sciences Component Code 030	3
American History Component Code 060	3 SOCI 3307	3

**15** **15**

#### Junior

First Semester Hours	Second Semester Hours	
MC 3321	3 Computer Science, Logic, Mathematics or Science <sup>1</sup>	3
MC 4323 or 4324	3 MC 4337	3
ENG Literature [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3 MC Advanced Elective	3
Elective	3 Minor	6
Minor	3	

**15** **15**

#### Senior

First Semester Hours	Second Semester Hours	
MC 4301	3 MC 4386, 4387, 3312, or 4348	3
MC Advanced Elective	3 MC Advanced Elective	3
Minor	6 Electives	7
Media Performance	1 Minor	3

**13** **16**

**Total Hours: 120**

Code	Title	Hours
<b>Media Performance</b>		
Select 1 of the following:		
MC 2111	Media Practicum	

MC 3100	Grammar for Media Professionals
MC 3111	Drone Bootcamp
MC 3112	Social Media Analytics Platforms
MC 3113	3D Drone Modeling
MC 3114	Career Exploration: Destination America
MC 3115	Digital Media Tools and Skills
MC 3116	Digital Media Innovation Concepts
MC 3117	Freelancing for Media Professionals
MC 3118	Careers in Media
MC 3119	Fundamentals of Layout and Design
MC 3120	Editing and Enhancing Digital Imagery
MC 3121	TV News Production
MC 3122	Search Engine Optimization Fundamentals
MC 4130	Internship

<sup>1</sup> Any mathematics course from the general education core curriculum Mathematics Component may be chosen except MATH 1316.

## Minimum required: 120 semester credit hours

### Admission Requirements

- Any student admitted to Texas State University with an overall GPA of at least a 2.25 and a "C" or higher in MC 1301 will automatically be admitted to their selected major in the School of Journalism and Mass Communication. If a student does not meet these requirements upon admission, they will be temporarily classified as a pre-major in the School of Journalism and Mass Communication. As soon as the student meets any missing requirements, they will be admitted to their selected major in the School of Journalism and Mass Communication.

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- All students seeking B.S. or B.A. degrees within the School of Journalism and Mass Communication must complete ENG 1310, ENG 1320 and COMM 1310 or their equivalent courses to meet degree requirements. Most students will meet these requirements through their general education core curriculum.
- In addition to the general education core curriculum, this major requires three hours of English literature, three hours of math/science/computer science courses and a minor.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- For transfer students, 12 semester credit hours (7 additional hour may also be acceptable at Texas State) may be transferred from a Texas public institution of higher education for the Communication Field of Study Sub-Area Journalism/Mass Communication and be applied to the Bachelor of Science degree with a major in Journalism at Texas State University. More information about the Field of Study

(<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
<b>Competency Area 1 choose 3 hours from the following:</b>		<b>3</b>
MC 1301	Introduction to Mass Communication	
TCCN: COMM 1307		
<b>Competency Area 2 choose 3 hours from the following:</b>		<b>3</b>
MC 1313	Media Writing	
TCCN: COMM 2311		
<b>Competency Area 3 choose 3 hours from the following:</b>		<b>3</b>
MC ELNA		
TCCN: COMM 1316		
MC ELNA		
TCCN: COMM 1336		
MC ELNA		
TCCN: COMM 2303		
MC ELNA		
TCCN: COMM 2315		
MC ELNA		
TCCN: COMM 2324		
MC ELNA		
TCCN: COMM 2332		
<b>Competency Area 4 choose 3 hours from the following:</b>		<b>3</b>
MC ELNA		
TCCN: COMM 1335		
MC ELNA		
TCCN: COMM 2300		
MC ELNA		
TCCN: COMM 2302		
<b>Total Hours</b>		<b>12</b>

6. All students in this degree program must earn a "C" or better in each of three core courses in Mass Communication, which include:

Code	Title	Hours
MC 1301	Introduction to Mass Communication	3
MC 4301	Media Law and Ethics	3
MC 4381	Fundamentals of Digital and Online Media	3

7. All students in this degree program must earn a "C" or better in all prerequisite courses, MC 4337 and in MC 3312 or MC 4348 or MC 4386 or MC 4387

Course Requirements

Freshman	Hours
COMM 1310 (Component Area Option Code 090/091)	3
ENG 1310 (Communication Component Code 010)	3
ENG 1320 (Communication Component Code 010)	3

Mathematics Component Code 020 <sup>1</sup>	3
US 1100	1
POSI 2310 (Government/Political Science Component Code 070)	3
POSI 2320 (Government/Political Science Component Code 070)	3
MC 1301	3
MC 4381	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050)	3
Social and Behavioral Sciences Component Code 080	3
<b>31</b>	

Sophomore	Hours
ENG Literature (Component Area Option Code 090/094)	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040)	3
MC 1313	3
MC 3383	3
Life and Physical Sciences Component Code 030	6
MC 4329	3
SOCI 3307	3
American History Component Code 060	6
<b>30</b>	

Junior	Hours
ENG Literature	3
Computer Science, Logic, Mathematics or science <sup>1</sup>	3
MC 4323 or 4324	3
Minor	9
MC 3321	3
MC 4337	3
Select six hours from the following:	6
MC 4330	
MC 4331	
MC 4336I	
MC 4357	
<b>30</b>	

Senior	Hours
MC 4386, 4387, 3312, or 4348	3
MC 4301	3
MC Elective	3
Select one of the following:	1
MC 2111	
MC 3100	
MC 3111	
MC 3112	
MC 3113	

MC 3114	
MC 3115	
MC 3116	
MC 3117	
MC 3118	
MC 3119	
MC 3120	
MC 3121	
MC 3122	
MC 4130	
Minor	10
Electives	9
	<b>29</b>

**Total Hours: 120**

<sup>1</sup> Any mathematics course from the general education core curriculum Mathematics Component may be chosen except MATH 1316.

## Minimum required: 120 semester credit hours

### Admission Requirements

- Any student admitted to Texas State University with an overall GPA of at least a 2.25 and a "C" or higher in MC 1301 will automatically be admitted to their selected major in the School of Journalism and Mass Communication. If a student does not meet these requirements upon admission, they will be temporarily classified as a pre-major in the School of Journalism and Mass Communication. As soon as the student meets any missing requirements, they will be admitted to their selected major in the School of Journalism and Mass Communication.

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- All students seeking B.S. or B.A. degrees within the School of Journalism and Mass Communication must complete ENG 1310, ENG 1320 and COMM 1310 or their equivalent courses to meet degree requirements. Most students will meet these requirements through their general education core curriculum.
- In addition to the general education core curriculum, this major requires three hours of English literature, three hours of math/science/computer science courses and a minor.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- For transfer students, 12 semester credit hours (7 additional hour may also be acceptable at Texas State) may be transferred from a Texas public institution of higher education for the Communication Field of Study Sub-Area Advertising/Public Relations and be applied to the Bachelor of Science degree with a major in Public Relations at Texas State University. More information about the Field of Study

(<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
<b>Competency Area 1 choose 9 hours from the following:</b>		<b>9</b>
MC 1301	Introduction to Mass Communication	
TCCN: COMM 1307		
MC 3343	Introduction to Public Relations	
TCCN: COMM 2330		
MC 3367	Advertising	
TCCN: COMM 2327		
MC ELNA		
TCCN: COMM 2300		
MC ELNA		
TCCN: COMM 2301		
<b>Competency Area 2 choose 3 hours from the following:</b>		<b>3</b>
MC 1313	Media Writing	
TCCN: COMM 2311		
MC 3306	Writing for the Electronic Media	
TCCN: COMM 2339		
MC 3311	Video Production	
TCCN: COMM 1336		
MC 3321	News Writing and Reporting I	
TCCN: COMM 2315		
MC 3383	Editing and Managing Content	
TCCN: COMM 2305		
MC 4312	Photojournalism	
TCCN: COMM 1318		
MC ELNA		
TCCN: COMM 1319		
MC ELNA		
TCCN: COMM 1337		
MC ELNA		
TCCN: COMM 2328		
MC ELNA		
TCCN: COMM 2329		
MC ELNA		
TCCN: COMM 2332		
<b>Total Hours</b>		<b>12</b>

- All students in this degree program must earn a "C" or higher in each of three core courses in Mass Communication, which include:

Code	Title	Hours
MC 1301	Introduction to Mass Communication	3
MC 4301	Media Law and Ethics	3
MC 4381	Fundamentals of Digital and Online Media	3

- All students in this degree program must earn a "C" or higher in all prerequisite courses and in the following major courses:

Code	Title	Hours
MC 3343	Introduction to Public Relations	3
MC 3313	Foundations of Public Relations Writing	3



MC 3314	Social Media for Strategic Communication	3
MC 3360	Public Relations Research	3
MC 4313	Advanced Writing for Public Relations	3
MC 4320	Public Relations Campaigns	3

MC Advanced Elective	3 MC Advanced Elective	3
Minor	6 Minor	3
Media Performance	1 Electives	7
	<b>13</b>	<b>16</b>

**Total Hours: 120**

## Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
MC 1301 (TCCN COMM 1307)	3 MC 4381	3
Mathematics Component Code 020 <sup>1</sup>	3 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
Social and Behavioral Sciences Component Code 080	3 ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
US 1100	1	
<b>16</b>	<b>15</b>	

Sophomore		
First Semester Hours	Second Semester Hours	
MC 3343	3 MC 3313	3
ENG Literature (Component Area Option Code 090/094) [ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3 Life and Physical Sciences Component Code 030	3
Life and Physical Sciences Component Code 030	3 American History Component Code 060	3
American History Component Code 060	3 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
MC Elective	3 SOCI 3307	3
<b>15</b>	<b>15</b>	

Junior		
First Semester Hours	Second Semester Hours	
ENG literature [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3 Computer Science, Logic, Mathematics or Science <sup>1</sup>	3
MC 3360	3 MC 4313	3
MC 3314	3 Minor	3
Minor	6 MC Elective	3
	Elective	3
<b>15</b>	<b>15</b>	

Senior		
First Semester Hours	Second Semester Hours	
MC 4301	3 MC 4320	3

Code	Title	Hours
<b>Media Performance</b>		
Select 1 of the following:		
MC 2111	Media Practicum	
MC 3100	Grammar for Media Professionals	
MC 3111	Drone Bootcamp	
MC 3112	Social Media Analytics Platforms	
MC 3113	3D Drone Modeling	
MC 3114	Career Exploration: Destination America	
MC 3115	Digital Media Tools and Skills	
MC 3116	Digital Media Innovation Concepts	
MC 3117	Freelancing for Media Professionals	
MC 3118	Careers in Media	
MC 3119	Fundamentals of Layout and Design	
MC 3120	Editing and Enhancing Digital Imagery	
MC 3121	TV News Production	
MC 3122	Search Engine Optimization Fundamentals	
MC 4130	Internship	

<sup>1</sup> Any mathematics course from the general education core curriculum Mathematics Component may be chosen except MATH 1316 .

**Minimum required: 120 semester credit hours**

## Admission Requirements

- Any student admitted to Texas State University with an overall GPA of at least a 2.25 and a "C" or higher in MC 1301 will automatically be admitted to their selected major in the School of Journalism and Mass Communication. If a student does not meet these requirements upon admission, they will be temporarily classified as a pre-major in the School of Journalism and Mass Communication. As soon as the student meets any missing requirements, they will be admitted to their selected major in the School of Journalism and Mass Communication.

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- All students seeking B.S. or B.A. degrees within the School of Journalism and Mass Communication must complete ENG 1310, ENG 1320 and COMM 1310 or their equivalent courses to meet degree requirements. Most students will meet these requirements through their general education core curriculum.

3. In addition to the general education core curriculum, this major requires three hours of English literature, three hours of math/science/computer science courses and a minor.
4. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
5. For transfer students, 12 semester credit hours (7 additional hour may also be acceptable at Texas State) may be transferred from a Texas public institution of higher education for the Communication Field of Study Sub-Area Advertising/Public Relations and be applied to the Bachelor of Science degree with a major in Public Relations at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
<b>Competency Area 1 choose 9 hours from the following:</b>		<b>9</b>
MC 1301	Introduction to Mass Communication	
	TCCN: COMM 1307	
MC 3343	Introduction to Public Relations	
	TCCN: COMM 2330	
MC 3367	Advertising	
	TCCN: COMM 2327	
MC ELNA		
	TCCN: COMM 2300	
MC ELNA		
	TCCN: COMM 2301	
<b>Competency Area 2 choose 3 hours from the following:</b>		<b>3</b>
MC 1313	Media Writing	
	TCCN: COMM 2311	
MC 3306	Writing for the Electronic Media	
	TCCN: COMM 2339	
MC 3311	Video Production	
	TCCN: COMM 1336	
MC 3321	News Writing and Reporting I	
	TCCN: COMM 2315	
MC 3383	Editing and Managing Content	
	TCCN: COMM 2305	
MC 4312	Photojournalism	
	TCCN: COMM 1318	
MC ELNA		
	TCCN: COMM 1319	
MC ELNA		
	TCCN: COMM 1337	
MC ELNA		
	TCCN: COMM 2328	
MC ELNA		
	TCCN: COMM 2329	
MC ELNA		
	TCCN: COMM 2332	
<b>Total Hours</b>		<b>12</b>

6. All students in this degree program must earn a "C" or higher in each of four core courses in Mass Communication, which include:

Code	Title	Hours
MC 1301	Introduction to Mass Communication	3
MC 4301	Media Law and Ethics	3
MC 4381	Fundamentals of Digital and Online Media	3

7. All students in this degree program must earn a "C" or higher in all prerequisite courses and in the following major courses:

Code	Title	Hours
MC 3343	Introduction to Public Relations	3
MC 3313	Foundations of Public Relations Writing	3
MC 3314	Social Media for Strategic Communication	3
MC 3360	Public Relations Research	3
MC 4313	Advanced Writing for Public Relations	3
MC 4320	Public Relations Campaigns	3

## Course Requirements

Freshman	Hours
COMM 1310 (Component Area Option Code 090/091)	3
ENG 1310 (Communication Component Code 010)	3
ENG 1320 (Communication Component Code 010)	3
Mathematics Component Code 020 <sup>1</sup>	3
US 1100	1
POSI 2310 (Government/Political Science Component Code 070)	3
POSI 2320 (Government/Political Science Component Code 070)	3
MC 1301	3
MC 4381	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050)	3
Social and Behavioral Sciences Component Code 080	3
	<b>31</b>
Sophomore	Hours
ENG Literature (Component Area Option Code 090/094)	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040)	3
MC 3343	3
MC 3313	3
Life and Physical Sciences Component Code 030	6
MC 4329	3
American History Component Code 060	6
SOCI 3307	3
	<b>30</b>

Junior	Hours
ENG Literature	3
Computer Science, Logic, Mathematics or Science <sup>1</sup>	3
MC 3314	3
MC 3360	3
MC 4313	3
Minor	9
Select six hours from the following:	6
MC 4330	
MC 4331	
MC 4336I	
MC 4357	
	<b>30</b>
Senior	Hours
MC 4320	3
MC 4301	3
MC Elective	3
Select one of the following:	1
MC 2111	
MC 3100	
MC 3111	
MC 3112	
MC 3113	
MC 3114	
MC 3115	
MC 3116	
MC 3117	
MC 3118	
MC 3119	
MC 3120	
MC 3121	
MC 3122	
MC 4130	
Minor	9
Electives	10
	<b>29</b>
<b>Total Hours: 120</b>	

<sup>1</sup> Any mathematics course from the general education core curriculum Mathematics Component may be chosen except MATH 1316.

The minor in Journalism requires 18 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
MC 1301	Introduction to Mass Communication	3
MC 1313	Media Writing	3
MC 3319	Visual Communication	3
MC 3321	News Writing and Reporting I	3
or MC 4323	Multimedia Journalism	
MC 4301	Media Law and Ethics	3

MC 4381	Fundamentals of Digital and Online Media	3
<b>Total Hours</b>		<b>18</b>

The minor in Mass Communication requires 18 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
MC 1301	Introduction to Mass Communication	3
or MC 4302	History of Mass Media	
MC 3343	Introduction to Public Relations	3
MC 3319	Visual Communication	3
or MC 4381	Fundamentals of Digital and Online Media	
MC 3355	Mass Media and Society	3
or MC 3375	Electronic Media as Entertainment	
MC 3367	Advertising	3
or MC 4303	International Advertising	
Choose 3 hours from the following: (Course cannot be duplicated from above.)		3
MC 1301	Introduction to Mass Communication	
MC 3375	Electronic Media as Entertainment	
MC 4303	International Advertising	
MC 4308	Women and Minorities in the Media	
MC 4309	Visual Literacy: Film	
MC 4310	International Communication	
MC 4319	Latinas/Latinos and the Media	
MC 4322	Health Communication Campaigns	
MC 4381	Fundamentals of Digital and Online Media	
MC 4382Q	Media in Asia and Southeast Asia	
<b>Total Hours</b>		<b>18</b>

For students who are seeking teacher certification in their major and would like a second teaching field in Journalism, the requirements are:

Code	Title	Hours
MC 1301	Introduction to Mass Communication	3
MC 1313	Media Writing	3
MC 3319	Visual Communication	3
MC 3321	News Writing and Reporting I	3
or MC 4323	Multimedia Journalism	
MC 4301	Media Law and Ethics	3
MC 4381	Fundamentals of Digital and Online Media	3
<b>Total Hours</b>		<b>18</b>

All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

Criminal background checks are required for participation in field-based coursework and for progression through the Educator Preparation Program. Based on information recorded in an individual's criminal history, a candidate may be ineligible for issuance of a certification upon completion of the Educator Preparation Program. If a candidate has a criminal history, that student is advised to request a Preliminary Criminal History Evaluation from the Texas Education Agency; schedule an appointment for free legal counseling services through Texas State

University's Attorney for Students (<http://attorney.dos.txstate.edu/>); and disclose this information to the Office of Educator Preparation.

Music Building Room 101  
Telephone: 512.245.2651 Fax: 512.245.8181  
Email: [music@txstate.edu](mailto:music@txstate.edu)  
[www.music.txstate.edu](http://www.music.txstate.edu) (<http://www.music.txstate.edu>)

## Mission Statement

The Texas State University School of Music prepares a diverse student population within a positive and inclusive environment for personal success and evolving careers in music, promotes creative and scholarly activity, and nurtures supportive communities.

We aspire to the highest levels of inclusivity, diversity, excellence, and student success. We nurture curiosity, creativity, passion, and collegiality, while supporting and respecting each other. Our music community strives for excellence and innovation in music making, teaching, and research.

In pursuing excellence, the School of Music strives to be an innovative community that embraces musical and cultural diversity of students, faculty, and curriculum. We seek to become a destination school, while maintaining our student-centered focus.

## Courses Offered

Courses are offered in individual, chamber, and ensemble performance, music education, history, literature, theory, composition, music technology, jazz, Latin, and sound recording. All university students, both music majors and non-music majors, are encouraged to participate in performing ensembles. However, due to the limited availability of private applied music instruction and certain other music classes, the School of Music may use any or all of the following criteria for determining students' access to these courses:

1. student's overall musical talent, musical achievement, and performance/teaching potential as determined by audition
2. studio/class space availability
3. academic standing as represented by GPA
4. other appropriate indicators

## School Policies

Those planning careers in music must demonstrate a high level of musical skill, music reading ability, and understanding. To help evaluate musical skills for counseling and placement purposes, the School of Music requires all music majors to pass several evaluations and academic requirements.

Credit by examination is available for Music Theory I - IV and Piano Techniques I - IV only before entering the course sequence at Texas State. Students testing out of one or more of the courses above or the entire proficiency exam(s) must remit \$10 to the University's Testing Center (set fee whether receiving credit for one or more courses) before a CR grade will be processed by the Registrar's Office for the course(s). See an academic advisor and the School of Music website for details.

A student who leaves music major status in good standing can be readmitted as a Music major without re-auditioning if returning within twelve (12) months. A music student who fails to complete or pass applied lessons (note: failing grades are F and U) or has not been a Music major at Texas State for more than twelve (12) months (i.e. not enrolling or two W grades in a row) will automatically be moved to a pre-music

status by their academic advisor and must re-apply and re-audition to be accepted back as a music major.

## Music Theory Proficiency

Fluency with tonal and post-tonal musical structures, as demonstrated by analysis and part-writing, is a goal for all music students. The Theory Proficiency Exam (TPE) is a graduation requirement for students earning a B.M. in Music Studies/Education, B.A. in Music, or B.M. in Performance. Students seeking teacher certification must pass the TPE no later than the semester before student teaching. All other music majors must pass before applying for graduation. Theory proficiency requirements are available on the School of Music website. Transfer students are advised to take the TPE in their first semester at Texas State University. Review materials are available in the Center for Aural and Theory Tutoring (CATT) Office in the School of Music. Note: No Theory Proficiency Exam is required for BS students.

## Piano Proficiency

All BA, BM – Music Studies, instrumental concentration students seeking teacher certification, and BM – Performance, jazz concentration students must pass the level II piano proficiency exam by the end of their fourth (4<sup>th</sup>) long semester. BM – Performance, keyboard concentration students must pass the piano majors piano proficiency exam by the end of their fourth (4<sup>th</sup>) long semester.

BM – Music Studies, choral concentration students must complete the level IV piano proficiency exam no later than the semester before student teaching. All other BM – Performance majors must complete the level IV piano proficiency exam before applying for graduation. Piano proficiency requirements are available on the School of Music website. Note: No Piano Proficiency exam is required for BS students.

## Upper-Level Competency Review

Upon completion of four long semesters as a music major, the student's total record is reviewed by the music faculty in their area to determine if they are prepared to continue in upper-level music study. The Upper Level Competency Review (ULCR) helps music majors determine if they are pursuing the most suitable career/degree. The ULCR is offered at the end of each long semester, and the student must pass before they may enroll in 3000-level courses in the degree area. Specific information and requirements are available in the School of Music Student Handbook and on the School of Music's website.

Transfer students with four or more semesters of music study complete the exam at the end of the first long semester of study at Texas State.

## Recital Attendance Requirements

Each semester, various recitals and concerts are presented by students, faculty, and visiting artists. All undergraduate music majors, with the exception of Bachelor of Science students, are required to attend a significant number of these events each semester, through enrollment in Departmental Recital. In addition, applied music instructors may require attendance at all recitals in the student's individual performance area.

## Ensemble Requirements

All music majors must participate in the appropriate major ensemble for their instrument each semester until all major ensemble requirements for the degree have been completed. No more than one major and one secondary ensemble will be counted toward the student's degree plan per semester. While not required in the degree plan, continued participation

in major ensembles after degree requirements are completed is encouraged.

## Senior Recital

A senior recital is required for all students enrolled in a Bachelor of Music degree program. Students seeking teacher certification must present the recital no later than the semester before student teaching. Specific requirements for the senior recital are described in the School of Music Student Handbook and on the School of Music website.

## Grade Requirements

Students majoring or minoring in the School of Music must achieve a grade of "C" or higher (including a CR in Departmental Recital) on all required music (MU, MUSE and MUSP) courses.

## Student Teaching Requirements

Before being allowed to enroll for student teaching, music students must have:

1. completed all major coursework for the degree with a "C" or higher;
2. presented a senior recital achieving a grade of "C" or higher;
3. passed the Upper Level Competency Review;
4. passed the piano and theory proficiency examinations; and
5. fulfilled the requirements for teacher certification as determined by the College of Education.

## Music Fees/Costs Not Included in Tuition/ Fees

This is a partial listing.

- Instrument rental fee – \$30 per semester (inc. all percussionists and students participating in percussion ensembles, all students enrolled in Applied Keyboard classes)
- Athletic Band accessories approximately \$50-\$100 per semester depending on the required number of accessories and cleanings (inc. shoes, gloves, shirt, shorts, Colorguard uniforms, cleanings, etc.). All participants must have the required accessories based on the information outlined in the Marching Band Handbook and syllabi.
- Choir dresses \$63 one-time charge (all women participating in a choral ensemble, with the exception of Vocalibre must purchase a choir dress through the School of Music)
- Tuxedos up to \$100 one-time charge (all men participating in a choral ensemble, with the exception of Vocalibre or a concert instrumental ensemble must rent/purchase a tuxedo; locations provided by ensemble directors)
- There are additional fees related to the student teaching & certification requirements. A list of associated fees is listed on the Office of Educator Preparation website.

NOTE: Due to copyright laws, students enrolled in private lessons are responsible for purchasing individual scores of solos/etudes required for performance. In addition, students enrolled in voice lessons or instrumentalists preparing for juries/recital performances are responsible for the cost of providing their own collaborative pianist for lessons, rehearsals, and recitals. A list of collaborative pianists approved by the School of Music is available at the beginning of each long semester.

## Facilities

As the music program has grown into a large, comprehensive School of Music, so too have the facilities expanded to keep pace with its diversity of ensembles, programs, and students.

### Music Buildings

The Music Building includes classrooms, faculty studios and rehearsal halls. There are separate rehearsal facilities for bands, orchestra, choirs, jazz, and Latin music ensembles, chamber groups, and opera. The facility also contains the 149-seat Music Building Recital Hall, the Schneider Music Library, a black box theater, over thirty practice rooms, an electronic piano laboratory, a multi-station music computer lab, two instrument checkout rooms, faculty offices, and the administrative office suite.

### Performing Arts Center

The Performing Arts Center includes an acoustically superb 312-seat recital hall. Equipped with two Steinway D concert grand pianos and a beautiful custom-built Flemish-replica harpsichord, the hall hosts performances by international guest artists, music faculty, and some student ensembles. It is a learning laboratory for student degree recitals. Another venue, the Patti Strickel Harrison Theater, provides a state-of-the-art theater with orchestra pit for TXST Opera Theater productions.

### Evans Auditorium

Evans Auditorium is the largest performance hall on campus with a seating capacity of 933. The university's wind bands, orchestra, and University Arts events utilize Evans as a performance site. The venue also contains two Steinway concert grand pianos.

### Fire Station Studio

The Fire Station Studio, located near campus is available for both Texas State and non-Texas State persons to rent for commercial purposes. The studio houses the School of Music's sound recording technology program and contains a multipurpose recording facility and television/film sound stage housing four control rooms, three tracking spaces, a large-format fully automated SSL mixing console, CD mastering gear, and numerous professional microphones and outboard devices.

### Colorado Building

Colorado Building houses the TXST Gamelan Lipi Awan (a Balinese ensemble) and sixteen additional practice rooms with digital pianos.

### Lampasas Hall

Offering music an additional five offices and three teaching studios, Lampasas Hall is the second oldest building on campus and was beautifully renovated in 2012.

### Marching Band Field/Storage

The Bobcat Marching Band field includes a standard 100+ yard field, multi-level director's tower, and newly completed equipment storage facility.

### Schneider Music Library

The Schneider Music Library, centrally located in the Music Building, provides convenient access to scores, sound recordings, DVDs, music education materials, and music reference sources.



## Music Computer Center

The Music Computer Center located in the Music Building features twenty-four high-end Mac workstations with MIDI controllers, a teacher station, a scanner workstation, and two administrator stations.

## YouStar Studios

The YouStar Studios, located in the Alkek Library, include a suite of multimedia technologies that enable users to create video and audio content. The YouStar Studios consist of a video recording studio and two audio recording studios.

## Admissions Requirements

1. All students seeking to major in music must be admitted to Texas State University. For more information on Texas State, visit [www.txstate.edu](http://www.txstate.edu) (<http://www.txstate.edu/>). Undergraduate students should visit the Office of Undergraduate Admissions at [www.admissions.txstate.edu](http://www.admissions.txstate.edu) (<http://www.admissions.txstate.edu/>) to learn about undergraduate level admission.
2. Students wanting to enter the music program as a music major (B.A., B.M., B.S.) must submit an online application and audition on their principal instrument or voice the semester before their desired entrance. For audition guidelines and requirements, prospective undergraduate students should visit: <http://www.music.txstate.edu/prospectivestudents/BecomingaMusicMajor.html>
3. Students interested in the Sound Recording Technology major must complete an additional application, submit materials for pre-screening (see [www.txstate.edu/music/srt](http://www.txstate.edu/music/srt) (<http://www.txstate.edu/music/srt/>) for details), and interview.
4. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263) once all course requirements and successful completion of the School of Music's Upper Level Competency Review have been met in order to officially complete the Bachelor of Music major in Music Studies degree program.

NOTE: Admission to the School of Music is contingent upon admission to Texas State, successful completion of the audition process, and available space in each studio. Moreover, a successful audition does not automatically ensure acceptance to the School of Music. Transfer students' transcripts will be evaluated by an academic advisor prior to an acceptance decision to ensure that acceptance and successful degree plan completion are possible here at Texas State. Prospective music majors will not be permitted to enroll in applied music and other music major classes until they have been accepted based on their audition and met with an academic advisor. Auditions are held periodically throughout the year for enrollment the following academic year. Those prospective music students unable to audition in person due to geographic distance from campus may submit an audio or video recording representative of their performing abilities that meet the audition guidelines for their instrument or voice. The deadline to submit a recorded audition is March 1 (for Fall admission) or November 1 (for Spring admission). Audition requirements are available on the School of Music website.

## Bachelor of Arts (B.A.)

- Major in Music (p. 360)

## Bachelor of Music (B.M.)

- Major in Music Studies (Choral Concentration with Teacher Certification in Music, Early Childhood Through Grade 12) (p. 362)

- Major in Music Studies (Band Concentration with Teacher Certification in Music, Early Childhood Through Grade 12) (p. 364)
- Major in Music Studies (Mariachi Concentration with Teacher Certification in Music, Early Childhood Through Grade 12) (p. 365)
- Major in Music Studies (String Concentration Teacher Certification in Music, Early Childhood through Grade Twelve) (p. 367)
- Major in Performance (Guitar Concentration) (p. 369)
- Major in Performance (Instrumental Concentration) (p. 371)
- Major in Performance (Jazz Concentration) (p. 372)
- Major in Performance (Keyboard Concentration) (p. 375)
- Major in Performance (Vocal Concentration) (p. 377)

## Bachelor of Science (B.S.)

- Major in Sound Recording Technology (p. 379)

## Minors

- Jazz (p. 380)
- Mariachi (p. 381)
- Music
- Music Composition
- Opera

**Subjects in this school include: MU (p. 337), MUSE (p. 347), MUSP (p. 350)**

## Courses in Music (MU)

### MU 1000. Freshman Departmental Recital.

Attendance and observation of weekly recitals. Concurrent enrollment in freshman-level applied lessons and the appropriate major ensemble are required. Corequisites: MUSP 1120 or MUSP 1130 or MUSP 1140 or MUSP 1150 or MUSP 1160 or MUSP 1170 or MUSP 1220 or MUSP 1230 or MUSP 1240 or MUSP 1250 or MUSP 1260 or MUSP 1270 or MUSP 1280.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### MU 1112. Basic Musicianship.

A study of music fundamentals: reading rhythms, pitches in bass and treble clefs, spelling, notating, and identifying key signatures, intervals and chords. Prerequisite: Music major status.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MU 1115. Aural Skills I.

In this course students will cover sight singing, dictation, keyboard exercises, and improvisation of musical structures and styles studied in MU 1315. Corequisite: MU 1315 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1116

**MU 1116. Aural Skills II.**

This course covers sight singing, dictation, keyboard exercises, and improvisation of musical structures and styles studied in MU 1316. Prerequisite: MU 1115 and MU 1315 with a grade of "C" or higher. Corequisite: MU 1316.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1117

**MU 1125. Life-Skills for Musicians.**

In this course students will develop essential life skills as they prepare for the transition from university student to professional musician. Course topics include study skills, professional communication, basic pedagogy, introduction to personal finance, healthcare, finding a job, job benefits, and independent living.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 1150. Introduction to Music Technology.**

Introduction to current computer applications in music. Including MIDI and sequencing, notation, internet communication, and digital audio.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 1180. Recording Practicum I.**

Independent study in sound recording. Students develop aural and practical skills necessary to produce high quality recordings. Full major status in SRT is required.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 1182. Recording Practicum II.**

Development of aural skills associated with audio production and recording. This course is a continuation of MU 1180, Recording Practicum I. Full major status in SRT is required. Prerequisite: MU 1180 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 1312. Essential Musicianship.**

Detailed instruction in fundamentals of music theory, including but not limited to notation, meters, scales, key signatures, intervals and chords. This course is designed primarily for non-Music majors and Music minors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1301

**MU 1315. Music Theory I.**

In this course, students study basic counterpoint and analysis of diatonic music. Students learn four-part voice-leading principles via tonic-function and dominant-function harmonies. Corequisite: MU 1115 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1311

**MU 1316. Music Theory II.**

This course covers the analysis and model composition of diatonic music, including voice-leading with tonic, pre-dominant, and dominant-function triads and 7th-chords. Topics include phrase structures, small forms, and an introduction to applied chords. Prerequisite: MU 1115 and MU 1315 with a grade of "C" or higher. Corequisite: MU 1116.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1312

**MU 2000. Sophomore Departmental Recital.**

Attendance and observation of weekly recitals. Concurrent enrollment in sophomore-level applied lessons and appropriate major ensemble is required. Corequisites: MUSP 2120 or MUSP 2130 or MUSP 2140 or MUSP 2150 or MUSP 2160 or MUSP 2170 or MUSP 2220 or MUSP 2230 or MUSP 2240 or MUSP 2250 or MUSP 2260 or MUSP 2270 or MUSP 2280.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MU 2104. Writing About Music.**

This course focuses on writing and research skills in music, including the use and documentation of sources. In addition to written exercises, assignments include studying professional writing samples about music, such as concert reviews, program notes, and research essays. Full major status in Performance required. (WI).

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MU 2115. Aural Skills III.**

This course covers sight singing, dictation, keyboard exercises, and improvisation of musical structures and styles studied in MU 2315. Prerequisite: MU 1116 and MU 1316 with a grade of "C" or higher. Corequisite: MU 2315.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 2116

**MU 2116. Aural Skills IV.**

This course covers sight singing, dictation, keyboard exercises, and improvisation of musical structures and styles studied in MU 2316. Prerequisite: MU 2115 and MU 2315 with a grade of "C" or higher. Corequisite: MU 2316.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 2117

**MU 2123. Foundations of Music Education.**

This course introduces principles of aesthetics and philosophy, as well as their practical application in music education.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 2153. Problems in Music.**

This course is conducted as an independent study on one or more music topics not covered in another course and is open to students on an individual basis by approval of the Director of the School of Music. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 2180. Recording Practicum III.**

This course allows students to continue to develop aural and practical skills in sound recording to produce high-quality recordings. Full major status in SRT required. Prerequisites: MU 1182 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 2182. Recording Practicum IV.**

Students will develop the aural skills associated with audio production and recording. This is a continuation of MU 2180 Recording Practicum III. Full major status in SRT required. Prerequisite: MU 2180 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 2215. Contemporary Musicianship I.**

This course explores musical parameters (harmony, melody, tempo, rhythm, meter, form, and instrumentation) in contemporary rock and pop genres as analyzed through listening and created via performance and composition. Contemporary notation methods, lead sheet symbols, and the Nashville number system are used to create musical scores. Prerequisite: MU 1116 and MU 1316 both with grades of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 2216. Contemporary Musicianship II.**

This course explores musical parameters (harmony, melody, tempo, rhythm, meter, and instrumentation) in country and reggae genres as analyzed through listening and created via performance and composition. Contemporary notation methods, as well as lead sheet symbols and the Nashville number system, are used to create musical scores. Prerequisite: MU 2215 with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 2241. Fundamentals of Diction in Singing I.**

In this course students study the International Phonetic Alphabet (IPA) and its application to English and Italian lyric diction. Students will learn the basics of singer's diction for these languages and demonstrate their knowledge through written examination, speaking, and singing. Corequisite: MUSP 1120 or MUSP 1220 or MUSP 2120 or MUSP 2220 or MUSP 3120 or MUSP 3220 or MUSP 4220 any with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 2242. Fundamentals of Diction in Singing II.**

In this course students study the International Phonetic Alphabet (IPA) and its application in German and French lyric diction. Students will learn the basics of singer's diction for these languages and demonstrate their knowledge through written examination, speaking, and singing. Prerequisite: MU 2241 with a grade of "C" or better. Corequisite: MUSP 1120 or MUSP 1220 or MUSP 2120 or MUSP 2220 or MUSP 3120 or MUSP 3220 or MUSP 4220 any with the grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 2253. Problems in Music.**

The course is conducted as an independent study on one or more music topics and is open to students on an individual basis by approval of the Director of the School of Music. May be repeated for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 2303. Survey of Music Literature.**

An introduction to western European art music from the Middle Ages into the 21st-century through listening examples, readings, and class lectures. The course covers representative works by major composers and introduces conventional musical forms/styles associated with various genres in each of the musical periods. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1307

**MU 2310. Guitar Class I.**

An introductory course primarily for the non-music major. This course offers the opportunity to study tuning, hand positions, chords, accompaniment patterns, strumming and introductory music reading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 2313. Introduction to Fine Arts.**

An introductory course designed to give the student a fundamental understanding of the creation and appreciation of diverse modes of expression through the visual and performing arts. This course may not be repeated for credit by taking ART 2313, DAN 2313, or TH 2313.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050

**Grade Mode:** Standard Letter

**TCCN:** HUMA 1315

**MU 2315. Music Theory III.**

This course covers the analysis and model composition of chromatic music, with a focus on voice-leading principles. Topics include modulations and larger forms. Prerequisite: MU 1116 and MU 1316 with a grade of "C" or higher. Corequisite: MU 2115.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 2311

**MU 2316. Music Theory IV.**

This course covers the analysis and model composition of music from the 20th- and 21st-centuries. Topics include, but are not limited to, impressionism, polytonality, parallelism, quartal/quintal harmonies, secundal harmonies, polyrhythms, octatonicism, minimalism, modes, serialism, and set theory. Prerequisite: MU 2115 and MU 2315 both with grades of "C" or better. Corequisite: MU 2116 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 2312

**MU 2353. Problems in Music.**

The course is conducted as an independent study on one or more music topics and is open to students on an individual basis by approval of the Director of the School of Music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 3000. Junior Departmental Recital.**

This course requires attendance and observation of weekly recitals. Concurrent enrollment in junior-level applied lessons and the appropriate major ensemble are required. Corequisites: MUSP 3170; MUSP 3220; MUSP 3230; MUSP 3240; MUSP 3250; MUSP 3260; MUSP 3270; MUSP 3280.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MU 3050. Junior Recital.**

Preparation and performance of the junior recital for music performance majors. Corequisites: Concurrent enrollment with applied lessons and major ensemble required for all Music Performance majors. Pre-requisite or Corequisite: MUSP 3170 or MUSP 3220 or MUSP 3230 or MUSP 3250 or MUSP 3260 or MUSP 3270 or MUSP 3280.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 3140. Instrumental Performance Literature.**

In this course students will survey repertoire for wind bands/orchestras from all musical periods/styles, including music for beginning bands/orchestras to works for collegiate/professional ensembles. Activities include: listening, score study, instrument transpositions, programming, contest preparation and student-led wind band/orchestra reading sessions. Prerequisite: ART 2313 or DAN 2313 or MU 2313 or TH 2313 any with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 3141. Fundamentals of Diction in Singing I.**

This course, the first of a two semester Diction sequence, is designed to acquaint the student singer with the International Phonetic Alphabet (IPA), correct pronunciation of Italian and German consonants and vowels, and the diction rules of these languages. This course does not take the place of a language requirement. Corequisite: MUSP 1120 or MUSP 1220 or MUSP 2120 or MUSP 2220 or MUSP 3120 or MUSP 3220 or MUSP 4220; with a grade of "C" or better.

**1 Credit Hour. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3142. Fundamentals of Diction in Singing II.**

This course, the second of a two-semester Diction sequence, is designed to acquaint the student singer with the International Phonetic Alphabet (IPA), correct pronunciation of French and English consonants and vowels, and the diction rules of these languages. This course does not take the place of a language requirement. Prerequisite: MU 3141 with a grade of "C" or better. Corequisite: MUSP 1120 or MUSP 1220 or MUSP 2120 or MUSP 2220 or MUSP 3120 or MUSP 3220 or MUSP 4220.

**1 Credit Hour. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3155. Mariachi Rehearsal Techniques & Literature.**

This course will explore mariachi ensemble literature for K-12 school mariachi programs and effective mariachi rehearsal techniques. Topics will include a review of age appropriate literature, conducting, lesson plan creation, ensemble setup, rehearsal pacing, error detection/correction, programming, and performance techniques for mariachi ensembles in the K-12 setting. Prerequisite: MU 2115 and MU 2315 both with grades of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3180. Recording Practicum V.**

This course allows students to continue to develop aural and practical skills necessary to produce high quality recordings. Full major status in SRT required. Prerequisites: MU 2182 with a grade of "C" or better. Corequisite: MU 3383.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3182. Recording Practicum VI.**

Students will develop the aural skills associated with audio production and recording. This is a continuation of MU 3180, Recording Practicum V. Full major status in SRT required. Prerequisite: MU 3180 with a grade of "C" or better. Corequisite: MU 3384.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3207. Instrumental Conducting I.**

This course covers instrumental conducting fundamentals such as beat pattern, baton techniques, score reading, cuing, subdivisions, fermatas, and releases. The class will function as an ensemble and each student will conduct assignments approximately once each week. Requires successful completion of the Upper Level Competency Review in Music Studies.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3208. Choral Conducting I.**

This course covers choral conducting fundamentals such as beat pattern, baton technique, score reading, cuing, subdivisions, fermatas, and releases. The class will function as an ensemble and each student will conduct assignments approximately once each week. Requires successful completion of the Upper Level Competency Review to enroll.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3217. Instrumental Conducting II.**

An application of the principles of conducting to instrumental music, including score reading and problems of interpretation. Some choral conducting experience will be included. Prerequisite: MU 3207 with a grade of "C" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 3227. Choral Conducting II.**

An application of the principles of conducting choral music, including score reading and problems in interpretation. Some instrumental conducting experience will be included. Prerequisite: MU 3208 with a grade of "C" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3233. Jazz Theory and Improvisation I.**

This course is a study of the musical theory basics used in jazz improvisation and composition, focusing on best practices in its practical application and pedagogy. In addition to a theoretical and applied approach, students will also examine historical and cultural considerations, as they relate to performance. (MULT) BM majors only. Prerequisites: MU 1316 with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 3234. Jazz Theory and Improvisation II.**

This course is a continuation of MU 3233, with particular attention to developing skills in the use of scales and modes (including major and minor pentatonic scales), modal playing, and jazz nomenclature. (MULT) BM majors only. Prerequisites: MU 3233 and MUSE 3127, all with a grade of "C" or better or permission of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 3241. A Survey of Instrumental Performance Literature.**

This course is an overview of repertoire for wind bands/orchestras from all musical periods/styles, including music for beginning bands/orchestras to works for collegiate/professional ensembles. Activities include: listening, score study, instrument transpositions, programming, contest preparation and student-led wind band/orchestra reading sessions. Upper-level status is required. Prerequisite: ART 2313, DAN 2313, MU 2313, or TH 2313; with a grade of "C" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3242. Survey of Choral Performance Literature.**

The course covers detailed consideration of literature of all periods appropriate for choral ensembles and includes discussions on repertoire selection/performance problems peculiar to all ensemble sizes.

Assignments give students opportunity to develop their own approach to vocal challenges that face high school and junior high singers, including arranging choral music. Prerequisites: MU 3208 and MU 3254, all with a grade of "C" or better. Corequisite: MU 3227.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3253. Band/Orchestra Methods.**

This course is designed to introduce fundamental principles of effective instrumental music instruction (such as assessment, planning, arranging, etc.), rehearsal techniques, and administration of secondary school music programs. This course will provide opportunities for students to conduct and rehearse instrumental ensembles, present teaching demonstrations, and conduct independent scholarship projects related to teaching. Prerequisites: [MU 2316 or MU 3207 or MUSP 3145 or MUSP 3147] and [MUSP 3155 or MUSP 3157] both with a grade of "C" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MU 3254. Choral Methods.**

This course provides practical experience in developing, teaching and maintaining a successful choral program at the secondary level. Assignments are designed to give students the opportunity to develop approaches to the basic challenges that face high school/middle school choral directors. Students will share ideas and evaluate each other's work. Prerequisite: MU 2316 with a grade of "C" or better. Corequisite: MU 3208.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3263. Marching Band Techniques.**

An examination of the techniques required to program, design, and instruct a successful marching band show. The class will discuss different types of design concepts currently being employed throughout the country, but also to construct and chart those designs.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3269. Current Trends in Music II.**

A study of melodic and harmonic techniques for keyboard percussion instruments, sight-reading techniques using Sol-Fa, and a survey of the folk music of Europe and the Americas. Prerequisite: MU 3340 with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3308. History of Rock Music.**

A survey of the evolution of rock styles, contributions of important performers, and musical techniques involved in the creation and performance of rock music. The course focuses on the first three decades of rock history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3310. Guitar Class II.**

Primarily for the non-music major, the course includes the opportunity for development of more advanced techniques in accompaniment, music reading and solo guitar techniques. Prerequisite: MU 2310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3315. History and Analysis of Music from Antiquity through the Seventeenth Century.**

This course provides a comprehensive musicianship approach to the study of music from antiquity through the seventeenth century. Approaches include history, aesthetics, repertoire, performance practice, and conceptual frameworks specific to sacred and secular traditions, domestic music, and genres associated with popular song, dance, and drama. (MULT) (WI) Prerequisite: MU 1316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**MU 3316. History and Analysis of Music in the Eighteenth and Nineteenth Centuries.**

This course provides a comprehensive musicianship approach to the study of music in the eighteenth and nineteenth centuries. Approaches include history, aesthetics, repertoire, performance practice, and conceptual frameworks specific to classical traditions, domestic music, and genres associated with popular song, dance, and the theater. (MC) (WI) Prerequisite: MU 1316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**MU 3317. History and Analysis of Music in the Twentieth and Twenty-First Centuries.**

This course provides a comprehensive musicianship approach to the study of music from the turn of the twentieth century to the present. Approaches include history, aesthetics, repertoire, performance practice, and conceptual frameworks specific to popular song, film music, jazz, rock, experimental trends, classical traditions, crossover genres, and influential technologies. (MC) (WI) Prerequisite: MU 1316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MU 3318. World Music Cultures.**

In this course students will be equipped with practical and conceptual tools to enhance their enjoyment and understanding of indigenous, folk, classical and popular music traditions around the globe, in their historical, social, political, and spiritual contexts. This course engenders respect for a diversity of cultures through the lens of music. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**MU 3340. Current Trends in Music I.**

A study of the components of music and their concepts. An emphasis on singing and rhythmic performance skills, and aesthetic awareness through listening. Prerequisite: MU 2123 with a grade of "C" or higher.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 3355. Mariachi Rehearsal Techniques & Literature.**

This course explores mariachi ensemble literature for K-12 school mariachi programs and effective mariachi rehearsal techniques. Topics include a review of age-appropriate literature, conducting, lesson plan creation, ensemble setup, rehearsal pacing, error detection/correction, programming, and performance techniques for mariachi ensembles in the K-12 setting. Students apply course concepts as they conduct lessons in the mariachi teaching lab. Prerequisite: MU 2115 and MU 2315 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3370. Music for the Elementary Classroom.**

This course is an introduction to basic music skills for the elementary classroom teacher. The course includes practical application and development of strategies and instructional techniques necessary for effective integration of music experiences in the elementary classroom curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3372. Inclusive Excellence in the Music Classroom.**

In this course, students will develop skills for creating equitable and inclusive music classrooms. Topics will include culturally responsive music teaching, World Music Pedagogy (including ethnomusicological perspectives regarding transcription and arranging in the transmission of music cultures), history and repertoire of global musics, and universal design for learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3375. History of Jazz.**

Jazz originated in America and has been of great importance in the development of the 20th Century music. Topics will include the structure and history of jazz, the contributions of jazz to contemporary music, and the chronological development of jazz experienced through recordings and live performances. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 3380A. Women in Jazz.**

Overview of jazz history from its New Orleans origins to the present focusing on the contributions of women. Major style periods researched include early jazz/swing, bebop, cool, hard bop, free jazz, jazz fusion, and contemporary trends. Emphasis will be placed on the development of critical listening skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**MU 3380B. Music and Film.**

This course is an exploration of historical traditions and functions of Hollywood film music. Students will apply music theory and dictation skills to analyze scores and explain how film music's characteristics and associated cultural connotations combine with image to create new meaning. Prerequisite: MU 2116 and MU 2316, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 3380C. Rock Harmony.**

Theoretical analysis of popular and rock music incorporating extensive ear training components such as recognition of chords and progressions. Further analysis of the individual stylistic details in rock songs as well as comparison to traditional tonal harmony and form. Pre-requisite: MU 1312 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 3380D. History of Blues.**

This course explores the role of the blues in American popular music, tracing the history of the genre from its origins to its influence on rock and other related styles, surveying important recording labels and related figures. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**MU 3380E. Teaching World Music Cultures Through World Music Pedagogy.**

This course prepares prospective and practicing teachers to teach world music cultures in their music classroom at the K-12 level. Culturally relevant pedagogy, multicultural education, and ethnomusicology also serve as the underpinnings towards creating an inclusive and equitable classroom. Prerequisite: MU 3340; with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 3381. Recording Techniques I.**

Introduction to audio recording techniques. Topics include acoustics, electronics, microphones, microphone techniques, loudspeakers, and operating principles of common recording equipment. Full major in SRT required. Prerequisite: MU 1182 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3382. Recording Techniques II.**

A continuation of MU 3381. Topics include: operating principles of common recording equipment, fundamentals of analog and digital recording, signal flow, equalization, and sound effects processors. Full major in SRT required. Prerequisite: MU 3381 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3383. Recording Techniques III.**

Principles and practices of microphone and mixing techniques. Full major in SRT required. Prerequisite: MU 3382 with a grade of "C" or better. Corequisite: MU 3180.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MU 3384. Recording Techniques IV.**

Audio tape and disc recording and their applications in a variety of settings and genres. Full major in SRT required. Prerequisite: MU 3383 with a grade of "C" or better. Corequisite: MU 3182.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MU 4000. Senior Departmental Recital.**

This course requires attendance and observation of weekly recitals. Concurrent enrollment in senior-level applied lessons and the appropriate major ensemble may be required.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MU 4050. Senior Recital.**

Preparation and performance of the senior recital. Prerequisite or Corequisites: MUSP 4170 or MUSP 4220 or MUSP 4230 or MUSP 4240 or MUSP 4250 or MUSP 4260 or MUSP 4270, or MUSP 4280, with a grade of "C" or better.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 4152. Problems in Music.**

The course is conducted as an independent study on one or more topics in music and is open to students on an individual basis by approval of the Director of the School of Music.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 4156. Mariachi Arranging Techniques.**

This course introduces analysis and arranging techniques for the mariachi ensemble. Topics include instrument families and their ranges, basic manuscript techniques, and standard mariachi orchestration techniques for voicing and scoring within the different song styles. (MULT) Prerequisite: MU 2316 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 4157. Mariachi Ensemble Teaching Lab.**

This course provides students with the knowledge to become effective directors of Mariachi ensembles within the public school/university systems. Mariachi curriculum/repertoire/rehearsal techniques appropriate to middle school/high school/post-high school ensembles are discussed and applied within the setting of a performing ensemble. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MU 4170. Mariachi Arranging.**

This course will introduce analysis and arranging techniques for the mariachi ensemble. Topics will cover instrument families and ranges, basic manuscript techniques, standard mariachi orchestration techniques for voicing and scoring within the different song styles. Prerequisite: MU 2316 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4180. Recording Practicum VII.**

This course allows students to continue to develop the aural and practical skills necessary to produce high quality recordings. Full major in SRT required. Prerequisite: MU 3182 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4182. Recording Practicum VIII.**

Students will develop the aural skills associated with audio production and recording. This is a continuation of MU 4180, Recording Practicum VII. Full major status in SRT required. Prerequisite: MU 4180 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4185. Senior Research Project.**

A study of the student's senior recital literature resulting in a thorough research paper on the theoretical, historical, technical and stylistic aspects of the compositions. Concurrent enrollment in Senior Recital, senior level applied lessons, and appropriate major ensemble are required. Prerequisites or Corequisites: MU 4050 and MUSP 4170 or MUSP 4220 or MUSP 4230 or MUSP 4240 or MUSP 4250 or MUSP 4260 or MUSP 4270 or MUSP 4280.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 4234. Arranging Techniques for School Music Ensembles.**

This class will introduce the many techniques involved in arranging for a wide variety of school music ensembles. Content will include an examination of the various instrument families, basic manuscript techniques (both manual and computer aided) and various orchestration techniques for voicing and scoring. Prerequisites: MU 2316; MU 3207; MUSP 3145 or 3147; MUSP 3155 or 3157; All with grades of "C" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4244. Jazz Theory and Improvisation III.**

This course is a continuation of MU 3234 and explores advanced concepts in jazz theory including symmetrical scales, chord substitutions, re-harmonization, pentatonic and exotic scale forms. Classes will focus on best practices in practical application and pedagogy and also examine historical and cultural considerations related to performance. (MULT) Prerequisite: MU 3234 and MUSE 3127, all with a grade of "C" or better or permission of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 4245. Jazz Composition and Arranging.**

This course is an in-depth exploration of various commercial writing styles and instrumentations, focusing on Pop, Latin, and Jazz. Students will analyze the writing styles of prolific 20th-century Big Band Arrangers, and learn to write music for all types of commercial applications, and styles, for all levels of musicians. (MULT) Prerequisite: MU 4244 with a grade of "C" or better or permission of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 4253. Problems in Music.**

The course is conducted as an independent study on one or more music topics and is open to students on an individual basis by approval of the Director of the School of Music.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 4257. Vocal Pedagogy I: Voice Science.**

This course explores the anatomy/physiology of the human voice, the acoustic properties that govern resonance, vocal health, and the philosophy of singing and teaching. It is designed for Bachelor of Music majors with a concentration in voice. Restricted to Music Studies or Music Performance majors, with a vocal concentration. Co-requisites: MUSP 3220 or MUSP 4220 with a grade of "C" or better, or by Instructor Permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 4259. Vocal Literature.**

This course is a detailed consideration of vocal literature from approximately 1600 through the 20th century, focusing on different cultures of the world. It covers major composers and developments in the genre. Repertoire selection and performance problems peculiar to the various styles will be discussed. Prerequisites: Bachelor of Music with vocal concentration and MU 2142. Corequisite: MUSP 3220 or MUSP 4220 with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 4260. Vocal Pedagogy II: Methods.**

This is a comparative study of various pedagogical methods and ideas that covers a wide range of historical and contemporary pedagogy treatises. Students will explore exercises and vocalises for general voice development, peer teaching, and techniques to address/correct specific vocal problems. Prerequisite: MU 4257 with a grade of "B" or better. Co-requisites: MUSP 3220 or MUSP 4220 with a grade of "D" or better, or by Instructor Permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4261. Guitar Pedagogy.**

This course is an intensive study of instructional methodologies for guitar from beginning to advanced levels that includes both one-on-one teaching and group lessons. Corequisite: MUSP 3260 or MUSP 4260.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4262. Guitar Literature.**

This course is an intensive study of music repertoire for guitar, including solo, chamber, and orchestral music, as well as relevant music history and literature, performance practice, and rehearsal techniques. Emphasis will be given to literature of the student's primary instrument. Corequisite: MUSP 3260 or MUSP 4260.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4263. Keyboard Pedagogy.**

This course is an intensive study of instructional methodologies for keyboard from beginning to advanced levels that includes both one-on-one teaching and group lessons. Corequisite: MUSP 3230 or MUSP 4230.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4264. Keyboard Literature I.**

This course is an intensive study of music repertoire for keyboard from 1700 to 1850, including solo, chamber, and orchestral music, as well as relevant music history and literature, performance practice, and rehearsal techniques. Emphasis will be given to literature of the student's primary instrument. Corequisite: MUSP 3230 or MUSP 4230.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4265. Keyboard Literature II.**

This course is an intensive study of music repertoire for keyboard from 1850 - today, including solo, chamber, and orchestral music, as well as relevant music history and literature, performance practice, and rehearsal techniques. Emphasis will be given to literature of the student's primary instrument. Corequisite: MUSP 3230 or MUSP 4230.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4266. Woodwind Pedagogy.**

This course is an intensive study of instructional methodologies for woodwinds from beginning to advanced levels that includes both one-on-one teaching and group lessons. Corequisite: MUSP 3240 or MUSP 4240.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4267. Woodwind Literature.**

This course is an intensive study of music repertoire for woodwinds, including solo, chamber, and orchestral music, as well as relevant music history and literature, performance practice, and rehearsal techniques. Emphasis will be given to literature of the student's primary instrument. Corequisite: MUSP 3240 or MUSP 4240.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4268. Brass Pedagogy.**

This course is an intensive study of instructional methodologies for brass from beginning to advanced levels that includes both one-on-one teaching and group lessons. Corequisite: MUSP 3250 or MUSP 4250.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4269. Brass Literature.**

This course is an intensive study of music repertoire for brass, including solo, chamber, and orchestral music, as well as relevant music history and literature, performance practice, and rehearsal techniques. Emphasis will be given to literature of the student's primary instrument. Corequisite: MUSP 3250 or MUSP 4250.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4270. Percussion Pedagogy.**

This course is an intensive study of instructional methodologies for percussion from beginning to advanced levels that includes both one-on-one teaching and group lessons. Corequisite: MUSP 3170 or MUSP 3270 or MUSP 4170 or MUSP 4270.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4271. Percussion Literature.**

This course is an intensive study of music repertoire for percussion, including solo, chamber, and orchestral music, as well as relevant music history and literature, performance practice, and rehearsal techniques. Emphasis will be given to literature of the student's primary instrument. Corequisite: MUSP 3170 or MUSP 3270 or MUSP 4170 or MUSP 4270.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4272. String Pedagogy.**

This course is an intensive study of instructional methodologies for strings from beginning to advanced levels that includes both one-on-one teaching and group lessons. Corequisite: MUSP 3260 or MUSP 4260.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4273. String Literature.**

This course is an intensive study of music repertoire for strings, including solo, chamber, and orchestral music, as well as relevant music history and literature, performance practice, and rehearsal techniques. Emphasis will be given to literature of the student's primary instrument. Corequisite: MUSP 3260 or MUSP 4260.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4310. Guitar Class III: Rock, Country, Blues.**

Designed primarily for the non-music major. Continued study of advanced techniques including scales, arpeggios, strumming patterns and advanced accompanying styles. Analysis and performance of musical styles including rock, country and blues. Prerequisite: MU 3310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4312. Guitar Class IV: Rock, Country, Blues.**

Designed primarily for the non-music major. Continued study of advanced techniques including soloing techniques, accompaniment techniques. Detailed analysis of performance styles emphasizing the styles of contemporary performers. Prerequisite: MU 4310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4330. Form and Analysis.**

Principles of form and analysis developed through the in-depth application of analytical systems to the musical repertoire through the nineteenth century. Prerequisites: MU 2316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4332. Contemporary Analytic Techniques.**

Detailed study and analysis of selected compositions from the early twentieth century to the present; analytical projects. Prerequisite: MU 2316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MU 4334. Orchestration.**

Study of the characteristics of individual instruments; writing for various combinations; study of scores of different periods; techniques of instrumentation, arranging, and orchestration; listening to recorded and live performances. Prerequisite: MU 2316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4336. 18th-Century Counterpoint.**

A study of 18th-century contrapuntal techniques as found in choral preludes, inventions and fugues, among other forms. Prerequisite: MU 2316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4343. Jazz Pedagogy.**

A study of repertoire selection and evaluation, phrasing and articulation, rhythm section techniques, methods of instruction, and review of current teaching styles in American jazz programs, including contest preparation and the teaching of basic improvisation. (MULT) Prerequisites: MU 2116 and MU 2316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 4351. Problems in Music.**

The course is conducted as an independent study on one or more music topics and is open to students on an individual basis by approval of the Director of the School of Music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 4353. Problems in Music.**

The course is conducted as an independent study on one or more music topics and are open to students on an individual basis by approval of the Director of the School of Music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 4354. Business in Music.**

A preparation of students and future musicians for a career in music. The course will discuss the various career options available to aspiring musicians and the paths to take to pursue these options.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4355. Mariachi Arranging Techniques.**

This course applies analysis to the arranging of music for the mariachi ensemble. Topics include instrument families and their ranges, basic manuscript techniques, and standard mariachi orchestration techniques for voicing and scoring within the different song styles. Prerequisite: MU 2316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4358. Advanced Musicianship Skills.**

This course focuses on developing advanced musicianship skills, specifically highlighting sight singing, error detection, transcription, dictation, and improvisation. The repertoire for this course includes western and non-western music of various styles and modalities.

Prerequisite: MU 2116 and MU 2316 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4385. Advanced Audio Recording Techniques.**

Application of theoretical skills in recording, mixing, and editing concert music. Full major in SRT required. Prerequisite: MU 3384 with a grade of "C" or higher. Corequisite: MU 4180.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4386. SRT Internship.**

Practical experience in audio recording under professional supervision.

Provides the opportunity for students to demonstrate professional competencies, based on prior theoretical and laboratory experiences. Full major in SRT required.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Courses in Music Ensembles (MUSE)

**MUSE 3009. Opera Production.**

Opera production is a performance class where practical skills are applied in a production setting. The class is designed to produce and perform a fully staged opera or opera scenes program. Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 3106 with a grade of "C" or better.

**0 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3026. Student Chamber Music.**

Small student organized and led performing groups coached by area faculty as necessary.

**0 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3027. Jazz Seminar.**

Jazz faculty and guest artists meet with Jazz Performance majors to address topics outside the scope of the student's other daily coursework. The seminar will provide lectures and performance opportunities that focus on skills related to professional jazz performance practices. (MULT).

**0 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 3028. Latin Music Studies Seminar.**

Latin music faculty and guest artists meet with Latin music majors to address topics outside the scope of the students' other daily coursework. The seminar will provide lectures and performance opportunities that focus on skills related to professional Latin performance practices. Corequisite: MUSP 1220 or MUSP 2220 or MUSP 3220 or MUSP 4220 or MUSP 1230 or MUSP 2230 or MUSP 3230 or MUSP 4230 or MUSP 1240 or MUSP 2240 or MUSP 3240 or MUSP 4240 or MUSP 1250 or MUSP 2250 or MUSP 3250 or MUSP 4250 or MUSP 1260 or MUSP 2260 or MUSP 3260 or MUSP 4260 or MUSP 1170 or MUSP 2170 or MUSP 3170 or MUSP 4170.

**0 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3099. Concert Ensemble.**

This is a major ensemble that provides experience for music majors to improve their performance skills in a mixed ensemble setting. May be repeated for credit. Restricted to full majors in Music.

**0 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3100. Mariachi Lince de Oro.**

This course is an introduction to the mariachi genre. Traditional mariachi repertoire is distributed, rehearsed, memorized, and performed.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3101. Bobcat Basketball Band.**

The Bobcat Basketball Band performs for all home men's and women's basketball games that do not fall over a university break. The group travels for all postseason tournaments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3102. Salsa Del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3103. Mariachi Nueva Generación.**

This course is a performing ensemble specializing in Mexican folk music.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 3104. Panorama Steel Drum Band.**

A performing ensemble specializing in Caribbean steel drum band music. May be repeated for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 3105. Vocalibre.**

A select vocal ensemble specializing in chamber music, including madrigal and jazz literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3106. Opera Workshop.**

Opera Workshop is a skills-based class designed for developing opera singers to learn and apply skills that prepare them for professional performance. This course may be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3107. Opera Theatre.**

This course is designed to take the knowledge and skills learned in MUSE 3106-Opera Workshop class and build on those skills while applying those skills to more advanced work. Students will learn and perform operatic roles, chamber opera pieces, or one-act operas. Prerequisite: MUSE 3106 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3108. Orquesta del Rio.**

Performing ensemble specializing in Latin and South America music. May be repeated for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 3109. Opera Production.**

Opera Production is a performance class where practical skills are applied in a production setting. The class is designed to produce and perform a fully staged opera or opera-scenes program. Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 3106 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3120. Bobcat Marching Band.**

This ensemble performs at all home and select away football games utilizing traditional and corps-style marching. The ensemble is focused on delivering entertaining and high-powered halftime shows while supporting Bobcat Football. The band also performs in exhibitions for high school band events. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3122. Aurora Voce.**

Aurora Voce is a highly selective chamber chorale ensemble that is open by audition to all treble singers across campus. Performing in this ensemble provides the singers opportunities to explore high quality and challenging repertoire that spans a wide variety of styles, historical periods, and genres.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3123. Concert Band.**

This ensemble provides playing experiences for non-music majors and music majors who want to improve their skills and serve as a lab ensemble for conducting students. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3124. Treble Voice Choir.**

This is a performing ensemble course, specializing in choral literature for treble voices. This course may be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3125. Men's Choir.**

Performing ensemble specializing in choral literature for men's voices. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3126. Chamber Music.**

Small group performing ensembles focusing on chamber literature of mixed and similar instrumental music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3127. Jazz Combo.**

A small performance ensemble designed to develop improvisational skills and individual musical creativity through performance of standard jazz literature. May be repeated for credit.

**1 Credit Hour. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3130. Wind Symphony.**

Major instrumental ensemble comprised of the most outstanding wind and percussion students who are selected by audition. The group is dedicated to the performance of the finest wind repertoire, whether a contemporary works for winds, or transcriptions from the orchestral repertoire. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3131. Symphonic Winds.**

Major instrumental ensemble consisting primarily of music majors and talented non-music majors. This ensemble performs a broad range of full ensemble repertoire, representative of all historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3140. Texas State Chorale.**

Auditioned major choral ensemble specializing in performances of literature from the Renaissance and 20th Century. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3141. University Singers.**

Major choral ensemble that performs a variety of literature, including masterworks, from the 17th Century to the present. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3150. Texas State Symphony Orchestra.**

A full symphony orchestra that performs standard orchestra literature, as well as oratorio, concerto, and opera accompaniments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3151. Chamber Orchestra.**

Auditioned orchestra designed to perform advanced level symphonic literature with repertoire representing several of historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3160. Jazz Ensemble.**

The jazz based ensemble performs advanced arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3161. Jazz Orchestra.**

The jazz based ensemble performs intermediate arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3162. Jazz Lab Band.**

The jazz based ensemble performs beginning arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3170. Accompanying.**

A coaching seminar for pianists to develop reading and accompanying skills. May be repeated for credit. Prerequisite: Piano major.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3180. Mystorium for Contemporary Music Ensemble.**

An ensemble course focusing on the performance and analysis of contemporary music in all styles and media. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3190. Guitar Ensemble.**

Chamber guitar ensemble designed to provide interaction with fellow guitarists, develop musicianship as ensemble performer, and to familiarize student with music from different periods through a variety of literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Courses in Applied Music (MUSP)

Applied Instruction: Private study of voice, piano/organ, woodwind, brass, string, and percussion instruments is available to all music majors from beginning through advanced levels of instruction. Though supervised private coaching, instruction focuses on technique, musicality, literature, and performance. May be repeated for credit. Prerequisite: Music major status or permission from instructor.

**MUSP 1120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. BA in music status is required as well as MU 1000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1121. Vocal Techniques.**

Vocal Techniques. Vocal instruction focusing on technique, musicality and performance for the beginning singer. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. BA in music status is required as well as MU 1000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1135. Piano Techniques I.**

This is an introductory course to develop piano technique and musical style through sight-reading, scales, chords, harmonization, and improvisation.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1181

**MUSP 1136. Piano Techniques II.**

Beginning level course to develop piano technique and musical style through sight-reading, scales, chords, harmonization, and improvisation. Prerequisites: MUSP 1135 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1182

**MUSP 1137. Piano Techniques III.**

Intermediate level course to develop piano technique and musical style through sight-reading, scales, chords, harmonization and improvisation. Prerequisite: MUSP 1136 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1138. Piano Techniques IV.**

Advanced level course to develop piano technique and musical style through sight-reading, scales, chords, harmonization and improvisation. Prerequisite: MUSP 1137 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. BA in music status is required as well as MU 1000, and the appropriate major ensemble must be taken concurrently.

Corequisite: MU 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. BA in music status is required as well as MU 1000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. BA in music status is required as well as MU 1000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Music major status is required as well as MU 1000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1180. Introduction to Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1230. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**MUSP 1240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Corequisite: MU 1000 with a grade of "C" or better; MUSE 3120, MUSE 3123, MUSE 3130, MUSE 3131, MUSE 3150, MUSE 3160, MUSE 3161, MUSE 3162; with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1325. Class Piano for Non-Music Majors.**

This course explores aspects of music in the context of developing basic keyboard skills. In addition to developing technical proficiency at the piano, students learn the basics of music theory and aural skills, while exploring various genres of music, including classical and modern styles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. BA in music status is required as well as MU 2000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 2000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2125. Applied Voice for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual vocal development. May be repeated for credit. Permission from instructor required to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. BA in music status is required as well as MU 2000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 2000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2135. Applied Keyboard for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual keyboard development. May be repeated for credit. Permission from instructor required to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. BA in music status is required as well as MU 2000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 2000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2145. Applied Woodwind for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual woodwind development. May be repeated for credit. Permission from instructor required to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. BA in music status is required as well as MU 2000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 2000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2155. Applied Brass for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual brass development. May be repeated for credit. Permission from instructor required to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. BA in music status is required as well as MU 2000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 2000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2165. Applied String for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual string development. May be repeated for credit. Permission from instructor required to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. This course may be repeated for credit. Music major status is required as well as MU 2000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 2000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2175. Applied Percussion for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual percussion development. May be repeated for credit. Permission from instructor required to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2185. Applied Composition for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual composition development. May be repeated for credit. Permission from instructor required to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2191. Electronic Music I.**

Theoretical and working knowledge of sound synthesis, MIDI, and computer-based composition emphasizing practical applications using available software and instruments. Major subject areas: hardware and software, virtual instruments, sampling & playback devices, timbre control, MIDI synchronization, sequencing, digital audio workstations, editing, mixing, notation, and composition. Full major in SRT required.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2192. Electronic Music II.**

Continuation of the theoretical/working knowledge of sound synthesis, MIDI, and computer-based composition emphasizing practical applications using available software and instruments. Major subject areas: hardware & software, virtual instruments, sampling & playback devices, timbre control, MIDI synchronization, sequencing, digital audio workstations, editing, mixing, notation, and composition. Full major in SRT required. Prerequisite: MUSP 2191.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2225. Applied Voice for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual vocal development. May be repeated for credit. Permission from instructor required to enroll.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2230. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2235. Applied Keyboard for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual keyboard development. May be repeated for credit. Permission from instructor required to enroll.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2245. Applied Woodwind for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual woodwind development. May be repeated for credit. Permission from instructor required to enroll.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2255. Applied Brass for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual brass development. May be repeated for credit. Permission from instructor required to enroll.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2265. Applied String for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual string development. May be repeated for credit. Permission from instructor required to enroll.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Corequisite: MU 2000 with a grade of "C" or better; MUSE 3120, MUSE 3123, MUSE 3130, MUSE 3131, MUSE 3150, MUSE 3160, MUSE 3161, MUSE 3162 or equivalent; with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2285. Applied Composition for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual composition development. May be repeated for credit. Permission from instructor required to enroll.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3131. Jazz Piano Techniques I.**

Beginning piano techniques, introducing scales and chords used in the jazz idiom. (MULT) Prerequisite: MUSP 1136 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 3132. Jazz Piano Techniques II.**

Continuing study of piano technique in the jazz idiom and application of skills through performance and arranging. (MULT) Prerequisites: MUSP 3131 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 3140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3145. Woodwind Techniques I.**

Basic teaching and performance techniques of the clarinet and saxophone. Requires successful completion of the Upper Level Competency Review in Music Studies or permission from the instructor to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3147. Woodwind Techniques II.**

Basic teaching and performance techniques of the flute and double reeds. Requires successful completion of the Upper Level Competency Review in Music Studies or permission from the instructor to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3155. Brass Techniques I.**

Basic teaching and performance techniques of the high brass instruments. Requires successful completion of the Upper Level Competency Review in Music Studies or permission from the instructor to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Perspective

**Grade Mode:** Standard Letter

**MUSP 3157. Brass Techniques II.**

Continuation of the basic teaching and performance techniques of the low brass instruments. Requires successful completion of the Upper Level Competency Review in Music Studies or permission from the instructor to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Perspective

**Grade Mode:** Standard Letter

**MUSP 3160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3165. String Techniques.**

Basic teaching and performance techniques of the violin, viola, cello and double bass. Full major in Music Studies required.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3166. String Techniques Practicum.**

In this course students will apply string pedagogy through various teaching activities. Corequisite: MUSP 3165 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Music major status required as well as MU 3000 and the appropriate major ensemble must be taken concurrently. Corequisite: MU 3000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3175. Percussion Techniques.**

Basic teaching and performance techniques of marching and concert percussion. Full major in Music Studies required.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3191. Electronic Music III.**

Further exploration into the theoretical and working knowledge of sound synthesis, MIDI, and computer-based composition emphasizing practical applications using available software and instruments. Major subject areas: hardware and software, virtual instruments, sampling & playback devices, timbre control, MIDI synchronization, sequencing, digital audio workstations, editing, mixing, notation, and composition. Prerequisite: MUSP 2192 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3192. Electronic Music IV.**

Final studies in the theoretical and working knowledge of sound synthesis, MIDI, and computer-based composition emphasizing practical applications using available software and instruments. Major subject areas: hardware and software, virtual instruments, sampling & playback devices, timbre control, MIDI synchronization, sequencing, digital audio workstations, editing, mixing, notation, and composition. Prerequisites: MUSP 3191 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3195. Instrumental Techniques for Choral Students.**

This course introduces basic teaching and performance techniques of band and orchestral instruments, instrumental ensembles and instrumental music programs for music students who consider instrumental music a secondary skill area. Full major in Music Studies, vocal concentration required.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**MUSP 3196. Jazz and Latin Ensemble Techniques.**

This course explores the basic teaching and performance techniques of instrumentation, arranging and pedagogy in the areas of jazz and multicultural ensembles. Full major in Music Studies, instrumental concentrations. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 3197. Choral/Vocal Techniques.**

This course will prepare instrumental music studies students with knowledge of and practice in basic vocal/choral techniques along with guidance in the choosing of appropriate choral literature in order that they may be successful in developing, directing, and maintaining choral programs in elementary-secondary schools. Full major in Music Studies required.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required

**Grade Mode:** Standard Letter

**MUSP 3220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance. May be repeated for credit.

Prerequisite: Music major status or permission from instructor.

Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3230. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3241. Woodwind Techniques - Single Reeds.**

In this course students will develop specific skills and knowledge for successful performance and instruction. Basic techniques of playing and teaching clarinet and saxophone, such as instrument assembly, embouchure, playing position, articulation, and arranging/orchestrating for single reeds, will be presented.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3247. Woodwind Techniques - Flute and Double Reeds.**

In this course students will develop specific skills and knowledge for successful performance and instruction. Basic techniques of playing and teaching flute, oboe, and bassoon, such as instrument assembly, embouchure, playing position, and articulation; orchestrating for flute and double reeds; and arranging, will be presented.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or permission from instructor.

Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3251. Brass Techniques - High Brass.**

This course will aid students in developing specific skills and understandings necessary for successful instrumental music teaching including: teaching, playing, and orchestrating/arranging for high brass instruments; lesson planning; and professional practice.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3255. Wind Instrumental Techniques for String Students.**

This course is designed to introduce basic teaching and performance techniques of the major wind instruments, with a focus on instructing full orchestra. Students will observe, practice, and teach wind instruments in various settings. Full major in Music Studies, string concentration and Upper-Level review completion required. Prerequisite: MUSP 3165; MUSP 3265; with grades of "C" or higher.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3257. Brass Techniques - Low Brass.**

This course will aid students in developing specific skills and understandings necessary for successful instrumental music teaching including: teaching, playing, and orchestrating/arranging for low brass instruments; lesson planning; and professional practice.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3261. Mariachi Trumpet Techniques.**

This course addresses playing and teaching the trumpet within the Mariachi Ensemble. Topics cover history, tuning, stylistic playing techniques, and contemporary teaching methods.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3262. Mariachi Violin Techniques.**

This course addresses playing and teaching the violin within the Mariachi Ensemble. Topics cover history, tuning, stylistic playing techniques, and contemporary teaching methods.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3263. Mariachi Vihuela Techniques.**

This course addresses playing and teaching the vihuela within the Mariachi Ensemble. Topics cover history, tuning, stylistic playing techniques, and contemporary teaching methods.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3264. Mariachi Guitarrón Techniques.**

This course addresses playing and teaching the Guitarrón within the Mariachi Ensemble. Topics cover history, tuning, stylistic playing techniques, and contemporary teaching methods.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3265. String Techniques II.**

This course is designed to review beginning-level techniques and to introduce intermediate and advanced-level techniques related to string teaching and playing. Techniques and concepts will be explored through historical perspectives, pedagogical approaches, performance (on primary and secondary instruments), observations of teaching, and teaching experiences. Prerequisite: MUSP 3165 with a grade of "C" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3266. Mariachi Voice Techniques.**

This course addresses singing and teaching within the Mariachi Ensemble. Topics cover history, tuning, range, stylistic singing techniques, contemporary teaching methods, and the foundations of vocal pedagogy.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3275. Percussion Techniques.**

In this course students will acquire skills and the basic techniques required for performance in the areas of drums, keyboard, timpani, marching percussion, accessory instruments, and drum set. Particular attention will be given to teaching materials and suggested pedagogical approaches for each area.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3355. Wind Instrumental Techniques for String Students.**

In this course students will explore basic teaching and performance techniques of the major wind instruments, with a focus on instructing full orchestra. Students observe, practice, and teach wind instruments in various settings. Prerequisite: MUSP 3165 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3365. String Techniques II.**

This course is designed to review beginning-level techniques and to introduce intermediate and advanced-level techniques related to string teaching and playing. Techniques and concepts will be explored through historical perspectives, pedagogical approaches, performance (on primary and secondary instruments), observations of teaching, orchestration/arranging for strings, and teaching experiences. Prerequisite: MUSP 3165 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. Co-requisite: MUSP 4230.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. Co-requisite: MUSP 4240 with a grade of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. Co-requisite: MUSP 4260.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4164. Mariachi Melodia Techniques.**

This course provides students with the fundamentals of playing and teaching the melodic instruments associated with the Mariachi ensemble, with specific emphasis on the voice, violin, and trumpet. Topics will cover history, tuning, and stylistic techniques associated with each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 4165. Mariachi Armonia Techniques.**

This course provides students with the fundamentals of playing and teaching the rhythm/harmony instruments in the Mariachi ensemble, with specific emphasis in the guitarrón, vihuela/guitar, and the harp. Topics will cover history, tuning, strumming, and stylistic techniques specific to each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 4170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4230. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4350. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### Admission Requirements

1. All students in the School of Music require admission to the university and admission to the program. For audition guidelines and requirements, prospective undergraduate students should visit: <http://www.music.txstate.edu/prospectivestudents/BecomingaMusicMajor.html>
2. Students wanting to enter the music program as a music major (B.A., B.M., B.S. degrees) must submit an online application and audition on their principal instrument or voice the semester before their desired entrance.
3. Admission to the School of Music is contingent upon admission to Texas State, successful completion of the audition process, and available space in each studio. Moreover, a successful audition does not automatically ensure acceptance to the School of Music. Transfer students' transcripts will be evaluated by an academic advisor prior to an acceptance decision to ensure that acceptance and successful degree plan completion are possible here at Texas State. Prospective music students will not be permitted to enroll in applied music and other music major classes until they have been accepted based on their audition and met with an academic advisor. Auditions are held periodically throughout the year for enrollment the following academic year. Those prospective music students unable to audition in person due to geographic distance from campus may submit an audio or video recording representative of their performing abilities that meet the audition guidelines for their instrument or voice. The deadline to submit a recorded audition is March 1 (for Fall admission) or November 1 (for Spring admission). Audition requirements are available on the School of Music website.

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this

catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses and a minor.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Piano Proficiency (Level II)
- Theory Proficiency
- Upper Level Competency Review (ULCR)
- All B.A. and B.M. music majors must participate in the appropriate major ensemble for their instrument each semester until all major ensemble requirements for the degree have been completed. No more than one major and one secondary ensemble will be counted toward the student's degree plan per semester. While not required in the degree plan, continued participation in major ensembles after degree requirements are completed is encouraged.
- For transfer students, 31 semester credit hours in Music (or equivalents) may be transferred from a Texas public institution of higher education for the Music Field of Study and be applied to the Bachelor of Arts degree with a major in Music at Texas State University. More information about the [Field of Study](http://www.mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/) (<http://www.mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. Transfer students may not reach the 36 advanced hours required in the degree without taking additional coursework. See your academic advisor for details. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
MU 1315	Music Theory I	3
TCCN: MUSI 1311		
MU 1316	Music Theory II	3
TCCN: MUSI 1312		
MU 2315	Music Theory III	3
TCCN: MUSI 2311		
MU 2316	Music Theory IV	3
TCCN: MUSI 2312		
MU 1115	Aural Skills I	1
TCCN: MUSI 1116		
MU 1116	Aural Skills II	1
TCCN: MUSI 1117		
MU 2115	Aural Skills III	1
TCCN: MUSI 2116		
MU 2116	Aural Skills IV	1
TCCN: MUSI 2117		
MU 2303	Survey of Music Literature	3
TCCN: MUSI 1307		

4 semester credit hours of Ensembles from the following: 4  
 MUSE 3120, MUSE 3123, MUSE 3122, MUSE 3124, MUSE 3125, MUSE 3130, MUSE 3131, MUSE 3140, MUSE 3141, MUSE 3150, MUSE 3160, MUSE 3161, MUSE 3162, MUSE 3170, MUSE 3190, MUSE 3100, MUSE 3103, MUSE 3102, MUSE 3108

TCCN: 4 hours from MUEN 11XX and 21XX

8 semester credit hours of Applied Study from the following: 8  
 MUSP#1220,#MUSP#1230,#MUSP#1240,#MUSP#1250,#MUSP#1260,#MUSP#

TCCN: 8 hours from MUAP 11XX, 12XX, 21XX and 22XX

**Total Hours 31**

## Course Requirements

Freshman			
Fall Semester Hours		Spring Semester Hours	
MU 1000	0	MU 1000	0
MU 1115 (TCCN MUSI 1116)	1	MU 1116 (TCCN MUSI 1117)	1
MU 1315 (TCCN MUSI 1311)	3	MU 1316 (TCCN MUSI 1312)	3
MUSP 12XX [TCCN MUAP 11XX, 12XX, 21XX and 22XX]	2	MUSP 12XX [TCCN MUAP 11XX, 12XX, 21XX and 22XX]	2
MUSE 31xx	1	MUSE 31xx	1
MUSP 1135 (TCCN MUSI 1181)	1	MUSP 1136 (TCCN MUSI 1182)	1
US 1100	1	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	American History Component Code 060	3
Mathematics Component Code 020	3		
15		14	
Sophomore			
Fall Semester Hours		Spring Semester Hours	
MU 2000	0	MU 2000	0
MU 2115 (TCCN MUSI 2116)	1	MU 2116	1
MU 2315 (TCCN MUSI 2311)	3	MU 2316	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3	MU 3315	3
MUSP 22XX [TCCN MUAP 11XX, 12XX, 21XX and 22XX]	2	MUSP 22XX [TCCN MUAP 11XX, 12XX, 21XX and 22XX]	2
MUSE 31xx	1	MUSE 31xx	1
Social and Behavioral Sciences Component Code 080	3	POSI 2310 (Government/ Political Science Component Code 070)	3
American History Component Code 060	3	Minor	3
16		16	
Junior			
Fall Semester Hours		Spring Semester Hours	
MU 3000	0	MU 3000	0
MU 3316	3	MU 3317	3
Modern Language 2310	3	Advanced Music Elective	3



Life and Physical Sciences Component Code 030	3 Modern Language 2320	3
POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3 Life and Physical Sciences Component Code 030	3
Minor	3 Minor	3
	<b>15</b>	<b>15</b>
		<b>Senior</b>
<b>Fall Semester Hours</b>	<b>Spring Semester Hours</b>	
Advanced Music Elective	3 Advanced Music Elective	2
BA ENG Literature	3 Minor	6
COMM 3301 or SOCI 3307 (BA Math/Science/Computer Science/Logic)	3 ENG Literature (Component Area Option Code 090/094) <sup>1</sup>	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
Minor	3	
	<b>15</b>	<b>14</b>

**Total Hours: 120**

<sup>1</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

**Minimum required: 129 semester credit hours**

## Admission Requirements

1. All students in the School of Music require admission to the university and admission to the program. For audition guidelines and requirements, prospective undergraduate students should visit: <http://www.music.txstate.edu/prospectivestudents/BecomingaMusicMajor.html>
2. Students wanting to enter the music program as a music major (B.A., B.M., B.S. degrees) must submit an online application and audition on their principal instrument or voice the semester before their desired entrance.
3. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263) once all course requirements and successful completion of the School of Music's Upper Level Competency Review have been met in order to officially complete the Bachelor of Music major in Music Studies degree program.
4. Admission to the School of Music is contingent upon admission to Texas State, successful completion of the audition process, and available space in each studio. Moreover, a successful audition does not automatically ensure acceptance to the School of Music. Transfer students' transcripts will be evaluated by an academic advisor prior to an acceptance decision to ensure that acceptance and successful degree plan completion are possible here at Texas State. Prospective music students will not be permitted to enroll in applied music and

other music major classes until they have been accepted based on their audition and met with an academic advisor. Auditions are held periodically throughout the year for enrollment the following academic year. Those prospective music students unable to audition in person due to geographic distance from campus may submit an audio or video recording representative of their performing abilities that meet the audition guidelines for their instrument or voice. The deadline to submit a recorded audition is March 1 (for Fall admission) or November 1 (for Spring admission). Audition requirements are available on the School of Music website.

## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. To satisfy graduation requirements for this concentration, students must have at least a 2.85 Overall GPA. A GPA of at least 2.50 in all assigned courses in the professional sequence with no grade below a "C".
3. In addition to the major requirements, students must also complete 15 hours of professional sequence courses through the College of Education. All coursework must be completed prior to EDST 4380 and EDST 4381.
4. Piano Proficiency (Level IV)
5. Theory Proficiency
6. Upper Level Competency Review (ULCR)
7. All music majors must participate in the appropriate major ensemble for their instrument each semester until all major ensemble requirements for the degree have been completed. No more than one major and one secondary ensemble will be counted toward the student's degree plan per semester. While not required in the degree plan, continued participation in major ensembles after degree requirements are completed is encouraged.
8. [The Texas Education Agency \(TEA\) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/.](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/)
9. For transfer students, 31 semester credit hours in Music (or equivalents) may be transferred from a Texas public institution of higher education for the Music Field of Study and be applied to the Bachelor of Music degree with a major in Music Studies at Texas State University. More information about the [Field of Study \(http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/\)](http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
MU 1315	Music Theory I	3
TCCN: MUSI 1311		

MU 1316	Music Theory II	3
TCCN: MUSI 1312		
MU 2315	Music Theory III	3
TCCN: MUSI 2311		
MU 2316	Music Theory IV	3
TCCN: MUSI 2312		
MU 1115	Aural Skills I	1
TCCN: MUSI 1116		
MU 1116	Aural Skills II	1
TCCN: MUSI 1117		
MU 2115	Aural Skills III	1
TCCN: MUSI 2116		
MU 2116	Aural Skills IV	1
TCCN: MUSI 2117		
MU 2303	Survey of Music Literature	3
TCCN: MUSI 1307		
4 semester credit hours of Ensembles from the following: MUSE 3122, MUSE 3124, MUSE 3125, MUSE 3140 and MUSE 3141		4
TCCN: 4 hours from MUEN 11XX and 21XX		
8 semester credit hours of Applied Study from the following: MUSP 1220 and MUSP 2220		8
TCCN: 8 hours from MUAP 11XX, 12XX, 21XX and 22XX		
<b>Total Hours</b>		<b>31</b>

## Course Requirements

		<b>Freshman</b>	
		<b>Fall Semester Hours</b>	<b>Spring Semester Hours</b>
MU 1000	0	MU 1000	0
MU 1115 (TCCN MUSI 1116)	1	MU 1116 (TCCN MUSI 1117)	1
MU 1315 (TCCN MUSI 1311)	3	MU 1316 (TCCN MUSI 1312)	3
MUSP 1220 (TCCN MUAP 12XX)	2	MUSP 1220 (TCCN MUAP 12XX)	2
MUSE 3124 or 3125	1	Select one from the following:	1
MU 1150	1	MUSE 3124	
MUSP 1135 (TCCN MUSI 1181)	1	MUSE 3125	
US 1100 (music education section)	1	MUSE 3140	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	MUSE 3141	
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	MUSP 1136 (TCCN MUSI 1182)	1
Mathematics Component Code 020	3	MU 2123	1
		ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3

	POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
	19	18
	Sophomore	
	Fall Semester Hours	Spring Semester Hours
MU 2000	0 MU 2000	0
MU 2115 (TCCN MUSI 2116)	1 MUSP 2220 (TCCN MUAP 22XX)	2
MU 2315 (TCCN MUSI 2311)	3 MU 2116 (TCCN MUSI 2117)	1
MUSP 2220 (TCCN MUAP 22XX)	2 MU 2316 (TCCN MUSI 2312)	3
MUSE 3140 or 3141	1 MUSE 3140 or 3141	1
MUSP 3195	1 MU 3318	3
MUSP 1137	1 MUSP 1138	1
MU 3141	1 MU 3142	1
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 MU 3315	3
American History Component Code 060	3 American History Component Code 060	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3	

19		18
		Junior
Fall Semester Hours		Spring Semester Hours
MU 3000	0 MU 3000	0
MUSP 3220	2 MUSP 3220	2
MUSE 3140 or 3141	1 MUSE 3140 or 3141	1
MU 3316	3 MU 3317	3
MU 3208	2 MU 3227	2
MU 3340	3 MU 3242	2
MU 3254	2 MU 3269 or 4257 (Fall only)	0-2
MU 4257 or 3269 (Spring only)	0-2 Life and Physical Sciences Component Code 030	3
Life and Physical Sciences Component Code 030	3 Social and Behavioral Sciences Component Code 080	3
18		16
		Senior
Fall Semester Hours		Spring Semester Hours
MUSP 4220	2 EDST 4380	3
MUSE 3140 or 3141	1 EDST 4381	3
MU 4050	0	
CI 4343	3	
CI 4370	3	
RDG 3323	3	

ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
<b>15</b>	<b>6</b>

**Total Hours: 129**

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- To satisfy graduation requirements for this concentration, students must have at least a 2.75 Overall GPA, as well as grades of "C" or better in all courses within the major(s), teaching field(s), certification area(s), and/or in the Minor in Education."
- In addition to the major requirements, students must also complete 15 hours of professional sequence courses through the College of Education. All coursework must be completed prior to EDST 4380 and EDST 4381.
- Piano Proficiency (Level I)
- Theory Proficiency
- Upper Level Competency Review (ULCR)
- All music majors must participate in the appropriate major ensemble for their instrument each semester until all major ensemble requirements for the degree have been completed. No more than one major and one secondary ensemble will be counted toward the student's degree plan per semester. While not required in the degree plan, continued participation in major ensembles after degree requirements are completed is encouraged.
- [The Texas Education Agency \(TEA\) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: \[https://tea.texas.gov/Texas\\\_Educators/Investigations/Preliminary\\\_Criminal\\\_History\\\_Evaluation-FAQs/\]\(https://tea.texas.gov/Texas\_Educators/Investigations/Preliminary\_Criminal\_History\_Evaluation-FAQs/\).](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/)
- For transfer students, 31 semester credit hours in Music (or equivalents) may be transferred from a Texas public institution of higher education for the Music Field of Study and be applied to the Bachelor of Music degree with a major in Music Studies at Texas State University. More information about the [Field of Study \(http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/\)](http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
MU 1315	Music Theory I	3
	TCCN: MUSI 1311	
MU 1316	Music Theory II	3
	TCCN: MUSI 1312	

MU 2315	Music Theory III	3
	TCCN: MUSI 2311	
MU 2316	Music Theory IV	3
	TCCN: MUSI 2312	
MU 1115	Aural Skills I	1
	TCCN: MUSI 1116	
MU 1116	Aural Skills II	1
	TCCN: MUSI 1117	
MU 2115	Aural Skills III	1
	TCCN: MUSI 2116	
MU 2116	Aural Skills IV	1
	TCCN: MUSI 2117	
MU 2303	Survey of Music Literature	3
	TCCN: MUSI 1307	
4 semester credit hours of Ensembles from the following: MUSE 3120, MUSE 3123, MUSE 3130, MUSE 3131, and MUSE 3150		4
	TCCN: 4 hours from MUEN 11XX and 21XX	
8 semester credit hours of Applied Study from the following: MUSP 1240, MUSP 1250, MUSP 1260, MUSP 1170 (2 sections), MUSP 2240, MUSP 2250, MUSP 2260, MUSP 2170 (2 sections)		8
	TCCN: 8 hours from MUAP 11XX, 12XX, 21XX and 22XX	
<b>Total Hours</b>		<b>31</b>

## Course Requirements

		Freshman	
		Fall Semester Hours	Spring Semester Hours
MU 1000	0	MU 1000	0
MU 1115 (TCCN MUSI 1116)	1	MU 1116 (TCCN MUSI 1117)	1
MU 1315 (TCCN MUSI 1311)	3	MU 1316 (TCCN MUSI 1312)	3
MUSP 12xx [TCCN MUAP 12XX]	2	MUSP 12xx [TCCN MUAP 12XX]	2
Select one of the following:	1	Select one of the following:	1
MUSE 3120		MUSE 3123	
MU 1150	1	MUSE 3130	
MUSP 1135 (TCCN MUSI 1181)	1	MUSE 3131	
US 1100 (music education section)	1	MUSE 3150	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	MU 2123	1
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
Mathematics Component Code 020	3	POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3

PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])		3	
<b>19</b>		<b>17</b>	<b>Sophomore</b>
<b>Fall Semester Hours</b>		<b>Spring Semester Hours</b>	
MU 2000	0 MU 2000		0
MU 2115 (TCCN MUSI 2116)	1 MU 2116		1
MU 2315 (TCCN MUSI 2311)	3 MU 2316		3
MUSP 22xx [TCCN MUAP 22XX]	2 MUSP 22xx		2
Select one of the following:	1 Select one of the following:		1
MUSE 3120	MUSE 3123		
MUSE 3150	MUSE 3130		
MUSE 3099	0 MUSE 3131		
MUSP 3197	1 MUSE 3150		
MUSP 3165	1 MUSE 3026 (secondary ensemble)		0
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 MU 3372		3
American History Component Code 060	3 MUSP 3275		2
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3 MU 3140		1
	MU 3315 or 3316		3
	American History Component Code 060		3
<b>18</b>		<b>19</b>	<b>Junior</b>
<b>Fall Semester Hours</b>		<b>Spring Semester Hours</b>	
MU 3000	0 MU 3000		0
MUSP 32xx	2 MUSP 32xx		2
Select one of the following:	1 Select one of the following:		1
MUSE 3123	MUSE 3123		
MUSE 3130	MUSE 3130		
MUSE 3131	MUSE 3131		
MUSE 3150 (Strings)	MUSE 3150		
MUSE 3026 (secondary ensemble)	0 MU 3317		3
MU 3207	2 MU 3217		2
MU 3340	3 MU 3253		2
MUSP 3241	2 MUSP 3257		2
MUSP 3251	2 MUSP 3247		2
Life and Physical Sciences Component Code 030	3 Life and Physical Sciences Component Code 030		3
Social and Behavioral Sciences Component Code 080	3		
<b>18</b>		<b>17</b>	

		<b>Senior</b>	
<b>Fall Semester Hours</b>		<b>Spring Semester Hours</b>	
MUSP 42xx	2 EDST 4380		3
MU 4050	0 EDST 4381		3
Select one of the following:	2		
MU 3263			
MU 3269			
MU 4234			
Select one of the following:	1		
MUSE 3123			
MUSE 3130			
MUSE 3131			
MUSE 3150			
CI 4370	3		
CI 4372	3		
RDG 3323	3		
ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3		
<b>17</b>		<b>6</b>	
<b>Total Hours: 131</b>			

**Minimum required: 129  
semester credit hours**

## Admission Requirements

1. All students in the School of Music require admission to the university and admission to the program. For audition guidelines and requirements, prospective undergraduate students should visit: <http://www.music.txstate.edu/prospectivestudents/BecomingaMusicMajor.html>
2. Students wanting to enter the music program as a music major (B.A., B.M., B.S. degrees) must submit an online application and audition on their principal instrument or voice the semester before their desired entrance.
3. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>) once all course requirements and successful completion of the School of Music's Upper Level Competency Review have been met in order to officially complete the Bachelor of Music major in Music Studies degree program.
4. Admission to the School of Music is contingent upon admission to Texas State, successful completion of the audition process, and available space in each studio. Moreover, a successful audition does not automatically ensure acceptance to the School of Music. Transfer students' transcripts will be evaluated by an academic advisor prior to an acceptance decision to ensure that acceptance and successful degree plan completion are possible here at Texas State. Prospective music students will not be permitted to enroll in applied music and other music major classes until they have been accepted based on their audition and met with an academic advisor. Auditions are held periodically throughout the year for enrollment the following academic year. Those prospective music students unable to audition in person due to geographic distance from campus may

submit an audio or video recording representative of their performing abilities that meet the audition guidelines for their instrument or voice. The deadline to submit a recorded audition is March 1 (for Fall admission) or November 1 (for Spring admission). Audition requirements are available on the School of Music website (<https://www.music.txstate.edu/>).

## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. To satisfy graduation requirements for this concentration, students must have at least a 2.85 Overall GPA, as well as grades of "C" or better in all courses within the major(s), teaching field(s), certification area(s), and/or in the Minor in Education.
3. In addition to the major requirements, students must also complete 15 hours of professional sequence courses through the College of Education. All coursework must be completed prior to EDST 4380 and EDST 4381.
4. Piano Proficiency (Level IV)
5. Theory Proficiency
6. Upper Level Competency Review (ULCR)
7. All music majors must participate in the appropriate major ensemble for their instrument each semester until all major ensemble requirements for the degree have been completed. No more than one major and one secondary ensemble will be counted toward the student's degree plan per semester. While not required in the degree plan, continued participation in major ensembles after degree requirements are completed is encouraged.
8. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).
9. For transfer students, 31 semester credit hours in Music (or equivalents) may be transferred from a Texas public institution of higher education for the Music Field of Study and be applied to the Bachelor of Music degree with a major in Music Studies at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
MU 1315	Music Theory I	3
TCCN: MUSI 1311		
MU 1316	Music Theory II	3
TCCN: MUSI 1312		

MU 2315	Music Theory III	3
TCCN: MUSI 2311		
MU 2316	Music Theory IV	3
TCCN: MUSI 2312		
MU 1115	Aural Skills I	1
TCCN: MUSI 1116		
MU 1116	Aural Skills II	1
TCCN: MUSI 1117		
MU 2115	Aural Skills III	1
TCCN: MUSI 2116		
MU 2116	Aural Skills IV	1
TCCN: MUSI 2117		
MU 2303	Survey of Music Literature	3
TCCN: MUSI 1307		
4 semester credit hours of Ensembles from the following: MUSE 3124, MUSE 3125, MUSE 3140 and MUSE 3141		4
TCCN: 4 hours from MUEN 11XX and 21XX		
8 semester credit hours of Applied Study from the following: MUSP 1220 and MUSP 2220		8
TCCN: 8 hours from MUAP 11XX, 12XX, 21XX and 22XX		
<b>Total Hours</b>		<b>31</b>

## Course Requirements

		Freshman	
		Fall Semester Hours	Spring Semester Hours
MU 1000		0 MU 1000	0
MU 1115 (TCCN MUSI 1116)		1 MU 1116 (TCCN MUSI 1117)	1
MU 1315 (TCCN MUSI 1311)		3 MU 1316 (TCCN MUSI 1312)	3
MUSP 1220, 1250, or 1260 (TCCN MUAP 12XX)		2 MUSP 1220, 1250, or 1260 (TCCN MUAP 12XX)	2
MUSE 3103		1 MUSE 3103	1
MU 1150		1 MUSP 1136 (TCCN MUSI 1182)	1
MUSP 1135 (TCCN MUSI 1181)		1 MU 2123	1
US 1100 (music education section)		1 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])		3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
MUSE 3028		0 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
Mathematics Component Code 020		3	
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])		3	



Fall Semester Hours		Sophomore Spring Semester Hours	
MU 2000	0	MU 2000	0
MU 2115 (TCCN MUSI 2116)	1	MU 2116 (TCCN MUSI 2117)	1
MU 2315 (TCCN MUSI 2311)	3	MU 2316	3
MUSP 2220, 2250, or 2260 (TCCN MUAP 22XX)	2	MUSP 2220, 2250, or 2260 (TCCN MUAP 22XX)	2
MUSE 3103	1	MUSE 3103	1
MUSP 4165	1	MUSP 4164 (voice)	1
MUSE 3028	0	MUSP 4164 (trumpet)	1
MU 3318	3	MUSE 3028	0
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	MU 3155	1
HIST 1310 (TCCN HIST 1301)	3	HIST 1320 (TCCN HIST 1302)	3
		ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
		Life and Physical Sciences Component Code 030	3
17		19	

Fall Semester Hours		Junior Spring Semester Hours	
MU 3000	0	MU 3000	0
MUSP 3220, 3250, or 3260	2	MUSP 3220, 3250, or 3260	2
MU 3316	3	MUSE 3103	1
MUSE 3103	1	MU 3317	3
MUSP 3197 or 3195	1	MU 3253	2
MU 3340	3	MUSP 4164 (Violin)	1
MU 4257 or 3269 (Spring only)	2	MUSE 3028	0
MU 3254	2	MUSP 3165	1
MUSP 4165 (Vihuela)	1	MUSE 3150, 3123, 3124, 3125, 3130, 3131, 3140, or 3141	1
MUSE 3150, 3123, 3124, 3125, 3130, 3131, 3140, or 3141	1	Life and Physical Sciences Component Code 030	3
		Social and Behavioral Sciences Component Code 080	3
16		17	

Fall Semester Hours		Senior Spring Semester Hours	
MUSP 4220, 4250, or 4260	2	EDST 4380	3
MUSE 3103	1	EDST 4381	3
MU 4050	0		
MU 4157	1		
CI 4343	3		
MU 4170	1		
CI 4370	3		
RDG 3323	3		

ENG Literature (Component  
Area Option Code 090/094)  
[ENGL 2322, 2323, 2332,  
2333, 2327 or 2328]

17

6

Total Hours: 129

## Minimum required: 131 semester credit hours

### Admission Requirements

1. All students in the School of Music require admission to the university and admission to the program. For audition guidelines and requirements, prospective undergraduate students should visit: <http://www.music.txstate.edu/prospectivestudents/BecomingaMusicMajor.html>
2. Students wanting to enter the music program as a music major (B.A., B.M., B.S. degrees) must submit an online application and audition on their principal instrument or voice the semester before their desired entrance.
3. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263) once all course requirements and successful completion of the School of Music's Upper Level Competency Review have been met in order to officially complete the Bachelor of Music major in Music Studies degree program.
4. Admission to the School of Music is contingent upon admission to Texas State, successful completion of the audition process, and available space in each studio. Moreover, a successful audition does not automatically ensure acceptance to the School of Music. Transfer students' transcripts will be evaluated by an academic advisor prior to an acceptance decision to ensure that acceptance and successful degree plan completion are possible here at Texas State. Prospective music students will not be permitted to enroll in applied music and other music major classes until they have been accepted based on their audition and met with an academic advisor. Auditions are held periodically throughout the year for enrollment the following academic year. Those prospective music students unable to audition in person due to geographic distance from campus may submit an audio or video recording representative of their performing abilities that meet the audition guidelines for their instrument or voice. The deadline to submit a recorded audition is March 1 (for Fall admission) or November 1 (for Spring admission). Audition requirements are available on the School of Music website.

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. To satisfy graduation requirements for this concentration, students must have at least a 2.75 Overall GPA, as well as grades of "C" or better in all courses within the major(s), teaching field(s), certification area(s), and/or in the Minor in Education."
3. In addition to the major requirements, students must also complete 15 hours of professional sequence courses through the College of

Education. All coursework must be completed prior to EDST 4380 and EDST 4381.

4. Piano Proficiency (Level III)
5. Theory Proficiency
6. Upper Level Competency Review (ULCR)
7. All music majors must participate in the appropriate major ensemble for their instrument each semester until all major ensemble requirements for the degree have been completed. No more than one major and one secondary ensemble will be counted toward the student's degree plan per semester. While not required in the degree plan, continued participation in major ensembles after degree requirements are completed is encouraged.

8. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).
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Code	Title	Hours
MU 1315	Music Theory I	3
TCCN: MUSI 1311		
MU 1316	Music Theory II	3
TCCN: MUSI 1312		
MU 2315	Music Theory III	3
TCCN: MUSI 2311		
MU 2316	Music Theory IV	3
TCCN: MUSI 2312		
MU 1115	Aural Skills I	1
TCCN: MUSI 1116		
MU 1116	Aural Skills II	1
TCCN: MUSI 1117		
MU 2115	Aural Skills III	1
TCCN: MUSI 2116		
MU 2116	Aural Skills IV	1
TCCN: MUSI 2117		
MU 2303	Survey of Music Literature	3
TCCN: MUSI 1307		
4 semester credit hours of Ensembles from the following:		4
MUSE 3120, MUSE 3123, MUSE 3130, MUSE 3131, and MUSE 3150		
TCCN: 4 hours from MUEN 11XX and 21XX		

8 semester credit hours of Applied Study from the following: 8  
 MUSP 1240, MUSP 1250, MUSP 1260, MUSP 1170 (2 sections),  
 MUSP 2240, MUSP 2250, MUSP 2260, MUSP 2170 (2 sections)

TCCN: 8 hours from MUAP 11XX, 12XX, 21XX and 22XX

**Total Hours 31**

## Course Requirements

		Freshman	
		Fall Semester Hours	Spring Semester Hours
MU 1000	0	MU 1000	0
MU 1115 (TCCN MUSI 1116)	1	MU 1116 (TCCN MUSI 1117)	1
MU 1315 (TCCN MUSI 1311)	3	MU 1316 (TCCN MUSI 1312)	3
MUSP 12xx [TCCN MUAP 12XX]	2	MUSP 12xx [TCCN MUAP 12XX]	2
MUSE 3150	1	MUSE 3150	1
MUSP 1135 (TCCN MUSI 1181)	1	MUSP 1136	1
MU 1150	1	MU 2123	1
US 1100 (music education section)	1	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
Mathematics Component Code 020	3		
		<b>19</b>	<b>18</b>
		Sophomore	
		Fall Semester Hours	Spring Semester Hours
MU 2000	0	MU 2000	0
MU 2115 (TCCN MUSI 2116)	1	MU 2116	1
MU 2315 (TCCN MUSI 2311)	3	MU 2316	3
MUSP 22xx [TCCN MUAP 22XX]	2	MUSP 22xx	2
MUSE 3150	1	MUSE 3150	1
MUSP 3197	1	MUSE 3026 (secondary ensemble)	0
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	MUSP 3165	1
American History Component Code 060	3	MUSP 3166	1
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3	MU 3315 or 3316	3
		MU 3140	1
		MU 3372	3

American History Component Code 060		3
17		19
		<b>Junior</b>
<b>Fall Semester Hours</b>	<b>Spring Semester Hours</b>	
MU 3000	0 MU 3000	0
MUSP 32xx	2 MUSP 32xx	2
MUSE 3150	1 MUSE 3150	1
MUSE 3026 (secondary ensemble)	0 MU 3317	3
MU 3207	2 MUSP 3275	2
MU 3340	3 MU 3217	2
MUSP 3365	3 MU 3253	2
MUSP 3355	3 Social and Behavioral Sciences Component Code 080	3
Life and Physical Sciences Component Code 030	3 Life and Physical Sciences Component Code 030	3
17		18
		<b>Senior</b>
<b>Fall Semester Hours</b>	<b>Spring Semester Hours</b>	
MUSP 42xx	2 EDST 4380	3
MU 4050	0 EDST 4381	3
MUSE 3150	1	
Choose one of the following:	2	
MU 3269		
MU 4234		
CI 4370	3	
CI 4372	3	
RDG 3323	3	
ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3	
17		6

**Total Hours: 131**

## Minimum required: 120 semester credit hours

### Admission Requirements

1. All students in the School of Music require admission to the university and admission to the program. For audition guidelines and requirements, prospective undergraduate students should visit: <http://www.music.txstate.edu/prospectivestudents/BecomingaMusicMajor.html>
2. Students wanting to enter the music program as a music major (B.A., B.M., B.S. degrees) must submit an online application and audition on their principal instrument or voice the semester before their desired entrance.
3. Admission to the School of Music is contingent upon admission to Texas State, successful completion of the audition process, and available space in each studio. Moreover, a successful audition does not automatically ensure acceptance to the School of Music. Transfer students' transcripts will be evaluated by an academic advisor prior

to an acceptance decision to ensure that acceptance and successful degree plan completion are possible here at Texas State. Prospective music students will not be permitted to enroll in applied music and other music major classes until they have been accepted based on their audition and met with an academic advisor. Auditions are held periodically throughout the year for enrollment the following academic year. Those prospective music students unable to audition in person due to geographic distance from campus may submit an audio or video recording representative of their performing abilities that meet the audition guidelines for their instrument or voice. The deadline to submit a recorded audition is March 1 (for Fall admission) or November 1 (for Spring admission). Audition requirements are available on the School of Music website.

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Piano Proficiency (Level IV)
3. Theory Proficiency
4. Upper Level Competency Review (ULCR)
5. All music majors must participate in the appropriate major ensemble for their instrument each semester until all major ensemble requirements for the degree have been completed. No more than one major and one secondary ensemble will be counted toward the student's degree plan per semester. While not required in the degree plan, continued participation in major ensembles after degree requirements are completed is encouraged.
6. For transfer students, 31 semester credit hours in Music (or equivalents) may be transferred from a Texas public institution of higher education for the Music Field of Study and be applied to the Bachelor of Music degree with a major in Performance at Texas State University. More information about the [Field of Study](http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/) (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. Transfer students may not reach the 36 advanced hours required in the degree without taking additional coursework. See your academic advisor for details. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
MU 1315	Music Theory I	3
TCCN: MUSI 1311		
MU 1316	Music Theory II	3
TCCN: MUSI 1312		
MU 2315	Music Theory III	3
TCCN: MUSI 2311		
MU 2316	Music Theory IV	3
TCCN: MUSI 2312		
MU 1115	Aural Skills I	1
TCCN: MUSI 1116		
MU 1116	Aural Skills II	1
TCCN: MUSI 1117		
MU 2115	Aural Skills III	1

TCCN: MUSI 2116		
MU 2116	Aural Skills IV	1
TCCN: MUSI 2117		
MU 2303	Survey of Music Literature	3
TCCN: MUSI 1307		
4 semester credit hours of Ensembles from the following:		4
MUSE 3190		
TCCN: 4 hours from MUEN 11XX and 21XX		
8 semester credit hours of Applied Study from the following:		8
MUSP 1260 and MUSP 2260		
TCCN: 8 hours from MUAP 11XX, 12XX, 21XX and 22XX		
<b>Total Hours</b>		<b>31</b>

## Course Requirements

Fall Semester Hours		Spring Semester Hours	
MU 1000	0	MU 1000	0
MU 1115 (TCCN MUSI 1116)	1	MU 1116 (TCCN MUSI 1117)	1
MU 1315 (TCCN MUSI 1311)	3	MU 1316 (TCCN MUSI 1312)	3
MUSP 1260 (TCCN MUAP 12XX)	2	MUSP 1260 (TCCN MUAP 12XX)	2
MUSE 3190	1	MUSE 3190	1
MU 1150	1	MUSP 1136 (TCCN MUSI 1182)	1
MUSP 1135 (TCCN MUSI 1181)	1	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
US 1100	1	COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3		
Mathematics Component Code 020	3		
<b>16</b>		<b>14</b>	

Fall Semester Hours		Spring Semester Hours	
MU 2000	0	MU 2000	0
MU 2115 (TCCN MUSI 2116)	1	MUSP 2260 (TCCN MUAP 22XX)	2
MU 2315 (TCCN MUSI 2311)	3	MU 2116 (TCCN MUSI 2117)	1
MUSP 2260 (TCCN MUAP 22XX)	2	MU 2316 (TCCN MUSI 2312)	3
MUSE 3190	1	MUSE 3190	1
MU 2104	1	MU 3315	3
MUSP 1137	1	MU 3318	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3	MUSP 1138	1
American History Component Code 060	3	American History Component Code 060	3
<b>15</b>		<b>17</b>	

Fall Semester Hours		Spring Semester Hours	
MU 3000	0	MU 3000	0
MU 3207 or 3208	2	MU 3050	0
MU 3316	3	MU 3317	3
MUSE 3190	1	Select one of the following:	3
MUSP 3260	2	MU 4330	
MUSP 3160	1	MU 4332	
Life and Physical Sciences Component Code 030	3	MU 4334	
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	MU 4336	
		MUSE 3190	1
		MUSP 3260	2
		MUSP 3160	1
		Life and Physical Sciences Component Code 030	3
		POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
<b>15</b>		<b>16</b>	
Fall Semester Hours		Spring Semester Hours	
MU 4262	2	MU 4050	0
Select one of the following:	3	MU 4185	1
MU 4330		MU 4261	2
MU 4332		Select one from the following:	1
MU 4334		MUSE 3102	
MU 4336		MUSE 3103	
2 Hours advanced MU Electives	2	MUSE 3108	
Select one from the following:	1	MUSE 3127	
MUSE 3102		MUSE 3160	
MUSE 3103		MUSE 3161	
MUSE 3108		MUSE 3162	
MUSE 3127		MUSE 3190	
MUSE 3160		MUSP 4260	2
MUSE 3161		MUSP 4160	1
MUSE 3162		PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
MUSE 3190		ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
Social & Behavioral Sciences Component Code 080	3		
MUSP 4260	2		

MUSP 4160	1	
	14	13
<b>Total Hours: 120</b>		

## Minimum required: 120 semester credit hours

### Admission Requirements

1. All students in the School of Music require admission to the university and admission to the program. For audition guidelines and requirements, prospective undergraduate students should visit: <http://www.music.txstate.edu/prospectivestudents/BecomingaMusicMajor.html>
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3. Admission to the School of Music is contingent upon admission to Texas State, successful completion of the audition process, and available space in each studio. Moreover, a successful audition does not automatically ensure acceptance to the School of Music. Transfer students' transcripts will be evaluated by an academic advisor prior to an acceptance decision to ensure that acceptance and successful degree plan completion are possible here at Texas State. Prospective music students will not be permitted to enroll in applied music and other music major classes until they have been accepted based on their audition and met with an academic advisor. Auditions are held periodically throughout the year for enrollment the following academic year. Those prospective music students unable to audition in person due to geographic distance from campus may submit an audio or video recording representative of their performing abilities that meet the audition guidelines for their instrument or voice. The deadline to submit a recorded audition is March 1 (for Fall admission) or November 1 (for Spring admission). Audition requirements are available on the School of Music website.

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Piano Proficiency (Level IV)
3. Theory Proficiency
4. Upper Level Competency Review (ULCR)
5. All music majors must participate in the appropriate major ensemble for their instrument each semester until all major ensemble requirements for the degree have been completed. No more than one major and one secondary ensemble will be counted toward the student's degree plan per semester. While not required in the degree plan, continued participation in major ensembles after degree requirements are completed is encouraged.
6. For transfer students, 31 semester credit hours in Music (or equivalents) may be transferred from a Texas public institution of higher education for the Music Field of Study and be applied to the Bachelor of Music degree with a major in Performance at Texas State University. More information about the [Field of Study](#)

(<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. Transfer students may not reach the 36 advanced hours required in the degree without taking additional coursework. See your academic advisor for details. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
MU 1315	Music Theory I	3
TCCN: MUSI 1311		
MU 1316	Music Theory II	3
TCCN: MUSI 1312		
MU 2315	Music Theory III	3
TCCN: MUSI 2311		
MU 2316	Music Theory IV	3
TCCN: MUSI 2312		
MU 1115	Aural Skills I	1
TCCN: MUSI 1116		
MU 1116	Aural Skills II	1
TCCN: MUSI 1117		
MU 2115	Aural Skills III	1
TCCN: MUSI 2116		
MU 2116	Aural Skills IV	1
TCCN: MUSI 2117		
MU 2303	Survey of Music Literature	3
TCCN: MUSI 1307		
4 semester credit hours of Ensembles from the following: MUSE 3123, MUSE 3130, MUSE 3131 and MUSE 3150		4
TCCN: 4 hours from MUEN 11XX and 21XX		
8 semester credit hours of Applied Study from the following: MUSP 1240, MUSP 1250, MUSP 1260, MUSP 1170 (2 sections), MUSP 2240, MUSP 2250, MUSP 2260 and MUSP 2170		8
TCCN: 8 hours from MUAP 11XX, 12XX, 21XX and 22XX		
<b>Total Hours</b>		<b>31</b>

### Course Requirements

		Freshman	
		Fall Semester Hours	Spring Semester Hours
MU 1000	0	MU 1000	0
MU 1115 (TCCN MUSI 1116)	1	MU 1116 (TCCN MUSI 1117)	1
MU 1315 (TCCN MUSI 1311)	3	MU 1316 (TCCN MUSI 1312)	3
MUSP 12xx [TCCN MUAP 12XX]	2	MUSP 12xx [TCCN MUAP 12XX]	2
Select one of the following:	1	Select one of the following:	1
MUSE 31xx (Wind Band)		MUSE 31xx (Wind Band)	
MUSE 3150		MUSE 3150	
MU 1150	1	MUSP 1136	1
MUSP 1135 (TCCN MUSI 1181)	1	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3



US 1100	1 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 American History Component Code 060	3
Mathematics Component Code 020	3	
<b>16</b>		<b>17</b>

<b>Fall Semester Hours</b>		<b>Spring Semester Hours</b>	
MU 2000	0 MU 2000		0
MU 2115 (TCCN MUSI 2116)	1 MU 2116 (TCCN MUSI 2117)		1
MU 2315 (TCCN MUSI 2311)	3 MU 2316 (TCCN MUSI 2312)		3
MUSP 22xx [TCCN MUAP 22XX]	2 MUSP 22xx [TCCN MUAP 22XX]		2
Select one of the following:	1 Select one of the following:		1
MUSE 31xx (Wind Band)	MUSE 31xx (Wind Band)		
MUSE 3150	MUSE 3150		
MU 3318	3 MUSE 31xx (secondary ensemble)		1
MU 2104	1 MUSP 1138		1
MUSP 1137	1 ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])		3
MUSE 31xx (secondary ensemble)	1 American History Component Code 060		3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3		
<b>16</b>		<b>15</b>	

<b>Fall Semester Hours</b>		<b>Spring Semester Hours</b>	
MU 3000	0 MU 3000		0
MUSP 32xx	2 MUSP 32xx		2
MUSE 31xx	1 MUSE 31xx		1
MUSE 31xx (secondary ensemble)	1 MUSE 31xx (secondary ensemble)		1
MU 3315	3 MU 3050		0
MU 3207	2 MU 3316		3
Life and Physical Sciences Component Code 030	3 Select one of the following:		3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 MU 4330		
	MU 4332		
	MU 4334		
	MU 4336		
	Life and Physical Sciences Component Code 030		3
	POSI 2320 (Government/ Political Science Component		3

<b>Fall Semester Hours</b>		<b>Spring Semester Hours</b>	
MU 3317	3 MUSP 42xx		2
MUSP 42xx	2 MUSE 31xx		1
MUSE 31xx	1 MU 4050		0
Select one of the following:	2 MU 4185		1
MU 4267	Select one of the following:		2
MU 4269	MU 4266		
MU 4271	MU 4268		
MU 4273	MU 4270		
2 hours of ADV MU, MUSE, or MUSP elective	2 MU 4272		
Select one of the following:	3 Social and Behavioral Sciences Component Code 080		3
MU 4330	ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]		3
MU 4332			
MU 4334			
MU 4336			
<b>13</b>		<b>12</b>	

**Total Hours: 120**

## Minimum required: 120 semester credit hours

### Admission Requirements

1. All students in the School of Music require admission to the university and admission to the program. For audition guidelines and requirements, prospective undergraduate students should visit: <http://www.music.txstate.edu/prospectivestudents/BecomingaMusicMajor.html>
2. Students wanting to enter the music program as a music major (B.A., B.M., B.S. degrees) must submit an online application and audition on their principal instrument or voice the semester before their desired entrance.
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deadline to submit a recorded audition is March 1 (for Fall admission) or November 1 (for Spring admission). Audition requirements are available on the School of Music website.

General Requirements

- 1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- 2. Piano Proficiency (Level II)
- 3. Theory Proficiency
- 4. Upper Level Competency Review (ULCR)
- 5. All music majors must participate in the appropriate major ensemble for their instrument each semester until all major ensemble requirements for the degree have been completed. No more than one major and one secondary ensemble will be counted toward the student's degree plan per semester. While not required in the degree plan, continued participation in major ensembles after degree requirements are completed is encouraged.
- 6. For transfer students, 31 semester credit hours in Music (or equivalents) may be transferred from a Texas public institution of higher education for the Music Field of Study and be applied to the Bachelor of Arts degree with a major in Music at Texas State University. More information about the [Field of Study \(http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/\)](http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/) is available in the Academic Policies section of this catalog. Transfer students may not reach the 36 advanced hours required in the degree without taking additional coursework. See your academic advisor for details. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
MU 1315	Music Theory I	3
TCCN: MUSI 1311		
MU 1316	Music Theory II	3
TCCN: MUSI 1312		
MU 2315	Music Theory III	3
TCCN: MUSI 2311		
MU 2316	Music Theory IV	3
TCCN: MUSI 2312		
MU 1115	Aural Skills I	1
TCCN: MUSI 1116		
MU 1116	Aural Skills II	1
TCCN: MUSI 1117		
MU 2115	Aural Skills III	1
TCCN: MUSI 2116		
MU 2116	Aural Skills IV	1
TCCN: MUSI 2117		
MU 2303	Survey of Music Literature	3
TCCN: MUSI 1307		
4 semester credit hours of Ensembles from the following:		4
MUSE 3160, MUSE 3161 and MUSE 3162		
TCCN: 4 hours from MUEN 11XX and 21XX		

8 semester credit hours of Applied Study from the following: 8  
MUSP 1230, MUSP 1240, MUSP 1250, MUSP 1260, MUSP 1270, MUSP 2230, MUSP 2240, MUSP 2250, MUSP 2260 and MUSP 2270

TCCN: 8 hours from MUAP 11XX, 12XX, 21XX and 22XX	
Total Hours	31

Course Requirements

Freshman

Fall Hours Semester	Spring Hours Semester	
MU 1000	0 MU 1000	0
MU 1115 (TCCN MUSI 1116)	1 MU 1116 (TCCN MUSI 1117)	1
MU 1315 (TCCN MUSI 1311)	3 MU 1316 (TCCN MUSI 1312)	3
Select one of the following:	2 Select one of the following:	2
MUSP 1230 (TCCN MUAP 12XX)	MUSP 1230 (TCCN MUAP 12XX)	
MUSP 12 (TCCN MUAP 12XX)	MUSP 12 (TCCN MUAP 12XX)	
MUSP 1250 (TCCN MUAP 12XX)	MUSP 1250 (TCCN MUAP 12XX)	
MUSP 12 (TCCN MUAP 12XX)	MUSP 12 (TCCN MUAP 12XX)	
MUSP 1270 (TCCN MUAP 12XX)	MUSP 1270 (TCCN MUAP 12XX)	
MUSE 3027	0 MUSE 3027	0
Select one of the following:	1 Select one of the following:	1
MUSE 31	MUSE 31	
MUSE 3161	MUSE 3161	
MUSE 31	MUSE 31	
MU 1150	1 MUSP 1136 (or MUSP 11xx)	1

MUSP 1135 (or MUSP 11xx)	1 ENG 1320 (Communic: Component Code 010 [TCCN ENGL 1302])	3
US 1100	1 ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
ENG 1310 (Communic: Component Code 010 [TCCN 1301])	3	
Mathematics Component Code 020	3	
<b>16</b>		<b>14</b>

**Sophomore**

<b>Fall Hours</b>		<b>Spring Hours</b>	
<b>Semester</b>		<b>Semester</b>	
MU 2000	0	MU 2000	0
MU 2115 (TCCN MUSI 2116)	1	MU 2116 (TCCN MUSI 2117)	1
MU 2315 (TCCN MUSI 2311)	3	MU 2316 (TCCN MUSI 2312)	3
Select one of the following:	2	Select one of the following:	2
MUSP 2230 (TCCN MUAP 22XX)		MUSP 2230 (TCCN MUAP 22XX)	
MUSP 22 (TCCN MUAP 22XX)		MUSP 22 (TCCN MUAP 22XX)	
MUSP 2250 (TCCN MUAP 22XX)		MUSP 2250 (TCCN MUAP 22XX)	
MUSP 22 (TCCN MUAP 22XX)		MUSP 22 (TCCN MUAP 22XX)	

MUSP 2270 (TCCN MUAP 22XX)	MUSP 2270 (TCCN MUAP 22XX)	
MUSE 3027	0 MUSE 3027	0
Select one of the following:	1 Select one of the following:	1
MUSE 31	MUSE 31	
MUSE 3161	MUSE 3161	
MUSE 31	MUSE 31	
MUSE 31xx (secondary ensemble)	1 MUSE 31xx (secondary ensemble)	1
MU 2303 (MUSI 1307)	3 Life and Physical Sciences Component Code 030	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 American History Component Code 060	3
American History Component Code 060	3	
<b>17</b>		<b>14</b>

**Junior**

<b>Fall Hours</b>		<b>Spring Hours</b>		<b>Summer Hours</b>	
<b>Semester</b>		<b>Semester</b>			
MU 3000	0	MU 3000	0	MU 4343	3
Select one of the following:	2	Select one of the following:	2		
MUSP 3230		MUSP 3230			
MUSP 32		MUSP 32			
MUSP 3250		MUSP 3250			
MUSP 32		MUSP 32			
MUSP 3270		MUSP 3270			
MUSE 3027	0	MUSE 3027	0		
Select one of the following:	1	Select one of the following:	1		
MUSE 31		MUSE 31			
MUSE 3161		MUSE 3161			
MUSE 31		MUSE 31			
MUSE 3127	1	MUSE 3127	1		
MU 3207	2	MU 3050	0		
MU 3233	2	MU 3375	3		

MU 3315, 3316, or 3317	3 MU 3234	2	
MUSP 3131	1 MUSP 3132	1	
POSI 2310 (Government Political Science Component Code 070 [TCCN GOVT 2306])	3 Life and Physical Sciences Component Code 030	3	
	POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3	
	15	16	3
			Senior
<b>Fall Hours Semester</b>	<b>Spring Hours Semester</b>		
Select one of the following:	2 Select one of the following:	2	
MUSP 42	MUSP 42		
MUSP 4240	MUSP 4240		
MUSP 42	MUSP 42		
MUSP 4260	MUSP 4260		
MUSP 42	MUSP 42		
MUSE 3027	0 MUSE 3027	0	
Select one of the following:	1 Select one of the following:	1	
MUSE 3160	MUSE 3160		
MUSE 31	MUSE 31		
MUSE 3162	MUSE 3162		
MUSE 3127	1 MUSE 3127	1	
MU 4354	3 MU 4050	0	
MU 4244	2 MU 4185	1	
ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3 MU 4245	2	

	Social and Behavioral Sciences Component Code 080	3
	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
	12	13
<b>Total Hours: 120</b>		

## Minimum required: 120 semester credit hours

### Admission Requirements

1. All students in the School of Music require admission to the university and admission to the program. For audition guidelines and requirements, prospective undergraduate students should visit: <http://www.music.txstate.edu/prospectivestudents/BecomingaMusicMajor.html>
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3. Theory Proficiency

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5. All music majors must participate in the appropriate major ensemble for their instrument each semester until all major ensemble requirements for the degree have been completed. No more than one major and one secondary ensemble will be counted toward the student's degree plan per semester. While not required in the degree plan, continued participation in major ensembles after degree requirements are completed is encouraged.
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TCCN: MUSI 1311		
MU 1316	Music Theory II	3
TCCN: MUSI 1312		
MU 2315	Music Theory III	3
TCCN: MUSI 2311		
MU 2316	Music Theory IV	3
TCCN: MUSI 2312		
MU 1115	Aural Skills I	1
TCCN: MUSI 1116		
MU 1116	Aural Skills II	1
TCCN: MUSI 1117		
MU 2115	Aural Skills III	1
TCCN: MUSI 2116		
MU 2116	Aural Skills IV	1
TCCN: MUSI 2117		
MU 2303	Survey of Music Literature	3
TCCN: MUSI 1307		
4 semester credit hours of Ensembles from the following: MUSE 3124, MUSE 3125, MUSE 3140, MUSE 3141 and MUSE 3170		4
TCCN: 4 hours from MUEN 11XX and 21XX		
8 semester credit hours of Applied Study from the following: MUSP 1230 and MUSP 2230		8
TCCN: 8 hours from MUAP 11XX, 12XX, 21XX and 22XX		
<b>Total Hours</b>		<b>31</b>

MU 1315 (TCCN MUSI 1311)	3	Select one from the following:	1
Select one from the following:	1	MUSE 3124	
MUSE 3124		MUSE 3125	
MUSE 3125		MUSE 3140	
MUSE 3140		MUSE 3141	
MUSE 3141		Select one from the following:	1
Select one from the following:	1	MUSP 1120 (TCCN MUAP 11XX)	
MUSP 1120 (TCCN MUAP 11XX)		MUSP 1130 (TCCN MUAP 11XX)	
MUSP 1130 (TCCN MUAP 11XX)		MUSP 1140 (TCCN MUAP 11XX)	
MUSP 1140 (TCCN MUAP 11XX)		MUSP 1150 (TCCN MUAP 11XX)	
MUSP 1150 (TCCN MUAP 11XX)		MUSP 1160 (TCCN MUAP 11XX)	
MUSP 1160 (TCCN MUAP 11XX)		MUSP 1170 (TCCN MUAP 11XX)	
MUSP 1170 (TCCN MUAP 11XX)		MUSP 1230 (TCCN MUAP 12XX)	2
MUSP 1230 (TCCN MUAP 12XX)	2	COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
Mathematics Component Code 020	3		
US 1100	1		
	<b>16</b>		<b>14</b>

Fall Semester Hours		Spring Semester Hours	
MU 2000	0	MU 2000	0
MU 2104	1	MU 2116 (TCCN MUSI 2117)	1
MU 2115 (TCCN MUSI 2116)	1	MU 2316 (TCCN MUSI 2312)	3
MUSE 3170	1	MUSE 3170	1
MU 2315 (TCCN MUSI 2311)	3	Select one of the following:	1
Select one from the following:	1	MUSP 1120 (TCCN MUAP 11XX)	
MUSP 1120 (TCCN MUAP 11XX)		MUSP 1130 (TCCN MUAP 11XX)	
MUSP 1130 (TCCN MUAP 11XX)		MUSP 1140 (TCCN MUAP 11XX)	
MUSP 1140 (TCCN MUAP 11XX)		MUSP 1150 (TCCN MUAP 11XX)	
MUSP 1150 (TCCN MUAP 11XX)		MUSP 1160 (TCCN MUAP 11XX)	
MUSP 1160 (TCCN MUAP 11XX)		MUSP 1170 (TCCN MUAP 11XX)	
MUSP 1170 (TCCN MUAP 11XX)		MUSP 2230 (TCCN MUAP 22XX)	2

## Course Requirements

Freshman	
Fall Semester Hours	Spring Semester Hours
MU 1000	0 MU 1000
MU 1150	1 MU 1116 (TCCN MUSI 1117)
MU 1115 (TCCN MUSI 1116)	1 MU 1316 (TCCN MUSI 1312)
	3



MUSP 2230 (TCCN MUAP 22XX)	2 ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3 American History Component Code 060	3
American History Component Code 060	3	
<b>15</b>		<b>14</b>

Fall Semester Hours		Spring Semester Hours		Junior
MU 3000	0	MU 3000	0	
MU 3207 or 3208	2	MU 3050	0	
MU 3315	3	MU 3316	3	
Select one of the following:	2	Select one of the following:	3	
MU 4264 or 4265		MU 4330		
MUSE 3170	1	MU 4332		
MUSP 3230 & MUSP 3130	3	MU 4334		
Life and Physical Sciences Component Code 030	3	MU 4336		
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3	MUSE 3170	1	
		MUSP 3230 & MUSP 3130	3	
		Life and Physical Sciences Component Code 030	3	
		POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3	
<b>17</b>				<b>16</b>

Fall Semester Hours		Spring Semester Hours		Senior
MU 3317	3	MU 3318	3	
Select one of the following:	2	MU 4050	0	
MU 4264 or 4265		MU 4185	1	
Select one of the following:	3	MU 4263	2	
MU 4330		MUSE 3170	1	
MU 4332		MUSP 4230	2	
MU 4334		MUSP 4130	1	
MU 4336		PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3	
MUSE 3170	1			
MUSP 4230	2			
MUSP 4130	1			

Social and Behavioral Sciences Component Code 080	3
<b>15</b>	<b>13</b>

**Total Hours: 120**

## Minimum required: 120 semester credit hours

### Admission Requirements

- All students in the School of Music require admission to the university and admission to the program. For audition guidelines and requirements, prospective undergraduate students should visit: <http://www.music.txstate.edu/prospectivestudents/BecomingaMusicMajor.html>
- Students wanting to enter the music program as a music major (B.A., B.M., B.S. degrees) must submit an online application and audition on their principal instrument or voice the semester before their desired entrance.
- Admission to the School of Music is contingent upon admission to Texas State, successful completion of the audition process, and available space in each studio. Moreover, a successful audition does not automatically ensure acceptance to the School of Music. Transfer students' transcripts will be evaluated by an academic advisor prior to an acceptance decision to ensure that acceptance and successful degree plan completion are possible here at Texas State. Prospective music students will not be permitted to enroll in applied music and other music major classes until they have been accepted based on their audition and met with an academic advisor. Auditions are held periodically throughout the year for enrollment the following academic year. Those prospective music students unable to audition in person due to geographic distance from campus may submit an audio or video recording representative of their performing abilities that meet the audition guidelines for their instrument or voice. The deadline to submit a recorded audition is March 1 (for Fall admission) or November 1 (for Spring admission). Audition requirements are available on the School of Music website.

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Piano Proficiency
- Theory Proficiency
- Upper Level Competency Review (ULCR)
- All B.A. and B.M. music majors must participate in the appropriate major ensemble as determined by placement through auditions for their instrument each semester until all major ensemble requirements for the degree have been completed. No more than one major and one secondary ensemble will be counted toward the student's degree plan per semester. While not required in the degree plan, continued participation in major ensembles after degree requirements are completed is encouraged.
- For transfer students, 31 semester credit hours in Music (or equivalents) may be transferred from a Texas public institution

of higher education for the Music Field of Study and be applied to the Bachelor of Music degree with a major in Performance at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
MU 1315	Music Theory I	3
TCCN: MUSI 1311		
MU 1316	Music Theory II	3
TCCN: MUSI 1312		
MU 2315	Music Theory III	3
TCCN: MUSI 2311		
MU 2316	Music Theory IV	3
TCCN: MUSI 2312		
MU 1115	Aural Skills I	1
TCCN: MUSI 1116		
MU 1116	Aural Skills II	1
TCCN: MUSI 1117		
MU 2115	Aural Skills III	1
TCCN: MUSI 2116		
MU 2116	Aural Skills IV	1
TCCN: MUSI 2117		
MU 2303	Survey of Music Literature	3
TCCN: MUSI 1307		
4 semester credit hours of Ensembles from the following: MUSE 3122, MUSE 3124, MUSE 3125, MUSE 3140 and MUSE 3141		4
TCCN: 4 hours from MUEN 11XX and 21XX		
8 semester credit hours of Applied Study from the following: MUSP 1220 and MUSP 2220		8
TCCN: 8 hours from MUAP 11XX, 12XX, 21XX and 22XX		
<b>Total Hours</b>		<b>31</b>

## Course Requirements

		Freshman	
Fall Semester Hours		Spring Semester Hours	
MU 1000	0	MU 1000	0
MU 1150	1	MU 1116 (TCCN MUSI 1117)	1
MU 1115 (TCCN MUSI 1116)	1	MU 1316 (TCCN MUSI 1312)	3
MU 1315 (TCCN MUSI 1311)	3	Select one from the following:	1
Select one of the following:	1	MUSE 3122	
MUSE 3122		MUSE 3124	
MUSE 3124		MUSE 3125	
MUSE 3125		MUSE 3140	
MUSE 3140		MUSE 3141	
MUSE 3141		MUSP 1136 (TCCN MUSI 1182)	1
MUSP 1135 (TCCN MUSI 1181)	1	MUSP 1220 (TCCN MUAP 12XX)	2

MUSP 1220 (TCCN MUAP 12XX)	2	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	Select one of the following:	4
US 1100	1	FR 1410 (TCCN FREN 1411)	
TH 1364 (TCCN DRAM 1351)	3	GER 1410 (TCCN GERM 1411)	
		ITAL 1410 (TCCN ITAL 1411)	
<b>16</b>		<b>15</b>	

Fall Semester Hours		Spring Semester Hours		Sophomore	
MU 2000	0	MU 2000	0		
MU 2241	2	MU 2242	2		
MU 2115 (TCCN MUSI 2116)	1	MU 2116 (TCCN MUSI 2117)	1		
MU 2315 (TCCN MUSI 2311)	3	MU 2316 (TCCN MUSI 2312)	3		
MUSE 3106 or 3107	1	ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3		
MUSE 3140, 3141, or 3122	1	MUSE 3106 or 3107	1		
MUSP 1137	1	MUSE 3140, 3141, or 3122	1		
MUSP 2220 (TCCN MUAP 22XX)	2	MUSP 1138	1		
Select one of the following:	4	MUSP 2220 (TCCN MUAP 22XX)	2		
FR 1420 (TCCN FREN 1412)		American History Component Code 060	3		
GER 1420 (TCCN GERM 1412)					
ITAL 1420 (TCCN ITAL 1412)					
Mathematics Component Code 020	3				
<b>18</b>		<b>17</b>		<b>Junior</b>	

Fall Semester Hours		Spring Semester Hours			
MU 3000	0	MU 3000	0		
MU 3208	2	MU 3050	0		
MU 3315	3	MU 3316	3		
MUSE 3109	1	MU 4259	2		
MUSE 3140, 3141, or 3122	1	MUSE 3140, 3141, or 3122	1		
MUSP 3220	2	MUSP 3220	2		
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	Life and Physical Sciences Component Code 030	3		
American History Component Code 060	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3		
<b>15</b>		<b>14</b>			

Fall Semester Hours		Spring Semester Hours		Senior
MU 3317	3	MU 4050	0	
MU 4257	2	MU 4185	1	
MUSP 4220	2	MU 4259	2	
Life and Physical Sciences Component Code 030	3	MUSP 4220	2	
Social and Behavioral Sciences Component Code 080	3	MUSE 3122, 3140, or 3141	1	
MUSE 3122, 3140, or 3141	1	COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	
		ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3	
		PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3	
14		15		

Total Hours: 124

## Minimum required: 120 semester credit hours

### Admission Requirements

- All students in the School of Music require admission to the university and admission to the program. For audition guidelines and requirements, prospective undergraduate students should visit: <http://www.music.txstate.edu/prospectivestudents/BecomingaMusicMajor.html>
- Students interested in the Sound Recording Technology major must complete an additional application, submit materials for pre-screening (see [www.txstate.edu/music/srt](http://www.txstate.edu/music/srt) (<http://www.txstate.edu/music/srt/>) for details), and interview.
- Students wanting to enter the music program as a music major (B.A., B.M., B.S. degrees) must submit an online application and audition on their principal instrument or voice the semester before their desired entrance.
- Students interested in the Sound Recording Technology major must complete an additional application, submit materials for pre-screening (see [www.txstate.edu/music/srt](http://www.txstate.edu/music/srt) (<http://www.txstate.edu/music/srt/>) for details), and interview.
- Admission to the School of Music is contingent upon admission to Texas State, successful completion of the audition process, and available space in each studio. Moreover, a successful audition does not automatically ensure acceptance to the School of Music. Transfer students' transcripts will be evaluated by an academic advisor prior to an acceptance decision to ensure that acceptance and successful degree plan completion are possible here at Texas State. Prospective music students will not be permitted to enroll in applied music and other music major classes until they have been accepted based on their audition and met with an academic advisor. Auditions are held periodically throughout the year for enrollment the following

academic year. Those prospective music students unable to audition in person due to geographic distance from campus may submit an audio or video recording representative of their performing abilities that meet the audition guidelines for their instrument or voice. The deadline to submit a recorded audition is March 1 (for Fall admission) or November 1 (for Spring admission). Audition requirements are available on the School of Music website.

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Upper Level Competency Review (ULCR)
- Senior Portfolio Review
- For transfer students, 31 semester credit hours in Music (or equivalents) may be transferred from a Texas public institution of higher education for the Music Field of Study and be applied to the Bachelor of Science degree with a major in Sound Recording Technology at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. Transfer students may not reach the 36 advanced hours required in the degree without taking additional coursework. See your academic advisor for details. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
MU 1315	Music Theory I	3
TCCN: MUSI 1311		
MU 1316	Music Theory II	3
TCCN: MUSI 1312		
MU 1115	Aural Skills I	1
TCCN: MUSI 1116		
MU 1116	Aural Skills II	1
TCCN: MUSI 1117		
MU 2115	Aural Skills III	1
TCCN: MUSI 2116		
MU 2315	Music Theory III	3
TCCN: MUSI 2311		
MU 2116	Aural Skills IV	1
TCCN: MUSI 2117		
MU 2316	Music Theory IV	3
TCCN: MUSI 2312		
MU 2303	Survey of Music Literature	3
TCCN: MUSI 1307		
4 semester credit hours of Ensembles from the following:		4
MUSE 3102, MUSE 3103, MUSE 3105, MUSE 3108, MUSE 3120, MUSE 3122, MUSE 3123, MUSE 3124, MUSE 3125, MUSE 3130, MUSE 3131, MUSE 3140, MUSE 3141, MUSE 3150, MUSE 3160, MUSE 3161, MUSE 3162, MUSE 3170 and MUSE 3190		
TCCN: 4 hours from MUEN 11XX and 21XX		

8 semester credit hours of Applied Study from the following:  
 MUSP 1220, MUSP 1230, MUSP 1240, MUSP 1250, MUSP 1260,  
 MUSP 1170 (2 sections) or MUSP 1270, MUSP 2220, MUSP 2230,  
 MUSP 2240, MUSP 2250, MUSP 2260, and MUSP 2170 (2  
 sections) or MUSP 2270

TCCN: 8 hours from MUAP 11XX, 12XX, 21XX and 22XX

**Total Hours 31**

## Course Requirements

Freshman	
Fall Semester Hours	Spring Semester Hours
MU 1115 (TCCN MUSI 1116)	1 MU 1116 (TCCN MUSI 1117)
MU 1315 (TCCN MUSI 1311)	3 MU 1316 (TCCN MUSI 1312)
MUSP 12xx [TCCN MUAP12XX]	2 MUSP 12xx [TCCN MUAP12XX]
MUSE 31xx [TCCN MUEN 31XX]	1 MUSE 31xx [TCCN MUEN 31XX]
MUSP 1135 (TCCN MUSI 1181)	1 MUSP 1136 (TCCN MUSI 1182)
MU 1180	1 MU 1182
US 1100	1 ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])
PHYS 1315 (Life and Physical Sciences Component Code 030 [TCCN PHYS PHYS 1301])	3 PHYS 1325 (Life and Physical Sciences Component Code 030 [TCCN PHYS 1302])
PHYS 1115 (TCCN PHYS 1101)	1 PHYS 1125 (TCCN PHYS 1102)
MATH 2417 (TCCN MATH MATH 2412)	4 MUSP 2191
<b>18</b>	<b>17</b>

Sophomore	
Fall Semester Hours	Spring Semester Hours
MU 2180	1 MU 2182
MU 2215	2 MU 2216
MU 2313, ART 2313, DAN 2313, or TH 2313 (Creative Arts Component Code 050 [HUMA 1315])	3 MUSP 22xx [TCCN MUAP22XX]
MUSP 22xx [TCCN MUAP 22XX]	2 MUSE 31xx [TCCN MUEN 31XX]
MUSE 31xx [TCCN MUEN 31XX]	1 MU 3382
MU 3381	3 MUSP 3191
MUSP 2192	1 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])
TECH 2370 (TCCN ENGR2305)	3 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])
<b>16</b>	<b>16</b>

Junior	
Fall Semester Hours	Spring Semester Hours
MU 2303 (TCCN MUSI 1307)	3 MU 3384
	<b>3</b>

MU 3383	3 MU 3182	1
MU 3180	1 MU 4182	1
MUSP 3192	1 TECH 3370	3
TECH 4372	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
American History Component Code 060	3 American History Component Code 060	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 PHYS 3301	3

<b>17</b>	<b>17</b>
Senior	
Fall Semester Hours	Spring Semester Hours
MU 4180	1 MU 4386
MU 4385	3
TECH 4374	3
ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
Social and Behavioral Sciences Component Code 080	3
<b>16</b>	<b>3</b>

**Total Hours: 120**

The minor in Jazz requires 18 semester credit hours. The Jazz minor is available only to students in the program for Bachelor of Music degree with a major in Music Studies.

Code	Title	Hours
<b>Required Courses</b>		
MU 3233	Jazz Theory and Improvisation I	2
MU 3234	Jazz Theory and Improvisation II	2
MU 3375	History of Jazz	3
MU 4245	Jazz Composition and Arranging	2
MU 4343	Jazz Pedagogy	3
MUSE 3127	Jazz Combo	1
MUSP 3131	Jazz Piano Techniques I	1
Choose 4 hours from the following: <sup>1</sup>		4
MUSE 3160	Jazz Ensemble	
MUSE 3161	Jazz Ensemble	
MUSE 3162	Jazz Lab Band	
MUSE 3105	VocaLibre	
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> MUSE 3105 is an acceptable ensemble for vocalists only.

The minor in Mariachi requires 18 semester credit hours. The Mariachi minor is available to all students at the university as long as they have auditioned and been placed in a mariachi ensemble.

Code	Title	Hours
<b>Required Courses</b>		
MU 3355	Mariachi Rehearsal Techniques & Literature	3
MUSE 3103	Mariachi Nueva Generación (Take 5 times)	5
or MUSE 3100	Mariachi Lince de Oro	
MUSE 3028	Latin Music Studies Seminar (Take 6 times)	0
MUSP 3261	Mariachi Trumpet Techniques	2
MUSP 3262	Mariachi Violin Techniques	2
MUSP 3263	Mariachi Vihuela Techniques	2
MUSP 3264	Mariachi Guitarrón Techniques	2
MUSP 3266	Mariachi Voice Techniques	2
<b>Total Hours</b>		<b>18</b>

The minor in Music requires 18 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
MU 1312	Essential Musicianship	3
MU 2303	Survey of Music Literature	3
Choose 3 hours from the following:		3
MU 3308	History of Rock Music	
MU 3318	World Music Cultures	
MU 3375	History of Jazz	
MU 3380A	Women in Jazz	
MU 3380B	Music and Film	
MU 3380C	Rock Harmony	
MU 3380D	History of Blues	
Choose 6 hours from the following:		6
Any MUSE course		
Any MUSP course (with Departmental Approval)		
MU 3310	Guitar Class II	
or MU 4310	Guitar Class III: Rock, Country, Blues	
or MU 4312	Guitar Class IV: Rock, Country, Blues	
<b>Elective</b>		
Choose 3 hours of advanced (3000 or 4000 level) music courses <sup>1</sup>		3
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Not including MU 3315, MU 3316, and MU 3317.

The minor in Music Composition requires 18 semester credit hours. The Music Composition minor is available only to students in the program for Bachelor of Music major in Music Studies, Bachelor of Music major in Performance, or for Bachelor of Science major in Sound Recording Technology.

Code	Title	Hours
<b>Required Courses</b>		
MU 3050	Junior Recital	0
MU 4334	Orchestration <sup>1</sup>	3
MU 4336	18th-Century Counterpoint <sup>1</sup>	3
MUSP 1180	Introduction to Composition	1
MUSP 1280	Applied Composition	2
MUSP 2280	Applied Composition (Taken 2 times)	4
MUSP 3280	Applied Composition	2
<b>Electives</b>		
Choose 3 hours from the following:		3
MU 3318	World Music Cultures <sup>2</sup>	
MU 3380B	Music and Film	
MU 4330	Form and Analysis	
MU 4332	Contemporary Analytic Techniques	
MUSP 1137	Piano Techniques III <sup>2</sup>	
MUSP 1138	Piano Techniques IV <sup>2</sup>	
MUSP 2191	Electronic Music I	
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> These courses are required Advanced Theory. However, if a student uses those courses to count towards their bachelor's degree requirements, MU 4330, MU 4332, and/or MU 3380B may count towards their required courses for the minor.

<sup>2</sup> These courses may only count towards the composition minor if the student's bachelor's degree does not require the courses for degree completion.

The minor in Opera requires 20 semester credit hours. The Opera minor is available only to students in the Bachelor of Music degree with a major in Performance (Vocal Concentration) and the Bachelor of Music degree with a major in Music Studies (Choral Concentration Teacher Certification in Music, Early Childhood through Grade Twelve).

Code	Title	Hours
<b>Required Courses</b>		
Two hours from the following		2
MUSE 3106	Opera Workshop	
or MUSE 3100	Opera Theatre	
TH 1365	Intermediate Acting	3
TH 2330	Stagecraft and Stage Lighting	3
TH 3360	Beginning Stage Combat	3
MUSE 3009	Opera Production (Take 2 times)	0
Choose 4 hours from the following: <sup>1</sup>		4
FR 1410	Beginning French I	
GER 1410	Beginning German I	
ITAL 1410	Beginning Italian I	
Choose one of the following courses:		2
DAN 1260	Jazz I	
DAN 1280	Ballet I	
DAN 1290	Modern/Contemporary I	
Choose ONE of the following:		3
TH 3330	Advanced Stagecraft	
TH 3343	Stage Makeup	



TH 3344	Costume Stagecraft
TH 3338	Stage Lighting
TH 4334	Stage Management
<hr/>	
<b>Total Hours</b>	<b>20</b>

<sup>1</sup> The language requirement for the Opera Minor is separate from, and in addition to, the requirement found in the Music Performance - Voice Concentration degree program.

Theatre Center Room 101

Telephone: 512-245-2147 Fax: 512-245-8440

[www.theatreanddance.txst.edu](http://www.theatreanddance.txst.edu) (<https://www.theatreanddance.txst.edu/>)

The Department of Theatre and Dance is committed to equity and representation that reflects the student population, builds community, teaches compassion, and condemns intolerance. We are committed to advancing social justice by providing equal opportunity for all students without biases toward race, ethnicity, gender, age, disability, sexual orientation, gender identity, religion, economic status, or political beliefs.

As artists, educators and scholars, we strive to achieve a creative collaboration in our classrooms, rehearsal, and performance spaces with a focus and dedication to equitable representation while actively embracing traditionally under-represented groups and their contributions to the canon.

We embrace the potential for theatre, dance, and film to create community and change world views. We seek:

- to cultivate a stimulating, diverse and creative environment in which students deepen their aesthetic experience, while strengthening a broad range of theatre and dance skills,
- to preserve the traditions of dramatic literature, while encouraging experimentation in new theatrical forms, ideas and insights,
- to make a significant cultural impact on the campus and throughout the region served by the university,
- to deliver a curriculum that emphasizes the role of theatre, dance, and film as a catalyst for artistic expression and a means for developing a global perspective,

The Department of Theatre and Dance provides classroom instruction and hands-on participation in the performance and production aspects of theatre, dance, and film. Recent productions include: *Opening Door Dance Theatre*, *Merge Dance Company*, *Pippin*, *Student Choreographers' Showcase Into the Woods*, *She Kills Monsters*, *The Wolves*, *The Liar*, *Mala Hierba*, *Life Sucks*, *Spring Awakening*, *Macbeth*, *El Nogalar*, *Father Comes Home From the Wars*, *Rent*, *Small Mouth Sounds*, *New Works Festival*.

Our programs prepare professional actors, designers, writers, film makers, editors, producers, directors, technicians, performers, choreographers, as well as teachers for the public schools. Students work closely with professional artist-educators who have earned national and international recognition. Our faculty have performed on Broadway, starred in television shows, danced in professional companies, worked at Tony-Award winning regional theatres, produced award winning films, choreographed for dance productions and musicals, had designs displayed internationally, presented films at Cannes Film Festival and SXSW, published books and articles, and had their plays produced in New York and abroad. We are large enough to provide access to a full complement of highly qualified specialists while prioritizing personal attention to our students. Specializations include acting, technical production, performance and production, performance and choreography,

musical theatre, film production, and teacher certification. Our graduates work as teachers, dancers, actors, choreographers, designers, writers, producers, directors, film makers, and technicians throughout the industry.

## Facilities

Classes take place in the university's distinctive Theatre Center, Jowers Center, Performing Arts Center, and the new Live Oak Film and TV Studios. Combined with the performance space in Evans Auditorium, these spaces contain five theatres, and a film sound stage that provide students the opportunity to experience a variety of production styles. They house completely equipped scenic, prop, paint, and costume shops, sound recording/foley studio, editing labs, rehearsal rooms, a computer drafting lab, classrooms, and resources for both research and teaching.

## Financial Assistance

Students may qualify for scholarships and waivers for out-of-state tuition. Contact the department for more information.

## Admissions Requirements

1. Admission to the B.F.A. major in Theatre with an emphasis in Acting is highly competitive and based on an audition/interview with members of the B.F.A. Acting Program faculty. Prospective students audition during their senior year of high school. This is a four-year sequential curriculum and transfer students are not accepted unless specially invited by the B.F.A. Acting faculty. Students in the program are always on probation; their work and progress are formally evaluated by faculty annually. Students must maintain a minimum GPA of 2.5.
2. Admission to the B.F.A. major in Theatre with an emphasis in Technical Production is based on successful completion (with a grade of C or better) in TH 1350 Introduction to Theatrical Design and in TH 2330 Stagecraft and Stage Lighting. Upon successful completion of these two courses, the student will be allowed to enroll in TH 3390 BFA Pre-Professional Apprenticeship I and, in some cases, may be concurrently enrolled in TH 2330 and TH 3390. Students in the program will be evaluated after each semester by Technical Production faculty and staff to assess progress and determine continuation in the program. Students must maintain a minimum GPA of 2.5.
3. Admission to the B.F.A. major in Musical Theatre is highly competitive and based on an audition/interview with members of the B.F.A. Musical Theatre Program faculty. Prospective students generally audition during their senior year of high school. Interested transfer students must contact the Head of Musical Theatre to see if there are any available slots in their class level; typically, students transferring into the program require four years at Texas State to complete their degree. Students in the program are always on probation, with their work and progress continually evaluated. Students must maintain a minimum GPA of 2.8.
4. Admission to the B.F.A. major in Dance is based on an audition in either the fall or spring semester prior to the year of admittance. Students in the program are always on probation, with their work and progress continually evaluated. There is a formal review at the end of the sophomore year that determines whether each student may advance to the upper-level training. Transfer students will be reviewed at the end of their first long semester. Students will be expected to maintain appropriate artistic and academic standards at the discretion of the Dance faculty.

5. Teacher certification majors in theatre and dance must maintain a GPA of 2.75. Students who fail to do so will be advised into another program. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

## Bachelor of Arts (B.A.)

- Major in Dance (p. 404)
- Major in Theatre (p. 405)

## Bachelor of Fine Arts (B.F.A.)

- Major in Dance (Dance Studies Concentration) (p. 406)
- Major in Dance (Performance and Choreography Concentration) (p. 406)
- Major in Dance (Single Field Teacher Certification in Dance, Grades 8-12) (p. 408)
- Major in Dance (Two Fields Teacher Certification in Dance, Grades 8-12) (p. 409)
- Major in Musical Theatre (p. 410)
- Major in Theatre (Acting Pre-Professional Concentration) (p. 411)
- Major in Theatre (Film Production Concentration) (p. 412)
- Major in Theatre (Performance and Production Pre-Professional Concentration) (p. 413)
- Major in Theatre (Teacher Certification in Theatre, Early Childhood Through Grade 12) (p. 415)
- Major in Theatre (Technical Production Concentration) (p. 416)

## Minors

- Dance (p. 417)
- Theatre

## Subjects included in this department: DAN (p. 383), TH (p. 388)

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## Courses in Dance (DAN)

### DAN 1113. Conditioning for Dancers.

In this course students will study body conditioning exercises and overall wellness. Topics include an introduction to, and practical application of, body conditioning methods based upon principles of functional fitness, in addition to Pilates, Aerobics, and Yoga techniques. Emphasis is placed on anatomical terminology and safe exercise.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### DAN 1212. Careers in Dance.

This course familiarizes incoming students with careers in dance in numerous social, cultural, and professional contexts. The course introduce students to the artistic, philosophical, and cognitive implications of Dance, while examining a variety of dance-related careers.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TCCN:** DANC 2303

### DAN 1260. Jazz I.

This course focuses on a beginning level of Jazz dance technique. Course content includes application of terminology specific to a beginning/intermediate Jazz technique, performance of movement phrasework, and exploration and application of elements of dynamic performance.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### DAN 1280. Ballet I.

This course focuses on an introductory level of Ballet technique. Course content includes introduction to terminology specific to beginning level Ballet technique, body conditioning, performance and choreographic approaches, and critical analysis skills.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### DAN 1290. Modern/Contemporary I.

In this course students explore beginning level modern and contemporary dance techniques. Topics include introduction to and application of modern and contemporary terminology and somatic approaches to movement. It focuses on body alignment, technical development and proper execution of exercises and combinations, including center combinations, progressions and repertory.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### DAN 2115. Pilates I.

In this course students will be introduced to the Pilates method of body conditioning and an exploration of its six basic principles of Concentration, Control, Center, Fluidity, Precision and Breath. The focus is on the matwork as a study of sound movement principles and body alignment with an application of principles and exercises of the method to dance and sport specific activities. Study of the method emphasizes and encourages the importance of the mind-body connection as it relates Pilates principles to dance training.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### DAN 2116. Yoga for Dancers I.

In this course students will examine Hatha Yoga for dancers with exploration of the asanas (postures), pranayama (breathing techniques), and meditation with an emphasis on mindfulness and relaxation. Students focus on the physical practice and proper alignment, balanced with a somatic understanding of yoga principles and philosophy.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 2201. Dance Composition I.**

In this course students will utilize improvisation as a creative dance technique in designing new movements for choreography. Using current trends in improvisational materials, this course places emphasis on designing original movement, while facilitating students in maintaining aesthetic forms and developing artistic discrimination. Prerequisite: DAN 1290 or DAN 2291 or DAN 3293 any with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TCCN:** DANC 1201

**DAN 2202. Dance Composition II.**

This course explores the basic principles of dance composition as it pertains to solo choreography, and the use of space, dynamics, and rhythm to build artistic compositions. Exploration of crafting materials in authentic expression will be facilitated. Prerequisite: DAN 2201 with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TCCN:** DANC 1301

**DAN 2210. Contact Improvisation.**

In this course students will cover improvisational movement techniques that explore weight-sharing, non-verbal communication, sensory awareness, risk-taking, and physical and emotional trust. Students will gain the physical and perceptual skills to enhance performance in all areas of creative expression. Principles will be applied through movement training, discussion, and performance.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** DANC 1201

**DAN 2261. Jazz II.**

This course focuses on a beginning/intermediate level of Jazz dance technique. Course content includes application of terminology specific to a beginning/intermediate Jazz technique, performance of movement phrasework, and exploration and application of elements of dynamic performance.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 2270. Hip-Hop I.**

In this course students explore hip-hop culture through dance. Course content will include an introduction to the core elements, history, and basic hip-hop dance foundation through physical practice, video assignments, and research.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 2281. Ballet II.**

This course focuses on a beginning/intermediate level of Ballet technique. Course content includes application of terminology specific to a beginning/intermediate Ballet technique, performance of movement phrasework, and exploration and application of elements of dynamic performance.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 2291. Modern/Contemporary II.**

In this course students study modern and contemporary dance techniques at a beginning/intermediate level. Topics focus on body alignment, technical development, and proper execution of exercises and combinations, including vocabulary and methodologies from several modern dance techniques and contemporary movement practices, exposing students to self and communal awareness.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 2313. Introduction to Fine Arts.**

An introductory course designed to give the student a fundamental understanding of the creation and appreciation of diverse modes of expression through the visual and performing arts. This course may not be repeated for credit by taking ART 2313 or MU 2313 or TH 2313. (MULP) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050|Multicultural Perspective| Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** HUMA 1315

**DAN 2365. Creative Movement for Children.**

This course uses rhythmical movement exploration and creative movement as both an art form and as a teaching tool. Through class activities, students develop effective facilitator skills and incorporate innovative strategies for teaching traditional material in non-traditional ways. (MULT) Prerequisites: DAN 2201 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Multicultural Content

**Grade Mode:** Standard Letter

**DAN 2368. World Dance and Cultures.**

World Dance and Cultures exposes students to the varied and rich traditions of dance in a wide range of historical and cultural contexts. Through lectures, group discussions, video analysis, live performance, movement exploration, and writing projects, students develop a broad appreciation of dance that encompasses a variety of dance practices. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** DANC 1305

**DAN 3111. Dance Activities.**

This course is designed to provide credit for participation in dance activities. It typically involves working on a departmental production.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3115. Pilates II.**

In this course students will study the Pilates method of body conditioning and an exploration of its six basic principles of Concentration, Control, Center, Fluidity, Precision and Breath designed by Joseph H. Pilates.

Course content includes a variety of Pilates apparatuses such as the Cadillac, the Reformer, the Chair and the Ladder Barrel and incorporates the use of props such as towels, balls, pillows, rollers, discs and therabands. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3116. Yoga for Dancers II.**

In this course students will explore the material presented in DAN 2116, with the introduction of intermediate level understanding of asanas (postures), pranayama (breathing techniques) and meditation practices of Hatha Yoga. Students practice Hatha Yoga beyond the general scope, providing more in-depth anatomical, physiological, and somatic awareness for dance practices. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3171. Musical Theatre Dance I.**

This course involves the study of dance as it applies to musical theatre performance. It covers some of the styles that make up musical theatre including character dancing, the Charleston, and various ballroom dances. Prerequisite: DAN 2181 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3262. Jazz III.**

This course focuses on an intermediate/advanced level of Jazz dance technique. Course content includes application of terminology specific to a intermediate/advanced Jazz technique, performance of movement phrasework, and exploration and application of elements of dynamic performance. While exploration of movement is central to Jazz III, this course also focuses on body conditioning, investigation of performance and choreography, and development of critical analysis skills.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3271. Hip-Hop II.**

In this course students focus on complex weight shifts, directional and level changes, movement coordination in the vernacular, and musical accuracy. Practice activities are designed to challenge and improve motor skills, while enhancing the knowledge and practice of the proper foundation in form and technique.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3282. Ballet III.**

This course focuses on an intermediate/advanced study of ballet technique. Course content includes application of terminology specific to intermediate/advanced, performance of technical phrasework, and exploration and application of elements of dynamic performance.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3293. Modern/Contemporary III.**

In this course students will study modern and contemporary dance techniques at an intermediate/advanced level. This course focuses on technical development, performance quality, complex movement sequences, center combinations, progressions and repertory.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3330. Dance Curriculum Development.**

This course builds on a requisite knowledge of basic educational theory and lesson plan structure with an emphasis on developing and implementing a successful dance curriculum. Practical and effective strategies for teaching middle school and high school dance will be examined. Prerequisites: [DAN 1260 or DAN 2261 or DAN 3262 or DAN 4263] and [DAN 1280 or DAN 2281 or DAN 3282 or DAN 4283] and [DAN 1290 or DAN 2291 or DAN 3293 or DAN 4293] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**DAN 3331. Theory and Practice of Teaching Dance.**

This course is an introduction to child/adolescent development as it applies to the teaching of codified dance techniques in a dance studio setting. Students in this course study multiple genres, teaching/learning approaches, ability levels, ownership and directing roles, and methods for creating age appropriate lesson plans in Modern Dance, Ballet, Hip Hop and Jazz. Course content includes readings, videos, observations at local studios, peer activities and assignments. Prerequisite: [DAN 1260 or DAN 2261 or DAN 3262 or DAN 4263] and [DAN 1280 or DAN 2281 or DAN 3282 or DAN 4283] and [DAN 1290 or DAN 2291 or DAN 3293 or DAN 4293] all with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DAN 3332. Dance Concert Production.**

In this course students develop skills required to plan and execute dance concerts in standard educational institutions, as well as professional venues. The course will include an introduction to technical theatre and design concepts for performance: lighting, stage management, make-up, costuming, and music selection.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DAN 3340. Dance Touring Ensemble.**

Learning and performing dances from the repertory of current faculty members, artists-in-residence, and from the repertory of historic modern dancers. Dances performed locally and regionally. Enrollment by audition only. May be repeated for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3342. Performance Workshop.**

In this course students will experience being a member of a professional performance company. Students practice learning and retaining complex choreography, rehearsing and creating movement vocabulary, and cultivating an engaging performance presence. Experimentation, technique, and personal expression focuses the shared, collaborative art work created through the rehearsal process. This work is performed in a concert at the end of the semester. Corequisite: DAN 1260 or DAN 1280 or DAN 1290 or DAN 2261 or DAN 2281 or DAN 2291 or DAN 3262 or DAN 3282 or DAN 3292 or DAN 4263 or DAN 4283 or DAN 4293 any with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3345. Screendance.**

In this course students create and edit choreographic work for the camera in video format. The class is geared towards dancers, choreographers, and filmmakers. The course includes analysis and discussion of a selection of international screendance works; as well as applying practical skills in choreography, editing, and camera techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3350. Dance Team Directing.**

This course is an introduction to dance team directing in middle and high school programs. Students develop skills in choreography, administrative organization, public relations, marketing, finance and communication. Prerequisite: DAN 3330 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**DAN 3368. World Dance and Culture.**

World Dance and Culture exposes students to the varied and rich traditions of dance in a wide range of historical and cultural contexts. Through lectures, group discussions, video analysis, live performance, movement exploration, and writing projects students develop a broad appreciation of dance that encompasses a variety of dance practices and traditions, including religious dance, folk dance, court dance, and social dance. Students develop tools for cross-cultural comparison to better understand the human impulse to dance and the social, political, and cultural conditions that support or repress dance expression.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**DAN 3370. Dance Composition III.**

In this course students will investigate dance composition elements as they relate to group forms, theme, development, and phrase manipulation. Prerequisite: DAN 2202 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**DAN 3380. Business and Marketing for Dance Artists.**

In this course students are introduced to business and marketing concepts geared towards the performing arts. Students will identify and explore how to carefully craft a personal brand and marketing platform that is specifically shaped for the dance community. The basic principles of business practices will form both the foundation of the course as well as the lens through which all classwork is viewed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DAN 3390. Dance in the Community.**

This course combines community service (creating dance for or with non-profit community organizations that serve at-risk populations) with readings, discussions, and collaboration on societal applications of performing arts. May be repeated once for credit when topics vary.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4263. Jazz IV.**

This course focuses on an advanced level of Jazz dance technique. Course content includes advanced technique and performance of movement phrasework, and exploration and application of elements of performance process. While exploration of movement is central to Jazz IV, this course also focuses on critical reflection on jazz choreography, investigation of performance and choreography, and development of conditioning regimen. Prerequisite: Instructor approval.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**DAN 4271. Dance Internship.**

This course provides hands-on experience and career exploration and development in the dance industry, including but not limited to, arts management, dance studio administration, pre-professional dance company administration and Study Abroad/Study in America administration. This course requires a minimum of 150 hours of off-campus experience, a written agreement with internship coordinator and portfolio of completed work. Dance Internship offers students a professional learning experience that grants meaningful, practical work related to the dance field. Prerequisite: Instructor approval.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4272. Hip-Hop III.**

This course advances the foundation of Breaking and Hip-Hop as a cultural dance form, and challenges the dancers' musicality, form, technique, flow, foundation, finesse, and demands more advanced creativity to discover original movement vocabularies. In this course students explore advanced concepts of original movement creation in the vernacular, complex movement patterns, polyrhythms, seamless directional, level changes and apply a wide spectrum of dynamic qualities into their dance practice. Prerequisite: DAN 3271 with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4283. Ballet IV.**

This course focuses on an advanced study of ballet technique. Course content includes application of terminology specific to advanced performance of technical phrasework, and exploration and application of elements of dynamic performance. This course also focuses on body conditioning, application of performance process, exposure to complex choreographic structures and development of critical analysis skills.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4292. Somatic Principles in Dance.**

In this course students will analyze and perform somatic principles as applied to dance training. Students develop a high level of conceptual mastery and physical skill for their teaching and performing preparation. Prerequisite: DAN 1290 or DAN 2291 or DAN 3293 or DAN 4293 any with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4293. Modern/Contemporary IV.**

In this course students explore advanced levels of modern and contemporary dance techniques. This course focuses on dynamics, performance process and technical development through repertory including and incorporating methodologies from a variety of modern dance techniques and contemporary movement practices.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4330. Dance Kinesiology.**

This course is an experiential study of the human body in rest and in motion. Emphasis will be on the skeletal and muscular systems in consideration of applications to dance performance, teaching and creative processes, and injury prevention and rehabilitation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DAN 4350. Musical Concepts for Dance Performance.**

This course provides dance majors with a working knowledge of the essential vocabulary of music-rhythm, melody, form and harmony, together with an overview of musical styles throughout both time and geography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DAN 4360. Dance Independent Study.**

Designed to give supervised experience to qualified advanced students in dance. Independent study on research problems or actual production problems may be chosen. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4366. Writing and Reading About Dance.**

Surveys dance literature including an opportunity for students to familiarize themselves with resources, current publications, theoretical materials, and professional organizations in dance. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**DAN 4367. Advanced Choreography: Theory and Practice.**

In this course, students engage in choreography, costuming, and lighting design for a group dance of substantial length, justifying artistic choices in an accompanying documented paper. Prerequisite: DAN 2202 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4369. Dance in the 20th and 21st Centuries.**

Exposure to a wide variety of literature in the area of dance, the arts and sciences which specifically address the development of dance as an art-form and cultural phenomena in the 20th and 21st Centuries. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**DAN 4370. Contemporary Issues in Dance.**

This upper-level theory course is designed to provide opportunities to investigate the current moment in contemporary concert dance. Current trends in choreography will be explored in a variety of genres. Culturally relevant themes of gender, sexuality, social justice, commercialism, racism, and beauty will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**DAN 4371. Dance Internship.**

This course provides hands-on experience and career exploration and development in the dance industry, including but not limited to, arts management, dance studio administration, pre-professional dance company administration and Study Abroad/Study in America administration. This course requires a minimum of 175 hours of off-campus experience, a written agreement with internship coordinator and portfolio of completed work. Dance Internship offers students a professional learning experience that grants meaningful, practical work related to the dance field. Prerequisite: Instructor approval.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DAN 4380. Professional Development for Dancers.**

This course prepares students to work as professionals in the field of Dance. They will learn the skills necessary to create a Dance-specific resume and portfolio for use upon graduation, to seek and secure employment, and seek funding for Dance projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DAN 4470. BFA Senior Concert.**

In this course students choreograph, perform, and produce a dance concert, while applying feedback from faculty and peers throughout the process. Students engage in the creative, administrative, and promotional aspects of production. Prerequisite: DAN 3370 or DAN 4367 either with a grade of "C" or better.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4471. Dance Internship.**

This course provides hands-on experience and career exploration and development in the dance industry, including but not limited to, arts management, dance studio administration, pre-professional dance company administration and Study Abroad/Study in America administration. Prerequisite: Instructor approval.

**4 Credit Hours. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Courses in Theatre (TH)

**TH 1111. Production Crew.**

This course provides students with vital production experience in the operation of a live theatrical event.

**1 Credit Hour. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 1121. Musical Theatre Singing Technique I.**

This course in vocal instruction focuses on technique, musicality and performance for the Musical Theatre performer.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1122. Musical Theatre Singing Technique II.**

This course in vocal instruction continues the work done in TH 1121 and focuses on technique, musicality and performance for the Musical Theatre performer. Prerequisite: TH 1121 with a grade of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1210. Introduction to Musical Theatre.**

This course introduces students to musical theatre through song, score, libretto, character analysis and performance. Students look at both classic and contemporary musical theatre style, structure and content with an emphasis on performance and acting the song. Students will also gain an introductory knowledge of the musical theatre canon.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1211. Score and Libretto Analysis - Acting the Song.**

In this course students will work on musical theatre performance through song, score, libretto, character analysis and performance. Students take a comprehensive look at both classic and contemporary musical theatre style, structure and content. Additional focus will be placed on knowledge of the musical theatre canon and its leading professionals. Prerequisite: TH 1210 with a grade of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1260. Musical Theatre Jazz I.**

This course focuses on beginning jazz dance technique for Musical Theatre students including jazz walks, weight shifts, isolations, stretches, and combinations. Combinations are designed to challenge and enhance the students' knowledge of the various styles and methodologies of jazz dance and to develop performance and choreographic abilities in these styles.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 1280. Musical Theatre Ballet I.**

This course introduces the basic technique and steps of classical ballet to Musical Theatre students. Basic barre exercises, positions and traveling steps of the ballet movement vocabulary will be taught and practiced for mastery. Students will also gain an understanding of ballet as a performing art.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 1312. Musical Theatre Musicianship I.**

This course offers detailed instruction in fundamentals of musicianship for the Musical Theatre performer, including notation, meters, scales, key signatures, intervals, chords, and sight singing. Equal emphasis is placed on practical skills and theoretical analysis of the musical theatre canon.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1314. Musical Theatre Musicianship II.**

This course offers continued practice of the essential elements of musicianship for the Musical Theatre performer including higher levels of ear training and sight-singing. Equal emphasis is placed on practical skills and theoretical analysis of the Musical Theatre canon. Prerequisite: TH 1312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1320. Filmmakers History of Film.**

This course introduces the student filmmaker to the history of film taken from the perspective of the practicing filmmaker. This is a study of how technological change, socio-economic forces and art trends inside and outside the medium itself affected the technique, craft and style of filmmakers from each period.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1330. P&P 101: Entrepreneurial Theatre-Making.**

This course prepares students entering the BFA Performance & Production Program with the skills and knowledge necessary to create a personal career plan. Students experiment with different creativity-generating processes and are introduced to a variety of theatre-making roles and paths that reflect current practices of the industry. Students investigate the ingredients of successful collaboration and build project teams united in a common artistic goal. With the knowledge gained from these experiences, students curate a personal degree plan optimized to provide them with a skillset tailored to their individual strengths and interests.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TH 1340. Voice and Diction.**

The human voice and the sounds of speech. The student's own voice and pronunciation will be the primary concern, using practice sessions to develop more acceptable patterns of voice and sound.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** DRAM 2336

**TH 1345. Voice I: Vocal Production.**

In this course students will explore basic principles of vocal production and anatomy, including vocal variety and in-depth exploration of vocal identity. Emphasis is placed on breath work, alignment, vocal support, range, flexibility and health.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1350. Introduction to Theatrical Design.**

Course introduces the freshman theatre major to the four primary areas of theatrical design: costume design, scenic design, sound design, and lighting design. Each area's practice is explored and analyzed through a series of exercises that incorporate design projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1353. Film Production Practices.**

This course provides an introduction to the art and practice of filmmaking. Students analyze the components of a film and examines the tools of filmmaking, including the camera, script, sound equipment, and editing software.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1354. Movement I.**

In this course students will explore movement for the stage. This introduction to movement course equips the actor with tools from multiple movement methodologies, including practical training in kinesthetic response, increased flexibility, and partner work and acrobatics, animating the interplay between these techniques and performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** DRAM 1322

**TH 1355. Movement II.**

A continuation of Movement I and the exploration of kinesthetic response for the actor, using movement techniques in class performances and further research into the techniques of Alexander, Feldenkrais, and Laban. Prerequisite: TH 1354 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1364. Beginning Acting.**

In this course students examine, understand, and apply the fundamentals of acting technique and personal artistry, and the interplay between the two. This course lays the foundation for Intermediate Acting and Movement I.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TCCN:** DRAM 1351

**TH 1365. Intermediate Acting.**

Intermediate Acting. (2-1) Classroom exercises designed to continue the exploration of the actor's inner resources; additional work on discovering techniques of developing a character. May be taken by non-majors independently. Prerequisite: TH 1364 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TCCN:** DRAM 1352

**TH 1369. Introduction to Dramatic Writing.**

In this course students will examine the essential elements of dramatic structure in literature written for theatre, film, and episodic programming. Students explore fundamental script elements during a semester of assigned writing, readings, script analysis, and critiques. Through this application, students develop their ability to write in all performance mediums. Completing this course increases the ability to identify each medium's appropriate format, act structure, craft, and style. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TH 2111. Theatre Activities.**

A course designed to provide credit for participation in theatre activities. May be repeated to a total of four credits.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** DRAM 1120

**TH 2210. Musical Theatre Devising.**

In this course students will develop their unique artistic voice applied to performance, and scene study skills by creating an original performance piece with a focus on personal, social, and justice-oriented themes.

Students will collaborate as a creative ensemble in devising, producing, marketing, and performing in the project. Prerequisite: TH 1210 and TH 1211 both with grades of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 2211. Applied Musical Theatre Musicianship Through Performance.**

In this course students will learn to utilize their deepening knowledge of harmony, form, orchestration, and motivic cohesion as a critical tool for expanding insight into characterization, emotional context, and storytelling. This course is a continuation of Music Theater Musicianship II and Intermediate Acting and functions as a bridge between singing and acting. Prerequisite: TH 1210 and TH 1211 both with grades of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 2261. Musical Theatre Jazz II.**

This course focuses on intermediate jazz dance technique for Musical Theatre students including complex weight shifts, syncopations, coordination and isolation techniques. Exercise and floor combinations are designed to challenge and improve previously obtained motor skills and to enhance knowledge of correct mechanics of dance as a performing art.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 2281. Musical Theatre Ballet II.**

This course introduces intermediate technique and steps of classical ballet to Musical Theatre students. Intermediate barre exercises, positions and traveling steps of the ballet movement vocabulary will be taught and practiced for mastery. Students will also gain an understanding of ballet as a performing art.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 2313. Introduction to Fine Arts.**

An introductory course designed to give the student a fundamental understanding of the creation and appreciation of diverse modes of expression through the visual and performing arts. This course may not be repeated for credit by taking ART 2313, DAN 2313, or MU 2313. (MULT) (MULP).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050|Multicultural Perspective

**Grade Mode:** Standard Letter

**TCCN:** HUMA 1315

**TH 2315. Film Directors Analysis.**

This course takes a filmmaker-centered approach to the study of individual directors and explores how they utilized technique, craft and style to achieve effects in the telling of their film stories. Students trace the career of a chosen filmmaker from their earliest films to their latest. Prerequisite: TH 1353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 2330. Stagecraft and Stage Lighting.**

This class teaches the facilities, tools, materials and techniques used to build scenery safely and effectively in the modern theatre. It also covers the facilities, tools, and techniques used to safely and effectively read a light plot, hang and focus stage lighting instruments. It includes a hands-on lab.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TH 2345. Voice II: Experiencing Speech.**

In this course students will focus on the ability to use speech articulators in order to allow full, healthy production of a wide variety of speech sounds. Emphasis is placed on full speech flexibility and ability to accurately create any sound the character requires. Prerequisite: TH 1345 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 2354. Characterization.**

This is a studio acting course in which the student explores and develops techniques of creating a role. Prerequisite: TH 1340 and TH 1365 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** DRAM 2351

**TH 2355. Introduction to Playwriting.**

This course focuses on reading and analyzing contemporary plays, as well as short-form writing exercises, leading to the creation of original scenes. Students will read and deconstruct four contemporary plays as well as engage in various short-form writing exercises culminating in an original scene as their final creative project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3111. Theatre Activities.**

This course is designed to provide credit for participation in theatre activities. It typically involves working on a departmental production. May be repeated for credit with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3120. Musical Theatre Singing Technique Private Instruction.**

This course is for advanced, private study in musical theater singing technique. Via private instruction, students will study multiple areas of musical theatre singing technique including singing for the microphone, belting, placement, and diverse musical theater styles (pop, rock, Golden Age, contemporary musical theater, etc). Prerequisite: TH 1122 with a grade of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3150. Pop Rock Repertoire Building.**

This class develops repertoire and vocal styles in 12 pop/rock genres of music, preparing students for the current demands of the musical theatre industry, including building repertoire for their professional audition books. Prerequisite: TH 1211 with a grade of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3251. Musical Theatre Tap I.**

This course covers the basic steps of tap technique and how they apply to musical theatre. Students learn coordination, rhythmic variations, and performance skills through a series of tap combinations and exercises. They also explore the concepts of dancing as an ensemble.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3252. Musical Theatre Tap II.**

This course expands on skills covered in Musical Theater Tap I. Basic steps are perfected and more difficult steps and combinations are learned. Longer sequences set to Musical Theatre and contemporary music are mastered, and attention is given to ensemble work, rhythmic variations, and performance skills.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**TH 3262. Musical Theatre Jazz III.**

This course focuses on advanced jazz dance technique for Musical Theatre students including complex coordination and combinations requiring increased levels of technique, strength and flexibility. Emphasis is on developing ability to quickly master challenging choreography while continuing to develop new skills. There is a continuing emphasis on biomechanics and choreography. Prerequisite: TH 2261 with a grade of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3271. Musical Theatre Dance I.**

This course involves the study of dance as it pertains to Musical Theatre performance. Along with technique fundamentals, students hone the skills necessary for effective character development, storytelling, and auditioning. The course also covers some styles that make up Musical Theatre including Traditional Broadway, Charleston, Hip-Hop, and various Ballroom dances. Prerequisite: TH 2281 and TH 2261 both with grades of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3272. Musical Theatre Dance II.**

This course involves the study of dance, movement, and staging for Musical Theatre and culminates in student-choreographed works from Musical Theatre productions. It includes strategies for learning and performing dance combinations as they occur in professional dance auditions. It also explores styles such as Fosse, Contemporary, and Commercial Dance. Prerequisite: TH 3271 with a grade of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3282. Musical Theatre Ballet III.**

This course introduces advanced technique and steps of classical ballet to Musical Theatre students. Advanced barre exercises, positions and traveling steps of the ballet movement vocabulary will be taught and practiced for mastery. Students will also gain an understanding of ballet as a performing art. Prerequisite: TH 2281 with a grade of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3305. Theatre in the Community.**

This course combines community service (creating theatre for or with non-profit community organizations that serve at-risk populations) with readings, discussions, and collaboration on societal applications of performing arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3310. Voice III: Heightened Text.**

In this course students will continue to develop the fundamentals of voice and speech for the stage while exploring heightened text. Students will learn tools for deciphering text and develop skills to vocally interpret what they've gleaned from the text. Prerequisite: TH 2345 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3320. History of the Theatre I.**

A study of the theatre and its place in the social and cultural evolution from primitive civilization to 1700. Selected examples of theatre literature are studied. (WI) (MULT & MULP).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Writing Intensive

**Grade Mode:** Standard Letter

**TH 3321. History of the Theatre II.**

A study of the theatre and its place in the social and cultural evolution from 1700 to the present. Selected examples of theatre literature are studied. (WI) (MULT) (MULP).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**TH 3322. History of Musical Theatre.**

Course examines the history of musical theatre, from its antecedents through its Golden Age to present-day issues. In the process students will study musical theatre's elements and structure, as well as its creators, including major librettists, composers, lyricists, designers, directors, choreographers, and performers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3325. Film Directors Workshop.**

This course addresses strategies used by the student filmmaker in approaching the directing of performance for film and television. The focus is on the director-actor relationship, script analysis, rehearsal strategies, beat-by-beat text breakdowns, staging exercises, and techniques for communicating and working with actors. Prerequisite: TH 1353 and TH 4363 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3330. Advanced Stagecraft.**

This course covers the facilities, tools, materials, equipment and techniques used to safely produce, from a technical standpoint, live theatrical performances. The course includes woodworking, metal working, stage rigging, stage lighting, audio and, in general, good stage hand practices. Prerequisite: TH 2330 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3331. Theatrical Drafting: By Hand.**

This course is a study of manual drafting techniques for theatrical designers and technicians. Prerequisite: TH 2330 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3332. Introduction to Stage Properties.**

This course introduces students to the categories of theatrical properties, as well as the practices and processes of the theatrical Prop Master as they pertain to the execution of a collaborative production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3333. Creating Comedy: Crafting Stand-Up, Sketch, and Improv.**

This course breaks down the craft of writing comedy in various mediums and provides an understanding of the basic history of American comedy from the eras of Vaudeville to digital. In addition to studying the history of comedy, students will also develop their own jokes, stand-up material, sketches and podcasts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3335. Properties Construction.**

This course focuses on specific construction techniques and materials utilized by professional prop artisans for the construction of theatrical properties. Students are introduced to the practices of the theatrical Prop Master as they pertain to the execution and planning of prop construction projects.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3337. Sound Technology.**

This course examines audio technology, the components of sound systems, and their application for live entertainment, including theatre and dance productions. This technical knowledge is the basis of the sound designer's skill set. Prerequisites: TH 1350 and TH 2330 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3338. Stage Lighting.**

This course in stage lighting design assumes basic knowledge of lighting technology equivalent to that learned in TH 2330. This class encompasses research, observation, group discussion, and practical "hands-on" projects with emphasis on learning to see light and developing a common language for light and the lighting design process. Prerequisite: TH 2330 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3339. Latinx Theatre and Performance.**

This course explores Latinx theatre that addresses the highly contested and geopolitical border that separates the US from Latin America. It focuses on how Latinx theatre creates counternarratives within the country. Students will study the borderlands as a place of latinidades, the multiple community voices of the region. Throughout the semester they will read dramatic, theoretical, and historical texts and examine the work of various border-crossers in the western hemisphere.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3340. Intro to VFX and Compositing.**

This course introduces the techniques, craft and art of visual effects and compositing using Adobe After Effects. Students organize, research and execute projects based on advanced techniques in visual effects and compositing, covering topics such as 2D and 3D animation, matte painting and color correction. Prerequisite: TH 4342 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3341. Film Sound.**

In this course student filmmakers will be introduced to the creative use of sound in the film and television industries. All the core aspects of film sound will be covered from production sound, dialogue, ADR, sound effects, sound design, foley, music/score and mixing. Prerequisite: TH 1353 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3342. Television/Film Performance.**

This course is a practical laboratory course in television and film performance techniques, including procedures and requirements for professional engagements. Prerequisites: TH 1365 and [TH 3361 or TH 3364] both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3343. Stage Makeup.**

A practical course in developing techniques used in applying stage makeup. Emphasis is placed on painting, and contouring the face to achieve the desired effect. Special projects include fantasy makeup and mask making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3344. Costume Stagecraft.**

A single semester introduction to garment production for the entertainment industry. Emphasis is placed on hand and machine stitching techniques, as well as an introduction to pattern drafting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TH 3346. Historical Costume Research.**

In this course students will explore clothing, accessories, and customs of a variety of historical periods and cultures as an approach to period costume productions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3350. Technical Production.**

This course provides hands-on experience to qualified advanced students in technical theatre utilizing a series of rotating topics. Selected topics may include stage rigging, sound systems, remote device management, technical direction and/or technical writing/drawing. May be repeated for credit with different emphasis. Prerequisite: TH 2330 with a grade of "D" or better instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3351. The Craft of the Stagehand in the Live Entertainment Industry.**

The purpose of this course is to provide the student with proper training in the variety of skills that are needed in order to work professionally as a Stagehand in live entertainment performance venues across the United States and around the world.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3352. Stage Rigging for the Live Entertainment Industry.**

The purpose of this course is to provide the student with instruction and opportunity to become proficient with safely employing basic rigging techniques that are common in live performance venues throughout the United States. Prerequisite: TH 2330 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3354. Safety for the Production of Live Entertainment Events.**

This course will provide students with the resources necessary to incorporate good safety and health practices into their professional career in the live entertainment industry. Based on standards from the Occupational Safety and Health Act, the Event Safety Alliance, and other current resources, students will learn to make informed decisions during the planning and execution of live events to ensure the safety of all event participants. Prerequisite: TH 2330 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3355. Playwriting.**

In this course students will study play fundamentals (structure, dialogue, and mechanics), and guidance and discussion of representative plays. Prerequisite: TH 2355 or TH 1369 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3358. Screenwriting.**

In this course students study the art and craft of writing screenplays. Through script readings, film viewings, and writing several original short scripts, students will learn story structure, character development, and a practical process for screenwriting. Prerequisite: TH 2355 or TH 1369 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TH 3359. Advanced Screenwriting.**

In this course, students will pitch, outline and write a draft of an original feature-length screenplay. Prerequisite: TH 3358 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3360. Beginning Stage Combat.**

This is an introductory course in stage combat with a hands-on approach emphasizing actor safety, dramatic requirements of the script, and historical accuracy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3361. Improvisation for the Actor.**

This class develops the student's understanding of the fundamentals of improvisation as both a performance art and a rehearsal technique, expanding the actor's versatility and enhancing confidence in performance and communication skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3362. Musical Theatre Performance for the Actor.**

This course is an introduction to the dynamic world of musical theatre through song analysis and performance, class exercises for the body and the voice, as well as an initial look at both classic and contemporary musical theatre style, structure, and content.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3363. Stage Combat Stick Fighting.**

This class covers Stick Fighting techniques from around the world and how to incorporate them safely into a play or film. Students learn safe handling and use of all types of fighting sticks including, but not limited to, European Quarterstaff, Japanese Bo-Staff, Irish cane fighting, and Philippino Arnis. Prerequisite: TH 3360 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3364. Acting Realism.**

This is a studio course emphasizing the theories and methods of Stanislavsky in order to create characters in realistic drama. Prerequisites: TH 1365 and [TH 1340 or TH 1345] both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3365. Acting Styles.**

This class explores a selected sample of theatre performance styles. The global history of performance includes many different uses of language, movement, gesture, relationship-to-audience, and storytelling intention. Instructors lead students through a curated sample of performance literature that could include Greek, Asian, Jacobean, Shakespearean, Moliere, Comedy of Manners, African, Latinx, and Brecht. This instructor-curated, performance-based curriculum can span theatre from 550BC to the late 19th century, providing students the opportunity to explore various forms of performance style. Prerequisite: TH 1365 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3366. Stage Combat Single Sword.**

This course develops students single-sword techniques and how to incorporate them safely into a play or film. Students will learn to safely handle single swords and how to build stage combat choreography using a hands-on approach emphasizing actor safety, dramatic requirements of the script, and historical accuracy. Prerequisite: TH 3360 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3367. Theory and Analysis.**

A study of dramatic theory and play analysis for production, including the study of forms, styles, and methods. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TH 3370. Creative Drama.**

Emphasis on process drama theory and using creative drama as both an art form and as a teaching tool. Through class activities, students will develop effective facilitator skills and incorporate innovative strategies for teaching traditional material in non-traditional ways.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3375. Production Design for Film.**

This course covers the structure and operation of an art department on a film production, as well as the fundamentals and application of production design for film and TV. Prerequisite: TH 1353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3390. BFA Pre-Professional Apprenticeship I.**

Intensive work in one of the following career paths: Acting, design, and theatre technologies, costuming.

**3 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3396. Musical Theatre Audition Technique.**

This course concentrates on musical theatre audition preparation and performance on an advanced level. Students will expand their analytical, professional and creative skills through performance work, mock auditions, "Business of the Business" labs, and a comprehensive research project. Students will create a portfolio of specific and personalized audition material. Prerequisite: TH 1210 and TH 1211 and TH 2210 and TH 2211 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TH 4120. Musical Theatre Singing Technique Private Instruction.**

This course is for advanced, private study in musical theater singing technique. Via private instruction, students will study multiple areas of musical theatre singing technique including singing for the microphone, belting, placement, and diverse musical theater styles (pop, rock, Golden Age, contemporary musical theater, etc). Prerequisite: TH 1122 and TH 3120 both with a grade of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4251. Musical Theatre Tap III.**

This course expands on skills covered in Musical Theatre Tap II. Intermediate and advanced tap steps are explored and attention is given to learning important pieces in the classic and contemporary tap canon as well as tap audition techniques. Focus is given to rhythmic clarity, agility, improvisation, and performance skills. Prerequisite: TH 3252 with a grade of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4271. Musical Theatre Dance III.**

This course provides an examination of the history and development of Musical Theatre dance styles, including an in-depth study of significant works of choreographers, including Agnes de Mille, Jack Cole, Jerome Robbins, Bob Fosse, Michael Bennett, and Andy Blankenbuehler. Prerequisite: TH 3282 and TH 3262 both with grades of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4272. Musical Theatre Dance IV.**

This is an advanced Musical Theatre dance class that will focus on building advanced technical and performance skills as well as displaying competence in a variety of styles. Students will also develop partnering skills. Prerequisite: TH 4271 with a grade of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4301. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry. May be repeated once for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4302. Contemporary Theatre Workshop.**

This course examines some of the major plays, playwrights, themes and styles in contemporary theatre in the United States. Students will read, analyze, research, and perform in scenes from many different types of contemporary performance, including realism, musical theatre, classical adaptation, surrealism, and devised work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4303. Multicultural Perspectives in American Theatre.**

This course explores the literature, history, and performance challenges of the many voices and perspectives that make up American Theatre. In addition to exposure to brief historical overviews, students will read key literary texts and perform monologues and scenes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4304. Web Series Creation.**

In this course, students explore entertainment series that are designed specifically for publication on the Internet. Students will create, develop, identify a target audience, and write scripts for two short episodes of an original web series. In addition, students will work in groups to write a script, produce, and publish an episode for an original audio drama series. The production of the original web series takes place in TH 4305 Advanced Web Series Creation. Prerequisite: TH 1369 with a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4305. Advanced Web Series Creation.**

This course is a continuation of TH 4304 Web Series class. Students will story edit, produce, direct, publish and market two episodes of their own web series. Prerequisite: TH 4304 with a grade of "B" or better and TH 1353 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4307. Properties Effects.**

This course focuses on specific construction techniques and materials utilized by professional prop artisans for the construction of theatrical special effects. Students are introduced to the practices of the theatrical Prop Master as they pertain to the execution and planning of prop special effects projects.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4308. Musical Theatre Choreography.**

This course examines the role of choreography in musical theatre and explores the choreographic process. Students study the history and theoretical principles of musical theatre choreography as well as obtain the practical skills needed to create staging and choreography for a musical theatre production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4310. Theatre Curriculum Development.**

Course builds on a requisite knowledge of basic educational theory and lesson plan structure with an emphasis on developing and implementing a successful Theatre curriculum. Practical and effective strategies for teaching middle school and high school Theatre will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TH 4311. Training the Teaching Artist.**

A teaching artist is, by definition, a two-career professional: a working artist and a working educator. This course explores the artistic, teaching, and business aspects of working as a teaching artist. Students create a job portfolio and teach a short residency in a classroom setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4312. P&P Business Startup.**

This course examines career and market research and analyzes current industry trends to develop an individual theatrical business plan. Students investigate and explore for-profit and nonprofit business structures. Prerequisite: TH 1330 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4315. Actor Artist Aesthetic.**

In this course students hone writing skills focused on creating original, "devised" theatre pieces. They investigate designated themes, experimenting with a variety of literary devices, movement techniques, and approaches to storytelling. This process culminates in creating collaborative ensemble-based pieces, as well as solo performance work. A foundation in movement is strongly recommended. Prerequisite: TH 1354 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**TH 4320. Directing Theatre Activities.**

Designed to assist any teacher in directing theatre activities. During the course, students will direct plays or scenes. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4321. The Art of Voiceover and Voice Acting.**

In this course, students enhance their listening skills, determine their vocal "brand" or type, and learn various industry reads and the necessary corresponding voice skills. Students learn how to research and cut copy, create commercial, industrial, and cartoon demos, recording etiquette, and how to take vocal direction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4323. Shakespeare Through Performance.**

This intensive summer study abroad program immerses students in the language and culture of Shakespeare's plays. Incorporating a performance-based approach to the study of Shakespeare, this course includes theatrical workshops taught by professionals at leading international theatres, including the Royal Shakespeare Company.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4324. Shakespeare: Text and Context.**

This intensive study abroad program immerses students in the language and culture of Shakespeare's plays. In Stratford, academic workshops are led by scholars from the Shakespeare Birthplace Trust. Through immersion in the cultural environment in which the plays were produced, students gain insight into the context that shaped Shakespeare's theatre.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4325. Shakespeare Ensemble.**

This class provides students with the opportunity to build an ensemble production of an abridged Shakespearean play. Using text analysis, character building, and clear storytelling, students create an adaptable production that can be performed in schools, libraries, and other community locations. Prerequisites: TH 1340 and TH 1365 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4326. Design for Theatre Educators.**

This course prepares teaching certification students for the execution of technical elements relating to a dramatic production. The class draws heavily from guidelines established by the University Interscholastic League (UIL) Handbook governing One-Act Play competitions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4327. Technical Theatre Production for Educators.**

This class guides students through exercises highlighting tool safety, scenery construction and proper stage protocols. Students build and repair scenery, hang a UIL light plot, hang masking curtains, design lights and audio for all the Texas State Summer High School Theatre Camp productions. Prerequisite: TH 4326 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4328. Arts Leadership for the 21st Century.**

In this course the students will serve on the Jeremy Torres Lab Theatre Board as well as serve as assistant directors on departmental productions. During the course, students either produce the Jeremy Torres Lab Theatre season or assistant direct a departmental production.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4329. Television Writing.**

In this course students study the process of writing a half-hour episodic television series. Students will learn fundamentals of TV scriptwriting, including story pitching, episode beat sheets, story and character development, culminating in a finished pilot script for an original thirty-minute television series. Prerequisite: TH 1369 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4330J. Drawing for the Designer.**

In this course students will cultivate drawing & rendering skills for scenic, lighting, and costume design. The student will be exposed to different rendering media such as water color, colored pencil and ink markers.

Prerequisite: TH 1350 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 43300. Smartphone Cinema in Paris.**

In this course students will explore Paris through smartphone cinema. The student will participate in real world explorations of the literal paths of the earliest French filmmakers, including but not limited to Alice Guy Blache, George Melies, and the Lumiere Brothers. Students will analyze the work and the paths of Francois Truffaut, Jean Conteau and Agnes Varna.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4330R. Oregon Shakespeare Festival Intensive.**

This course examines theatre production at the regional theatre level by exposing students to the work of the Oregon Shakespeare Festival. Students will study issues of translating the current season's nine plays from script to stage, as well as analyze the perspectives and choices that inform each production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331A. Auditions: The Business of Acting.**

This course equips the actor with the skills necessary to enter the professional world. Students will create an effective audition portfolio which may include two self-taped contrasting one-minute monologues, a resumé, a headshot, a professional bio, and/or a professional website. Prerequisite: TH 1365 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331B. Realism: Chekhov & Contemporary American Playwrights.**

This course will give undergraduate actors mastery of the fundamental tools for undertaking a successful rehearsal process, including Stanislavski-based text work as the initial stage for exploration and discovery of a dramatic text. Text work serves as a means of collectively investigating text, fostering strong director/actor collaborations, and laying a foundation for a richly exploratory rehearsal period. For the sake of this class, the rehearsal process is an exploration of the connection, meaning and specificity required to embody the character and plot of a play actively and truthfully. Prerequisite: TH 1365 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331C. Non-Realism in Theater, 1950-Present.**

The class will allow directors and actors to collaborate on scene studies from plays written in the second half of the twentieth century, as well as in the twenty-first century, going up to the present day. Genres and styles studied may include: absurdism, magical realism, dystopias, and intersectional plays. Prerequisite: TH 1365 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331D. New Play Workshop.**

Undergraduate actors will collaborate with MFA Directors and guest playwrights on a reading of a new play. Additionally, through this process, students will develop techniques for delving into the core themes and ideas of a new play so that it can be truthfully realized in performance. Prerequisite: TH 2355 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331E. Devising for Performers.**

In this course students develop devised theatre and live performances, individually and collectively, in conjunction with critique methods that collectively move the work forward. Through the creation of new work and community critique of that work, student artists build a common language out of their unique interests and contemporary devising methodologies. Through devising, acting, writing, designing and creating original solo and group performances, students will expand their artistic skillset.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331G. Live Sound Audio Engineering and Mixing.**

In this course, students will examine the role of audio engineering and the live sound industry. Students will explore all aspects of audio engineering and mixing in order to meet the industry standards in the field of audio production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331H. Technical Design Solutions for the Stage.**

This course will provide students with the tools necessary to safely and creatively plan, problem-solve, and execute the production of scenery, special projects, and special effects for the stage. Students will explore various challenges faced by technical directors, property supervisors, and associated artisans. They will learn both common and unique solutions for those problems. Prerequisite: TH 2330 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331I. Advanced Acting For Film & TV.**

In this course, students will expand their knowledge in the field of acting for film and television by applying skills on a film set or location. In addition, this course culminates in a final "reel", which the student can use for their own promotional materials as they enter the workforce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331P. Performing Postdramatic Theatre: Embodying the Unconventional.**

In this course students will explore postdramatic theatre terminology, principles, and practices, equipping them to become versatile, innovative, and boundary-pushing theatre artists who redefine the art of live performance. This course will introduce students to avant-garde techniques and concepts that transcend conventional boundaries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331S. Directing Musical Theatre & Shakespeare in an Educational Setting.**

In this course students will examine basic educational theory and lesson plan structure with an emphasis on the study of directing musicals and Shakespeare productions. Practical and effective strategies for directing musical theatre and Shakespeare productions in the middle school and high school theatre environment will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331V. Vectorworks II.**

This course is an advanced study of computer techniques and procedures using Vectorworks in the preparation of technical drawings and digital previsualization for theatrical scenic and lighting design.

Prerequisite: TH 4356 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331Z. The History of Early French Films.**

In this course students will explore the origins and explorations of Filmmaking in France. This immersive education experience will take students to significant sites and experiences in Paris with optional tours to iconic, historical film locations from cinema produced in Paris, the City of Light, with preparation and foundation in the preceding semester of study.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4332. Theatre in Education.**

This course provides an in-depth examination of Applied Theatre as it is used in a variety of settings, including elementary and middle school classrooms, recreation facilities, and in community outreach programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4333. Advanced Television Writing.**

In this course students explore the process of writing a one-hour episodic television series pilot. Students will create an idea for an original one-hour television series, write a beat sheet for the pilot episode, write and re-write the pilot episode script, and create and present a pitch deck.

Prerequisite: TH 4329 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4334. Stage Management.**

This is a seminar course in stage management, focusing on organization, techniques, and practices for managing stage productions from initial planning through performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4335. Stage Management Practicum.**

This course is a hands-on practicum in which select students stage manage a departmental production, from auditions through the completion of the production. Prerequisite: TH 4334 with a grade of "D" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4336. Production and Company Management for the Arts.**

The goal of this course is to examine the job duties (and sometimes overlapping tasks) of members of a theatrical/producing arts team with a focus on company managers, stage managers, production managers, and the producing process. Focus also includes an emphasis on group management and organizational tools.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4337. Sound Design.**

This course provides an exploration of the sound design process and practical application for live entertainment, including theatre and dance productions. It involves an exploration of the sound design process and practical application through class projects. Prerequisite: TH 3337 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4338. Lighting Design.**

This course will concentrate primarily on the aesthetics of stage lighting covering such topics as color; script analysis; use of light in creating both static and dynamic visual compositions; development and graphic representation of a theatrical lighting design; and psychological and physiological responses pertaining to visual perception. Prerequisites: TH 1350 and TH 2330 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4340. Business of Film.**

This course focuses on how film projects are put together, from development to production, with an emphasis on job opportunities that are available in the film industry. Where applicable, working professionals are brought in as guest lecturers to provide a hands-on perspective of working in the film industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4341. Short Film Development.**

This course focuses on the essential elements that go into the pre-production phase of developing a short film project. Emphasis is on script research, writing, budgeting, scheduling, finance, and development. Prerequisite: TH 1353 and TH 3358 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4342. Film Editing.**

This course will introduce students to the theory and application of film editing practices beginning with an in-depth study of several software applications. The students engage in the artistry of film editing utilizing workflows across multiple formats including fiction, documentary, and commercial. Prerequisite: TH 1353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4343. Film Producing.**

This course introduces students to the roles and responsibilities that contribute to the successful production of narrative films across multiple formats: short, feature, commercial, documentary and web. Utilizing industry-standard software tools, the student works through stages of development, budgeting, scheduling and on set production. Prerequisite: TH 1353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4344. Advanced Sound Design.**

This course focuses on the use of a digital audio workstation in the composition of music, sound, and scoring of theatrical moments on stage, as well as explores recording techniques. It also examines dramaturgical aspects of sound design. It is project-based, and includes a wide range of topics based on student interest and instructor discernment. Prerequisite: TH 3337 and TH 4337 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4345. Costume Design.**

In this course students will explore the role of a costume designer with specific focus on the costume design process. Projects will include developing skills in script analysis, character development, research, and drawing and rendering techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4346. Advanced Costume Design.**

Continued development of costume design skills. Includes research as well as advanced drawing and rendering techniques. Repeatable for credit with different emphasis. Prerequisite: TH 3344 and TH 4345 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4347. Pattern Making.**

Pattern Making is a single semester exploration of the skills and techniques of pattern drafting and draping. Through guided practice and project work, students will enhance their understanding of garment planning and production. Prerequisite: TH 3344 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4348. Mask Making.**

Mask Making is a single semester course focusing on the practical craft and techniques of mask making for the live entertainment industry. Through guided practice students will be introduced to various materials and techniques in sculpting, casting, and molding for theatre. Prerequisite: TH 3344 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4349. Hat Making.**

In this course students will explore the design and execution of headwear. Through guided practice students will examine the materials and techniques that will provide a strong foundation in millinery design and construction. Prerequisite: TH 3344 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4351. History of Architecture and Interiors for Theatrical Design.**

This course is a study of architecture and interiors throughout history as it impacts design for theatre. Students will look at periods of design from ancient Egypt to the late Twentieth Century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4352. Armor Making.**

Armor Making is a single semester course in the construction of armor for the live entertainment industry. Through guided practice students will gain experience with various materials and techniques used in this specialized area of garment construction. Prerequisite: TH 3344 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4353. Wig Making and Styling.**

Wig Making is a single semester study of the principles of wig making and wig styling for the live entertainment industry. Through guided practice, students will learn to ventilate and style synthetic wigs and small ventilated appliances. Prerequisite: TH 3344 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4354. Special Effects Makeup.**

Special Effects Makeup is a single-semester exploration of the advanced makeup techniques and the creation and application of prosthetic appliances within the context of character design and production for the entertainment industry. Prerequisite: TH 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4355. Scene Painting.**

In this course students will study the theory and practice of scene painting for the theatre, with hands-on projects implementing various scene-painting techniques. Students will also have the opportunity to work as scenic artists on departmental productions.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4356. Theatrical Drafting: Vectorworks.**

This course is a study of computer techniques and procedures used in the preparation of design and technical drawings for theatrical scenery and lighting. Prerequisites: TH 3331 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4357. Scene Design.**

A study of scene design for theatre, focusing specifically on process of scenic designer with practical assignments including renderings and scaled models. Prerequisites: TH 1350 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4358. Drama and Adaptation.**

This course covers the development of new theatrical scripts based on existing stories and source material. Students explore a variety of potential source materials, pitch adaptation ideas from multiple sources, and complete a written script.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4360. Problems in Theatre.**

Problems in Theatre. (3-0) Designed to give supervised experience to qualified advanced students in theatre history, playwriting, directing, acting, technical, or other theatre problems. Research problems or actual production problems may be chosen. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4361. Voice IV: Dialects For Actors.**

In this course students will expand their knowledge of the International Phonetic Alphabet and learn a methodical approach to accurately speak in regional American, and international dialects of English. Prerequisite: TH 3310 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4363. Directing For Film.**

This course is an in-depth examination of directing theories and procedures for film with practical filming and editing exercises. Prerequisites: TH 1353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4364. Directing I.**

This course is a study of the fundamentals of directing with practical experience provided by directing scenes. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TH 4365. Directing II.**

A study of directing different dramatic styles. Students will direct a one-act play during regular semesters. Prerequisite: TH 4364 with a grade of "D" or better. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**TH 4366. Directing III.**

In this course, student directors will create theatre projects inspired by contemporary immersive theatre-making methods. Student directors will re-imagine how to stage their work, investigating the role of the audience, and how they use the space. Students will explore innovative and creative approaches around language, intention, and structure. Prerequisite: TH 4364 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4368. Cinematography.**

This course will introduce the student filmmaker to intermediate and advanced concepts in camera, lighting and image delivery across multiple platforms: motion picture, television and the web. Utilizing the latest tools in digital videography, the student will learn to apply story analysis to their on-set decision making. Prerequisite: TH 1353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**TH 4369. Film Production Intensive.**

In this course students explore the duties, expectations and protocols of each position on set, from camera and lighting to sound and assistant directing. They will learn rules for communication, including 'walkie lingo' and receive hands-on instruction for various technologies that exist for digital film production. While learning all of the written and unwritten rules for film and TV production, the student filmmaker will confront, evaluate and overcome all manner of logistical issues. This course will prepare them for their first day on set. Prerequisite: TH1353 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4371. Producing the Independent Feature Film.**

In this course students investigate the unique processes, challenges and opportunities offered when choosing to produce a low-budget feature film through an independent approach. The student will take a current feature screenplay through each stage of development and pre-production, production, post, festival, sales, and distribution. The student will act as Executive, Producer, Line Producer, Assistant Director, Post Supervisor, and Sales agent featuring the full life cycle of a feature film. Prerequisite: TH 1353 and TH 4343 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4372. Theory and Practice of Dramaturgy.**

Study of the practical application of historical research and textual analysis in the production of period plays and new works. Emphasis upon the dramaturg as an instrument of collaboration between members of the artistic team and as a facilitator of audience outreach. Prerequisite: TH 3367 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4373. Advanced Film Directing.**

This course is an in-depth examination of narrative filmmaking that includes screenplay analysis, storyboarding, scheduling the shoot, directorial techniques, staging actors, camera placement, filming on location, and editing. Prerequisite: TH 3358 and TH 4363 and TH 4343 and TH 4368 and TH 4342 all with grades of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4375. Advanced Playwriting.**

This course focuses on an in-depth study of the techniques of playwriting and the variety of styles that a playwright might employ. The course culminates with the writing of a full-length play. Prerequisite: TH 3355 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4376. Advanced Lighting Design.**

This course focuses on advanced principles of light design and lighting aesthetics. It covers the variable elements one encounters during the design process as it applies to stage lighting. Prerequisite: TH 4338 with a grade of "D" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4377. Advanced Scene Design.**

This course emphasizes working with directors and other designers in creating a design for the stage. Students will improve verbal and visual communication skills as well as further develop drawing/painting/modeling/drafting skills. The course involves multiple projects including creating an original performance art piece with a director and other designers. Prerequisite: TH 4357 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4378. Play Development Lab.**

This course provides a laboratory workshop development process for new plays. It provides a structured environment for rigorously revising student-written works. Prerequisite: TH 4375 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4380. Advanced Scenic Painting.**

Students will further develop scenic art skills, with an increased emphasis on realized practical production work, and a focus on planning, sampling, and managing of theatrical production paint processes. Prerequisite: TH 4355 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4381. Automated Lighting.**

Automated Lighting will explore and practice methods and approaches for basic uses of multi-attribute lighting technology. We will investigate a variety of moving light and LED technology and control as well as methods of properly documenting and cueing with these complex tools. Prerequisite: TH 3338 and TH 4338 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4382. Welded Scenery for the Live Entertainment Industry.**

This course offers a hands-on study of the principles and practices utilized in the fabrication of steel framed stage scenery for the live entertainment industry. Emphasis will be on safely cutting, prepping and welding mild carbon steel. Tools used include steel cutting saws, grinders and MIG welder. Prerequisite: TH 2330 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4385. Lighting Console Programming.**

This course explores basic, intermediate, and advanced skills and techniques used in modern console programming for a variety of lighting systems used in the entertainment industry. The course incorporates programming specifics for consoles from a variety of manufacturers. Prerequisite: TH 3338 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4386. Lighting and Projection Design for Dance.**

This course covers the skills and techniques used in lighting and projection design for dance performances. Students explore innovative choreographers and designers who use both established and emerging technologies in lighting and projection design for dance. Prerequisite: TH 3338 and TH 4338 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4388. Advanced Cinematography.**

In this course students use their visual creativity and knowledge of craft to solve problems, express ideas, and reveal truth through the moving image. This course will also emphasize the role of leadership the Director of Photography, Gaffer, Key Grip, and 1st Assistant Camera must serve on a set. This course will address both the technical and aesthetic aspects of cinematography with an emphasis on mastering the tools, and developing techniques and operating methods that will prepare the student filmmaker for a working career. Prerequisite: TH 1353 and TH 4368 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4390. BFA Pre-Professional Apprenticeship II.**

Intensive laboratory work in individual and group theatre methods for the actor, designer, or technician. Each apprenticeship from BFA II to V will focus upon a specific theatrical discipline for the actor, i.e. advanced vocal work, music theatre, performing Shakespeare, performing new scripts, advanced movement techniques, and further development of internal process.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4391. BFA Pre-Professional Apprenticeship III.**

A continuation of laboratory work for the actor. Each apprenticeship from BFA II-V will focus on a specific theatrical discipline for the actor, i.e. advanced vocal work, music theatre, performing Shakespeare, performing new scripts, advanced movement techniques, and further development of the internal process.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required

**Grade Mode:** Standard Letter

**TH 4392. BFA Pre-Professional Apprenticeship IV.**

A continuation of laboratory work for the actor. Each apprenticeship from BFA II-V will focus on a specific theatrical discipline for the actor, i.e. advanced vocal work, music theatre, performing Shakespeare, performing new scripts, advanced movement techniques, and further development of the internal process.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4393. BFA Pre-Professional Apprenticeship V.**

This course is a continuation of laboratory work for the actor. Each apprenticeship from BFA II-V focuses on a specific theatrical discipline for the actor, i.e. advanced vocal work, music theatre, performing Shakespeare, performing new scripts, advanced movement techniques, and further development of the internal process.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4394. Senior Film Capstone Project.**

In this course students assemble a production team comprised of a Producer, Director, DP and Production Designer with a script that has already been developed in Short Film Development. This creative team immediately goes into production on the final culminating film shoot for their undergraduate careers. The course guides each production team through the subsequent post-production process, reshoots, final deliverables and festival and marketing campaign. This course is designed to work in conjunction with Short Film Development and act as a capstone course for graduating seniors. Prerequisite: TH 1353 and TH 4341 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4396. Musical Theatre Industry Showcase and Business of the Business.**

This course prepares students for their Industry Showcase and concentrates on transitioning into the professional industry utilizing a series of "Business of the Business" labs designed to prepare students to run their business with skills including contract negotiations, agent interviews, marketing and branding, and financial planning. Prerequisite: TH 1210 and TH 1211 and TH 2210 and TH 2211 and TH 3396 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TH 4601. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry; it is intended for students who do a full-time internship over the summer or during the fall or spring semesters. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses and a minor.
3. Students must complete a minimum of 29 required hours in Dance, with **10** additional required elective hours in Dance and/or Theatre courses. A minimum of 12 DAN hours must be upper level.
4. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
5. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).

### Course Requirements

Freshman			
Fall Semester Hours		Spring Semester Hours	
US 1100	1	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	Mathematics Component Code 020	3
Social and Behavioral Sciences Component Code 080	3	Language, Philosophy, and Culture Component Code 040	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	American History Component Code 060	3
DAN 1290, 2291, or 3293	2	DAN 1280, 2281, or 3282	2
<b>15</b>		<b>17</b>	

Sophomore			
Fall Semester Hours		Spring Semester Hours	
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3	Modern Language 1420	4
American History Component Code 060	3	Life and Physical Sciences Component Code 030	3

Modern Language 1410	4	ENG 2310, 2320, 2330, 2340, 2359, or 2360 (Component Area Option Code 090/094 [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328])	3
Life and Physical Sciences Component Code 030	3	DAN 1212	2
DAN 1260, 2261, or 3262	2	DAN 2201	2
DAN 3368	3	DAN and TH Electives	2
<b>18</b>		<b>16</b>	

Fall Semester Hours		Spring Semester Hours	
Modern Language 2310	3	Modern Language 2320	3
BA Additional Math, Science, or Logic	3	DAN 3332	3
DAN 1113	1	Choose 3 hours from the following:	3
DAN 4369	3	DAN 2365	
DAN and TH Electives	2	DAN 3331	
Minor	3	DAN 3345	
		DAN 3390	
		DAN 4330	
		DAN 4350	
		DAN 4366	
		Minor	6
<b>15</b>		<b>15</b>	

Fall Semester Hours		Spring Semester Hours	
BA ENG Literature [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3	DAN 4380	3
DAN 3111	1	DAN and TH Electives	3
DAN 4292	2	Minor	6
DAN and TH Electives	3		
Minor	3		
<b>12</b>		<b>12</b>	

#### Total Hours: 120

Code	Title	Hours
Prescribed BA DAN and TH Electives:		
DAN 1260	Jazz I	2
DAN 1280	Ballet I	2
DAN 1290	Modern/Contemporary I	2
DAN 2115	Pilates I	1
DAN 2116	Yoga for Dancers I	1
DAN 2202	Dance Composition II	2
DAN 2210	Contact Improvisation	2
DAN 2261	Jazz II	2
DAN 2270	Hip-Hop I	2
DAN 2281	Ballet II	2
DAN 2291	Modern/Contemporary II	2
DAN 3111	Dance Activities	1
DAN 3115	Pilates II	1
DAN 3116	Yoga for Dancers II	1

DAN 3262	Jazz III	2
DAN 3271	Hip-Hop II	2
DAN 3282	Ballet III	2
DAN 3293	Modern/Contemporary III	2
DAN 3370	Dance Composition III	3
DAN 4263	Jazz IV	2
DAN 4271	Dance Internship	1
DAN 4283	Ballet IV	2
DAN 4292	Somatic Principles in Dance	2
DAN 4293	Modern/Contemporary IV	2
DAN 4370	Contemporary Issues in Dance	3
DAN 4371	Dance Internship	3
DAN 4380	Professional Development for Dancers	3
DAN 4471	Dance Internship	4
TH 1350	Introduction to Theatrical Design	3
TH 1354	Movement I	3
TH 1364	Beginning Acting	3
TH 2330	Stagecraft and Stage Lighting	3
TH 3305	Theatre in the Community	3
TH 3343	Stage Makeup	3
TH 3361	Improvisation for the Actor	3
TH 4302	Contemporary Theatre Workshop	3
TH 4311	Training the Teaching Artist	3
TH 4334	Stage Management	3
TH 4336	Production and Company Management for the Arts	3

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses and a minor.
3. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
4. Students must complete a minimum of 35 hours in Theatre courses, with six additional hours strongly recommended. A minimum of 12 Theatre hours must be advanced.
5. All Theatre students are encouraged to participate in theatre production activities each semester, and B.A. students must enroll in TH 2111 a minimum of two semesters.
6. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

### Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
TH 1354 (TCCN DRAM 1322)	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
TH 1364 (TCCN DRAM 1351)	3	ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
TH 1350	3	TH 1365 (TCCN DRAM 1352)	3
US 1100	1	TH 2111 (TCCN DRAM 1120)	1
		<b>16</b>	<b>16</b>

		Sophomore	
		First Semester Hours	Second Semester Hours
TH 2330	3	TH 2111 (TCCN DRAM 1120)	1
Modern Language 1410	4	TH Elective	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3	Modern Language 1420	4
Mathematics Component Code 020	3	ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
American History Component Code 060	3	Social and Behavioral Sciences Component Code 080	3
		American History Component Code 060	3
		<b>16</b>	<b>17</b>

		Junior	
		First Semester Hours	Second Semester Hours
TH 3320	3	TH 3321	3
TH 3344 or 3346	3	Life and Physical Sciences Component Code 030	3
Life and Physical Sciences Component Code 030	3	Modern Language 2320	3
Modern Language 2310	3	Minor	6
Minor	3		
		<b>15</b>	<b>15</b>

		Senior	
		First Semester Hours	Second Semester Hours
TH 4364	3	TH Elective	3

BA ENG Literature [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3 BA Computer Science, Logic, Mathematics or Science	3
Minor	6 Minor	3
	Electives	4
<b>12</b>		<b>13</b>

**Total Hours: 120**

## Minimum required: 120-122 semester credit hours

### General Requirements

1. There is NO audition required for admission to the BFA Dance Studies concentration.
2. Skill level will be evaluated by faculty to determine course placement in ballet, jazz, and modern technique classes.
3. General education requirements must be met. Elective hours may be needed to reach the minimum number of hours for the degree.
4. Students must meet with the Dance Studies Area Head at least once a year for assistance choosing electives to support their career goals.
5. A minor is not required.

		<b>Freshman</b>	
		<b>Fall Semester Hours</b>	<b>Spring Semester Hours</b>
US 1100	1 DAN 1290, 2291, or 3293	2	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3	
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3	
Social and Behavioral Sciences Component Code 080	3 Mathematics Component Code 020	3	
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 Language, Philosophy, and Culture Component Code 040	3	
DAN 1113	1 DAN 1260, 2261, or 3262	2	
DAN 1280, 2281, or 3282	2 DAN 2115 or 2116	1	
<b>16</b>		<b>17</b>	

		<b>Sophomore</b>	
		<b>Fall Semester Hours</b>	<b>Spring Semester Hours</b>
DAN 2201	2 DAN 2202	2	
DAN 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3 DAN 3332	3	
DAN 1280, 2281, 3282, or 4283	2 DAN 1290, 2291, 3293, or 4293	2	
DAN 2270 or 3271	2 DAN 1260, 2261, 3262, or 4263	2	
American History Component Code 060	3 American History Component Code 060	3	

Life and Physical Sciences Component Code 030	3 Life and Physical Sciences Component Code 030	3
<b>15</b>		<b>15</b>

		<b>Junior</b>	
		<b>Fall Semester Hours</b>	<b>Spring Semester Hours</b>
DAN 2365	3 DAN 3331	3	
DAN 2210	2 DAN 3368	3	
DAN 3390	3 DAN 4366	3	
DAN 3380	3 Choose 3 hours from the following:	3	
DAN 1260, 2261, 3262, 4263, 1280, 2281, 3282, 4283, 1290, 2291, 3293, 4293, 2270, 3271, 2115, 2116, 3115, 3116, 1113, 3340, 3111, or 3342 (Choose 2 hours)	2 DAN 1260, 2261, 3262, 4263, 1280, 2281, 3282, 4283, 1290, 2291, 3293, 4293, 2270, 3271, 2115, 2116, 3115, 3116, 1113, 3340, 3111, or 3342	2	
ENG Literature (Component Area Option Code 090/094)	3		
<b>16</b>		<b>12</b>	

		<b>Senior</b>	
		<b>Fall Semester Hours</b>	<b>Spring Semester Hours</b>
DAN 4369	3 DAN 4330	3	
DAN 4370	3 DAN 4292	2	
DAN 4380	3 DAN 3345 or 4367	3	
Choose 6 hours from the following:	6 Choose 6-8 hours from the following:	6-8	
DAN 1260, 2261, 3262, 4263, 1280, 2281, 3282, 4283, 1290, 2291, 3293, 4293, 2270, 3271, 2115, 2116, 3115, 3116, 1113, 3340, 3111, 3342, 4350, 4371, 4271, 4360, 3345, 4367, TH 1345, TH 1350, TH 1364, TH 2330, TH 3337, TH 3338, TH 3343, TH 3344, or TH 4334	DAN 1260, 2261, 3262, 4263, 1280, 2281, 3282, 4283, 1290, 2291, 3293, 4293, 2270, 3271, 2115, 2116, 3115, 3116, 1113, 3340, 3111, 3342, 4350, 4371, 4271, 4360, 3345, 4367, TH 1345, TH 1350, TH 1364, TH 2330, TH 3337, TH 3338, TH 3343, TH 3344, or TH 4334		
<b>15</b>		<b>14-16</b>	

**Total Hours: 120-122**

## Minimum required: 120-122 semester credit hours

### Admission Requirements

1. The Bachelor of Fine Arts (B.F.A.) major in Dance concentration in Performance and Choreography is based on an audition in either the fall or spring semester prior to the year of admittance. A limit of two audition attempts is enforced for entrance into the program. Students will be expected to maintain appropriate artistic and academic standards at the discretion of the Dance faculty.
2. Skill level will be evaluated by faculty to determine course placement in ballet, jazz, hip hop, and modern/contemporary technique classes.



## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Skill level will be evaluated by faculty to determine course placement in ballet, jazz, and modern technique classes.

## Course Requirements

Freshman	Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3
ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
American History Component Code 060	3
Mathematics Component Code 020	3
Social and Behavioral Sciences Component Code 080	3
DAN 1113	1
DAN 1260, 2261, or 3262	2
US 1100	1
DAN 1280, 2281, or 3282	2
DAN 1290, 2291, or 3293	2
DAN 3332	3
	<b>32</b>
Sophomore	Hours
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [PHIL 1301])	3
POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
American History Component Code 060	3
ENG Literature (Component Area Option Code 090/094)	3
DAN 2201	2
DAN 2115 or 2116	1
DAN 2202	2
DAN 2270, 3271, or 4272	2
DAN 1280, 2281, 3282, or 4283	2
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050)	3
DAN 3368	3

DAN 1290, 2291, 3293, or 4293	2
DAN 1260, 2261, 3262, or 4263	2
	<b>31</b>
Junior	Hours
Life and Physical Sciences Component Code 030	6
DAN 2365 or 3331	3
DAN 3370	3
DAN 2210	2
DAN 1260, 2261, 3262, or 4263	2
DAN 1280, 2281, 3282, or 4283	2
DAN 1290, 2291, 3293, or 4293	2
DAN 2270 or 3271	2
DAN 3111	1
DAN 3345	3
Electives	3
Choose 3 hours from the following:	
DAN 3111	
DAN 3340	
DAN 3342	
DAN 4271	
DAN 4292	
DAN 4367	
DAN 4371	
TH 1345	
TH 1350	
TH 1364	
TH 2330	
TH 3337	
TH 3338	
TH 3343	
TH 3344	
TH 4334	
	<b>29</b>
Senior	Hours
DAN 2115, 2116, 3115, or 3116 (twice)	2
DAN 1260, 2261, 3262, or 4263	2
DAN 1280, 2281, 3282, or 4283	2
DAN 1290, 2291, 3293, or 4293 (twice)	4
DAN 4330	3
DAN 4350	3
DAN 4369	3
DAN 4380	3
DAN 4470	4
Electives	2-4
Choose 2-4 hours from the following:	
DAN 3340	
DAN 3345	
DAN 4271	

DAN 4292	
DAN 4371	
TH 1345	
TH 1350	
TH 1364	
TH 2330	
TH 3337	
TH 3338	
TH 3343	
TH 3344	
TH 4334	
<hr/>	
28-30	

**Total Hours: 120-122**

## Minimum required: 120-122 semester credit hours

### Admission Requirements

1. Admission to the Bachelor of Fine Arts (B.F.A.) degree with a major in Dance teacher certification requires an audition in either the fall or spring semester prior to the year of admittance. A limit of two audition attempts is enforced for entrance into the program. Students will be expected to maintain appropriate artistic and academic standards at the discretion of the Dance faculty.
2. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).
3. Skill level will be evaluated by faculty to determine course placement in ballet, jazz, hip hop, and modern/contemporary technique classes.

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Teacher certification students must maintain an overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s) and/or in the Education Minor. Students who fail to do so will be advised into another program.
3. In addition to the major requirements, students must also complete a Minor in Education. The Minor requires 21-hours including 6 hours in DAN that count toward this requirement. All coursework must be completed prior to EDST 4681.
4. Summer course work may be need to complete the degree in a timely manner.
5. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

## Course Requirements

<b>Freshman</b>	<b>Hours</b>
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3
ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
American History Component Code 060	3
Social and Behavioral Sciences Component Code 080	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [PHIL 1301])	3
DAN 1113	1
DAN 1260, 2261, 3262, or 4263	2
DAN 1280, 2281, 3282, or 4283	2
DAN 1290, 2291, 3293, or 4293	2
US 1100	1
DAN 3332	3
Mathematics Component Code 020	3
<b>35</b>	
<b>Sophomore</b>	<b>Hours</b>
POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
American History Component Code 060	3
ENG Literature (Component Area Option Code 090/094)	3
Life and Physical Sciences Component Code 030	6
DAN 2115, 2116, 3115, or 3116	1
DAN 2270, 3271, or 4272	2
DAN 1280, 2281, 3282, or 4283	2
DAN 1290, 2291, 3293, or 4293	2
DAN 2201	2
DAN 2202	2
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [HUMA 1315])	3
<b>29</b>	
<b>Junior</b>	<b>Hours</b>
DAN 1260, 2261, 3262, or 4263	2
DAN 1260, 2261, 3262, 4263, 2270, or 3271	2
DAN 1290, 2291, 3293, or 4293	2
DAN 2270 or 3271	2

DAN 2365, 3331, or 3390	3
DAN 3111	1
DAN 3330	3
DAN 3350	3
DAN 3368	3
DAN 4350	3
DAN 4367	3
Choose 3-5 hours from the following:	3-5
DAN 3345	
DAN 3390	
DAN 2210	
DAN 2115 or 3115	
DAN 2116 or 3116	
DAN 4292	
DAN 4271	
DAN 4371	
DAN 4471	

30-32

Senior	Hours
DAN 4330	3
DAN 4369	3
DAN 4380	3
DAN 1280, 2281, 3282, or 4283	2
CI 4372	3
CI 4370	3
RDG 3323	3
EDST 4681	6

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Total Hours: 120-122

**Minimum required: 130  
semester credit hours**

## Admission Requirements

1. Admission to the Bachelor of Fine Arts (B.F.A.) degree with a major in Dance teacher certification requires an audition in either the fall or spring semester prior to the year of admittance. A limit of two audition attempts is enforced for entrance into the program. Students will be expected to maintain appropriate artistic and academic standards at the discretion of the Dance faculty.
2. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).
3. Skill level will be evaluated by faculty to determine placement in ballet, jazz, hip hop, and modern/contemporary technique classes.

## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students should consult an academic advisor to help you choose an additional teaching field and for sequencing of courses.

3. A second teaching field is required in this degree program.
4. Teacher certification students must maintain an overall GPA of 2.75, as well as grades of a "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s) and/or in the Education Minor. Students who fail to do so will be advised into another program.
5. In addition to the major requirements, students must also complete a Minor in Education. The Minor requires 21-hours including 6 hours in DAN that count toward this requirement. All coursework must be completed prior to EDST 4681.
6. Summer course work may be need to complete the degree in a timely manner.
7. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

## Course Requirements

Freshman	Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3
ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
American History Component Code 060	3
Social and Behavioral Sciences Component Code 080	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [PHIL 1301])	3
DAN 1113	1
DAN 1290, 2291, 3293, or 4293	2
US 1100	1
Second Teaching Field	3
DAN 3332	3
Mathematics Component Code 020	3

34

Sophomore	Hours
Life and Physical Sciences Component Code 030	6
POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3

American History Component Code 060	3
ENG Literature (Component Area Option Code 090/094)	2
DAN 1280, 2281, 3282, or 4283	2
DAN 2201	2
DAN 2202	2
DAN 2365, 3331, or 3390	3
Second Teaching Field	6
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [HUMA 1315])	3
Choose 2 hours from the following:	2
DAN 1260, 2261, 3262, or 4263	
DAN 1290, 2291, 3293, or 4293	
DAN 2115 or 3115	
DAN 2116 or 3116	
DAN 2270, 3271, or 4272	
DAN 3111	

**34**

<b>Junior</b>	<b>Hours</b>
DAN 1260, 2261, 3262, or 4263	2
DAN 1280, 2281, 3282, or 4283	2
DAN 1290, 2291, 3293, or 4293	2
DAN 2270 or 3271	2
DAN 3330	3
DAN 3350	3
DAN 4330	3
DAN 4350	3
DAN 4367	3
Second Teaching Field	6

**29**

<b>Senior</b>	<b>Hours</b>
Choose 3 hours from the following:	3
DAN 1260, 2261, 3262, or 4263	
DAN 1280, 2281, 3282, or 4283	
DAN 1290, 2291, 3293, or 4293	
DAN 2115 or 3115	
DAN 2116 or 3116	
DAN 2270 or 3271	
DAN 3111	
DAN 4271	
DAN 4292	
DAN 4371	
DAN 4369	3
DAN 3368	3
CI 4372	3
CI 4370	3
Second Teaching field	9
RDG 3323	3

EDST 4681	6
<b>Total Hours: 130</b>	<b>33</b>

## Minimum required: 123 semester credit hours

### Admission Requirements

1. The Bachelor of Fine Arts (B.F.A.) degree with a major in Musical Theatre requires admission to the university and admission to the program. For more information visit: <http://www.theatreanddance.txstate.edu/Undergraduate-Degrees/BFA-Musical-Theatre.html>
2. Admission to the Musical Theatre program is highly competitive and based on an audition/interview with members of the B.F.A. Musical Theatre Program faculty. Prospective students generally audition during their senior year of high school. Interested transfer students must contact the Head of Musical Theatre to see if there are any available slots in their class level; typically, students transferring into the program require four years at Texas State to complete their degree.

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses. It is recommended that some of the general education core curriculum courses be taken over one or more summer sessions.
2. Students choose their career path in consultation with the Head of the Musical Theatre program.
3. A minimum of 36 advanced hours are required.
4. All Theatre students are encouraged to participate in theatre production activities each semester.
5. Students in the program are always on probation, with their work and progress continually evaluated
6. Students must maintain a minimum GPA of 2.8.

### Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
TH 1210	2	TH 1211	2
TH 1364 (TCCN DRAM 1351)	3	TH 1365 (TCCN DRAM 1352)	3
TH 1312	3	TH 1314	3
TH 1121	1	TH 1122	1
TH 1260 or 2261	2	TH 2261 or 3262	2
TH 1280 or 2281	2	TH 2281 or 3282	2
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
US 1100	1		
TH 2111 (TCCN DRAM 1120)	1		
<b>18</b>		<b>16</b>	

Sophomore	
First Semester Hours	Second Semester Hours
TH 2210	2 TH 2211 2
TH 3364	3 TH 3150 1
TH 3251 or 3252	2 TH 3322 3
TH 3271 or 4271	2 TH 3252 or 4251 2
TH 3120 or 4120	1 TH 3272, 4272, DAN 2270, or DAN 3271 2
TH 1350	3 TH 4120 or 3120 1
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305]) 3
	ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315]) 3
<b>16</b>	<b>17</b>

Junior	
First Semester Hours	Second Semester Hours
TH 2354	3 TH 3321 3
TH 3320	3 TH 2345 3
TH 3396	3 American History Component Code 060 3
TH 4271 or 3271	2 Social and Behavioral Sciences Component Code 080 3
TH 3120 or 4120	1 Mathematics Component Code 020 3
American History Component Code 060	3
<b>15</b>	<b>15</b>

Senior	
First Semester Hours	Second Semester Hours
TH 4364	3 TH 4396 3
TH 3342	3 TH 4120 or 3120 1
TH 3120 or 4120	1 Life and Physical Sciences Component Code 030 3
Life and Physical Sciences Component Code 030	3 ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328] 3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311]) 3
<b>13</b>	<b>13</b>

**Total Hours: 123**

## Minimum required: 125 semester credit hours

### Admission Requirements

1. The Bachelor of Fine Arts (B.F.A.) major in Theatre with a concentration in Acting requires admission to the university and admission to the program. For more information visit: <http://www.theatreanddance.txstate.edu/Undergraduate-Degrees/BFA-Theatre-Acting.html>
2. Admission to the B.F.A. major in Theatre with a concentration in Acting is highly competitive and based on an audition/interview with members of the B.F.A. Acting Program faculty. Prospective students audition during their senior year of high school. This is a four-year sequential curriculum and transfer students are not accepted unless specially invited by the B.F.A. Acting faculty.

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students in the program are always on probation; their work and progress are formally evaluated by faculty annually. Students must maintain a minimum GPA of 2.5.

### Course Requirements

Freshman	Hours
TH 1345	3
TH 1350	3
TH 1354	3
TH 1364	3
TH 1365	3
TH 2111	1
ENG 1310 (Communication Component Code 010)	3
ENG 1320 (Communication Component Code 010)	3
COMM 1310 (Component Area Option Code 090/091)	3
POSI 2310 (Government/Political Science Component Code 070)	3
POSI 2320 (Government/Political Science Component Code 070)	3
US 1100	1
<b>32</b>	
Sophomore	Hours
TH 1355	3
TH 2345	3
TH 2354	3
TH 3343	3
TH 3364	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050)	3



American History Component Code 060	6
Social and Behavioral Sciences Component Code 080	3
Mathematics Component Code 020	3

**30**

<b>Junior</b>	<b>Hours</b>
TH 3310	3
TH 3320	3
TH 3321	3
TH 3360	3
TH 3390	3
TH 4315	3
TH 4390	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040)	3
ENG Literature (Component Area Option Code 090/094)	3
Life and Physical Sciences Component Code 030	6

**33**

<b>Senior</b>	<b>Hours</b>
TH 3342	3
TH 3367 <sup>1</sup>	3
TH 4331I	3
TH 4361	3
TH 4364	3
TH 4391	3
TH 4392	3
TH 4393	3
Acting Area Electives	6

**30****Total Hours: 125**

<sup>1</sup> Oregon Shakespeare Festival Intensive can be substituted for TH 3367, Dramatic Theory.

**TH Acting Area Electives**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
TH 3361	Improvisation for the Actor	3
TH 3362	Musical Theatre Performance for the Actor	3
TH 4321	The Art of Voiceover and Voice Acting	3
TH 4323	Shakespeare Through Performance	3
TH 4324	Shakespeare: Text and Context	3

**Minimum required: 120 semester credit hours**

**Admission Requirements**

1. The Bachelor of Fine Arts (B.F.A.) major in Theatre with a concentration in Film Production requires admission to the university and admission to the program.
2. Admission to the concentration will be based on the following criteria:

- a. Application form. See Theatre and Dance website for application dates. <https://www.theatreanddance.txstate.edu/Undergraduate-Degrees/BFA-Film-Production/Apply.html>
  - b. Overall GPA of 2.50
  - c. "B" or better in TH1353 Film Production Practices and TH1320 Filmmakers History of Film
  - d. A portfolio of three video works (produced in the Film Production Practices course).
3. Students currently in the BFA Theatre program are eligible to apply for the Film Production concentration.

**General Requirements**

1. The Bachelor of Fine Arts (B.F.A.) major in Theatre with a concentration in Film Production requires admission to the university and admission to the program.
2. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
3. A minimum of 36 advanced hours are required.
4. All Theatre students are encouraged to participate in theatre production activities each semester.
5. Students in the program are always on probation; their work and progress are formally evaluated by faculty annually. Students must maintain a minimum GPA of 2.5.

Freshman			
First Semester Hours		Second Semester Hours	
TH 1353	3	TH 1320	3
TH 1369	3	TH 1364	3
US 1100	1	TH 1350	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	TH 2111	1
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	ENG 1320 (Communication Component Code 010 (TCCN ENGL 1302))	3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3	POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
16		16	
Sophomore			
First Semester Hours		Second Semester Hours	
TH 4342	3	TH 4343	3
TH 4368	3	TH 3341	3
TH 4340	3	TH Film Production Elective	3
TH 3358	3	American History Component Code 060	3
American History Component Code 060	3	TH 2313, DAN 2313, MU 2313, or ART 2313 (Creative Arts Component Code 050 [HUMA 1315])	3
15		15	

Junior	
First Semester Hours	Second Semester Hours
TH Film Production Elective	10 TH 4364
Mathematics Component Code 020	3 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN: PHIL 1301 or PHIL 2306])
	TH Film Production Electives
	ENG Literature (Component Area Option Code 090/094)
<b>13</b>	<b>15</b>

Senior	
First Semester Hours	Second Semester Hours
TH 4341	3 TH 4394
TH 3320	3 TH 3321
TH Film Production Electives	6 TH Film Production Elective
Life and Physical Sciences Component Code 030	3 Life and Physical Sciences Component Code 30
	Social and Behavioral Sciences Component Code 080
<b>15</b>	<b>15</b>

**Total Hours: 120**

## Electives

Code	Title	Hours
<b>Directing Track</b>		
TH 2315	Film Directors Analysis	3
TH 3325	Film Directors Workshop	3
TH 4304	Web Series Creation	3
TH 4305	Advanced Web Series Creation	3
TH 4365	Directing II	3
TH 4373	Advanced Film Directing	3
<b>Producing Track</b>		
TH 4334	Stage Management	3
TH 4336	Production and Company Management for the Arts	3
TH 4371	Producing the Independent Feature Film	3
<b>Cinematography Track</b>		
ARTF 1304	Color Theory	3
ARTS 1303	Photography Foundations I	3
ARTS 1304	Photography Foundations II	3
TH 3338	Stage Lighting	3
TH 4338	Lighting Design	3
TH 4376	Advanced Lighting Design	3
TH 4388	Advanced Cinematography	3
<b>Film Production Design Track</b>		
ARTF 1304	Color Theory	3
TH 2330	Stagecraft and Stage Lighting	3
TH 3332	Introduction to Stage Properties	3
TH 3343	Stage Makeup	3
TH 3375	Production Design for Film	3
TH 4345	Costume Design	3

TH 4346	Advanced Costume Design	3
TH 4354	Special Effects Makeup	3
TH 4355	Scene Painting	3
TH 4363	Directing For Film	3
TH 4369	Film Production Intensive	3
TH 4380	Advanced Scenic Painting	3
TH 4382	Welded Scenery for the Live Entertainment Industry	3

<b>Post Production Track</b>		
ARTF 1304	Color Theory	3
MU 1180	Recording Practicum I	1
MU 1182	Recording Practicum II	1
MU 3380B	Music and Film	3
MU 3381	Recording Techniques I	3
MU 3382	Recording Techniques II	3
TH 3340	Intro to VFX and Compositing	3
TH 3337	Sound Technology	3
TH 4337	Sound Design	3

<b>Writing Track</b>		
TH 3359	Advanced Screenwriting	3
TH 4304	Web Series Creation	3
TH 4329	Television Writing	3
TH 4333	Advanced Television Writing	3

<b>General Theatre Film Production</b>		
TH 1365	Intermediate Acting	3
TH 3337	Sound Technology	3
TH 3338	Stage Lighting	3
TH 3342	Television/Film Performance	3
TH 3343	Stage Makeup	3
TH 3344	Costume Stagecraft	3
TH 3355	Playwriting	3
TH 3360	Beginning Stage Combat	3
TH 3364	Acting Realism	3
TH 4304	Web Series Creation	3
TH 4305	Advanced Web Series Creation	3
TH 4329	Television Writing	3
TH 4333	Advanced Television Writing	3
TH 4337	Sound Design	3
TH 4338	Lighting Design	3
TH 4354	Special Effects Makeup	3
TH 4358	Drama and Adaptation	3
TH 4365	Directing II	3
TH 4375	Advanced Playwriting	3

**Minimum required: 120 semester credit hours**

## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core>

- curriculum/) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- A minimum of 36 advanced hours are required.
  - All Theatre students are encouraged to participate in theatre production activities each semester.
  - Performance and Production electives are separated by tracks. This allows students to focus their coursework in concentrated areas. Students may complete one of the tracks or take courses from any of the tracks to complete 27 hours of Performance and Production electives.

## Course Requirements

Freshman	Hours
TH 1330	3
TH 1350	3
TH 1353	3
TH 1364	3
TH 1369	3
TH 2111	1
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3
ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
US 1100	1
	29
Sophomore	Hours
TH 2330 or 3344	3
TH 3367 or 4324	3
TH Performance and Production Electives	6
POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
American History Component Code 060	6
Mathematics Component Code 020	3
Creative Arts Component Code 050 [HUMA 1315]	3
ENG Literature (Component Area Option Code 090/094)	3
	30
Junior	Hours
TH 3320	3
TH 3321	3
TH 4364	3
TH Performance and Production Electives	9

Life and Physical Sciences Component Code 030	6
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN: PHIL 1301 or PHIL 2306])	3
Social and Behavioral Sciences Component Code 080	3
	30
Senior	Hours
TH Performance and Production Electives	12
TH/DAN Advanced Electives	12
Electives	7
	31

Total Hours: 120

## Performance and Production Electives Performance

Code	Title	Hours
TH 1340	Voice and Diction	3
TH 1354	Movement I	3
TH 1355	Movement II	3
TH 1365	Intermediate Acting	3
TH 2354	Characterization	3
TH 3332	Introduction to Stage Properties	3
TH 3343	Stage Makeup	3
TH 3342	Television/Film Performance	3
TH 3360	Beginning Stage Combat	3
TH 3361	Improvisation for the Actor	3
TH 3362	Musical Theatre Performance for the Actor	3
TH 3363	Stage Combat Stick Fighting	3
TH 3364	Acting Realism	3
TH 3365	Acting Styles	3
TH 3370	Creative Drama	3
TH 4302	Contemporary Theatre Workshop	3
TH 4311	Training the Teaching Artist	3
TH 4325	Shakespeare Ensemble	3
TH 4330D		3
TH 4340	Business of Film	3

## Dramatic Writing

Code	Title	Hours
TH 1320	Filmmakers History of Film	3
TH 1340	Voice and Diction	3
TH 3305	Theatre in the Community	3
TH 3332	Introduction to Stage Properties	3
TH 3337	Sound Technology	3
TH 3344	Costume Stagecraft	3
TH 3346	Historical Costume Research	3
TH 3355	Playwriting	3
TH 3358	Screenwriting	3
TH 3359	Advanced Screenwriting	3

TH 3360	Beginning Stage Combat	3
TH 3363	Stage Combat Stick Fighting	3
TH 4302	Contemporary Theatre Workshop	3
TH 4304	Web Series Creation	3
TH 4305	Advanced Web Series Creation	3
TH 4311	Training the Teaching Artist	3
TH 4324	Shakespeare: Text and Context	3
TH 4329	Television Writing	3
TH 4330D		3
TH 4333	Advanced Television Writing	3
TH 4334	Stage Management	3
TH 4337	Sound Design	3
TH 4338	Lighting Design	3
TH 4340	Business of Film	3
TH 4341	Short Film Development	3
TH 4342	Film Editing	3
TH 4343	Film Producing	3
TH 4345	Costume Design	3
TH 4357	Scene Design	3
TH 4358	Drama and Adaptation	3
TH 4375	Advanced Playwriting	3
TH 4378	Play Development Lab	3

## Directing

Code	Title	Hours
TH 1354	Movement I	3
TH 1365	Intermediate Acting	3
TH 2330	Stagecraft and Stage Lighting	3
TH 3305	Theatre in the Community	3
TH 3332	Introduction to Stage Properties	3
TH 3337	Sound Technology	3
TH 3344	Costume Stagecraft	3
TH 3346	Historical Costume Research	3
TH 3360	Beginning Stage Combat	3
TH 3361	Improvisation for the Actor	3
TH 3363	Stage Combat Stick Fighting	3
TH 3364	Acting Realism	3
TH 4302	Contemporary Theatre Workshop	3
TH 4311	Training the Teaching Artist	3
TH 4338	Lighting Design	3
TH 4340	Business of Film	3
TH 4341	Short Film Development	3
TH 4342	Film Editing	3
TH 4343	Film Producing	3
TH 4345	Costume Design	3
TH 4357	Scene Design	3
TH 4363	Directing For Film	3
TH 4364	Directing I	3
TH 4365	Directing II	3
TH 4366	Directing III	3
TH 4368	Cinematography	3
TH 4378	Play Development Lab	3

## Playmaking (Generalist)

Code	Title	Hours
TH 1354	Movement I	3
TH 1365	Intermediate Acting	3
TH 2330	Stagecraft and Stage Lighting	3
TH 3305	Theatre in the Community	3
TH 3332	Introduction to Stage Properties	3
TH 3337	Sound Technology	3
TH 3343	Stage Makeup	3
TH 3344	Costume Stagecraft	3
TH 3360	Beginning Stage Combat	3
TH 3363	Stage Combat Stick Fighting	3
TH 3370	Creative Drama	3
TH 4302	Contemporary Theatre Workshop	3
TH 4338	Lighting Design	3
TH 4345	Costume Design	3
TH 4355	Scene Painting	3
TH 4357	Scene Design	3
TH 4364	Directing I	3
TH 4365	Directing II	3
TH 4378	Play Development Lab	3

**Minimum required: 125 semester credit hours**

## Admission Requirements

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. An all-level (EC-12) teacher certification in the theatre program consists of a minimum of 41 semester hours, with at least 24 hours advanced.
3. All Theatre students are encouraged to participate in theatre production activities each semester.
4. In addition to the major requirements, students must also complete a Minor in Education. The Minor requires 21-hours including 6 hours in TH that count toward this requirement. All coursework must be completed prior to EDST 4380 and EDST 4381.
5. Teacher certification students in Theatre must maintain an overall GPA of 2.75, a major GPA of 2.75, and a GPA of 2.75 in all required education courses as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor. Students who fail to do so will be advised into another program.
6. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If

[you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: \[https://tea.texas.gov/Texas\\\_Educators/Investigations/Preliminary\\\_Criminal\\\_History\\\_Evaluation-FAQs/\]\(https://tea.texas.gov/Texas\_Educators/Investigations/Preliminary\_Criminal\_History\_Evaluation-FAQs/\).](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/)

## Course Requirements

Freshman	Hours
TH 1354	3
TH 1364	3
TH 1365	3
TH 2111	1
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3
ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3
POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
Mathematics Component Code 20	3
US 1100	1
	<b>29</b>
Sophomore	Hours
TH 2330	3
TH 3344	3
TH 3370	3
Theatre Elective	3
ENG Literature (Component Area Option Code 090/094)	3
American History Component Code 060	6
Social and Behavioral Sciences Component Code 080	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or PHIL 2306])	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
	<b>30</b>
Junior	Hours
TH 3320	3
TH 3321	3
TH 4364	3
TH 4310	3
TH 4326	3
TH 4332	3

Life and Physical Sciences Component Code 030	6
Advanced Theatre Teacher Certification Electives <sup>1</sup>	6
	<b>30</b>
Senior	Hours
TH 4365 <sup>2</sup>	3
TH 4320 <sup>2</sup>	3
TH 4327 <sup>2</sup>	3
TH 3367	3
TH 4311	3
TH 4334	3
CI 4370	3
CI 4372	3
RDG 3323	3
EDST 4380	3
EDST 4381	3
	<b>33</b>
<b>Total Hours: 122</b>	

<sup>1</sup> Non-specified advanced TH classes are chosen in consultation with academic advisor.

<sup>2</sup> During the summer between their junior and senior years, B.F.A. Teacher Certification majors take TH 4365, TH 4327, and TH 4320.

## Minimum required: 120 semester hours Admission Requirements

1. The Bachelor of Fine Arts (B.F.A.) degree with a major in Theatre with a concentration in Technical Production requires admission to the university and admission to the program. For more information visit: <http://www.theatreanddance.txstate.edu/Undergraduate-Degrees/BFA-Theatre--Technical-Production.html>
2. Admission to the B.F.A. with a major in Theatre with a concentration in Technical Production is based on successful completion (with a grade of C or better) in TH 1350 and in TH 2330. Upon successful completion of these two courses, the student will be allowed to enroll in TH 3390 and, in some cases, may be concurrently enrolled in TH 2330 and TH 3390.

## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. All Theatre students are encouraged to participate in theatre production activities each semester.
3. Students must complete a minimum of 60 hours in Theatre courses, of which 36 are required.
4. A grade of "C" or better is required in all Theatre courses.
5. Students in this emphasis are encouraged to complete a non-course based internship during the summers after their Sophomore and Junior years.



6. Students in the program will be evaluated after each semester by Technical Production faculty and staff to assess progress and determine continuation in the program. Students must maintain a minimum GPA of 2.5.

## Course Requirements

<b>Freshman</b>	<b>Hours</b>
TH 1111	1
TH 1350	3
TH 2330	3
TH 1364	3
TH 2111	1
ENG 1310 (Communication Component Code 010)	3
ENG 1320 (Communication Component Code 010)	3
POSI 2310 (Government/Political Science Component Code 070)	3
POSI 2320 (Government/Political Science Component Code 070)	3
COMM 1310 (Component Area Option Code 090/091)	3
Mathematics Component Code 020	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050)	3
US 1100	1
	<b>33</b>
<b>Sophomore</b>	<b>Hours</b>
Select one of the following:	3
TH 3330	
TH 3344	
TH 4334	
TH 3320	3
TH 3321	3
TH 3331	3
TH 3390	3
TH 4390	3
ENG Literature (Component Area Option Code 090/094)	3
American History Component Code 060	6
Social and Behavioral Sciences Component Code 080	3
	<b>30</b>
<b>Junior</b>	<b>Hours</b>
TH 4391	3
TH 4392	3
TH Advanced Technical Production Electives <sup>1</sup>	18
Life and Physical Sciences Component Code 030	6
	<b>30</b>

<b>Senior</b>	<b>Hours</b>
TH 4364	3
TH 4393	3
TH Advanced Technical Production Electives <sup>1</sup>	12
General Electives	6
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040)	3
	<b>27</b>

**Total Hours: 120**

<sup>1</sup> Non-specified advanced TH classes are chosen in consultation with academic advisor.

The minor in Dance requires 20 semester credit hours.

<b>Code</b>	<b>Title</b>	<b>Hours</b>
<b>Required Courses</b>		
Choose 1 course from the following: <sup>1</sup>		2
DAN 1260	Jazz I	
DAN 2261	Jazz II	
DAN 3262	Jazz III	
DAN 4263	Jazz IV	
Choose 1 course from the following: <sup>1</sup>		2
DAN 1280	Ballet I	
DAN 2281	Ballet II	
DAN 3282	Ballet III	
DAN 4283	Ballet IV	
Choose 1 course from the following: <sup>1</sup>		2
DAN 1290	Modern/Contemporary I	
DAN 2291	Modern/Contemporary II	
DAN 3293	Modern/Contemporary III	
DAN 4293	Modern/Contemporary IV	
Choose 1 course from the following: <sup>1</sup>		2
DAN 2270	Hip-Hop I	
DAN 3271	Hip-Hop II	
<b>Prescribed Electives</b>		
Choose 9 hours from the following:		9
DAN 2365	Creative Movement for Children	
DAN 3331	Theory and Practice of Teaching Dance	
DAN 3332	Dance Concert Production	
DAN 3345	Screendance	
DAN 3368	World Dance and Culture	
DAN 3390	Dance in the Community	
DAN 4366	Writing and Reading About Dance	
DAN 4369	Dance in the 20th and 21st Centuries	
DAN 4370	Contemporary Issues in Dance	
<b>Electives</b>		
Choose 3 hours from the following:		3
DAN 1113	Conditioning for Dancers	
DAN 1260	Jazz I	
DAN 1280	Ballet I	

DAN 1290	Modern/Contemporary I	
DAN 2115	Pilates I	
DAN 2116	Yoga for Dancers I	
DAN 2201	Dance Composition I	
DAN 2202	Dance Composition II	
DAN 2210	Contact Improvisation	
DAN 2261	Jazz II	
DAN 2270	Hip-Hop I	
DAN 2281	Ballet II	
DAN 2291	Modern/Contemporary II	
DAN 3111	Dance Activities	
DAN 3115	Pilates II	
DAN 3116	Yoga for Dancers II	
DAN 3262	Jazz III	
DAN 3271	Hip-Hop II	
DAN 3282	Ballet III	
DAN 3293	Modern/Contemporary III	
DAN 3342	Performance Workshop	
DAN 4263	Jazz IV	
DAN 4283	Ballet IV	
DAN 4292	Somatic Principles in Dance	
DAN 4293	Modern/Contemporary IV	
Total Hours		20

<sup>1</sup> Level placement in the above dance technique courses will be determined by faculty approval.

The minor in Theatre requires 18 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
Choose 3 hours from the following:		3
TH 1364	Beginning Acting	
TH 2330	Stagecraft and Stage Lighting	
Choose 15 hours from TH courses, 9 of which must be advanced		15
<b>Total Hours</b>		<b>18</b>

**Dean**  
M. Gary Sayed, Ph.D.

San Marcos Campus Dean's Office  
Encino Hall Room 201  
Telephone: 512-245-3300 Fax: 512-245-3791  
[www.health.txstate.edu](http://www.health.txstate.edu) (<http://www.health.txstate.edu/>)

Round Rock Campus Dean's Office  
Avery 265  
Telephone: 512-716-4200

**Associate Dean, San Marcos**  
Scott Kruse, Ph.D.

**Senior Associate Dean, Round Rock**  
Marla A. Erbin-Roesemann, Ph.D.

**Associate Dean for Research**  
Arzu Ari, Ph.D.

#### Department Chairs/Program Chairs/School Directors

Medical Laboratory Science—Rodney E. Rohde, Ph.D.  
Communication Disorders—Farzan Irani, Ph.D.  
Health Administration—Cristian Lieneck, Ph.D. (Interim Director)  
Health Informatics and Information Management—David L. Gibbs, Ph.D.  
Health Sciences—Marla Roesemann, Ph.D.  
Nursing—Theresa Garcia, Ph.D.  
Physical Therapy—Janet Bezner, Ph.D.  
Radiation Therapy—Megan L. Trad, Ph.D.  
Respiratory Care—S. Gregg Marshall, Ph.D.

The College of Health Professions prepares students for careers in the healthcare field. Through its professional, technical, clinical and academic programs, the college serves as an advocate for change and technical improvement in the field. The college also serves as a catalyst to expand and improve public perceptions of healthcare.

Undergraduate programs are available in clinical laboratory science, communication disorders, healthcare administration, health information management, health sciences, nursing, radiation therapy, and respiratory care. Graduate programs are offered in communication disorders, healthcare administration, health information management, nursing, physical therapy, and respiratory care. The college has a number of cooperating teaching sites with more than 1200 affiliations with hospitals and other healthcare facilities.

All programs offered in the College of Health Professions, except the B.S. with a major in health sciences, have specific admission requirements in addition to Texas State admission requirements. Most programs also have requirements for student liability insurance and immunizations. Background checks and drug testing may be required.

## Academic Advising Center

Encino Hall, Room 302  
T: 512.245.3506 F: 512.245.1615  
[www.health.txstate.edu/advising](http://www.health.txstate.edu/advising) (<http://www.health.txstate.edu/advising/>)

The College of Health Professions Undergraduate Academic Advising Center provides academic advising to current and prospective undergraduate students considering a major in the College of Health Professions. Academic advisors provide guidance and information to current and prospective students regarding the selection of an undergraduate major or minor, program admission requirements, long term planning for degree completion and career goals, and campus resources to assist students in achieving their goals.

## Bachelor of Sciences (B.S.)

- Major in Health Sciences (p. 419)
- Major in Health Sciences (Fine Motor Therapy Concentration) (p. 420)
- Major in Health Sciences (Gross Motor Therapy Concentration) (p. 421)
- Major in Health Sciences (Pre-Chiropractic Concentration) (p. 423)
- Major in Health Sciences (Pre-Communication Disorders Concentration) (p. 424)
- Major in Health Sciences (Pre-Medical Laboratory Science Concentration) (p. 425)
- Major in Health Sciences (Pre-Nursing Concentration) (p. 426)

- Major in Health Sciences (Pre-Radiation Therapy Concentration) (p. 427)
- Major in Health Sciences (Pre-Respiratory Care Concentration) (p. 428)

## Health Sciences (HS)

### HS 1310. Introduction to Health Professions.

This course introduces students to various healthcare fields and their roles as health care providers. Students will examine the history of the respective fields, educational and credentialing requirements, job functions, perspective job outlooks and salaries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### HS 3331. Healthcare Systems In The U.S..

This course provides students with the knowledge and skill related to access and barriers to healthcare. Additionally, the healthcare providers' role in past and current health policy and healthcare delivery will be emphasized. Evaluation of quantitative global and U.S. healthcare data in relation to healthcare systems and evidence-based practices will be analyzed. Ethical topics will be discussed. This course is for non-nursing majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### HS 3350. Foundations in Interprofessional Education and Collaborative Practice.

This course introduces students to the foundational principles of interprofessional education and collaborative practice in healthcare. Students will examine the history, purpose, and best practices of team-based client and patient care, including the enabling, reinforcing, and interfering factors related to interprofessional education and practice. (WI) Prerequisite: [HA 3308 or HI 3301] and HS 1310 all with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

### HS 3374. Principles of Accounting for Healthcare Managers.

This course provides an introduction to accounting useful in healthcare facilities and agencies, and demonstrates the application of accounting principles and techniques in the healthcare field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### HS 4300. International Healthcare and Wellness.

This course provides an introduction to the culture of a foreign country, with an emphasis on wellness, the health care environment, and language in the healthcare setting. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### HS 4315. Capstone for Bachelor of Science in Health Sciences.

This course will provide students with the opportunity to reflect on their studies as a whole and explore how they will use the knowledge they have obtained in their future career. Students will investigate career opportunities available to them after graduation and develop professional skills to ensure success post-graduation. Prerequisite: HS 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

### HS 4327. Legal Concepts of Healthcare.

This course provides an overview of legal, regulatory, and ethical issues in healthcare. Topics include patient consent, privacy, confidentiality, torts, contract law, corporate liability, employment, labor, malpractice, antitrust, fraud and abuse, and key federal regulations. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

### HS 4379. Introduction to Financial Management for Health Sciences.

This course is designed to prepare health professionals for managerial positions in healthcare organizations by providing sufficient knowledge of industry financial matters so they can provide input to the organization's chief executive officer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**Minimum required: 120  
semester credit hours**

## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
3. Nine hours of writing intensive (WI) courses are required for graduation.
4. Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.

5. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). If minoring in HA, do not take HA 3347. Work with your advisor for an alternate course.

## Course Requirements

		Freshman
First Semester Hours	Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
Mathematics Component Code 020 select 1 of the following:	3 PSY 1300 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301])	3
MATH 1315 (TCCN MATH 1314)	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
MATH 1319 (TCCN 1324)	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
MATH 1329 (TCCN MATH 1325)	CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3
MATH 2321 (TCCN MATH 2313)		
MATH 2417 (TCCN MATH 2412)		
MATH 2471 (TCCN MATH 2413)		
BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3	
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	
US 1100	1	
HS 1310	3	
	<b>16</b>	<b>15</b>

		Sophomore
First Semester Hours	Second Semester Hours	
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3 American History Component Code 060	3
CS 1308 or ISAN 1323 (TCCN COSC 1301 or BCIS 1305)	3 ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
HIM 2360 (TCCN HITT 1305)	3 HA 3308, HIM 3301, or HS 3331	3
American History Component Code 060	3 NUTR 2360 (TCCN BIOL 1322)	3

COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 Prescribed Electives	3
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<b>15</b>	<b>15</b>
<b>Junior</b>	

First Semester Hours		Second Semester Hours	
HA 3324	3	HS 3350	3
PSY 3300 or HDFS 1351	3	Support Course <sup>2</sup>	3
Support Course <sup>2</sup>	3	Minor	6
Minor	6	Prescribed Electives	3
15		15	

		Senior
First Semester Hours	Second Semester Hours	
HS 4379	3 HS 4315	3
Support Course <sup>2</sup>	3 HIM 4331	3
Prescribed Electives <sup>1</sup>	3 Prescribed Electives <sup>1</sup>	3
HP 3325, SOCI 3307, 2301, CJ 3347, or 2338	3 Minor	3
Minor	3 Support Course	2
15		14

**Total Hours: 120**

<sup>1</sup> 12 hours of Prescribed Electives may be chosen from the following: AT 3358, CDIS 1331, COMM 4326, ECO 2301, ECO 2314, ECO 2315, ESS 3117, ESS 3317, HA 3344, HA 4305, HA 4322, HA 4440, HI 3310, HI 3311, HIM 3463, HS 3374, HS 4327, MC 4322, MKT 3343, NUTR 1362, NUTR 3362, NUTR 3364, PFW 1301, PH 1310, PH 1320, PH 2340, PH 3301, PH 3348, PH 3350, PH 4336, PSY 3361, RC 2213, SOCI 1310 OR SOCI 3300, SOCI 3329, SOCI 3363, SOCI 3383, SOCI 3384

<sup>2</sup> 11-12 hours of Support Courses may be chosen from the following: BIO 1130, BIO 1131, BIO 1331, BIO 2430, BIO 2400 or BIO 2440, BIO 2451, BIO 2452, CHEM 1141, CHEM 1142, CHEM 1342, CHEM 2130, CHEM 2141, CHEM 2142, CHEM 2341, CHEM 2342, PHYS 1115, PHYS 1125, PHYS 1310, PHYS 1315, PHYS 1320, PHYS 1325; additional BIO, CHEM, or PHYS courses may be approved. Students should consult with an advisor for additional course options.

## Minimum required: 120 semester credit hours

## General Requirements

- The fine motor concentration prepares students to apply to an occupational therapy program to earn a degree in occupational therapy.
- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.

- Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). If minoring in HA, do not take HA 3347. Work with your advisor for an alternate course.
- Admission and acceptance to Texas State and declaration as a fine motor therapy concentration student does not guarantee admission to a professional degree program culminating in the awarding of an occupational therapy degree. Admission to an occupational therapy masters or doctoral program is competitive and selective. <https://www.aota.org/career/become-an-ot-ota> (<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.aota.org%2Fcareer%2Fbecome-an-ot-ota&data=05%7C01%7Cjb25%40txstate.edu%7Cbed4947f5c5449cb291d08da9c0d7ff4%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C637993879032831591%7CUnknown%7CTWFPbGZsb3d8eyJWljojMC4wLjAwMDAilCJQljoiv2luMzliLCJBTiI6Ik1haWwWlCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=grtaGu2FO7fd9R6uFwAc%2BrPj404FRRQAJcZnp04m0%2B8%3D&reserved=0>)

## Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
Mathematics Component Code 020 Choose 1 of the following:	3	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
MATH 1315 (TCCN MATH 1314)		PSY 1300 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301])	3
MATH 1319 (TCCN MATH 1324)		POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
MATH 1329 (TCCN MATH 1325)		CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3
MATH 2321 (TCCN MATH 2313)			
MATH 2417 (TCCN MATH 2412)			
MATH 2471 (TCCN MATH 2413)			
BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3		
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3		
HS 1310	3		

US 1100	1		
	16		15
		Sophomore	
		First Semester Hours	Second Semester Hours
CS 1308 or ISAN 1323 (TCCN COSC 1301 or BCIS 1305)	3	American History Component Code 060	3
Creative Arts Component Code 050 [HUMA 1315]	3	Component Area Option Code 090	3
HIM 2360	3	HA 3308, HIM 3301, or HS 3331	3
American History Component Code 060	3	NUTR 2360 (TCCN BIOL 1322)	3
Component Area Option Code 090	3	HP 3325, SOCI 3307, 2301, CJ 3347, or 2328	3
	15		15
		Junior	
		First Semester Hours	Second Semester Hours
HA 3324	3	HS 3350	3
PSY 3300 (TCCN PSYC 2314)	3	SOCI 1310 (TCCN SOCI 1310)	3
BIO 2451 (TCCN BIOL 2401)	4	BIO 2452 (TCCN BIOL 2402)	4
Minor	6	Minor	6
	16		16
		Senior	
		First Semester Hours	Second Semester Hours
HS 4379	3	HS 4315	3
PHYS 1315 (TCCN PHYS 1301)	3	HIM 4331	3
PHYS 1115 (TCCN PHYS 1101)	1	Prescribed Electives <sup>1</sup>	5
PSY 3315	3	Minor	3
Minor	3		
	13		14

**Total Hours: 120**

<sup>1</sup> Prescribed Electives may be chosen from the following: AT 3358, CDIS 1331, COMM 4326, ECO 2314, ECO 2315, ESS 3117, ESS 3317, HA 3344, HA 4305, HA 4322, HA 4440, HI 3310, HI 3311, HIM 3463, HS 3374, HS 4327, MC 4322, MKT 3343, NUTR 1362, NUTR 3362, NUTR 3364, NUTR 3366, PFW 1301, PH 1310, PH 1320, PH 2340, PH 3301, PH 3348, PH 3350, PH 4336, PSY 3361, RC 2213, SOCI 3329, SOCI 3363, SOCI 3383, SOCI 3384

## Minimum required: 120 semester credit hours

### General Requirements

- The gross motor concentration prepares students to apply to a physical therapy program to earn a doctor of physical therapy (DPT) degree.
- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this



catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.
- Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). If minoring in HA, do not take HA 3347. Work with your advisor for an alternate course.
- Admission and acceptance to Texas State and declaration as a gross motor therapy concentration student does not guarantee admission to the doctor of physical therapy degree program at Texas State. Admission to the DPT program is competitive and selective. Additional information may be found on the DPT catalog page (p. 2345).

## Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 Communication Component Code 010	3
Mathematics Component Code 020	3 PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
Choose 1 of the following:	PSY 1300 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301])	3
MATH 1315 (TCCN MATH 1314)	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
MATH 1319 (TCCN MATH 1324)	CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3
MATH 1329 (TCCN MATH 1325)	CHEM 1141 (TCCN CHEM 1111)	1
MATH 2321 (TCCN MATH 2313)		
MATH 2417 (TCCN MATH 2412)		
MATH 2471 (TCCN MATH 2413)		
BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3	
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	
HS 1310	3	

US 1100	1	
	<b>16</b>	<b>16</b>
Sophomore		
First Semester Hours	Second Semester Hours	
HA 3308, HIM 3301, or HS 3331	3 American History Component Code 060	3
Creative Arts Component Code 050 [HUMA 1315]	3 Component Area Option Code 090	3
CHEM 1342 (TCCN CHEM 1312)	3 CS 1308 or ISAN 1323 (TCCN COSC 1301 or BCIS 1305)	3
CHEM 1142 (TCCN CHEM 1112)	1 Choose 1 of the following:	3
American History Component Code 060	3 SOCI 3307	
Component Area Option Code 090	3 HP 3325	
	CJ 3347	
	PSY 2301 (TCCN PSYC 2317)	
	NUTR 2360 (TCCN BIOL 1322)	3
	<b>16</b>	<b>15</b>
Junior		
First Semester Hours	Second Semester Hours	
PSY 3300 (TCCN PSYC 2314)	3 HS 3350	3
HIM 2360	3 HA 3324	3
AT 3400	4 Minor	6
Minor	3 Prescribed Electives <sup>2</sup>	2
	<b>13</b>	<b>14</b>
Senior		
First Semester Hours	Second Semester Hours	
HS 4379	3 HS 4315	3
HIM 4331	3 PHYS 1325 (TCCN PHYS 1302)	3
PHYS 1315 (TCCN PHYS 1301)	3 PHYS 1125 (TCCN PHYS 1102)	1
PHYS 1115 (TCCN PHYS 1101)	1 Minor	3
Minor	6 ESS 3317 & ESS 3117 <sup>3</sup>	4
	<b>16</b>	<b>14</b>

**Total Hours: 120**

<sup>1</sup> Prescribed Electives may be chosen from the following: AT 3358, BIO 2451, BIO 2452, CDIS 1331, COMM 4326, ECO 2301, ECO 2314, ECO 2315, HA 3344, HA 4305, HA 4322, HA 4440, HI 3310, HI 3311, HIM 3463, HS 3374, HS 4327, MC 4322, MKT 3343, NUTR 1362, NUTR 3364, NUTR 3362 (<https://www.txstate.edu/search/#q=NUTR%203362>), PFW 1301, PH 1310, PH 1320, PH 2340, PH 3301, PH 3348, PH 3350, PH 4336, PSY 3361, RC 2213, SOCI 1310 OR SOCI 3300, SOCI 3329, SOCI 3363, SOCI 3383, SOCI 3384

<sup>2</sup> BIO 2451 and 2452 may substitute for AT 3400.

<sup>3</sup> BIO 3421 may substitute for ESS 3317 and ESS 3117.

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
3. Nine hours of writing intensive (WI) courses are required for graduation.
4. Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
5. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). The minor in Biochemistry is recommended and included in the following degree plan. Minor and electives should be chosen in consultation with an academic advisor. If minoring in HA, do not take HA 3347. Work with your advisor for an alternate course.

### Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
ENG 1310 (Communication Component Code 10 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
Mathematics Component Code 020. Choose 1 of the following:	3	HS 1310	3
MATH 1315 (TCCN MATH 1314)		PSY 1300 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301])	3
MATH 1319 (TCCN MATH 1324)		COMM 1310 (Component Area Option 090/091 [TCCN SPCH 1311])	3
MATH 1329 (TCCN MATH 1325)		CHEM 1342 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1312])	3
MATH 2321 (TCCN MATH 2313)		CHEM 1142 (TCCN CHEM 1112)	1
MATH 2417 (TCCN MATH 2412)			
MATH 2471 (TCCN MATH 2413)			
BIO 1330 (TCCN BIOL 1306)	3		

BIO 1130 (TCCN BIOL 1106, [taken with TCCN BIOL 1306])	1		
CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3		
CHEM 1141 (TCCN CHEM 1111)	1		
US 1100	1		
	15		16

#### Sophomore

First Semester Hours		Second Semester Hours	
HA 3308, HIM 3301, or HS 3331	3	American History Component Code 060	3
American History Component Code 060	3	CS 1308 or ISAN 1323 (TCCN COSC 1301 or BCIS 1305)	3
Component Area Option Code 090	3	BIO 2400 or 2440 (TCCN BIOL 2420 or BIOL 2421)	4
Creative Arts Component Code 050 [HUMA 1315]	3	CHEM 2342 (TCCN CHEM 2325)	3
CHEM 2341 (TCCN CHEM 2323)	3	CHEM 2142 (TCCN CHEM 2125)	1
CHEM 2141 (TCCN CHEM 2123)	1		
	16		14

#### Junior

First Semester Hours		Second Semester Hours	
Choose 1 of the following:	3	HS 3350	3
MATH 2328 (TCCN MATH 1342)		HA 3324	3
SOCI 3307		CHEM 3276	2
HP 3325		BIO 2452 (TCCN BIOL 2402)	4
CJ 3347		PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
PSY 2301 (TCCN PSYC 2317)			
PSY 3300 (TCCN PSYC 2314)	3		
CHEM 3375 or 4375	3		
BIO 2451 (TCCN BIOL 2401)	4		
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3		
	16		15

#### Senior

First Semester Hours		Second Semester Hours	
HS 4379	3	HS 4315	3
PHYS 1315 (TCCN PHYS 1301)	3	HIM 4331	3
PHYS 1115 (TCCN PHYS 1101)	1	HIM 2360	3

CHEM 4360 or 4385	3 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
NUTR 2360 (TCCN BIOL 1322)	3 MKT 3343	3
COMM 2338 (TCCN SPCH 1315)	3	
<b>16</b>		<b>15</b>
<b>Total Hours: 123</b>		

## Minimum required: 120 semester credit hours

### General Requirements

- Any student entering Texas State may enroll in the Bachelor of Science in Health Sciences (BSHS) pre-communication disorders concentration. The BSHS degree does not prepare students to attend a graduate degree program in communication disorders. Admission to Texas State does not guarantee admission to the Communication Disorders program. Admission to the Communication Disorders program is competitive and selective. It is recommended that students arrange academic advising at least once prior to submitting an application. The academic sequence begins during the fall semester of the junior year. The deadline for submission of applications is typically in the summer. Additional information may be found on the Communication Disorders catalog page (p. 437).
- The general education core curriculum courses are listed in the degree plan below along with the statewide component core number. See the General Education Core Curriculum section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.
- Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
- Students who chose to earn a BSHS degree must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). If minoring in HA, do not take HA 3347. Work with your advisor for an alternate course.
- The degree plan listed below for the Junior and Senior years applies only to students who chose to earn a BSHS degree. Students admitted to the Communication Disorders program, see BSCD catalog page.

### Course Requirements

<b>Freshman</b>	
<b>First Semester Hours</b>	<b>Second Semester Hours</b>
Communication Component Code 010	3 Communication Component Code 010

Mathematics Component Code 020	3 PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
Choose 3 hours from the following:	Life and Physical Sciences Component Code 30	4
MATH 1315 (TCCN MATH 1314)	Choose 4 hours from the following:	
MATH 1319 (TCCN MATH 1324)	BIO 1330 & BIO 1130 (TCCN BIOL 1306 & BIOL 1106)	
MATH 1329 (TCCN MATH 1325)	BIO 1331 & BIO 1131 (TCCN BIO 1307 & BIOL 1107)	
MATH 2417 (TCCN MATH 2412)	POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
MATH 2471 (TCCN MATH 2413)	HS 1310	3
CDIS 1331	3	
PSY 1300 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301])	3	
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3	
US 1100	1	
<b>16</b>		<b>16</b>

#### Sophomore

First Semester Hours		Second Semester Hours	
Component Area Option Code 090	3	Creative Arts Component Code 050 [HUMA 1315]	3
HIM 2360	3	American History Component Code 060	3
PSY 3300 (TCCN PSYC 2314)	3	ENG 3303	3
American History Component Code 060	3	Choose 3 hours form the following:	3
BIO 2430 (TCCN BIOL 2404)	4	SOCI 3307	
		HP 3325	
		CJ 3347	
		PSY 2301 (TCCN PSYC 2317)	
		Life and Physical Sciences Component Code 30	3
		Choose 3 hours from the following:	
		PHYS 1310 (TCCN PHYS 1305)	
		PHYS 1320 (TCCN PHYS 1307)	
		PHYS 1315 (TCCN PHYS 1301)	

PHYS 1325 (TCCN PHYS 1302)	
16	15
Junior	
First Semester Hours	Second Semester Hours
HA 3308, HIM 3301, or HS 3331	3 HS 3350 3
CS 1308 or ISAN 1323 (TCCN COSC 1301 or BCIS 1305)	3 HA 3324 3
NUTR 2360 (TCCN BIOL 1322)	3 Prescribed Elective <sup>1</sup> 3
Component Area Option Code 090	3 Support Science <sup>2</sup> 3
Minor	3 Minor 3
15	15
Senior	
First Semester Hours	Second Semester Hours
HS 4379	3 HS 4315 3
Prescribed Elective <sup>1</sup>	3 HIM 4331 3
Minor	6 Prescribed Elective <sup>1</sup> 3
	Minor 6
12	15

**Total Hours: 120**

<sup>1</sup> Prescribed Electives—Choose 9 hours from the

following: ANTH 3302, ANTH 3325, CDIS 4335, CDIS 4371, CDIS 4379, CDIS 4391, CDIS 4680, COUN 3320, ENG 3319, HA 3309, PSY 3315, PSY 3322, SOCI 3383

<sup>2</sup> Support Courses—Choose 3 hours from the

following: BIO 2400 or BIO 2440, BIO 2451, BIO 2452, CHEM 1341, CHEM 1342

**Minimum required: 120 semester credit hours**

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.
- Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). If minoring in HA, do not take HA 3347. Work with your advisor for an alternate course.
- Admission and acceptance to Texas State and declaration as a pre-M.L.S. major does not guarantee admission to the program. Admission to the program is competitive and selective. <https://www.health.txst.edu/clis/degrees-programs/undergraduate.html>

## Course Requirements

Freshman	
First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 Communication Component Code 010 3
CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3 CHEM 1342 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1312]) 3
CHEM 1141 (TCCN CHEM 1111)	1 CHEM 1142 (TCCN CHEM 1112) 1
BIO 1330 (TCCN BIOL 1306)	3 BIO 1331 (TCCN BIOL 1307) 3
BIO 1130 (TCCN BIOL 1106, [taken with TCCN BIOL 1306])	1 BIO 1131 (TCCN BIOL 1107, [taken with BIOL 1307]) 1
Mathematics Component Code 020	3 HS 1310 3
Choose 1 of the following:	
MATH 1315 (TCCN MATH 1314)	
MATH 1319 (TCCN MATH 1324)	
MATH 1329 (TCCN MATH 1325)	
MATH 2321 (TCCN MATH 2013)	
MATH 2417 (TCCN MATH 2412)	
MATH 2471 (TCCN MATH 2413)	
US 1100	1

15 14

Sophomore	
First Semester Hours	Second Semester Hours
BIO 2440 or 2400 (TCCN BIOL 2420 or BIOL 2421)	4 American History Component Code 060 3
PSY 1300 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301])	3 POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306]) 3
American History Component Code 060	3 Choose 1 of the following: 3
Choose 1 of the following:	4 PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306]) 3
CHEM 2330 & CHEM 2130	HP 3325
CHEM 2341 & CHEM 2141 (TCCN CHEM 2323 & 2123)	MATH 2328 (TCCN MATH 1342)
CHEM 2342 & CHEM 2141 (TCCN CHEM 2325 & 2125)	PSY 2301 (TCCN PSYC 2317)

Prescribed Electives <sup>1</sup>	2	ONLY 2333 (TCCN BUSI 2305)	
		SOCI 3307	
		Component Area Option Code 090	3
	16		15
			Junior
<b>First Semester Hours</b>		<b>Second Semester Hours</b>	
Creative Arts Component Code 050 [HUMA 1315]	3	HS 3350	3
HA 3308, HIM 3301, or HS 3331	3	HA 3324	3
CS 1308 or ISAN 1323 (TCCN COSC 1301 or BCIS 1305)	3	HIM 2360	3
Prescribed Electives <sup>1</sup>	3	Minor	6
Component Area Option Code 090	3		
	15		15
			Senior
<b>First Semester Hours</b>		<b>Second Semester Hours</b>	
NUTR 2360 (TCCN BIOL 1322)	3	HS 4315	3
HS 4379	3	HIM 4331	3
PSY 3300 or HDFS 1351 (TCCN PSYC 2314)	3	POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
Minor	6	Minor	6
	15		15
<b>Total Hours: 120</b>			

<sup>1</sup> Prescribed Electives may be chosen from the

following: AT 3358, CDIS 1331, COMM 4326, ECO 2301, ECO 2314, ECO 2315, HATH 174, ESTON 1331, MATB 341, HA 3344, HA 4305, HA 4322, HA 4440, HI 3310, HI 3

**Minimum required: 120 semester credit hours**

## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
3. Nine hours of writing intensive (WI) courses are required for graduation.
4. Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
5. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/>

undergraduate/minors/). If minoring in HA, do not take HA 3347. Work with your advisor for an alternate course.

6. Admission and acceptance to Texas State and declaration as a pre-nursing major does not guarantee admission to the program. Admission to the program is competitive and selective. Application to the BSN program can be found on the B.S.N. Nursing catalog page. (p. 453)

First Semester Hours		Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	Communication Component Code 010	3
BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
Mathematics Component Code 020	3	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
Choose 1 of the following:		PSY 1300 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301])	3
MATH 1315 (TCCN MATH 1314)		CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3
MATH 1319 (TCCN MATH 1324)			
MATH 1329 (TCCN MATH 1325)			
MATH 2417 (TCCN MATH 2412)			
HA 1341, HA 3344, HA 4305, HA 4322, HA 4440, HA 4441, HA 4442, HA 4443, HA 4444, HA 4445, HA 4446, HA 4447, HA 4448, HA 4449, HA 4450, HA 4451, HA 4452, HA 4453, HA 4454, HA 4455, HA 4456, HA 4457, HA 4458, HA 4459, HA 4460, HA 4461, HA 4462, HA 4463, HA 4464, HA 4465, HA 4466, HA 4467, HA 4468, HA 4469, HA 4470, HA 4471, HA 4472, HA 4473, HA 4474, HA 4475, HA 4476, HA 4477, HA 4478, HA 4479, HA 4480, HA 4481, HA 4482, HA 4483, HA 4484, HA 4485, HA 4486, HA 4487, HA 4488, HA 4489, HA 4490, HA 4491, HA 4492, HA 4493, HA 4494, HA 4495, HA 4496, HA 4497, HA 4498, HA 4499, HA 4500			
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3		
Component Area Option Code 090	3		
US 1100	1		
<b>16</b>	<b>16</b>		<b>15</b>

### Sophomore

First Semester Hours	Second Semester Hours
BIO 2451 (TCCN BIOL 2401)	4 BIO 2452 (TCCN BIOL 2402) 4
BIO 2440 (TCCN BIOL 2420)	4 American History Component Code 060 3
Creative Arts Component Code 050 [HUMA 1315]	3 Component Area Option Code 090 3
American History Component Code 060	3 NUTR 2360 (TCCN BIOL 1322) 3
	PSY 3300 or HDFS 1351 (TCCN PSYC 2314) 3
<b>14</b>	<b>16</b>



therapy program is competitive and selective. See the Radiation Therapy website at [www.health.txstate.edu/rtt](http://www.health.txstate.edu/rtt).

Junior	
First Semester Hours	Second Semester Hours
HA 3308, HIM 3301, or HS 3331	3 HS 3350 3
CS 1308 or ISAN 1323 (TCCN COSC 1301 or BCIS 1305)	3 HA 3324 3
HS 1310	3 MATH 2328 (TCCN MATH 1342) 3
SOCI 1310 (TCCN SOCI 1301)	3 HIM 2360 3
Minor	3 Minor 3
<b>15</b>	<b>15</b>
Senior	
First Semester Hours	Second Semester Hours
HS 4379	3 HS 4315 3
HIM 4331	3 Prescribed Electives <sup>1</sup> 4
Prescribed Electives <sup>1</sup>	4 Minor 6
Minor	6
<b>16</b>	<b>13</b>

**Total Hours: 120**

<sup>1</sup> Prescribed Electives may be chosen from the following:  
 AT 3358, CDIS 1331, COMM 4326, ECO 2301, ECO 2314, ECO 2315, ESS 3117, ESS 3317, HA 3341, HA 3344, HA 4305, HA 4322, HA 4440, HI 3310, HI 3311, HIM 3463, HS 3374, HS 4327, MC 4322, MKT 3343, NUTR 1362, NUTR 3364, NUTR 3362, PFW 1301, PH 1310, PH 1320, PH 2340, PH 3301, PH 3348, PH 3350, PH 4336, PSY 3361, RC 2213, SOCI 3329, SOCI 3363, SOCI 3383, SOCI 3384

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
3. Nine hours of writing intensive (WI) courses are required for graduation.
4. Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
5. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). If minoring in HA, do not take HA 3347. Work with your advisor for an alternate course.
6. Admission and acceptance to Texas State and declaration as a pre-radiation therapy concentration student does not guarantee admission to a professional degree program culminating in the awarding of a radiation therapy degree. Admission to a radiation

Freshman		
First Hours Semester	Second Hours Semester	Third Hours Semester
Core Curriculum 010-Communication Component	3 Communication Component Code 010	3 Core Curriculum 090 – Component Area Option
Core Curriculum 060 – Early American History Component	3 Core Curriculum 060 – Modern American History Component	3 PSY 1300 (Core Curriculum 80 - Social and Behavioral Sciences Component [TCCN PSYC 2301]) 3
BIO 1330 (Core Curriculum 30 - Life and Physical Sciences Component [TCCN BIOL 1306])	3 CHEM 1341 (Core Curriculum 30 - Life and Physical Sciences Component [TCCN CHEM 1311])	3 PHIL 1320 (Language, Philosophy, and Culture Component Code 040 TCCN PHIL 2306)
MATH 2417 or 2471 (Core Curriculum 20 - Mathematic Component [TCCN MATH 2412 or 2413])	4 CHEM 1141	1
US 1100	1 BIO 1331 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1307])	3
	HS 1310	3
<b>14</b>	<b>16</b>	<b>9</b>

Sophomore		
First Hours Semester	Second Hours Semester	
BIO 2430 (TCCN BIOL 2404)	4 AT 3358 or PSY 4390N	3
Core Curriculum 070 – Government Political Science Component	3 Core Curriculum 070 – Government Political Science Component	3
Core Curriculum 050 – Creative Arts Component	3 PHYS 1315	3
Core Curriculum 090 – Area Option	3 PHYS 1115	1
	Select one of the following: HP 3302, PSY 2301, SOCI 3307, MATH 2328, CJ 3347	3
	<b>13</b>	<b>13</b>

Junior		
First Hours Semester	Second Hours Semester	
Prescribed Electives <sup>1</sup>	3 HS 3350	3
HA 3308, HIM 3301, or HS 3331	3 HA 3324	3
CS 1308 or ISAN 1323 (TCCN COSC 1301 or BCIS 1305)	3 HIM 2360	3
Minor	3 Minor	3
	<b>12</b>	<b>12</b>

Senior		
First Hours Semester	Second Hours Semester	
NUTR 2360 (TCCN BIOL 1322)	3 HS 4315	3

PSY 3300 or HDFS 1351 (TCCN PSYC 2314)	3 HIM 4331	3
HS 4379	3 Prescribed Electives <sup>1</sup>	4
Minor	6 Minor	6
	<b>15</b>	<b>16</b>
<b>Total Hours: 120</b>		

<sup>1</sup> Prescribed Electives may be chosen from the following: CDIS 1331, COMM 4326, ECO 2301, ECO 2314, ECO 2315, ESS 3117, ESS 3317, HA 3341, HA 3344, HA 4305, HA 4322, HA 4440, HI 3310, HI 3311, HIM 3463, HS 3374, HS 4327, MC 4322, MKT 3343, NUTR 1362, NUTR 3364, NUTR 3362, PFW 1301, PH 1310, PH 1320, PH 2340, PH 3301, PH 3348, PH 3350, PH 4336, PSY 3361, RC 2213, SOCI 3329, SOCI 3363, SOCI 3383, SOCI 3384

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.
- Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). If minoring in HA, do not take HA 3347. Work with your advisor for an alternate course.
- Admission and acceptance to Texas State and declaration as a pre-respiratory care concentration student does not guarantee admission to a professional degree program culminating in the awarding of a respiratory care degree. Admission to a respiratory care program is competitive and selective and occurs during the sophomore year (application deadline is May 1 each year).

### Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 Communication Component Code 010	3

Mathematics Component Code 020	3 PSY 1300 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301])	3
Choose 1 of the following:	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 TCCN 2306)	3
MATH 1315 (TCCN MATH 1314)	POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
MATH 1319 (TCCN MATH 1324)	CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3
MATH 1329 (TCCN MATH 1325)		
MATH 2417 (TCCN MATH 2412)		
MATH 2471 (TCCN MATH 2413)		
BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3	
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3	
Component Area Option Code 090	3	
US 1100	1	
	<b>16</b>	<b>15</b>

Sophomore		
First Semester Hours	Second Semester Hours	
BIO 2430 (TCCN BIOL 2404)	4 BIO 2440 (TCCN BIOL 2420)	4
Creative Arts Component Code 050 [HUMA 1315]	3 American History Component Code 060	3
HS 1310	3 Component Area Option Code 090	3
American History Component Code 060	3 Choose 1 of the following:	3
Choose 1 of the following:	3 PHYS 1310 (TCCN PHYS 1305)	
SOCI 3307	PHYS 1320 (TCCN PHYS 1307)	
HP 3325	PHYS 1315 (TCCN PHYS 1301)	
MATH 2328 (TCCN MATH 1342)	PHYS 1325 (TCCN PHYS 1302)	
PSY 2301 (TCCN PSYC 2317)	RC 2213	2
CJ 3347		
	<b>16</b>	<b>15</b>

Junior		
First Semester Hours	Second Semester Hours	
HA 3308, HIM 3301, or HS 3331	3 HS 3350	3
CS 1308 or ISAN 1323 (TCCN COSC 1301 or BCIS 1305)	3 HA 3324	3
HIM 2360	3 NUTR 2360 (TCCN BIOL 1322)	3
PSY 3300 or HDFS 1351 (TCCN PSYC 2314)	3 Minor	6
Minor	3	
	<b>15</b>	<b>15</b>
Senior		
First Semester Hours	Second Semester Hours	
HS 4379	3 HS 4315	3
Prescribed Electives <sup>1</sup>	6 Prescribed Electives <sup>1</sup>	4
Minor	6 HIM 4331	3
	Minor	3
	<b>15</b>	<b>13</b>

**Total Hours: 120**

<sup>1</sup> Prescribed Electives may be chosen from the following: AT 3358, CDIS 1331, COMM 4326, ECO 2301, ECO 2314, ECO 2315, ESS 3117, ESS 3317, HA 3341, HA 3344, HA 4305, HA 4322, HA 4440, HI 3310, HI 3311, HIM 3463, HS 3374, HS 4327, MC 4322, MKT 3343, NUTR 1362, NUTR 3364, NUTR 3362, PFW 1301, PH 1310, PH 1320, PH 2340, PH 3301, PH 3348, PH 3350, PH 4336, PSY 3361, SOCI 3329, SOCI 3363, SOCI 3383, SOCI 3384

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The Bachelor of Science in Medical Laboratory Science (BSMLS) degree with a major in Medical Laboratory Science prepares students to function as medical laboratory scientists (clinical laboratory scientists) or medical technologists in a wide variety of settings from physician office laboratories to modern tertiary care hospital laboratories. The medical laboratory scientist can become an indispensable top-level laboratory worker, a supervisor, a specialist, a researcher, or an educator.

The requirements during the first two years of study include courses in biology, chemistry, and mathematics, along with courses in the humanities and social and behavioral sciences. The junior and senior years combine clinical experiences in the affiliated clinical laboratories with advanced academic study in the MLS disciplines.

The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). Graduates of the program are eligible to take the national certification examination for the Medical Laboratory

Scientist (MLS) given by the Board of Certification of the American Society for Clinical Pathology (ASCP).

## Immunization Requirements

It is a policy of the College of Health Professions that each student must provide a Health Report completed by a physician or licensed healthcare provider. Certain immunizations are required prior to beginning classes in the MLS program and before the student can be placed in a clinical or internship assignment. Information on these requirements and forms may be obtained through the program office.

## Background Check and Drug Screening

Prior to beginning classes in the MLS program, students are required to have a background check. As a condition for placement in professional practice sites during the second year of the program, students will be required to have a drug screening and meet other requirements set by individual sites. Information on the background check and drug screening process will be provided by the MLS Program.

## Clinical Placement (rotation) Requirements

The Medical Laboratory Science (MLS) Program at Texas State provides clinical placements for all MLS students entering the clinical year (senior year / 2<sup>nd</sup> year of post baccalaureate) in good academic standing. Clinical placements are carefully and methodically assigned while taking into account transportation issues, types of clinical affiliates, and student characteristics. In the event a clinical affiliate is unable to fulfill their prior obligation, alternative clinical rotations will be sought at other affiliate institutions. In the very unlikely event alternative clinical rotations are unable to be secured; affected students will be reassigned to the first available rotation site. The next available clinical rotation will occur as soon as possible but no later than one year from the time the rotation was cancelled. If the clinical rotation cancellation occurs after clinical rotations have commenced, the affected student will be placed first in the queue to receive the first available clinical rotation slot that will occur no later than one year after the cancellation. If the clinical rotation cancellation occurs prior to the start of clinical rotations, affected students will be selected based on GPA calculated from performance in the MLS courses. Students with the lowest GPAs will be required to relinquish their clinical rotation slots which will delay clinical rotations.

## Bachelor of Science in Medical Laboratory Science (B.S.M.L.S.)

- Major in Medical Laboratory Science (p. 432)

## Courses in Medical Laboratory Science (MLS)

### MLS 3105. Introduction to Medical Laboratory Techniques LAB.

This lab class will be for students currently accepted into the Medical Laboratory Science Program and have taken or concurrently taking MLS 3205 lecture course. There will be technical competency demonstrations and hands-on practice in the techniques, procedures, and instrumentation commonly used in clinical laboratories. Corequisite: MLS 3205 with a grade of a "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### MLS 3111. Medical Laboratory Science Review.

This course reviews material presented in the first two semesters of the Medical Laboratory Science coursework to improve retention of material for the national certification exam. Students will review entry-level theory and application in the areas of clinical chemistry, immunology, hematology, coagulation, urinalysis, parasitology, quality control, and microscopy.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### MLS 3205. Introduction to Medical Laboratory Techniques.

This course will introduce students, both MLS majors and non-majors, to the main areas of clinical practice including Hematology, Microbiology, Immunohematology (blood banking), Clinical Chemistry, and Immunology. Lectures will cover the techniques, procedures, and instrumentation commonly used in clinical laboratories. (WI).

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

### MLS 3323. Medical Microscopy and Analysis of Body Fluids.

This course is the study of body fluids present in the various anatomical compartments of the body as they differ in health and disease. Physical and chemical tests, and microscopic examination of select body fluids are performed.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### MLS 3324. Clinical Immunology.

This course is an in-depth study of theoretical and practical aspects of clinical immunology with emphasis on principles, methodology, problems encountered, and clinical applications.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**MLS 3326. Medical Parasitology.**

This course includes lectures and laboratory instruction in medically important parasites producing disease in humans with emphasis on epidemiology, life cycles, identifying characteristics, and pathology of these parasites.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**MLS 3410. Clinical Chemistry I.**

This course is designed to acquaint the medical laboratory science student with concepts, techniques, procedures, and instrumentation used in clinical chemistry.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**MLS 3412. Clinical Hematology and Hemostasis I.**

This course is an in-depth study of theoretical and practical aspects of clinical hematology and hemostasis with emphasis on principles, methodology, problems encountered, and clinical applications.

**4 Credit Hours. 3 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**MLS 4121. Directed Study in Medical Laboratory Science.**

This course is an in-depth study of a narrow range of topics or a related problem in the medical laboratory sciences. Topics to be announced; may be repeated for credit when topics vary.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**MLS 4177A. Community Health Education through Laboratory Science.**

This course is a service-learning course designed to teach students about best practices in community health and community health education from a laboratory science perspective. Students will learn about cultural humility in healthcare, social determinants of health, and how clinical laboratory professionals can be integrated into a variety of public health initiatives.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions|Topics

**Grade Mode:** Credit/No Credit

**MLS 4221. Directed Study in Medical Laboratory Science.**

This course is an in-depth study of a narrow range of topics or a related problem in the medical laboratory sciences. Topics to be announced. Course may be repeated for credit when topics vary.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**MLS 4225. Laboratory Management & Supervision.**

This course is an in-depth study of theoretical and practical aspects of laboratory management, with emphasis on active discussions of general principles of management and supervision of the clinical laboratory and its personnel.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**MLS 4241. Molecular Diagnostics.**

This course consists of an introduction to the principles, methodologies, and applications of molecular diagnostic procedures used in clinical laboratories. Emphasis is placed on the procedures used in the identification of infectious agents that cause human disease, the diagnosis of inherited diseases, and the diagnosis of cancer.

**2 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**MLS 4318. Clinical Hematology and Hemostasis II.**

This course is an in-depth study of theoretical and practical aspects of clinical hematology and hemostasis with emphasis on principles, methodology, problems encountered, and clinical applications.

**3 Credit Hours. 3 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**MLS 4321. Directed Study in Medical Laboratory Science.**

This course provides an in-depth study of a narrow range of topics or a related problem in the clinical laboratory sciences. Topics to be announced. May be repeated for credit when topics vary.

**3 Credit Hours. 3 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**MLS 4333. Bridge to Clinical Practice.**

This course will discuss professional and technical laboratory competence requirements for clinical laboratory science students as well as the student's role as a unit of the healthcare team. This course focuses on the four Cs: critical thinking, communication, cultural humility, and core competencies. Students will reflect upon their own cultural beliefs and examine a variety of cultural perspectives, behaviors, disparities, and barriers to transcultural communication. (MULTI).

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter



**MLS 4340. Diagnostic Microbiology II.**

This course is a study of medically important fungi, viruses, chlamydiae, rickettsiae, mycobacteria, and advanced topics in clinical microbiology. Automated identification of microorganisms, database management, and epidemiologic techniques will be discussed.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**MLS 4361. Medical Laboratory Research Methods.**

This course provides a working knowledge of research designs, analysis, and presentation for medical laboratory professionals. Students will complete a directed independent research project covering the principles of research and validation of medical laboratory methodologies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**MLS 4370. Clinical Chemistry II.**

This course is designed to acquaint the medical laboratory science student with advanced concepts, techniques, procedures, and instrumentation used in clinical chemistry.

**3 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**MLS 4440. Diagnostic Microbiology I.**

This course is a study of pathogenic and nonpathogenic bacteria with special emphasis on methods of isolation from body fluids, cultural and differential biochemical characteristics of body pathogens. An overview of major classes of antibiotics, antimicrobial resistance, and antibiotic susceptibility testing platforms will be covered.

**4 Credit Hours. 3 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**MLS 4460. Immunohematology.**

This course is a study of theoretical and practical consideration of major blood groups with emphasis on grouping and typing, antibody detection and identification, compatibility testing and component therapy in blood transfusion service.

**4 Credit Hours. 3 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**MLS 4463. Clinical Practice I.**

This course provides a structured clinical experience assigned on an individual basis for observation, study, interpretation, and practical application of techniques and methodology in the medical laboratory.

**4 Credit Hours. 4 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**MLS 4465. Clinical Practice II.**

Structured clinical experience assigned on an individual basis for observation, study, and practical application of techniques and methodology in the medical laboratory.

**4 Credit Hours. 4 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### Admission Requirements

1. The Bachelor of Science in Medical Laboratory Science (B.S.M.L.S.) degree with a major in Medical Laboratory Science requires admission to the university and admission to the program. For more information visit: <http://www.health.txstate.edu/cls/degrees-programs/undergraduate.html>
2. University application deadlines are different than the Medical Laboratory Science (M.L.S.) program deadline. Any student entering Texas State may declare the bachelor of science with a major in health sciences and a Pre-Medical Laboratory Science concentration as their major. It is recommended that students arrange academic advising at least once prior to making application, and, if possible, arrange to learn about the profession through clinical laboratory tours, personal research, and interviewing a practicing M.L.S. professional. Admission and acceptance to Texas State and declaration of a pre-M.L.S. concentration does not guarantee admission to the B.S.M.L.S. program. Admission to the program is competitive and selective. The academic sequence begins during the fall semester of the junior year. Students are selected in the spring semester of their sophomore year. Enrollment is limited by student/faculty ratios and clinical placement availability.
3. The deadline for submission of applications to the M.L.S. program is February 15th. A typical cohort size of 20 students will be admitted. Applicants will be notified of their status by April 30th or sooner. The criteria for student selection for the junior class includes scholastic ability, particularly in the sciences, essays, and a personal interview, and not on the basis of gender, race, color, religion, veteran status or condition of disability, or national origin. Due to performance standards of the profession, students must meet specific ADA standards in accordance with physical and emotional requirements of the academic program to qualify for admission.
4. Potential applicants are encouraged to complete the University process early (six to eight weeks prior to the M.L.S. application deadline of February 15th) to facilitate review of transcripts during the M.L.S. program application process.
5. A minimum overall GPA and science and mathematics GPA of 2.50; however, an overall GPA and a science and mathematics GPA of 3.0 is recommended in order to be competitive in the application process. Applicants must be in good academic standing to apply to the M.L.S. Program. Students on academic probation or suspension will not be considered. The science and mathematics GPA is calculated based on grades in the following nine courses which must be completed prior to submitting the M.L.S. application:

Code	Title	Hours
BIO 1330	Functional Biology	3
BIO 1130	Functional Biology Laboratory	1

BIO 1331	Organismal Biology	3
BIO 1131	Organismal Biology Laboratory	1
CHEM 1341	General Chemistry I	3
CHEM 1141	General Chemistry Laboratory I	1
CHEM 1342	General Chemistry II	3
CHEM 1142	General Chemistry Laboratory II	1
MATH 1315	College Algebra	3
	or MATH 1319 Mathematics for Business and Economics I	
	or MATH 1329 Mathematics for Business and Economics II	
	or MATH 2321 Calculus for Life Sciences I	
	or MATH 2417 Pre-Calculus Mathematics	
	or MATH 2471 Calculus I	

- Science and mathematics courses require a minimum grade of "C" or higher.
- Students may have a maximum of nine hours of core and prerequisite coursework remaining prior to beginning the M.L.S. program.
- Completion of the M.L.S. application packet for admission is required by the deadline (February 15th).
- Successful interview of selected candidate with admission committee is also required.
- Health records and a background check are necessary before being allowed to start the program. Specific immunizations and drug testing are necessary before clinical placements.

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.
- Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
- To graduate with a B.S.M.L.S., students must successfully complete all MLS courses in a lock-step sequence with a "C" or higher. Each MLS course is offered only once each academic year; therefore, progress in the program is affected should a student fall out of the sequence due to failure to successfully complete a course. A student who falls out of sequence (whether due to illness, course failure, or other reasons) will be delayed one year to repeat the course. Students with a grade of less than a "C" in a MLS course will be stepped out of the program and individuals must reapply to the program the following year. To be considered for program readmission, all original program admission criteria and an approved schedule for retaking courses must be met. In addition, a student may repeat a MLS course only once. If the student does not earn a grade of at least "C" upon repeating the course, the student cannot continue in the program.
- All non-MLS courses must be completed *prior* to the senior year, 2nd semester (spring), due to students beginning off-campus clinical rotations.
- Requirements for B.S.M.L.S. completion and graduation include a Texas State GPA of 2.0 with a MLS major GPA of 2.25.

- During the second semester (spring) and final semester (summer) of the senior year, students are required to successfully complete five clinical laboratory rotations/experiences in MLS Clinical Practice courses. These courses require that the students spend clinical time in other facilities, primarily hospitals and reference laboratories, away from campus. Students must furnish their own transportation, and if necessary, housing. Because of the time and distances involved, typically no courses other than those listed in the MLS Program can be taken in the final two semesters of the senior year.

## Course Requirements

### Freshman

First Hours Semester	Second Hours Semester	
BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306 or BIOL 1406]))	3 BIO 1331 (TCCN BIOL 1307 or 1407)	3
BIO 1130 (TCCN BIOL 1106 [taken with TCCN BIOL 1306]))	1 BIO 1131 (TCCN BIOL 1107)	1
CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311]))	3 CHEM 1342 (TCCN CHEM 1312)	3
CHEM 1141 (TCCN CHEM 1111)	1 CHEM 1142 (TCCN CHEM 1112)	1
Communication Component Code 010	3 Communication Component Code 010	3
Government Political Science Component Code 070	3 Choose one from the following (Mathemati Component Code 020):	3
US 1100 <sup>1</sup>	1 MATH 1315 (TCCN MATH 1314)	

	MATH 13 (TCCN MATH 1324)	
	MATH 1329 (TCCN MATH 1325)	
	MATH 23 (TCCN MATH 2313)	
	MATH 2331	
	MATH 24 (TCCN MATH 2412)	
	MATH 2471 (TCCN MATH 2413)	
<b>15</b>	<b>14</b>	<b>Sophomore</b>
<b>First Hours Semester</b>	<b>Second Hours Semester</b>	
BIO 2440 or 2400 (TCCN BIOL 2420 or 2421)	4 American History Component Code 060	3
Component Area Codes 090, 091, 092, 093 and 094	3 Government Political Science Component Code 070	3
American History Component Code 060	3 Language, Philosophy, and Culture Component Code 040	3
Choose one of the following:	4 Choose one of the following:	3
CHEM 2330	SOCI 3307	
& CHEM 2130		
CHEM 23	HP 3325	
& CHEM 2323 (TCCN CHEM 2323 & 2123)		

CHEM 2342 & CHEM 2142 (TCCN CHEM 2325 & 2125)	MATH 2328 (TCCN MATH 1342)	
	ONLY 2331 (TCCN BUSI 2305)	
	Component Area Option Codes 090, 091, 092, 093 and 094	3
<b>14</b>	<b>15</b>	<b>Junior</b>
<b>First Hours Semester</b>	<b>Second Hours Semester</b>	<b>Summer Hours</b>
MLS 3205	2 MLS 3323	3 MLS 3111
MLS 3105	1 MLS 3324	3
MLS 3410	4 MLS 3412	4
MLS 3326	3 Social and Behavioral Sciences Component Code 080	3
Creative Arts Component Code 050 [HUMA 1315]	3	
<b>13</b>	<b>13</b>	<b>1</b>
		<b>Senior</b>
<b>First Hours Semester</b>	<b>Second Hours Semester</b>	<b>Summer Hours</b>
MLS 4333	3 MLS 4340	3 MLS 4225
MLS 4318	3 MLS 4370	3 MLS 4361
MLS 4440	4 MLS 4463	4 MLS 4465
MLS 4460	4 MLS 4241	2
<b>14</b>	<b>12</b>	<b>9</b>

**Total Hours: 120**

<sup>1</sup> If US 1100 is waived, the student must have a minimum of 120 hours to graduate. See the College Advising Center.

Willow Hall Room 253  
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The Department of Communication Disorders, located in Round Rock, is dedicated to excellence in teaching, research, and clinical practice in speech-language pathology and audiology. We are committed to innovative instruction, expansion of knowledge, and community-based collaboration to create a vibrant and supportive learning community that engages and inspires students, faculty, staff, and clients. Advanced clinical and educational training, grounded in evidence-based practices (EBP) and practice-based practices (PBP), prepares students in the undergraduate program for entry into graduate school.

The Department of Communication Disorders provides undergraduate students with the academic background to successfully enter a graduate program in speech-language pathology or audiology. The undergraduate curriculum provides knowledge in normal and disordered speech, language, swallowing and hearing processes. Coursework in the major is supported by additional courses in psychology, counseling, biology, physics, and statistics.

## Background Check

As a condition for participation in clinical aiding, in which direct client contact is required, students are required to have a background check. Information on the background check process will be provided by the department. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Bachelor of Science in Communication Disorders (B.S.C.D.)

- Major in Communication Disorders (p. 437)

## Courses in Communication Disorders (CDIS)

### CDIS 1331. Introduction to Communication Disorders.

Study of speech, hearing, and language development and its disorders; descriptions of communicative disorders and their etiologies for the speech-language pathologist, health professional, and classroom teacher.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### CDIS 3312. Neuroanatomy for Communication Disorders.

This is a lecture course that examines the organization of the brain, spinal cord, and peripheral nervous system. Significance of the areas of the nervous system that are primary or secondary for speech, language and hearing are the main focus of this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### CDIS 3325. Anatomy and Physiology of the Speech Production System.

Description of structure and function of the speech production system with emphasis on physical problems in speech, language, and hearing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### CDIS 3359. Phonetics.

The course is designed to analyze normal and abnormal phonological processes in children and adults. Proficiency in transcription using the International Phonetic Alphabet (IPA) is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### CDIS 3369. Hearing Science.

This course is designed to provide foundational knowledge in the areas of acoustics, auditory and vestibular anatomy/physiology, psychoacoustics, and speech perception across the lifespan.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### CDIS 3375. Speech Science.

This course is designed to provide a conceptual foundation in voice and speech production, speech perception, and acoustic analysis of voice and speech. The course will begin with the math and physics of acoustics, to provide students with a strong foundation in acoustics necessary to master speech science. Content will cover acoustical phonetics, theories of speech production and perception, and clinical application emphasizing acoustic instrumentation and software used in communication disorders. Examples of concepts to be covered include frequency, pitch, intensity, loudness, decibels, waveforms, spectra, spectrograms, filters, vocal tract transfer function, formants, and acoustic software for voice and speech analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### CDIS 3377. Language Science.

This course is designed to investigate various aspects of language, including its structure, processing, acquisition, and neurological organization. The course will cover at least the following topics of language science: Linguistics (the lexicon, morphology, and syntax), language acquisition (acquisition of multiple languages, disorders of language in children, role of culture in developing language), psycholinguistics (lexical processing, sentence processing, bilingual language processing), and neurolinguistics (brain imaging, disorders of language in adults).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 3462. Speech Sound Disorders.**

This course is designed to provide the study of principles and procedures for the identification, description, assessment, and treatment of speech sound disorders in children. Students will observe demonstrations of assessment and treatment procedures during lab. (WI) Prerequisite: CDIS 3325 and CDIS 3359 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**CDIS 4101. Advanced Independent Study.**

This course is designed to provide an in-depth study of selected topics in Communication Disorders for the exceptionally motivated student. Work is done on an independent basis with a faculty member and only with prior departmental permission.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 4201. Advanced Independent Study.**

This course is designed to provide an in-depth study of selected topics in Communication Disorders for the exceptionally motivated student. Work is done on an independent basis with a faculty member and only with prior departmental permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 4301. Advanced Independent Study.**

In-depth study of selected topics in Communication Disorders for the exceptionally motivated student. Work done on an independent basis with faculty member and only with prior departmental permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 4317. Service Delivery in Communication Disorders.**

Provides a foundation of clinical management to prepare CDIS students to work in a variety of settings. Emphasis will be placed on techniques of goal and objective sequencing, report writing, evaluation of services, ethics, and interdisciplinary collaboration. Prerequisite: CDIS 3462 and CDIS 4330 and [CDIS 4350 or CDIS 4466] all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**CDIS 4330. Speech and Language Development.**

This course is designed to acquaint students with acquisition of speech and language in children. Basic information from linguistics, psycholinguistics, psychology, and communication are examined for children in various stages of development. Prerequisite: CDIS 3377 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 4335. Bilingual Speech Sound Disorders.**

Typical development of Spanish-English bilingual/bidialectal children's articulation and phonology will be discussed. Assessment and intervention of articulation and phonology with bilingual/bidialectal children will also be addressed. The information and theoretical foundations serve as a guide for students to critically evaluate and clinically apply research in bilingual populations. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 4340. Augmentative Communication Systems.**

This course is designed to review methods of non-oral communication as applied to hospital, rehabilitation, and school settings. Use of electronic communication systems emphasized. Prerequisite: CDIS 4330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 4344. Clinical Practicum in Communication Disorders.**

This course is the supervised clinical practicum in speech-language pathology. Must be taken each semester student participates in any supervised clinical practicum in speech-language pathology.

Prerequisites: CDIS 1331, CDIS 3359, and CDIS 4330 all with grades of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**CDIS 4350. Survey of Neurogenic Communication Disorders.**

An introduction to acquired speech, language, cognitive and swallowing disorders resulting from brain injury. Basic neuroanatomy and physiology are reviewed, followed by discussion of the etiology, diagnosis, treatment, and prognosis of these disorders. Emphasis is placed on aphasia, motor speech disorders, right hemisphere syndrome, traumatic brain injury, dementia and dysphagia. Prerequisite: CDIS 3312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter



**CDIS 4370. Aural Rehabilitation.**

Principles and procedures in the habilitation and rehabilitation of hearing impaired children and adults. (WI) Prerequisites: CDIS 4420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**CDIS 4371. An Introduction to Stuttering and Voice Disorders.**

This is an introductory course on childhood-onset stuttering and voice disorders. Specific to stuttering, students will learn the etiology, assessment and treatment of childhood-onset stuttering. Specific to voice disorders, students will learn the basic anatomy and physiology of voice, normal voice, types of voice disorders, their assessment and treatment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 4420. Diagnostic Audiology.**

This course is designed to relate anatomy and physiology of the auditory system and the science of acoustics to the study of normal and pathological auditory function. Laboratory experience in administration and interpretation of audiological tests. Discussion of professional opportunities in the field of audiology and provision of audiological service to special populations will be held. Prerequisite: CDIS 3369 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**CDIS 4466. Language Disorders.**

The study of principles and procedures for the identification, description, assessment and remediation of language disorders in infants, children, and adolescents. Students will observe demonstrations of assessment procedures and types of language disorders within the context of clinical procedures. Describing observed behaviors and analyzing language samples will be emphasized. Prerequisite: CDIS 4330 with a grade of "C" or better.

**4 Credit Hours. 4 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**Minimum required: 120  
semester credit hours**

**Admission Requirements**

1. The Bachelor of Science in Communication Disorders (B.S.C.D.) degree with a major in Communication Disorders requires admission to the university and admission to the program. For more information visit: <http://www.health.txstate.edu/cdis/prospective-students/Admissions.html>
2. Students start out as Bachelor of Science in Health Sciences, pre-communication disorders concentration majors. Once the student

is accepted into the Junior/Senior sequence, the major becomes Communication Disorders (CDIS)

3. Admission to the CDIS junior/senior-level courses is competitive and selective. Enrollment is limited by student/faculty ratios in both academic and clinical components of the program.
4. Students must be in overall good standing to apply.
5. An overall GPA of 3.0 is required to be considered for admission.
6. The application for admission is submitted to the department by May 15th. Admission decisions are made after the end of Summer I. All students will be notified by letter of the CDIS. Undergraduate Admission Committee's decisions. Student selection is made on academic performance and not on the basis of race, color, religion, gender, age, or national origin.
7. A minimum grade of C in support and major classes listed as part of the freshman/sophomore years in the degree plan below. These classes must be completed by the end of the Summer 1 session in the same calendar year in which the student wishes to begin the junior/senior sequence.

Code	Title	Hours
CDIS 1331	Introduction to Communication Disorders	3
HP 3302	Biostatistics	3
PSY 3300	Lifespan Development	3
HIM 2360	Medical Terminology	3
BIO 2430	Human Physiology and Anatomy	4

9. Students are ranked by their GPA in the following five required classes and admittance in the junior/senior year is based on this ranking. Preference for admission is given to students who have not repeated any of the five courses. These classes must be completed by the end of the Summer 1 session in the same calendar year in which the student wishes to begin the junior/senior sequence. The following courses must be taken in the 50 hours to be considered for admission:

Code	Title	Hours
PHYS 1310	Elementary Physics I	3
CDIS 1331	Introduction to Communication Disorders	3
BIO 2430	Human Physiology and Anatomy	4
HP 3302	Biostatistics	3
PSY 3300	Lifespan Development	3

**General Requirements**

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
3. Nine hours of writing intensive (WI) courses are required for graduation.
4. Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
5. Students must have attained a major GPA of 2.75 to graduate.

6. The junior/senior-level CDIS course sequence begins during the fall semester only. CDIS courses must be taken in the sequence identified in the degree plan.
7. After admission into the Junior/Senior sequence, failure to enroll in all of the recommended CDIS courses for that semester as identified by an advisor in conjunction with the Degree Plan will delay graduation at least a year.
8. If a student has not earned the minimum major GPA requirement of 2.75 for graduation and has not earned "C" or higher in all CDIS courses, the student will be allowed to re-take CDIS courses only until the student achieves the GPA of 2.75. CDIS students are NOT permitted to re-take CDIS courses if they have earned C's or higher in the courses. If a grade below "C" in a junior- or senior-level CDIS courses is earned, the student will not be allowed to continue as a Communication Disorders student and must change majors to something other than CDIS. This change will be done in conjunction with the student's CDIS academic advisor and the College of Health Professions' Advising Center.

## Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
CDIS 1331	3	Select one of the following (Life and Physical Sciences Component Code 030):	4
American History Component Code 060	3	BIO 1330 & BIO 1130 (TCCN BIOL 1306 & 1106)	
Select one of the following (Mathematics Component Code 020):	3	BIO 1331 & BIO 1131 (TCCN BIOL 1307 & 1107)	
MATH 1315 (TCCN MATH 1314)		American History Component Code 060	3
MATH 1319 (TCCN MATH 1324)		PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 & 2306])	3
MATH 1329 (TCCN MATH 1325)		COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
MATH 2417 (TCCN MATH 2412)			
MATH 2471 (TCCN MATH 2413)			
PSY 1300 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301])	3		
US 1100 <sup>1</sup>	1		
	<b>16</b>		<b>16</b>

		Sophomore	
First Semester Hours		Second Semester Hours	
ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3	ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	Select one of the following (Life & Physical Sciences Component Code 030):	3
HIM 2360 (TCCN HITT 1305)	3	PHYS 1310 (TCCN PHYS 1305)	
BIO 2430 (TCCN BIOL 2404)	4	PHYS 1320 (TCCN PHYS 1307)	
PSY 3300	3	PHYS 1315 (TCCN PHYS 1301)	
		PHYS 1325 (TCCN PHYS 1302)	
		POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
		Select one of the following:	3
		HP 3302	
		PSY 2301 (TCCN PSYC 2317)	
		SOCI 3307	
		CJ 3347	
		ENG 3303	3
	<b>16</b>		<b>15</b>
		Junior	
First Semester Hours		Second Semester Hours	
CDIS 3325	3	CDIS 3369	3
CDIS 3359	3	CDIS 3375	3
CDIS 3312	3	CDIS 4330	3
Support Course	3	Support Course	3
CDIS 3377	3		
	<b>15</b>		<b>12</b>
		Senior	
First Semester Hours		Second Semester Hours	
CDIS 3462	4	CDIS 4317	3
CDIS 4340	3	CDIS 4370	3
CDIS 4420	4	CDIS 4466	4
CDIS 4350	3	CDIS 4344 <sup>2</sup>	3
		Support Course	3
	<b>14</b>		<b>16</b>
<b>Total Hours: 120</b>			

<sup>1</sup> If US 1100 is waived, the student must have a minimum of 120 hours to graduate. See the College Advising Center.

<sup>2</sup> CDIS 4344 is taken either in the first or second semesters of the senior year. The department assigns which semester it is taken.

**Support Courses**

Code	Title	Hours
ANTH 3302	Introduction to Linguistic Anthropology	3
ANTH 3331F	Body Talk: Gestures, Communication, and Society	3
CDIS 4371	An Introduction to Stuttering and Voice Disorders	3
CDIS 4301	Advanced Independent Study	3
COUN 3320	Introduction to Counseling and Psychotherapy	3
ENG 3319	The Development of English	3
PSY 3315	Psychopathology	3
HIM 3301	Hospitals and Health Systems	3
HIM 3310		3
PSY 3316	Personality Psychology	3
PSY 3322	Brain and Behavior	3
PSY 3341	Cognitive Processes	3
PSY 3350	Cognitive Behavioral Therapies	3
SOCI 3383	Aging and Society	3

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[www.health.txstate.edu/HA/](http://www.health.txstate.edu/HA/) (<http://www.health.txstate.edu/HA/>)

The Bachelor of Healthcare Administration degree with a major in healthcare administration (BHA) integrates healthcare management theory and practice, and prepares graduates to assume entry to entry-level management positions in a variety of healthcare settings. These settings include health maintenance organizations (HMO), physician group practice, hospitals, insurance companies, clinics, and medical offices. Healthcare administrators manage employees, prepare and maintain budgets, procure resources and perform other administrative functions so that the clinical professionals can provide their services. The major is certified by the Association of University Programs in Health Administration.

**Immunization Requirements**

It is a policy of the College of Health Professions that each student must provide a Health Report completed by a physician or licensed healthcare provider and must take certain immunizations before the student can be placed in a clinical or residency assignment. Information on these requirements and forms to be supplied may be obtained through the school office.

**Background Check and Drug Screening**

As a condition for placement in all professional practice sites, students are required to have a background check and/or drug screen to meet requirements set by individual sites. Information on the drug screening process will be provided by the School of Health Administration. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code will affect eligibility for placement in field experience.

**Bachelor of Healthcare Administration (B.H.A.)**

- Major in Healthcare Administration (p. 442)

**Minor**

- Healthcare Administration (p. 443)

**Subjects in this school include: HA (p. 439), HP (p. 442)**

**Courses in Healthcare Administration (HA)****HA 3308. Healthcare Organization.**

Overview of the healthcare system and the role hospitals have played and continue to play in the future. Analysis of organizational structure of a hospital and other healthcare agencies, administrative and management elements necessary for policy determination, decision making, and control to achieve institutional goals and objectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 3309. Ethics in the Health Professions.**

This course introduces the student to a sound foundation in well-established ethical theories and a familiarity with terms, concepts and issues in ethics as applied to the health professions. Also provides practical methods for proceeding from considered reflection to informed action in solving ethical problems. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HA 3311. Independent Study in Healthcare Administration.**

An in-depth study of a single topic or problem confronting the healthcare industry. This course affords the student an opportunity to focus on a topic/problem or group of related problems impacting healthcare managers. This course may be repeated for credit with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 3315. Healthcare Administration History, Culture, and Language.**

An introduction to the historical and cultural development of modern healthcare administration in contemporary American society. Special attention is given to the mores of health services delivery including critiques and use of professional behavior and language. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Multicultural Content

**Grade Mode:** Standard Letter

**HA 3324. Supervisory Management for Healthcare Managers.**

Introduction to the following functions of supervisory management: planning, organizing, staffing, influencing, and controlling; as well as the connective processes of decisionmaking, coordinating, and communicating in healthcare organizations. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HA 3329. Human Resources in Healthcare Management.**

Human resource management as applicable to the healthcare field. Course will cover human resource planning, staffing, job requirements, job descriptions, sources of labor supply, training and education programs, salary administration, employee communications, legal considerations, union-management relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 3340. Management of Health Information Systems.**

Provides an introduction to information systems for healthcare facilities and agencies. Covers determining what information is needed by whom; designing information flows, procurement of computer/telecommunication resources, assuring information security, and continuing management of information systems supporting healthcare delivery.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 3341. Project Management & Professional Development in Healthcare.**

This course examines the professional development and project management processes as applied to the healthcare industry. Emphasis is placed on staff development, needs analysis, task analysis, development of training and continuing education programs for healthcare personnel. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HA 3344. Patient Care Management & Quality Improvement in Health Care Integrated Delivery Systems.**

This course is an introduction of integrated delivery systems and their operations. It includes an examination of patient care management and the patient experience. A framework for understanding healthcare quality efforts is also an integral part of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 3347. Essentials of Healthcare Law.**

This course includes a review of the laws pertaining to healthcare institutions, physicians, and other healthcare workers who contribute to patient care. Tort and contract law are emphasized. The course addresses policy issues and ethics through topics like patient rights, reproduction, and end of life decisions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 3375. Principles of Accounting for Healthcare Managers.**

Provides an introduction to accounting useful in healthcare facilities and agencies, and demonstrates the application of accounting principles and techniques in the healthcare field. Prerequisite: HP 3325 and [ECO 2301 or ECO 2314] both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 3376. Financial Management for Healthcare Managers.**

A concentration in the fundamentals of healthcare financial management including the financial organization of nonprofit facilities, sources of operating revenue, management of working capital, and the allocation, control and analysis of resources. Prerequisite: HA 3375 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 4121. Problems in Healthcare Administration.**

In-depth study of a singular problem considered to be of immediate concern to the health care industry. Special emphasis is placed on problems unique to managers in the field of health administration. May be repeated with permission of department chair.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 4141. Healthcare Comprehensive Exam Review and Administration including Field Placement Orientation.**

A course in which each of the respective faculty will review their portion of the comprehensive examination that all HA majors are required to successfully pass during their final semester of study. The comprehensive exam will be administered at the conclusion of the course. In addition, students will be prepared to move from the classroom setting to a workplace scenario.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**HA 4221. Problems in Healthcare Administration.**

In-depth study of a narrow range of topics considered to be of immediate concern to the health care industry. Special emphasis on problems unique to managers in the field of health administration. May be repeated with permission of department chair.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 4305. Healthcare Services Marketing.**

The course applies the principles of services marketing to healthcare organizations. The course will present tools to identify and close the gaps that exist between customer expectation of services and the services provided and to ensure quality of health care.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 4315. Health Services Operations Management.**

An introduction to methodologies used to seek solutions to health administration problems which affect technical and professional personnel. Designed to place emphasis on techniques most directly applicable to models of administration and management decision making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HA 4318. Employment Law in Healthcare Management.**

This course examines the legal aspects of healthcare human resource management. Each of the major federal and state enactments impacting human resource management will be studied in depth. Prerequisite: HA 3329 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 4320. Seminar in Healthcare Administration.**

Current trends and problems in health administration affecting health administration technical and professional personnel. Designed to place emphasis in selected areas of administration and management. Research paper and presentation is required of each student. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HA 4322. Public Health Administration.**

This course introduces the healthcare manager to public health and its role in preventing illnesses and improving the health of the community. Students will learn about the role of the manager in disease prevention and how to participate and lead community efforts for the wellness of the community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 4325. Healthcare Strategic Management.**

This capstone class integrates accounting, finance, marketing, MIS, and organizational behavior in the creation of sustainable competitive advantage. Health care case studies will be used to illustrate key concepts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HA 4440. Practicum Internship A.**

Students with specialization in management participate in a health services based practicum. Experiences in providing opportunities for observation, participation, and practical application of administrative or management skills in the institutional setting are required. Must have a 2.25 major GPA and have completed all junior year major courses.

**4 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**HA 4441. Practicum Internship B.**

Studies tailored to particular interests and needs of individual students. A variety of experiences may be used to enrich the program for students with special needs or demonstrated competencies. This course is taken in the final semester of study.

**4 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**HA 4848. Healthcare Administrative Residency.**

Designed for students who have limited or no previous background in healthcare management/administration. Includes rotation through selected major departments, culminating in a major project. This course is taken in the final semester of study.

**8 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit



## Courses in Health Professions (HP)

**HP 3302. Biostatistics.**

The course introduces major statistical concepts and procedures as applied to clinical science students with an emphasis on inferential statistics. Topics include: descriptive statistics, hypothesis testing, comparison statistics, relationship statistics, association statistics, and beginning epidemiological ratios. Students are introduced to major statistical packages. Prerequisite: MATH 1315 or MATH 1319 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**HP 3325. Healthcare Statistics.**

The course introduces major statistical concepts and procedures as applied to healthcare administration students with an emphasis on descriptive statistics. Topics include: healthcare statistical terminology, descriptive statistics, hypothesis testing, comparison statistics, relationship statistics, and association statistics. Prerequisite: MATH 1315 or MATH 1319 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

Minimum required: 120 semester credit hours

## Admission Requirements

- Any student admitted to Texas State may declare Pre-Healthcare Administration as the major. To declare Pre-Healthcare as a major, contact the Health Professions Advising Center or School of Health Administration.
- Continuation into the Healthcare Administration major is guaranteed to students who:
  - have an overall GPA of 2.00;
  - are in good academic standing at Texas State;
  - have successfully completed their general education core curriculum; and
  - have completed the following support courses with a "C" or higher: MATH 1315 or an equivalent, ECO 2301 or 2314, HP 3325 or an equivalent, and HA 3308.
- To declare Healthcare Administration as the student's major and continue into junior level, first semester Healthcare Administration courses, the student must complete a change of major form with the School of Health Administration. Students can begin their junior level, first semester Healthcare Administration courses in a fall or spring semester only.

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.
- Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
- All students are required to complete a residency for the B.H.A. The Joint Commission requires accredited healthcare facilities to complete criminal background checks on all employees. Therefore, a background check is required during your 3rd semester (enrollment in HA 4141) prior to the residency semester. If there is any reason that could prevent your placement at a facility, you will be asked to meet with the B.H.A. Program Director and/or the Field Placement Coordinator to determine if you will be able to complete the residency requirement. Issues with the background check could impact residency placement and ability for employment in the healthcare industry.
- All students must pass an EXIT exam administered in HA 4141.
- All students are required to have attained a grade of "C" or higher in each HA course. Students are required to take HA courses in a prescribed sequence. All 3000-level courses must be completed before enrolling in any 4000-level courses. All 4000-level courses must be completed before enrolling in field placement.
- Students are allowed to repeat each HA course once, and only once, to improve their grade. In the event that B.H.A. students do not make a "C" or better when repeating a course, they will be suspended from the major. B.H.A. students suspended from the B.H.A. program have a right of appeal and should contact the B.H.A. Director.
- All students are required to pass an EXIT exam administered in HA 4141 before enrolling in field placement.
- All students must have attained a 2.00 Texas State GPA or better and 2.25 HA GPA or better.

## Course Requirements

			Freshman
First Hours Semester	Second Hours Semester		
Communication Component Code 010	3 Communication Component Code 010\	3	
Component Area Option 090	3 Life and Physical Sciences Component Code 030	3	
American History Component Code 060	3 American History Component Code 060	3	
Mathematic Component Code 020 <sup>2</sup>	3 Social and Behavioral Sciences Component Code 080	3	

Life and Physical Sciences Component Code 030	3 Language, Philosophy, and Culture Component Code 040	3
US 1100 <sup>1</sup>	1	
	<b>16</b>	<b>15</b>

			Sophomore
First Hours Semester	Second Hours Semester	Summer Hours	
Component Area Option 090	3 Government/Political Science Component Code 070	3 Elective	5
Creative Arts Component Code 050	3 ECO 2301 or 2314 (TCCN ECON 1301 or 2302 )	3	
Government/Political Science Component Code 070	3 Choose one of the following:	3	
ISAN 1323 or CS 1308 (TCCN BCIS 1305 or COSC 1301)	3 CJ 3347		
Elective	3 HP 3325		
	HP 3302 or		
	PSY 2301 (TCCN PSYC 2317)		
	SOCI 330		
	HA 3308	3	
	Elective	3	
	<b>15</b>	<b>15</b>	<b>5</b>

			Junior
First Hours Semester	Second Hours Semester		
HA 3309	3 HA 3341	3	
HA 3324	3 HA 3340	3	
HA 3315	3 HA 3376	3	
HA 3375	3 HA 3344	3	
HA 3329	3 HA 3347	3	
	<b>15</b>	<b>15</b>	

			Senior
First Hours Semester	Second Hours Semester		
HA 4305	3 HA 4848	8	
HA 4315	3		

HA 4318	3
HA 4322	3
HA 4325	3
HA 4141	1
	<b>16</b>
	<b>8</b>

**Total Hours: 120**

<sup>1</sup> If US 1100 is waived, the student must have a minimum of 120 hours to graduate. See the College Advising Center.

<sup>2</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1319 (TCCN 1324), MATH 1329 (TCCN MATH 1325), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

The minor in Healthcare Administration requires 18 semester credit hours. The Healthcare Administration minor is designed to complement the student's major with the objective of providing an introductory curriculum, which can assist the student in gaining employment in healthcare and healthcare related career fields. This objective can be achieved by: building on general education core foundations; offering scheduling flexibility for non-traditional students; introducing students to health services management functions through the mastery of certain skills including communication, decision-making, and coordination, unique to healthcare administration; and preparing students for graduate study. The minor requires 18 hours including:

Code	Title	Hours
<b>Required Courses</b>		
HA 3308	Healthcare Organization <sup>1</sup>	3
HA 3324	Supervisory Management for Healthcare Managers	3
HA 3347	Essentials of Healthcare Law	3
<b>Electives</b>		
Choose 9 hours from the following:		9
HA 3309	Ethics in the Health Professions	
HA 3315	Healthcare Administration History, Culture, and Language	
HA 3329	Human Resources in Healthcare Management	
HA 3340	Management of Health Information Systems	
HA 3341	Project Management & Professional Development in Healthcare	
HA 3344	Patient Care Management & Quality Improvement in Health Care Integrated Delivery Systems	
HA 3375	Principles of Accounting for Healthcare Managers	
HA 3376	Financial Management for Healthcare Managers	

**Total Hours 18**

<sup>1</sup> HA 3308 must be taken prior or concurrent with other HA courses.

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Round Rock Campus

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[www.health.txst.edu/HIM/](http://www.health.txst.edu/HIM/) (<http://www.health.txst.edu/HIM/>)

Health Information Management (HIM) improves the quality and efficiency of healthcare delivery through the management and application

of information and technology. HIM programs prepare students to work in a digital health profession which focuses on health data, analytics, information governance, health informatics, compliance, privacy, cybersecurity, artificial intelligence, and the management of associated resources and technology. The HIM profession addresses the structure, application, and translation of data into usable forms of information such as the electronic health record (EHR), required by interdisciplinary healthcare teams to improve patient outcomes.

Graduates from the Bachelor of Science in Health Information Management (BSHIM) program work in multiple settings throughout the healthcare industry and beyond. These settings include the continuum of care delivery organizations such as hospitals, clinics, physician practices, long-term care, mental health, and other ambulatory care facilities. The profession has recently seen significant expansion in nonpatient care settings, with careers in managed care, insurance companies, electronic health record systems vendors, cybersecurity firms, consulting services, government agencies, higher education institutions, and pharmaceutical companies. With a strong component of online information exchange, many HIM professionals can work remotely either part-time or fulltime.

BSHIM graduates are well prepared to continue their studies in graduate-level programs in HIM, health informatics, data analytics, or other related disciplines. The department offers a fully online Master of Health Information Management (MHIM) degree with a variety of options and concentrations.

The BSHIM program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Upon completion of the degree, graduates of the program are eligible to sit for the Registered Health Information Administrator (RHIA) examination offered by the American Health Information Management Association (AHIMA).

The department is also recognized by the Healthcare Information and Management Systems Society (HIMSS) as an Approved Education Partner.

The department offers a Minor in Health Information Management and a Minor in Health Informatics. The minor programs fit well with majors in Health Sciences and other disciplines in the College of Health Profession and across university. The minor programs do not establish eligibility for the RHIA credential. Students completing the BSHIM degree automatically qualify for the Minor in Health informatics which is comprised of courses built into the major.

The BSHIM degree is offered in multiple delivery format options: traditional in-person, face-to-face courses on the Round Rock Campus and fully online. All options lead to the same degree and have the same academic requirements. Fulltime students may complete the BSHIM degree in four years.

The curriculum is organized as a two-plus-two program with completion of general education core curriculum and program prerequisite coursework prior to beginning the two-year professional phase. Once qualified for the professional program, the final two years consist of the required HIM coursework reinforced with a professional practice experience assignment at an appropriate affiliated site. Students who have achieved the Registered Health Information Technician (RHIT) credential or graduated from a CAHIIM accredited HIT program may qualify to receive academic credit toward the BSHIM degree for previous coursework.

## Immunization Requirements

It is a policy of the College of Health Professions that each student must provide a Health Report form completed by a physician or licensed healthcare provider, providing evidence of specific immunizations before the student can be placed in a professional practice experience assignment. Information on these requirements and forms may be obtained through the Department of Health Informatics & Information Management.

## Background Checks and Drug Screening

As a condition for placement in professional practice experience sites, students may be required to have a background check and/or drug screening and/or meet other specific requirements as set by individual sites. Information on these requirements may be obtained through the Department of Health Informatics & Information Management.

## Bachelor of Science in Health Information Management (B.S.H.I.M.)

- Major in Health Information Management (p. 447)

### Minor

- Health Informatics (p. 448)
- Health Information Management (p. 449)

## Courses in Health Informatics (HI)

### HI 3310. Health Informatics.

This course provides an introduction to health informatics and information management to include hardware components, systems architecture, operating systems, languages, software applications, tools, electronic health record systems, and related concepts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### HI 3311. Databases in Healthcare.

This course provides an overview and introduction to healthcare databases and data management. Topics in the course will include database theory, information infrastructure, and data analytics. Implementing healthcare information systems and decision making will also be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HI 4401. Advanced Health Informatics and Security.**

This course includes the integrated use of health information technology throughout the healthcare organization. Students will evaluate how technology impacts the overall hospital operations from both clinical and administrative perspectives. Students will also use planning and assessment tools to simulate health information technology system implementation and explore securing those systems.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

## Courses in Health Information Management (HIM)

**HIM 2360. Medical Terminology.**

Recognizing and understanding the vocabulary of the health care professions. Emphasis on medical prefixes, suffixes, and word roots as used in oral and written communications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 3301. Hospitals and Health Systems.**

This course will explore the organizational structure and delivery of healthcare in hospitals and health systems and the associated roles of HIM professionals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 3350. Legal Aspects of HIM.**

A study of the legal issues of Health Information Management with focus on statutory and regulatory requirements, case law and practical applications. Special legal problems associated with access to patient information, disposition of records, confidentiality and privacy, reporting requirements and compliance with current state and federal legislation are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 3364. Coding and Classification Systems.**

This course provides an introduction to ICD, CPT and other classifications and nomenclatures. Emphasis will be placed on the assignment of diagnosis and procedure codes. Management and use of encoding systems is examined. Prerequisite: Instructor approval.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**HIM 3367. Disease and Medical Science.**

This course provides an introduction to the general disease process. Stress is placed upon the occurrence of disease, the signs and symptoms of disease, the test values and findings of disease, and the therapeutic treatment of disease.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 3380. Quality Management for HIM.**

This course provides an overview of regulatory agency requirements for quality improvement, utilization management, and risk management. Methods for integrating these procedures for credentialing and peer review are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 3390. Principles of Management in HIM.**

This course provides a study of the principles of management in healthcare and related organizations. The course provides the opportunity to apply the fundamentals of management including ethical decision making and human resources in the expanded role of the HIM Professional.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 3463. Foundations of Health Information Management.**

This course is an introduction to the foundational principles of health information management. The content, structure, processing, use, analysis, and management of the health record will be explored. Instruction will include the use of the electronic health record and other common health information management software applications.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 4101. Problems in Health Information Management.**

Comprehensive study of selected problems related to professional practice issues and changes in the health information management field. Emphasis will be on problem solving and application of management skills. May be repeated with permission of department chair.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 4320. Principles of Information Governance.**

This course applies the principles of Information Governance to guide the HIM professional's evolving role in the transition from paper to electronic health records and managing the increasing volume of electronic health data. Topics include data architecture, analytics, integrity, quality and decision support; enterprise content management; and consumer informatics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 4331. Research and Data Analytics for HIM.**

This course provides an introduction to research methods and experimental inquiry to acquaint the student with skills to critique and conduct studies in the health information management domains. The course will also provide the foundation for compiling, analyzing, and displaying statistics related to the delivery of healthcare.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 4363. Comparative Record Systems.**

Theory and procedures for the maintenance and regulation of patient health information records in non-hospital medical care facilities to include long term care, ambulatory care, psychiatric care, rehabilitation and prison record keeping systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 4364. Coding and Compliance for HIM.**

This course provides a continued study of coding and classification systems including the role of mapping among clinical terminologies. Compliance activities and methods will be covered for HIM topics to include code audits, fraud and abuse, and clinical documentation improvement.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**HIM 4370. Finance and Reimbursement Methodologies for HIM.**

Course will address the reimbursement cycle from patient registration to claims billing with an emphasis on federal regulations and the role of HIM regarding payment systems. Topics will include accounting principles, budget processes, cost/benefit analysis, healthcare finance, compliance strategies, charge-master and casemix management, and payment systems and plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 4383. Seminar in Health Information Management.**

Problem-solving course designed to assimilate actual internship encounters and theory. Emphasis is on integration of knowledge and making transition to the applications required to function as a health information manager.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 4385. Health Information Management Practicum.**

Assignments made to promote uniformity and competency levels required of entry-level health information management professionals with practical application of administrative, management, and problem-solving skills required to complete projects and portfolio material. (WI).

**3 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HIM 4388. Practicum.**

Faculty-led administrative training for the associate degree health information progression student. Emphasis is placed on analysis of HIM personnel functions, interdepartmental relations, use of health information technology, and committee assignments. Full-time participation of the student is required.

**3 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required|Time Conflicts Permitted|Writing Intensive

**Grade Mode:** Credit/No Credit

**HIM 4389. Professional Practice Experience.**

Supervised management experience and training in a healthcare or related setting. Student will participate in administrative, management, and problem-solving activities in the institutional setting. Full-time participation is required. Option for health information associate degree and post-baccalaureate students. (WI).

**3 Credit Hours. 1 Lecture Contact Hour. 40 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required|Time Conflicts Permitted|Writing Intensive

**Grade Mode:** Credit/No Credit

**HIM 4390. Contemporary Leadership Principles for HIM.**

An analysis of the expanded role of the Health Information Management professional in the healthcare environment and application of the principles involved. Topics include strategic planning and forecasting, marketing, entrepreneurialism, leadership, motivation, consensus building, workforce diversity, change management, work redesign/reengineering, and project management. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter



**HIM 4393. Project Management for Health Information Management.**

This course provides pragmatic guidance in the management of HIM projects by analyzing critical success factors and skills required to organize, plan, monitor, and control projects in healthcare settings. Cost and schedule estimation techniques are presented together with proposal writing, negotiation, communication, risk management, HIM technology assessment, and quality measurement. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HIM 4501. Professional Practice Experience.**

Supervised management experience and training in a healthcare or related setting. Student will participate in administrative, management, and problem-solving activities in the institutional setting. Full-time participation is required in addition to scheduled campus visits. (WI).

**5 Credit Hours. 1 Lecture Contact Hour. 40 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Credit/No Credit

or SOCI 3307 Statistics for the Behavioral Sciences

or CJ 3347 Statistics For Criminal Justice

5. Students must have a maximum of nine hours of general education core curriculum and prerequisite coursework remaining to declare the HIM major.
6. Students must have a minimum overall GPA of 2.50 and a minimum 2.0 Texas State GPA to declare the HIM major.
7. Credit for previous HIM coursework, credentials, and/or work experience will require a review of the student's transcripts and approval by the Department Chair.
8. Due to course sequencing and the scheduling of the professional practice experience assignment, students who drop out of the program for one or more semesters will be required to obtain approval from the Department Chair to progress.
9. Immunization Requirements - It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider, and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and the required forms may be obtained through the department office.
10. Background Check and Drug Screening - As a condition for placement in some professional practice sites, some students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the background check/drug screening process will be provided by the department. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Minimum required: 120 semester credit hours

### Admission Requirements

1. The Bachelor of Science in Health Information Management (B.S.H.I.M.) degree with a major in Health Information Management requires admission to the university and admission to the program. Any student admitted to Texas State may declare pre-HIM as their major. To declare pre-HIM as a major, contact the College of Health Professions Advising Center. For more information visit: <http://www.health.txst.edu/him> (<http://www.health.txst.edu/him/>).
2. Any student meeting the requirements for the HIM major must complete an online application to the program (<https://www.health.txst.edu/him/admissions/Application.html>). For academic advising, students should contact the College of Health Professions Advising Center or the Department of Health Information Management.
3. Students completing the required courses for the BSHIM major will also earn the built-in Minor in Health Informatics (<http://mycatalog.txstate.edu/undergraduate/health-professions/information-management/health-informatics-minor/>).
4. Students must have completed the majority of the general education core curriculum and other prerequisite coursework listed below before being allowed to declare the HIM major:

Code	Title	Hours
HIM 2360	Medical Terminology	3
BIO 2430	Human Physiology and Anatomy	4
ISAN 1323	Introduction to Microcomputer Applications	3
or CS 1308	Computer Literacy and the Internet	
HP 3302	Biostatistics	3
or PSY 2301	Introduction to Statistics	
or MATH 2328	Elementary Statistics	

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students completing this program will earn the BSHIM degree with a Minor in Health Informatics (<http://mycatalog.txstate.edu/undergraduate/health-professions/information-management/health-informatics-minor/>) as a part of the curriculum.
3. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
4. Nine hours of writing intensive (WI) courses are required for graduation.
5. Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
6. To graduate with a B.S.H.I.M., students must successfully complete all HIM and HI courses with a "C" or higher. HIM courses are normally taken in a lock-step sequence. Most courses are offered only once each academic year; therefore, progress in the program may be delayed if a student falls out of sequence due to failure to successfully complete the HIM and HI courses with the required "C" or higher. Due to course sequencing and the scheduling of the professional practice experience assignment, students who drop out

of the program for one or more semesters will be required to obtain approval from the Department Chair to progress.

7. All students must have attained a 2.0 or higher Texas State University GPA with a minimum of 2.25 GPA in the HIM major and the Health Informatics minor courses to graduate.
8. During the second semester of the senior year students are required to take a five-week professional practice experience course. This course requires that the students spend a minimum of five weeks in other institutions (hospitals or healthcare related organizations) away from campus. Or, students who have already completed an associate degree in health information or another bachelor's degree or who have significant healthcare experience are required to complete a two-week professional practice experience course. Students must furnish their own transportation and housing. Due to the time and distances involved, no courses other than those listed can be taken in the final semester of the senior year.

## Course Requirements

Freshman		
First Hours Semester	Second Hours Semester	
Communication Component Code 010	3 Communication Component Code 010	3
Mathematic Component Code 020 <sup>2</sup>	3 American History Component Code 060	3
Government/ Political Science Component Code 070	3 Life and Physical Sciences Component Code 030	3
Component Area Option 090	3 Social and Behavioral Sciences Component Code 080	3
US 1100 <sup>1</sup>	1 ISAN 1323 or CS 1308 (TCCN BCIS 1305 or COSC 1301)	3
	<b>13</b>	<b>15</b>

Sophomore		
First Hours Semester	Second Hours Semester	
American History Component Code 060	3 Government/ Political Science Component Code 070	3
Life and Physical Sciences Component Code 030	3 Language, Philosophy, and Culture Component Code 040	3

HIM 2360	3 BIO 2430 (TCCN BIOL 2404)	4
Creative Arts Component Code 050 [TCCN HUMA 1315]	3 Choose one of the following:	3
Component Area Option 090	3 HP 3302	
	PSY 2301 (TCCN PSYC 2317)	
	CJ 3347	
	MATH 23 (TCCN MATH 1342)	
	SOCI 3307	
	<b>15</b>	<b>13</b>

Junior		
First Hours Semester	Second Hours Semester	Summer Hours
HIM 3301	3 HI 3311	3 HIM 4370
HI 3310	3 HIM 3350	3 HIM 4363
HIM 3463	4 HIM 3380	3
HIM 3367	3 HIM 3364	3
HIM 3390	3 HIM 4393	3
	<b>16</b>	<b>15</b>
Senior		
First Hours Semester	Second Hours Semester	
HI 4401	4 HIM 4383	3
HIM 4331	3 HIM 4385	3
HIM 4364	3 HIM 4390	3
HIM 4320	3 HIM 4501	5
	<b>13</b>	<b>14</b>

**Total Hours: 120**

<sup>1</sup> If US 1100 is waived, the student must have a minimum of 120 hours to graduate. See the College Advising Center.

<sup>2</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

The Minor in Health Informatics requires 19 semester credit hours. Health Informatics integrates health sciences, information science, computing, and data analytics to assist healthcare professionals to organize, analyze, and apply health information to improve clinical decisions and patient outcomes. The Minor in Health Informatics is designed to complement existing majors including the Bachelor of Science in Health Information

Management, BS in Health Sciences, BS in Public Health, and other majors across the university.

Code	Title	Hours
<b>Required Courses</b>		
HI 3310	Health Informatics	3
HI 3311	Databases in Healthcare	3
HI 4401	Advanced Health Informatics and Security	4
HIM 4331	Research and Data Analytics for HIM	3
<b>Electives</b>		<b>6-7</b>
ISAN 3389	Programming for Data Processing	
GEO 2426	Fundamentals of Geographic Information Systems	
HIM 3380	Quality Management for HIM	
HA 4322	Public Health Administration	
HIM 4393	Project Management for Health Information Management	
PH 3370	Epidemiology	
<b>Total Hours</b>		<b>19-20</b>

The minor in Health Information Management requires 19 semester credit hours.

Health Information Management (HIM) is the profession dedicated to the effective management of patient information and healthcare data needed to deliver quality treatment and care to the public. The fundamentals of the HIM profession continue to evolve over time, becoming less paper-based and increasingly electronic. HIM plays a critical role in the successful implementation of electronic health records and ensures that providers, healthcare organizations, and patients have access to the right health information when and where it is needed while maintaining the highest standards of data integrity, confidentiality and security. The minor in Health Information Management is designed to enhance other degrees on which students are working.

HIM academic advising is required to assure appropriate sequencing and progression requirements are maintained.

Completion of the HIM minor does not meet eligibility requirements for the Registered Health Information Administrator certification examination offered by the American Health Information Management Association.

Code	Title	Hours
<b>Required Courses</b>		
HIM 3301	Hospitals and Health Systems <sup>1</sup>	3
HIM 3463	Foundations of Health Information Management <sup>1</sup>	4
<b>Electives</b>		<b>12</b>
HI 3310	Health Informatics	
HI 3311	Databases in Healthcare	
HIM 3350	Legal Aspects of HIM	
HIM 3380	Quality Management for HIM	
HIM 3390	Principles of Management in HIM	
HIM 4320	Principles of Information Governance	
HIM 4331	Research and Data Analytics for HIM	
HIM 4363	Comparative Record Systems	
HIM 4370	Finance and Reimbursement Methodologies for HIM	
HIM 4390	Contemporary Leadership Principles for HIM	

HIM 4393 Project Management for Health Information Management

**Total Hours 19**

<sup>1</sup> HIM 3301 and HIM 3463 must be taken prior to or concurrent with other HIM courses.

Nursing Building  
Round Rock Campus  
100 Bobcat Way  
Round Rock, TX  
T: 512.716.2900 F: 512.716.2911  
www.nursing.txst.edu (<https://www.nursing.txst.edu/>)

## Vision

The St. David's School of Nursing at Texas State University will provide supportive and creative educational programs, which inspire those who teach and those who learn, based on mutual respect and a commitment to contribute to the health of individuals, families, populations, communities, and the environment worldwide.

## Mission

### Preparing the next generation of nurses to improve health care.

The St. David's School of Nursing educates and prepares graduates, using innovative teaching strategies and state-of-the-art technology. Graduates provide ethical, safe, and effective patient-centered care and contribute to present and emerging research and health management practices. Graduates demonstrate competence in clinical judgement, collaborate as member and leaders of interprofessional healthcare teams, and utilize scientifically-based interventions. As caring professional nurses, graduates manage illness; promote, maintain, and restore health; and provide end-of-life care for diverse individuals, families, populations, and global communities across the lifespan.

The nursing program, located in Round Rock, offers two undergraduate nursing programs. The first is the traditional face-to-face upper division Bachelor of Science in Nursing (BSN) program which prepares graduates to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN®) and to meet the minimum competencies for beginning practice as a R.N.

The BSN curriculum is 120 hours, including 61 hours of Texas State core curricular and prerequisite courses; and 59 hours of nursing courses. The nursing courses are offered in a lock step format over five semesters beginning at the junior level. Academic study in nursing is combined with clinical experiences in affiliated clinical settings, as well as hours spent in the simulation laboratories in the School of Nursing building. The curriculum is designed to accommodate the latest teaching technologies and learning strategies to provide students with the skills, knowledge and abilities needed for professional nursing practice in the 21st century.

The second undergraduate nursing program offered is a hybrid BSN completion program (RN to BSN). This program is for students who hold an associate's degree in nursing from an associate college. The BSN completion curriculum includes 30 hours of upper division nursing courses. The didactic courses are primarily offered online with strategically placed face-to-face experiences. The curriculum is designed for flexibility with the option of full or part-time study. Students can finish in as little as two semesters or as many as six semesters with extension

by permission from the undergraduate program director. This program is only offered if sufficient enrollment is met.

Our graduates are prepared to pursue clinical excellence and certification by the American Nurses Credentialing Center (ANCC) and to continue formal education for the Master of Science in Nursing degree and/or Doctorate in Nursing. Nursing programs offered in the St. David's School of Nursing are accredited by the Commission on Collegiate Nursing Education (CCNE).

## Academic Progression

Students enrolled in the undergraduate nursing programs are required to earn a grade of at least 75% (C or higher) in all courses in the BSN curriculum. Students must have a minimum GPA of 2.50 in their nursing coursework to graduate from the BSN program.

BSN courses are offered in a lock-step sequence. Each course will be offered only once each academic year; therefore, progress in the program will be delayed if the student fails or drops/withdraws from a course. A student may repeat a nursing course only one time. Following a second nursing course failure or withdrawal from a nursing course beyond the census date (12th class day), a student will be dismissed from the nursing program, but not Texas State University.

## Immunizations and Basic Life Support

It is a policy of the College of Health Professions that each student will complete a Health Certificate and Immunization Test Form. These forms must be signed by a physician or licensed healthcare provider. Students must stay current on immunizations. Basic Life Support for Healthcare Professionals must also be completed and remain current.

## Criminal Background Check and Drug Screen

The traditional BSN student will undergo two background checks. The first criminal background check conducted through the Board of Nursing is required prior to admission to the St. David's School of Nursing. The second background check, conducted by a third-party vendor, is required by our clinical partners and a valid social security number must be submitted. Both traditional and RN to BSN students must complete the third-party background check and drug screen as part of the admission process. All nursing students are subject to random, or for cause, drug and alcohol screens throughout the program.

## Bachelor of Science in Nursing (B.S.N.)

- Major in Nursing (p. 453)
- Major in Nursing (RN to BSN Online Completion Program) (p. 455)

## Courses in Nursing (NURS)

### NURS 3110. Health Assessment Across the Life Span Practicum.

This course requires demonstrated competency in the performance and documentation of physical assessments of well individuals and nursing care plans using the nursing process, critical thinking, and evidence-based practice. Apply teaching/learning principles in meeting the education needs of patients and demonstrate measures to maintain confidentiality of personal health information.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

### NURS 3121. Essentials of Nursing Care Practicum.

This course requires the use of nursing process and clinical reasoning principles to provide safe, effective, patient-centered care. Evidence-based practices will be used when performing essential nursing skills and procedures to care for patients experiencing acute and chronic alterations in health status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

### NURS 3221. Essentials of Nursing Care.

This foundation course focuses on basic concepts related to essential nursing care of patients across the life span. Integration of knowledge of family systems, evidence-based practice, clinical reasoning, and the nursing process to provide safe, effective, patient-centered care will occur.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

### NURS 3230. Healthcare Systems.

Access and barriers to healthcare, past and current healthcare policy, and the professional nurse's role in policy and delivery of healthcare, will be emphasized. Qualitative and quantitative research in relation to healthcare systems, evidence based nursing practice, and ethical topics will be discussed.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### NURS 3240. Nursing Care Across the Life Span Practicum.

This course uses clinical experiences to apply the nursing process in providing safe, effective, and quality care to patients and families across the life span. Clinical reasoning and judgment will be used to provide ethical, holistic, and patient-centered nursing care, promote health, prevent disease, and manage illness.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 3241. Acute Nursing Care of Adults Practicum.**

This course requires students to use evidence-based and collaborative practice principles in providing safe, effective, and quality care to adult patients experiencing acute, rapidly changing, life-threatening alterations in health status. Clinical reasoning and judgment will be used to provide ethical, holistic, patient-centered nursing care, manage illness, and promote health.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 3250. Health Assessment Across the Life Span.**

Conducting health histories and physical assessments of well individuals and developing nursing care plans that include patient age-specific health promotion, illness prevention, and risk factors will be emphasized. Assessments will encompass cultural domains, diversity, belief systems, and the implications for traditional as well as complementary and alternative healthcare.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 3260. Psychiatric Mental Health Nursing Practicum.**

This course utilizes clinical experiences to promote application of the nursing process in providing quality care to those experiencing mental health issues across the life span. Competency in using evidence-based practices to promote health, prevent disease, and manage illness will be developed.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 3300. Foundations of Professional Nursing Practice.**

This course explores the history of nursing in the context of the evolving healthcare system. Laws, regulations, and ethical guidelines impacting nursing licensure and professional practice will be examined. The delivery of patient and family-centered, evidence-based, and safe quality care will be explored. (WI) (MULP).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Multicultural Perspective|Writing Intensive

**Grade Mode:** Standard Letter

**NURS 3302. Research and Ethics.**

Introduction to critical appraisal of qualitative and quantitative research, and application of research and evidence-based processes used to improve decision-making and patient care outcomes across health settings. Integration of theory, information systems, clinical judgment, interprofessional perspectives and analysis of ethical conduct provide a foundation for learning the research process. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**NURS 3360. Psychiatric Mental Health Nursing.**

This course applies theories, concepts, knowledge, and skills for the comprehensive nursing care of those coping with mental health issues. Building on a liberal education, this course integrates theories of mental illness, psychopathology, and current research findings as they relate to the presentation of symptoms and holistic management of care.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 3430. Pathophysiology and Pharmacology for Nurses.**

Introduction and overview of pathology, clinical pharmacology and pharmacotherapeutics, including how major drugs are used therapeutically for age-specific clients. Other topics to be covered include drug laws and regulations, patient and nurse safety.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 3440. Nursing Care Across the Life Span.**

This foundational course focuses on the use of clinical reasoning and judgment to provide collaborative care to patients across the life span experiencing chronic and acute alterations in health status. Content is presented based on evidence-based practice and the prevalent health needs of patients. Prerequisite: NURS 3430 with a grade of "C" or better.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**NURS 3441. Acute Nursing Care of Adults.**

This course focuses on the use of evidence-based practice and clinical reasoning and judgment to provide collaborative care to adult patients experiencing acute, rapidly changing, life-threatening alterations in health status.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4160. Maternal and Newborn Nursing Practicum.**

This course is the clinical companion to NURS 4260. Concepts, knowledge, and skills taught in NURS 4160 will be applied to both simulation lab and clinical settings. Evidence-based, developmentally and culturally appropriate nursing care in a variety of patient-care settings will be emphasized.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit



**NURS 4170. Pediatric Nursing Practicum.**

This course is the clinical companion to NURS 4270. Concepts, knowledge, and skills taught in NURS 4270 will be applied in the simulation lab and clinical settings. Evidence-based, developmentally and culturally appropriate nursing care in a variety of patient-care settings will be emphasized.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 4201. Professional Growth and Empowerment.**

This course focuses on issues related to professional practice, career planning, personal goal setting, and empowerment of self and others. Factors related to job performance, performance expectations and evaluation, reality orientation, and commitment to lifelong learning will be discussed.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4204. Policy, Ethics, and Advocacy in Professional Nursing Practice.**

This course explores the baccalaureate prepared nurse's role informing the public policy process. Nursing jurisprudence, principles of nursing ethics, patient safety advocacy, standards and scope of nursing practice, professional boundaries, nursing peer review, and whistleblower protections are emphasized to prepare students to influence the U.S. Health Care System and society.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4205. Healthcare Information Technology in Nursing Practice.**

This course emphasizes nursing informatics and technology used in healthcare settings to research, support and implement safe quality patient care. Nursing administrative applications, pre-care and care support, electronic health records, clinical information systems, telehealth, informatics promoting community and consumer health, HIPAA, and technology to enhance collaboration in healthcare are covered.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4211. Nursing Care in Complex Health Practicum.**

This course focuses on providing care to patients with complex health alterations and life situations. Nursing care to patients in a variety of settings will be provided using the concepts of therapeutic communication and collaborative interventions with a focus on the complexity of the patient's or family's needs.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 4260. Maternal and Newborn Nursing.**

This course applies the nursing process and evidence-based practice to the care of maternal and newborn patients in a variety of healthcare settings. The course emphasizes the use of the nursing process to provide care to individuals and families that is developmentally and culturally focused.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4270. Pediatric Nursing.**

This course applies the nursing process and evidence-based practice to the care of pediatric patients in acute, outpatient and non-acute care settings. The course emphasizes the use of the nursing process to provide care to individuals and families that is developmentally and culturally appropriate.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4280. Community and Population Health Nursing Practicum.**

Clinical experiences will expose students to a variety of community and public health environments, health programs and policies in order to learn how nursing care is delivered to populations in community settings.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 4302. Role Transition to Professional Nursing.**

This didactic course focuses on role responsibility and accountability for transition into baccalaureate nursing practice. Emphasis is given to core professional standards and ethical values fundamental to nursing. Principles of professional communication, critical thinking, and role socialization will be integrated within an organizational context for professional growth. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**NURS 4303. Safety and Quality in an Interprofessional Environment.**

This course emphasizes the professional nurses' role in application of evidence based quality improvement and risk reduction strategies that promote safe environments while maximizing resources and opportunities for positive patient outcomes. Participation in highly effective Interprofessional teams is emphasized with concepts applied to local, national and international health issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4311. Nursing Care in Complex Health.**

This course explores traditional and contemporary nursing concepts related to complex health alterations, compensations, and environments across the life span. Therapeutic communication, education, and collaborative interventions with diverse individuals and groups are emphasized including the use of complementary and alternative modalities to meet the needs of patients.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**NURS 4341. Leadership and Management of Nursing Care Practicum.**

Leadership and management skills in a variety of nursing care situations will be applied. Nursing unit leadership and staff assignments based on assessment of client needs, resources, priorities, and competencies of staff will be covered. Assessment and evaluation of the provision of evidence-based nursing care will be performed.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 4351. Leadership and Management of Nursing Care.**

Students discuss leadership and management theories related to organizational nursing roles, including competencies required for complex change, performance improvement, and transformational leadership. Organizational contexts, structure, processes, and culture, in leading and directing patient centered care are examined, along with relationships between governance structures, practice environments, and positive patient outcomes. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**NURS 4380. Community and Population Health Nursing.**

This course explores concepts of Community-Oriented Nursing Practice with an emphasis on using the nursing process to assess the health of communities and diverse populations. Public Health Nursing Practice and Community-Based Nursing Practice are discussed with an emphasis on health promotion and the prevention of disability and disease.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

University. A separate admission application for the Bachelor of Science in Nursing program is required.

- The BSN priority admission application for the Nursing program opens September 15 and closes January 15. The general application period opens September 15 and closes March 15. One hundred (100) to one hundred and fifty (150) students are admitted each fall.
- Applicants must have a nursing prerequisite GPA of 3.0 or higher. A minimum grade of "C" is required for NUTR 2360 and HDFS 1351 or PSY 3300. The nursing prerequisite GPA is calculated based on grades in the following courses:

Code	Title	Hours
MATH 1315	College Algebra	3
	or MATH 1319 Mathematics for Business and Economics I	
	or MATH 1329 Mathematics for Business and Economics II	
	or MATH 2417 Pre-Calculus Mathematics	
	or MATH 2471 Calculus I	
HIST 1310	History of the United States to 1877	3
HIST 1320	History of the United States, 1877 to Date	3
POSI 2310	Principles of American Government	3
POSI 2320	Functions of American Government	3
NUTR 2360	Nutrition Science	3
PSY 3300	Lifespan Development	3
	or HDFS 1351 Lifespan Development	
PSY 1300	Introduction to Psychology	3

- Applicants must also have a Science GPA for 3.0 or higher. Science courses require a minimum grade of "C" for admission. Applicants may have "CR" for BIO 1330 or CHEM 1341, but not both courses. A maximum of 8 attempts (including W) on the 5 science courses listed below, with no more than 2 attempts on any one science course, is permitted. There can be a maximum of 18 remaining prerequisite credit hours, (including no more than 2 of the 5 science courses) left to complete in the spring and summer semesters before final admission to the St. David's School of Nursing. At least 3 science courses must be completed with a minimum grade of "C" prior to applying to the program and cannot be included in the 18 remaining prerequisite hours. The science GPA is calculated based on grades in the following courses:

Code	Title	Hours
BIO 1330	Functional Biology	3
BIO 2440	Principles of Microbiology	4
	or BIO 2400 Microbiology	
BIO 2451	Human Anatomy and Physiology I	4
BIO 2452	Human Anatomy and Physiology II	4
CHEM 1341	General Chemistry I	3

- An application fee must accompany the St. David's School of Nursing application.
- Additional criteria include a personal persuasive essay, scores from the Test of Essential Academic Skills (TEAS) test version 7, pre-nursing entrance assessment, and an interview of selected candidates with the admissions committee.

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number.

**Minimum required: 120  
semester credit hours**

## Admission Requirements

- The Bachelor of Science in Nursing (B.S.N.) degree with a major in Nursing requires admission to Texas State University prior to submitting the St. David's School of Nursing application. For more information visit: <http://www.nursing.txstate.edu/>
- Texas State students interested in pursuing the Bachelor of Science in Nursing degree will be enrolled in the Bachelor of Science in Health Sciences pre-nursing concentration upon entry into Texas State

See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

- For transfer students, 34 semester credit hours may be transferred from a Texas public institution of higher education for the Nursing Field of Study and be applied to the Bachelor of Science in Nursing degree with a major in Nursing at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
BIO 2440	Principles of Microbiology	4
TCCN: BIOL 2421 or 2420		
CHEM 1341	General Chemistry I	3
TCCN: CHEM 1311		
NUTR 2360	Nutrition Science	3
TCCN: BIOL 1322		
BIO 2451	Human Anatomy and Physiology I	4
TCCN: BIOL 2401		
BIO 2452	Human Anatomy and Physiology II	4
TCCN: BIOL 2402		
PSY 1300	Introduction to Psychology	3
TCCN: PSYC 2301		
PSY 3300	Lifespan Development	3
TCCN: PSYC 2314		
MATH 2328	Elementary Statistics	3
TCCN: MATH 1342		
ENG 1310	College Writing I	3
TCCN: ENGL 1301		
ENG 1320	College Writing II	3
TCCN: ENGL 1302		
Total hours		34

- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.
- Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
- To graduate with a B.S.N., a student must successfully complete all nursing courses with a "C" or better in addition to completing all prerequisite courses.
- All students must have attained a 2.0 or higher Texas State University GPA with a minimum of a 2.50 GPA in the Nursing major to graduate.
- All students must complete the B.S.N. program in three years from the time of first admission.
- Each nursing course is offered only once each academic year; therefore, progress in the program is delayed if the student fails a course. A student may repeat a nursing course only once. A second nursing course failure or withdrawal from nursing courses will result

in the student being dismissed from the nursing program. However, the student is not dismissed from Texas State University.

## Course Requirements

### Freshman

First Hours Semester	Second Hours Semester	
Communication Component Code 010	3 Communication Component Code 010	3
BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3 CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3
American History Component Code 060	3 American History Component Code 060	3
MATH 1315, 1319, or 1329 (Mathematic Component Code 020 [TCCN MATH 1314, 1324, or 1325])	3 Language, Philosophy, and Culture Component Code 040	3
PSY 1300 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301])	3 Component Area Option 090	3
US 1100 <sup>1</sup>	1	
16		15

### Sophomore

First Hours Semester	Second Hours Semester	
BIO 2451 (TCCN BIOL 2401)	4 BIO 2452 (TCCN BIOL 2402)	4
Component Area Option 090	3 Creative Arts Component Code 050 [TCCN HUMA 1315]	3

Government/ Political Science Component Code 070	3 NUTR 2360 (TCCN BIOL 1322)	3	
BIO 2440 (TCCN BIOL 2420)	4 HDFS 1351 or PSY 3300	3	
	Government/ Political Science Component Code 070	3	
<b>14</b>		<b>16</b>	
			<b>Junior</b>
<b>First Hours</b> <b>Semester</b>	<b>Second Hours</b> <b>Semester</b>	<b>Summer Hours</b>	
NURS 3250	2 NURS 3440	4 NURS 3441	4
NURS 3110	1 NURS 3240	2 NURS 3241	2
NURS 3300	3 NURS 3260	2	
NURS 3121	1 NURS 3360	3	
NURS 3221	2 NURS 3302	3	
NURS 3430	4		
<b>13</b>		<b>14</b>	<b>6</b>
			<b>Senior</b>
<b>First Hours</b> <b>Semester</b>	<b>Second Hours</b> <b>Semester</b>		
NURS 4270	2 NURS 4380	3	
NURS 4260	2 NURS 4351	3	
NURS 4160	1 NURS 4280	2	
NURS 4311	3 NURS 4201	2	
NURS 4211	2 NURS 4341	3	
NURS 3230	2		
NURS 4170	1		
<b>13</b>		<b>13</b>	
<b>Total Hours: 120</b>			

<sup>1</sup> If US 1100 is waived, the student must have 120 hours to graduate. See College Advising Center.

## Minimum required: 120 semester credit hours

### Admission Requirements

- Application for admission to the registered nurse to Bachelor of Science in Nursing online completion program (R.N. to B.S.N.) must be made to the St. David's School of Nursing in addition to the university admission procedures. Students will be admitted each fall. Admission to the R.N. to B.S.N. online completion program requires admission to the university and admission to the program. For more information visit: <http://www.nursing.txstate.edu/>
- Students must hold unencumbered registered nurse license in a state or region that is approved through the National Council of State Boards of Nursing.

- All applicants must have a nursing school GPA of 2.5 and an overall GPA of 2.5 to apply.
- Completion of 42 hours of general education core curriculum requirements, including the following major-specific core requirements or field of study complete:
  - PSY 1300 or SOCI 1310
  - MATH 1315
  - CHEM 1341
- Completion of 18 hours of support coursework or field of study complete:
  - BIO 2400 or BIO 2440
  - BIO 2451
  - BIO 2452
  - NUTR 2360
  - PSY 3300 or HDFS 1351
- Students who earned an Associate in Applied Science Nursing degree (A.D.N.) from a regionally accredited community college will be awarded 30 semester credit hours toward the B.S.N. online completion.
- Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.

### General Requirements

- Students have three years to complete the degree requirements.
- For transfer students, 34 semester credit hours may be transferred from a Texas public institution of higher education for the Nursing Field of Study and be applied to the Bachelor of Science in Nursing degree with a major in Nursing at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
BIO 2440	Principles of Microbiology	4
TCCN: BIOL 2421 or 2420		
CHEM 1341	General Chemistry I	3
TCCN: Any 4 SCH course including lab (CHEM 1341 + 1 hour ELNA)		
NUTR 2360	Nutrition Science	3
TCCN: BIOL 1322/HECO 1322		
BIO 2451	Human Anatomy and Physiology I	4
TCCN: BIOL 2401		
BIO 2452	Human Anatomy and Physiology II	4
TCCN: BIOL 2402		
PSY 1300	Introduction to Psychology	3
TCCN: PSYC 2301		
PSY 3300	Lifespan Development	3
TCCN: PSYC 2314		
MATH 2328	Elementary Statistics	3
TCCN: MATH 1342		
ENG 1310	College Writing I	3
TCCN: ENGL 1301		

ENG 1320	College Writing II	3
TCCN: ENGL 1302 or ENGL 2311		
Total hours		34

T: 512-245-9081  
F: 512-245-1477  
[www.health.txst.edu/rtt](https://www.health.txst.edu/rtt) (<https://www.health.txst.edu/rtt/>)

3. All upper division courses must be completed with a grade of "C" or better to progress. Students must complete prerequisite courses prior to enrolling in upper division nursing courses.

## Course Requirements

Fall Semester Hours		Spring Semester Hours	
NURS 4302	3	NURS 4380	3
NURS 3430	4	NURS 4280	2
NURS 3110	1	NURS 3230	2
NURS 3250	2	NURS 4303	3
NURS 3302	3	NURS 4351	3
NURS 4204	2	NURS 4205	2
15		15	

Total Hours: 30

**This integrated bachelor's and master's degree program is found in the graduate catalog. For information regarding the program please click here (p. 2308).**

Willow Hall Room 336  
Round Rock Campus

200 Bobcat Way  
Round Rock, TX  
T: 512-716-2652  
[www.health.txstate.edu/PT](http://www.health.txstate.edu/PT) (<http://www.health.txstate.edu/PT/>)

The Department of Physical Therapy, located in Round Rock, is a graduate department offering a Doctor of Physical Therapy (DPT) degree with a major in Physical Therapy. For more information, contact the Department of Physical Therapy or visit <http://www.health.txstate.edu/pt> (<http://www.health.txstate.edu/pt/>).

The requirements for admission to the DPT degree program include:

1. completion of a baccalaureate degree with a minimum 3.0 GPA in the last 60 hours of coursework completed for that degree,
2. minimum 3.0 GPA in all science courses,
3. minimum 3.0 GPA in prerequisite courses,
4. competitive GRE on verbal and quantitative, and
5. completion of all prerequisite courses, including general psychology, abnormal or developmental psychology, statistics, medical terminology, human physiology and anatomy or human structure and function, vertebrate physiology or physiology of exercise, general chemistry I and II, and general physics I and II.

This program is accredited by the Commission on Accreditation in Physical Therapy Education.

## Course in Physical Therapy (PT)

Avery Bldg Room 353  
Round Rock Campus

The radiation therapist is a key member of the professional team, which uses various forms of radiation to treat cancer patients. Radiation therapy may be used alone, or in combination with surgery or chemotherapy, and is the treatment of choice for cure of many cancers. Because of sustained contact with patients, the radiation therapist has considerable responsibility in patient care, dietary counseling and treatment evaluation. The radiation therapist must also appreciate the significant psychological impact that cancer has on patients and their families. The program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). The curriculum complies with the professional curriculum of the American Society of Radiologic Technologists.

The Bachelor of Science in Radiation Therapy (B.S.R.T.) degree with a major in Radiation Therapy, is a two- and one-half year program beginning in the junior year. The junior and senior years combine clinical experiences in the affiliated radiation therapy facilities with advanced academic study in the professional disciplines. The program is designed to prepare students for the technical, theoretical, and psychological aspects of this career. Students acquire the technical skills necessary to plan, deliver, and record a prescribed course of radiotherapy. Upon completion of the degree, students are eligible to apply to the ARRT national registry examination.

Any student entering Texas State may declare a Bachelor of Science (B.S.) Major in health Science (Pre-Radiation Therapy Concentration) as their major. Admission to Texas State does not guarantee admission to the program. Admission to the program is competitive and selective. It is recommended that students arrange academic advising at least once prior to making application. The academic sequence begins during the fall semester. Enrollment is limited by student/faculty ratios in the clinical components of the program. The deadline for submission of applications is January 15.

## Immunization Requirements

It is a policy of the College of Health Professions that each student must provide a Health Report completed by a physician or licensed healthcare provider, and must take certain immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and forms to be supplied may be obtained through the program office.

## Criminal Background Check/Drug Screening

As a condition for placement in some professional practice sites, students are required to have a background check and/or drug screening and meet other requirements set by individual sites. Information on the process of drug screening will be provided by the program. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for state license status following graduation and may affect admission consideration to the Radiation Therapy program.



# Bachelor of Science in Radiation Therapy (B.S.R.T.)

• Major in Radiation Therapy (p. 459)

## Courses in Radiation Therapy Technology (RTT)

### RTT 3120. Clinical Simulation Lab I.

Students are provided instruction and simulated practice in a controlled laboratory setting. This course provides first-year students foundational clinical set-up skills from which to build on during the clinical learning practicum course.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### RTT 3121. Clinical Simulation Lab II.

Students are provided instruction and simulated practice in a controlled laboratory setting. This course provides instruction, demonstration and participation in immobilization, positioning and simulation with the aid of an anthropomorphic phantom. Students will learn aspects of simulation for basic treatment delivery applications.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### RTT 3220. Directed Clinical Learning I.

Students will observe the basic operations of the radiation oncology clinic while interacting with the multidisciplinary team involved in providing treatment and care. The student will be introduced to oncology terminology, equipment, and techniques used for treatment. Learning is achieved through direct patient care, with instruction, demonstration and direct supervision.

**2 Credit Hours. 1 Lecture Contact Hour. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### RTT 3221. Directed Clinical Learning II.

Students will gain additional skills in clinical procedures, interaction with patients and professional personnel. Students apply knowledge from previous clinical learning experience under the supervision of a registered radiation therapist. Students are tested on intermediate clinical radiation therapy skills.

**2 Credit Hours. 1 Lecture Contact Hour. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### RTT 3300. Patient Care in Radiation Oncology.

This course will focus on basic nursing concepts involved in providing care for the cancer patient. Topics to be included in the class will be cancer as a chronic health problem, social roles and cancer, multidisciplinary approach to patient care, psychosocial dimension of cancer, in-treatment examinations, follow-up examinations, emergency management, chemotherapy and nutritional aspects of treating patients with cancer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### RTT 3301. Introduction to Radiation Oncology.

An overview of radiation oncology and the role of the radiation therapist. Presentations will orient the student to the physical and biological basis of radiation equipment, procedures, tumor pathology, and patient interaction. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

### RTT 3302. Radiologic Science and Medical Imaging.

This course will cover the principles governing production of radiation, interaction of radiation with matter, and protection of the radiation worker and patient from exposure. Basic principles of x-ray equipment, exposure factors, latent image formation, and processing of radiographs are presented. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### RTT 3310. Physics of Radiation Therapy I.

Students will learn the principles of radiation physics as they apply to the treatment and care of the cancer patient. Course will include a thorough review of x-ray production, fundamental principles, concepts and terminology. Topics studied include measurements, general principles, structure of the atom, structure of the matter, electrostatics, magnetism, electrodynamics, electromagnetism, rectification and production and properties of radiation and radiographic techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### RTT 3314. Radiation Therapy Sectional Anatomy.

The course provides instruction in identifying cross-sectional anatomy to develop the ability to make anatomic correlations between multiple planes of view. Major organs, lymphatics, vessels are emphasized as related to the clinical significance in the field of radiation therapy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 3350. Radiobiology.**

This course will cover the principles of cell response to radiation, including tissue sensitivity, survival, repair and the latent effects of irradiated tissue. Topics to be covered include the development of radiation science, cellular targets for radiation action, target theory, physical/ chemical factors affecting radiation response, biological factors, repair and recovery, fractionated doses and dose rate, early/ acute effects of whole body exposure, late/chronic effects of whole body exposure, and radiation protection dose guidelines.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4120. Clinical Simulation Lab III.**

Students are provided instruction and simulated practice in a controlled laboratory setting. A continuation of RTT 3121. This course provides instruction, demonstration, and participation in immobilization, positioning and simulation with the aid of an anthropomorphic phantom. Students will learn aspects of simulation for basic intermediate treatment delivery applications.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4121. Clinical Simulation Lab IV.**

Students are provided instruction and simulated practice in a controlled laboratory setting. A continuation of RTT 4120. This course provides instruction, demonstration and participation in immobilization, positioning and treatment simulation. Students will learn aspects of simulation for basic, intermediate, and some advanced treatment delivery applications.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4122. Clinical Simulation Lab V.**

Students are provided instruction and simulated practice in a controlled laboratory setting. A continuation of RTT 4121. This course provides instruction, demonstration and participation in immobilization, positioning and treatment simulation. Students will learn aspects of simulation for basic, intermediate, and some advanced treatment delivery applications.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4189. Radiation Therapy Literary Scholarship and Manuscript Writing.**

This intensive writing course provides instructions in research strategies, critical review and analysis of peer reviewed publications. An introduction to scholarly resources and professional manuscript development using peer reviewed journal guidelines for the profession of radiation therapy. This course prepares students for RTT 4191 Radiation Therapy Seminar. (WI).

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**RTT 4190. Professional Issues in Radiation Therapy.**

This capstone course provides a comprehensive review of the program curriculum and clinical practice in the field. Current radiation therapy treatment management techniques and issues are presented for analysis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4191. Radiation Therapy Seminar.**

This course is a continuation of RTT 4189. The course provides instruction in the completion of a final draft for the student's technical manuscript. The course work builds from the completed manuscript and draws from the material and knowledge gained in RTT 4189 to develop a formal presentation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4220. Directed Clinical Learning III.**

Students will continue to develop skills during this clinical course. Progressive interaction with patients and professional personnel are monitored as students practice radiation therapy in a supervised setting. Additional areas include problem solving, identifying machine components and basic side effect management. Students will demonstrate competence in beginning, and intermediate procedures.

**2 Credit Hours. 1 Lecture Contact Hour. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4221. Directed Clinical Learning IV.**

The course provides students the opportunity to continue to develop confidence and increased skill in simulation and treatment delivery. Students will demonstrate competence in beginning, intermediate, and some advanced procedures through supervised clinical instruction, progressing through a competency-based educational sequence.

**2 Credit Hours. 1 Lecture Contact Hour. 24 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4222. Directed Clinical Learning V.**

The students will complete their clinical training by practicing all the skills they have learned in the classroom, lab, and clinical practicum. The students will continue demonstrating proficiency while completing the Skills Competency Checklist.

**2 Credit Hours. 1 Lecture Contact Hour. 24 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4291. Radiation Therapy Registry Review.**

This course provides a comprehensive review of the program curriculum and clinical practice in the field. Current radiation therapy treatment management techniques and issues are presented for analysis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4310. Physics of Radiation Therapy II.**

Students will continue to learn the principles of cell response to radiation. Topics covered will include properties of x-ray and gamma radiation, radiation units, x-ray production, photon interactions, beam characteristics, radioactivity, treatment units, and particle irradiation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4330. Quality Assurance.**

Students will study quality assurance tests related to patient charts, treatment accessories, patient communication devices, machine reading and safety devices. Emphasis on quality control procedures to include Continuous Quality Improvement (CQI), Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and responsibilities of each team member in relation to quality assurance duties.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4331. Operational Issues in Radiation Therapy.**

Course content is designed to focus on various radiation therapy operational issues. Accreditation, CQI development and assessment techniques will be presented. Human resource issues and regulations impacting the radiation therapist will be examined. Topics include the role of network information systems within the radiation oncology department. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**RTT 4360. Dosimetry I.**

This course will cover the basic concepts in treatment planning and clinical dosimetry. Students will learn to identify treatment preparation processes and needs for beam modifying devices. Students will also be taught isodose charts for several treatment arrangements and be able to calculate a variety of external beam treatment formulas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4361. Dosimetry II.**

Students will learn additional concepts in treatment planning and clinical dosimetry addressed in Dosimetry I. Computerized treatment planning applications will enhance the understanding of medical dosimetry.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**RTT 4370. Clinical Radiation Oncology I.**

The first of a two-part course, this course advances the student's knowledge of neoplastic disease management. Instruction will focus on the regional anatomy and physiology, epidemiology and etiology, detection and diagnosis, diagnostic procedures, histopathology, patterns of spread principles of treatment, staging, and prognosis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4371. Clinical Radiation Oncology II.**

The second of a twopart course, this course is a continuation of disease specific instruction. Instruction will focus on the regional anatomy and physiology, epidemiology and etiology, detection and diagnosis, diagnostic procedures, histopathology, patterns of spread, principles of treatment, staging, and prognosis. Prerequisite: RTT 4370 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**Minimum required: 120  
semester credit hours**

**Admission Requirements**

1. The Bachelor of Science in Radiation Therapy (B.S.R.T.) degree with a major in Radiation Therapy requires admission to the university and admission to the program. For more information visit: <http://www.health.txstate.edu/rtt/>
2. Any student may declare Pre-Radiation Therapy as their major. Admission to Texas State does not guarantee admission to the program. Admission to the program is competitive and selective. It is recommended that students arrange academic advising at least once prior to making application.
3. The academic sequence begins during the fall semester. Enrollment is limited by student/faculty ratios in the clinical components of the program.

- The deadline for submission of applications is January 15.
- Satisfactory completion of all general education core curriculum and a minimum overall GPA of 2.75 is required for admission.
- Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
- Completion of the application packet is required for admission.
- Three letters of reference and a career goal statement are required for admission.
- Successful interview of selected candidates with admission committee.
- Twenty-four hours of clinical observation with completed evaluation on file by January 15.
- Students must be able to perform the 13 Technical Standards indicated by the American Disabilities Act (refer to program website or department for more information).
- Previous misdemeanor or felony convictions will affect admission to the program.
- Applicants must have a science and support course GPA of 3.0 or higher. No more than 2 attempts on any one science course is permitted. An applicant may repeat only one of the courses on this list. Courses included in the science and support course GPA computation include:

Code	Title	Hours
BIO 1330	Functional Biology	3
BIO 1331	Organismal Biology	3
BIO 2430	Human Physiology and Anatomy	4
AT 3358 or PSY 4390N	Clinical Pathopharmacology Psychopharmacology	3
CHEM 1341	General Chemistry I	3
CHEM 1141	General Chemistry Laboratory I	1
PSY 1300	Introduction to Psychology	3
MATH 2417 or MATH 2471	Pre-Calculus Mathematics Calculus I	4
PHYS 1320 or PHYS 1315 or PHYS 1325	Elementary Physics II General Physics I General Physics II	3
PHYS 1110 or PHYS 1115 or PHYS 1125	General Physics I Laboratory General Physics II Laboratory	1
HP 3302 or PSY 2301 or SOCI 3307 or MATH 2328 or CJ 3347	Biostatistics Introduction to Statistics Statistics for the Behavioral Sciences Elementary Statistics Statistics For Criminal Justice	3

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).

- Nine hours of writing intensive (WI) courses are required for graduation.
- Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
- To graduate with a B.S.R.T., a student must successfully fulfill the general education requirements and complete all RTT courses with a "C" or better. RTT courses are offered in a lock-step sequence. Each course is offered only once each academic year; therefore, progress in the program is affected should a student fall out of the sequence due to failure to successfully complete a course. A student who falls out of sequence (whether due to illness, course failure, or other reasons) will be delayed one year to repeat the course.
- A student may repeat a RTT course only once. If the student does not earn a grade of at least "C" upon repeating the course, the student cannot continue in the program.
- The student must meet the requirements for clinical competency as described in the Directed Clinical Learning syllabi.
- All students must have attained a 2.0 or higher Texas State University GPA with a minimum of a 2.75 GPA in the Radiation Therapy major to graduate.

## Course Requirements

		Freshman	
First Hours Semester	Second Hours Semester	Summer Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3 ENG Literature (Component Area Option Code 090/094) ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3
American History Component Code 060	3 American History Component Code 060	3 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3 BIO 1331 (TCCN BIOL 1307)	3 PSY 1300 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301])	3

COMM 131C (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3
US 1100 <sup>1</sup>	1 CHEM 1141 (TCCN CHEM 1111)	1
	<b>13</b>	<b>13</b>

**Sophomore**

First Hours Semester	Second Hours Semester	
BIO 2430 (TCCN BIOL 2404)	4 AT 3358 or PSY 4390N	3
POSI 2310 (Governmen Political Science Component Code 070 [TCCN GOVT 2306])	3 POSI 2320 (Governmen Political Science Component Code 070 [TCCN GOVT 2305])	3
MATH 2417 or 2471 (Mathematics Component Code 020 [TCCN MATH 2412 or 2413])	4 PHYS 1315	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3 PHYS 1115	1

Select  
one of the  
following:

HP 3302

PSY 2301  
(TCCN  
PSYC  
2317)

SOCI 330

MATH 2328  
(TCCN  
MATH  
1342)

CJ 3347

**14****13****Junior**

First Hours Semester	Second Hours Semester	Summer Hours	
RTT 3314	3 RTT 3310	3 RTT 4189	1
RTT 3301	3 RTT 3302	3 RTT 4360	3
RTT 3300	3 RTT 3350	3 RTT 4220	2
RTT 3220	2 RTT 4370	3 RTT 4120	1
RTT 3120	1 RTT 3221	2	
	RTT 3121	1	
	<b>12</b>	<b>15</b>	<b>7</b>

**Senior**

First Hours Semester	Second Hours Semester	
RTT 4371	3 RTT 4361	3
RTT 4330	3 RTT 4331	3
RTT 4310	3 RTT 4291	2
RTT 4221	2 RTT 4222	2
RTT 4121	1 RTT 4122	1
	RTT 4190	1
	<b>12</b>	<b>12</b>

**Total Hours: 120**

<sup>1</sup> If US 1100 is waived, the student must have 120 hours to graduate. See College Advising Center.

Willow Hall Room 214  
Round Rock Campus

200 Bobcat Way  
Round Rock, TX  
T: 512-716-2682 F: 512-716-2805  
[www.health.txstate.edu/rc/](http://www.health.txstate.edu/rc/) (<http://www.health.txstate.edu/rc/>)

The Bachelor of Science in Respiratory Care (BSRC) degree prepares students to practice as nationally credentialed respiratory care practitioners and take their place as a key healthcare team member. Skilled in assessing patients with breathing disorders in the emergency room, intensive care units and many other areas in healthcare facilities, respiratory therapists work directly with physicians on newborn, pediatric or adult patients to analyze oxygen levels and breathing difficulty. Therapists administer prescribed medications to relieve breathing distress, provide pulmonary/lung therapies, and conduct lung diagnostics for all ages. Graduates find employment in many settings such as hospitals, pulmonary rehabilitation clinics, doctors' offices, sleep labs, homecare, and air-life transport teams as they work with patients in the emergency room, newborn/pediatric/adult intensive care units, and many other areas.

Respiratory care (RC) majors attend lab and lecture classes on the Round Rock campus and gain clinical experience in Austin-area hospitals. Students successfully admitted to the program must complete the



sequenced curriculum within the cohort group. Individuals taking core courses prior to applying for admission to the RC program should contact the College of Health Professions' Advising Office and request a change of majors to Bachelor of Science in Health Sciences - Pre-Respiratory Care. The BSRC Program is accredited by the Commission on Accreditation for Respiratory Care (CoARC) and qualifies graduates to sit for national board credentialing exams to become a Registered Respiratory Therapist (RRT) through the National Board for Respiratory Care immediately upon completion.

Students having already completed an associate degree in Respiratory Care from another university or college are eligible to apply for admission to the BSRC Online Completion Program at Texas State for bachelor degree completion. Once accepted to the university and the BSRC Online Completion Program, this 100% online program admits student every fall, spring, and summer semester without the need to come to the Texas State campus. The online degree completion program features 8-week courses and has a program completion time of one year for the full-time student. Enrollment is open each fall, spring and summer semesters. For information on this option, please contact the BSRC Online Completion program director.

The department also offers a Master of Science in Respiratory Care (MSRC) degree with concentrations in Leadership and Polysomnography Technology (sleep diagnostics). Both concentrations provide 24 semester hours of core courses that build leadership and knowledge of research with 12 semester hours of either Leadership or Polysomnography studies. The Leadership track prepares credentialed therapists for mid-management leadership roles in the hospital as department managers, clinical educators, supervisors, and other opportunities. Individuals credentialed in Polysomnography (PSG) or sleep diagnostics provide diagnostic and therapeutic treatment for those suffering from sleep disorders such as obstructive sleep apnea, insomnia, narcolepsy, and other conditions. The (PSG) course of study prepares individuals to sit for national sleep board credentialing exams immediately upon completion.

A rolling enrollment allows students to enter the MSRC program each fall, spring, and summer. Admission to the MSRC program requires the applicant to have previously earned the RRT credential and completed a bachelor's degree from a regionally accredited institution. Please refer to The Graduate catalog for admission requirements and course descriptions.

## Immunization Requirements

It is a policy of the College of Health Professions that each student must provide the College Health Report completed by a physician or licensed healthcare provider and must complete specific required immunizations before being placed in a clinical or internship assignment. Information on these requirements and forms may be obtained through the departmental office.

## Background Checks and Drug Screening

As a condition for placement in some professional practice sites, all students are required to have a background check and/or drug screening to meet requirements of individual sites. Information on the drug screening process will be provided by the department to clinical facilities as required. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for state respiratory care practitioner license status following graduation and future employment in healthcare.

## Bachelor of Science in Respiratory Care (B.S.R.C.)

- Major in Respiratory Care (p. 465)
- Major in Respiratory Care (R.R.T. to B.S.R.C. Online Completion Program) (p. 467)

## Courses in Respiratory Care (RC)

### RC 2213. Introduction to Respiratory Care.

This course offers an in-depth overview of the respiratory care profession to acquaint the student with the responsibilities of the respiratory therapist as part of healthcare team. Progression of the profession, career opportunities, past and future impact of profession on patient recovery and health maintenance, and medical gas therapy will be covered.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### RC 3112. Pharmacology.

A comprehensive study of pharmacology principles. Receptor theory, clinical applications of medications, and historical analysis of first-generation medications will be covered. Current medication trends and recommendations are also examined.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### RC 3125. Pulmonary Function Testing.

This course examines the most common pulmonary function tests, their techniques, and the pathophysiology that may be evaluated by each test. Pulmonary function equipment, calibration, and the American Thoracic Society guidelines will be discussed. Laboratory practice of performing the tests will be provided to develop skills for testing patients.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### RC 3313. RC Clinical Practice I.

This course provides an introduction to respiratory care clinical skills, including vital signs, chest assessment, infection control, aerosolized medication delivery, oxygen therapy, hyperinflation therapy, and airway clearance. This course prepares the student for direct patient care to be performed in more advanced courses. Direct patient care is performed under close supervision.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3314. Respiratory Care Instrumentation.**

Through lectures and lab exercises, students are acquainted with concepts of design, function, and operation of basic respiratory care equipment. Oxygen cylinders, regulators, flowmeters, oxygen analyzers, oximeters, oxygen adjuncts, humidifiers, nebulizers, airways, and pressure cycled ventilators will be covered. The course also covers respiratory pharmacology, decontamination of equipment, and arrhythmia recognition.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3315. Cardiopulmonary - Renal Anatomy & Physiology.**

This course provides an in-depth human gross anatomy study of the cardiac, respiratory, and renal systems. Clinical application of pulmonary anatomy and physiology will also be explored.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3316. Fundamentals of Respiratory Care.**

This course provides a study of theories and modalities utilized in delivering, monitoring, and evaluating basic respiratory therapeutics to patients with compromised respiratory function in various healthcare settings. Aspects of artificial ventilation, arterial blood gas analysis, lung volume diagnostics, and hyperinflation intervention will be covered in patient scenarios.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3321. Cardiopulmonary Pathology.**

As an introduction to the assessment, treatment, and pathophysiology of respiratory diseases, this course focuses on the signs, symptoms, etiology, pathophysiology, diagnosis and treatment of selected diseases. Utilizing clinical simulation software to develop critical thinking regarding assessment, diagnostic data gathering. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**RC 3322. Critical Care Concepts.**

This course provides students with an in-depth study of selected respiratory care techniques with an emphasis on the care of critically ill patients. Critical skills and knowledge of mechanical ventilation, bedside diagnostic techniques, patient monitoring, and rehabilitation are explored in the critical care setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3323. RC Clinical Practice II.**

Students perform clinical procedures and interact with patients and professional personnel in a healthcare institution under the supervision of a respiratory therapist. Students gain direct patient care experience as presented in medical/surgical and pediatric clinical situations. Preparatory instruction is provided for mechanical ventilation and other critical care procedures.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3324. Critical Care Instrumentation.**

A comprehensive study of advanced equipment and technology utilized in the critical care, homecare, pulmonary rehabilitation and blood gas lab settings. Lectures and class activities will detail hardware for hemodynamic monitoring, supplemental oxygen administration, noninvasive monitoring, blood gas measurement, quality control and assurance and mechanical ventilator concepts.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3332. Hemodynamics.**

This course is an advanced study of cardiovascular hemodynamic measurements. Normal cardiovascular physiology and measures are examined, as well as variations caused by disease. Current clinical trends and practices in hemodynamic procedures are also explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3333. RC Clinical Practice III.**

A supervised clinical education experience in which the student administers advanced respiratory therapeutics to patients in the adult critical care setting. Diagnostic and monitoring procedures, including arterial blood gases, bedside physiologic monitoring, airway care, advanced pulmonary function testing, ventilator management will be performed according to physician orders.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3334. Neonatal Respiratory Care.**

An in-depth study of neonatal utero development, fetal lung development, fetal circulation, and cardiovascular changes at birth. Neonatal respiratory emergencies, neonatal respiratory diseases and management, congenital defects, and respiratory care procedures specific to the neonate will be discussed. A specific emphasis on neonatal mechanical ventilation will be included.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4211. Respiratory Care Research.**

This course provides an introduction to applied experimental design, research ethics, and data analysis focusing on the respiratory care profession. Students will participate in each step the research process from developing a personal research hypothesis and research design through IRB submission. Prerequisite: HP 3302 or equivalent.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4216. Disease Management.**

The course offers an in-depth description of common therapeutic modalities and treatment protocols used to offset the anatomic alterations and pathophysiologic mechanisms activated by selected disorders. Students will develop an understanding of how therapies work to offset the anatomic alterations of lungs caused by disease. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4221. Leadership and Management for Respiratory Care Professionals.**

This course is designed to comprehensively examine the dynamic evolution of respiratory care as a profession. The role of the respiratory care professional in the areas of leadership, management, and professional ethics will be explored with regards to the profession's impact on legislation, regulation, and politics. (WI).

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**RC 4223. ICU Internship.**

Through affiliations with agencies, hospitals and selected treatment centers, the student interns in the intensive care setting by providing patient care and administering critical care therapeutics. Analysis and clinical application of advanced ventilator care of patients is emphasized along with patient care diagnostics and management in the ICU.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**RC 4224. Research Seminar.**

This course is a study of the research process from a review of research design to methodology implementation including data collection, statistical analysis, and presentation of a research proposal on a topic in the respiratory care discipline. The course provides direct research experience culminating in a research paper and presentation. Prerequisite: RC 4211 with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4225. Specialization Internship.**

This course provides the student with an internship opportunity to gain clinical experience in sub-specialty areas including pediatrics, adult intensive care, neonatal intensive care, pulmonary function testing, home care/durable medical equipment, subacute care, pulmonary rehabilitation, polysomnography, education, and research. Specific specialty offerings will be based on clinical availability.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**RC 4309. Pulmonary Diagnostics.**

The course examines various pulmonary diagnostic techniques and the pathophysiology associated with each diagnostic measurement in disease management and clinical research. The course will provide an in-depth presentation of clinical indications for various diagnostic analyses including the ethical responsibilities associated with clinical research. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4311. Interdisciplinary Healthcare.**

This course introduces the respiratory care student to the role that respiratory therapists play within the interdisciplinary healthcare team. The course will allow students to gain experience in developing and applying strategies to improve patient outcomes through the inclusion of the respiratory therapist with various appropriate healthcare disciplines. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**RC 4312. Critical Care Clinical Simulation.**

Students will analyze concept review in preparation for national board examinations and evidence-based care. Classroom and laboratory instruction will demonstrate cumulative review of the Therapist Multiple Choice and the Clinical Simulation Examination national board exams. Clinical simulation case studies will be assessed reflecting real-life patient scenarios.

**3 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4314. Advanced Ventilator Concepts.**

This course provides an in-depth study of specific adult mechanical ventilators addressing traditional and proposed ventilator classification, various methods of operation, parameter interrelationships and ventilator patient monitoring. Lectures and class activities will focus on ventilator analysis of several contemporary volume-, time-, pressure- and flow-cycled ventilators with advanced graphics interpretation required.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4316. RC Clinical Practice IV.**

This course provides an advanced intensive care clinical education requiring students to monitor and administer critical care therapeutics on assigned patients in the adult and neonatal critical care setting. Cardiopulmonary diagnostic experience will be gained through arterial blood gas and co-oximetry assessment with ventilator graphic analysis.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4317. Pulmonary Rehabilitation.**

This course is designed to introduce students to the medical, ethical, and insurance reimbursement issues of pulmonary rehabilitation, homecare, and sleep diagnostic facilities. The role of therapists in case management, treatment requirements, and discharge planning along with the impact of legislation, regulations, and politics will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4318. Independent Study in Respiratory Care.**

This course provides the student an in-depth study on a topic or healthcare problem impacting respiratory care. The course may be repeated for credit with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4322. RC Practitioner Seminar.**

Students will research and present selected case studies by students to physicians, therapists, and colleagues. Presentations will emphasize total patient management with etiology, symptoms, pathophysiology, diagnosis, and treatment of specific diseases including asthma, pulmonary embolism, CHF, COPD, ARDS, neurologic diseases, inhalational injury, pneumonia, sleep disordered breathing, AIDS, and drug overdose. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**RC 4324. Sleep Medicine and Polysomnography.**

This course introduces the respiratory care student to sleep medicine and polysomnography. The course will present topics on sleep stages, sleep architecture, and sleep disorders. Basic and advanced treatment options of selected sleep disorders will be discussed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4333. Neonatal Critical Care.**

This course will provide the Respiratory Care student with advanced knowledge on the management of the neonatal patient in the critical care environment. The course will expose the student to advanced therapeutics and mechanical ventilation strategies. Course content will prepare the student for the role of neonatal specialist. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4334. Adult Critical Care.**

This course provides professional enrichment for practitioners with a conceptual foundation for adult critical care medicine. The course will provide an in-depth presentation of advanced respiratory therapy therapeutics and procedures caring for adults in the intensive care unit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### Admission Requirements

1. The Bachelor of Science in Respiratory Care (B.S.R.C.) degree with a major in Respiratory Care requires admission to the university and admission to the program. For more information visit: <http://www.health.txstate.edu/rc/>
2. Application for admission to the Respiratory Care (R.C.) undergraduate program must be made to the R.C. department in addition to regular university admission procedures.
3. All applicants must have an overall GPA of 2.50 to apply.
4. It is highly recommended that individuals interested in applying for the R.C. program complete RC 2213 prior to application.
5. Admission is competitive and enrollment is limited depending on student/faculty ratios in the clinical phase of the program.
6. Due to performance standards of the profession, students must meet specific ADA standards in accordance with physical and emotional requirements of the academic program in order to qualify for admission.
7. The priority admission application period for the Respiratory Care program begins November 1 and closes December 15. The general application period begins November 1 and closes May 1.

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
3. Nine hours of writing intensive (WI) courses are required for graduation.

4. Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
5. All RC courses must be taken in a lock-step sequence and completed with a grade of "C" or higher in order to progress to the next semester in the curriculum. Students with a grade of less than a "C" in a RC course will be ineligible to continue the program and must reapply to the program the following year. To be considered for program readmission, all original program admission criteria must be met. If readmitted, an assessment of clinical skills will be required to determine appropriate clinical placement in the curriculum sequence.
6. Requirements for B.S.R.C. completion and graduation include a Texas State GPA of 2.0 with a RC major GPA of 2.25.

**Sophomore****Course Requirements**

			<b>Freshman</b>		
<b>First Hours Semester</b>	<b>Second Hours Semester</b>		<b>First Hours Semester</b>	<b>Second Hours Semester</b>	
US 1100 <sup>1</sup>	1 BIO 2430 (TCCN BIOL 2404)	4	HIM 2360 (HITT 1305)	3 BIO 2400 or 2440 (TCCN BIOL 2421 or 2420)	4
PSY 1300 or SOCI 1310 (Social and Behavioral Sciences Component Code 080 [TCCN PSYC 2301 or SOCI 1301])	3 Communica Component Code 010	3	CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3 Government Political Science Component Code 070	3
BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3 Component Area Option 090	3	American History Component Code 060	3 Choose one of the following Statistics courses:	3
Communica Component Code 010	3 American History Component Code 060	3	Component Area Option 090	3 HP 3302	
Government/ Political Science Component Code 070	3 Mathematics Component Code 020 <sup>2</sup>	3	Language, Philosophy, and Culture Component Code 040	3 HP 3325	
Creative Arts Component Code 050 [HUMA 1315]	3			SOCI 330	
				PSY 2301 (TCCN PSYC 2317)	
				MATH 23	
				CJ 3347	
				Choose one of the following:	3
				PHYS 1310 (TCCN PHYS 1305)	
				PHYS 1311 (TCCN PHYS 1301)	
				PHYS 1320 (TCCN PHYS 1307)	
				PHYS 1321 (TCCN PHYS 1302)	
<b>16</b>	<b>16</b>		<b>15</b>	<b>13</b>	



			Junior
First Hours Semester	Second Hours Semester	Summer Hours	
RC 3112	1 RC 3321	3 RC 3332	3
RC 3313	3 RC 3323	3 RC 3333	3
RC 3315	3 RC 3322	3 RC 3334	3
RC 3314	3 RC 3324	3	
RC 3316	3 RC 3125	1	
	<b>13</b>	<b>13</b>	<b>9</b>

			Senior
First Hours Semester	Second Hours Semester		
RC 4211	2 RC 4312	3	
RC 4221	2 RC 4223	2	
RC 4314	3 RC 4224	2	
RC 4316	3 RC 4225	2	
RC 4317	3 RC 4322	3	
	<b>13</b>	<b>12</b>	

**Total Hours: 120**

<sup>1</sup> If US 1100 is waived, the student must have a minimum of 120 hours to graduate. See College Advising Center.

<sup>2</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

## Minimum required: 120 semester credit hours

### Admission Requirements

1. The Bachelor of Science in Respiratory Care (B.S.R.C.) degree with a major in Respiratory Care requires admission to the university and admission to the program. For more information visit: <http://www.health.txstate.edu/rc/>
2. Application for admission to the R.R.T. to B.S.R.C. online completion program must be made to the Department of Respiratory Care in addition to regular university admission procedures. Students will be admitted each fall, spring, and summer semester.
3. Students must obtain the R.R.T. credential from the National Board for Respiratory Care prior to enrolling into their final semester in the program.
4. All applicants must have an overall GPA of 2.25 to apply.
5. Admission is competitive and enrollment is limited.
6. Students who earned the R.R.T. credential and who have graduated from a regionally accredited community college will be awarded 35 semester credit hours toward the B.S.R.C. completion.
7. Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.

### General Requirements

1. All courses must be taken in sequence and completed with a grade of "C" or better in order to progress to the next semester in the curriculum.

2. Completion of 11 hours of support coursework is required prior to graduation:
  - BIO 2400 or BIO 2440
  - BIO 2430
  - HP 3302, HP 3325, SOCI 3307, PSY 2301, MATH 2328, or CJ 3347
3. Completion of 42 hours of general education core curriculum, including the following major-specific core courses, is required prior to graduation:
  - PSY 1300 or SOCI 1310 for the Social and Behavioral Sciences Component Code 080
  - MATH 1315, MATH 1319, MATH 1329, MATH 2417, or MATH 2471 for the Mathematics Component Code 020
  - CHEM 1341 for the Life and Physical Sciences Component Code 030
  - PHYS 1310, PHYS 1315, PHYS 1320, or PHYS 1325 for the Life and Physical Sciences Component Code 030

### Course Requirements

Fall Hours Semester	Spring Hours Semester	Summer Hours	
RC 3332	3 RC 4216	2 RC 4333	3
RC 4309	3 RC 4311	3 RC 4334	3
RC 4314	3 RC 4324	3 RC 4221	2
RC 4317	3 RC 4224	2	
	RC 4211	2	
	<b>12</b>	<b>12</b>	<b>8</b>

**Total Hours: 32**

#### Dean

Mary C. Brennan, Ph.D.

Flowers Hall Room 313

Telephone: 512-245-2317 Fax: 512-245-8291

<http://www.txstate.edu/liberalarts> (<http://www.txstate.edu/liberalarts/>)

#### Associate Dean

Emily Brunson, Ph.D.

#### Associate Dean

Elizabeth Erhart, Ph.D.

#### Associate Dean

Lucy Ditto Harney, Ph.D.

#### Associate Dean

Yongmei Lu, Ph.D.

#### Center Directors/Department Chairs/Program Directors

International Studies—Paul Hart, Ph.D.

Diversity and Gender Studies—Gloria Martinez, Ph.D.

Study of the Southwest—John Mckiernan-Gonzalez, Ph.D.

Anthropology—Christina Conlee, Ph.D.

English—Victoria L. Smith, Ph.D.

Geography and Environmental Studies—Jennifer Jensen, Ph.D.

History—Jeffrey L. Helgeson, Ph.D.

Philosophy—James Craig Hanks, Ph.D.

Political Science—Kenneth L. Grasso, Ph.D.

Psychology—Natalie A. Ceballos, Ph.D.

Sociology—Toni T. Watt, Ph.D.

World Languages & Literatures—Yasmine Beale-Rivaya, Ph.D.

The College of Liberal Arts provides students with the foundation for a liberal education, preparing graduates to think independently,

to choose freely, to base personal and professional decisions on a broad understanding of history and culture, and to live full, rewarding lives. Recognizing the central importance of liberal education, the university requires that more than fifty percent of the general education core curriculum be taken in the College of Liberal Arts, and students increasingly declare majors or minors in one of the college's nine departments or special programs.

The College of Liberal Arts offers the Bachelor of Arts in each of its nine departments: Anthropology, English, Geography and Environmental Studies, History, Philosophy, Political Science, Psychology, Sociology, and World Languages & Literatures. The Bachelor of Science is awarded in Anthropology, Geography and Environmental Studies, Psychology, and Sociology. The college also offers two special degrees: The Bachelor of Arts in International Studies (B.A.I.S.), and the Bachelor of Public Administration (B.P.A.). The college houses nineteen interdisciplinary minors: African American Studies, Aging and the Life Course, Diplomacy, Diversity Studies, Environmental Studies, Forensic Psychology, International Studies, Latina/o Studies, Media Studies, Medical Humanities, Medieval and Renaissance Studies, Nature and Heritage Tourism, Peace and Social Justice Studies, Religious Studies, Social Impact through Applied Research, Southwestern Studies, Sport Psychology, Studies in Popular Culture, Sustainability Studies, Value Studies, and Women's, Gender, and Sexuality Studies. The college provides education not only in the traditional humanities but also in the practical application of the humanities to professional careers.

## Academic Advising Center

Flowers Hall Room 322  
Telephone: 512-245-1852 Fax: 512-245-7949  
[www.liberalarts.txstate.edu/advising/](http://www.liberalarts.txstate.edu/advising/) (<https://www.liberalarts.txstate.edu/advising/>)

The College of Liberal Arts Advising Center is committed to providing effective guidance and accurate information to a diverse student community. In a supportive and collaborative environment, academic advisors encourage students to take an active role in achieving their educational and professional goals. From new student orientation to graduation, advisors are available to assist students as they navigate a variety of academic and administrative issues.

Through individual advising sessions, advisors help students select courses, understand degree requirements, and plan for graduation. Depending on students' unique needs, advisors may also provide information on major-specific concentrations, teaching certification options, education abroad and internship opportunities, GPA calculation, degree applicability of transfer courses, and strategies for overcoming academic probation and suspension. Although advising center staff are well-versed on campus resources and institutional policies, students may be referred to campus partners for specific guidance on financial aid, billing, veteran's benefits, and other student support services.

Students are encouraged to meet with an advisor at least once per academic year; however, appointments are available year-round and can be conducted in person or virtually. In addition to individual advising sessions, drop-in advising is offered at the beginning of each semester and during times of peak registration.

Trauth-Huffman Hall Room 478  
Telephone: 512-245-2361  
[www.txstate.edu/cdgs](http://www.txstate.edu/cdgs) (<http://www.txstate.edu/cdgs/>)

The Center for Diversity and Gender Studies in the College of Liberal Arts administers the Diversity Studies minor, African American Studies minor, and the Women's Studies minor at the undergraduate level. The Center offers academic courses that help prepare students to work and live in a pluralistic society. In addition, it assists faculty with resources and professional development activities to encourage the infusion of multiculturalism in the curriculum through a Multicultural Curriculum Transformation and Research Institute. It houses a resource area with more than 1000 books, articles, and syllabi. The director of the Center works in collaboration with an advisory council of faculty, staff, and students representing several Texas State colleges and departments.

These minors will:

- Prepare students with a unique body of knowledge, cultural competence, and communication skills that will prepare them for a diverse and changing workforce.
- Enrich students' learning about cultural pluralism and improve their interpersonal and professional skills.
- Offer students a well-rounded liberal arts education and a greater understanding of their cultural history and traditions.

## Minors

- African American Studies (p. 470)
- Diversity Studies (p. 470)
- Women's, Gender, and Sexuality Studies (p. 472)

**Subjects in this center include: AAS (p. 468), DVST (p. 469), WS (p. 469)**

## Courses in African American Studies (AAS)

### AAS 2310. Introduction to African American Studies.

Course provides an overview of black culture in America from an interdisciplinary approach, employing scholarship from history, literature, music, visual and performing arts, folklore, religion, sociology, psychology, philosophy, economics, and political science. It introduces epistemological considerations, theories, and methods that form the field of African American and African Diaspora Studies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### AAS 3310A. Blacks, Film, and Society.

This course examines Black American cinema between 1919 and the present and how film can help society better understand black history, black culture, and the black experience in America. The course also explores what each film teaches Blacks about Blacks and what film teaches Whites and other groups about Blacks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**AAS 3350. Black Queer Experience.**

This course will introduce students to the historical study of Black LGBTQ peoples. We will use primary sources such as letters, diaries, newspaper articles, and blues songs, along with historical and interdisciplinary scholarship and films, to learn about the experiences of same-sex loving and gender-transgressing Black people. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**AAS 3399. Negotiating the Color Line.**

This course examines how Black Americans have negotiated the Black-White color line from the 1800s to the present day.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**AAS 4320. Global Perspectives on the African Diaspora.**

Course connects the transatlantic slave trade, contemporary migrations, their legacies, and speaks to the broader issues of the African diaspora in relation to previous and ongoing struggles of black people for rebirth, progress, justice, and racial uplift. Examines African Diasporic women's definition of feminism while suggesting no universal black feminism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**AAS 4377. Intersections of Race, Class, Gender, and Sexualities.**

This course critically examines how race, class, gender, and sexuality intersect to shape the lived experiences of a wide array of communities in the United States. Students cannot receive credit for both WS 4377 and AAS 4377. (WI) Prerequisite: AAS 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**AAS 4388. Independent Research in African American Studies.**

Independent study course open to advanced students on an individual or small group basis. The research area in African American Studies, bibliography, and study paper outline are to be approved by the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Diversity Studies (DVST)

**DVST 3301. Introduction to Diversity Studies.**

The course is a general, multi-disciplinary and comparative survey of U.S. diversity issues. It highlights the traditional minorities, such as African, Latino/a American, Native, and Asian Americans, as well as European American ethnic groups. It also explores issues related to religion, age, sexual orientation, gender identity, and physical ability/disability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**DVST 3320. Introduction to Global Diversity Issues.**

This course provides an understanding of relationship between U.S. and other nations in terms of economics, politics, and culture. Students will examine how colonialism shaped developed and underdeveloped nations, investigate grassroots activism in response to globalization and will examine how policies formulation by one country has consequences for other countries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DVST 3325. Social Difference of Groups in Society.**

This course introduces students to theories of social difference, such as race, class, gender, sexuality, age, and disability/ability using a case study analysis of social interactions within complex social, cultural, economic, or political systems. The focus is to explore the role of social institutions and organizations in constructing social difference and to study its impact on people's opportunities. Prerequisite: DVST 3301 with a grade of a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Women's Studies (WS)

**WS 3376. Introduction to Women's, Gender, and Sexuality Studies.**

This course introduces students to the key concepts of women's, gender, and sexuality studies with a focus on the diversity of cultural experiences within the United States. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**WS 3377. Gender, Sex, and Power.**

This course examines the relationship between gender, sex, and power in cross cultural contexts to investigate key debates and current research within the field of Women's, Gender, and Sexuality Studies. Gender roles in societies outside the U.S. will be examined. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**WS 4377. Intersections of Race, Class, Gender, and Sexualities.**

This course critically examines how race, class, gender, and sexuality intersect to shape the lived experiences of a wide array of communities in the United States. Students cannot receive credit for both WS 4377 and AAS 4377. (WI) Prerequisite: WS 3376 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**WS 4388. Independent Research in Women's Studies.**

Independent study course open to advanced students on an individual or small group basis. The research area in Women's Studies, bibliography, and study paper outline are to be approved by the instructor. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

The minor in African American Studies requires 18 semester credit hours. The African American Studies minor (AAS) is an interdisciplinary course of study that focuses on the Black experience in the United States and throughout the African diaspora. Our central mission is to prepare students to critically understand, conduct research, and interpret the complex histories, societies, and cultures of people of African descent.

Code	Title	Hours
<b>Required Courses</b>		
AAS 2310	Introduction to African American Studies	3
AAS 4320	Global Perspectives on the African Diaspora	3
Any 3000 or 4000 level AAS Course		3
<b>Prescribed Electives</b>		
Choose 9 hours from the following:		9
AAS 3310A	Blacks, Film, and Society	
AAS 3350	Black Queer Experience	
AAS 3399	Negotiating the Color Line	
AAS 4388	Independent Research in African American Studies	
ANTH 3322	Peoples and Cultures of Africa	
ANTH 3331F	Body Talk: Gestures, Communication, and Society	
ANTH 4304	Language, Culture and Society	
ARTH 4310	Race and Representation	
CI 2311	Education and Equity in a Diverse Society	
CJ 3322	Race, Ethnicity and Criminal Justice	
CJ 4309L	Gangs and the Criminal Justice System	
COMM 3329	Intercultural Communication	
COMM 3336	Diversity and Communication	
COMM 4322	Rhetoric of Protest Movements	
COMM 4341	Intercultural Communication in the Americas	
DAN 2270	Hip-Hop I	
DAN 2368	World Dance and Cultures	
DAN 3271	Hip-Hop II	
ENG 3331	Black Literature	
GEO 3328	Geography of North Africa and the Middle East	
GEO 3353	American Ethnic Geography	
HIST 2381	African American History to 1877	

HIST 2382	African American History from 1877
HIST 3346	The Civil War and Reconstruction
HIST 3359	African American History
HIST 3368S	History of Music and Race in the American South
HIST 3378	History of the Blues
HIST 3380	The Desegregation of the South from 1944-1970
HIST 4350A	Slavery and Emancipation in the Americas
HIST 4352	Black Women and Black Protest in America
HIST 4375B	African-American Experience in Texas
HON 2305A	African American Popular Music: Society, Politics, and Culture
HON 2306C	America in the 1960s: A History of Movements and Ideas
HON 3392X	The Nature of the Human Experience: The Contemporary African Novel in English
HON 2309M	From Jay-Z to Kendrick Lamar: Politics, Power, and Identity in Hip Hop Literature
HON 3394Z	The Black Image in Postwar America
HON 3399M	Negotiating the (Black/White) Color Line
MC 4308	Women and Minorities in the Media
MKT 3385	Ethnic and Niche Marketing
MU 3375	History of Jazz
MU 3380D	History of Blues
PHIL 4373	Themes in Africana Philosophy
PS 3342	African Politics
PS 4322	African American Politics
PSY 3334	Psychology of Human Diversity
PSY 3337	Psychology of Prejudice, Discrimination, and Hate
SOCI 3327	Sociology of Racial and Ethnic Relations
SOWK 4302	Hip Hop and Social Justice for Individual and Community Change
SOWK 4310	Diversity and Social Justice in Social Work
TH 4303	Multicultural Perspectives in American Theatre

**Total Hours** 18

The minor in Diversity Studies requires 18 semester credit hours. The minor provides for an interdisciplinary approach to Diversity Studies with conceptual frameworks for exploring new perspectives which recover the history and creative expressions previously excluded by the traditional approaches to higher education. The minor fosters students' development of self, voice, and moral vision to prepare students to live and work effectively in a pluralistic society and a global world. Students will explore issues related to race, ethnicity, gender, religion, age, sexual orientation, and physical ability and disability. Using the courses available students may design a special focus based on their interest or career path. Relevant courses may be substituted with approval from the director of the Center for Diversity and Gender Studies. The two required core courses (6 hours) are DVST 3301, which offers a general, multidisciplinary and comparative survey of diversity, and DVST 3320, which provides students with a global view of diversity issues.

Code	Title	Hours
<b>Required Courses</b>		<b>6</b>
DVST 3301	Introduction to Diversity Studies	
DVST 3320	Introduction to Global Diversity Issues	

**Electives**

Choose 12 hours from the following: 12

AG 3319	International Food and Fiber Systems
ANTH 1312	Cultural Anthropology
ANTH 3301	Principles of Cultural Anthropology
ANTH 3309	Cultures Through Film
ANTH 3314	Latin American Cultures
ANTH 3322	Peoples and Cultures of Africa
ANTH 3324	Mexican American Culture
ANTH 3331F	Body Talk: Gestures, Communication, and Society
ANTH 3332	Myths and Moundbuilders
ANTH 3345	Archaeology of Mesoamerica
ANTH 3350	Gender and Sexuality in Cross-cultural Perspective
ANTH 4304	Language, Culture and Society
ARTH 3307	Issues in Contemporary Art
ARTH 4310	Race and Representation
CJ 3322	Race, Ethnicity and Criminal Justice
CJ 4326	Women and Criminal Justice
COMM 3316F	Rhetoric, Race, and Memory
COMM 3328	Communication and Gender
COMM 3329	Intercultural Communication
COMM 3336	Diversity and Communication
COMM 4336	Diversity and Inclusion Training
COMM 4341	Intercultural Communication in the Americas
COMM 4322	Rhetoric of Protest Movements
ENG 2310	British Literature before 1785
ENG 2320	British Literature since 1785
ENG 3309	The Southwest in Film
ENG 3325	Literature in Translation
ENG 3327	Early Global Drama in English
ENG 3331	Black Literature
ENG 3344	Chicana/o/x Narrative and Social History
ENG 3345	Southwestern Studies I: Defining the Region
ENG 3346	Southwestern Studies II: Consequences of Region
ENG 3388	Women's Writing
ENG 4325	Literature of the Southwest
GEO 1309	Introduction to Cultural Geography
GEO 3308	Latin America
GEO 3310	Urban Geography
GEO 3328	Geography of North Africa and the Middle East
GEO 3329	Geography of Texas
GEO 3332	Geography of South and Southeast Asia
GEO 3333	Geography of East Asia
GEO 3340	Political Geography
GEO 3349	World Population
GEO 3353	American Ethnic Geography
GEO 4393E	Race, Class, and the American City
HIST 3310	History of Europe, 1815-1919
HIST 3311	History of Europe Since 1919
HIST 3317	U.S. Women's History to 1877
HIST 3318	U.S. Women's History since 1877
HIST 3320	History of Mexico

HIST 3329	Spanish Borderlands, 1521-1821
HIST 3359	African American History
HIST 3372	Texas History: A Survey
HIST 3375A	Topics in Working Class History
HIST 3380	The Desegregation of the South from 1944-1970
HIST 3382	Immigration and US History
HIST 4318W	Queer Youth History
HIST 4318Z	Podcasting History: Making Marginalized Voices Heard
HIST 4325	Islamic History to 1798
HIST 4352	Black Women and Black Protest in America
HIST 4371	Introduction to American Indian History
HIST 4372	Latina/o/x Histories
HIST 4374A	History of American Sexualities
HIST 4375B	African-American Experience in Texas
HIST 4376	The History of Texas Music
HON 2306C	America in the 1960s: A History of Movements and Ideas
HON 2309M	From Jay-Z to Kendrick Lamar: Politics, Power, and Identity in Hip Hop Literature
HON 2390K	An Introduction to Arab Culture
HON 2390L	An Introduction to Islam
HON 3380D	Unpacking the Gaze: Intersectionality and Creative Publication
HON 3391W	Service Learning: A Study Abroad Course
HON 3393Y	Ethics of Care - East and West
HON 3394C	Japanese Urban Experience
HON 3396U	From White Slavery to Sex Trafficking
HON 3397H	International Culture Course: the cultural characteristics and diversity of people outside the US
HON 3399F	The Myths of Western Civilization: Decolonizing and Queering European History
LATS 2300	Introduction to Latina/o Studies
LATS 4325	Latina/o Identities, Communities and Social Change
MC 3355	Mass Media and Society
MC 4303	International Advertising
MC 4308	Women and Minorities in the Media
MC 4310	International Communication
MC 4319	Latinas/Latinos and the Media
MGT 3375	International Business
MKT 3385	Ethnic and Niche Marketing
MKT 4310	International Marketing
MU 3375	History of Jazz
PH 3330	Inclusion and Diversity in Women's Health
PH 3360	Issues in Human Sexuality
PHIL 4371	Asian Philosophy
PHIL 4372	Latin American Philosophy
PHIL 4373	Themes in Africana Philosophy
PA 3316	Metropolitan Politics
PS 3341	Comparative Politics
PS 3342	African Politics



PS 3343	Government and Politics of Latin America	
PS 3346	Government and Politics of Asia	
PS 3347	Politics of Modern Southeast Asia	
PS 4313	The Holocaust	
PS 4322	African American Politics	
PS 4323	Latina/o Politics	
PS 4331	Islamic Law and Politics	
PS 4342	Economic Development in Latin America	
PSY 3334	Psychology of Human Diversity	
PSY 3337	Psychology of Prejudice, Discrimination, and Hate	
PSY 4390S	Latinx Psychology	
REL 1300	World Religions	
REL 2310	Introduction to the Hebrew Bible	
REL 2360	Asian Religious Traditions	
REL 3361C	Philosophical Issues in Judaism, Christianity, and Islam	
REL 3381	The Philosophical and Spiritual Heritage of India	
REL 3385	Buddhism	
SOCI 3322	Sociology of Latinos and Immigration	
SOCI 3327	Sociology of Racial and Ethnic Relations	
SOCI 3330	Globalization and Development	
SOCI 3350	Gender and Society	
SOCI 3375M	Latinos and Aging	
SOWK 4310	Diversity and Social Justice in Social Work	
SPAN 3305	Latin American Literatures I	
SPAN 3306	Latin American Literatures II	
SPAN 3371	Latin American Civilization	
SPAN 4330	The Latin American Novel	
SPAN 4370	Hispanic Literature of the Southwest	
TH 3339	Latinx Theatre and Performance	
WS 3376	Introduction to Women's, Gender, and Sexuality Studies	
Total Hours		18

The minor in Women's, Gender, and Sexuality Studies requires 18 semester credit hours. Drawing on recent scholarship on women, gender, and sexuality, this interdisciplinary minor provides a flexible, coherent program that enables students to consider the significance of gender and sexuality to human society.

A minor in Women's, Gender, and Sexuality Studies offers students the opportunity for exciting intellectual growth. The minor provides a valuable specialty to prepare students for opportunities in a variety of fields, including business, counseling, education, government, health and medicine, human resources, law, politics, psychology, social work, and graduate studies. The Women's, Gender, and Sexuality Studies minor helps students recognize their opportunities in a rapidly changing society and flexibly complements any major.

The required core courses introduce students to the foundational theories of women's, gender, and sexualities studies. Topics courses, offered on a selective basis, may also count toward the minor with permission from the Women's, Gender, and Sexuality Studies Program Director.

Code	Title	Hours
<b>Required Courses</b>		
WS 3376	Introduction to Women's, Gender, and Sexuality Studies	3
WS 3377	Gender, Sex, and Power	3
or WS 4377	Intersections of Race, Class, Gender, and Sexualities	
<b>Electives</b>		
Choose 12 hours from the following:		12
AAS 3350	Black Queer Experience	
ANTH 3350	Gender and Sexuality in Cross-cultural Perspective	
ANTH 4309	Culture, Medicine and the Body	
ARTH 4309	Gender and Visual Representation	
ARTS 2332	Queer Art and Visual Culture	
BIO 3301	Biology of Sex and Reproduction	
CJ 4326	Women and Criminal Justice	
COMM 3328	Communication and Gender	
ENG 3371	Queer and Trans Texts	
ENG 3373	Gender and Sexualities in Texts	
ENG 3388	Women's Writing	
ENG 3392	Women Writers of the Middle Ages	
FM 2335		
HIST 3317	U.S. Women's History to 1877	
HIST 3318	U.S. Women's History since 1877	
HIST 3373C	The History of Rural Women	
HIST 3373D	History of American Feminisms, 1960-2020	
HIST 4318W	Queer Youth History	
HIST 4350E	Gender in Latin American History	
HIST 4350K	Gender & Militarization in the Arab World	
HIST 4352	Black Women and Black Protest in America	
HIST 4374A	History of American Sexualities	
HON 2305B	Women and Texas Music	
HON 3380D	Unpacking the Gaze: Intersectionality and Creative Publication	
HON 3392P	The Nature of the Human Experience: Technology & Gender in Film	
HON 3396U	From White Slavery to Sex Trafficking	
HON 3398J	The Body and Literature	
HON 3399F	The Myths of Western Civilization: Decolonizing and Queering European History	
MC 4308	Women and Minorities in the Media	
MU 3380A	Women in Jazz	
PH 3330	Inclusion and Diversity in Women's Health	
PH 3360	Issues in Human Sexuality	
PHIL 3325	Philosophy of Sex and Love	
PHIL 3333	Feminist Theory	
PS 4324	Women in Politics	
PSY 2311	Psychology of Human Sexuality	
PSY 3332	Psychology of Women	
SOCI 3350	Gender and Society	
SOCI 3395	Sociology of Sexuality	
SOWK 4310	Diversity and Social Justice in Social Work	
SPAN 4380G	Women, Minorities and Marginal Groups in Medieval Spanish Literature	

WS 4377	Intersections of Race, Class, Gender, and Sexualities
WS 4388	Independent Research in Women's Studies
<b>Total Hours</b>	<b>18</b>

Derrick Hall Room 101

T: 512.245.2339

[www.txstate.edu/internationalstudies](http://www.txstate.edu/internationalstudies) (<http://www.txstate.edu/internationalstudies/>)

Demand for globally aware graduates with knowledge of international business, cultural and area studies, and language skills continues to increase. Globalization has created a need for people with cultural understanding and international perspective in business, law, diplomacy, communications, NGO's, and other fields. The Bachelor of Arts in International Studies (B.A.I.S.) prepares students for these and other opportunities.

In addition to its academic programs, the Center offers students marketable and transferable skills through internships, service learning, and study abroad.

## Peace Corps Prep

Peace Corps Prep is a certificate program for undergraduates who wish to build on the four competencies that Peace Corps looks for (training/experience in a work sector, foreign language skills, intercultural competence, and professional and leadership development). The certificate gives students a competitive edge when applying for Peace Corps service. The program is open to all majors. The program does not guarantee acceptance into the Peace Corps, but provides undergraduates with skills that are an advantage in the application process, as well as in other international development work. Being part of the program demonstrates to any future employer that participating students value global understanding and cultural awareness.

## Academic Advising

Majors receive advising assistance from the College of Liberal Arts Academic Advising Center, and a full-time academic program coordinator at the Center to ensure timely graduation. The Center strives to prepare students for internationally focused careers.

## Graduation Requirements

All B.A.I.S. majors are required to maintain a TXST GPA of 2.75, a major GPA of 3.00, complete the Texas State general education core curriculum, the International Studies Core, and the International Studies major courses. All majors are required to complete a global academic experience, which can be fulfilled by an education abroad course or internship that entails international work, service, or group research. The Center's director and academic program coordinator will work closely with majors to find the best options for international study. Majors are not required to complete a minor. Students must meet all course prerequisites. Please see the College of Liberal Arts, and the Degrees and Programs sections of this catalog for specific information on the general education core curriculum, and special requirements for the B.A.I.S.

B.A.I.S. majors are required to complete the special requirements in science and English Literature. The below list of approved additional science courses under that section include statistics.

Code	Title	Hours
ANLY 2333	Business Statistics	3
SOCI 3307	Statistics for the Behavioral Sciences	3
GEO 3301	Research Methods in Geography	3
PS 3315	Quantitative Research in Political Science	3
CJ 3347	Statistics For Criminal Justice	3
HP 3302	Biostatistics	3
MATH 2358	Discrete Mathematics I	3
MATH 3305	Introduction to Probability and Statistics	3

## International Studies Core

All B.A.I.S. majors are required to complete 41 hours of core courses:

Code	Title	Hours
PS 3351	Introduction to International Studies	3
IS 4380	International Studies Seminar	3
GEO 1310	World Geography	3
GEO 3303	Economic Geography	3
HIST 2310	Western Civilization to 1715	3
or HIST 2311	History of World Civilization to the 17th Century	
HIST 2312	History of World Civilization from the 17th Century	3
or HIST 2320	Western Civilization, 1715 to Date	

The below courses are core classes dependent on the student's chosen concentration. 6

International Business & Travel and Tourism	
ECO 2314	Principles of Microeconomics
ECO 2315	Principles of Macroeconomics
All other Concentrations	
ANTH 1312	Cultural Anthropology
PS 3352	Theories of International Politics
or PS 3353	Issues in World Politics
1410, 1420, 2310, 2320, and one advanced (3000- or 4000-level) course in the same language as approved for each concentration.	17
<b>Total Hours</b>	<b>41</b>

## Bachelor of Arts in International Studies (B.A.I.S.)

- Major in International Relations (p. 474)
- Major in International Studies (Asian Studies Concentration) (p. 476)
- Major in International Studies (European Studies Concentration) (p. 477)
- Major in International Studies (Global Security Studies Concentration) (<http://mycatalog.txstate.edu/undergraduate/liberal-arts/international-studies/global-security-studies/>)
- Major in International Studies (International Business Concentration) (p. 479)
- Major in International Studies (Latin American Studies Concentration) (p. 481)
- Major in International Studies (Middle East/African Studies Concentration) (p. 482)
- Major in International Studies (Russian/East European Studies Concentration) (p. 484)

- Major in International Studies (Travel and Tourism Concentration) (p. 485)

Minor

- Diplomacy (p. 490)
- International Studies (p. 487)

Courses in International Studies (IS)

IS 4380. International Studies Seminar.

A senior-level seminar that explores international topics through reading, writing, research and group discussion. Students will be expected to produce a significant research paper. This course is required for all International Studies majors and should be taken in the senior year of undergraduate study. (MULT).

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

Grade Mode: Standard Letter

IS 4387. International Studies Internship.

A semester-long work and study experience in a local, national, or foreign setting. Internships must be approved by the director of the Center for International Studies. May be repeated for credit. Prerequisite: Instructor approval.

3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Standard Letter

IS 4388. Diplomacy Seminar.

This course is a senior-level seminar which explores overarching topics in Diplomacy, including intelligence, negotiation, speech and report writing, protocol, and media and risk management, through reading, writing, research and group discussion. This course is a required capstone for all Diplomacy minors and should be taken in the last semester of minor coursework. (MULT).

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Writing Intensive

Grade Mode: Standard Letter

IS 4390. Problems in International Studies Research.

The instructor and student create an in-depth research project on a topic of interest to both participants.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing|Writing Intensive

Grade Mode: Standard Letter

IS 4687. International Studies Internship.

A semester long work and study experience in a local, national, or foreign setting. Internships must be approved by the director of the Center for International Studies. Repeatable once for credit. Prerequisite: Minimum 3.0 Texas State GPA.

6 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Standard Letter

Minimum required: 120 semester credit hours

General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts in International Studies (B.A.I.S.) degree requires three additional hours of English literature; and three hours of mathematics, science, logic, or computer science courses.
3. Students are required to complete a global academic experience that can be fulfilled by an education abroad course or IS 4387, if it entails international work, service, or group research. Consult with the academic program coordinator in the Center for International Studies for options.
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Nine hours of writing intensive (WI) courses are required for graduation.
6. To satisfy graduation requirements, students must have at least a 2.75 Texas State GPA and a 3.00 GPA in the International Relations major.

Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020 <sup>2</sup>	3	Creative Arts Component Code 050	3
Government/Political Science Component Code 070	3	American History Component Code 060	3
GEO 1310 (Social and Behavioral Sciences Component Code 080 [TCCN GEOG 1303])	3	Government/Political Science Component Code 070	3
Modern Language 1410 <sup>1</sup>	4	Modern Language 1420 <sup>1</sup>	4
US 1100	1		
17		16	
Sophomore			
First Semester Hours		Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3	Life and Physical Sciences Component Code 030	3
American History Component Code 060	3	ENG Literature (Component Area Option Code 090/094) <sup>3</sup>	3
Modern Language 2310 <sup>1</sup>	3	Modern Language 2320 <sup>1</sup>	3
PS 3351	3	HIST 2310 or 2311 (TCCN HIST 2311 or 2321)	3

ANTH 1312	3 PS 3352 or 3353	3
<b>15</b>		<b>15</b>
<b>Junior</b>		
<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
Life and Physical Sciences Component Code 030	3 BAIS English Literature	3
Component Area Option Code 090/091	3 BAIS Science, Math, Computer Science, or Logic	3
Modern Language Advanced <sup>1</sup>	3 GEO 3303	3
HIST 2320 or 2312 (TCCN HIST 2312 or 2322)	3 International Relations Electives	6
ECO 3317, PS 3352, PS 3353, PS 4342, or PS 4353	3	
<b>15</b>		<b>15</b>
<b>Senior</b>		
<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
GEO 3340	3 IS 4380	3
HIST 3357	3 Early World History Electives	6
PS 4352	3 Modern World History Electives	6
PS 4354	3	
<b>12</b>		<b>15</b>

**Total Hours: 120**

<sup>1</sup> All five semesters of Modern Language must be in the same language. American Sign Language (ASL) is not an option.

<sup>2</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

<sup>3</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371.

## International Relations Electives\*

Code	Title	Hours
AG 3319	International Food and Fiber Systems	
ANTH 3309	Cultures Through Film	
ARAB 3301	Levantine Arabic	
ARAB 3302	Media Arabic	
CHI 3301	Conversational Chinese	
CHI 3302	Chinese for Business	
CHI 4390	Studies in Chinese Language and Culture	
COMM 3329	Intercultural Communication	
COMM 3336	Diversity and Communication	
DVST 3320	Introduction to Global Diversity Issues	
ECO 3320	Emerging Market Economies	
ECO 3353	Comparative Economic Systems	
FR 3381	Business French I	
FR 4390	Studies in French Culture, Language, or Literature	
GEO 3307	Geography of Europe	

GEO 3308	Latin America
GEO 3309	United States and Canada
GEO 3328	Geography of North Africa and the Middle East
GEO 3349	World Population
GER 3380	Business German in Global Economy
GER 4390	Studies in German Culture, Language, or Literature
HIST 4373	Economic and Social History of the Americas
IS 4387	International Studies Internship
IS 4687	International Studies Internship
ITAL 3308	Advanced Grammar and Composition
ITAL 4390	Studies in Italian Language and Culture
JAPA 3306	Modern Japanese Literature and Culture
JAPA 3308	Advanced Japanese for Business
JAPA 4390	Studies in Japanese Language and Culture
MC 3343	Introduction to Public Relations
MC 3367	Advertising
MC 4303	International Advertising
MC 4310	International Communication
MC 4319	Latinas/Latinos and the Media
PH 3348	Prevention of Disease
PHIL 3332	Social and Political Philosophy
PS 3341	Comparative Politics
PS 3343	Government and Politics of Latin America
PS 3344	Government and Politics of Europe
PS 3345	Government and Politics of Russia
PS 3346	Government and Politics of Asia
PS 4351	International Conflict and Security
PSY 4393	International Psychology
SOCI 3322	Sociology of Latinos and Immigration
SOCI 3327	Sociology of Racial and Ethnic Relations
SOCI 3328	Complex Organizations
SOCI 3330	Globalization and Development
SPAN 3311	Business Spanish I
SPAN 3312	Business Spanish II
SPAN 4390	Studies in Spanish Culture, Language, or Literature

## Early World History Electives

Code	Title	Hours
HIST 3313	Europe During the Old Regime, 1600-1760	3
HIST 3315	History of England to 1603	3
HIST 3319	History of Brazil	3
HIST 3322	Colonial History of Latin America to 1828	3
HIST 3325I	Resistance and Rebellion in Colonial Latin America	3
HIST 3327	History of Mexico to 1848	3
HIST 4304	Ancient Rome and the Mediterranean 500 B.C. to 500 A.D.	3
HIST 4307	Medieval European History, 300-1400	3
HIST 4317	Tudor-Stuart England, 1485-1689	3
HIST 4320	Origins of Christianity	3
HIST 4325	Islamic History to 1798	3
HIST 4333	The History of Russia and Eurasia to 1917	3
HIST 4350D	Empire and Identity in Central Asia	3

HIST 4350L	History of Southeast Asia	3
HIST 4350V	History of Pakistan	3

## Modern World History Electives

Code	Title	Hours
HIST 3310	History of Europe, 1815-1919	3
HIST 3311	History of Europe Since 1919	3
HIST 3312	Renaissance and Reformation	3
HIST 3314	Revolutionary Europe, 1760-1815	3
HIST 3316	History of England Since 1603	3
HIST 3320	History of Mexico	3
HIST 3324	Latin America from Independence to Present	3
HIST 3325G	Modern Revolutions in Latin American History	3
HIST 3329	Spanish Borderlands, 1521-1821	3
HIST 3368P	The U.S. and Britain in the Sixties	3
HIST 3368U	U.S. - Cuban Relations	3
HIST 4318S	Britain and the World	3
HIST 4318U	Topics in Industrial Britain	3
HIST 4326	The Modern Middle East	3
HIST 4327	The Problem of Palestine	3
HIST 4328	History of India	3
HIST 4334	The History of Russia and Eurasia from 1917 to Present	3
HIST 4335	20TH CENT EAST EUR	3
HIST 4336	Germany from 1815 to Present	3
HIST 4337	Germany and National Socialism, 1918-1945	3
HIST 4343	Modern China, 1600-Present	3
HIST 4344	Modern Japan, 1600-Present	3
HIST 4346	Modern Korea	3
HIST 4347	Hong Kong in the Modern World	3
HIST 4348	Mahatma Gandhi and Nonviolence	3
HIST 4350E	Gender in Latin American History	3
HIST 4350K	Gender & Militarization in the Arab World	3
HIST 4350R	Workers and Work in the Arab World	3
HIST 4350T	Japanese Urban Life	3
HIST 4350Y	Development of Secularism in Ottoman Empire and Modern Turkey	3
HIST 4373	Economic and Social History of the Americas	3

\* Prerequisites and restrictions may apply to the following courses.

**Minimum required: 120 semester credit hours**

## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts in International Studies (B.A.I.S.) degree requires

three additional hours of English literature; and three hours of mathematics, science, logic, or computer science courses.

3. Students are required to complete a global academic experience that can be fulfilled by an education abroad course or IS 4387, if it entails international work, service, or group research. Consult with the academic program coordinator in the Center for International Studies for options.
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Nine hours of writing intensive (WI) courses are required for graduation.
6. To satisfy graduation requirements, students must have at least a 2.75 Texas State GPA and a 3.00 GPA in the International Studies major.

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020 <sup>2</sup>	3	Creative Arts Component Code 050	3
Government/Political Science Component Code 070	3	American History Component Code 060	3
GEO 1310 (Social and Behavioral Sciences Component Code 080 [TCCN GEOG 1303])	3	Government/Political Science Component Code 070	3
US 1100	1	JAPA 1420 or CHI 1420 <sup>1</sup>	4
JAPA 1410 or CHI 1410 <sup>1</sup>	4		
17		16	

Sophomore			
First Semester Hours		Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3	Life and Physical Sciences Component Code 030	3
American History Component Code 060	3	ENG Literature (Component Area Option Code 090/094) <sup>3</sup>	3
JAPA 2310 or CHI 2310 <sup>1</sup>	3	HIST 2310 or 2311 (TCCN HIST 2311 or 2321)	3
ANTH 1312	3	PS 3352 or 3353	3
PS 3351	3	JAPA 2320 or CHI 2320 <sup>1</sup>	3
15		15	

Junior			
First Semester Hours		Second Semester Hours	
Life and Physical Sciences Component Code 030	3	BAIS English Literature	3
Component Area Option Code 090/091	3	BAIS Science, Math, Computer Science, or Logic	3
JAPA or CHI Advanced <sup>1</sup>	3	GEO 3303	3
HIST 2320 or 2312 (TCCN HIST 2312 or 2322)	3	Asian Studies Electives	6
Asian Studies Elective	3		
15		15	



First Semester Hours		Senior
Second Semester Hours		
Asian Studies Electives	15 IS 4380	3
	Asian Studies Electives	9
	<b>15</b>	<b>12</b>

**Total Hours: 120**

<sup>1</sup> All five semesters of language must be in the same language.

<sup>2</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

<sup>3</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371.

### Asian Studies Electives\*

Code	Title	Hours
AG 3319	International Food and Fiber Systems	
ANTH 3309	Cultures Through Film	
ARTH 4308	Asian Art	
CHI 3301	Conversational Chinese	
CHI 3302	Chinese for Business	
CHI 4390	Studies in Chinese Language and Culture	
COMM 3329	Intercultural Communication	
COMM 3336	Diversity and Communication	
DVST 3320	Introduction to Global Diversity Issues	
ECO 3317	International Economics	
ECO 3320	Emerging Market Economies	
ECO 3353	Comparative Economic Systems	
ENG 3341	Studies in Global Literature	
GEO 3332	Geography of South and Southeast Asia	
GEO 3333	Geography of East Asia	
GEO 3340	Political Geography	
GEO 3349	World Population	
HIST 4328	History of India	
HIST 4343	Modern China, 1600-Present	
HIST 4344	Modern Japan, 1600-Present	
HIST 4346	Modern Korea	
HIST 4347	Hong Kong in the Modern World	
HIST 4348	Mahatma Gandhi and Nonviolence	
HIST 4350D	Empire and Identity in Central Asia	
HIST 4350L	History of Southeast Asia	
HIST 4350T	Japanese Urban Life	
IS 4387	International Studies Internship	
IS 4687	International Studies Internship	
JAPA 3304	Advanced Japanese Grammar I	
JAPA 3306	Modern Japanese Literature and Culture	
JAPA 3307	Advanced Japanese Writing and Grammar	
JAPA 3308	Advanced Japanese for Business	
JAPA 4310	Postwar Japanese Literature and Film	

JAPA 4320	Japanese Science Fiction
JAPA 4390	Studies in Japanese Language and Culture
LING 4307	Foreign Language Acquisition
LING 4390	Independent Study in Applied Linguistics and Language Learning
MU 3318	World Music Cultures
PHIL 4371	Asian Philosophy
PS 3341	Comparative Politics
PS 3346	Government and Politics of Asia
PS 3347	Politics of Modern Southeast Asia
PS 3352	Theories of International Politics
PS 3353	Issues in World Politics
PS 4331	Islamic Law and Politics
PS 4340A	Government and Politics of Japan
PS 4351	International Conflict and Security
PS 4352	International Law
PS 4353	International Organizations
PS 4354	Politics of International Economic Relations
PSY 4393	International Psychology
REL 2360	Asian Religious Traditions
REL 3381	The Philosophical and Spiritual Heritage of India
REL 3385	Buddhism
SOCI 3327	Sociology of Racial and Ethnic Relations
SOCI 3328	Complex Organizations
SOCI 3330	Globalization and Development

\* No more than 3 courses may be taken from the same discipline/prefix. Prerequisites and restrictions may apply to the following courses.

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts in International Studies (B.A.I.S.) degree requires three additional hours of English literature; and three hours of mathematics, science, logic, or computer science courses.
3. Students are required to complete a global academic experience that can be fulfilled by an education abroad course or IS 4387, if it entails international work, service, or group research. Consult with the academic program coordinator in the Center for International Studies for options.
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Nine hours of writing intensive (WI) courses are required for graduation.

6. To satisfy graduation requirements, students must have at least a 2.75 Texas State GPA and a 3.00 GPA in the International Studies major.

## Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020 <sup>2</sup>	3	Creative Arts Component Code 050	3
Government/Political Science Component Code 070	3	American History Component Code 060	3
GEO 1310 (Social and Behavioral Sciences Component Code 080 [TCCN GEOG 1303])	3	Government/Political Science Component Code 070	3
US 1100	1	FR 1420, GER 1420, ITAL 1420, POR 1420, RUSS 1420, or SPAN 1420 <sup>1</sup>	4
FR 1410, GER 1410, ITAL 1410, POR 1410, RUSS 1410, or SPAN 1410 <sup>1</sup>	4		
	17		16

		Sophomore	
First Semester Hours		Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3	Life and Physical Sciences Component Code 030	3
American History Component Code 060	3	ENG Literature (Component Area Option Code 090/094) <sup>3</sup>	3
FR 2310, GER 2310, ITAL 2310, POR 2310, RUSS 2310, or SPAN 2310 <sup>1</sup>	3	FR 2320, GER 2320, ITAL 2320, POR 2320, RUSS 2320, or SPAN 2320 <sup>1</sup>	3
ANTH 1312	3	PS 3352 or 3353	3
PS 3351	3	HIST 2310 or 2311 (TCCN HIST 2311 or 2321)	3
	15		15

		Junior	
First Semester Hours		Second Semester Hours	
Life and Physical Sciences Component Code 030	3	BAIS English Literature	3
Component Area Option Code 090/091	3	BAIS Science, Math, Computer Science, or Logic	3
Advanced FR, GER, ITAL, POR, RUSS, or SPAN <sup>1</sup>	3	GEO 3303	3
HIST 2320 or 2312 (TCCN HIST 2312 or 2322)	3	European Studies Electives	6
European Studies Elective	3		
	15		15

		Senior	
First Semester Hours		Second Semester Hours	
European Studies Electives	15	IS 4380	3

European Studies Electives	9
<b>15</b>	<b>12</b>

**Total Hours: 120**

<sup>1</sup> All five semester of language requirements must be in the same language.

<sup>2</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

<sup>3</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371.

## European Studies Electives\*

Code	Title	Hours
AG 3319	International Food and Fiber Systems	
ANTH 3309	Cultures Through Film	
ARTH 2301	Ancient to Medieval Art	
ARTH 2302	Renaissance to Modern Art	
ARTH 3301	History of Modern Art	
ARTH 4304	Global History of Cinema	
ARTH 4306	Renaissance Art	
ARTH 4311	History of Italian Art	
ARTH 4313	Hellenistic Art and Culture	
ARTH 4321U	Contemporary Art in Italy	
COMM 3329	Intercultural Communication	
COMM 3336	Diversity and Communication	
DVST 3320	Introduction to Global Diversity Issues	
ECO 3320	Emerging Market Economies	
ECO 3317	International Economics	
ECO 3353	Comparative Economic Systems	
ENG 3341	Studies in Global Literature	
ENG 3351	Early Medieval Literature of the British Isles	
ENG 3354	Shakespeare	
ENG 3359	British Literature, 1750-1800	
ENG 3370	Twentieth- and Twenty-First Century British Literature	
ENG 4355	The Later Shakespeare	
FR 3303	French Composition and Conversation	
FR 3350	History of French Cinema I, 1895-1960	
FR 4304B	French Genre Fiction	
FR 4307	Study of French Language	
FR 4330A	History of French Media	
FR 4350A	French Poetic Realist Cinema	
FR 4390	Studies in French Culture, Language, or Literature	
GEO 3307	Geography of Europe	
GEO 3340	Political Geography	
GEO 3349	World Population	
GEO 4328	Geography of the Russian Realm	
GER 3304A	German Cinema	
GER 3304D	German Translation	

GER 3305	German on the Stage
GER 3370	The Contemporary German-Speaking World
GER 4310	Masterpieces of German Literature
GER 4390	Studies in German Culture, Language, or Literature
HIST 3310	History of Europe, 1815-1919
HIST 3311	History of Europe Since 1919
HIST 3312	Renaissance and Reformation
HIST 3313	Europe During the Old Regime, 1600-1760
HIST 3314	Revolutionary Europe, 1760-1815
HIST 3315	History of England to 1603
HIST 3316	History of England Since 1603
HIST 3368P	The U.S. and Britain in the Sixties
HIST 3374A	History of Christianity 1300-1700
HIST 4304	Ancient Rome and the Mediterranean 500 B.C. to 500 A.D.
HIST 4307	Medieval European History, 300-1400
HIST 4317	Tudor-Stuart England, 1485-1689
HIST 4318S	Britain and the World
HIST 4318U	Topics in Industrial Britain
HIST 4320	Origins of Christianity
HIST 4335	20TH CENT EAST EUR
HIST 4336	Germany from 1815 to Present
HIST 4337	Germany and National Socialism, 1918-1945
IS 4387	International Studies Internship
IS 4687	International Studies Internship
ITAL 3308	Advanced Grammar and Composition
ITAL 4390	Studies in Italian Language and Culture
MU 3318	World Music Cultures
PS 3341	Comparative Politics
PS 3344	Government and Politics of Europe
PS 3352	Theories of International Politics
PS 3353	Issues in World Politics
PS 4311	Ancient and Medieval Political Thought (Greeks to 1600)
PS 4313	The Holocaust
PS 4351	International Conflict and Security
PS 4352	International Law
PS 4353	International Organizations
PS 4354	Politics of International Economic Relations
PSY 4393	International Psychology
RUSS 4390	Studies in Russian Language and Culture
SOCI 3327	Sociology of Racial and Ethnic Relations
SOCI 3328	Complex Organizations
SOCI 3330	Globalization and Development
SPAN 3311	Business Spanish I
SPAN 3312	Business Spanish II
SPAN 4390	Studies in Spanish Culture, Language, or Literature

\* No more than 3 courses may be taken from the same discipline/prefix. Prerequisites and restrictions may apply to the following courses.)

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts in International Studies (B.A.I.S.) degree requires three additional hours of English literature; and three hours of mathematics, science, logic, or computer science courses.
3. Students are required to complete a global academic experience that can be fulfilled by an education abroad course or IS 4387, if it entails international work, service, or group research. Consult with the academic program coordinator in the Center for International Studies for options.
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Nine hours of writing intensive (WI) courses are required for graduation.
6. To satisfy graduation requirements, students must have at least a 2.75 Texas State GPA and a 3.00 GPA in the International Studies major.

### Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020 <sup>2</sup>	3	Creative Arts Component Code 050	3
Government/Political Science Component Code 070	3	American History Component Code 060	3
GEO 1310 (Social and Behavioral Sciences Component Code 080 [TCCN GEOG 1303])	3	Government/Political Science Component Code 070	3
Modern Language 1410 <sup>1</sup>	4	Modern Language 1420 <sup>1</sup>	4
US 1100	1		
17		16	
Sophomore			
First Semester Hours		Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3	Life and Physical Sciences Component Code 030	3
American History Component Code 060	3	ENG Literature (Component Area Option Code 090/094) <sup>3</sup>	3
Modern Language 2310 <sup>1</sup>	3	Modern Language 2320 <sup>1</sup>	3
ECO 2314 (TCCN ECON 2302)	3	ECO 2315 (TCCN ECON 2301)	3

PS 3351	3 HIST 2310 or 2311 (TCCN HIST 2311 or 2321)	3
<b>15</b>		<b>15</b>
		<b>Junior</b>
<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
Life and Physical Sciences Component Code 030	3 BAIS English Literature	3
Component Area Option Code 090/091	3 BAIS Science, Math, Computer Science, or Logic	3
Modern Language Advanced <sup>1</sup>	3 GEO 3303	3
HIST 2320 or 2312 (TCCN HIST 2312 or 2322)	3 International Business Focus I Electives	6
International Business Focus I Elective	3	
<b>15</b>		<b>15</b>
		<b>Senior</b>
<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
International Business Focus I Electives	6 IS 4380	3
International Business Focus II Electives	9 International Business Focus II	9
<b>15</b>		<b>12</b>
<b>Total Hours: 120</b>		

<sup>1</sup> All five semesters of language requirements must be in the same language. American Sign Language (ASL) is not an option.

<sup>2</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

<sup>3</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371.

### International Business Focus I Electives\*

Code	Title	Hours
ACC 2361	Introduction to Financial Accounting	
ACC 2362	Introduction to Managerial Accounting	
BLAW 3363	International Business Law	
ECO 3311	Money and Banking	
ECO 3314	Intermediate Microeconomics	
ECO 3315	Intermediate Macroeconomics	
ECO 3317	International Economics	
ECO 3320	Emerging Market Economies	
ECO 3353	Comparative Economic Systems	
IS 4387	International Studies Internship	
IS 4687	International Studies Internship	
ISAN 3317	E-Business	
MGT 3303	Management of Organizations	
MGT 3375	International Business	
MGT 4375	Organizational Behavior and Human Relations	

MKT 3343	Principles of Marketing
MKT 4310	International Marketing

### International Business Focus II Electives\*

Code	Title	Hours
AG 3319	International Food and Fiber Systems	
ANTH 3309	Cultures Through Film	
ARAB 3301	Levantine Arabic	
ARAB 3302	Media Arabic	
CHI 3301	Conversational Chinese	
CHI 3302	Chinese for Business	
CHI 4390	Studies in Chinese Language and Culture	
COMM 3329	Intercultural Communication	
COMM 3336	Diversity and Communication	
DVST 3320	Introduction to Global Diversity Issues	
FR 3381	Business French I	
FR 4390	Studies in French Culture, Language, or Literature	
GEO 3307	Geography of Europe	
GEO 3308	Latin America	
GEO 3309	United States and Canada	
GEO 3328	Geography of North Africa and the Middle East	
GEO 3340	Political Geography	
GEO 3349	World Population	
GER 3380	Business German in Global Economy	
GER 4390	Studies in German Culture, Language, or Literature	
HIST 3340	History of the United States, 1877-1914	
HIST 3341	History of the United States, 1914-1945	
HIST 3343	Social and Intellectual History of the United States Since 1865	
HIST 4360	History of the United States, 1945 to 1968	
HIST 4373	Economic and Social History of the Americas	
IS 4387	International Studies Internship	
IS 4687	International Studies Internship	
ITAL 3308	Advanced Grammar and Composition	
ITAL 4390	Studies in Italian Language and Culture	
JAPA 3306	Modern Japanese Literature and Culture	
JAPA 3308	Advanced Japanese for Business	
JAPA 4390	Studies in Japanese Language and Culture	
LING 4307	Foreign Language Acquisition	
LING 4390	Independent Study in Applied Linguistics and Language Learning	
MC 3343	Introduction to Public Relations	
MC 3367	Advertising	
MC 4303	International Advertising	
MC 4310	International Communication	
MC 4319	Latinas/Latinos and the Media	
PA 3310	Public Finance Administration	
PHIL 3322	Professional Ethics	
PHIL 3332	Social and Political Philosophy	
PS 3341	Comparative Politics	
PS 3352	Theories of International Politics	
PS 3353	Issues in World Politics	
PS 4342	Economic Development in Latin America	

PS 4351	International Conflict and Security
PS 4352	International Law
PS 4353	International Organizations
PS 4354	Politics of International Economic Relations
PSY 3333	Industrial Psychology
PSY 4393	International Psychology
RUSS 4390	Studies in Russian Language and Culture
SOCI 3322	Sociology of Latinos and Immigration
SOCI 3327	Sociology of Racial and Ethnic Relations
SOCI 3328	Complex Organizations
SOCI 3330	Globalization and Development
SPAN 3311	Business Spanish I
SPAN 3312	Business Spanish II
SPAN 4390	Studies in Spanish Culture, Language, or Literature

\* No more than 3 courses may be taken from the same discipline/prefix. Prerequisites and restrictions may apply to the following courses.

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts in International Studies (B.A.I.S.) degree requires three additional hours of English literature; and three hours of mathematics, science, logic, or computer science courses.
3. Students are required to complete a global academic experience that can be fulfilled by an education abroad course or IS 4387, if it entails international work, service, or group research. Consult with the academic program coordinator in the Center for International Studies for options.
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Nine hours of writing intensive (WI) courses are required for graduation.
6. To satisfy graduation requirements, students must have at least a 2.75 Texas State GPA and a 3.00 GPA in the International Studies major.

### Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
Communication Component Code 010	3 Communication Component Code 010	3
Mathematics Component Code 020 <sup>2</sup>	3 Creative Arts Component Code 050	3

Government/Political Science Component Code 070	3 American History Component Code 060	3
GEO 1310 (Social and Behavioral Sciences Component Code 080 [TCCN GEOG 1303])	3 Government/Political Science Component Code 070	3
SPAN 1410, FR 1410, or POR 1410 <sup>1</sup>	4 SPAN 1420, FR 1420, or POR 1420 <sup>1</sup>	4
US 1100	1	
	<b>17</b>	<b>16</b>

#### Sophomore

First Semester Hours	Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3 Life and Physical Sciences Component Code 030	3
American History Component Code 060	3 ENG Literature (Component Area Option Code 090/094) <sup>3</sup>	3
ANTH 1312	3 HIST 2310 or 2311 (TCCN HIST 2311 or 2321)	3
SPAN 2310, FR 2310, or POR 2310 <sup>1</sup>	3 SPAN 2320, FR 2320, or POR 2320 <sup>1</sup>	3
PS 3351	3 PS 3352 or 3353	3
	<b>15</b>	<b>15</b>

#### Junior

First Semester Hours	Second Semester Hours	
Life and Physical Sciences Component Code 030	3 BAIS English Literature	3
Component Area Option Code 090/091	3 BAIS Science, Math, Computer Science, or Logic	3
SPAN, FR, or POR Advanced <sup>1</sup>	3 GEO 3303	3
HIST 2320 or 2312 (TCCN HIST 2312 or 2322)	3 Latin American Studies Electives	6
Latin American Studies Elective	3	
	<b>15</b>	<b>15</b>

#### Senior

First Semester Hours	Second Semester Hours	
Latin American Studies Electives	15 IS 4380	3
	Latin American Studies Electives	6
	Elective	3
	<b>15</b>	<b>12</b>

**Total Hours: 120**

<sup>1</sup> All five semesters of language requirements must be in the same language.

<sup>2</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

<sup>3</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL



2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

### Latin American Studies Electives\*

Code	Title	Hours
AG 3319	International Food and Fiber Systems	
ANTH 3305	Magic, Ritual and Religion	
ANTH 3309	Cultures Through Film	
ANTH 3313	Aztec: Native Americans and Empire	
ANTH 3314	Latin American Cultures	
ANTH 3324	Mexican American Culture	
ANTH 3345	Archaeology of Mesoamerica	
ANTH 3347	Archaeology of North America	
ANTH 3349	The Incas	
ANTH 3356	Archaeology of Andean Civilizations	
ANTH 3363	The Art and Archaeology of the Olmec	
ARTH 4302	Latin American Modernisms	
ARTH 4303	Pre-Columbian Art	
ARTH 4317	Spanish Colonial Art of the Americas	
COMM 3329	Intercultural Communication	
COMM 3336	Diversity and Communication	
ECO 3317	International Economics	
ECO 3320	Emerging Market Economies	
ECO 3353	Comparative Economic Systems	
ENG 3341	Studies in Global Literature	
GEO 3308	Latin America	
GEO 3340	Political Geography	
GEO 3349	World Population	
HIST 3319	History of Brazil	
HIST 3320	History of Mexico	
HIST 3322	Colonial History of Latin America to 1828	
HIST 3324	Latin America from Independence to Present	
HIST 3325G	Modern Revolutions in Latin American History	
HIST 3325I	Resistance and Rebellion in Colonial Latin America	
HIST 3326	The Southern Cone of Latin America	
HIST 3327	History of Mexico to 1848	
HIST 3329	Spanish Borderlands, 1521-1821	
HIST 4350E	Gender in Latin American History	
HIST 4372	Latina/o/x Histories	
HIST 4373	Economic and Social History of the Americas	
IS 4387	International Studies Internship	
IS 4687	International Studies Internship	
MC 3367	Advertising	
MC 4303	International Advertising	
MC 4310	International Communication	
MC 4319	Latinas/Latinos and the Media	
MU 3318	World Music Cultures	
PH 3348	Prevention of Disease	
PHIL 4372	Latin American Philosophy	
PS 3341	Comparative Politics	
PS 3352	Theories of International Politics	
PS 3353	Issues in World Politics	

PS 3354	United States-Latin America Relations
PS 4323	Latina/o Politics
PS 4342	Economic Development in Latin America
PS 4351	International Conflict and Security
PS 4352	International Law
PS 4353	International Organizations
PS 4354	Politics of International Economic Relations
PSY 4393	International Psychology
SOCI 3322	Sociology of Latinos and Immigration
SOCI 3327	Sociology of Racial and Ethnic Relations
SOCI 3328	Complex Organizations
SOCI 3330	Globalization and Development
SPAN 3311	Business Spanish I
SPAN 3312	Business Spanish II
SPAN 4390	Studies in Spanish Culture, Language, or Literature

\* No more than 3 courses may be taken from the same discipline/prefix. Prerequisites and restrictions may apply to the following courses.

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts in International Studies (B.A.I.S.) degree requires three additional hours of English literature; and three hours of mathematics, science, logic, or computer science courses.
3. Students are required to complete a global academic experience that can be fulfilled by an education abroad course or IS 4387, if it entails international work, service, or group research. Consult with the academic program coordinator in the Center for International Studies for options.
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Nine hours of writing intensive (WI) courses are required for graduation.
6. To satisfy graduation requirements, students must have at least a 2.75 Texas State GPA and a 3.00 GPA in the International Studies major.

### Course Requirements

Freshman		
First Semester Hours		Second Semester Hours
Communication Component Code 010	3 Communication Component Code 010	3
Mathematics Component Code 020 <sup>2</sup>	3 Creative Arts Component Code 050	3

Government/Political Science Component Code 070	3 American History Component Code 060	3
GEO 1310 (Social and Behavioral Sciences Component Code 080 [TCCN GEOG 1303])	3 Government/Political Science Component Code 070	3
US 1100	1 ARAB 1420, FR 1420, or SPAN 1420 <sup>1</sup>	4
ARAB 1410, FR 1410, or SPAN 1410 <sup>1</sup>	4	
<b>17</b>		<b>16</b>

**Sophomore**

First Semester Hours	Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3 Life and Physical Sciences Component Code 030	3
American History Component Code 060	3 ENG Literature (Component Area Option Code 090/094) <sup>3</sup>	3
ARAB 2310, FR 2310, or SPAN 2310 <sup>1</sup>	3 ARAB 2320, FR 2320, or SPAN 2320 <sup>1</sup>	3
ANTH 1312	3 PS 3352 or 3353	3
PS 3351	3 HIST 2310 or 2311 (TCCN HIST 2311 or 2321)	3
<b>15</b>		<b>15</b>

**Junior**

First Semester Hours	Second Semester Hours	
Life and Physical Sciences Component Code 030	3 BAIS English Literature	3
Component Area Option Code 090/091	3 BAIS Science, Math, Computer Science, or Logic	3
ARAB, FR, or SPAN Advanced <sup>1</sup>	3 GEO 3303	3
HIST 2320 or 2312 (TCCN HIST 2312 or 2322)	3 Middle East/African Studies Electives	6
Middle East/African Studies Elective	3	
<b>15</b>		<b>15</b>

**Senior**

First Semester Hours	Second Semester Hours	
Middle East/African Studies Electives	15 IS 4380	3
	Middle East/African Studies Electives	9
<b>15</b>		<b>12</b>

**Total Hours: 120**

<sup>1</sup> All five semesters of language requirements must be in the same language.

<sup>2</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

<sup>3</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL

2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

**Middle East/African Studies Electives\***

Code	Title	Hours
AG 3319	International Food and Fiber Systems	
ANTH 3309	Cultures Through Film	
ANTH 3322	Peoples and Cultures of Africa	
ANTH 3350	Gender and Sexuality in Cross-cultural Perspective	
COMM 3329	Intercultural Communication	
COMM 3336	Diversity and Communication	
DVST 3320	Introduction to Global Diversity Issues	
ECO 3317	International Economics	
ECO 3320	Emerging Market Economies	
ECO 3353	Comparative Economic Systems	
ENG 3341	Studies in Global Literature	
GEO 3328	Geography of North Africa and the Middle East	
GEO 3340	Political Geography	
GEO 3349	World Population	
HIST 3357	History of U.S. Foreign Relations	
HIST 4325	Islamic History to 1798	
HIST 4326	The Modern Middle East	
HIST 4327	The Problem of Palestine	
HIST 4350K	Gender & Militarization in the Arab World	
HIST 4350R	Workers and Work in the Arab World	
HIST 4350V	History of Pakistan	
HIST 4350Y	Development of Secularism in Ottoman Empire and Modern Turkey	
HIST 4364	Military History of the United States	
HIST 4368	War and Society	
IS 4387	International Studies Internship	
IS 4687	International Studies Internship	
MU 3318	World Music Cultures	
PS 3342	African Politics	
PS 3348	Revolution and Nationalism	
PS 3352	Theories of International Politics	
PS 3353	Issues in World Politics	
PS 4331	Islamic Law and Politics	
PS 4343	Politics of Democratization in Developing Countries	
PS 4344	The Politics of Extremism	
PS 4351	International Conflict and Security	
PS 4352	International Law	
PS 4353	International Organizations	
PS 4354	Politics of International Economic Relations	
PSY 4393	International Psychology	
SOCI 3327	Sociology of Racial and Ethnic Relations	
SOCI 3328	Complex Organizations	
SOCI 3330	Globalization and Development	

\* No more than 3 courses may be taken from the same discipline/prefix. Prerequisites and restrictions may apply to the following courses.

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts in International Studies (B.A.I.S.) degree requires three additional hours of English literature; and three hours of mathematics, science, logic, or computer science courses.
3. Students are required to complete a global academic experience that can be fulfilled by an education abroad course or IS 4387, if it entails international work, service, or group research. Consult with the academic program coordinator in the Center for International Studies for options.
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Nine hours of writing intensive (WI) courses are required for graduation.
6. To satisfy graduation requirements, students must have at least a 2.75 Texas State GPA and a 3.00 GPA in the International Studies major.

### Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
Communication Component Code 010	3 Communication Component Code 010	3
Mathematics Component Code 020 <sup>1</sup>	3 Creative Arts Component Code 050	3
Government/Political Science Component Code 070	3 American History Component Code 060	3
GEO 1310 (Social and Behavioral Sciences Component Code 080 [TCCN GEOG 1303])	3 RUSS 1420	4
RUSS 1410	4 Government/Political Science Component Code 070	3
US 1100	1	
<b>17</b>	<b>16</b>	
Sophomore		
First Semester Hours	Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3 Life and Physical Sciences Component Code 030	3
American History Component Code 060	3 ENG Literature (Component Area Option Code 090/094) <sup>2</sup>	3
RUSS 2310	3 RUSS 2320	3
ANTH 1312	3 PS 3352 or 3353	3

PS 3351	3 HIST 2310 or 2311 (TCCN HIST 2311 or 2321)	3
<b>15</b>	<b>15</b>	<b>Junior</b>
First Semester Hours	Second Semester Hours	
Life and Physical Sciences Component Code 030	3 BAIS English Literature	3
Component Area Option Code 090/091	3 BAIS Science, Math, Computer Science, or Logic	3
Russian/East European Studies Elective	3 GEO 3303	3
RUSS Advanced	3 Russian/East European Studies Electives	6
HIST 2320 or 2312 (TCCN HIST 2312 or 2322)	3	
<b>15</b>	<b>15</b>	<b>Senior</b>
First Semester Hours	Second Semester Hours	
Russian/East European Studies Electives	15 IS 4380	3
	Russian/East European Studies Electives	9
<b>15</b>	<b>12</b>	

**Total Hours: 120**

<sup>1</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

<sup>2</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

### Russian/East European Studies Electives\*

Code	Title	Hours
AG 3319	International Food and Fiber Systems	
ANTH 3309	Cultures Through Film	
COMM 3329	Intercultural Communication	
COMM 3336	Diversity and Communication	
DVST 3320	Introduction to Global Diversity Issues	
GEO 3307	Geography of Europe	
GEO 3340	Political Geography	
GEO 3349	World Population	
GEO 4328	Geography of the Russian Realm	
GER 3380	Business German in Global Economy	
GER 4390	Studies in German Culture, Language, or Literature	
HIST 3310	History of Europe, 1815-1919	
HIST 3311	History of Europe Since 1919	
HIST 3313	Europe During the Old Regime, 1600-1760	
HIST 3314	Revolutionary Europe, 1760-1815	
HIST 3357	History of U.S. Foreign Relations	
HIST 3368J	The Space Race	

HIST 4307	Medieval European History, 300-1400
HIST 4320	Origins of Christianity
HIST 4333	The History of Russia and Eurasia to 1917
HIST 4335	20TH CENT EAST EUR
HIST 4336	Germany from 1815 to Present
HIST 4337	Germany and National Socialism, 1918-1945
IS 4387	International Studies Internship
IS 4687	International Studies Internship
MC 3343	Introduction to Public Relations
MC 3367	Advertising
MC 4303	International Advertising
MC 4310	International Communication
MU 3318	World Music Cultures
PA 3310	Public Finance Administration
PH 3348	Prevention of Disease
PHIL 3322	Professional Ethics
PHIL 3332	Social and Political Philosophy
PS 3341	Comparative Politics
PS 3344	Government and Politics of Europe
PS 3345	Government and Politics of Russia
PS 3352	Theories of International Politics
PS 3353	Issues in World Politics
PS 4313	The Holocaust
PS 4321	American Foreign Policy
PS 4351	International Conflict and Security
PS 4352	International Law
PS 4353	International Organizations
PS 4354	Politics of International Economic Relations
PSY 4393	International Psychology
RUSS 4390	Studies in Russian Language and Culture
SOCI 3327	Sociology of Racial and Ethnic Relations
SOCI 3328	Complex Organizations
SOCI 3330	Globalization and Development

\* No more than 3 courses may be taken from the same discipline/prefix. Prerequisites and restrictions may apply to the following courses.

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts in International Studies (B.A.I.S.) degree requires three additional hours of English literature; and three hours of mathematics, science, logic, or computer science courses.
3. Students are required to complete a global academic experience that can be fulfilled by an education abroad course or IS 4387, if it

entails international work, service, or group research. Consult with the academic program coordinator in the Center for International Studies for options.

4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Nine hours of writing intensive (WI) courses are required for graduation.
6. To satisfy graduation requirements, students must have at least a 2.75 Texas State GPA and a 3.00 GPA in the International Studies major.

## Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020 <sup>2</sup>	3	Creative Arts Component Code 050	3
Government/Political Science Component Code 070	3	American History Component Code 060	3
GEO 1310 (Social and Behavioral Sciences Component Code 080 [TCCN GEOG 1303])	3	Government/Political Science Component Code 070	3
Modern Language 1410 <sup>1</sup>	4	Modern Language 1420 <sup>1</sup>	4
US 1100	1		
	17		16

		Sophomore	
		First Semester Hours	Second Semester Hours
Language, Philosophy, and Culture Component Code 040	3	Life and Physical Sciences Component Code 030	3
American History Component Code 060	3	ENG Literature (Component Area Option Code 090/094) <sup>3</sup>	3
Modern Language 2310 <sup>1</sup>	3	Modern Language 2320 <sup>1</sup>	3
ECO 2314	3	ECO 2315	3
PS 3351	3	HIST 2310 or 2311 (TCCN HIST 2311 or 2321)	3
	15		15

		Junior	
		First Semester Hours	Second Semester Hours
Life and Physical Sciences Component Code 030	3	BAIS English Literature	3
Component Area Option Code 090/091	3	BAIS Science, Math, Computer Science, or Logic	3
Modern Language Advanced <sup>1</sup>	3	GEO 3303	3
HIST 2320 or 2312 (TCCN HIST 2312 or 2322)	3	MKT 3343	3
ACC 2301	3	MGT 3303	3
	15		15

		Senior	
		First Semester Hours	Second Semester Hours
Early World History Elective	3	IS 4380	3

Modern World History Elective	3 Travel & Tourism Electives	9
IS 4687	6	
GEO 3340	3	
	<b>15</b>	<b>12</b>

**Total Hours: 120**

<sup>1</sup> All five semesters of language requirements must be in the same language. American Sign Language (ASL) is not an option.

<sup>2</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

<sup>2</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

**Early World History Electives\***

Code	Title	Hours
HIST 3313	Europe During the Old Regime, 1600-1760	3
HIST 3315	History of England to 1603	3
HIST 3319	History of Brazil	3
HIST 3322	Colonial History of Latin America to 1828	3
HIST 3325I	Resistance and Rebellion in Colonial Latin America	3
HIST 3327	History of Mexico to 1848	3
HIST 4304	Ancient Rome and the Mediterranean 500 B.C. to 500 A.D.	3
HIST 4307	Medieval European History, 300-1400	3
HIST 4317	Tudor-Stuart England, 1485-1689	3
HIST 4320	Origins of Christianity	3
HIST 4325	Islamic History to 1798	3
HIST 4333	The History of Russia and Eurasia to 1917	3
HIST 4350D	Empire and Identity in Central Asia	3
HIST 4350L	History of Southeast Asia	3
HIST 4350V	History of Pakistan	3

**Modern World History Electives\***

Code	Title	Hours
HIST 3310	History of Europe, 1815-1919	3
HIST 3311	History of Europe Since 1919	3
HIST 3312	Renaissance and Reformation	3
HIST 3314	Revolutionary Europe, 1760-1815	3
HIST 3316	History of England Since 1603	3
HIST 3320	History of Mexico	3
HIST 3324	Latin America from Independence to Present	3
HIST 3325G	Modern Revolutions in Latin American History	3
HIST 3329	Spanish Borderlands, 1521-1821	3
HIST 3368P	The U.S. and Britain in the Sixties	3
HIST 3368U	U.S. - Cuban Relations	3
HIST 4318S	Britain and the World	3
HIST 4318U	Topics in Industrial Britain	3
HIST 4326	The Modern Middle East	3

HIST 4327	The Problem of Palestine	3
HIST 4328	History of India	3
HIST 4334	The History of Russia and Eurasia from 1917 to Present	3
HIST 4335	20TH CENT EAST EUR	3
HIST 4336	Germany from 1815 to Present	3
HIST 4337	Germany and National Socialism, 1918-1945	3
HIST 4343	Modern China, 1600-Present	3
HIST 4344	Modern Japan, 1600-Present	3
HIST 4346	Modern Korea	3
HIST 4347	Hong Kong in the Modern World	3
HIST 4348	Mahatma Gandhi and Nonviolence	3
HIST 4350E	Gender in Latin American History	3
HIST 4350K	Gender & Militarization in the Arab World	3
HIST 4350R	Workers and Work in the Arab World	3
HIST 4350T	Japanese Urban Life	3
HIST 4350Y	Development of Secularism in Ottoman Empire and Modern Turkey	3
HIST 4373	Economic and Social History of the Americas	3

**Travel and Tourism Electives\***

Code	Title	Hours
ANTH 3301	Principles of Cultural Anthropology	
ANTH 3314	Latin American Cultures	
ANTH 3345	Archaeology of Mesoamerica	
ARAB 4390	Studies in Arabic Language and Culture	
CHI 3301	Conversational Chinese	
CHI 4390	Studies in Chinese Language and Culture	
COMM 3329	Intercultural Communication	
COMM 3336	Diversity and Communication	
DVST 3320	Introduction to Global Diversity Issues	
ECO 3320	Emerging Market Economies	
ECO 3353	Comparative Economic Systems	
FR 3381	Business French I	
FR 4390	Studies in French Culture, Language, or Literature	
GEO 3308	Latin America	
GEO 3309	United States and Canada	
GEO 3328	Geography of North Africa and the Middle East	
GEO 3332	Geography of South and Southeast Asia	
GEO 3333	Geography of East Asia	
GEO 4326	Parks and Protected Places	
GEO 4328	Geography of the Russian Realm	
GEO 3340	Political Geography	
GEO 3349	World Population	
GER 3380	Business German in Global Economy	
GER 4390	Studies in German Culture, Language, or Literature	
ITAL 4390	Studies in Italian Language and Culture	
JAPA 3308	Advanced Japanese for Business	
JAPA 3309	Japanese Language through Popular Culture	
JAPA 4390	Studies in Japanese Language and Culture	
MC 3367	Advertising	
MC 4303	International Advertising	
MC 4310	International Communication	



MC 4319	Latinas/Latinos and the Media
MGT 3375	International Business
MKT 4310	International Marketing
NHT 4301	Planning and Development of Nature and Heritage Tourism
PA 3310	Public Finance Administration
PH 3348	Prevention of Disease
PH 3350	Consumer Health
PHIL 3322	Professional Ethics
PHIL 3332	Social and Political Philosophy
PS 3341	Comparative Politics
PS 3352	Theories of International Politics
PS 3353	Issues in World Politics
PS 4342	Economic Development in Latin America
PS 4351	International Conflict and Security
PS 4352	International Law
PS 4353	International Organizations
PS 4354	Politics of International Economic Relations
PSY 3333	Industrial Psychology
PSY 4393	International Psychology
SOCI 3322	Sociology of Latinos and Immigration
SOCI 3327	Sociology of Racial and Ethnic Relations
SOCI 3328	Complex Organizations
SOCI 3330	Globalization and Development
SPAN 3311	Business Spanish I
SPAN 3312	Business Spanish II
SPAN 4390	Studies in Spanish Culture, Language, or Literature

\* No more than 3 courses may be taken from the same discipline/prefix.  
Prerequisites and restrictions may apply to the following courses.

The minor in International Studies requires 18 semester credit hours.  
An International Studies minor provides students with broader understanding and awareness of global histories, politics, languages, and culture.

Code	Title	Hours
<b>Required Courses</b>		
GEO 1310	World Geography	3
PS 3351	Introduction to International Studies	3
<b>International Perspective Prescribed Electives</b>		
Choose 6 hours from the following:		6
ECO 3317	International Economics	
GEO 3303	Economic Geography	
HIST 3320	History of Mexico	
HIST 3325G	Modern Revolutions in Latin American History	
HIST 3357	History of U.S. Foreign Relations	
HIST 3337	History of U.S. Foreign Policy Making in the Muslim World	
HIST 3368U	U.S. - Cuban Relations	
PS 3352	Theories of International Politics	
PS 3353	Issues in World Politics	
PS 4351	International Conflict and Security	

PS 4352	International Law
PS 4353	International Organizations
PS 4354	Politics of International Economic Relations
<b>International Studies Prescribed Electives</b>	
Choose 6 hours from the following courses: <sup>1</sup>	
ACC 2301	Accounting in Organizations and Society
ACC 2361	Introduction to Financial Accounting
ACC 2362	Introduction to Managerial Accounting
AG 3319	International Food and Fiber Systems
AG 4371T	International Horticulture
AG 4371V	Green Revolution & Agricultural Development in Asia
AG 4383	Agricultural Resource Economics
ANTH 3306	World Prehistory
ANTH 3309	Cultures Through Film
ANTH 3314	Latin American Cultures
ANTH 3316	The Origin and Evolution of Human Behavior
ANTH 3322	Peoples and Cultures of Africa
ANTH 3324	Mexican American Culture
ANTH 3327	Anthropology of Religion and Fundamentalism
ANTH 3345	Archaeology of Mesoamerica
ANTH 3347	Archaeology of North America
ANTH 3349	The Incas
ANTH 3350	Gender and Sexuality in Cross-cultural Perspective
ANTH 3351	Anthropology of Peace and Violence
ANTH 3356	Archaeology of Andean Civilizations
ANTH 3360	Economic Anthropology
ANTH 3363	The Art and Archaeology of the Olmec
ANTH 4320	Rise of Civilization
ARAB 3301	Levantine Arabic
ARAB 3302	Media Arabic
ARAB 4390	Studies in Arabic Language and Culture
ARTH 2301	Ancient to Medieval Art
ARTH 2302	Renaissance to Modern Art
ARTH 2303	
ARTH 3301	History of Modern Art
ARTH 4302	Latin American Modernisms
ARTH 4303	Pre-Columbian Art
ARTH 4304	Global History of Cinema
ARTH 4306	Renaissance Art
ARTH 4308	Asian Art
ARTH 4311	History of Italian Art
ARTH 4313	Hellenistic Art and Culture
ARTH 4316	Islamic Art
ARTH 4321U	Contemporary Art in Italy
ARTH 4321W	Contemporary Art in Mexico
BIO 3308	Global Ecology
BLAW 3363	International Business Law
CHI 3302	Chinese for Business
CHI 3301	Conversational Chinese
CHI 4390	Studies in Chinese Language and Culture
COMM 3329	Intercultural Communication

COMM 3336	Diversity and Communication	HIST 3312	Renaissance and Reformation
COMM 4341	Intercultural Communication in the Americas	HIST 3313	Europe During the Old Regime, 1600-1760
COMM 4345	Political Communication	HIST 3314	Revolutionary Europe, 1760-1815
DAN 2368	World Dance and Cultures	HIST 3315	History of England to 1603
DAN 4369	Dance in the 20th and 21st Centuries	HIST 3316	History of England Since 1603
ECO 3311	Money and Banking	HIST 3319	History of Brazil
ECO 3315	Intermediate Macroeconomics	HIST 3320	History of Mexico
ECO 3320	Emerging Market Economies	HIST 3322	Colonial History of Latin America to 1828
ECO 3353	Comparative Economic Systems	HIST 3324	Latin America from Independence to Present
ENG 3311	Practices in Writing and Rhetoric	HIST 3325G	Modern Revolutions in Latin American History
ENG 3316	Film Adaptation Studies	HIST 3325I	Resistance and Rebellion in Colonial Latin America
ENG 3322	The European Novel	HIST 3326	The Southern Cone of Latin America
ENG 3325	Literature in Translation	HIST 3327	History of Mexico to 1848
ENG 3327	Early Global Drama in English	HIST 3329	Spanish Borderlands, 1521-1821
ENG 3328	Modern Global Drama in English	HIST 3357	History of U.S. Foreign Relations
ENG 3341	Studies in Global Literature	HIST 3337	History of U.S. Foreign Policy Making in the Muslim World
ENG 3350	Global Medieval Literature	HIST 3368J	The Space Race
ENG 3351	Early Medieval Literature of the British Isles	HIST 3368P	The U.S. and Britain in the Sixties
ENG 3352	Medieval English Literature	HIST 3368U	U.S. - Cuban Relations
ENG 3354	Shakespeare	HIST 3338	History of Religion in India
ENG 3393	Postcolonial Literatures	HIST 4304	Ancient Rome and the Mediterranean 500 B.C. to 500 A.D.
FR 3303	French Composition and Conversation	HIST 4307	Medieval European History, 300-1400
FR 3305	Acting French	HIST 4317	Tudor-Stuart England, 1485-1689
FR 3306	Masterpieces of French Literature	HIST 4323	France and the Modern World
FR 3308	French Translation I	HIST 4318S	Britain and the World
FR 3310	French Pronunciation and Intonation	HIST 4320	Origins of Christianity
FR 3350	History of French Cinema I, 1895-1960	HIST 4325	Islamic History to 1798
FR 3351	Cinema of the French-Speaking World, 1960-present	HIST 4326	The Modern Middle East
FR 3381	Business French I	HIST 4327	The Problem of Palestine
FR 4370	Cultures of the French-Speaking World	HIST 4328	History of India
FR 4390	Studies in French Culture, Language, or Literature	HIST 4333	The History of Russia and Eurasia to 1917
GEO 3307	Geography of Europe	HIST 4334	The History of Russia and Eurasia from 1917 to Present
GEO 3308	Latin America	HIST 4335	20TH CENT EAST EUR
GEO 3309	United States and Canada	HIST 4336	Germany from 1815 to Present
GEO 3328	Geography of North Africa and the Middle East	HIST 4337	Germany and National Socialism, 1918-1945
GEO 3332	Geography of South and Southeast Asia	HIST 4343	Modern China, 1600-Present
GEO 3333	Geography of East Asia	HIST 4344	Modern Japan, 1600-Present
GEO 3340	Political Geography	HIST 4346	Modern Korea
GEO 3349	World Population	HIST 4347	Hong Kong in the Modern World
GEO 3353	American Ethnic Geography	HIST 4348	Mahatma Gandhi and Nonviolence
GEO 4322	Interpretive Environmental Geography	HIST 4350A	Slavery and Emancipation in the Americas
GEO 4328	Geography of the Russian Realm	HIST 4350D	Empire and Identity in Central Asia
GER 3304A	German Cinema	HIST 4350E	Gender in Latin American History
GER 3304B	German Colonialism, Orientalism, and Exoticism in Film and Literature	HIST 3384	History and Culture of Modern India
GER 3370	The Contemporary German-Speaking World	HIST 4350K	Gender & Militarization in the Arab World
GER 3380	Business German in Global Economy	HIST 4350L	History of Southeast Asia
GER 4310	Masterpieces of German Literature	HIST 4350R	Workers and Work in the Arab World
GER 4390	Studies in German Culture, Language, or Literature	HIST 4350T	Japanese Urban Life
HIST 3310	History of Europe, 1815-1919	HIST 4350V	History of Pakistan
HIST 3311	History of Europe Since 1919	HIST 4353	WWI: The Great War

HIST 4350Y	Development of Secularism in Ottoman Empire and Modern Turkey
HIST 4364	Military History of the United States
HIST 4368	War and Society
HIST 4372	Latina/o/x Histories
HIST 4373	Economic and Social History of the Americas
IS 4387	International Studies Internship
IS 4687	International Studies Internship
ISAN 3317	E-Business
ITAL 4390	Studies in Italian Language and Culture
JAPA 3306	Modern Japanese Literature and Culture
JAPA 3308	Advanced Japanese for Business
JAPA 3309	Japanese Language through Popular Culture
JAPA 4310	Postwar Japanese Literature and Film
JAPA 4320	Japanese Science Fiction
JAPA 4390	Studies in Japanese Language and Culture
MC 3319	Visual Communication
MC 3343	Introduction to Public Relations
MC 3367	Advertising
MC 4303	International Advertising
MC 4310	International Communication
MC 4319	Latinas/Latinos and the Media
MC 4382Q	Media in Asia and Southeast Asia
MGT 3303	Management of Organizations
MGT 3375	International Business
MGT 4375	Organizational Behavior and Human Relations
MKT 3343	Principles of Marketing
MKT 4310	International Marketing
MU 3318	World Music Cultures
PH 3330	Inclusion and Diversity in Women's Health
PHIL 3322	Professional Ethics
PHIL 3326	Philosophy and Sport
PHIL 3332	Social and Political Philosophy
PHIL 4371	Asian Philosophy
PHIL 4372	Latin American Philosophy
PHIL 4373	Themes in Africana Philosophy
PS 3341	Comparative Politics
PS 3342	African Politics
PS 3343	Government and Politics of Latin America
PS 3344	Government and Politics of Europe
PS 3345	Government and Politics of Russia
PS 3346	Government and Politics of Asia
PS 3347	Politics of Modern Southeast Asia
PS 3348	Revolution and Nationalism
PS 3349	Latin America Party Politics: Theory and Practice
PS 3351	Introduction to International Studies
PS 3352	Theories of International Politics
PS 3353	Issues in World Politics
PS 3354	United States-Latin America Relations
PS 4311	Ancient and Medieval Political Thought (Greeks to 1600)
PS 4313	The Holocaust

PS 4321	American Foreign Policy
PS 4323	Latina/o Politics
PS 4331	Islamic Law and Politics
PS 4332	The Politics of U.S. Economic Policy
PS 4340A	Government and Politics of Japan
PS 4342	Economic Development in Latin America
PS 4343	Politics of Democratization in Developing Countries
PS 4344	The Politics of Extremism
PS 4350A	U.S. National Affairs and Homeland Security
PS 4351	International Conflict and Security
PS 4352	International Law
PS 4353	International Organizations
PS 4354	Politics of International Economic Relations
PSY 3333	Industrial Psychology
PSY 3334	Psychology of Human Diversity
PSY 4393	International Psychology
REL 3320	Judaism
REL 3381	The Philosophical and Spiritual Heritage of India
REL 3383	An Introduction to Chinese Religions
REL 3385	Buddhism
RUSS 4390	Studies in Russian Language and Culture
SOCI 3320	Population Dynamics
SOCI 3322	Sociology of Latinos and Immigration
SOCI 3327	Sociology of Racial and Ethnic Relations
SOCI 3328	Complex Organizations
SOCI 3330	Globalization and Development
SOCI 3375P	Sociology of Religion: A Global Perspective
SOWK 4300F	International Social Work
SPAN 3301	Literatures of Spain I
SPAN 3302	Literatures of Spain II
SPAN 3311	Business Spanish I
SPAN 3312	Business Spanish II
SPAN 3370	Spanish Civilization
SPAN 3371	Latin American Civilization
SPAN 4302	The Spanish Novel
SPAN 4311	Historical Aspects of Hispanic Linguistics
SPAN 4330	The Latin American Novel
SPAN 4350	Hispanic Film
SPAN 4361	Hispanic Poetry
SPAN 4362	Hispanic Drama
SPAN 4380A	Hispanic Nobel Prizes in Literature
SPAN 4380F	Mexican Literature
SPAN 4380H	Nature and Nation in Latin American Literature
SPAN 4390	Studies in Spanish Culture, Language, or Literature

**Total Hours** **18**

<sup>1</sup> The six hours of advanced electives are to be selected from an approved list that is available in the Center for International Studies. Please contact an advisor for this list.

Students wishing to satisfy coursework in the minor through participation in Texas State Affiliated programs through the Education Abroad Office must complete all of the following steps:

1. Declare International Studies as a minor before going abroad.
2. Attend a General Information Session through the Education Abroad Office.
3. Complete the Transfer Credit Agreement Form.
4. Complete the Texas State Affiliated Program Application.
5. Submit the Transfer Credit Agreement Form to the Center for International Studies (Center) and meet with the Director, Associate Director, or Academic Advisor of the Center to review the completed Transfer Credit Agreement Form. A completed Transfer Credit Agreement form should include prospective courses from the affiliated institution and the Texas State equivalency. All courses evaluated via Transfer Credit Agreement Form must be approved by the Director or Associate Director of the Center. The Center will review courses with the following prefixes (pending evaluation as an Elective Advanced course - ELADV) – ANTH, ECO, FIN, GEO, HIST, IS, MC, MGT, MKT, PA, PHIL, POSI, PS, and SOCI. Additional courses outside of approved prefixes will be evaluated on a case-by-case basis.
6. Submit the Texas State Affiliated Program Application to the Education Abroad Office with a copy to the Center.
7. Apply through your respective Affiliated Provider.

**Enrolling in courses not indicated on Transfer Credit Agreement may result in courses not being counted towards degree program. Such courses may be ineligible for financial aid. Any new course selection will require an updated Transfer Credit Agreement form that must be reviewed and approved by the Center.**

The minor in Diplomacy requires 21 semester credit hours. A Diplomacy minor provides students with broader understanding and awareness of global histories, politics, and culture and prepares them specifically for experiences in international diplomacy.

Code	Title	Hours
<b>Required Courses</b>		<b>9</b>
PS 3341	Comparative Politics	
PS 4355	US National Security Strategy	
HIST 3325J	Diplomacy Seminar <sup>1</sup>	
<b>Prescribed Electives</b>		
Choose 3 hours from the following:		<b>3</b>
ANTH 3327	Anthropology of Religion and Fundamentalism	
COMM 3318V		
COMM 3325	Communication and Conflict Management	
COMM 3329	Intercultural Communication	
COMM 3345	Argumentation and Debate <sup>2</sup>	
COMM 4331	Persuasion	
COMM 4338	Advanced Public Speaking <sup>2</sup>	
CJ 4309K	Intelligence Analysis <sup>2</sup>	
ECO 3317	International Economics <sup>2</sup>	
ECO 3320	Emerging Market Economies <sup>2</sup>	
ECO 3353	Comparative Economic Systems <sup>2</sup>	
GEO 1309	Introduction to Cultural Geography	
GEO 3303	Economic Geography	
GEO 3340	Political Geography	

Choose 3 hours from the following **3**

CTE 3313P	Project Management
CTE 3315	Leadership and Professional Development
HON 2301A	Writing to Change the World <sup>2</sup>
HON 2309O	Talking Like TED <sup>2</sup>
HON 3390K	Modern Democracy & Its Enemies <sup>2</sup>
HON 3398N	The Anthropology of Religion and Fundamentalism <sup>2</sup>
MC 1313	Media Writing <sup>2</sup>
MC 3343	Introduction to Public Relations
MC 3313	Foundations of Public Relations Writing <sup>2</sup>
MGT 4390G	Cross-Cultural Human Relations <sup>2</sup>
MGT 4390S	Business Contracts/Negotiation <sup>2</sup>
MGT 4390T	Effective Teams and Groups <sup>2</sup>
PH 3374	Global Health
PHIL 2330	Elementary Logic
PHIL 3332	Social and Political Philosophy <sup>2</sup>

Choose 3 hours from the following: **3**

HIST 3311	History of Europe Since 1919
HIST 3320	History of Mexico
HIST 3325G	Modern Revolutions in Latin American History
HIST 3357	History of U.S. Foreign Relations
HIST 3382	Immigration and US History
HIST 4318N	Immigration in European History
HIST 4326	The Modern Middle East
HIST 4327	The Problem of Palestine
HIST 4328	History of India
HIST 4334	The History of Russia and Eurasia from 1917 to Present
HIST 4343	Modern China, 1600-Present

Choose 3 hours from the following: **3**

PS 3341	Comparative Politics
PS 3345	Government and Politics of Russia
PS 3346	Government and Politics of Asia
PS 3348	Revolution and Nationalism
PS 3351	Introduction to International Studies
PS 3352	Theories of International Politics
PS 3353	Issues in World Politics
PS 4312	Modern Political Theory (1600 - 1900)
PS 4321	American Foreign Policy
PS 4340B	Authoritarian Regimes
PS 4343	Politics of Democratization in Developing Countries
PS 4344	The Politics of Extremism
PS 4345	Model International Institution Competition
PS 4346	Organization of American States
PS 4350A	U.S. National Affairs and Homeland Security
PS 4351	International Conflict and Security
PS 4352	International Law
PS 4353	International Organizations
PS 4354	Politics of International Economic Relations

PS 4355	US National Security Strategy
<b>Total Hours</b>	<b>21</b>

<sup>1</sup> If the course is not offered, an advisor-approved internship may be substituted for IS 4387.

<sup>2</sup> Some courses may require a prerequisite or departmental approval.

Brazos Hall Room 212  
T: 512.245.2224 F: 512.245.7462  
[www.txstate.edu/cssw](http://www.txstate.edu/cssw) (<http://www.txstate.edu/cssw/>)

The Center for the Study of Southwest, established in February 1990 in the College of Liberal Arts, has a threefold mission: curriculum development, public outreach, and research. Its 18-hour interdisciplinary minor, administered jointly with the Department of English, was approved in 1992. The Center draws faculty from varied disciplines (Art, Biology, English, Geography, History, and others); it disseminates information about its programs and research through *Southwestern American Literature*, a biannual journal devoted to the literature and culture of the Greater Southwest, and *Texas Books in Review*, a journal that monitors publications from or about Texas.

The Center for the Study of the Southwest, funded in part by grants from the National Endowment for the Humanities and the Houston Endowment, promotes the exchange of knowledge about regional issues among individuals, communities, and institutions across the U.S. Southwest and northern Mexico. The Center encourages students, teachers, and the general public to understand the power of place to build identity, honor diversity, strengthen community, and celebrate the human spirit.

## Minor

- Southwestern Studies (p. 491)

The minor in Southwestern Studies requires 18 semester credit hours. Students are required to take at least two of the core courses for the minor. No more than three courses in a single department may count toward this minor. A course may not be used to satisfy both a major and a minor requirement. Relevant Honors and topics courses may be substituted with permission from the Director of the Center for the Study of the Southwest.

Code	Title	Hours
<b>Core Courses</b>		
Choose 6 hours from the following:		6
ANTH 3315	Archaeology of the Southwest	
ANTH 3324	Mexican American Culture	
ENG 3344	Chicana/o/x Narrative and Social History	
ENG 3345	Southwestern Studies I: Defining the Region	
ENG 3346	Southwestern Studies II: Consequences of Region	
GEO 4306	Geography of the Southwest	
HIST 2327	History of Mexican America to 1865	
HIST 2328	History of Mexican America from 1865	
HIST 3329	Spanish Borderlands, 1521-1821	
SOCI 3322	Sociology of Latinos and Immigration	
<b>Electives</b>		
Choose 12 hours from the following:		12
ANTH 3315	Archaeology of the Southwest	<sup>1</sup>

ANTH 3318	Ancient Cultures of the Texas Crossroads
ANTH 3324	Mexican American Culture <sup>1</sup>
ARTH 4300	History of American Art
ARTH 4310	Race and Representation
ENG 3309	The Southwest in Film
ENG 3344	Chicana/o/x Narrative and Social History <sup>1</sup>
ENG 3345	Southwestern Studies I: Defining the Region <sup>1</sup>
ENG 3346	Southwestern Studies II: Consequences of Region <sup>1</sup>
ENG 4325	Literature of the Southwest
GEO 3308	Latin America
GEO 3329	Geography of Texas
GEO 4306	Geography of the Southwest <sup>1</sup>
GEO 4310	Regional Field Studies (Big Bend)
HIST 2327	History of Mexican America to 1865 <sup>1</sup>
HIST 2328	History of Mexican America from 1865 <sup>1</sup>
HIST 3329	Spanish Borderlands, 1521-1821 <sup>1</sup>
HIST 3352	Western America
HIST 3353	The U.S. - Mexico Border and its Communities: A History
HIST 3368L	History of Mexican American Music in the Southwest
HIST 3372	Texas History: A Survey
HIST 4372	Latina/o/x Histories
HIST 4375A	Critical Issues in Texas History
HIST 4375B	African-American Experience in Texas
HIST 4376	The History of Texas Music
HON 2305B	Women and Texas Music
PS 4323	Latina/o Politics
SOCI 3322	Sociology of Latinos and Immigration <sup>1</sup>
SOWK 4310	Diversity and Social Justice in Social Work
SPAN 4370	Hispanic Literature of the Southwest

**Total Hours** **18**

<sup>1</sup> Courses completed for core credit may not be used for elective credit.

Evans Liberal Arts Building Room 266  
Telephone: 512-245-8272 Fax: 512-245-8076  
[www.txstate.edu/anthropology](http://www.txstate.edu/anthropology) (<http://www.txstate.edu/anthropology/>)

Anthropology is the study of human cultural and biological variation and evolution. It is a holistic discipline taking into consideration all aspects of human existence. In a general sense, anthropology is concerned with determining what humans are, how they evolved, and how they differ from one another. Anthropology at Texas State is divided into three major sub-fields: cultural anthropology, biological anthropology, and archaeology and we offer coursework and training in each of these areas.

Undergraduate Anthropology majors choose between two degrees: The Bachelor of Arts and the Bachelor of Science. The undergraduate curriculum for students seeking the BA and BS degrees in Anthropology is structured to ensure that all students receive the knowledge to achieve the educational outcomes prescribed by the faculty, as well as allow for flexibility in training so that the personal goals of each student is



achieved. Students pursuing either degree have the opportunity to participate in department field schools and/or internship program.

Graduates can be found in a surprising array of fields and careers, such as corporations, all levels of government, educational institutions and non-profit associations. Post-graduate employment includes Education/Outreach, Archeology, Cultural Resource Management (CRM), Historic Preservation, Museum/Curation/Project Design, Community Development, Advocacy (human rights/social justice), Human/Social Services, Management Consulting/Organizational Development/Training, Computers/Software Development/Information Technology, Design (products and/or services), International Development/Affairs, Forensics, Mass Communication, Law/Criminal Justice/Law Enforcement, Administration/Management, Ethnography, Evaluation/Assessment, Health (international/public health), Environment and Natural Resources, Healthcare Management/Services/Deliver, Social Impact Assessment, Market Research, and Humanitarian Efforts.

## Bachelor of Arts (B.A.)

- Major in Anthropology (p. 499)

## Bachelor of Science (B.S.)

- Major in Anthropology (p. 501)

## Minor

- Anthropology (p. 502)
- Social Impact through Applied Research (p. 502)

## Courses in Anthropology (ANTH)

### ANTH 1312. Cultural Anthropology.

In this course students examine the nature of cultural variation of populations in the present and recent past. Its subjects include social, political, economic, and ideological aspects of human cultures. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ANTH 2351

### ANTH 2101. Biological Anthropology Laboratory.

This laboratory course accompanies Biological Anthropology. It provides students with hands-on experience with the materials and methods of biological anthropology. Students examine human genetic and anatomical variability, anatomical and behavioral similarities and differences among living primates, human skeletal anatomy, and evidence for human evolution from the fossil record.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** ANTH 2101

### ANTH 2102. Introduction to Archaeology Laboratory.

This laboratory course accompanies Introduction to Archaeology. It provides students with hands-on experience with the materials and methods of archaeology, and covers topics such as stratigraphy, site maps, lithic and ceramic analysis, and ethics. Corequisite: ANTH 2302 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ANTH 2301. Biological Anthropology.

This lecture and accompanying laboratory course examine fundamental aspects of the biological nature of humans. Course content is divided into topics devoted to explaining the scientific method, evolutionary theory, genetics, speciation, variation and adaptation, nonhuman primates, and human evolution.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030

**Grade Mode:** Standard Letter

**TCCN:** ANTH 2301

### ANTH 2302. Introduction to Archaeology.

This lecture and accompanying laboratory course examine the basic principles of archaeology. It includes a study of the kinds of sites; classification of stone artifacts; methods of archaeological survey and excavation; methods of dating by geological, faunal, and radiometric means; and the theoretical approach to archaeology. Corequisite: ANTH 2102.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** ANTH 2302

### ANTH 3101. Writing Anthropology.

This course offers tutelage in professional scholarly writing, word processing software, library research, scientific and ethnographic writing styles, and effective use of anthropological literature. Because it provides core skills presupposed by advanced anthropology courses, students should enroll in it alongside their first writing-intensive anthropology electives.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

### ANTH 3102. Skeletal Processing, Preparation, and Curation Techniques.

In this laboratory-based course students will learn human skeletal processing techniques used in forensic anthropological casework and gain an introduction to human skeletal anatomy and variation. Prerequisite: ANTH 3381 with a grade of a "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 3201. Professionalization in Anthropology.**

This course surveys the breadth of careers open to people holding anthropology degrees. Issues discussed include professional ethics, specialized skill sets, the transferable skills of liberal arts degrees, broad trends in the labor market, and steps toward pursuing relevant careers.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3301. Principles of Cultural Anthropology.**

This course is an ethnographically-based analysis of major theoretical positions and debates in contemporary anthropology. (WI) Prerequisites: ANTH 1312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3302. Introduction to Linguistic Anthropology.**

This course provides an introduction to the study of linguistic anthropology. We will focus on the origin of language and its evolution and diversity, the interactions between language, culture and society, and modes of communication. This course will enhance a student's awareness of the complex interrelationships between language and other aspects of culture. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3303. Applied Cultural Anthropology.**

In this course students learn the methods applied cultural anthropologists use to address social problems such as poverty, sustainable development, conflict, climate change, community health, workplace and product design, education, and cultural heritage, as well as the value "thinking anthropologically" has for a wide range of careers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3304. Bioarchaeology.**

Bioarchaeology is the study of human skeletal remains in relation to the archaeological record. In this course students will study theories and methods used in the analysis of human skeletal remains in bioarchaeology to reconstruct patterns of subsistence, diet, disease, demography, biological relatedness, and physical activity of past populations.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 3305. Magic, Ritual and Religion.**

An examination of magic and religion in cultures of the world with an emphasis on recent works dealing with mysticism and the occult. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3306. World Prehistory.**

This course presents a survey of the prehistoric human record throughout the world. It focuses upon the achievements of early and modern humans, world colonization events, and the development of complex societies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3307. History of Evolutionary Thought.**

This course discusses the impact of evolutionary discourse within the context of its history. Students will develop a thorough understanding of evolution and its importance to anthropology, as well as to other scientific disciplines. (WI) Prerequisites: ANTH 2301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3308. Cultural Resource Management and Archaeology.**

This course surveys Cultural Resource Management (CRM) archaeology, the conservation and investigation of archaeological remains as mandated by federal and state laws. The course covers the history of CRM and its legal and regulatory framework, organization, methods, funding, employment prospects, and ethical and practical dilemmas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3309. Cultures Through Film.**

Through films, lectures, and discussions, students explore the various ways that ethnographic film interprets the cultural environment and social interactions of small-scale cultures around the world. We will also discuss anthropological interpretations of how historically U.S. (American) culture has dealt with concepts of the "other" and supernatural phenomena through film. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3311. Disease and Society.**

In this course students examine infectious diseases and the effect they have on human societies. The course is organized into case studies of specific infectious diseases, which focus on the biology and epidemiology of a disease as well its social impact.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3313. Aztec: Native Americans and Empire.**

This course presents an understanding of Aztec culture through archaeology, the interpretation of art, religion, and architecture, and the formation of a highly specialized and stratified society with an imperial administration. The course will emphasize an intellectual and religious outlook in intimate contact with the earth, sky, and the seasons.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3314. Latin American Cultures.**

This course examines different aspects of Latin American indigenous cultures from a variety of theoretical perspectives in anthropology. Emphasis is on the Maya, and different theoretical perspectives provide different interpretations of data. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3315. Archaeology of the Southwest.**

An examination of the prehistory and early cultures of the Greater Southwest from the first arrival of humans as early as 20,000 years ago to the coming of the Spaniards in the 16th century. The course covers several mammoth kill sites at the end of the Pleistocene; the emergence of Archaic hunters and gatherers and the appearance of agriculture about two thousand years ago, leading to the three major cultures in the southwest-the Mogollon, the Hohokam and the Anasazi, the last in multistoried pueblos and cliff dwellings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3316. The Origin and Evolution of Human Behavior.**

This course presents our current understanding of Old World Paleolithic Archaeology. The origin and evolution of hominid behavior, the initial colonization of the Old World, and the development of modern human behavior will be discussed for each continent. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3317. Rock Art Field Methods.**

This course will train students in rock art field methods. They will gain first-hand experience recording rock art sites through photography, field sketches, mapping, and written inventories. Students will generate a visual and written description of the art, which they will use to infer and explain past human behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3318. Ancient Cultures of the Texas Crossroads.**

This course will present our current understanding of Texas archaeology. The environmental and social contexts of prehistoric, protohistoric, and historic records of Native American and Spanish occupations in Texas are discussed. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3322. Peoples and Cultures of Africa.**

This course is a general introduction to the contemporary peoples and cultures of Africa. Students will examine the social structure, economy, political systems, and religions of African cultures in the context of the radical economic and social transformations affecting the area. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3324. Mexican American Culture.**

This course provides exploration of Mexican American culture with an emphasis on the US-Mexico transborder region. The course integrates history, anthropology, and ethnic studies to capture the broad diversity of Mexican American experiences. Some of the topics covered include identity, social movements, Chicana feminism, transnational migration, spirituality, and cultural expressions such as visual art, film, music, and performance. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3325. Medical Anthropology.**

This course focuses on how illness identities are culturally constructed, how adaptations or maladaptations to local environments affect health, how political and economic forces influence health and health behaviors, and how the practice of medical anthropology can contribute to solving urgent health issues around the world.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3327. Anthropology of Religion and Fundamentalism.**

This course provides students with current and historical approaches to the anthropology of religion with a particular emphasis on fundamentalism. It focuses on the development of religious fundamentalism in different cultural contexts, geopolitical situations, and religious traditions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3330. Archaeological Curation and Collections Management.**

This course provides technical training in and an understanding of the principles and methods of curating and managing archaeological collections. Students review the history of archaeological curation in the United States as well as relevant laws and regulations. Additional topics covered include types of repositories and storage facilities, costs of curation, policies, collection rehabilitation, archival processing, basic preventative conservation strategies, and using archaeological collections to educate the public.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 3331D. Dental Anthropology and Oral Biology.**

The biological development of the cranio-facial structures will be presented with emphasis on hard tissue anatomy and diseases. Dental traits will be discussed in relation to human evolutionary concepts. Forensic methods that support identification of human remains are emphasized. This course is appropriate for anthropology students and pre-professional dentistry. Prerequisite: ANTH 2301 or [BIO 1130 and BIO 1330] any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 3331E. Anthropology and the Law.**

This course explores the role of law as an instrument of social change, justice, and human rights. Topics include law as a social system, understanding legal reasoning, identifying key actors, how law influences change, how law is depicted in popular culture, and how law influences anthropological research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 3331F. Body Talk: Gestures, Communication, and Society.**

Communication involves the use of 'invisible' words and gestures, or 'visible actions.' This course focuses on gestures, what they are, how they are used, what role they play in communication and in thinking, and their cultural underpinning. Students will learn the theoretical and methodological issues involved in studying different gestures across societies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 3331G. The Archaeology of Cannibalism and Sacrifice.**

Students in this course explore kinds of violence in past societies considered especially shocking or controversial in the contemporary, developed West: human sacrifice and the consumption of the human dead. Avoiding exoticism and suspending moral evaluation in favor of anthropological inquiry, we will consider cannibalism and sacrifice as cultural expressions of universal human drives and preoccupations and as historically specific solutions to common problems in social organization. We will examine archaeological and ethnohistoric case studies drawn from a wide range of time periods, cultures, and regions in an effort to identify and explain diversity and commonalities among such practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3331I. Design + Anthropology.**

This course will begin by exploring the anthropology of design, including the practices, implications, and expansion of design under contemporary capitalism. Students will then use this knowledge to examine the growing field of design anthropology and learn how anthropologists provide actionable insights and research for design work today.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3331J. Race and Biological Anthropology.**

In this course students will learn where race concepts originated, examining the worldview and scientific mindsets that guided biological anthropology into the 21st century. We will explore how social race has become biological, put forth pragmatic solutions in the context of anthropology research, and help develop an informed scientific practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3331L. Social Impact: Anthropology of Innovation, Entrepreneurship, & Business.**

This course explores the nature of innovation under late capitalism via entrepreneurship. Drawing on the anthropology of business, design, organizations, economics and technology, students will review with a critical lens how people strive for better futures and what anthropology can do to improve these efforts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 3332. Myths and Moundbuilders.**

This course presents an anthropological approach to Native Americans of the Southeastern United States, their culture and beliefs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3335. The Anthropology of Native American Belief Systems.**

In this course students use anthropological approaches to investigate past and present Native American belief systems in order to determine the temporal range and evolving complexity of Native American religious and ritual expression.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3336. Locally Engaged Research.**

This course will provide students the opportunity to conduct hands-on anthropological research on a variety of topics in local communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3337. Language and Linguistics.**

This course is concerned with the theoretical and methodological study of language, what constitutes the knowledge of a language, how this knowledge is acquired, and how it is used. Other areas of interest include the properties of human language, its representation in the mind, learnability, origin, and change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3338. Geoarchaeology.**

This course will teach students how to interpret sediments and the nature of sediment accumulation at archeological sites. Course topics include sedimentology, natural depositional environments, weathering processes and soil development, stratigraphic analysis, and archaeological site formation processes. (WI) Prerequisite: ANTH 2302 or GEOL 1410 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3339. Contemporary Film and Global Culture.**

This course examines the relationship of recent film to both national culture and our increasingly globalized world culture. It focuses on the relationship between the creators of film, their intended audiences and the cultural context of both of these. It explores the way that film relates to current issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3340. Human and Primate Origins.**

An examination of the long and diverse record of human and nonhuman biological adaptations as viewed from the fossil record. It examines the functional and ecological challenges that may have been responsible for the path of human development.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3342. Primate Behavior.**

In this course, students will learn about the behavior, ecology and conservation of nonhuman primates (lemurs, lorises, monkeys, and apes).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3343. Human Variation and Adaptation.**

This course examines the physical variation observable within and between human populations. It emphasizes a functional approach whereby variation is examined in relation to biological adaptation. It explores the biological mechanisms responsible for change and evaluates the potential of biological components in human behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3345. Archaeology of Mesoamerica.**

This course examines the development of culture from early hunters and gatherers through the appearance of agriculture to the rise of civilization. The focus of the course is on the emergence of complex society among groups such as the Olmec, Aztec, and Maya. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3347. Archaeology of North America.**

This course describes human settlement of North America from the end of the Pleistocene to European discovery. It considers early occupation of arctic, plains, and forested regions and development during archaic times of Adena, Hopewell, and Mississippian societies in the Southeast and Mogollon, Hohokam, and Anasazi in the Southwest.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3348. Primate Conservation: Adapting to Rapidly Changing Landscapes.**

This course provides instruction on the ecology and conservation of primates and the flora and fauna in their ecosystems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3349. The Incas.**

The Incas were the largest Pre-Columbian empire in the Americas and this course will explore the origins of this civilization and how they conquered such a large area of South America. Using archaeological and historic information the class will examine various aspects of Inca society including religion, economics, and kingship.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3350. Gender and Sexuality in Cross-cultural Perspective.**

This course explores historical and contemporary issues related to gender and sexuality from cross-cultural perspectives. It will focus on cultural constructions of gender and sexuality and explore key themes in queer anthropology as well as US minority and Global South feminisms through expressive and documentary forms including music, film, art and performance. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3351. Anthropology of Peace and Violence.**

This class explores anthropological perspectives on peace and violence. It focuses on understanding violent practices within both traditional and current day societies including everyday violence and warfare. It explores the contributions of social structure, gender, religion, race, and ethnicity to violence. It examines efforts to build peace and reconciliation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ANTH 3352. Language and the Body.**

This class focuses on how language shapes our identities and deeply held beliefs about our bodies. Students will have an opportunity to engage in discourse analysis of media representations as well as collect and analyze their own conversational data using the methods of linguistic and cultural anthropology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3353. Human Structure and Function.**

Students study the structure and basic function of the human body with emphasis on the skeletal, muscular, and nervous systems. This course provides a basis for other courses in biological anthropology.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 3356. Archaeology of Andean Civilizations.**

This course examines the cultures of the Andes Region of South America with an emphasis on pre-Columbian and contemporary peoples of the area.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3357. Historical Archaeology.**

This course is designed to provide students with an intensive overview of historical archaeology method, theory, and artifacts in Texas and North America. Using the methods and theories of historical archaeology, students analyze historical narratives, which incorporates research, documents, and material culture from historic period sites.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 3358. Human Evolutionary Anatomy.**

This course is designed to give students an anatomical background to the study of human evolution with a focus on the comparative anatomy of apes, living humans, and fossil hominins.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 3359. Skeletal Processing, Preparation, and Curation Techniques.**

This course is laboratory based and students will learn human skeletal processing techniques used in forensic anthropological casework and gain an introduction to human skeletal anatomy and variation. Prerequisite: ANTH 3381 with a grade of a "D" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3360. Economic Anthropology.**

Reviews central issues in economic anthropology, using both case studies and theoretical writings. Analyzes production, exchange, distribution, consumption, property, economic surplus, inheritance, and types of economic structure. Materials will cover huntergatherer societies, simple agricultural societies, pre-capitalist complex state societies, and issues of development in nonindustrialized countries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3361. Archaeological Field Methodology.**

In this course students will learn about planning, organizing, and carrying out archaeological field investigations from survey to excavation to specialized data recovery. The focus is on the research strategies, techniques and logistics necessary to design and accomplish successful field research. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3363. The Art and Archaeology of the Olmec.**

This course will present our current understanding of the art and archaeology of the Olmec culture, the earliest known civilization in North America. The Olmec culture is considered the influential foundation for later Mesoamerican civilizations such as the Maya and the Aztec.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3366. Social Impact through Applied Research.**

This course introduces students to how research in anthropology and other disciplines can be used to create social impact—solutions to public problems. Students will explore what social impact is, barriers that prevent social impact from occurring, and how social impact can be created through the application of applied research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3367. Applied Statistics.**

This course will teach students basic statistical concepts through an anthropological lens. Students will learn to engage with data and statistics in everyday topics related to anthropology, the foundations of statistical analysis, and how to use the statistical programming language and software to explore and communicate data to the public.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 3377. Anthropology of Youth.**

This class will provide an overview of issues in adolescent and emerging adult health and development in national and international contexts. Drawing from several disciplines including anthropology, education, public health, psychology, and sociology, we will critically examine existing research on youth and discuss underlying assumptions, research methodologies, and findings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ANTH 3380. Forensic Anthropology.**

Forensic Anthropology is the recovery and analysis of human skeletal remains for modern legal inquiry. This course is an overview of the field of Forensic Anthropology illustrated with real forensic cases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ANTH 3381. Human Osteology.**

The foundation of biological anthropology is the study of the human skeleton. This is a lab-intensive course in which students will learn how to identify skeletal elements, both whole and fragmentary.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ANTH 3382. Archaeology of Ice Age America.**

Precisely when the first people arrived in the Americas, where they came from, and how they got here are the subjects of longstanding debate. This class will draw upon archaeological, biological, linguistic, and environmental evidence to reconstruct the earliest human prehistory of the New World.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ANTH 4303. Human Speech Sounds.**

This course is an introductory overview of human speech production and perception from an anthropological perspective. It describes speech anatomy and pays particular attention to the description of the acoustic and articulatory properties of speech as it occurs in real time. Students will study articulatory, acoustic, and auditory phonetics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ANTH 4304. Language, Culture and Society.**

This course seeks to introduce students to the fundamentals of linguistic anthropology, and the use of linguistics in anthropological fieldwork through lecture, discussion, and "hands on" class exercises.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ANTH 4309. Culture, Medicine and the Body.**

This course explores how the human body, functions of the body, and the practices of medicine and healing are situated and contextualized within cultural frameworks. Case studies cover body and health-related topics over the life course, from birth to death. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Writing Intensive  
**Grade Mode:** Standard Letter

**ANTH 4310. Theories and Issues in Anthropology.**

This course explores major theoretical and historical developments in anthropology, highlighting the discipline's unique four-field perspective that includes archaeology, biological and cultural anthropology, and anthropological linguistics. Topics stress the importance of anthropological thought in key scientific discoveries and cultural debates. Prerequisites: ANTH 1312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Writing Intensive  
**Grade Mode:** Standard Letter

**ANTH 4315. Archaeological Artifact Identification and Analysis.**

This course will train students to describe and analyze artifacts commonly recovered from archaeological sites. Current theories covering the production and analysis of chipped and ground stone tools, ceramics, bone and other materials will be presented, and scientific analytical methods discussed. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Writing Intensive  
**Grade Mode:** Standard Letter

**ANTH 4320. Rise of Civilization.**

This course consists of a definition of civilization and its components, its geographic setting, and the roles of religion, art, and the institution of the "Divine King" in the development of dynamic state societies in Egypt, Sumeria, the Indus Valley, and China in the Old World and that of the Olmec in Mexico and Chavin in Peru. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content|Writing Intensive  
**Grade Mode:** Standard Letter

**ANTH 4326. Field Methods in Forensic Anthropology.**

In this course students will learn how to locate, excavate and recover human remains, associated personal effects, and other materials in order to ensure legal credibility for all recoveries. Prerequisite: ANTH 3381 with a grade of "D" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ANTH 4337. Theory in Linguistic Anthropology.**

In this course students will be introduced to the major theories of linguistics through reading and discussing classic and contemporary literatures. Particular attention will be given to how the various theories have influenced linguistic anthropology. (WI) Prerequisites: ANTH 1312 or ANTH 3302 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 4339. Theoretical Concepts in Archaeology.**

This course provides a broad survey of theory in archaeology as it is practiced throughout the world. It includes both historical perspectives and contemporary usage. (WI) Prerequisite: ANTH 2302 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 4360. Directed Study.**

A one-semester course of independent reading, tutorial sessions, and individual research projects. Open to superior students by invitation of the professor and with the consent of the chair of the department. May be repeated for credit with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 4361. Qualitative Research Methods.**

This course provides instruction on qualitative research methods through lectures and hands-on activities, including designing qualitative research projects, collecting and analyzing qualitative data, and presenting qualitative results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 4363. Methods in Primate Research.**

In this course, students will learn about the methods used to study primates in captive and field settings.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 4381. Paleopathology.**

This course focuses on the study of diseases and maladies of ancient populations, and will survey the range of pathology on human skeletons from trauma, infection, syphilis, tuberculosis, leprosy, anemia, metabolic disturbances, arthritis, and tumors. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 4382. Methods in Skeletal Biology.**

This course is for students who wish to advance their osteological skills. Students will learn how to identify isolated and fragmentary skeletal remains to estimate age, sex, ancestry, stature, and health of an individual in past and present contexts. Prerequisite: ANTH 3381 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 4390. Internship in Anthropology.**

This course provides students with professional development through work or research-related experience. After consulting the internship coordinator, students choose placements matching their interests and develop individualized internship contracts. Interns meet to discuss career preparation and anthropological topics related to each intern's activities, keep a journal, and submit a final report. Prerequisites: Minimum 2.5 Major GPA and instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 4600. Bioarchaeology Field and Laboratory Methods.**

In this course students will be trained in the documentation, contextual assessment, and recordation of human skeletal remains in bioarchaeological settings. Students will engage in research projects, gaining practical laboratory and field experience. Prerequisite: ANTH 3381 with a grade of "D" or better or instructor approval.

**6 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 4630. Archaeological Field School.**

This course is designed to train students in the skills and techniques of modern archaeological survey and excavation of prehistoric sites. May be repeated for credit, but only six hours may be applied toward the major.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses. Life and Physical Sciences component courses may not include ANTH 2101 or ANTH 2301.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature; three hours of mathematics, science, logic, or computer science courses (not to include ANTH 2301); a minor; and six hours of 2000-level modern language courses. Most students will have to complete the 1410 and 1420 language courses as prerequisites before attempting the 2310 course.

- Nine hours of writing intensive (WI) courses are required for graduation.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- This major requires 32 semester credit hours of Anthropology courses which 18 hours must be advanced courses. Students may not receive more than six hours of credit in ANTH 4630 to satisfy Anthropology major requirements. Students must complete one of the following theory-based Anthropology courses:

Code	Title	Hours
ANTH 3301	Principles of Cultural Anthropology	3
ANTH 3307	History of Evolutionary Thought	3
ANTH 4310	Theories and Issues in Anthropology	3
ANTH 4337	Theory in Linguistic Anthropology	3
ANTH 4339	Theoretical Concepts in Archaeology	3

- Students are required to achieve a major GPA 2.50 for graduation.
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
Communication Component Code 010	3	Communication Component Code 010	3
Government/Political Science Component Code 070	3	American History Component Code 060	3
Modern Language 1410	4	Modern Language 1420	4
ANTH 1312 (TCCN ANTH 2351)	3	ANTH 2301 & ANTH 2101 (TCCN ANTH 2301 & 2101)	4
US 1100	1		
<b>14</b>		<b>14</b>	

Sophomore			
First Semester Hours		Second Semester Hours	
Mathematics Component Code 020	3	Life and Physical Sciences Component Code 030 (not to include ANTH 2301 or ANTH 2101)	3
American History Component Code 060	3	Creative Arts Component Code 050	3
Social and Behavioral Sciences Component Code 080 (not to include ANTH 1312)	3	Government/Political Science Component Code 070	3
Modern Language 2310	3	Modern Language 2320	3
ANTH 2302 & ANTH 2102 (TCCN ANTH 2302 & 2102)	4	ANTH 3201	2

ANTH 3101		1
16		15
First Semester Hours		Junior
Second Semester Hours		
Language, Philosophy, and Culture Component Code 040	3 Life and Physical Sciences Component Code 030 (not to include ANTH 2301 or ANTH 2101)	3
ENG 2310, 2320, 2330, 2340, 2359, 2360, or 2371 (Component Area Option Code 090/094 [TCCN ENGL 2322, 2323, 2332, 2333, 2327, or 2328])	3 Component Area Option Code 090/091	3
ANTH Advanced Electives	6 ANTH Advanced Elective	3
Minor	3 Minor	6

<b>15</b>		<b>15</b>	
First Semester Hours		Second Semester Hours	
BA English Literature	3	ANTH Advanced Elective	3
BA Science, Math, Computer Science, or Logic (not to include ANTH 2301 or ANTH 2101)	3	Anthropology Techniques	3
ANTH 3301, 3307, 4310, 4337, or 4339	3	Minor	6
ANTH Advanced Elective	3	Electives (as needed)	4
Minor	3		
<b>15</b>		<b>16</b>	

### Total Hours: 120

Code	Title	Hours
<b>Anthropology Techniques</b>		
Choose 3 hours from the following:		
ANTH 3317	Rock Art Field Methods	3
ANTH 3330	Archaeological Curation and Collections Management	3
ANTH 3336	Locally Engaged Research	3
ANTH 3338	Geoarchaeology	3
ANTH 3361	Archaeological Field Methodology	3
ANTH 4303	Human Speech Sounds	3
ANTH 4315	Archaeological Artifact Identification and Analysis	3
ANTH 4326	Field Methods in Forensic Anthropology	3
ANTH 4361	Qualitative Research Methods	3
ANTH 4363	Field Methods in Primate Behavior	3
ANTH 4382	Methods in Skeletal Biology	3
ANTH 4390	Internship in Anthropology	3
ANTH 4600	Bioarchaeology Field and Laboratory Methods	6
ANTH 4630	Archaeological Field School	6

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Twelve hours of writing intensive (WI) courses are required for graduation.
- Students must select a minor from the following list of lab-based science minors: biology, chemistry, physics, geology, geography, computer science, or mathematics.
- All students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- This major consists of 35 semester credit hours of Anthropology courses, 18 of which must be advanced. Students may not receive more than six hours of credit for ANTH 4630 to satisfy Anthropology major requirements. Students must complete one of the following Anthropology theory-based courses:

Code	Title	Hours
ANTH 3301	Principles of Cultural Anthropology	3
ANTH 3307	History of Evolutionary Thought	3
ANTH 4310	Theories and Issues in Anthropology	3
ANTH 4337	Theory in Linguistic Anthropology	3
ANTH 4339	Theoretical Concepts in Archaeology	3

- Students must complete 6 hours of Anthropology techniques courses to be selected from:

Code	Title	Hours
ANTH 3317	Rock Art Field Methods	3
ANTH 3330	Archaeological Curation and Collections Management	3
ANTH 3361	Archaeological Field Methodology	3
ANTH 4326	Field Methods in Forensic Anthropology	3
ANTH 4361	Qualitative Research Methods	3
ANTH 4363	Field Methods in Primate Behavior	3
ANTH 4382	Methods in Skeletal Biology	3
ANTH 4390	Internship in Anthropology	3
ANTH 4630	Archaeological Field School	6

- Students must complete one of the following statistics courses: CJ 3347, GEO 3301, PSY 2301, or SOCI 3307.
- Students are required to achieve a major GPA 2.50 for graduation.
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

### Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
Communication Component Code 010	3 Communication Component Code 010	3

Government/Political Science Component Code 070	3 American History Component Code 060	3
Modern Language 1410	4 Modern Language 1420	4
ANTH 1312 (TCCN ANTH 2351)	3 ANTH 2301 & ANTH 2101 (TCCN ANTH 2301 & 2101)	4
US 1100	1	
14		14

#### Sophomore

First Semester Hours	Second Semester Hours	
MATH 1315, 1317, 1319, 2321, 2417, or 2471 (Mathematics Component Code 020 [TCCN MATH 1314, 1316, 1324, 2313, 2412, or 2413])	3 Life and Physical Sciences Component Code 030 <sup>1</sup>	3-4
Life and Physical Sciences Component Code 030 <sup>1</sup>	BIO 1321 (TCCN BIOL 1309)	
BIO 1320 (TCCN BIOL 1308)	BIO 1331 & BIO 1131 (TCCN BIOL 1307 & 1107)	
BIO 1330 & BIO 1130 (TCCN BIOL 1306 & 1106)	Language, Philosophy, and Culture Component Code 040	3
American History Component Code 060	3 Creative Arts Component Code 050	3
Social and Behavioral Sciences Component Code 080 (not to include ANTH 1312)	3 Government/Political Science Component Code 070	3
ANTH 2302 & ANTH 2102 (TCCN ANTH 2302 & 2102)	4 ANTH 3201	2
ANTH 3101		1
16		15

#### Junior

First Semester Hours	Second Semester Hours	
ENG 2310, 2320, 2330, 2340, 2359, 2360, or 2371 (Component Area Option Code 090/094 [TCCN ENGL 2322, 2323, 2332, 2333, 2327, or 2328])	3 Component Area Option Code 090/091	3
ANTH Advanced Electives	6 ENG 3303 or PHIL 4355	3
CJ 3347, GEO 3301, PSY 2301, or SOCI 3307	3 ANTH 3317, 3330, 3361, 4326, 4363, 4361, 4382, 4390, or 4630	3
Minor	3 Minor	6
15		15

#### Senior

First Semester Hours	Second Semester Hours	
ANTH Advanced Elective	3 ANTH Advanced Elective	3
ANTH 3317, 3330, 3361, 4326, 4363, 4361, 4382, 4390, or 4630	3 Minor	3



ANTH 3301, 3307, 4310, 4337, or 4339	3 Electives (as needed)	7
Minor	6 Anthropology Techniques	3
	<b>15</b>	<b>16</b>

**Total Hours: 120**

<sup>1</sup> Students minoring in Biology are required to complete BIO 1330 & BIO 1130 and BIO 1331 & BIO 1131.

Code	Title	Hours
<b>Anthropology Techniques</b>		
Choose 3 hours from the following:		
ANTH 3336	Locally Engaged Research	3
ANTH 3338	Geoarchaeology	3
ANTH 4303	Human Speech Sounds	3
ANTH 4315	Archaeological Artifact Identification and Analysis	3
ANTH 4600	Bioarchaeology Field and Laboratory Methods	6

The minor in Anthropology requires 20 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
ANTH 1312	Cultural Anthropology	3
ANTH 2101	Biological Anthropology Laboratory	1
ANTH 2102	Introduction to Archaeology Laboratory	1
ANTH 2301	Biological Anthropology	3
ANTH 2302	Introduction to Archaeology	3
<b>Prescribed Electives</b>		
Choose 9 hours of advanced ANTH electives		9
<b>Total Hours</b>		<b>20</b>

<sup>1</sup> Students must take ANTH 2301 and ANTH 2101 in the same semester.  
Students must take ANTH 2302 and ANTH 2102 in the same semester.

The undergraduate minor in Social Impact through Applied Research requires 18 semester credit hours. The minor is designed for students seeking to enhance their abilities to translate scholarly research into practical solutions to social problems. It is an ideal complement to majors in business, health care, and STEM.

Code	Title	Hours
<b>Required Courses</b>		
ANTH 3366	Social Impact through Applied Research	3
<b>Qualitative Methods/Statistics</b>		
Choose 3 hours from the following:		3
ANLY 2300	Introduction to Data Analytics	
ANLY 2333	Business Statistics	
ANTH 3367	Applied Statistics	
ANTH 4361	Qualitative Research Methods	
GEO 3301	Research Methods in Geography	
IE 3320	Engineering Statistics	
MATH 2328	Elementary Statistics	
PH 3315	Statistics in Public Health	
PSY 2301	Introduction to Statistics	

SOCI 3307	Statistics for the Behavioral Sciences
SOCI 3318	Applied Data Analysis
SOCI 4308	Quantitative Research Methods
SOCI 4309	Qualitative Research Methods

<b>Community Research/Internship</b>		
Choose 3 hours from the following: <sup>1</sup>		3
ANTH 3336	Locally Engaged Research	
ANTH 4390	Internship in Anthropology	

<b>Communication</b>		
Choose 3 hours from the following:		3
COMM 2338	Public Speaking	
COMM 3325	Communication and Conflict Management	
COMM 3350	Public Advocacy and Civic Engagement	
COMM 4331	Persuasion	
ENG 1321	Writing for Sustainable Change	
ENG 3303	Technical Writing	
ENG 3313	Scientific Writing	

<b>Minor Electives</b>		
Choose 6 hours from the following:		6

AAS 3399	Negotiating the Color Line
ANTH 3304	Bioarchaeology
ANTH 3308	Cultural Resource Management and Archaeology
ANTH 3315	Archaeology of the Southwest
ANTH 3318	Ancient Cultures of the Texas Crossroads
ANTH 3324	Mexican American Culture
ANTH 3325	Medical Anthropology
ANTH 3330	Archaeological Curation and Collections Management
ANTH 3331J	Race and Biological Anthropology
ANTH 3331L	Social Impact: Anthropology of Innovation, Entrepreneurship, & Business
ANTH 3343	Human Variation and Adaptation
ANTH 3350	Gender and Sexuality in Cross-cultural Perspective
ANTH 3351	Anthropology of Peace and Violence
ANTH 3357	Historical Archaeology
ANTH 3380	Forensic Anthropology
COMM 3336	Diversity and Communication
COMM 4322	Rhetoric of Protest Movements
COMM 4345	Political Communication
GEO 3320	Community and Regional Planning
GEO 3340	Political Geography
GEO 4393E	Race, Class, and the American City
HIST 4318Z	Podcasting History: Making Marginalized Voices Heard
HIST 4352	Black Women and Black Protest in America
PHIL 1320	Ethics and Society
PHIL 4360C	Philosophy, Nonviolence, Sustainability, and Social Change
PHIL 4360F	Biopolitics, Governmentality, and Ungovernability
PA 3300	Introduction to Public and Nonprofit Administration
PA 3301	Political Institutions and Public Service
PA 3350	Public Policy Process

PH 3330	Inclusion and Diversity in Women's Health
PH 4330A	
SOCI 3322	Sociology of Latinos and Immigration
SOCI 3324	Social Stratification
SOCI 3331	Social Movements
SOWK 4310	Diversity and Social Justice in Social Work
WS 3377	Gender, Sex, and Power
<b>Total Hours</b>	<b>18</b>

<sup>1</sup> With departmental approval, similar courses from other departments may satisfy this requirement.

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Students in the Department of English learn to create for a world dependent on the written word and visual rhetoric. Ever-changing and fragmented communication landscapes—especially those that include AI—demand leaders who can inspire others by using words and images that convey innovative ideas and foster authentic connections. Our students create essays and professional documents, along with poems, short stories, and screenplays, as well as content for a host of new media platforms. What students create in the Department of English is limited only by their own imaginations.

Courses cover a range of texts—from medieval literature to pop culture—through a range of approaches. Students in English analyze literature, rhetoric, technical documents, film, and other media, and they express themselves in a variety of contexts while exploring big questions about life, meaning, and value. From literary wonderlands to the cinematic west, from the Elizabethan stage to social media platforms, English courses take students to a variety of textual worlds.

Our department's faculty are award-winning authors, scholars, poets, and essayists who bring a breadth of expertise into the classroom. Their courses help students hone their crafts, developing the abilities to analyze texts, express themselves in different media, and adapt to the future. Our flexible curriculum provides a broad foundation in the Humanities while also encouraging students to pursue their individual passions among several different concentrations and minors.

English majors, minors, and concentrations prepare students for any job that requires communication, persuasion, or research. Creators who can adapt, while presenting unique, diverse, and distinct voices, are more important than ever. Independent thinking, rhetorical dexterity, and the ability to analyze, edit, and revise have always mattered, but they are vital skills for today's workplaces and communities.

English graduates work in sectors that include but are not limited to: publishing, media and entertainment, content creation, social media, journalism, education, and instructional technology, as well as medical communication, business management, public relations, marketing, advertising, human relations, finance, and foreign service. Our students are also well prepared for graduate training, from Ph.D. programs to law school to MFAs. Their skills as expert readers and writers help employers meet and exceed their goals because an English degree prepares students to respond to various rhetorical situations, to adapt and revise for diverse audiences' needs, to create in different modalities, and to

thrive in a future dependent on the clear transmission of information and ideas.

## Bachelor of Arts (B.A.)

- Major in English (p. 510)
- Major in English (Creative Writing Emphasis) (p. 513)
- Major in English (Film Emphasis) (p. 515)
- Major in English (Secondary Education; Teacher Certification in English Language Arts and Reading, Grades Seven through Twelve, with Double Major in B.A. Education) (p. 518)
- Major in English (Writing and Rhetoric Emphasis) (p. 521)

## Minor

- English (p. 523)
- Media Studies (p. 524)
- Medieval and Renaissance Studies (p. 524)
- Southwestern Studies (p. 525)
- Writing (p. 525)
- Second Teaching Field in English (Grades 7-12) (p. 525)

## English (ENG)

Requirements in first-year English must be completed before a student takes any other English course.

### ENG 1300. Developmental Writing.

Basic composition skills. For students who have not satisfied TSIP requirements or for those who need developmental work before taking English 1310. Credit earned for this course does not count toward any degree offered by the university.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Developmental/Remedial

**Grade Mode:** Developmental

### ENG 1310. College Writing I.

Expository writing as a means of exploring and shaping ideas. Emphasis on critical reading and the improvement of essays through revision. (MULP) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Communication Core 010|Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ENGL 1301

**ENG 1320. College Writing II.**

Continuation of English 1310. Expository writing as a means of analyzing and understanding texts. Research paper required. Requirements in sophomore English must be completed before a student takes any advanced work in English. (MULP) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Communication Core 010|Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ENGL 1302

**ENG 1321. Writing for Sustainable Change.**

This service-learning writing course focuses on supporting sustainable community initiatives in the local area. All writing assignments target real-world audiences in order to advance existing and/or proposed community projects. Writing assignments reflect a variety of genres, including multimodal texts and group-authored projects. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Communication Core 010|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** ENGL 1302

**ENG 2310. British Literature before 1785.**

Students study representative authors and works of British literature from the beginnings through the Neoclassical Period.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Component Area Core 090|Lang, Phil & Culture CAO 094|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** ENGL 2322

**ENG 2320. British Literature since 1785.**

Students study representative authors and works of British literature from the Romantic Period to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Component Area Core 090|Lang, Phil & Culture CAO 094|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** ENGL 2323

**ENG 2330. World Literature before 1600.**

Students study representative authors and works of literature from the ancient world to the early modern world. Readings may come exclusively from the Western tradition or from various literary traditions, such as those of Africa and Asia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Component Area Core 090|Lang, Phil & Culture CAO 094|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** ENGL 2332

**ENG 2340. World Literature since 1600.**

Students study representative authors and works of literature from the modern world. Readings may come exclusively from the Western tradition or from various literary traditions, such as those of Africa and Asia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Component Area Core 090|Lang, Phil & Culture CAO 094|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** ENGL 2333

**ENG 2359. US Literature before 1865.**

Students survey representative authors and works of US literature from the beginnings to the Civil War.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Component Area Core 090|Lang, Phil & Culture CAO 094|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** ENGL 2327

**ENG 2360. US Literature since 1865.**

Students survey representative authors and works of US literature from the Civil War to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Component Area Core 090|Lang, Phil & Culture CAO 094|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** ENGL 2328

**ENG 2371. U.S. Literature: Writing Identities.**

In this course students survey writers and texts that reflect a variety of identities and traditions throughout U.S. history, from the colonial era to the present. Students read and analyze literary texts; develop an appreciation of literature as an art form; and gain an understanding of the role of literature in its historical, social and cultural contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Lang, Phil & Culture CAO 094|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3301. Critical Approaches for English Majors.**

This course introduces the critical methods and practices underpinning rhetorical and literary analysis within various branches of English Studies and develops the skills of reading, writing, and research. It is required for majors and open to minors and should be taken in the first semester of upper division classes. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3302. Film and Video Theory and Production.**

This course covers the study of film and narrative theory combined with the practice of videography and video editing. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 3303. Technical Writing.**

This course concerns writing in technical professions. It emphasizes planning, writing, revising, editing, and proofreading proposals, reports, instructions, and other forms of professional communication for a variety of audiences. (WI) Prerequisite: ENG 1310 or ENG 1320 or ENG 1321 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Communication Core 010|Multicultural Perspective|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3304. Professional Writing.**

The principles of expository writing adapted for the workplace. Prepares students in non-technical fields to write documents commonly used in professional settings. Students compile a writing portfolio suitable for a job search or for application to professional school. Computer technology included. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3305. Life Writing.**

This course covers approaches to and/or practices of life writing in rhetoric and writing studies, including autoethnography, narrative inquiry, counterstorytelling, literacy narratives, scholarly personal writing, or personal writing. Specific content and focus vary by section. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3306. Writing for Film.**

This course is an introduction to screenwriting that combines the study of published film texts with workshop practice in writing for film. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3307. Introduction to the Study of Film.**

This course provides an introduction to basic film terms and concepts, various theoretical approaches to the study of film, and to important debates within film theory. Its focus will include, but is not limited to, theories of spectatorship, the debate between formalism and realism, psychoanalytic and feminist theories, and cultural approaches to film. This course should be taken before other upper-division film courses. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3308. Advanced Topics in Film.**

This course offers a focused examination of film as text, with an emphasis on critical, theoretical, cultural, historical, generic, and/or stylistic aspects. Specific content and focus vary by section and may include the history of classical Hollywood cinema; silent film; world, European, or national cinemas; or the documentary. This course may be repeated once for credit when its topic varies. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3309. The Southwest in Film.**

A survey of films of the Southwest, emphasizing the history and cultural diversity of the region as represented on screen. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3311. Practices in Writing and Rhetoric.**

This course concerns the study and practice of advanced expository writing, with a focus on achieving rhetorical dexterity and effective communication. Specific content and focus vary by section and may include The Essay, Nature Writing, Argument, Writing for the Government, or Online Communication. This course may be repeated once for credit when its emphasis varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3312. Internship in English Studies.**

Course offers a supervised work experience related to students' career interests. Prerequisites: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 3313. Scientific Writing.**

The course teaches composition techniques that include planning, organization, revision, usage, and audience identification necessary for writing in science and/or social science fields. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3315. Introduction to Creative Writing.**

A critical seminar for writers of fiction, poetry, and articles. Creativity, criticism, and revision are emphasized. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3316. Film Adaptation Studies.**

This course offers a comparative study of film adaptations from other media. Specific content and focus vary by section. This course may be repeated once for credit when its topic varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3318. Approaches to Writing and Rhetoric.**

This course focuses on approaches central to the study and practice of writing and rhetoric. Specific content and focus vary by section and may include Composition Theory, Theories of Technical Communication, Chicana/o/x Rhetorics, or Literacy Studies. This course may be repeated when its emphasis varies for up to 9 hours of English credit. (MULT)(WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3319. The Development of English.**

Origin and growth of the English language with particular attention to phonological, morphological, and grammatical changes; history of dialects, spelling, and dictionaries; sources of vocabulary. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 3320. Studies in Theory and Criticism.**

This course explores one or more theoretical and critical approaches, such as ecocriticism, film theory, trauma theory, or disability studies. It may be repeated once for credit when its topic varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3321. The Short Story.**

The short story throughout the world since Poe and Gogol. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3322. The European Novel.**

Major continental novelists from Cervantes to the present, read in translation. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3323. Modern Poetry.**

Modern poetry in English and English translation. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3325. Literature in Translation.**

This course examines major works of literature, in translation, since the eighteenth century. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3326. US Drama on Film.**

This course examines masterpieces of US drama and the films that have been made from them. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3327. Early Global Drama in English.**

This course studies examples of global drama from Aeschylus to Ibsen. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3328. Modern Global Drama in English.**

This course studies examples of world drama in English from Ibsen to the present. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter



**ENG 3329. Studies in Mythology.**

This course examines myths in various contexts, such as ancient and/or contemporary cultures, mythic patterns in modern literature, and myths produced in popular culture. Specific content and focus vary by section. This course may be repeated once for credit when its topic varies. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3331. Black Literature.**

This course studies selected Black poetry, drama, fiction, and other cultural texts. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3333. Early US Literature.**

This course examines selected US literature from its colonial beginnings to 1865. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3335. US Literature, 1865-1945.**

This course examines selected US literature from the Civil War to World War II. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3336. US Literature, 1945 to the Present.**

This course examines elected US literature from World War II to the present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3338. The American Novel.**

A study of the novels and pertinent criticism from the beginnings in America. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3340. Special Topics in Language and Literature.**

This course covers a variety of topics proposed and taught occasionally by different English faculty members. Specific content and focus vary by section; past emphases have included Early Modern Evil, Sexing the Word, and The Beatles. This course may be repeated twice for credit when its emphasis varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Header|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3341. Studies in Global Literature.**

This course examines selections from ancient and/or modern literature from around the globe. Specific content and focus vary by section, and the course may be repeated once for credit when its topic varies. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3342. Editing.**

A study of editing, to include instruction in making editorial changes, preparing MSS for typesetter, marking galley and page proof; fundamentals of layout and design (typeface, paper, headlines, etc.); problems and possibilities in desktop publishing; and the current status of electronic publications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 3343. The Interdisciplinary Approach to Literature.**

This course studies a single topic using techniques from various disciplines such as history, sociology, psychology, environmental studies, and/or visual studies. It may be repeated once for credit when its topic varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3344. Chicana/o/x Narrative and Social History.**

This course examines narratives by people of Mexican descent living in the United States. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3345. Southwestern Studies I: Defining the Region.**

The first of two courses in a broad interdisciplinary survey of geophysical, cultural, social, literary, and political history of the Southwest that emphasizes regional and ethnic expressions of culture in architecture, art, economics, law, literature, philosophy and politics. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3346. Southwestern Studies II: Consequences of Region.**

The second of a two-course sequence in a broad interdisciplinary survey of geophysical, cultural, social, literary, and political history of the Southwest, emphasizing regional and ethnic expressions of culture in architecture, art, economics, law, literature, philosophy, politics, popular culture, religion, social science, and technology. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3347. American Poetry.**

Study of American poetry from its beginnings to present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3348. Creative Writing: Fiction.**

A seminar for writers of fiction, with emphasis on creativity, criticism, and revision. (WI) Prerequisite: ENG 3315 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3349. Creative Writing: Poetry.**

A seminar for writers of poetry, with emphasis on creativity, criticism, and revision. (WI) Prerequisites: ENG 3315 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3350. Global Medieval Literature.**

This course examines medieval contexts, genres, and writings across Europe and beyond. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3351. Early Medieval Literature of the British Isles.**

An introduction to Old English life and writings from early culture through Beowulf (texts in modern translation). (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3352. Medieval English Literature.**

Studies of important non-Chaucerian writings in the Middle Ages, some in modern translations. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3353. British Poetry and Prose of the Sixteenth Century.**

Major poets and prose writers from More to Spenser. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3354. Shakespeare.**

Selected plays from the earliest through Hamlet. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3356. British Poetry and Prose of the Seventeenth Century.**

Prose and poetry from Donne and Bacon to Milton and Dryden. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3357. British Literature, 1688-1750.**

This course explores late-seventeenth- and early eighteenth-century literature and the development of literary genres. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3359. British Literature, 1750-1800.**

This course explores later eighteenth-century poetry and prose and the beginnings of the Romantic movement. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3362. The British Romantics.**

Course explores British poetry and prose of the Romantic Age. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3365. The British Victorian Period.**

British poetry and prose of the Victorian period, 1837-1900. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3368. The British Novel.**

Course explores British prose fiction. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3370. Twentieth- and Twenty-First Century British Literature.**

This course examines selected British poetry, fiction, and drama since 1900. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3371. Queer and Trans Texts.**

This course examines texts engaged with LGBTQIA2S+ culture in various media. Specific content and focus vary by section. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3372. Race and Ethnicity in Texts.**

This course examines depictions, representations, and engagements with race and ethnicity in a variety of texts. Specific content and focus vary by section. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3373. Gender and Sexualities in Texts.**

This course examines depictions, representations, and engagements with gender and sexualities in a variety of texts. Specific content and focus vary by section but may include feminist, queer, trans, and/or men's studies approaches. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3385. Children's Literature.**

A survey of traditional and contemporary literature for children with attention to literary history, aesthetic qualities, and critical approaches. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3386. Adolescent Literature.**

A survey designed to provide a critical philosophy and working repertoire of literature for adolescents. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3388. Women's Writing.**

This course examines selected writing by women, in various genres and from a variety of historical periods. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3389. Teaching English Language Arts in the Secondary Classroom.**

This course familiarizes future teachers with the discipline of English as a formal field and the practice of teaching English Language Arts. It is a required part of the student teaching sequence and prepares students for the English TExES (Texas Examination of Educator Standards). (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3390. Independent Study in Language and Literature.**

This course consists of an independent study with an individualized reading list, research project, and tutorial sessions, focused on a special problem in language and/or literature. (WI) Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3392. Women Writers of the Middle Ages.**

Religious and secular writings by women from the early Church through the 15th century. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3393. Postcolonial Literatures.**

This course examines postcolonial literatures, such as Canadian, Caribbean, African, South Asian, or Australian, with discussion of aesthetic, cultural, and political issues surrounding them. Texts will be in English. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4310. Modern English Syntax.**

This course studies English syntax as described by traditional, structural, and transformational grammarians.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 4323. Studies in Autobiography and Biography.**

Selected works in autobiography and biography. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4325. Literature of the Southwest.**

The literature of Texas and the surrounding territory; various types of non-fiction prose, fiction, and poetry. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4334. US Romanticism.**

Course explores the US Romantic movement of the 19th century, with consideration of important authors, intellectual backgrounds, and literary relationships. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4343. Approaches to a British Author.**

This course examines the works of a British author, e.g. Charles Dickens, Mary Wollstonecraft, Virginia Woolf, or Zadie Smith. Specific content and focus vary by section, and the course may be repeated once for credit when its emphasis varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4344. Approaches to a US Author.**

This course examines the works of a US author, e.g. Gloria Anzaldúa, Cormac McCarthy, bell hooks, or Toni Morrison. Specific content and focus vary by section, and the course may be repeated once for credit when its emphasis varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4345. Approaches to a Global Author.**

This course examines the works of a global author, e.g. Dante Alighieri, Anita Desai, Paolo Friere, or Chinua Achebe. Specific content and focus vary by section, and the course may be repeated once for credit when its emphasis varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4348. Senior Seminar in Fiction Writing.**

Workshop in writing fiction and evaluating manuscripts. Students produce portfolio of creative work. (WI) Prerequisite: ENG 3348 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4349. Senior Seminar in Poetry Writing.**

Workshop in writing poetry and evaluating manuscripts. Students produce portfolio of creative work. (WI) Prerequisite: ENG 3349 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4350. Senior Seminar in Film.**

This course integrates perspectives from English film and media studies, including film criticism, history, theory, screenwriting, and practical video skills. Each student will choose a focus, and all students will critique scholarly research, screenplays, and video projects that demonstrate concepts learned. Specific content and focus vary by section, and this course may be repeated once for credit when its emphasis varies. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4351. Chaucer and His Time.**

The works of Chaucer and their significance in an important literary and social era. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4355. The Later Shakespeare.**

The problem comedies, through the tragedies, to the plays of the final years; emphasis on reading in depth the plays, significant critical materials, and selected plays by Shakespeare's contemporaries. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4358. Milton.**

Milton's longer poems and most important prose writing. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4385. Advanced Studies in Children's or Adolescent Literature.**

This course studies children's or adolescent literature. Possible topics include a historical period, a geographical area, a genre, a single author, or a theoretical approach, with attention to developing critical and research skills. Specific content and focus vary by section, and this course may be repeated once when emphasis varies for up to six hours of English credit. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three additional hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor. For this program, the additional literature course may be satisfied by selecting a sophomore literature course for the 040 component of the core curriculum.
3. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Nine hours of writing intensive (WI) courses are required for graduation.
6. This major requires 36 semester credit hours of English courses. Within the 36 hours, students are required to complete six hours of early literature, three hours of literature focused on the work of a single author, and three hours of 4000-level literature. To satisfy the group requirements, students must select one course from 4 of the 5 groups. ENG 1310 and ENG 1320 or ENG 1321 are recommended prerequisites to all other English courses.
7. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
8. For transfer students, 12 semester credit hours in English (or equivalents) may be transferred from a Texas public institution of higher education for the English Language and Literature Field of Study and be applied to the Bachelor of Arts degree with a major in English at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
ENG 1310	College Writing I	3
TCCN: ENGL 1301		
ENG 1320	College Writing II	3
TCCN: ENGL 1302		
Choose 6 semester credit hours from the following: ENG 2310, ENG 2320, ENG 2330, ENG 2340, ENG 2359, ENG 2360, and ENG 2371		6
TCCN: 6 semester credit hours from the following: ENGL 2321, ENGL 2322, ENGL 2323, ENGL 2326, ENGL 2327, ENGL 2328, ENGL 2331, ENGL 2332, ENGL 2333, ENGL 2341 and ENGL 2351		
<b>Total Hours</b>		<b>12</b>

Mathematics Component Code 020	3 Life and Physical Sciences Component Code 030	3
Government/Political Science Component Code 070	3 American History Component Code 060	3
Modern Language 1410	4 Government/Political Science Component Code 070	3
US 1100	1 Modern Language 1420	4
<b>14</b>		<b>16</b>

**Sophomore**

First Semester Hours		Second Semester Hours
Life and Physical Sciences Component Code 030	3 Social and Behavioral Sciences Component Code 080	3
ENG Literature (Language, Philosophy, and Culture Component 040) <sup>3</sup>	3 ENG Literature (Component Area Option Code 090/094) <sup>1</sup>	3
Creative Arts Component Code 050 [HUMA 1315]	3 ENG 3301 <sup>2</sup>	3
American History Component Code 060	3 Modern Language 2320	3
Modern Language 2310	3 Minor	3
<b>15</b>		<b>15</b>

**Junior**

First Semester Hours		Second Semester Hours
Component Area Option 090	3 ENG Advanced Group Electives	6
ENG Advanced Group Electives	6 Minor	3
Minor	3 Electives (as needed)	6
Elective (as needed)	3	
<b>15</b>		<b>15</b>

**Senior**

First Semester Hours		Second Semester Hours
ENG Advanced Group Electives	6 BA Science, Math, Computer Science, or Logic	3
Minor	3 ENG Advanced Group Elective	3
Electives (as needed)	6 Minor	6
	Elective (as needed)	3
<b>15</b>		<b>15</b>

**Total Hours: 120**

<sup>1</sup> Students who earn a grade of "B" or higher in the first sophomore course may elect to take an advanced literature course in lieu of the second sophomore course. No more than six hours of sophomore literature may count toward the major.

<sup>2</sup> ENG 3301 is required, and students should take it immediately after completing the sophomore literature requirement.

<sup>3</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL

## Course Requirements

**Freshman**

First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 ENG 1320 or 1321 (Communication Component Code 010 [TCCN ENGL 1302])



2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

### Advanced English Courses

Students are required to take ENG 3301, preferably immediately after completing the sophomore literature requirement. Students must also take two courses focusing on early literature at either the sophomore or advanced level. In addition to ENG 3301, students must complete seven advanced courses, one of which must be a 4000-level course. Students must take at least one advanced course from four of the five groups listed below as well as nine hours of electives from any group. One of the advanced courses must focus on the works of a single author and is recommended to be taken at the end of the major.

Code	Title	Hours
<b>EARLY LITERATURE COURSES</b>		
ENG 2310	British Literature before 1785	3
ENG 2330	World Literature before 1600	3
ENG 2359	US Literature before 1865	3
ENG 3327	Early Global Drama in English	3
ENG 3333	Early US Literature	3
ENG 3350	Global Medieval Literature	3
ENG 3351	Early Medieval Literature of the British Isles	3
ENG 3352	Medieval English Literature	3
ENG 3353	British Poetry and Prose of the Sixteenth Century	3
ENG 3354	Shakespeare	3
ENG 3356	British Poetry and Prose of the Seventeenth Century	3
ENG 3357	British Literature, 1688-1750	3
ENG 3359	British Literature, 1750-1800	3
ENG 3392	Women Writers of the Middle Ages	3
ENG 4334	US Romanticism	3
ENG 4351	Chaucer and His Time	3
ENG 4355	The Later Shakespeare	3
ENG 4358	Milton	3
<b>SINGLE AUTHOR COURSES</b>		
ENG 3354	Shakespeare	3
ENG 4343	Approaches to a British Author	3
ENG 4344	Approaches to a US Author	3
ENG 4345	Approaches to a Global Author	3
ENG 4351	Chaucer and His Time	3
ENG 4355	The Later Shakespeare	3
ENG 4358	Milton	3
<b>GROUP A—BRITISH LITERATURE</b>		
ENG 3351	Early Medieval Literature of the British Isles	3
ENG 3352	Medieval English Literature	3
ENG 3353	British Poetry and Prose of the Sixteenth Century	3
ENG 3354	Shakespeare	3
ENG 3356	British Poetry and Prose of the Seventeenth Century	3
ENG 3357	British Literature, 1688-1750	3

ENG 3359	British Literature, 1750-1800	3
ENG 3362	The British Romantics	3
ENG 3365	Victorian Literature	3
ENG 3368	The British Novel	3
ENG 3370	Twentieth- and Twenty-First Century British Literature	3
ENG 4343	Approaches to a British Author	3
ENG 4351	Chaucer and His Time	3
ENG 4355	The Later Shakespeare	3
ENG 4358	Milton	3

Code	Title	Hours
<b>GROUP B—US LITERATURE</b>		
ENG 3331	Black Literature	3
ENG 3333	Early US Literature	3
ENG 3335	US Literature, 1865-1945	3
ENG 3336	US Literature, 1945 to the Present	3
ENG 3338	The American Novel	3
ENG 3344	Chicana/o/x Narrative and Social History	3
ENG 3345	Southwestern Studies I: Defining the Region	3
ENG 3346	Southwestern Studies II: Consequences of Region	3
ENG 3347	American Poetry	3
ENG 4325	Literature of the Southwest	3
ENG 4334	US Romanticism	3
ENG 4344	Approaches to a US Author	3

Code	Title	Hours
<b>GROUP C—GLOBAL LITERATURES</b>		
ENG 3322	The European Novel	3
ENG 3325	Literature in Translation	3
ENG 3327	Early Global Drama in English	3
ENG 3328	Modern Global Drama in English	3
ENG 3329	Studies in Mythology	3
ENG 3341	Studies in Global Literature	3
ENG 3350	Global Medieval Literature	3
ENG 3385	Children's Literature	3
ENG 3386	Adolescent Literature	3
ENG 3388	Women's Writing	3
ENG 3392	Women Writers of the Middle Ages	3
ENG 3393	Postcolonial Literatures	3
ENG 4345	Approaches to a Global Author	3
ENG 4385	Advanced Studies in Children's or Adolescent Literature	3

Code	Title	Hours
<b>GROUP D—MEDIA, GENRE, AND VISUAL STUDIES</b>		
ENG 3302	Film and Video Theory and Production	3
ENG 3307	Introduction to the Study of Film	3
ENG 3308	Advanced Topics in Film	3
ENG 3309	The Southwest in Film	3
ENG 3316	Film Adaptation Studies	3
ENG 3320	Studies in Theory and Criticism	3
ENG 3321	The Short Story	3
ENG 3323	Modern Poetry	3

ENG 3326	US Drama on Film	3
ENG 3340	Special Topics in Language and Literature <sup>1</sup>	3
ENG 3343	The Interdisciplinary Approach to Literature <sup>1</sup>	3
ENG 3371	Queer and Trans Texts <sup>1</sup>	3
ENG 3372	Race and Ethnicity in Texts <sup>1</sup>	3
ENG 3373	Gender and Sexualities in Texts <sup>1</sup>	3
ENG 3390	Independent Study in Language and Literature <sup>1</sup>	3
ENG 4323	Studies in Autobiography and Biography	3
ENG 4350	Senior Seminar in Film	3

Code	Title	Hours
<b>GROUP E—WRITING STUDIES AND PRACTICE</b>		
ENG 3303	Technical Writing	3
ENG 3304	Professional Writing	3
ENG 3305	Life Writing	3
ENG 3306	Writing for Film	3
ENG 3311	Practices in Writing and Rhetoric	3
ENG 3312	Internship in English Studies	3
ENG 3313	Scientific Writing	3
ENG 3315	Introduction to Creative Writing	3
ENG 3318	Approaches to Writing and Rhetoric	3
ENG 3319	The Development of English	3
ENG 3342	Editing	3
ENG 3348	Creative Writing: Fiction	3
ENG 3349	Creative Writing: Poetry	3
ENG 3389	Teaching English Language Arts in the Secondary Classroom	3
ENG 4310	Modern English Syntax	3
ENG 4348	Senior Seminar in Fiction Writing	3
ENG 4349	Senior Seminar in Poetry Writing	3

<sup>1</sup> May fall into other groups depending on specific course content.

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three additional hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor. For this program, the additional literature course may be satisfied by selecting a sophomore literature course for the 040 component of the core curriculum.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).

- Nine hours of writing intensive (WI) courses are required for graduation.
- This major requires 36 semester credit hours of English courses. Within the 36 hours, students are required to complete six hours of early literature, three hours of literature focused on the work of a single author, and three hours of 4000-level literature. To satisfy the group requirements, students must select one course from 4 of the 5 groups. ENG 1310 and ENG 1320 or ENG 1321 are recommended prerequisites to all other English courses.
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- For transfer students, 12 semester credit hours in English (or equivalents) may be transferred from a Texas public institution of higher education for the English Language and Literature Field of Study and be applied to the Bachelor of Arts degree with a major in English at Texas State University. More information about the [Field of Study](http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/) (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
ENG 1310	College Writing I	3
TCCN: ENGL 1301		
ENG 1320	College Writing II	3
TCCN: ENGL 1302		
Choose 6 semester credit hours from the following: ENG 2310, ENG 2320, ENG 2330, ENG 2340, ENG 2359, ENG 2360, and ENG 2371		6
TCCN: 6 semester credit hours from the following: ENGL 2321, ENGL 2322, ENGL 2323, ENGL 2326, ENGL 2327, ENGL 2328, ENGL 2331, ENGL 2332, ENGL 2333, ENGL 2341 and ENGL 2351		
<b>Total Hours</b>		<b>12</b>

### Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 or 1321 (Communication Component Code 010 [TCCN ENGL 1302])	3
Mathematics Component Code 020	3	Life and Physical Sciences Component Code 030	3
Government/Political Science Component Code 070	3	American History Component Code 060	3
Modern Language 1410	4	Government/Political Science Component Code 070	3
US 1100	1	Modern Language 1420	4
<b>14</b>		<b>16</b>	

Sophomore	
First Semester Hours	Second Semester Hours
Life and Physical Sciences Component Code 030	3 Social and Behavioral Sciences Component Code 080
ENG Literature (Language, Philosophy, and Culture Component 040) <sup>3</sup>	3 ENG Literature (Component Area Option Code 090/094) <sup>1</sup> , <sup>3</sup>
Creative Arts Component Code 050 [HUMA 1315]	3 ENG 3301 <sup>2</sup>
American History Component Code 060	3 Modern Language 2320
Modern Language 2310	3 Minor
<b>15</b>	<b>15</b>
Junior	
First Semester Hours	Second Semester Hours
Component Area Option 090	3 ENG 3348 or 3349
ENG 3315	3 ENG Advanced Group Elective
ENG Advanced Group Elective	3 Minor
Minor	3 Electives (as needed)
Elective (as needed)	3
<b>15</b>	<b>15</b>
Senior	
First Semester Hours	Second Semester Hours
ENG Advanced Group Electives	6 BA Science, Math, Computer Science, or Logic
Minor	3 ENG 4348 or 4349
Electives (as needed)	6 Minor
	Elective (as needed)
<b>15</b>	<b>15</b>

**Total Hours: 120**

<sup>1</sup> Students who earn a grade of "B" or higher in the first sophomore course may elect to take an advanced literature course in lieu of the second sophomore course. No more than six hours of sophomore literature may count toward the major.

<sup>2</sup> ENG 3301 is required, and students should take it immediately after completing the sophomore literature requirement.

<sup>3</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

### Advanced English Courses

Students are required to take ENG 3301, preferably immediately after completing the sophomore literature requirement. Students must also take two courses focusing on early literature at either the sophomore or advanced level. In addition to ENG 3301, students must complete seven advanced courses. Students must take at least one advanced course from three of the four non-writing groups listed below (A, B, C, or D), and three specified courses from Group E: ENG 3315 and either ENG 3348 and ENG 4348 (fiction track) or ENG 3349 and ENG 4349 (poetry track). They also select one three-hour elective from any group. One of the advanced

courses must focus on the works of a single author and is recommended to be taken at the end of the major.

Code	Title	Hours
<b>EARLY LITERATURE COURSES</b>		
ENG 2310	British Literature before 1785	3
ENG 2330	World Literature before 1600	3
ENG 2359	US Literature before 1865	3
ENG 3327	Early Global Drama in English	3
ENG 3333	Early US Literature	3
ENG 3350	Global Medieval Literature	3
ENG 3351	Early Medieval Literature of the British Isles	3
ENG 3352	Medieval English Literature	3
ENG 3353	British Poetry and Prose of the Sixteenth Century	3
ENG 3354	Shakespeare	3
ENG 3356	British Poetry and Prose of the Seventeenth Century	3
ENG 3357	British Literature, 1688-1750	3
ENG 3359	British Literature, 1750-1800	3
ENG 3392	Women Writers of the Middle Ages	3
ENG 4334	US Romanticism	3
ENG 4351	Chaucer and His Time	3
ENG 4355	The Later Shakespeare	3
ENG 4358	Milton	3

Code	Title	Hours
<b>SINGLE AUTHOR COURSES</b>		
ENG 3354	Shakespeare	3
ENG 4343	Approaches to a British Author	3
ENG 4344	Approaches to a US Author	3
ENG 4345	Approaches to a Global Author	3
ENG 4351	Chaucer and His Time	3
ENG 4355	The Later Shakespeare	3
ENG 4358	Milton	3

Code	Title	Hours
<b>GROUP A—BRITISH LITERATURE</b>		
ENG 3351	Early Medieval Literature of the British Isles	3
ENG 3352	Medieval English Literature	3
ENG 3353	British Poetry and Prose of the Sixteenth Century	3
ENG 3354	Shakespeare	3
ENG 3356	British Poetry and Prose of the Seventeenth Century	3
ENG 3357	British Literature, 1688-1750	3
ENG 3359	British Literature, 1750-1800	3
ENG 3362	The British Romantics	3
ENG 3365	Victorian Literature	3
ENG 3368	The British Novel	3
ENG 3370	Twentieth- and Twenty-First Century British Literature	3
ENG 4343	Approaches to a British Author	3
ENG 4351	Chaucer and His Time	3

ENG 4355	The Later Shakespeare	3
ENG 4358	Milton	3

Code	Title	Hours
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**GROUP B—US LITERATURE**

ENG 3326	US Drama on Film	3
ENG 3331	Black Literature	3
ENG 3333	Early US Literature	3
ENG 3335	US Literature, 1865-1945	3
ENG 3336	US Literature, 1945 to the Present	3
ENG 3338	The American Novel	3
ENG 3344	Chicana/o/x Narrative and Social History	3
ENG 3345	Southwestern Studies I: Defining the Region	3
ENG 3346	Southwestern Studies II: Consequences of Region	3
ENG 3347	American Poetry	3
ENG 4325	Literature of the Southwest	3
ENG 4334	US Romanticism	3
ENG 4344	Approaches to a US Author	3

Code	Title	Hours
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**GROUP C—GLOBAL LITERATURES**

ENG 3322	The European Novel	3
ENG 3325	Literature in Translation	3
ENG 3327	Early Global Drama in English	3
ENG 3328	Modern Global Drama in English	3
ENG 3329	Studies in Mythology	3
ENG 3341	Studies in Global Literature	3
ENG 3350	Global Medieval Literature	3
ENG 3385	Children's Literature	3
ENG 3386	Adolescent Literature	3
ENG 3388	Women's Writing	3
ENG 3392	Women Writers of the Middle Ages	3
ENG 3393	Postcolonial Literatures	3
ENG 4345	Approaches to a Global Author	3
ENG 4385	Advanced Studies in Children's or Adolescent Literature	3

Code	Title	Hours
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**GROUP D—MEDIA, GENRE, AND VISUAL STUDIES**

ENG 3302	Film and Video Theory and Production	3
ENG 3307	Introduction to the Study of Film	3
ENG 3308	Advanced Topics in Film	3
ENG 3309	The Southwest in Film	3
ENG 3316	Film Adaptation Studies	3
ENG 3320	Studies in Theory and Criticism	3
ENG 3321	The Short Story	3
ENG 3323	Modern Poetry	3
ENG 3326	US Drama on Film	3
ENG 3340	Special Topics in Language and Literature <sup>1</sup>	3
ENG 3343	The Interdisciplinary Approach to Literature <sup>1</sup>	3
ENG 3371	Queer and Trans Texts <sup>1</sup>	3
ENG 3372	Race and Ethnicity in Texts <sup>1</sup>	3
ENG 3373	Gender and Sexualities in Texts <sup>1</sup>	3

ENG 3390	Independent Study in Language and Literature <sup>1</sup>	3
ENG 4310	Modern English Syntax	3
ENG 4323	Studies in Autobiography and Biography	3
ENG 4350	Senior Seminar in Film	3

Code	Title	Hours
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**GROUP E—WRITING STUDIES AND PRACTICE**

ENG 3303	Technical Writing	3
ENG 3304	Professional Writing	3
ENG 3305	Life Writing	3
ENG 3306	Writing for Film	3
ENG 3311	Practices in Writing and Rhetoric	3
ENG 3312	Internship in English Studies	3
ENG 3313	Scientific Writing	3
ENG 3315	Introduction to Creative Writing	3
ENG 3318	Approaches to Writing and Rhetoric	3
ENG 3319	The Development of English	3
ENG 3342	Editing	3
ENG 3348	Creative Writing: Fiction	3
ENG 3349	Creative Writing: Poetry	3
ENG 3389	Teaching English Language Arts in the Secondary Classroom	3
ENG 4310	Modern English Syntax	3
ENG 4348	Senior Seminar in Fiction Writing	3
ENG 4349	Senior Seminar in Poetry Writing	3

<sup>1</sup> May fall into other groups depending on specific course content.

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three additional hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor. For this program, the additional literature course may be satisfied by selecting a sophomore literature course for the 040 component of the core curriculum.
3. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Nine hours of writing intensive (WI) courses are required for graduation.
6. This major requires 36 semester credit hours of English courses. Within the 36 hours, students are required to complete six hours of early literature, three hours of literature focused on the work of a single author, and three hours of 4000-level literature. To satisfy the

group requirements, students must select one course from 4 of the 5 groups. ENG 1310 and ENG 1320 or ENG 1321 are recommended prerequisites to all other English courses.

7. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
8. For transfer students, 12 semester credit hours in English (or equivalents) may be transferred from a Texas public institution of higher education for the English Language and Literature Field of Study and be applied to the Bachelor of Arts degree with a major in English at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
ENG 1310	College Writing I	3
TCCN: ENGL 1301		
ENG 1320	College Writing II	3
TCCN: ENGL 1302		
Choose 6 semester credit hours from the following: ENG 2310, ENG 2320, ENG 2330, ENG 2340, ENG 2359, ENG 2360, and ENG 2371		6
TCCN: 6 semester credit hours from the following: ENGL 2321, ENGL 2322, ENGL 2323, ENGL 2326, ENGL 2327, ENGL 2328, ENGL 2331, ENGL 2332, ENGL 2333, ENGL 2341 and ENGL 2351		
<b>Total Hours</b>		<b>12</b>

## Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 ENG 1320 or 1321 (Core Curriculum 010 – Communication Component [TCCN ENGL 1302])	3
Mathematics Component Code 020	3 Life and Physical Sciences Component Code 030	3
Government/Political Science Component Code 070	3 American History Component Code 060	3
Modern Language 1410	4 Government/Political Science Component Code 070	3
US 1100	1 Modern Language 1420	4
<b>14</b>	<b>16</b>	

Sophomore		
First Semester Hours	Second Semester Hours	
Life and Physical Sciences Component Code 030	3 Social and Behavioral Sciences Component Code 080	3
ENG Literature (Language, Philosophy, and Culture Component 040) <sup>3</sup>	3 ENG Literature (Component Area Option Code 090/094) <sup>1, 3</sup>	3

Creative Arts Component Code 050 [HUMA 1315]	3 ENG 3301 <sup>2</sup>	3
American History Component Code 060	3 Modern Language 2320	3
Modern Language 2310	3 Minor	3
<b>15</b>	<b>15</b>	

Junior		
First Semester Hours	Second Semester Hours	
Component Area Option 090	3 ENG Advanced Film Course	3
ENG 3307	3 ENG Advanced Group Elective	3
ENG Advanced Group Elective	3 Minor	3
Minor	3 Electives (as needed)	6
Elective (as needed)	3	
<b>15</b>	<b>15</b>	

Senior		
First Semester Hours	Second Semester Hours	
ENG Advanced Group Electives	6 BA Science, Math, Computer Science, or Logic	3
Minor	3 ENG Advanced Film Course	3
Electives (as needed)	6 Minor	6
	Elective (as needed)	3
<b>15</b>	<b>15</b>	

**Total Hours: 120**

<sup>1</sup> Students who earn a grade of “B” or higher in the first sophomore course may elect to take an advanced literature course in lieu of the second sophomore course. No more than six hours of sophomore literature may count toward the major.

<sup>2</sup> ENG 3301 is required, and students should take it immediately after completing the sophomore literature requirement.

<sup>3</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

### Advanced English Courses

Students are required to take ENG 3301, preferably immediately after completing the sophomore literature requirement. Students must also take two courses focusing on early literature at either the sophomore or advanced level. In addition to ENG 3301, students must complete seven advanced courses, one of which must be a 4000-level course. Students in the Emphasis in Film must take at least one advanced course from three of the four non-film groups listed below (A, B, C, and E) plus nine hours in film: three hours of ENG 3307 and 6 hours of other film courses. Students also select one three-hour elective from any group. One of the advanced courses must focus on the works of a single author and is recommended to be taken at the end of the major.

Code	Title	Hours
<b>FILM COURSES</b>		
ENG 3302	Film and Video Theory and Production	3
ENG 3306	Writing for Film	3
ENG 3308	Advanced Topics in Film	3



ENG 3309	The Southwest in Film	3
ENG 3316	Film Adaptation Studies	3
ENG 3326	US Drama on Film	3
ENG 4350	Senior Seminar in Film	3

Code	Title	Hours
<b>EARLY LITERATURE COURSES</b>		

ENG 2310	British Literature before 1785	3
ENG 2330	World Literature before 1600	3
ENG 2359	US Literature before 1865	3
ENG 3327	Early Global Drama in English	3
ENG 3333	Early US Literature	3
ENG 3350	Global Medieval Literature	3
ENG 3351	Early Medieval Literature of the British Isles	3
ENG 3352	Medieval English Literature	3
ENG 3353	British Poetry and Prose of the Sixteenth Century	3
ENG 3354	Shakespeare	3
ENG 3356	British Poetry and Prose of the Seventeenth Century	3
ENG 3357	British Literature, 1688-1750	3
ENG 3359	British Literature, 1750-1800	3
ENG 3392	Women Writers of the Middle Ages	3
ENG 4334	US Romanticism	3
ENG 4351	Chaucer and His Time	3
ENG 4355	The Later Shakespeare	3
ENG 4358	Milton	3

Code	Title	Hours
<b>SINGLE AUTHOR COURSES</b>		

ENG 3354	Shakespeare	3
ENG 4343	Approaches to a British Author	3
ENG 4344	Approaches to a US Author	3
ENG 4345	Approaches to a Global Author	3
ENG 4351	Chaucer and His Time	3
ENG 4355	The Later Shakespeare	3
ENG 4358	Milton	3

Code	Title	Hours
<b>GROUP A—BRITISH LITERATURE</b>		

ENG 3351	Early Medieval Literature of the British Isles	3
ENG 3352	Medieval English Literature	3
ENG 3353	British Poetry and Prose of the Sixteenth Century	3
ENG 3354	Shakespeare	3
ENG 3356	British Poetry and Prose of the Seventeenth Century	3
ENG 3357	British Literature, 1688-1750	3
ENG 3359	British Literature, 1750-1800	3
ENG 3362	The British Romantics	3
ENG 3365	Victorian Literature	3
ENG 3368	The British Novel	3
ENG 3370	Twentieth- and Twenty-First Century British Literature	3
ENG 4343	Approaches to a British Author	3
ENG 4351	Chaucer and His Time	3

ENG 4355	The Later Shakespeare	3
ENG 4358	Milton	3

Code	Title	Hours
<b>GROUP B—US LITERATURE</b>		

ENG 3326	US Drama on Film	3
ENG 3331	Black Literature	3
ENG 3333	Early US Literature	3
ENG 3335	US Literature, 1865-1945	3
ENG 3336	US Literature, 1945 to the Present	3
ENG 3338	The American Novel	3
ENG 3344	Chicana/o/x Narrative and Social History	3
ENG 3345	Southwestern Studies I: Defining the Region	3
ENG 3346	Southwestern Studies II: Consequences of Region	3
ENG 3347	American Poetry	3
ENG 4325	Literature of the Southwest	3
ENG 4334	US Romanticism	3
ENG 4344	Approaches to a US Author	3

Code	Title	Hours
<b>GROUP C—GLOBAL LITERATURES</b>		

ENG 3322	The European Novel	3
ENG 3325	Literature in Translation	3
ENG 3327	Early Global Drama in English	3
ENG 3328	Modern Global Drama in English	3
ENG 3329	Studies in Mythology	3
ENG 3341	Studies in Global Literature	3
ENG 3350	Global Medieval Literature	3
ENG 3385	Children's Literature	3
ENG 3386	Adolescent Literature	3
ENG 3388	Women's Writing	3
ENG 3392	Women Writers of the Middle Ages	3
ENG 3393	Postcolonial Literatures	3
ENG 4345	Approaches to a Global Author	3
ENG 4385	Advanced Studies in Children's or Adolescent Literature	3

Code	Title	Hours
<b>GROUP D—MEDIA, GENRE, AND VISUAL STUDIES</b>		

ENG 3302	Film and Video Theory and Production	3
ENG 3307	Introduction to the Study of Film	3
ENG 3308	Advanced Topics in Film	3
ENG 3309	The Southwest in Film	3
ENG 3316	Film Adaptation Studies	3
ENG 3320	Studies in Theory and Criticism	3
ENG 3321	The Short Story	3
ENG 3323	Modern Poetry	3
ENG 3326	US Drama on Film	3
ENG 3340	Special Topics in Language and Literature <sup>1</sup>	3
ENG 3343	The Interdisciplinary Approach to Literature <sup>1</sup>	3
ENG 3371	Queer and Trans Texts <sup>1</sup>	3
ENG 3372	Race and Ethnicity in Texts <sup>1</sup>	3
ENG 3373	Gender and Sexualities in Texts <sup>1</sup>	3

ENG 3390	Independent Study in Language and Literature <sup>1</sup>	3
ENG 4323	Studies in Autobiography and Biography	3
ENG 4350	Senior Seminar in Film	3

Code	Title	Hours
<b>GROUP E—WRITING STUDIES AND PRACTICE</b>		
ENG 3303	Technical Writing	3
ENG 3304	Professional Writing	3
ENG 3305	Life Writing	3
ENG 3306	Writing for Film	3
ENG 3311	Practices in Writing and Rhetoric	3
ENG 3312	Internship in English Studies	3
ENG 3313	Scientific Writing	3
ENG 3315	Introduction to Creative Writing	3
ENG 3318	Approaches to Writing and Rhetoric	3
ENG 3319	The Development of English	3
ENG 3342	Editing	3
ENG 3348	Creative Writing: Fiction	3
ENG 3349	Creative Writing: Poetry	3
ENG 3389	Teaching English Language Arts in the Secondary Classroom	3
ENG 4310	Modern English Syntax	3
ENG 4348	Senior Seminar in Fiction Writing	3
ENG 4349	Senior Seminar in Poetry Writing	3

<sup>1</sup> May fall into other groups depending on specific course content.

## Minimum Hours: 120 Semester Credit Hours

### Admission Requirements

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (<http://mycatalog.txstate.edu/undergraduate/degree-program-information/>) (B.A.) requires three additional hours of English literature, three additional hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor. For this program, the additional literature course may be satisfied by selecting a sophomore literature course for the 040 component of the core curriculum and the second major in Education fulfills the minor requirement.
3. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).

4. Nine hours of writing intensive (WI) courses are required for graduation.
5. This major requires 36 semester credit hours of English courses. Within the 36 hours, students are required to complete six hours of early literature, three hours of literature focused on the work of a single author, and three hours of 4000-level literature. ENG 1310 and ENG 1320 ENG 1320ENG 1320 or ENG 1321 are recommended prerequisites to all other English courses.
6. To satisfy graduation requirements for teacher certification, students must have at least a 2.75 Overall GPA and a GPA of at least 2.50 in all assigned courses in the professional sequence of the Education major with no grade below a "C".
7. This degree program is designed to prepare students for secondary teacher certification in English and requires that students pursue a double major by declaring and completing requirements for both the major in English and the major in Education. The following courses are required for the major in Education:

Code	Title	Hours
<b>Education Foundations</b>		
CI 2310	Education for Change	3
CI 3325	Adolescents and Society	3
CI 4332	Secondary Teaching: Curriculum and Technology	3
<b>Teaching and Learning</b>		
CI 3340	Teaching for Linguistic Diversity	3
CI 4343	Instructional Strategies for the Secondary Teacher	3
CI 4370	Building Relationships in the Secondary Classroom	3
CI 4372	Teaching in Communities	3
RDG 3323	Teaching Literacies in the Content Areas	3
SPED 4344	Educating Students with Mild Disabilities	3
<b>Clinical Practice</b>		
EDST 4681	Clinical Teaching 7-12	6
<b>Total Hours</b>		<b>33</b>

8. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c420f9a%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPbQjwNv%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c420f9a%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPbQjwNv%3D&reserved=0)).
9. For transfer students, 6 semester credit hours in Curriculum and Instruction and Special Education may be transferred from a Texas public institution of higher education for the Associate of Arts in Teaching Field of Study and be applied to the Bachelor of Arts degree with a major in Education at Texas State University. More

information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
CI 2310	Education for Change	3
TCCN: EDUC 1301		
SPED 4344	Educating Students with Mild Disabilities	3
TCCN: EDUC 2301		

10. For transfer students, 12 semester credit hours in English (or equivalents) may be transferred from a Texas public institution of higher education for the English Language and Literature Field of Study and be applied to the Bachelor of Arts degree with a major in English at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
ENG 1310	College Writing I	3
TCCN: ENGL 1301		
ENG 1320	College Writing II	3
TCCN: ENGL 1302		
Choose 6 hours from the following:		6
ENG 2310	British Literature before 1785	
ENG 2320	British Literature since 1785	
ENG 2330	World Literature before 1600	
ENG 2340	World Literature since 1600	
ENG 2359	US Literature before 1865	
ENG 2360	US Literature since 1865	
ENG 2371	U.S. Literature: Writing Identities	
TCCN: 6 semester credit hours from the following:		
ENGL 2321, ENGL 2322, ENGL 2323, ENGL 2326, ENGL 2327, ENGL 2328, ENGL 2331, ENGL 2332, ENGL 2333, ENGL 2341 and ENGL 2351		

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
Life and Physical Sciences Component Code 030	3	Life and Physical Sciences Component Code 030	3
Government/Political Science Component Code 070	3	Creative Arts Component Code 050 [HUMA 1315]	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	American History Component Code 060	3
Modern Language 1410	4	Modern Language 1420	4

US 1100	1		
	17		16
First Semester Hours		Second Semester Hours	
Mathematics Component Code 020	3	Social and Behavioral Sciences Component Code 080	3
ENG Literature (Language, Philosophy, and Culture Component 040) <sup>3</sup>	3	ENG Literature (Component Area Option Code 090/094) <sup>1</sup> , <sup>3</sup>	3
American History Component Code 060	3	Modern Language 2320	3
Government/Political Science Component Code 070	3	ENG 3301 <sup>2</sup>	3
Modern Language 2310	3	CI 2310 (TCCN EDUC 1301)	3
		Elective (as needed)	3
	15		18

First Semester Hours		Second Semester Hours	
BA Science, Math, Computer Science, or Logic	3	ENG Group B - American Literature	3
ENG Group A - British Literature	3	ENG 3319 or 4310	3
ENG Group B - American Literature	3	Secondary Field Block I:	9
ENG Group C - World Literature	3	CI 3340	
Education Core:	6	CI 4343	
CI 3325		SPED 4344	
CI 4332			
	18		15

First Semester Hours		Second Semester Hours	
ENG 3389	3	Clinical Practice (Student Teaching):	6
ENG Advanced Group Elective	3	EDST 4681	
Secondary Field Block II:	9		
CI 4370			
CI 4372			
RDG 3323			
	15		6

**Total Hours: 120**

<sup>1</sup> Students who earn a grade of "B" or higher in the first sophomore course may elect to take an advanced literature course in lieu of the second sophomore course. No more than six hours of sophomore literature may count toward the major.

<sup>2</sup> ENG 3301 is required, and students should take it immediately after completing the sophomore literature requirement.

<sup>3</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL

2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

Advanced English Electives

Students are required to take ENG 3301, preferably immediately after completing the sophomore literature requirement. Students must also take two courses focusing on early literature at either the sophomore or advanced level. In addition to ENG 3301, students must complete seven advanced courses. Students must take at least one advanced course from Group A and one from Group C, two courses from Group B, and two specified courses from Group E: ENG 3319 or ENG 4310, and ENG 3389. They also select a three-hour elective from any group. In selecting their advanced courses, students are encouraged to take at least two courses that center on genre, theme, or theory. One of the advanced courses must focus on the works of a single author and is recommended to be taken at the end of the major.

Code	Title	Hours
EARLY LITERATURE COURSES		
ENG 2310	British Literature before 1785	3
ENG 2330	World Literature before 1600	3
ENG 2359	US Literature before 1865	3
ENG 3327	Early Global Drama in English	3
ENG 3333	Early US Literature	3
ENG 3350	Global Medieval Literature	3
ENG 3351	Early Medieval Literature of the British Isles	3
ENG 3352	Medieval English Literature	3
ENG 3353	British Poetry and Prose of the Sixteenth Century	3
ENG 3354	Shakespeare	3
ENG 3356	British Poetry and Prose of the Seventeenth Century	3
ENG 3357	British Literature, 1688-1750	3
ENG 3359	British Literature, 1750-1800	3
ENG 3392	Women Writers of the Middle Ages	3
ENG 4334	US Romanticism	3
ENG 4351	Chaucer and His Time	3
ENG 4355	The Later Shakespeare	3
ENG 4358	Milton	3
Code	Title	Hours
SINGLE AUTHOR COURSES		
ENG 3354	Shakespeare	3
ENG 4343	Approaches to a British Author	3
ENG 4344	Approaches to a US Author	3
ENG 4345	Approaches to a Global Author	3
ENG 4351	Chaucer and His Time	3
ENG 4355	The Later Shakespeare	3
ENG 4358	Milton	3
Code	Title	Hours
GROUP A—BRITISH LITERATURE		
ENG 3351	Early Medieval Literature of the British Isles	3
ENG 3352	Medieval English Literature	3
ENG 3353	British Poetry and Prose of the Sixteenth Century	3
ENG 3354	Shakespeare	3

ENG 3356	British Poetry and Prose of the Seventeenth Century	3
ENG 3357	British Literature, 1688-1750	3
ENG 3359	British Literature, 1750-1800	3
ENG 3362	The British Romantics	3
ENG 3365	Victorian Literature	3
ENG 3368	The British Novel	3
ENG 3370	Twentieth- and Twenty-First Century British Literature	3
ENG 4343	Approaches to a British Author	3
ENG 4351	Chaucer and His Time	3
ENG 4355	The Later Shakespeare	3
ENG 4358	Milton	3

Code	Title	Hours
GROUP B—US LITERATURE		
ENG 3331	Black Literature	3
ENG 3333	Early US Literature	3
ENG 3335	US Literature, 1865-1945	3
ENG 3336	US Literature, 1945 to the Present	3
ENG 3338	The American Novel	3
ENG 3344	Chicana/o/x Narrative and Social History	3
ENG 3345	Southwestern Studies I: Defining the Region	3
ENG 3346	Southwestern Studies II: Consequences of Region	3
ENG 3347	American Poetry	3
ENG 3347	American Poetry	3
ENG 4325	Literature of the Southwest	3
ENG 4334	US Romanticism	3
ENG 4344	Approaches to a US Author	3

Code	Title	Hours
GROUP C—GLOBAL LITERATURES		
ENG 3322	The European Novel	3
ENG 3325	Literature in Translation	3
ENG 3327	Early Global Drama in English	3
ENG 3328	Modern Global Drama in English	3
ENG 3329	Studies in Mythology	3
ENG 3341	Studies in Global Literature	3
ENG 3350	Global Medieval Literature	3
ENG 3385	Children's Literature	3
ENG 3386	Adolescent Literature	3
ENG 3388	Women's Writing	3
ENG 3392	Women Writers of the Middle Ages	3
ENG 3393	Postcolonial Literatures	3
ENG 4345	Approaches to a Global Author	3
ENG 4385	Advanced Studies in Children's or Adolescent Literature	3

Code	Title	Hours
GROUP D—MEDIA, GENRE, AND VISUAL STUDIES		
ENG 3302	Film and Video Theory and Production	3
ENG 3307	Introduction to the Study of Film	3
ENG 3308	Advanced Topics in Film	3
ENG 3309	The Southwest in Film	3

ENG 3316	Film Adaptation Studies	3
ENG 3320	Studies in Theory and Criticism	3
ENG 3321	The Short Story	3
ENG 3323	Modern Poetry	3
ENG 3326	US Drama on Film	3
ENG 3340	Special Topics in Language and Literature <sup>1</sup>	3
ENG 3343	The Interdisciplinary Approach to Literature <sup>1</sup>	3
ENG 3371	Queer and Trans Texts <sup>1</sup>	3
ENG 3372	Race and Ethnicity in Texts <sup>1</sup>	3
ENG 3373	Gender and Sexualities in Texts <sup>1</sup>	3
ENG 3390	Independent Study in Language and Literature <sup>1</sup>	3
ENG 4323	Studies in Autobiography and Biography	3
ENG 4350	Senior Seminar in Film	3

Code	Title	Hours
<b>GROUP E—WRITING STUDIES AND PRACTICE</b>		
ENG 3303	Technical Writing	3
ENG 3304	Professional Writing	3
ENG 3305	Life Writing	3
ENG 3306	Writing for Film	3
ENG 3311	Practices in Writing and Rhetoric	3
ENG 3312	Internship in English Studies	3
ENG 3313	Scientific Writing	3
ENG 3315	Introduction to Creative Writing	3
ENG 3318	Approaches to Writing and Rhetoric	3
ENG 3319	The Development of English	3
ENG 3342	Editing	3
ENG 3348	Creative Writing: Fiction	3
ENG 3349	Creative Writing: Poetry	3
ENG 3389	Teaching English Language Arts in the Secondary Classroom	3
ENG 4310	Modern English Syntax	3
ENG 4348	Senior Seminar in Fiction Writing	3
ENG 4349	Senior Seminar in Poetry Writing	3

<sup>1</sup> May fall into other groups depending on specific course content.

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three additional hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor. For this program, the additional literature course may be satisfied by selecting a sophomore literature course for the 040 component of the core curriculum.

- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.
- This major requires 36 semester credit hours of English courses. Within the 36 hours, students are required to complete six hours of early literature, three hours of literature focused on the work of a single author, and three hours of 4000-level literature. To satisfy the group requirements, students must select one course from 4 of the 5 groups. ENG 1310 and ENG 1320 or ENG 1321 are recommended prerequisites to all other English courses.
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- For transfer students, 12 semester credit hours in English (or equivalents) may be transferred from a Texas public institution of higher education for the English Language and Literature Field of Study and be applied to the Bachelor of Arts degree with a major in English at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
ENG 1310	College Writing I	3
TCCN: ENGL 1301		
ENG 1320	College Writing II	3
TCCN: ENGL 1302		
Choose 6 semester credit hours from the following: ENG 2310, ENG 2320, ENG 2330, ENG 2340, ENG 2359, ENG 2360, and ENG 2371		6
TCCN: 6 semester credit hours from the following: ENGL 2321, ENGL 2322, ENGL 2323, ENGL 2326, ENGL 2327, ENGL 2328, ENGL 2331, ENGL 2332, ENGL 2333, ENGL 2341 and ENGL 2351		
<b>Total Hours</b>		<b>12</b>

### Course Requirements

		Freshman
First Semester Hours	Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 ENG 1320 or 1321 (Communication Component Code 010 [TCCN ENGL 1302])	3
Mathematics Component Code 020	3 Life and Physical Sciences Component Code 030	3
Government/Political Science Component Code 070	3 American History Component Code 060	3



Modern Language 1410	4 Government/Political Science Component Code 070	3
US 1100	1 Modern Language 1420	4
<b>14</b>		<b>16</b>
<b>Sophomore</b>		
<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
Life and Physical Sciences Component Code 030	3 Social and Behavioral Sciences Component Code 080	3
ENG Literature (Language, Philosophy, and Culture Component 040) <sup>3</sup>	3 ENG Literature (Component Area Option Code 090/094) <sup>1, 3</sup>	3
Creative Arts Component Code 050 [HUMA 1315]	3 ENG 3301	3
American History Component Code 060	3 Modern Language 2320	3
Modern Language 2310	3 Minor	3
<b>15</b>		<b>15</b>
<b>Junior</b>		
<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
Component Area Option 090	3 ENG 3303, 3304, 3311, or 3342	3
ENG 3318	3 ENG Advanced Group Elective	3
ENG Advanced Group Elective	3 Minor	3
Minor	3 Electives (as needed)	6
Elective (as needed)	3	
<b>15</b>		<b>15</b>
<b>Senior</b>		
<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
ENG 3303, 3304, 3311, 3318, or 3342	3 BA Science, Math, Computer Science, or Logic	3
ENG Advanced Group Elective	3 ENG Advanced Group Elective	3
Minor	3 Minor	6
Electives (as needed)	6 Elective (as needed)	3
<b>15</b>		<b>15</b>
<b>Total Hours: 120</b>		

<sup>1</sup> Students who earn a grade of "B" or higher in the first sophomore course may elect to take an advanced literature course in lieu of the second sophomore course. No more than six hours of sophomore literature may count toward the major.

<sup>2</sup> ENG 3301 is required, and students should take it immediately after completing the sophomore literature requirement.

<sup>3</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

### Advanced English Courses

Students are required to take ENG 3301, preferably immediately after completing the sophomore literature requirement. Students must also take two courses focusing on early literature at either the sophomore or advanced level. In addition to ENG 3301, students must complete seven advanced courses, one of which must be a 4000-level course. Students must take one advanced course from three of the four non-writing groups (Groups A, B, C, and D) plus nine hours of electives in writing and rhetoric. In choosing their nine hours of electives in writing and rhetoric, majors with the emphasis in writing and rhetoric must take three hours of theory (ENG 3318, repeatable); three hours of practice (ENG 3303, ENG 3304, ENG 3305, ENG 3311, or ENG 3342); and three hours of theory or practice. They also select one three-hour elective from any group. One of the advanced courses must focus on the works of a single author and is recommended to be taken at the end of the major.

Code	Title	Hours
<b>EARLY LITERATURE COURSES</b>		
ENG 2310	British Literature before 1785	3
ENG 2330	World Literature before 1600	3
ENG 2359	US Literature before 1865	3
ENG 3327	Early Global Drama in English	3
ENG 3333	Early US Literature	3
ENG 3350	Global Medieval Literature	3
ENG 3351	Early Medieval Literature of the British Isles	3
ENG 3352	Medieval English Literature	3
ENG 3353	British Poetry and Prose of the Sixteenth Century	3
ENG 3354	Shakespeare	3
ENG 3356	British Poetry and Prose of the Seventeenth Century	3
ENG 3357	British Literature, 1688-1750	3
ENG 3359	British Literature, 1750-1800	3
ENG 3392	Women Writers of the Middle Ages	3
ENG 4334	US Romanticism	3
ENG 4351	Chaucer and His Time	3
ENG 4355	The Later Shakespeare	3
ENG 4358	Milton	3

Code	Title	Hours
<b>SINGLE AUTHOR COURSES</b>		
ENG 3354	Shakespeare	3
ENG 4343	Approaches to a British Author	3
ENG 4344	Approaches to a US Author	3
ENG 4345	Approaches to a Global Author	3
ENG 4351	Chaucer and His Time	3
ENG 4355	The Later Shakespeare	3
ENG 4358	Milton	3

Code	Title	Hours
<b>GROUP A—BRITISH LITERATURE</b>		
ENG 3351	Early Medieval Literature of the British Isles	3
ENG 3352	Medieval English Literature	3
ENG 3353	British Poetry and Prose of the Sixteenth Century	3
ENG 3354	Shakespeare	3
ENG 3356	British Poetry and Prose of the Seventeenth Century	3

ENG 3357	British Literature, 1688-1750	3
ENG 3359	British Literature, 1750-1800	3
ENG 3362	The British Romantics	3
ENG 3365	Victorian Literature	3
ENG 3368	The British Novel	3
ENG 3370	Twentieth- and Twenty-First Century British Literature	3
ENG 4343	Approaches to a British Author	3
ENG 4351	Chaucer and His Time	3
ENG 4355	The Later Shakespeare	3
ENG 4358	Milton	3

Code	Title	Hours
<b>GROUP B—US LITERATURE</b>		
ENG 3331	Black Literature	3
ENG 3333	Early US Literature	3
ENG 3335	US Literature, 1865-1945	3
ENG 3336	US Literature, 1945 to the Present	3
ENG 3338	The American Novel	3
ENG 3344	Chicana/o/x Narrative and Social History	3
ENG 3345	Southwestern Studies I: Defining the Region	3
ENG 3346	Southwestern Studies II: Consequences of Region	3
ENG 3347	American Poetry	3
ENG 4325	Literature of the Southwest	3
ENG 4334	US Romanticism	3
ENG 4344	Approaches to a US Author	3

Code	Title	Hours
<b>GROUP C—GLOBAL LITERATURES</b>		
ENG 3322	The European Novel	3
ENG 3325	Literature in Translation	3
ENG 3327	Early Global Drama in English	3
ENG 3328	Modern Global Drama in English	3
ENG 3329	Studies in Mythology	3
ENG 3341	Studies in Global Literature	3
ENG 3350	Global Medieval Literature	3
ENG 3385	Children's Literature	3
ENG 3386	Adolescent Literature	3
ENG 3388	Women's Writing	3
ENG 3392	Women Writers of the Middle Ages	3
ENG 3393	Postcolonial Literatures	3
ENG 4345	Approaches to a Global Author	3
ENG 4385	Advanced Studies in Children's or Adolescent Literature	3

Code	Title	Hours
<b>GROUP D—MEDIA, GENRE, AND VISUAL STUDIES</b>		
ENG 3302	Film and Video Theory and Production	3
ENG 3307	Introduction to the Study of Film	3
ENG 3308	Advanced Topics in Film	3
ENG 3309	The Southwest in Film	3
ENG 3316	Film Adaptation Studies	3
ENG 3320	Studies in Theory and Criticism	3
ENG 3321	The Short Story	3

ENG 3323	Modern Poetry	3
ENG 3326	US Drama on Film	3
ENG 3340	Special Topics in Language and Literature <sup>1</sup>	3
ENG 3343	The Interdisciplinary Approach to Literature <sup>1</sup>	3
ENG 3371	Queer and Trans Texts <sup>1</sup>	3
ENG 3372	Race and Ethnicity in Texts <sup>1</sup>	3
ENG 3373	Gender and Sexualities in Texts <sup>1</sup>	3
ENG 3390	Independent Study in Language and Literature <sup>1</sup>	3
ENG 4323	Studies in Autobiography and Biography	3
ENG 4350	Senior Seminar in Film	3

Code	Title	Hours
<b>GROUP E—WRITING STUDIES AND PRACTICE</b>		
ENG 3303	Technical Writing	3
ENG 3304	Professional Writing	3
ENG 3305	Life Writing	3
ENG 3306	Writing for Film	3
ENG 3311	Practices in Writing and Rhetoric	3
ENG 3312	Internship in English Studies	3
ENG 3313	Scientific Writing	3
ENG 3315	Introduction to Creative Writing	3
ENG 3318	Approaches to Writing and Rhetoric	3
ENG 3319	The Development of English	3
ENG 3342	Editing	3
ENG 3348	Creative Writing: Fiction	3
ENG 3349	Creative Writing: Poetry	3
ENG 3389	Teaching English Language Arts in the Secondary Classroom	3
ENG 4310	Modern English Syntax	3
ENG 4348	Senior Seminar in Fiction Writing	3
ENG 4349	Senior Seminar in Poetry Writing	3

<sup>1</sup> May fall into other groups depending on specific course content.

The minor in English requires 24 semester credit hours. Students who earn a grade of "B" or higher in the first sophomore course may elect to take an advanced literature course in lieu of the second sophomore course. No more than 6 hours of sophomore literature may count toward the English minor. Minors must take advanced courses from at least two different groups (Group A—British Literature, Group B—US Literature, Group C—Global Literatures, Group D—Media, Genre, and Visual Studies, or Group E—Writing Studies and Practice).

Code	Title	Hours
<b>Required Courses</b>		
ENG 1310	College Writing I	3
ENG 1320	College Writing II	3
	or ENG 1321 Writing for Sustainable Change	
Choose 6 hours from the following:		6
ENG 2310	British Literature before 1785	
ENG 2320	British Literature since 1785	
ENG 2330	World Literature before 1600	
ENG 2340	World Literature since 1600	
ENG 2359	US Literature before 1865	

ENG 2360	US Literature since 1865	
ENG 2371	U.S. Literature: Writing Identities	
<b>Electives</b>		
Choose 12 hours of advanced ENG courses		12
<b>Total Hours</b>		<b>24</b>

The minor in Media Studies requires 18 semester credit hours. No more than three courses, including core courses, in a single department may count toward this minor. Students should check with individual departments for course prerequisites. Relevant Honors courses and special topics courses may be substituted with permission from the Director of Media Studies.

Code	Title	Hours
<b>Required Courses</b>		
MC 3319	Visual Communication	3
ENG 3307	Introduction to the Study of Film	3
Choose 12 hours from the following:		12
AAS 3310A	Blacks, Film, and Society	
ANTH 3309	Cultures Through Film	
ARAB 3302	Media Arabic	
ARTH 3306	History of Photography	
ARTH 4304	Global History of Cinema	
ARTH 4309	Gender and Visual Representation	
ARTH 4310	Race and Representation	
ARTH 4312	The Arts in Popular Culture	
ARTH 4315	History of Experimental Film	
CHI 3303	Chinese for Media	
COMM 4307	Media Criticism	
ENG 3302	Film and Video Theory and Production	
ENG 3308	Advanced Topics in Film	
ENG 3309	The Southwest in Film	
ENG 3316	Film Adaptation Studies	
ENG 3326	US Drama on Film	
ENG 3327	Early Global Drama in English	
ENG 3328	Modern Global Drama in English	
ENG 4350	Senior Seminar in Film	
FR 3350	History of French Cinema I, 1895-1960	
FR 3351	Cinema of the French-Speaking World, 1960-present	
FR 4304C	Francophone Literature, Cinema, and Culture	
FR 4350A	French Poetic Realist Cinema	
FR 4350C	French Directors' Series	
GER 3304A	German Cinema	
GER 3304C	The Many Faces of Weimar Cinema: German Expressionist Films	
ITAL 3309	Italian Film and Media Studies	
JAPA 3309	Japanese Language through Popular Culture	
JAPA 4310	Postwar Japanese Literature and Film	
MC 3355	Mass Media and Society	
MC 3375	Electronic Media as Entertainment	
MC 4302	History of Mass Media	
MC 4309	Visual Literacy: Film	
MC 4319	Latinas/Latinos and the Media	

PS 3328	Politics in Film	
SPAN 3313	Spanish and Media	
SPAN 4350	Hispanic Film	
TH 3342	Television/Film Performance	
TH 4363	Directing For Film	
<b>Total Hours</b>		<b>18</b>

The minor in Medieval and Renaissance Studies requires 24 semester credit hours. No more than three courses, including core courses, in a single department may count toward this minor. Students should check with individual departments for course prerequisites. Relevant Honors courses and special topics courses may be substituted with permission from the Director of Medieval and Renaissance Studies.

Code	Title	Hours
<b>Required Courses</b>		
ENG 2310	British Literature before 1785	3
or ENG 2330	World Literature before 1600	
HIST 2310	Western Civilization to 1715	3
or HIST 2311	History of World Civilization to the 17th Century	
Choose 18 hours from the following:		18
ARTH 2301	Ancient to Medieval Art	
ARTH 2302	Renaissance to Modern Art	
ARTH 4306	Renaissance Art	
ARTH 4311	History of Italian Art	
ARTH 4322	Special Problems	
DAN 2368	World Dance and Cultures	
ENG 3319	The Development of English	
ENG 3350	Global Medieval Literature	
ENG 3351	Early Medieval Literature of the British Isles	
ENG 3352	Medieval English Literature	
ENG 3353	British Poetry and Prose of the Sixteenth Century	
ENG 3354	Shakespeare	
ENG 3356	British Poetry and Prose of the Seventeenth Century	
ENG 3392	Women Writers of the Middle Ages	
ENG 4351	Chaucer and His Time	
ENG 4355	The Later Shakespeare	
ENG 4358	Milton	
GER 4310	Masterpieces of German Literature	
GER 4380	German Civilization	
HIST 3312	Renaissance and Reformation	
HIST 3315	History of England to 1603	
HIST 3335	Spain of the Three Religions: Muslims, Christians, and Jews in Premodern Iberia	
HIST 3374D	Reframing Medieval Power: Rulers of the Mediterranean	
HIST 4307	Medieval European History, 300-1400	
HIST 4316	Roman and Medieval Britain	
HIST 4317	Tudor-Stuart England, 1485-1689	
HIST 4320	Origins of Christianity	
HIST 4325	Islamic History to 1798	
MATH 4311	Introduction to the History of Mathematics	

MU 3315	History and Analysis of Music from Antiquity through the Seventeenth Century
PHIL 2311	History of Philosophy Before 1600
PS 4311	Ancient and Medieval Political Thought (Greeks to 1600)
PS 4312	Modern Political Theory (1600 - 1900)
PS 4331	Islamic Law and Politics
SPAN 3301	Literatures of Spain I
SPAN 4342	Don Quijote
SPAN 4380G	Women, Minorities and Marginal Groups in Medieval Spanish Literature
TECH 3322	Development of Technology
TH 3320	History of the Theatre I
TH 3346	Historical Costume Research
<b>Total Hours</b>	<b>24</b>

**This minor is administered by the Center for the Study of the Southwest. For information regarding the requirements please click here (p. 491).**

The minor in Writing requires 24 semester credit hours. Students may choose an emphasis in creative writing or professional writing, or they may take courses in both types of writing. Students should check course descriptions for prerequisites to ENG 3348, ENG 3349, ENG 4348, and ENG 4349.

Students majoring in English may not minor in writing.

Code	Title	Hours
<b>Required Courses</b>		
ENG 1310	College Writing I	3
ENG 1320	College Writing II	3
or ENG 1321	Writing for Sustainable Change	
Choose 3 hours from the following:		3
ENG 2310	British Literature before 1785	
ENG 2320	British Literature since 1785	
ENG 2330	World Literature before 1600	
ENG 2340	World Literature since 1600	
ENG 2359	US Literature before 1865	
ENG 2360	US Literature since 1865	
ENG 2371	U.S. Literature: Writing Identities	
Choose 12 hours from the following:		12
ENG 3303	Technical Writing	
ENG 3304	Professional Writing	
ENG 3305	Life Writing	
ENG 3306	Writing for Film	
ENG 3311	Practices in Writing and Rhetoric	
ENG 3313	Scientific Writing	
ENG 3315	Introduction to Creative Writing	
ENG 3318	Approaches to Writing and Rhetoric	
ENG 3342	Editing	
ENG 3348	Creative Writing: Fiction	

ENG 3349	Creative Writing: Poetry
ENG 4348	Senior Seminar in Fiction Writing
ENG 4349	Senior Seminar in Poetry Writing
Choose 3 hours of advanced ENG literature courses	3
<b>Total Hours</b>	<b>24</b>

For students who are seeking a teacher certification within their major and would like a second teaching field in English, the requirements are:

Code	Title	Hours
ENG 1310	College Writing I	3
ENG 1320	College Writing II	3
or ENG 1321	Writing for Sustainable Change	
ENG 3301	Critical Approaches for English Majors	3
ENG 3389	Teaching English Language Arts in the Secondary Classroom	3
Select two of the following:		6
ENG 2310	British Literature before 1785	
ENG 2320	British Literature since 1785	
ENG 2330	World Literature before 1600	
ENG 2340	World Literature since 1600	
ENG 2359	US Literature before 1865	
ENG 2360	US Literature since 1865	
ENG 2371	U.S. Literature: Writing Identities	
Select three advanced hours from Group A		3
Select three advanced hours from Group B		3
Select three advanced hours from Group C		3
Select one of the following from Group E:		3
ENG 3319	The Development of English	
ENG 4310	Modern English Syntax	
<b>Total Hours</b>		<b>30</b>

All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

Evans Liberal Arts Building Room 139  
Telephone: 512-245-2170 Fax: 512-245-8353  
[www.geo.txstate.edu](http://www.geo.txstate.edu) (<http://www.geo.txstate.edu>)

Texas State's Department of Geography and Environmental Studies is one of the largest undergraduate programs of its kind in the United States. The undergraduate program offers a variety of majors of study. Students may select a Bachelor of Arts (B.A.) degree or a Bachelor of Science (B.S.) degree. The programs provide students with courses designed to increase their understanding of the world they live in and help students develop analytical skills necessary to interpret and solve real-world problems. The B.A. requires a minimum of 30 semester credit hours of Geography and Environmental Studies coursework while the B.S.

requires a minimum of 36 hours of Geography and Environmental Studies coursework. Geography and Environmental Studies majors may include a maximum of two additional Geography and Environmental Studies courses towards their major. Majors are required to complete a minor and are encouraged to select a minor in consultation with an academic advisor.

Additionally, the Department of Geography and Environmental Studies' internship program is one of the largest of its kind, placing students in both government agencies and private enterprises to provide students real-world experience to complement their academic program. The Department also offers highly acclaimed field experiences to places such as Big Bend National Park, the Southwestern United States, and Europe and Latin America, where students gain invaluable firsthand geographical knowledge while gaining academic credit.

## Major in Geography

The Geography major under the Bachelor of Arts or the Bachelor of Science degrees provides flexibility in designing unique programs for students with highly specialized career or graduate study objectives. Students electing to follow this major are strongly encouraged to work with a faculty member with experience in their specific area of interest.

## Major in Geographic Information Science

The general philosophy of the program stresses the importance of a content-rich background in geography along with principles and techniques of Geographic Information Science: GIS; remote sensing; visualization; cartography; spatial modeling; and quantitative methods. The Bachelor of Science major in Geographic Information Science was developed and structured for positions in local, state, and federal agencies, commercial companies, planning departments, engineering firms, utility companies, and many others. To prepare for GIScience careers, many students perform internships with government agencies or private firms as part of their academic program.

## Major in Geography Natural Resource and Environmental Studies

The Bachelor of Science major in Geography Resource and Environmental Studies prepares students for a wide variety of government and private sector occupations relating to resource conservation and/or environmental management. Graduates pursue careers with employers such as the Texas General Land Office, the Texas Commission on Environmental Quality, the Texas Department of Transportation, Texas Parks and Wildlife, the National Geographic Society, the Lower Colorado River Authority, the San Antonio Water System, Motorola, Valero Energy, and various private sector environmental consulting firms.

## Major in Geography Urban and Regional Planning

Planning is a diverse profession, which draws upon fields of knowledge and technical skills closely related to geography. The Bachelor of Science major in Urban and Regional Planning provides the means to evaluate and facilitate programs that benefit our neighborhoods, communities, cities, and regions. Population growth, economic development, transportation, education, public services, and the environment are a few of the essential factors evaluated by planners. Many of our graduates are employed as planners in Texas, as well as within other states and countries.

## Major in Geography Water Resources

The Bachelor of Science major in Geography Water Resources provides a focused study of the physical, chemical, social, political, and economic factors of water resources from the geographic perspective. As water resources become ever more critical to the nation, and in particular Texas and the Southwest Borderlands, this degree program addresses the increasing need for professionals in this crucial field. Graduates are highly sought after by government agencies, from local, state to federal, industries that have large water demands, agricultural interests and private consulting firms that specialize in water resource issues. The Lower Colorado River Authority, the Guadalupe-Blanco River Authority, the Edwards Aquifer Authority, and the San Antonio Water System all employ graduates of the program.

## Major in Physical Geography

The Bachelor of Science major in Physical Geography emphasizes the physical science elements of geographical study. This major prepares students for employment in applied climatology and meteorology, oceanography, geomorphology, resource evaluation, environmental analysis, and areas where an understanding of the complex relationship between nature and society is required. Students considering graduate studies in Physical Geography or any of the earth and atmospheric sciences should select this degree option.

## Bachelor of Arts (B.A.)

- Major in Human Geography (p. 536)

## Bachelor of Science (B.S.)

- Major in Geographic Information Science (p. 537)
- Major in Geography (p. 538)
- Major in Geography Natural Resources and Environmental Studies (p. 539)
- Major in Geography Urban and Regional Planning (p. 540)
- Major in Geography Water Resources (p. 542)
- Major in Physical Geography (p. 543)

## Minors

- Environmental Studies (p. 544)
- Geographic Information Science (p. 544)
- Geography (p. 545)
- Geology (p. 545)
- Nature and Heritage Tourism (p. 545)
- Spatial Data Science and Health (p. 546)

**Subjects in this department include: GEO (p. 527), GEOL (p. 534), NHT (p. 535)**

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## Courses in Geography (GEO)

### **GEO 1105. Meteorology Laboratory.**

Laboratory observations, calculations, and exercises of meteorological data and phenomena. Prerequisite: GEO 1305 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** GEOL 1147

### **GEO 1305. Meteorology.**

An introduction to atmospheric science providing information on the properties of the atmosphere, the scientific principles that govern weather and climate, and interactions between the atmosphere and the other components of the Earth system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030

**Grade Mode:** Standard Letter

**TCCN:** GEOL 1347

### **GEO 1309. Introduction to Cultural Geography.**

This course introduces students to the geographical perspective and focuses on spatial distributions of human activities and investigates underlying geographical processes that account for present and past cultural patterns such as population, folk and popular culture, language, religion, gender, ethnicity, politics, urban and rural land use, and economic development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** GEOG 1302

### **GEO 1310. World Geography.**

This course stresses the similarities and differences of the major world regions. Emphasis is given to human behavior in a spatial context. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080|Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** GEOG 1303

### **GEO 2110. Physical Geography Laboratory.**

This is a laboratory course that includes exercises and calculations to apply principles and concepts covered in introductory physical geography lecture classes. These include geographic tools, weather and climate, soils and biogeography, and geomorphology. Open only to students who have taken the lecture class at another college/university. Prerequisite: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better and instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **GEO 2310. Global Environmental Change.**

This course introduces the global perspective to examine Earth's environment and its systems, dynamics, and risks. Students use principles of scale, space, and distributions to analyze the changes in the environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **GEO 2410. Introduction to Physical Geography.**

A systematic study of the various elements that make up the Earth's physical environment, weather, climate, vegetation, soil, and landforms. Prerequisites: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

### **GEO 2420. Introduction to Geographic Information Techniques.**

The course will introduce the foundations of geographic information systems (GIS), global positioning systems (GPS), remote sensing, cartography, data analysis, and other tools and methods used by geographic information scientists. Maps, data collection, using and creating Internet content, and data analysis and display will be topics in the course.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

### **GEO 2426. Fundamentals of Geographic Information Systems.**

This course is an introduction to Geographic Information Systems (GIS), a tool for integrating and analyzing spatial data to visualize relationships, seek explanations and develop solutions to pressing problems. The foundations and theory of GIS will be emphasized. Prerequisites: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

### **GEO 2427. Management and Implementation of GIS.**

This course addresses strategies for successful GIS management and implementation in an organization-wide context and is organized around four primary issues: implementation planning, data management, technology assessment, and organizational setting. Prerequisite: GEO 2426 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 3301. Research Methods in Geography.**

This course provides an introduction to quantitative and qualitative research methodology, data collection and analytical techniques. Topics include descriptive, inferential, spatial quantitative statistics and qualitative methods such as case studies and content analysis. The course will introduce students to software applications that are designed for organizing, analyzing and visualizing data. Prerequisite: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3303. Economic Geography.**

This course investigates the geographic organization of economic activity with emphasis on the interconnections from global to local scales. Technological advances, resource creation and destruction, supply and demand, distribution and development, environmental impacts, and economic justice are addressed. Theoretical models are used to interpret past and current situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3305. Climatology.**

Introduction to the elements of climate and their use in environmental monitoring and analysis. Prerequisite: GEO 2110 or GEO 2410 or [GEO 1305 and MATH 1315] any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3307. Geography of Europe.**

The course presents a systematic and regional investigation of the physical and cultural processes and phenomena that have created the characteristic landscapes of Europe. Topics include the climate, landform regions, trade, transportation, urban growth, population change, and the evolution of economic integration in the region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 3308. Latin America.**

A regional survey of the physical and cultural geography of Latin America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 3309. United States and Canada.**

This course provides a systematic and regional analysis of the United States and Canada with emphasis on contemporary economic, environmental, political, and social issues. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 3310. Urban Geography.**

The study of city systems, form, and development with emphasis on functional patterns, economic base, industrial location, service, and social area analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3313. Natural Resource Use and Management.**

This course uses environmental concepts at all geographic scales to identify and analyze patterns and processes of resource use, and discusses management strategies to solve present and future concerns related to natural resources. Prerequisite: GEO 2110 or GEO 2410 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3320. Community and Regional Planning.**

This course examines the practice, history and development of community and regional planning in the U.S. focusing on specific methods and legal frameworks of community planning and cultivating sustainable development. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 3321. Energy Resource Management.**

An analysis of energy sources, their distribution and characteristics, and the problems associated with their use and management. (WI) Prerequisite: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 3323. Researching the City.**

This course covers data collection and analysis of urban life, and the factors considered in locating industry, business, housing, and community facilities. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 3328. Geography of North Africa and the Middle East.**

A regional treatment dealing with the physical features and cultural activities of the people in North Africa and the Middle East. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 3329. Geography of Texas.**

A physical and cultural geography of Texas with special emphasis on human resources and economic activities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 3332. Geography of South and Southeast Asia.**

This course is a systematic and regional overview of the physical and human geography of the countries of the Indian subcontinent and Southeast Asia. Topics include the monsoons, cultural diversity, rapid economic development, agricultural systems, and environmental problems. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 3333. Geography of East Asia.**

This course provides a regional overview of the physical and human geography of the countries of East Asia. This course also systematically examines the countries of this region by closely examining such topics as the impacts of high population densities and intensive land use practices. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 3335. Oceanography.**

An introductory course about the physical, chemical, geologic, and biologic characteristics of the oceans and coastal areas. Emphasis will be placed on the role of the oceans as a component of the global environment. Prerequisite: BIO 1320 or BIO 1330 or GEO 2110 or GEO 2410 or GEOL 1410 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3340. Political Geography.**

Political geography concerns the interrelationship between political activities and spatial distributions. Topics include the concept of the state, international spheres of influence and confrontation, boundaries, contemporary world issues and problems, and geographic aspects of electoral politics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3349. World Population.**

An in-depth study of the spatial distribution and movement of human populations. The course will emphasize current issues and analytical techniques. Topics will include the impact of population growth, spatial diffusion processes, migration trends and theories, explanation of regional demographic differences, and techniques such as population projections. Prerequisite: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3351. Health Geography.**

This course introduces concepts of health, health care, disease, and illness from a geospatial perspective. The course examines how people and societies interact geographically with the natural, social, and built environment in ways that result in varying degrees of health. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 3353. American Ethnic Geography.**

A geographical analysis of ethnic groups in the United States with emphasis on their settlement patterns, spatial interactions, and current problems. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 3411. Maps and Mapmaking.**

An introduction to reference and thematic map use and design. The course introduces basic cartographic mapping techniques for quantitative and qualitative data, teaches about geospatial analysis and interpretation, and enables students to design basic maps. Prerequisite: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 3416. Remote Sensing and Earth Observation.**

Introduction to the acquisition, mensuration, interpretation, and mapping of aerial photographs and satellite images for environmental monitoring and inventorying. Prerequisite: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 3425. Geomorphology.**

This course in Geomorphology investigates linkages between landscape forms and processes with emphasis on weathering, fluvial, aeolian, karst, and coastal processes. There will be various activities, including fieldwork, where students will demonstrate their grasp on fundamental processes in geomorphology. Prerequisite: GEO 2110 or GEO 2410 or GEOL 1410 any with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3426. Advanced GIS.**

This course builds on the principles introduced in GEO 2426 and presents an in-depth examination of the technical aspects involved in spatial data handling, analysis, and modeling. Prerequisite: GEO 2426 and GEO 3301 both with grades of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 3434. Water Resources.**

This course analyzes within a geographical perspective, the formation, use, conservation, and management of water resources. The students will develop a working knowledge of the hydrologic, water quality, legal, economic, political, and societal factors that determine water availability, hazards, use, demand, and allocation. Prerequisite: GEO 2110 or GEO 2410 or [CHEM 1141 and CHEM 1341] any with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 4190. Independent Study.**

Individual study under direct supervision of a professor. May involve field trips. This course may be repeated for credit, but a student may not exceed six hours of credit in Independent Study.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 4290. Independent Study.**

Individual study under direct supervision of a professor. May involve field trips. This course may be repeated for credit, but a student may not exceed six hours of credit in Independent Study.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 4306. Geography of the Southwest.**

Though primarily defined by aridity, the southwestern United States is extremely diverse in its environments and its people. This course explores how people have related to this land. This course also examines current issues and future trends in natural resources and cultural processes in the region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 4309. Cultural and Political Ecology.**

This course examines cultural and political ecology, which employs concepts of culture formation/change and biological ecology to understand processes of adaptation and the influences of social/political power. It provides a holistic means to interpret pre-modern, non-western, and agrarian cultures as well as modern cultures as relates to their biophysical environment. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4310. Regional Field Studies.**

Observation, description, and analysis of a geographical environment based upon offcampus study in that environment. May be repeated once, provided the second study is in a different region, for a total of 6 semester hours. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4313. Environmental Management.**

This course provides an analysis of the causes of environmental problems, from local to global scale, and the evaluation of attempts at management and solutions of those problems. Emphasis will be placed on the role that geography can play in environmental degradation and management. Prerequisite: [GEO 2110 or GEO 2410] and [GEO 3313 or GEO 3321 or GEO 3434 or GEO 4350 or GEO 4352] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4314. River Basin Management.**

The purpose of this course is to study principles and practices of large-scale river basin management. Emphasis is on integrated management of land and water resources, including economic development and environmental protection issues. (WI) Prerequisite: GEO 3434 or GEO 4325 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4316. Landscape Biogeography.**

Investigation of present-day and post-Pleistocene spatial patterns of plants, animals, and biogeographical processes. Human interactions with biogeographical patterns is also addressed, as are methods for reconstructing Holocene patterns of biogeographic distribution. Course to be taught over every other year. Prerequisite: GEO 2110 or GEO 2410 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4317. Water Resources Planning.**

This course examines water resources planning case studies related to water quality protection/mitigation and state/regional water supply planning from a policy practitioner's perspective. Students explore watershed and water supply planning to understand the elements involved, stakeholders, and strategy recommendations pursued including water-use conservation and efficiency measures. Prerequisite: GEO 3434 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4321. Cities and Urban Design.**

This course explores the interplay of intentional and natural processes shaping urban landscapes. It provides an introduction to the roles of spatial thinking and collaborative decision-making in urban planning and design. (MULT) Prerequisite: GEO 3310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 4322. Interpretive Environmental Geography.**

Students learn principles, themes, and techniques for effective interpretation of environmental information to audiences ranging from park visitors to professional conferences. Interpretive themes are drawn from geographic concepts including the physical and cultural landscapes and cultural ecology. Techniques emphasize effective use of traditional and digital presentation methods. (WI) Prerequisite: GEO 2110 or GEO 2410 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4323. Conservation Leadership.**

This course offers an in-depth introduction to the conservation movement and the philosophy, establishment, and operation of institutions engaged in that movement. Problems and attributes of leadership will be emphasized along with the operational implications, ethical issues and other considerations for successful implementation at non-governmental, local, state, and federal levels.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4325. Fluvial Processes.**

Students analyze modern principles of river processes and forms within a geographical perspective. This course examines the fundamental mechanics of fluvial channels with an emphasis on quantitative geographic evaluation of their processes. The course emphasizes natural scientific perspectives and includes linkages to ecology, engineering, resources management, and policy. Prerequisite: GEO 3425 or GEO 3434 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4326. Parks and Protected Places.**

This course serves as an in-depth introduction to the philosophy, establishment, and operation of Public Parks, Wildlife Refuges, Protected Areas, Non-Governmental Preserves and Historic Sites. Students will be introduced to the scientific and policy rationale for the creation of such areas as well as methods of classification and acquisition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4328. Geography of the Russian Realm.**

This course presents a regional and systematic overview of the physical and human geography of the countries of the former Soviet Union. The course examines in depth issues such as the legacy of the degraded landscape and environmental problems left by decades of Soviet industrialization. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4331. Geography of Food and Agriculture.**

This course critically evaluates local and global food systems, considering the implications of varying forms of production and consumption. Topics explored are related to sociocultural, economic, and environmental landscape change, the role of agriculture in both rural and urban places, and sustainability writ large. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4334. Groundwater Resources.**

This course examines, within a geographical perspective, the major concepts and principles that control groundwater availability and use. Students will analyze aquifer characteristics that determine water quantity and quality. Constraints on aquifer use including environmental, economic, societal, and legal factors will be analyzed for optimizing aquifer management and water-use policy. Prerequisite: GEO 3434 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**GEO 4335. Directed Research.**

This course allows students to pursue advanced geographic research not offered in the present curriculum. Permission and project approval must be obtained from the supervising faculty member prior to registration. This course may be repeated for credit, but a student may not exceed six hours of credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 4336. Transportation Systems.**

This course is an examination of the evolution of urban transportation systems, policies, institutions, and methods in the United States. Principles, procedures, and techniques of transportation planning in the State of Texas are covered and students are introduced to the literature in transportation geography and methods of transportation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4338. Planning Practicum.**

This capstone course focuses on methods and procedures used for planning and managing urban development on the local level. Topics include municipal ordinances, the development/redevelopment process and relationships between development, capital improvements and the local economy. Prerequisite: GEO 3320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4339. Environmental Hazards.**

Analysis of environmental hazards with respect to human use of the land. Includes geologic hazards and problems caused by floods and meteorological conditions. Prerequisite: GEO 2110 or GEO 2410 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4340. Fundamental Themes in Geography.**

Students will become familiar with the K-12 Geography Texas Essential Knowledge and Skills (TEKS) and the national geography content standards, identify instructional resources and materials, design instructional units, and fully develop grade level appropriate inquiry based lessons and student assessments. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4341. Water Policy.**

This course covers the evolution of water policy from the awareness of issues, through the political and legal process, to the implementation of specific plans, programs, and facilities. Prerequisite: GEO 3434 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4350. Solid Waste Planning and Management.**

A survey of the methods of solid waste disposal including waste storage, collection, transportation and disposal, and their short-and long-range effects on the environment. A practical course in the planning, implementation, and management of alternate methods of sanitary waste disposal. Prerequisite: GEO 2110 or GEO 2410 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4351. Geospatial Data Science and Health.**

This course examines how methods in geospatial data science can be used to study health outcomes from a geographic perspective, and how insights from these studies can be used to enhance population health efforts. Prerequisite: GEO 2426 and GEO 3301 and GEO 3351 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4352. Air Quality Management.**

This course provides an assessment and analysis of air quality including types, sources, and effects of air pollutants as well as principles governing their dispersal and management. These aspects are analyzed considering physical science, economic, legal and social factors.

Prerequisite: [CHEM 1141 and CHEM 1341] or GEO 2110 or GEO 2410 or GEO 3305 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4355. Geography of Crime.**

This course provides understanding of geographical aspects of crime and criminal behavior. Students are exposed to theories and analysis methods and models explaining and predicting crime spatial patterns. Computer exercises give students hands on experience on crime pattern analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4356. Urban Infrastructure Management.**

This course examines life-cycle management of technology-enhanced urban infrastructure. Buildings, transportation systems, water and waste treatment facilities, and energy and communication grids are considered. Sensor data and other factors are analyzed to establish repair and rehabilitation strategies to improve an asset's functionality, safety, and economic value. (WI) Prerequisite: CE 3360 or [GEO 2426 and GEO 3301] either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4380. Internship in Geography.**

On-the-job training in a public or private-sector agency. Students must apply to the department internship director at least six weeks prior to registering for the internship course. This course may be repeated one time for additional internship credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 4390. Independent Study.**

Individual study under direct supervision of a professor. May involve field trips. This course may be repeated for credit, but a student may not exceed six hours of credit in Independent Study.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 4393A. Environmental Compliance.**

This course examines the implementation and enforcement of environmental statutes and regulations from a geographic perspective that includes physical environmental, cultural, social, economic, and legal parameters. The course focuses on current environmental requirements as applied to contemporary regulatory challenges including widely applicable innovative compliance strategies. (WI) Prerequisite: GEO 3321 or GEO 3434 or GEO 4350 or GEO 4352 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4393B. Business Geography.**

This course provides an exploration of the geospatial analysis of business activities in the United States with emphasis on site location, market segmentation and material/product tracking.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 4393E. Race, Class, and the American City.**

This course examines historical and contemporary intersections of race and class as they have been shaped by and continue to influence urbanization in the United States while emphasizing geographical understandings of space and place. Topics include segregation, immigration, civil rights, housing, crime, race and the environment, community development, and cultural.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 4393F. Geographies of the Holocaust and Genocide.**

This course examines the Holocaust as a complex historical event and frames the Holocaust in the context of, and in comparison to, other genocides. The course is explicitly geographical in methods and subject matter, focusing on how the Holocaust and genocide are planned, implemented, and experienced differently in different places.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 4393G. Geographic Elements of Environmental Law.**

A survey of environmental laws related to land, air, and water pollution. The nature of environmental problems will be studied as they relate to urbanization, industrialization, land development, noise, radiation and solid waste management, and the laws and guidelines that have been passed to alleviate such problems. Prerequisite: GEO 3321 or GEO 3434 or GEO 4350 or GEO 4352 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4411. Advanced Cartographic Design.**

This advanced course in cartography focuses on thematic map design. The objective is to produce a cartographic portfolio of well-designed, professional grade maps. Theoretical concepts and principles will be introduced using practical examples and written assignments. Prerequisite: GEO 3411 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 4412. Digital Image Processing and Machine Learning.**

This course is an introduction to the digital image processing of satellite scenes including restoration, enhancement, classification and machine learning, change detection, and mapping for environmental monitoring and inventorying. (WI) Prerequisites: GEO 3301 and GEO 3416 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4417. Digital Terrain Modeling.**

The course focuses on the mapping, transformation, mensuration, visualization, and applications of digital elevation models in Geography. Prerequisite: GEO 2426 and GEO 3416 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 4420. GeoProgramming.**

This course develops advanced GIS concepts, techniques, analysis skills (e.g. spatial data manipulation), and provides hands-on experience with geoprocessing in GIS software programs. The course focuses on the application of basic programming skills to solve real-world GIS problems. Prerequisite: GEO 3426 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4422. Web Mapping.**

The course introduces students to modern interactive and dynamic mapping and GIS techniques that allow internet-based cartographic representations of temporal and non-temporal geospatial objects and phenomena. Prerequisite: GEO 3411 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 4424. GPS and GIS.**

Students will learn to plan and conduct fieldwork using Global Positioning System (GPS) to differentially correct GPS data, and to build Geographic Information Systems (GIS) applications using GPS technology. The course is project-based and involves working with external client(s). Prerequisites: GEO 3411 or GEO 3426 either with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4427. GIS Consulting Practicum.**

This course requires students to work on a substantive GIS project in partnership with external clients in the GIS workforce. Through project-based teamwork, students develop GIS career skills and demonstrate competence in GIS techniques at the professional level. Prerequisite: GEO 3426 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 4430. Field Methods.**

Methods and techniques for observing, measuring, recording, and reporting on geographic phenomena are investigated in this course. Students will learn the use of instruments and materials in the collection of data for mapping and field research in the local area. (WI) Prerequisites: [GEO 2110 or GEO 2410] and GEO 3301 both with grades of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Geology (GEOL)

**GEOL 1410. Physical Geology.**

The study of materials making up the Earth, the processes that act upon them, and the results of these processes; the development of tools for the interpretation of earth's history and structure, and the major geologic concepts.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** GEOL 1403

**GEOL 1420. Historical Geology.**

A continuation of physical geology leading to consideration of the geologic history of the Earth (with special emphasis on North America), the evolution of life, the continents through geologic time and the principles and procedures used in the interpretation of earth history.

Prerequisite: GEOL 1410 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** GEOL 1404

**GEOL 3410. Sedimentation and Stratigraphy.**

This course will allow students to study the principles of weathering, transportation, deposition, and lithification of sediments. Primary structures and textures of sediments are used to determine environments of deposition. Students will identify the recognition and classification of strata into stratigraphic units. Prerequisite: GEOL 3450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEOL 3430. Structural Geology.**

This course examines the description, classification, and origin of Earth structures and the stresses involved in their formation. Students will explore solutions of structural geology problems using analytical geometry, geologic maps, contouring of data, and preparation of cross sections. Prerequisites: GEOL 1420 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEOL 3450. Earth Materials.**

This course provides an introduction to crystal chemistry, physical properties, and identification of major rock-forming minerals, sedimentary, igneous, and metamorphic rocks. It brings together wide-ranging fundamental and key concepts in mineralogy and petrology to understand rocks and minerals and how they relate to the broader Earth, materials and environmental sciences. Prerequisite: GEOL 1410 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEOL 4121. Directed Study.**

Independent study of a particular subject area in geology. Specific topic to be discussed and agreed upon prior to registration. May be repeated once with different emphasis and professor for additional credit. Prerequisite: GEOL 1420 with a grade of "C" or better and instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEOL 4320. Topics in Field Geology.**

This course provides on-site directed investigations of geology in locations remote from campus. Prerequisite: GEOL 1420 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**GEOL 4321. Directed Study.**

This course is designed to provide a student with an opportunity to conduct independent research for credit in consultation with his or her Geology instructors. The course may be repeated once with a different content or instructor. Prerequisite: GEOL 1420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEOL 4330A. Introduction to Petroleum Geology.**

This course discusses the origin and distribution of conventional and unconventional petroleum resources, source rocks, types of traps and seals, reservoir rock properties, exploration methods (seismic data analysis and interpretation, formation evaluation, subsurface mapping), reservoir characterization and modeling, reserves calculations. Prerequisite: GEOL 1420 with a grade of "C" or better. Corequisite: GEOL 4121 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEOL 4330B. Planetary Geology.**

This course is a survey of the application of geologic principles to the rocky planets and satellites in the solar system. Prerequisite: GEOL 1420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEOL 4330C. Survey of Economic Mineral Deposits.**

This is a survey of the geology of economic resource derived from the Earth including metals, nonmetals, energy related resources and ground water. Topics include genesis of economic deposits, methods of prospecting, methods of extraction, refining, and environmental impact. Prerequisite: GEOL 3450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEOL 4330D. Tectonics and Geology of the USA.**

Study of the geology of the USA from the tectonic point of view. The different tectonic processes including continental extension and formation of an ocean, convergence and mountain building, volcanism and seismic activity will be studied and illustrated using mostly examples based on the geology of the USA. Prerequisite: GEOL 1420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEOL 4421. Hydrogeology.**

This course will provide the student with an introduction to the science of hydrogeology, a conceptual and quantitative understanding of groundwater from a geological/mathematical/geochemical perspective, and experience with hydrogeology applications. (WI) Prerequisites: GEOL 1420 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Nature and Heritage and Tourism (NHT)

**NHT 4301. Planning and Development of Nature and Heritage Tourism.**

This course applies basic planning and development principles to the special issues of nature and heritage tourism. Particular emphasis is placed on locational analysis, site analysis, and planning for sustainable use. Prerequisite: GEO 2110 or GEO 2410 either with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NHT 4302. Internship in Nature and Heritage Tourism.**

Students will work in private or public sector settings to gain practical experience in the planning, development and management of nature and/or heritage tourism. NHT internships frequently require students to develop and deliver content (online and/or in-person) to increase recipients' awareness of and appreciation for geography and the environment. Students will be expected to perform at high professional standards and will interpret the internship experience within the context of current literature. Prerequisite: NHT 4301 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor.
- This major requires students to select a minor area of study from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>) offered at Texas State. Recommended minors are Nature and Heritage Tourism, Geographic Information Science, Geology, Anthropology, Sociology, Political Science, History, and Sustainability Studies; however, other minors may be appropriate depending on a student's interests and career goals. Students are encouraged to meet with an academic advisor to review minor options and degree requirements.
- To satisfy graduation requirements, students must have at least a 2.50 Geography major GPA and at least a 2.25 Texas State GPA. Students must make a grade of "C" or better in all Geography courses that are to be counted for credit toward their major.
- This major requires a minimum of 32 semester credit hours of Geography courses.
- Required Geography major courses include the following 14 hours:

Code	Title	Hours
GEO 1309	Introduction to Cultural Geography	3
or GEO 1310	World Geography	
GEO 2410	Introduction to Physical Geography	4
GEO 3301	Research Methods in Geography	3
Choose 4 hours from the following:		
GEO 2426	Fundamentals of Geographic Information Systems	
GEO 3411	Maps and Mapmaking	
GEO 3416	Remote Sensing and Earth Observation	
GEO 4430	Field Methods	

- Required Human Geography core (6 hours):

Code	Title	Hours
Choose 6 hours from the following:		
GEO 3303	Economic Geography	3
GEO 3310	Urban Geography	3
GEO 3340	Political Geography	3
GEO 3349	World Population	3

- Required Regional Geography course:

Code	Title	Hours
Choose 3 hours from the following:		
GEO 3307	Geography of Europe	3
GEO 3308	Latin America	3
GEO 3309	United States and Canada	3

GEO 3328	Geography of North Africa and the Middle East	3
GEO 3329	Geography of Texas	3
GEO 3332	Geography of South and Southeast Asia	3
GEO 3333	Geography of East Asia	3
GEO 4306	Geography of the Southwest	3
GEO 4310	Regional Field Studies	3
GEO 4328	Geography of the Russian Realm	3

- Additional Human Geography Requirements:

Code	Title	Hours
Choose 6 hours from the following:		
GEO 2310	Global Environmental Change	3
GEO 3323	Researching the City	3
GEO 3351	Health Geography	3
GEO 3353	American Ethnic Geography	3
GEO 4309	Cultural and Political Ecology	3
GEO 4331	Geography of Food and Agriculture	3
GEO 4393E	Race, Class, and the American City	3

\*Students may also choose courses from the Human Geography Core and Required Regional Geography lists that were not taken to satisfy those requirements.

- Geography required elective courses (3 hours) are to be selected in consultation with an academic advisor.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- Nine hours of writing intensive (WI) courses are required for graduation.

### Course Requirements

		Freshman
First Semester Hours	Second Semester Hours	
Communication Component Code 010	3 Communication Component Code 010	3
MATH 1315, 1317, 1319, 1329, 2321, 2417, or 2471 (Mathematics Component Code 020 [TCCN MATH 1314, 1316, 1324, 1325, 1323, 2412, or 2413])	3-4 Creative Arts Component Code 050	3
Life and Physical Sciences Component Code 030	3 American History Component Code 060	3
Government/Political Science Component Code 070	3 Government/Political Science Component Code 070	3
GEO 1309 or 1310 (TCCN GEOG 1302 or 1303)	3 GEO 2410 (BA Science, Math, Computer Science, or Logic)	4
US 1100	1	
16		16



Sophomore	
First Semester Hours	Second Semester Hours
Language, Philosophy, and Culture Component Code 040	3 Life and Physical Sciences Component Code 030 3
American History Component Code 060	3 ENG Literature (Component Area Option Code 090/094) <sup>2</sup> 3
Social and Behavioral Sciences Component Code 080 (not to include GEO 1310)	3 Modern Language 1420 <sup>1</sup> 4
Modern Language 1410 <sup>1</sup>	4 GEO 2426, 3411, 3416, or 4430 4
GEO 3301	3
<b>16</b>	<b>14</b>

Junior	
First Semester Hours	Second Semester Hours
Component Area Option Code 090/091	3 BA ENG Literature 3
Modern Language 2310 <sup>1</sup>	3 Modern Language 2320 <sup>1</sup> 3
Human Geography Core	6 Required Regional Geography Course 3
Minor	3 Minor 6
<b>15</b>	<b>15</b>

Senior	
First Semester Hours	Second Semester Hours
Additional Human Geography Courses	6 Minor 6
GEO Elective	3 Electives (as needed) 6
Minor	3
Electives (as needed)	4
<b>16</b>	<b>12</b>

**Total Hours: 120**

<sup>1</sup> Students must complete 6 hours of the same modern language (2310 and 2320). Most students complete 1410 and 1420 as prerequisites before attempting 2310.

<sup>2</sup> ENG Literature Courses: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), or ENG 2371

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- This major requires students to select a minor area from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>) offered at Texas State. Various minors may be appropriate depending on a student's interests and career goals.

Students are encouraged to meet with an academic advisor to review minor options and degree requirements.

- This major requires a minimum of 36 semester credit hours of Geography courses.
- To satisfy graduation requirements, students must have at least a 2.50 major GPA for Geography and at least a 2.25 TXST GPA. Students must make a grade of "C" or better in all Geography courses that are to be counted for credit toward their major.
- Required major courses include the following:

Code	Title	Hours
GEO 1309	Introduction to Cultural Geography	3
or GEO 1310	World Geography	
GEO 2410	Introduction to Physical Geography	4
GEO 2426	Fundamentals of Geographic Information Systems	4
GEO 3301	Research Methods in Geography	3

- Required Geography core courses include the following:

Code	Title	Hours
GEO 3411	Maps and Mapmaking	4
GEO 3416	Remote Sensing and Earth Observation	4
GEO 3426	Advanced GIS	4

- Required 4000-level Geography includes at least three courses from the following:

Code	Title	Hours
GEO 4351	Geospatial Data Science and Health	3
GEO 4411	Advanced Cartographic Design	4
GEO 4412	Digital Image Processing and Machine Learning	4
GEO 4420	GeoProgramming	4
GEO 4422	Web Mapping	4
GEO 4424	GPS and GIS	4
GEO 4427	GIS Consulting Practicum	4
GEO 4380	Internship in Geography	3
or GEO 4430	Field Methods	

Students cannot take both GEO 4380 and GEO 4430 to count towards 4000-level requirement

- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- Nine hours of writing intensive (WI) courses are required for graduation.

### Course Requirements

Freshman	
First Semester Hours	Second Semester Hours
Communication Component Code 010	3 Communication Component Code 010 3
Mathematics Component Code 020 <sup>1</sup>	3 Life and Physical Sciences Component Code 030 3
Life and Physical Sciences Component Code 030	3 American History Component Code 060 3

Government/Political Science Component Code 070	3 Social and Behavioral Sciences Component Code 080 (not to include GEO 1310)	3
GEO 1309 or 1310 (TCCN GEOG 1302 or 1303)	3 GEO 2410	4
US 1100	1	
	<b>16</b>	<b>16</b>

**Sophomore**

First Semester Hours	Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3 Component Area Option Code 090/091	3
American History Component Code 060	3 Computer Science, Computer Information Systems, or Mathematics Course (not to include MATH 1312 or MATH 1316)	3
Government/Political Science Component Code 070	3 Modern Language 1420 (if required) or Elective	4
Modern Language 1410 (if required) or Elective	4 GEO 3301	3
GEO 2426	4 Minor	3
	<b>17</b>	<b>16</b>

**Junior**

First Semester Hours	Second Semester Hours	
Creative Arts Component Code 050	3 GEO 3411	4
ENG Literature (Component Area Option Code 090/094) <sup>2</sup>	3 GEO 3416	4
GEO 3426	4 Minor	6
Minor	3	
	<b>13</b>	<b>14</b>

**Senior**

First Semester Hours	Second Semester Hours	
ENG 3303 (BS Literature or Technical Writing)	3 GEO 4411, 4412, 4420, 4422, 4424, 4427, 4380, or 4430	4
GEO 4411, 4412, 4420, 4422, 4424, 4427, 4380, or 4430	4 Minor	3
GEO 4411, 4412, 4420, 4422, 4424, 4427, 4380, or 4430	4 Electives (as needed)	7
Minor	3	
	<b>14</b>	<b>14</b>

**Total Hours: 120**

<sup>1</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1317 (TCCN 1316), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2321 (TCCN 2313), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

<sup>2</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL

2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. This major requires students to select a minor area of study from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>) offered at Texas State. Recommended minors are Biology, Chemistry, Geology, Anthropology, Computer Science, Mathematics, Plant and Soil Science, and Physics; however, other minors may be appropriate depending on a student's interests and career goals. Students are encouraged to meet with an academic advisor to review minor options and degree requirements.
3. To satisfy graduation requirements, students must have at least a 2.50 Geography major GPA and at least a 2.25 Texas State GPA. Students must make a grade of "C" or better in all Geography courses that are to be counted for credit toward their major.
4. Geography required elective courses (22 hours) are to be selected in consultation with an academic advisor.
5. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
6. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
7. Nine hours of writing intensive (WI) courses are required for graduation.

### Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
Communication Component Code 010	3 Communication Component Code 010	3
Mathematics Component Code 020 <sup>1</sup>	3 American History Component Code 060	3
Life and Physical Sciences Component Code 030	3 Government/Political Science Component Code 070	3
Government/Political Science Component Code 070	3 Social and Behavioral Sciences Component Code 080 (not to include GEO 1310)	3
GEO 1309 or 1310 (TCCN GEOG 1302 or 1303)	3 GEO 2410	4
US 1100	1	
	<b>16</b>	<b>16</b>

Sophomore		
First Semester Hours	Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3 Life and Physical Sciences Component Code 030	3
Creative Arts Component Code 050	3 ENG Literature (Component Area Option Code 090/094) <sup>2</sup>	3
American History Component Code 060	3 Modern Language 1420 (if required) or Elective	4
Modern Language 1410 (if required) or Elective	4 GEO 2426	4
GEO 3301	3	
<b>16</b>	<b>14</b>	
Junior		
First Semester Hours	Second Semester Hours	
Component Area Option Code 090/091	3 GEO Electives	7
ENG 3303 (BS Literature or Technical Writing)	3 Minor	6
GEO Electives	6 Elective (as needed)	3
Minor	3	
<b>15</b>	<b>16</b>	
Senior		
First Semester Hours	Second Semester Hours	
GEO Electives	6 GEO Elective	3
Minor	3 Minor	6
Electives (as needed)	6 Elective (as needed)	3
<b>15</b>	<b>12</b>	

**Total Hours: 120**

<sup>1</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1317 (TCCN 1316), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2321 (TCCN 2313), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

<sup>2</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- This major requires students to select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>) offered at Texas State. Recommended minors are Biology, Chemistry, Geology, Anthropology, Computer Science, Mathematics, Plant and Soil Science, and Physics; however,

other minors may be appropriate depending on a student's interests and career goals. Students are encouraged to meet with an academic advisor to review minor options and degree requirements.

- This major requires a minimum of 36 semester credit hours of Geography courses.
- To satisfy graduation requirements, students must have at least a 2.50 major GPA for Geography and at least a 2.25 Texas State GPA. Students must make a grade of "C" or better in all Geography courses that are to be counted for credit toward their major.
- Required major courses include the following:

Code	Title	Hours
GEO 1309	Introduction to Cultural Geography	3
or GEO 1310	World Geography	
GEO 2410	Introduction to Physical Geography	4
GEO 2426	Fundamentals of Geographic Information Systems	4
GEO 3301	Research Methods in Geography	3

- Required Geography core courses include the following:

Code	Title	Hours
GEO 2310	Global Environmental Change	3
GEO 3313	Natural Resource Use and Management	3
Select at least two of the following:		
GEO 3321	Energy Resource Management	
GEO 3434	Water Resources	
GEO 4350	Solid Waste Planning and Management	
GEO 4352	Air Quality Management	

- Required Geography capstone is GEO 4313.
- Geography electives to bring the required Geography hours to 36 should be selected in consultation with an advisor from the following courses:

Code	Title	Hours
GEO 1305	Meteorology	3
GEO 3303	Economic Geography	3
GEO 3305	Climatology	3
GEO 3310	Urban Geography	3
GEO 3320	Community and Regional Planning	3
GEO 3335	Oceanography	3
GEO 3340	Political Geography	3
GEO 3349	World Population	3
GEO 3425	Geomorphology	4
GEO 3426	Advanced GIS	4
GEO 4309	Cultural and Political Ecology	3
GEO 4310	Regional Field Studies	3
GEO 4314	River Basin Management	3
GEO 4316	Landscape Biogeography	3
GEO 4322	Interpretive Environmental Geography	3
GEO 4325	Fluvial Processes	3
GEO 4326	Parks and Protected Places	3
GEO 4334	Groundwater Resources	3
GEO 4339	Environmental Hazards	3
GEO 4341	Water Policy	3
GEO 4380	Internship in Geography	3
GEO 4412	Digital Image Processing and Machine Learning	4

Students may select one regional course as a Geography Elective from the following:

GEO 3307	Geography of Europe
GEO 3308	Latin America
GEO 3309	United States and Canada
GEO 3328	Geography of North Africa and the Middle East
GEO 3329	Geography of Texas
GEO 3332	Geography of South and Southeast Asia
GEO 3333	Geography of East Asia
GEO 4306	Geography of the Southwest
GEO 4328	Geography of the Russian Realm

- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- Nine hours of writing intensive (WI) courses are required for graduation.

## Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020 <sup>1</sup>	3	Life and Physical Sciences Component Code 030	3
Life and Physical Sciences Component Code 030	3	American History Component Code 060	3
Government/Political Science Component Code 070	3	Government/Political Science Component Code 070	3
GEO 1309 or 1310 (TCCN GEOG 1302 or 1303)	3	GEO 2410	4
US 1100	1		
	16		16

		Sophomore	
		First Semester Hours	Second Semester Hours
Language, Philosophy, and Culture Component Code 040	3	Creative Arts Component Code 050	3
American History Component Code 060	3	ENG Literature (Component Area Option Code 090/094) <sup>2</sup>	3
Social and Behavioral Sciences Component Code 080 (not to include GEO 1310)	3	Modern Language 1420 (if required) or Elective	4
Modern Language 1410 (if required) or Elective	4	GEO 2310	3
GEO 3301	3	Minor	3
	16		16

		Junior	
		First Semester Hours	Second Semester Hours
Component Area Option Code 090/091	3	GEO 3321, 3434, 4350, or 4352	3-4

ENG 3303 (BS Literature or Technical Writing)	3	GEO Electives	6
GEO 2426	4	Minor	3
GEO 3313	3	Elective (as needed)	3
Minor	3		
	16		15

		Senior	
		First Semester Hours	Second Semester Hours
GEO 3321, 3434, 4350, or 4352	3-4	GEO 4313	3
GEO Elective	3	Minor	6
Minor	3	Elective (as needed)	4
Elective (as needed)	3		
	12		13

**Total Hours: 120**

<sup>1</sup> A Mathematics course may be chosen from the following to satisfy the Mathematics Component Code 020 for this major: MATH 1315 (TCCN MATH 1314), MATH 1317 (TCCN MATH 1316), MATH 1319 (TCCN MATH 1324), MATH 1329 (TCCN MATH 1325), MATH 2321 (TCCN MATH 1323), MATH 2417 (TCCN MATH 2412), or MATH 2471 (TCCN MATH 2413)

<sup>2</sup> An English Literature course may be chosen from the following to satisfy the Component Option Code 090/094 for this major: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), or ENG 2371.

**Minimum required: 120 semester credit hours**

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- This major requires students to select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>) offered at Texas State. Students interested in entering the professional planning field are strongly advised to consider a minor in Public Administration, Business Administration, or Construction Science and Management; however, other minors may be appropriate depending on a student's interests and career goals. Students are encouraged to meet with an academic advisor to review minor options and degree requirements.
- This major requires a minimum of 36 semester credit hours of Geography courses.
- To satisfy graduation requirements, students must have at least a 2.50 major GPA for Geography and at least a 2.25 Texas State GPA. Students must make a grade of "C" or better in all Geography courses that are to be counted for credit toward their major.
- Required major courses include the following:

Code	Title	Hours
GEO 1309 or GEO 1310	Introduction to Cultural Geography World Geography	3
GEO 2410	Introduction to Physical Geography	4
GEO 2426	Fundamentals of Geographic Information Systems	4
GEO 3301	Research Methods in Geography	3

6. Required Urban and Regional Planning core courses include the following:

Code	Title	Hours
GEO 3310	Urban Geography	3
GEO 3320	Community and Regional Planning	3
GEO 3411	Maps and Mapmaking	4
GEO 4321	Cities and Urban Design	3
GEO 4338	Planning Practicum	3

7. Required Geography techniques courses include at least one course from the following:

Code	Title	Hours
Select one of the following:		
GEO 3411	Maps and Mapmaking	
GEO 3416	Remote Sensing and Earth Observation	
GEO 3426	Advanced GIS	
GEO 4380	Internship in Geography	
GEO 4430	Field Methods	

8. This major also requires an additional three hours of ENG 3303 with a grade of "C" or higher.

9. Geography electives to bring the required Geography hours to 36 should be selected in consultation with an advisor from the following courses:

Code	Title	Hours
GEO 3303	Economic Geography	3
GEO 3323	Researching the City	3
GEO 3340	Political Geography	3
GEO 3416	Remote Sensing and Earth Observation	4
GEO 3426	Advanced GIS	4
GEO 4336	Transportation Systems	3
GEO 4356	Urban Infrastructure Management	3
GEO 4380	Internship in Geography	3
GEO 4393E	Race, Class, and the American City	3
GEO 4430	Field Methods	4

10. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).

11. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

12. Nine hours of writing intensive (WI) courses are required for graduation.

## Course Requirements

### Freshman

First Semester Hours		Second Semester Hours	
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020 <sup>1</sup>	3	Life and Physical Sciences Component Code 030	3
Life and Physical Sciences Component Code 030	3	American History Component Code 060	3
Government/Political Science Component Code 070	3	Government/Political Science Component Code 070	3
GEO 1309 or 1310 (TCCN GEOG 1302 or 1303)	3	GEO 2410	4
US 1100	1		
<b>16</b>		<b>16</b>	

### Sophomore

First Semester Hours		Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3	ENG Literature (Component Area Option Code 090/094) <sup>2</sup>	3
American History Component Code 060	3	Modern Language 1420 (if required) or Elective	4
Social and Behavioral Sciences Component Code 080 (not including GEO 1310)	3	GEO 2426	4
Modern Language 1410 (if required) or Elective	4	GEO 3310	3
GEO 3301	3		
<b>16</b>		<b>14</b>	

### Junior

First Semester Hours		Second Semester Hours	
Creative Arts Component Code 050	3	Component Area Option Code 090/091	3
ENG 3303	3	GEO 3411, 3416, 3426, 4380, or 4430	4
GEO 3320	3	GEO Elective	3
GEO Elective	3	Minor	6
Minor	3		
<b>15</b>		<b>16</b>	

### Senior

First Semester Hours		Second Semester Hours	
GEO 4321	3	GEO 4338	3
GEO Elective (as needed)	3	Minor	3
Minor	6	Electives (as needed)	6
Elective (as needed)	3		
<b>15</b>		<b>12</b>	

**Total Hours: 120**

<sup>1</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1317 (TCCN 1316), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2321 (TCCN 2313), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).



<sup>2</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- This major requires students to select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>) offered at Texas State. Recommended minors are Biology, Chemistry, Geology, Political Science, Anthropology, Business Administration, Plant and Soil Science, and Nature and Heritage Tourism; however, other minors may be appropriate depending on a student's interests and career goals. Students are encouraged to meet with an academic advisor to review minor options and degree requirements.
- This major requires a minimum of 36 semester credit hours of Geography courses.
- To satisfy graduation requirements, students must have at least a 2.50 major GPA for Geography and at least a 2.25 Texas State GPA. Students must make a grade of "C" or better in all Geography courses that are to be counted for credit toward their major.
- Required Geography major courses include the following:

Code	Title	Hours
GEO 1309 or GEO 1310	Introduction to Cultural Geography World Geography	3
GEO 2410	Introduction to Physical Geography	4
GEO 2426	Fundamentals of Geographic Information Systems	4
GEO 3301	Research Methods in Geography	3

- Required Geography core courses include the following:

Code	Title	Hours
GEO 3305	Climatology	3
GEO 3434	Water Resources	4
GEO 4314	River Basin Management	3
GEO 4325	Fluvial Processes	3
GEO 4334 or GEOL 4421	Groundwater Resources Hydrogeology	3
GEO 4341 or GEO 4317	Water Policy Water Resources Planning	3

- Required Geography elective course (3 hours) is to be selected in consultation with an academic advisor.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete

depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

- Nine hours of writing intensive (WI) courses are required for graduation.

## Course Requirements

Freshman	
First Semester Hours	Second Semester Hours
Communication Component Code 010	3 Communication Component Code 010
Mathematics Component Code 020 <sup>1</sup>	3 Life and Physical Sciences Component Code 030
Life and Physical Sciences Component Code 030	3 American History Component Code 060
Government/Political Science Component Code 070	3 Government/Political Science Component Code 070
GEO 1309 or 1310 (TCCN GEOG 1302 or 1303)	3 GEO 2410
US 1100	1
<b>16</b>	<b>16</b>

Sophomore	
First Semester Hours	Second Semester Hours
American History Component Code 060	3 Language, Philosophy, and Culture Component Code 040
Modern Language 1410 (if required) or Elective	4 Modern Language 1420 (if required) or Elective
GEO 2426	4 GEO 3301
GEO 3305	3 GEO 3434
<b>14</b>	<b>14</b>

Junior	
First Semester Hours	Second Semester Hours
Social and Behavioral Sciences Component Code 080 (not to include GEO 1310)	3 Creative Arts Component Code 050
ENG Literature (Component Area Option Code 090/094) <sup>2</sup>	3 Component Area Option Code 090/091
ENG 3303 (BS Literature or Technical Writing)	3 GEO 4314
GEO 4325	3 Minor
Minor	3
<b>15</b>	<b>15</b>

Senior	
First Semester Hours	Second Semester Hours
GEO 4334 or GEOL 4421	3-4 GEO Elective
GEO 4341 or 4317	3 Minor
Minor	6 Electives (as needed)
Elective (as needed)	3
<b>15</b>	<b>15</b>

**Total Hours: 120**

<sup>1</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN

1314), MATH 1317 (TCCN 1316), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2321 (TCCN 2313), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

- <sup>2</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- This major requires students to select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>) offered at Texas State. Recommended minors are Biology, Chemistry, Computer Science, Geology, Mathematics, and Physics; however, other minors may be appropriate depending on a student's interests and career goals. Students are encouraged to meet with an academic advisor to review minor options and degree requirements.
- This major requires a minimum of 36 semester credit hours of Geography courses.
- To satisfy graduation requirements, students must have at least a 2.50 major GPA for Geography and at least a 2.25 Texas State GPA. Students must make a grade of "C" or better in all Geography courses that are to be counted for credit toward their major.
- Required major courses include the following:

Code	Title	Hours
GEO 1309	Introduction to Cultural Geography	3
or GEO 1310	World Geography	
GEO 2410	Introduction to Physical Geography	4
GEO 2426	Fundamentals of Geographic Information Systems	4
GEO 3301	Research Methods in Geography	3

- Required Geography core courses include the following:

Code	Title	Hours
GEO 3305	Climatology	3
GEO 3425	Geomorphology	4
Select at least two courses from the following:		6
GEO 1305	Meteorology	
GEO 3335	Oceanography	
GEO 4316	Landscape Biogeography	
GEO 4325	Fluvial Processes	

- Required Geography techniques courses include at least two courses from the following:

Code	Title	Hours
GEO 3411	Maps and Mapmaking	4
GEO 3416	Remote Sensing and Earth Observation	4

GEO 3426	Advanced GIS	4
GEO 4412	Digital Image Processing and Machine Learning	4
GEO 4422	Web Mapping	4
GEO 4424	GPS and GIS	4
GEO 4430	Field Methods	4

- Geography electives to bring the required Geography hours to 36 should be selected in consultation with an advisor from the following courses:

Code	Title	Hours
GEO 2310	Global Environmental Change	3
GEO 2420	Introduction to Geographic Information Techniques	4
GEO 2427	Management and Implementation of GIS	4
GEO 3321	Energy Resource Management	3
GEO 3434	Water Resources	4
GEO 3349	World Population	3
GEO 4310	Regional Field Studies	3
GEO 4313	Environmental Management	3
GEO 4314	River Basin Management	3
GEO 4325	Fluvial Processes	3
GEO 4334	Groundwater Resources	3
GEO 4339	Environmental Hazards	3
GEO 4350	Solid Waste Planning and Management	3
GEO 4380	Internship in Geography	3

Student may select one regional course as a Geography Elective from the following:

GEO 3307	Geography of Europe	
GEO 3308	Latin America	
GEO 3309	United States and Canada	
GEO 3328	Geography of North Africa and the Middle East	
GEO 3329	Geography of Texas	
GEO 3332	Geography of South and Southeast Asia	
GEO 3333	Geography of East Asia	
GEO 4306	Geography of the Southwest	
GEO 4328	Geography of the Russian Realm	

- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- Nine hours of writing intensive (WI) courses are required for graduation.

### Course Requirements

		Freshman
First Semester Hours	Second Semester Hours	
Communication Component Code 010	3 Communication Component Code 010	3

MATH 1315, 1317, 1319, 1329, 2321, 2417, or 2471 (Mathematics Component Code 020 [TCCN MATH 1314, 1316, 1324, 1325, 1323, 2412, or 2413])	3-4 Life and Physical Sciences Component Code 030	3
Life and Physical Sciences Component Code 030	3 American History Component Code 060	3
Government/Political Science Component Code 070	3 Government/Political Science Component Code 070	3
GEO 1309 or 1310 (TCCN GEOG 1302 or 1303)	3 GEO 2410	4
US 1100	1	
<b>16</b>		<b>16</b>

**Sophomore**

First Semester Hours	Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3 Component Area Option Code 090/091	3
American History Component Code 060	3 Modern Language 1420 (if required) or Elective	4
Modern Language 1410 (if required) or Elective	4 GEO 3301	3
GEO 2426	4 GEO 3411, 3416, 3426, 4412, 4422, 4424, or 4430	4
GEO 3305	3	
<b>17</b>		<b>14</b>

**Junior**

First Semester Hours	Second Semester Hours	
Social and Behavioral Sciences Component Code 080 (not to include GEO 1310)	3 Creative Arts Component Code 050	3
GEO 3425	4 ENG 2310, 2320, 2330, 2340, 2359, 2360, or 2371 (Component Area Option Code 090/094 [TCCN ENGL 2322, 2323, 2332, 2333, 2327, or 2328])	3
GEO 3411, 3416, 3426, 4412, 4422, 4424, or 4430	4 GEO 1305, 3335, 4316, or 4325	3
Minor	3 Minor	6
<b>14</b>		<b>15</b>

**Senior**

First Semester Hours	Second Semester Hours	
ENG 3303 (BS Literature or Technical Writing)	3 GEO Elective	3
GEO 1305, 3335, 4316, or 4325	3 Minor	3
Minor	6 Electives (as needed)	7
Elective (as needed)	3	
<b>15</b>		<b>13</b>

**Total Hours: 120**

The minor in Environmental Studies requires 20-22 semester credit hours. The Environmental Studies minor is designed for students seeking to enhance their preparation for environmental careers or graduate work in environmental studies. Students majoring in Geography programs may not minor in this or other Geography minors.

Code	Title	Hours
<b>Required Courses</b>		
GEO 2410	Introduction to Physical Geography	4
GEO 2426	Fundamentals of Geographic Information Systems	4
GEO 2310	Global Environmental Change	3
or GEO 3313	Natural Resource Use and Management	

**Prescribed Electives**

Select 2 courses from the following: **6-7**

GEO 3321	Energy Resource Management
GEO 3434	Water Resources
GEO 4350	Solid Waste Planning and Management
GEO 4352	Air Quality Management

Select 1 course from the following: **3-4**

GEO 3301	Research Methods in Geography
GEO 3303	Economic Geography
GEO 3305	Climatology
GEO 3335	Oceanography
GEO 3340	Political Geography
GEO 3349	World Population
GEO 3411	Maps and Mapmaking
GEO 3416	Remote Sensing and Earth Observation
GEO 3425	Geomorphology
GEO 3426	Advanced GIS
GEO 4309	Cultural and Political Ecology
GEO 4316	Landscape Biogeography
GEO 4317	Water Resources Planning
GEO 4323	Conservation Leadership
GEO 4334	Groundwater Resources
GEO 4339	Environmental Hazards
GEO 4380	Internship in Geography

**Total Hours 20-22**

The minor in Geographic Information Science requires 23 semester credit hours. The Geographic Information Science minor is designed for students seeking to enhance their preparation for careers or graduate work utilizing geographic information science and geospatial techniques. Students majoring in Geographic Information Science may not minor in this program. Students majoring in other Geography majors who choose the GIS minor will not be able to count GEO 2426 and GEO 3301 for credit in both the major and the minor. Those courses will count toward the minor; therefore, Geography majors must take approved Geography elective courses to satisfy the minimum credit hour requirements for their major.

Code	Title	Hours
<b>Required Courses</b>		
GEO 2426	Fundamentals of Geographic Information Systems	4
GEO 3301	Research Methods in Geography	3
GEO 3411	Maps and Mapmaking	4

GEO 3416	Remote Sensing and Earth Observation	4
<b>Prescribed Electives</b>		
Select 2 courses from the following:		8
GEO 3426	Advanced GIS	
GEO 4411	Advanced Cartographic Design	
GEO 4412	Digital Image Processing and Machine Learning	
GEO 4420	GeoProgramming	
GEO 4422	Web Mapping	
GEO 4424	GPS and GIS	
GEO 4427	GIS Consulting Practicum	
GEO 4351	Geospatial Data Science and Health	
<b>Total Hours</b>		<b>23</b>

The minor in Geography requires 19 semester credit hours. Texas State Geography offers a wide range of content courses that can provide distinct career preparation and competitive advantages to many majors. Students pursuing a Geography minor may choose to focus their studies in these areas: Urban Planning and Land Development; Water Studies; Geographic Information Science; Regional International Studies; Physical Geography/Earth Science; Environmental Resource Management; or Cultural Geography and Demographics. Minors are encouraged to consult with a Geography Department Academic Advisor to select courses to design the Geography minor.

Code	Title	Hours
<b>Required Courses</b>		
GEO 2410	Introduction to Physical Geography	4
Choose 3 hours from the following:		3
GEO 1309	Introduction to Cultural Geography	
GEO 1310	World Geography	
GEO 3303	Economic Geography	
<b>Electives</b>		
Choose 12 hours of Geography courses, 9 of which must be at the advanced (3000-4000) level		12
<b>Total Hours</b>		<b>19</b>

The minor in Geology requires 23-24 semester credit hours. Geology is the science and study of the solid matter of the Earth, its composition, structure, physical properties, history, and the processes that shape it. A geology minor is an ideal complement to a number of majors in the natural, social, and applied sciences.

Code	Title	Hours
<b>Required Courses</b>		
GEOL 1410	Physical Geology	4
GEOL 1420	Historical Geology	4
GEOL 3450	Earth Materials	4
Choose 4 hours from the following:		4
GEOL 3410	Sedimentation and Stratigraphy	
GEOL 3430	Structural Geology	
Choose 7-8 hours from the following:		7-8
GEOL 4330A & GEOL 4121	Introduction to Petroleum Geology and Directed Study	
GEOL 4330C & GEOL 4121	Survey of Economic Mineral Deposits and Directed Study	

GEOL 4330D & GEOL 4121	Tectonics and Geology of the USA and Directed Study	
GEOL 3425	Geomorphology	
GEOL 4325	Fluvial Processes	
GEOL 3410	Sedimentation and Stratigraphy	
GEOL 3430	Structural Geology	
GEOL 4421	Hydrogeology	
<b>Total Hours</b>		<b>23-24</b>

The minor in Nature and Heritage Tourism requires 22 semester credit hours. Nature and Heritage Tourism is the most rapidly growing segment of the overall tourism industry. The minor in Nature and Heritage Tourism concentrates on planning, development and management of nature and heritage tourism activities that have a strong learning content.

Code	Title	Hours
<b>Required Courses</b>		
GEOL 2410	Introduction to Physical Geography	4
GEOL 4322	Interpretive Environmental Geography	3
GEOL 4326	Parks and Protected Places	3
NHT 4301	Planning and Development of Nature and Heritage Tourism	3
NHT 4302	Internship in Nature and Heritage Tourism	3
<b>Electives</b>		
Choose 6 hours from the following:		6
AG 3318	Agricultural Business Management	
AG 3321	Range Management	
AG 3351	Agricultural Marketing and Sales	
AG 3426	Soil Science I	
AG 3427	Soil Science II	
AG 4383	Agricultural Resource Economics	
ANTH 3301	Principles of Cultural Anthropology	
ANTH 3306	World Prehistory	
ANTH 3314	Latin American Cultures	
ANTH 3315	Archaeology of the Southwest	
ANTH 3318	Ancient Cultures of the Texas Crossroads	
ANTH 3324	Mexican American Culture	
ANTH 3332	Myths and Moundbuilders	
ANTH 3345	Archaeology of Mesoamerica	
ANTH 3347	Archaeology of North America	
ANTH 4320	Rise of Civilization	
ANTH 4630	Archaeological Field School	
BIO 4304	Wildlife and Recreation: Impact, Policy, and Management	
BIO 4305	Nature Study	
BIO 4410	Field Biology of Plants	
BIO 4415	Ichthyology	
BIO 4416	General Ecology	
BIO 4420	Natural History of the Vertebrates	
BIO 4421	Ornithology	
BIO 4422	Mammalogy	
BIO 4423	Wildlife Management	
BIO 4434	Herpetology	
ENG 3345	Southwestern Studies I: Defining the Region	

ENG 3346	Southwestern Studies II: Consequences of Region
ENG 4325	Literature of the Southwest
GEO 3307	Geography of Europe
GEO 3308	Latin America
GEO 3309	United States and Canada
GEO 3313	Natural Resource Use and Management
GEO 3328	Geography of North Africa and the Middle East
GEO 3329	Geography of Texas
GEO 3332	Geography of South and Southeast Asia
GEO 3333	Geography of East Asia
GEO 3335	Oceanography
GEO 3411	Maps and Mapmaking
GEO 4306	Geography of the Southwest
GEO 4310	Regional Field Studies
GEO 4313	Environmental Management
GEO 4314	River Basin Management
GEO 4316	Landscape Biogeography
GEO 4328	Geography of the Russian Realm
GEO 4390	Independent Study
GEO 4430	Field Methods
GEOL 1410	Physical Geology
GEOL 1420	Historical Geology
GEOL 3410	Sedimentation and Stratigraphy
GEOL 4320	Topics in Field Geology
HIST 3353	The U.S. - Mexico Border and its Communities: A History
HIST 3372	Texas History: A Survey
HIST 4372	Latina/o/x Histories
MGT 3303	Management of Organizations
MKT 3343	Principles of Marketing
PFW 1190A	Canoeing
PFW 1190F	Beginning Scuba
PFW 1201	Advanced and Master Scuba Diving
PFW 1204	Underwater Photography
REC 1310	Introduction to Recreation and Leisure Services
REC 1330	Introduction to Outdoor Recreation
REC 3340	Recreation Facilities Operations and Maintenance
REC 3351	Evaluation of Leisure Service Programming
REC 4335	Outdoor Recreation Programming
SOCI 3340	Sociology of Sport and Leisure
<b>Total Hours</b>	<b>22</b>

The minor in Spatial Data Science and Health requires 20 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
GEO 2426	Fundamentals of Geographic Information Systems	4
GEO 3351	Health Geography	3
GEO 4351	Geospatial Data Science and Health	3
Choose 3 hours from the following:		3
GEO 3301	Research Methods in Geography	
SOCI 3307	Statistics for the Behavioral Sciences	

PH 3315	Statistics in Public Health	
HP 3325	Healthcare Statistics	
MATH 3305	Introduction to Probability and Statistics	
Choose 3 hours from the following:		3
PH 1310	Foundations of Personal Health	
PH 1320	Introduction to Public Health	
HI 3310	Health Informatics	
HA 4322	Public Health Administration	
SOCI 3363	Medical Sociology: The Sociology of Health and Illness Behavior	
Choose 4 hours from the following:		4
GEO 3411	Maps and Mapmaking	
GEO 3426	Advanced GIS	
GEO 4420	GeoProgramming	
GEO 4422	Web Mapping	
GEO 4427	GIS Consulting Practicum	
Total Hours		20

Taylor-Murphy Building Room 202

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[www.txstate.edu/history](http://www.txstate.edu/history) (<http://www.txstate.edu/history/>)

As an undergraduate major, the discipline of History provides students with the knowledge and skills necessary to participate in our increasingly global society and economy. Emphasizing societies, cultures, and politics in the United States and around the world, the History Program helps to impart understandings of human motivation and interaction which form an essential background for all current activities whether they are in the realm of business, law, journalism, politics, education, or public history (i.e. National Park Service, museum work, historical restoration, etcetera). In addition to gaining knowledge in their subject areas, students also develop skills in intensive reading and expository writing, as well as in logical and analytical, evidence-based thinking. As a consequence, students acquire a variety of skills that make them highly adaptable and valued by today's employers.

## Academic Advising

The Department of History provides extensive academic advising services that include both group and individual advising. Through these sessions, the academic advisor can offer detailed program and course information, which can help students successfully complete their graduation requirements in a timely manner. All History majors are encouraged to seek advice about program requirements and course selection each semester. To schedule an appointment, please contact the History Department Office.

## Bachelor of Arts (B.A.)

- Major in History (p. 561)
- Major in History (Secondary Education; Teacher Certification in History, Grades Seven through Twelve, with Double Major in B.A. Education)
- Major in History (Secondary Education; Teacher Certification in Social Studies, Grades Seven through Twelve, with Double Major in B.A. Education)



- Major in History (Two Fields Teacher Certification in History, Grades 7-12) (p. 571)

## Minors

- History (p. 574)
- Peace and Social Justice (p. 575)
- Second Teaching Field in History (Grades 7-12) (p. 575)

## Courses in History (HIST)

HIST 2310 or HIST 2311, HIST 2320, HIST 2312, HIST 2327, HIST 2328, HIST 2381, and HIST 2382 are open to all students regardless of classification. However, it must be understood that HIST 2310 or HIST 2311 and HIST 2320 or HIST 2312 will not satisfy the legislative requirement in American history. Students majoring in fields other than history would be well advised to begin with HIST 1310, HIST 1320, HIST 2327, HIST 2328, HIST 2381, or HIST 2382.

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### HIST 1310. History of the United States to 1877.

A general survey of the history of the United States from its settlement to the end of Reconstruction. (WI) (MULT) (MULP).

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** American History Core 060|Multicultural Perspective|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 1301

### HIST 1320. History of the United States, 1877 to Date.

A general survey of the history of the United States from Reconstruction to present. (WI) (MULT) (MULP).

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** American History Core 060|Multicultural Perspective|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 1302

### HIST 2310. Western Civilization to 1715.

A general survey of western civilization from earliest times to the end of the 17th century. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 2311

### HIST 2311. History of World Civilization to the 17th Century.

A general survey of world civilization from the earliest times to the 17th Century. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 2321

### HIST 2312. History of World Civilization from the 17th Century.

A general survey of world civilization from the 17th Century to the present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 2322

### HIST 2320. Western Civilization, 1715 to Date.

A general survey of western civilization from the Treaty of Utrecht to the present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 2312

### HIST 2327. History of Mexican America to 1865.

This course is a survey of the economic, social, political, intellectual, and cultural history of Mexican Americans/Chicanx to 1865. Topics the course addresses include: conquest and mestizaje; the rise and fall of native and African slavery; colonial Mexico's relationship to other global economies, the development of New Spain's/Mexico's northern frontier, how gender and power shaped the emergence of Mexican identities, independence movements, mission secularization, Texas independence, the U.S.-Mexico wars, and U.S. expansion and civil war.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 2327

### HIST 2328. History of Mexican America from 1865.

This course is a survey of the economic, social, political, intellectual, and cultural history of Mexican Americans/Chicanx since 1865. Topics the course addresses include: the making of borders and borderlands, the impact of the Treaty of Guadalupe Hidalgo, and uses gender to explain migration and citizenship and expulsion, nineteenth-century activism and displacement, industrialization and the making of a transnational Mexican working class, the Mexican Revolution, urbanization, WWII and organized advocacy, the Chicano Movement, changing identifications, globalization, and immigration restriction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 2328

**HIST 2381. African American History to 1877.**

This course is a survey of the social, political, economic, cultural and intellectual history of people of African descent in the formation and development of the United States to the Civil War/Reconstruction period. African American History to 1877 includes the study of African origins and legacy, trans-Atlantic slave trade and the experiences of African Americans during the Colonial, Revolutionary, Early National, Antebellum, and the Civil War/Reconstruction Era. This course presents African American history as an integral part of U.S. History.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 2381

**HIST 2382. African American History from 1877.**

This course is a survey of the social, political, economic, cultural, and intellectual history of people of African descent in the United States from the end of the Reconstruction period to the present. African American History since 1877 examines segregation, disenfranchisement, civil rights, migrations, industrialization, world wars, the Harlem Renaissance, and the conditions of African Americans in the Great Depression, Cold War, and post-Cold War eras. This course enables students to understand African American history as an integral part of US history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3310. History of Europe, 1815-1919.**

The background, course, and results of World War I, with emphasis on imperialism, diplomatic alliances, and nationalistic rivalries from the Congress of Vienna to the Paris peace settlements. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3311. History of Europe Since 1919.**

The rise of Communism, Fascism, and Nazism; the background of World War II, and the post-war problems of peace. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3312. Renaissance and Reformation.**

The cultural, political, and economic changes that marked the transition from the Middle Ages in Europe to the modern period; special attention to the decline of the medieval church and the Protestant revolt. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3313. Europe During the Old Regime, 1600-1760.**

A study of European society and institutions in the 17th and 18th centuries with special attention to the development of absolute and constitutional monarchy, the scientific revolution, and the intellectual ferment of the Enlightenment. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3314. Revolutionary Europe, 1760-1815.**

A study of the dynamics of revolutionary change in France and the rest of the European continent from the period of the Seven Years War through the fall of Napoleon Bonaparte. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3315. History of England to 1603.**

The development of the English nation from prehistoric times to the end of the Tudor Dynasty in 1603. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3316. History of England Since 1603.**

The English nation and the British Empire from 1603 through the modern era. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3317. U.S. Women's History to 1877.**

This course surveys the diversity of women's experiences in the United States from the colonial era to 1877. The social, economic, political, and intellectual realms of women's worlds, both public and private, are explored. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3318. U.S. Women's History since 1877.**

This course surveys the diversity of women's experiences in the United States from 1877 to the present. The social, economic, political, and intellectual realms of women's worlds, both public and private, are explored. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3319. History of Brazil.**

This course surveys the history of Brazil, from pre-Columbian times until the present, with a focus on the development of a national culture. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3320. History of Mexico.**

A survey of the national period of Mexican history from the independence movement to the present. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3322. Colonial History of Latin America to 1828.**

A study of the colonial period of Latin America from the early Spanish and Portuguese colonization to the beginning of the period of independence. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3324. Latin America from Independence to Present.**

This course examines the history of Latin America from independence to present. Explores the challenges of formation and consolidation of the new states; of economic policy and development; the rise of Populism and the age of reforms; revolutions and revolutionary movements; and present challenges. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3325G. Modern Revolutions in Latin American History.**

This course will focus on the historical antecedents and events surrounding the Mexican, Guatemalan, Cuban, Chilean, and Nicaraguan revolutions. The purpose is to analyze these five revolutions and to come to an understanding of the current problems facing Latin America. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3325I. Resistance and Rebellion in Colonial Latin America.**

This research-based course analyzes the political dynamics of resistance, rebellion, and social control within Latin American colonial societies, from the pax colonial of the seventeenth century to the Age of Andean Insurrection of the second half of the eighteenth century. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3325J. Diplomacy Seminar.**

A senior-level seminar that explores overarching topics in Diplomacy (including intelligence, negotiation, speech and report writing, protocol, and media and risk management) through reading, writing, research and group discussion. This course is a required capstone for all Diplomacy minors and should be taken in the last semester of minor coursework. Departmental Approval required. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3326. The Southern Cone of Latin America.**

A topical survey of Argentina, Chile, Brazil, and Uruguay which stresses the political balance, geopolitical interests, and forces of commonality and division that have influenced this region since the colonial period. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3327. History of Mexico to 1848.**

A survey of Mexico from prehistoric times to the Treaty of Guadalupe Hidalgo. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3328. Militarism in Latin America.**

This course provides an in-depth survey of militarism and the causes and processes of transition to democracy in Latin America. Students examine the major characteristics of different types of military regimes in Latin America with particular attention to the military regimes in Argentina, Chile, Brazil, and Uruguay, and their relinquishing of power for democratic transitions. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3329. Spanish Borderlands, 1521-1821.**

A survey of the history of the Spanish frontier in North America and its hinterlands from the earliest explorations to the end of Spanish rule in 1821. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3332. History of Early Modern Spain from 1492 to 1808.**

This course traces the history of Spain and its transoceanic empire from the reign of the Catholic Monarchs, Isabel I of Castile and Fernando II of Aragon, in the late fifteenth century to the Peninsular War against Napoleon's invading forces in the early nineteenth century. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3333. History of Modern Spain from 1808 to Present.**

This course covers over two hundred years of Spanish history, beginning during Europe's revolutionary era through Spain's fall into fascism, its transition to democracy and integration into the European Union. Students will engage with issues related to Spain's history and culture, considering issues of religion, race, gender, sexuality, nationalism, and class. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3335. Spain of the Three Religions: Muslims, Christians, and Jews in Premodern Iberia.**

This course covers the history of Muslims, Christians, and Jews in Spain from Islamic conquests in the 700s to expulsions of Jews and Muslims from the peninsula in the 1400s and 1600s. For most of this 900-year chronology, however, Muslims, Christians, and Jews lived in close proximity, sometimes as neighbors, causing scholars to dub this era as "Spain of the three religions." This class investigates the dynamics between these religious groups as they evolved across time, exploring themes like the politics of conversion, the role of gender in interfaith relations, intellectual exchange, and the relationship between royal authority and religion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3337. History of U.S. Foreign Policy Making in the Muslim World.**

This course examines the history of U.S. foreign policy-making in the Muslim Middle East in the twentieth century by exploring selected incidents in the history of U.S. foreign policy towards the Middle East. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3338. History of Religion in India.**

This course surveys the historical development of religious traditions within India including Vedic, Buddhist, Jain, Hindu, Christian, Islamic, and Sikh traditions. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3340. History of the United States, 1877-1914.**

A survey of American history from the end of Reconstruction to the outbreak of World War I with an emphasis on the pertinent historical literature. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3341. History of the United States, 1914-1945.**

The study of American history from World War I through World War II with an emphasis on the pertinent historical literature. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3342. Social and Intellectual History of the United States, 1607-1865.**

A history of American culture, with emphasis on the development of religious, political, social, and philosophical ideas through the Civil War. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3343. Social and Intellectual History of the United States Since 1865.**

A study of the development of the United States after 1865, with emphasis on the social, political, economic, aesthetic, and philosophical ideas that have influenced contemporary American culture. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3346. The Civil War and Reconstruction.**

The history of the United States from the Compromise of 1850 through the election of 1876. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3349. The Constitution of the United States.**

An intensive study of the origin and development of the Constitution of the United States. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3352. Western America.**

A general examination of the Trans-Mississippi West, its major cultural, economic, political, and social frontiers, and its development as a region and as a national component, from 1803 to the present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3353. The U.S. - Mexico Border and its Communities: A History.**

This course is a thematic examination of the region including Texas, California and the states that include the Great Basin, the Southern Rockies, and the Sonoran Desert from Mexican Independence in 1821 to the present. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3357. History of U.S. Foreign Relations.**

A study of American diplomacy since the Civil War. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3359. African American History.**

A survey of African-American history, 1619 to the present. Emphases include African and European backgrounds, hemispheric slavery, slavery in early America, the antislavery movement, the Civil War and Reconstruction, post-Reconstruction culture and society, and Civil Rights movement. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3363. Colonial North America to 1763.**

An intensive study of selected topics in the history of the settlement and expansion of British North America, including the development of the social, economic, and political life of the American colonies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3365. US Early Republic, 1788-1828.**

History of the early national era, 1788-1828, with emphasis on development of the first party system in American politics, the social and economic issues, the expansion of southern slavery, and the western frontier. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3366. Introduction to Public History.**

This course offers an introduction to the work of public historians who interpret history outside the classroom in settings like museums, historic sites, archives, and national parks. Topics explored in this course include: methods used by public historians to preserve historic buildings and exhibit museum collections; how to engage the public with the past through storytelling and digital history projects; and the challenges faced by public historians to mediate popular memory and myth. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368B. Law and Society in Early America.**

A survey of American law and society from its European antecedents to the mid-nineteenth century. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368E. United States Westward Expansionism, 1776-1861.**

This course examines the expansion of the United State across the North American continent from the time of the American Revolution to the beginning of the Civil War. Special attention will be devoted to the Louisiana Purchase, the annexation of Texas, the Mexican Cession of 1848, and the Gadsden Purchase. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368H. LBJ's America.**

This is a team-taught course covering LBJ's evolution as politician. Beginning with LBJ's early career, students will learn the New Deal/Rooseveltian roots of LBJ's political philosophy. Second, students will discuss LBJ's presidency, Great Society, and Civil Rights legislation. Lastly, students will study LBJ's Cold War politics, particularly the Vietnam conflict. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368J. The Space Race.**

This course traces the history of space exploration, focusing on the competition between the United States and Russia since the launch of Sputnik in 1957. Themes include the creation and role of NASA, the scientific and economic impact of rocket science, and the political use of the space program. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter



**HIST 3368K. American Cultural History.**

This course examines the history of specific expressive, popular, and symbolic forms of US culture in shaping American intellectual life, aesthetics, and material culture during the post- Civil War – mid 20th century period. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368L. History of Mexican American Music in the Southwest.**

This class will explore Mexican American Music in all of its forms as it has developed in the American Southwest. The course will begin with an historical review of the region. It will then explore, from Islamic Spain to the contemporary Southwest, the development of musical language, styles and fusions. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368M. Popular Music and Social Movements in 20th Century America.**

The examination of music as both a reflection of historical trends and a tool of social change will illuminate the relationship between music, culture, politics, and protest movements in 20th-century American history. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368P. The U.S. and Britain in the Sixties.**

This course explores the political, social and cultural changes experienced by Americans and Britons during the "long 1960s" (1955-1975). Students will examine key events in each country separately before focusing on the commonalities and differences. Special attention will be paid to the transfer of movements across the Atlantic. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368S. History of Music and Race in the American South.**

This course examines how the complex musical landscape of the American South, including blues, gospel, jazz, folk, country, bluegrass, Cajun, zydeco, rockabilly, and others, reflects the interaction of larger social, historical, ethnic, racial, political, and economic forces in that region from the eighteenth century to the present. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368T. American Songbook.**

This course examines the music of American from the colonial era to the 1960s. By exploring songs as primary source documents, students will analyze lyrical themes that illuminate historical trends from diverse perspectives. Beginning with British America, the course traces musical contributions of many demographic groups that comprise American society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368U. U.S. - Cuban Relations.**

This course will provide students with an overview of relations between the United States and Cuba from 1865 to 2006. Themes include economic, political, military, and cultural inter-development through Cuban independence movements, U.S. military occupation, shared cultural and economic movements, and the growing animosity from Castro's Revolution to recent years. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368X. Organization of the Modern American State.**

This course analyzes changes in political culture, policies, and organizational dynamics that shaped the American state, 1870 - Present. It examines how interest groups, experts, and bureaucrats helped transform a weak American state into one that affects most parts of citizens' daily lives, despite America's traditional aversion to centralized power. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368Y. Walking in the Way of Peace, War & Slavery: Quakers in American History.**

From their earliest roles as agitators to the Puritan "Citty on a Hill" and as founders of Pennsylvania, "The Best Poor Man's Country," to their early embrace of abolition and notable pacifist resistance in the Revolution, Civil War, WWII and Vietnam the Society of Friends has played an out sized role in American History. This course will take a thematic approach to focus on several key points at the intersection of Quaker and American history, concentrating particularly on two issues: the Quaker relationship to slavery and the slave trade, and the Quaker response to warfare.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368Z. A Global History of Pandemics.**

This class will investigate the history of pandemics. This course includes the Justinian plague of the 6th century, the Black Death of 1347-52, the smallpox pandemic caused by the Spanish Empire, the Spanish influenza outbreak of 1918, the polio pandemic, the influenza pandemic of 1957, the HIV/AIDS pandemic, and the COVID-19 pandemic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3371A. Conflict and Creativity in U.S. Urban and Suburban History.**

This course surveys the changing functions, scale, and quality of urban society in the United States. Special emphasis will be placed upon urban politics, or how changing demographics, physical environments, public and private institutions, and economies both grew out of and gave rise to political tensions between Americans. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3371B. Health and Illness in American History.**

From concerns epidemics might undermine proper American racial orders to anxieties over democracy and health care financing (Obamacare), health and illness have reflected and shaped the ways Americans understand themselves, their policies, and their societies. This course examines two centuries of this complicated and fascinating history. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3371C. History Behind the Headlines: Current Debates in a Historical Perspective.**

This course will allow students the opportunity to explore the historical roots and development of some of the most pressing questions that dominate our current political climate and policy debates. Students will seek to put the past in the present, looking at how American history shapes the debates of today. We will cover topics such as the history of pandemics and our government response, the history of mass incarceration and police brutality, the rise of the conservative movement and neoliberal capitalism, and other immigration policy debates.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3371D. The History of U.S. Policing and Prisons.**

This course traces the historical development of policing and prisons in the United States, introducing students to the historical method and creating opportunities for original research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3372. Texas History: A Survey.**

A one-semester survey of Texas History which will emphasize political, economic and social development from prehistory to the twentieth century. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3373C. The History of Rural Women.**

This course surveys rural women in the United States from the founding of the nation to the present. Topics include women's work in the agricultural economy, female influence in community and agrarian organizations, and the relations ship between rural and government services from regional, national, and global perspectives. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3373D. History of American Feminisms, 1960-2020.**

This course covers the history of feminist activism from 1960 to 2020 in the United States.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3374A. History of Christianity 1300-1700.**

This course examines selected individuals and movements that embody key concerns of Christians during the most tumultuous era in Western Church history. The course begins in the fourteenth century so that students may gain perspective on reform efforts predating, and decisively influencing, the break with Rome catalyzed by Martin Luther.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3374D. Reframing Medieval Power: Rulers of the Mediterranean.**

This course explores often overlooked rulers and centers of power of the Middle Ages to expand discussion beyond white male kings of Christian Europe. Powerful queens, African dynasties, and Muslim rulers are some narratives included alongside those of European monarchies. Readings include modern scholarship and medieval sources like mirrors for princes, crusade chronicles, and legal texts, as well as works on art and architecture. Assignments include short essays and discussion, and there will be a multi-day class role-playing simulation where students will be cast as real medieval people with personal goals and diplomatic missions to negotiate with their peers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3375A. Topics in Working Class History.**

Examines topics in US working class history with emphasis on the experiences of organized and unorganized workers in the context of their social, cultural, political, and workplace environments and the role of the working class in shaping US society. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3375E. History of Women's Health in the United States.**

This course examines the history of women's health and healthcare in the United States from Colonial America to present day debates over female bodily autonomy, including but not limited to abortion, access to prenatal, postpartum, and maternal care, birth control, and trans healthcare. Topics and themes covered in the course include the ways in which the state attempted to control women's access to sex-specific healthcare and how women demanded and created more transparency and forged new avenues of medical autonomy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3376. American Religious History.**

This course in religious history explores the theological, social, and political evolution of religions and the development of the leading trends in religious beliefs and practices in the United States from pre-European encounters to the present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3377. History of Country Music.**

This course examines the evolution of country music and how it reflects larger social, cultural, historical economic, political, ethnic, and demographic changes taking place within American society. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3378. History of the Blues.**

This course examines the evolution of the blues and other forms of African-American music throughout American history, with an emphasis on how blues music reflects the rich and complex traditions of the African-American community and helped give birth to rock & roll. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3379. History of Rock and Roll.**

This course traces the various ethnic, social, cultural, political, economic, and demographic forces in American society that helped shape rock and roll music. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3380. The Desegregation of the South from 1944-1970.**

Course will address the history and the historiography of the desegregation of the South from 1944-1970. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3381. Democracy and Education.**

This course provides an overview of the relationship (and tension) between democracy and education in the U.S. between 1865 and 1930, when emancipation, westward expansion, rural poverty, and growing immigrant and working-class populations motivated reassessment and reform of public education in an attempt to meet individual and societal needs. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3382. Immigration and US History.**

This course examines the history of immigration to the United States beginning with the colonial era and extending through present day. It considers the causes of immigration; the social, cultural and economic experiences of various immigrant groups; the development of immigrant group identities; and American responses to immigration.(WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3384. History and Culture of Modern India.**

This course surveys the history of modern India. The course covers the Mughal Empire, British Colonialism, Mahatma Gandhi and the Indian Independence Movement, the establishment of the nations of India and Pakistan, and recent political and historical developments in India. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4304. Ancient Rome and the Mediterranean 500 B.C. to 500 A.D..**

A survey of Roman History from the Republican period to the fall of the Western Empire with emphasis on its Mediterranean milieu. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4307. Medieval European History, 300-1400.**

A study of the Latin West and the Byzantine East during the Middle Ages with emphasis on the continuity of Greco-Roman culture as it encounters Islam and the Barbarians. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4316. Roman and Medieval Britain.**

This course is a study in British history from the arrival of the Romans in Britain to 1603. This course integrates classroom discussions, readings, virtual excursions and discussions of the major events and features of Roman and Medieval history in Britain. Students are introduced to issues, personalities, movements and developments, encompassing political, governmental, constitutional, social, religious, economic and cultural topics. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4317. Tudor-Stuart England, 1485-1689.**

A study of the constitutional, social, political, and religious developments in England during the Tudor-Stuart dynasties. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318B. Race in the Middle Ages: Exclusion and Belonging in the Mediterranean.**

This course will teach students how a constellation of physical, cultural, and religious characteristics became encoded with racializing meanings before the 17th c. In the diverse Mediterranean, people justified violence, privilege, exclusion, and belonging by constructing notions of sameness and difference. Medieval race-thinking appears in Christian and Islamic literature, religious texts on curses, blood purity statutes, human diversity in art, laws about women's chastity, and geographies of so-called 'monstrous races.' Delving into such sources, students will pursue research that investigates how the history of race and racecraft is deeply related to medieval definitions of power, morality, community, and identity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318C. Spy vs Spy: Intelligence & Counterintelligence in World War II.**

This course examines key intelligence operations and agencies active in the Arab world/North Africa. Students assess tradecraft, querying the extent to which intelligence work complemented the Allies' domestic and foreign policies. Half of the course's content focuses on Queer, Trans, and LGBTQIAP+ experiences of World War II.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318N. Immigration in European History.**

While we typically think of Europe as a fixed, finite continent, its borders are more porous than we often realize. This class examines the movement of people from Europe and to Europe in the nineteenth and twentieth centuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318S. Britain and the World.**

Mainstream British history still neglects the world's influence upon domestic developments, and British overseas history remains largely confined to the study of the British Empire. This course takes a broader approach, investigating Britain's interactions with the wider world from 1688 to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318U. Industrial Britain.**

This course will examine the physical impact that industrialization had on the Great Britain - bridges, canals, factories - and the cultural/social effects on factory and seaside resort towns and ocean ports. The class will address what role industrialization played in Britain becoming world industrial and imperial power. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318W. Queer Youth History.**

This transatlantic course examines the emergence of both youth and queer culture in urban spaces through a study of gender, sexuality, race, class, and nationalism. With a wide-ranging chronological and geographical scope, the selected queer/youth cultures represent diverse spatial, aesthetic, economic, political, and socio-cultural histories.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318X. Scottish History from the Wars of Independence to the Present.**

This class will investigate the history of Scotland from the 13th century (the Wars of Independence from England) to the present day. It will focus on major personalities and important events both within and without Scotland as well as the culture and society of this proud and ancient nation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318Y. The Global Teenager.**

This course covers the historical development of the category of the teenager across the globe, exploring the similarities and differences of the teenage experience across a variety of regional contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318Z. Podcasting History: Making Marginalized Voices Heard.**

In this course students will work collaboratively to create history podcasts on topics related to race, gender, class, nationality, and sexuality for public audiences. Students will learn relevant software and cultural history research methods, as well as how to script and record podcasts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4320. Origins of Christianity.**

A survey of the development of the institutional church from the founding of the first primitive communities of believers to the rending of Christian unity in the 16th century. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4323. France and the Modern World.**

This course surveys important phenomena in nineteenth and twentieth-century French history that have had an impact on the development of the modern world. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4325. Islamic History to 1798.**

This course explores the history and culture of the Arab and Muslim peoples in the Middle East and North Africa from the late 6th century to Napoleon's invasion of Egypt in 1798. Emphasis is placed on the interrelationships of indigenous socio-economic structures and intellectual developments in Islamic theology and Shar' a law. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4326. The Modern Middle East.**

This course emphasizes economic social and intellectual developments in the Arab Middle East and North Africa in the 19th and 20th centuries. Some attention will be paid to Iran in the period after World War II. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4327. The Problem of Palestine.**

Examination of Arab Palestine. Ottoman records to 1914, Israel's creation in 1948, and Jordan's loss of control of the West Bank and Gaza in 1967 will be surveyed. The Palestinian Diaspora, Yasir Arafat's leadership, and the "Intifada," also will be examined. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4328. History of India.**

This course is an introduction to the history of India from ancient times to the creation of the modern nation-state of India. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter



**HIST 4331. Piracy Through the Ages.**

An activity based on greed, and sometimes survival, piracy has existed since humans took to the seas. This course investigates the global history of piracy beginning with the Vikings. The history of piracy in the Caribbean, Asia, and the Mediterranean will be covered and compared to the piracy of today. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4332. European Colonialism.**

This course explores the worldwide development of European colonial systems since the fifteenth century. The course emphasizes how native peoples responded to European attempts to introduce economic, political, and cultural prerogatives in a variety of world settings such as South and Southeast Asia, Africa, and North and South America.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4333. The History of Russia and Eurasia to 1917.**

A survey of Kievan Rus, Muscovy, and the Russian Empire to 1917. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4334. The History of Russia and Eurasia from 1917 to Present.**

A survey of the history of the former Soviet Union and post-Soviet society from 1917 to the present. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4335. 20TH CENT EAST EUR.**

A survey of the history of Eastern Europe. May be repeated with a different emphasis. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4336. Germany from 1815 to Present.**

The political, social, economic, and cultural development of Germany since Napoleonic times. Includes the Confederation period, unification under Bismarck, the Second Empire, National Socialism, and the post-war period. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4337. Germany and National Socialism, 1918-1945.**

Survey of German history and the Nazi movement. Topics covered will include the Weimar Republic, Hitler's rise to power, everyday life in Nazi Germany and in peace and war and the Holocaust. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4341. The History of Modern Britain.**

This course examines the history of imperial Britain from the early nineteenth century to the present day. Students analyze the cultural and intellectual foundations of modern British society, including the growth of its industrial economy, the development of representative politics, and the evolution of its relationship with empire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4342. Modern Africa.**

The course presents a chronological narrative of Africa from the beginning of the nineteenth century until the present day. Students engage with the continent's social, cultural, and intellectual history through topics and themes that include the spread of Islam and Christianity, the Atlantic and Indian Ocean trade worlds, twentieth-century colonialism, and anti-colonial nationalism. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4343. Modern China, 1600 to the Present.**

A survey of the political, social, economic, and intellectual history of China from 1600 to the present. Emphasis on the issues of domestic troubles and external aggression, and on the revolutionary changes in the 19th and 20th centuries. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4344. Modern Japan, 1600-Present.**

A survey of the political, social, economic, and intellectual history of Japan from 1600 to the present. Focus on the radical changes in the state, society, and economy in the 19th and 20th centuries and on the impact of these changes on Japan's status in the world today. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4345. Postwar Japan.**

This course explores Japan's development from the 1940s through the 1970s. The emphasis is on the continuities and discontinuities from the wartime to the postwar regime, American influence on policies and discourses on post-occupation society, the legacies of the war in culture and society, and the repercussions of economic affluence. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4346. Modern Korea.**

This course is a survey of the political, social, economic, and intellectual history of modern Korea, focusing on the external aggression and internal transformation between 1876 and 1910, the impact of the Japanese rule, the split into two Koreas in 1945, and the North/South developments and interactions since then. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4347. History of Hong Kong.**

This course is a survey of the political, social, economic, and intellectual history of Hong Kong from 1842 to the present. Focus is on British colonial rule, the Handover in 1997, and the current status of the Hong Kong Special Administrative Region of the People's Republic of China. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4348. Mahatma Gandhi and Nonviolence.**

This course will offer students the opportunity to explore Mahatma Gandhi's leadership of the movement against British colonialism in India and the legacy of Gandhi's strategies of non-violent non-cooperation in other political movements of the twentieth century. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4349. History of Drugs.**

This course examines the impact of drugs on societies, how drug use has changed throughout history corresponding to major changes in society, and the ways in which drugs have influenced international trade and political economics. Psychoactive substances (from stimulants to hallucinogens) have played a major role in shaping human societies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 4350A. Slavery and Emancipation in the Americas.**

An Atlantic and continental perspective of the institutionalization of the slave trade, the adaptation of the plantation system and the evolution of slave laws, the various models of emancipation in the Americas, followed by the modified forms of indigenous and foreign slave labor adopted in the Americas. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350D. Empire and Identity in Central Asia.**

This course explores the historical development of local, ethnic, and national identity in Central Asia from the 13th-century Mongol conquest to the present. The course concludes with explorations of the transnational links within the region and the challenges and possibilities for the five Central Asian republics in the post-Soviet era. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350E. Gender in Latin American History.**

This course surveys the role of gender in Latin American history, from pre-conquest to the present. It analyzes Latin American politics, culture, and economics, and gives particular attention to the creation and resistance of social norms. The course strengthens analytical skills through extensive discussion and writing. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350K. Gender & Militarization in the Arab World.**

For women and men in the modern Arab world, national identity and sovereignty – or civil war – influence how they live. This class takes advantage of cutting-edge scholarship on the twentieth-century Middle East to hone students' skills in historical analysis. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350L. History of Southeast Asia.**

This course explores the region of Southeast Asia from its earliest origins through the periods of European colonialism, nationalism, revolution, and the transformation of old societies into new nations. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350R. Workers and Work in the Arab World.**

Of 255 million people in 22 predominantly-Arab countries in North Africa and the Middle East, over the past 150 years, most have worked at some kind of job or another. In this course we will consider how labor politics introduce state regulations to gender, national and sexual identities. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350T. Japanese Urban Life.**

Home to the world's largest city, Edo, at the end of the eighteenth century, Japan has been influenced over many centuries by a vibrant and distinctive urban culture. Through works of history, fiction, film, geography, and urban planning, this course introduces students to the characteristics and development of Japanese urban.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350V. History of Pakistan.**

This course is an introduction to the history and culture of Pakistan. Broadly covering the 5000 year history of the region, from origins, the introduction of Islam and creation of the modern state, the course focuses on the cultural developments of the region, along with highlights of major political developments. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350Y. Development of Secularism in Ottoman Empire and Modern Turkey.**

The emergence of Turkey as a secular state is a peculiar example among the countries with predominantly Muslim populations. This course aims to provide students with an historical survey of the secularization of the Ottoman state and the development that led to the emergence of modern Turkey.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4352. Black Women and Black Protest in America.**

This course traces the participation of Black women in every stage of Black protest in America from slavery and Reconstruction thru the Civil Rights and Black nationalist movements to present day. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4353. WWI: The Great War.**

This course covers the history of the First World War by examining the experiences of both soldiers and civilians across multiple continents. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4360. History of the United States, 1945 to 1968.**

A study of the interplay of economic, social, political, and cultural forces that shaped American society from the end of World War II to the presidential election of 1968. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4361. History of the United States, 1968 to the Present.**

A study of the interplay of economic, social, political and cultural forces that have shaped American society from 1968 to the present. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4362. Peace and Nonviolence Movements.**

This course explores the origins, development, and impact of peace and nonviolence movements globally. It examines the roles that religion, class, gender, race, ethnicity, and nationalism have played in shaping social and political perceptions of injustice and public attitudes toward movement goals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4364. Military History of the United States.**

A specialized study of the military problems of the United States since 1789 and their impact upon non-military problems. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4365. Age of Revolution in North America, 1763-1789.**

A history of the American people during the age of the American Revolution, from the beginning of the crisis with Britain to the adoption of the Constitution. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4367. US Antebellum Era, 1812-1861.**

A survey of conflicting American attitudes about the desirability of a strong central government, rapid economic growth, aggressive national expansion, and human slavery in a democratic society. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4368. War and Society.**

A study of the relationship of war with social and cultural institutions from the 18th century to the present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4369. Introduction to Ethnohistory.**

This course familiarizes students with the ethnohistorical method, a multidisciplinary approach to the study of the historical, social, and cultural processes undergone by indigenous peoples before, during, and after contact with nation-states. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4371. Introduction to American Indian History.**

This course promotes understanding of the role played by the native peoples of North America in the history of the United States. Among the subjects to be covered through lectures and discussions: initial migrations and cultural development; impact of European conquest; adaptation; removal and reservation life; 20th century adjustments. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4372. Latina/o/x Histories.**

This course is a survey of the political, economic, and social-cultural role of Latinas/os in the United States. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4373. Economic and Social History of the Americas.**

Comparative history of the Americas with special attention to the United States, Canada, and Mexico. Explores different patterns of economic growth and their impact on societies and international relations. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4374A. History of American Sexualities.**

This course examines the history of sexuality in the United States from the colonial period to the end of the twentieth century. The course emphasizes the diversity of sexual behaviors, the role of sexual regulation, and modes of thought in the past.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4374B. History Lab: European Cinema and Film Festival.**

In this course, students will collaborate on a significant faculty-directed research project or public history project as part of a team. Students will learn research methods, project design strategies, and implementation skills. Projects can include working on peer-reviewed research, symposium organization, and/or exhibitions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4375A. Critical Issues in Texas History.**

Emphasis will be on significant critical issues in Texas history. Topics will include: Mexican independence, Texas and U.S. expansion, the Texas Revolution and the Mexican War, the Civil War and Reconstruction, Spindletop, the Depression and WWII, and the rise of urban, high-tech Texas. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4375B. African-American Experience in Texas.**

People of African ancestry have played a role in Texas history since Estebanico accompanied Cabeza de Vaca in exploring the region in the 1530s. As slaves, soldiers, and cowboys, Afro-Texans have participated in the state's development while being at the center of controversies regarding rights, racemixing and economic opportunity. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4376. The History of Texas Music.**

Examination of the evolution of music in Texas and the American Southwest, emphasizing how music reflects the richly diverse ethnic and cultural heritage of the region. It also considers the importance of ethnic identity and other social, political, and economic factors in shaping the Southwest, its people, and its music. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4377. Social Justice and Reform Movements in the United States.**

This course introduces students to the history of U.S. social justice movements. It defines activism as individual, community, and political acts designed to create social, political, and economic change at both the local and national levels. The course explores a series of topics, including the Black Freedom Movement, Chicano Movement, Indigenous Peoples Movement, voting rights, labor movements, and student activism, among other topics in U.S. social movement history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 4379. Internship in Public History.**

This course offers a supervised work experience related to students' career interests in historical institutions. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 4380. Historical Resources and Practices.**

This course is required for students seeking teacher certification in History. This course is an introductory methods course designed to familiarize students with general historical practice and its application in secondary teaching. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4388. Problems in History.**

This is an independent study course open to advanced students on an individual basis. Repeatable for credit with different emphasis. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4399. Senior Seminar.**

This course is required for History majors not seeking teaching certification. In this course students refine skills and techniques essential to the historical profession. Students analyze primary and secondary sources, apply methods, and write a term paper. Prerequisite: 24 semester credit hours in History with a grade point average of at least 2.25 in those hours. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

core-curriculum/) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses. The History courses HIST 2327 (<http://mycatalog.txstate.edu/search/?P=HIST%202327>), HIST 2328 (<http://mycatalog.txstate.edu/search/?P=HIST%202328>), HIST 2381 (<http://mycatalog.txstate.edu/search/?P=HIST%202381>), and HIST 2382 (<http://mycatalog.txstate.edu/search/?P=HIST%202382>) are for general education core curriculum credit only and cannot apply toward the History major.

- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor.
- Nine hours of writing intensive (WI) courses are required for graduation.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- This major requires 33 semester credit hours including the following History courses:

Code	Title	Hours
HIST 1310	History of the United States to 1877	3
HIST 1320	History of the United States, 1877 to Date	3
HIST 2310	Western Civilization to 1715	3
or HIST 2311	History of World Civilization to the 17th Century	
HIST 2320	Western Civilization, 1715 to Date	3
or HIST 2312	History of World Civilization from the 17th Century	
HIST 4399	Senior Seminar	3
Advanced HIST electives		18
<b>Total Hours</b>		<b>33</b>

- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- In choosing advanced History electives, students are required to complete one course from Group A (World History), one course from Group B (European History), one course from Group C (U.S. History), and three courses from any Group as long as no more than three courses are taken from any one group. (See Group lists below).
- For transfer students, 12 semester credit hours in History (or equivalents) may be transferred from a Texas public institution of higher education for the History Field of Study and be applied to the Bachelor of Arts degree with a major in History at Texas State University. More information about the [Field of Study](http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/) (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
HIST 1310	History of the United States to 1877	3
TCCN: HIST 1301		
HIST 1320	History of the United States, 1877 to Date	3

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education->



TCCN: HIST 1302	
Choose two of the following eight courses:	6
HIST 2310 Western Civilization to 1715	
TCCN: HIST 2311	
HIST 2311 History of World Civilization to the 17th Century	
TCCN: HIST 2321	
HIST 2312 History of World Civilization from the 17th Century	
TCCN: HIST 2322	
HIST 2320 Western Civilization, 1715 to Date	
TCCN: HIST 2312	
HIST ELNA	
TCCN: HIST 2301	
HIST ELNA	
TCCN: HIST 2327	
HIST ELNA	
TCCN: HIST 2328	
HIST ELNA	
TCCN: HIST 2381	
<b>Total Hours</b>	<b>12</b>

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020	3	Life and Physical Sciences Component Code 030	3
Government/Political Science Component Code 070	3	HIST 1310 (American History Component Code 060 [TCCN HIST 1301])	3
Modern Language 1410	4	Government/Political Science Component Code 070	3
US 1100	1	Modern Language 1420	4
<b>14</b>		<b>16</b>	

Sophomore			
First Semester Hours		Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3	Life and Physical Sciences Component Code 030	3
Creative Arts Component Code 050	3	ENG Literature (Component Area Option Code 090/094) <sup>1</sup>	3
HIST 1320 (American History Component Code 060 [TCCN HIST 1302])	3	Modern Language 2320	3
Social and Behavioral Sciences Component Code 080	3	HIST 2310 or 2311 (TCCN HIST 2311 or 2321)	3
Modern Language 2310	3	Minor	3
<b>15</b>		<b>15</b>	

Junior			
First Semester Hours		Second Semester Hours	
Component Area Option Code 090/091	3	BA English Literature	3
HIST 2320 or 2312 (TCCN HIST 2312 or 2322)	3	HIST Group B - European History	3
HIST Group A - World History	3	HIST Group C - U.S. History	3
Minor	6	Minor	3
		Elective (as needed)	3
<b>15</b>		<b>15</b>	

Senior			
First Semester Hours		Second Semester Hours	
BA Science, Math, Computer Science, or Logic	3	HIST Advanced Elective	3
HIST Advanced Electives	6	HIST 4399	3
Minor	3	Minor	3
Elective (as needed)	3	Electives (as needed)	6
<b>15</b>		<b>15</b>	

### Total Hours: 120

<sup>1</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

## HIST Advanced Group Electives

Code	Title	Hours
<b>GROUP A - WORLD HISTORY</b>		
HIST 3319	History of Brazil	3
HIST 3320	History of Mexico	3
HIST 3322	Colonial History of Latin America to 1828	3
HIST 3324	Latin America from Independence to Present	3
HIST 3325G	Modern Revolutions in Latin American History	3
HIST 3325I	Resistance and Rebellion in Colonial Latin America	3
HIST 3326	The Southern Cone of Latin America	3
HIST 3327	History of Mexico to 1848	3
HIST 3328	Militarism in Latin America	3
HIST 3337	History of U.S. Foreign Policy Making in the Muslim World <sup>1</sup>	3
HIST 3338	History of Religion in India	3
HIST 3368U	U.S. - Cuban Relations <sup>1</sup>	3
HIST 3368Z	A Global History of Pandemics	3
HIST 3384	History and Culture of Modern India	3
HIST 4318S	Britain and the World <sup>1</sup>	3
HIST 4318Y	The Global Teenager <sup>1</sup>	3
HIST 4325	Islamic History to 1798	3
HIST 4326	The Modern Middle East	3
HIST 4327	The Problem of Palestine	3
HIST 4328	History of India	3
HIST 4331	Piracy Through the Ages <sup>1</sup>	3
HIST 4332	European Colonialism <sup>1</sup>	3
HIST 4333	The History of Russia and Eurasia to 1917 <sup>1</sup>	3

HIST 4334	The History of Russia and Eurasia from 1917 to Present <sup>1</sup>	3
HIST 4342	Modern Africa	3
HIST 4343	Modern China, 1600-Present	3
HIST 4344	Modern Japan, 1600-Present	3
HIST 4345	Postwar Japan	3
HIST 4346	Modern Korea	3
HIST 4347	Hong Kong in the Modern World	3
HIST 4348	Mahatma Gandhi and Nonviolence	3
HIST 4349	History of Drugs	3
HIST 4350A	Slavery and Emancipation in the Americas	3
HIST 4350D	Empire and Identity in Central Asia	3
HIST 4350E	Gender in Latin American History	3
HIST 4350K	Gender & Militarization in the Arab World	3
HIST 4350L	History of Southeast Asia	3
HIST 4350R	Workers and Work in the Arab World	3
HIST 4350T	Japanese Urban Life	3
HIST 4350V	History of Pakistan	3
HIST 4350Y	Development of Secularism in Ottoman Empire and Modern Turkey	3
HIST 4353	WWI: The Great War <sup>1</sup>	3
HIST 4362	Peace and Nonviolence Movements <sup>1</sup>	3
HIST 4368	War and Society <sup>1</sup>	3
HIST 4369	Introduction to Ethnohistory <sup>1</sup>	3
HIST 4373	Economic and Social History of the Americas <sup>1</sup>	3
HIST 4388	Problems in History <sup>2</sup>	3

Code	Title	Hours
<b>GROUP B - EUROPEAN HISTORY</b>		
HIST 3310	History of Europe, 1815-1919	3
HIST 3311	History of Europe Since 1919	3
HIST 3312	Renaissance and Reformation	3
HIST 3313	Europe During the Old Regime, 1600-1760	3
HIST 3314	Revolutionary Europe, 1760-1815	3
HIST 3315	History of England to 1603	3
HIST 3316	History of England Since 1603	3
HIST 3332	History of Early Modern Spain from 1492 to 1808	3
HIST 3333	History of Modern Spain from 1808 to Present	3
HIST 3368P	The U.S. and Britain in the Sixties <sup>1</sup>	3
HIST 4304	Ancient Rome and the Mediterranean 500 B.C. to 500 A.D.	3
HIST 4307	Medieval European History, 300-1400	3
HIST 4316	Roman and Medieval Britain	3
HIST 4317	Tudor-Stuart England, 1485-1689	3
HIST 4318N	Immigration in European History	3
HIST 4318S	Britain and the World <sup>1</sup>	3
HIST 4318U	Topics in Industrial Britain	3
HIST 4318W	Queer Youth History	3
HIST 4318X	Scottish History from the Wars of Independence to the Present	3
HIST 4318Y	The Global Teenager <sup>1</sup>	3
HIST 4318Z	Podcasting History: Making Marginalized Voices Heard	3

HIST 4320	Origins of Christianity	3
HIST 4323	France and the Modern World	3
HIST 4331	Piracy Through the Ages <sup>1</sup>	3
HIST 4332	European Colonialism <sup>1</sup>	3
HIST 4333	The History of Russia and Eurasia to 1917 <sup>1</sup>	3
HIST 4334	The History of Russia and Eurasia from 1917 to Present <sup>1</sup>	3
HIST 4335	20TH CENT EAST EUR	3
HIST 4336	Germany from 1815 to Present	3
HIST 4337	Germany and National Socialism, 1918-1945	3
HIST 4341	The History of Modern Britain	3
HIST 4353	WWI: The Great War <sup>1</sup>	3
HIST 4368	War and Society <sup>1</sup>	3
HIST 4388	Problems in History <sup>2</sup>	3

Code	Title	Hours
<b>GROUP C - U.S. HISTORY</b>		
HIST 3317	U.S. Women's History to 1877	3
HIST 3318	U.S. Women's History since 1877	3
HIST 3329	Spanish Borderlands, 1521-1821	3
HIST 3337	History of U.S. Foreign Policy Making in the Muslim World <sup>1</sup>	3
HIST 3340	History of the United States, 1877-1914	3
HIST 3341	History of the United States, 1914-1945	3
HIST 3342	Social and Intellectual History of the United States, 1607-1865	3
HIST 3343	Social and Intellectual History of the United States Since 1865	3
HIST 3346	The Civil War and Reconstruction	3
HIST 3349	The Constitution of the United States	3
HIST 3352	Western America	3
HIST 3353	The U.S. - Mexico Border and its Communities: A History	3
HIST 3357	History of U.S. Foreign Relations	3
HIST 3359	African American History	3
HIST 3363	Colonial North America to 1763	3
HIST 3365	US Early Republic, 1788-1828	3
HIST 3366	Introduction to Public History	3
HIST 3368B	Law and Society in Early America	3
HIST 3368E	United States Westward Expansionism, 1776-1861	3
HIST 3368H	LBJ's America	3
HIST 3368J	The Space Race	3
HIST 3368K	Topics in American Cultural History	3
HIST 3368L	History of Mexican American Music in the Southwest	3
HIST 3368M	Popular Music and Social Movements in 20th Century America	3
HIST 3368P	The U.S. and Britain in the Sixties <sup>1</sup>	3
HIST 3368S	History of Music and Race in the American South	3
HIST 3368T	American Songbook	3
HIST 3368U	U.S. - Cuban Relations <sup>1</sup>	3
HIST 3368X	Organization of the Modern American State	3
HIST 3368Y	Walking in the Way of Peace, War & Slavery: Quakers in American History	3

HIST 3371A	Conflict and Creativity in U.S. Urban and Suburban History	3
HIST 3371B	Health and Illness in American History	3
HIST 3371C	History Behind the Headlines: Current Debates in a Historical Perspective	3
HIST 3372	Texas History: A Survey	3
HIST 3373C	The History of Rural Women	3
HIST 3373D	History of American Feminisms, 1960-2020	3
HIST 3374A	History of Christianity 1300-1700	3
HIST 3375A	Topics in Working Class History	3
HIST 3376	American Religious History	3
HIST 3377	History of Country Music	3
HIST 3378	History of the Blues	3
HIST 3379	History of Rock and Roll	3
HIST 3380	The Desegregation of the South from 1944-1970	3
HIST 3381	Democracy and Education	3
HIST 3382	Immigration and US History	3
HIST 4352	Black Women and Black Protest in America	3
HIST 4360	History of the United States, 1945 to 1968	3
HIST 4361	History of the United States, 1968 to the Present	3
HIST 4362	Peace and Nonviolence Movements <sup>1</sup>	3
HIST 4364	Military History of the United States	3
HIST 4365	Age of Revolution in North America, 1763-1789	3
HIST 4367	US Antebellum Era, 1812-1861	3
HIST 4368	War and Society <sup>1</sup>	3
HIST 4369	Introduction to Ethnohistory <sup>1</sup>	3
HIST 4371	Introduction to American Indian History	3
HIST 4372	Latina/o/x Histories	3
HIST 4373	Economic and Social History of the Americas <sup>1</sup>	3
HIST 4374A	History of American Sexualities	3
HIST 4375A	Critical Issues in Texas History	3
HIST 4375B	African-American Experience in Texas	3
HIST 4376	The History of Texas Music	3
HIST 4377	Social Justice and Reform Movements in the United States	3
HIST 4388	Problems in History <sup>2</sup>	3

Code	Title	Hours
<b>GROUP D - HISTORY CAPSTONE AND TEACHER CERTIFICATION PREPARATION</b>		
HIST 4380	Historical Resources and Practices	3
HIST 4399	Senior Seminar	3

<sup>1</sup> Course is listed in multiple groups based on content from a variety of regions; however, such courses may only apply to one group upon completion.

<sup>2</sup> HIST 4388 is an independent study and may be applied to Group A, B, or C depending on content.

## Minimum Hours: 120 Semester Credit Hours

### Admission Requirements

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses. The History courses HIST 2327 (<http://mycatalog.txstate.edu/search/?P=HIST%202327>), HIST 2328 (<http://mycatalog.txstate.edu/search/?P=HIST%202328>), HIST 2381 (<http://mycatalog.txstate.edu/search/?P=HIST%202381>), and HIST 2382 (<http://mycatalog.txstate.edu/search/?P=HIST%202382>) are for general education core curriculum credit only and cannot be applied to the History major.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (<http://mycatalog.txstate.edu/undergraduate/degree-program-information/>) (B.A.) requires three additional hours of English literature, three additional hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor. For this program, the additional literature course may be satisfied by selecting a sophomore literature course for the 040 component of the core curriculum and the second major in Education fulfills the minor requirement.
3. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
4. Nine hours of writing intensive (WI) courses are required for graduation.
5. To satisfy graduation requirements for teacher certification, students must have at least a 2.75 Overall GPA and a GPA of at least 2.50 in all assigned courses in the professional sequence of the Education major with no grade below a "C".
6. This program is designed to prepare students for secondary teacher certification in History and requires students to pursue a second major in Education. The following courses are required for the major in History.

Code	Title	Hours
HIST 1310	History of the United States to 1877	3
HIST 1320	History of the United States, 1877 to Date	3
HIST 2311	History of World Civilization to the 17th Century	3
HIST 2312	History of World Civilization from the 17th Century	3
HIST 3372	Texas History: A Survey	3
HIST Group A - World History		3
HIST Group B - European History		3
HIST Group C - U.S. History		6
HIST Group A or Group B		3

HIST 4399	Senior Seminar	3
<b>Total Hours</b>		<b>33</b>

7. This degree program is designed to prepare students for secondary teacher certification in History and requires that students pursue a double major by declaring and completing requirements for both the major in History and the major in Education. The following courses are required for the major in Education:

Code	Title	Hours
Education Foundations:		
CI 2310	Education for Change	3
CI 3325	Adolescents and Society	3
CI 4332	Secondary Teaching: Curriculum and Technology	3
Teaching and Learning:		
CI 3340	Teaching for Linguistic Diversity	3
CI 4343	Instructional Strategies for the Secondary Teacher	3
CI 4370	Building Relationships in the Secondary Classroom	3
CI 4372	Teaching in Communities	3
RDG 3323	Teaching Literacies in the Content Areas	3
SPED 4344	Educating Students with Mild Disabilities	3
Clinical Practice:		
EDST 4681	Clinical Teaching 7-12	6
<b>Total Hours</b>		<b>33</b>

8. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7CCholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c12nfo4c82b5%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPk%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7CCholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c12nfo4c82b5%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPk%3D&reserved=0)).

9. For transfer students, 6 semester credit hours in Curriculum and Instruction and Special Education may be transferred from a Texas public institution of higher education for the Associate of Arts in Teaching Field of Study and be applied to the Bachelor of Arts degree with a major in Education at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list:

Code	Title	Hours
CI 2310	Education for Change	3
TCCN: EDUC 1301		

SPED 4344	Educating Students with Mild Disabilities	3
TCCN: EDUC 2301		

10. For transfer students, 21 semester credit hours in History may be transferred from a Texas public institution of higher education for the History Field of Study and be applied to the Bachelor of Arts degree with a major in History at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
HIST 1310	History of the United States to 1877	3
TCCN: HIST 1301		
HIST 1320	History of the United States, 1877 to Date	3
TCCN: HIST 1302		
HIST 2311	History of World Civilization to the 17th Century	3
TCCN: HIST 2321		
HIST 2312	History of World Civilization from the 17th Century	3
TCCN: HIST 2322		
<b>Total Hours</b>		<b>12</b>

## Course Requirements

### Freshman

First Semester Hours		Second Semester Hours	
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020	3	Creative Arts Component Code 050	3
Life and Physical Sciences Component Code 030	3	HIST 1310 (American History Component Code 060 [TCCN HIST 1301])	3
Government/Political Science Component Code 070	3	Government/Political Science Component Code 070	3
Modern Language 1410	4	Modern Language 1420	4
US 1100	1		
<b>17</b>		<b>16</b>	

### Sophomore

First Semester Hours		Second Semester Hours	
HIST 1320 (American History Component Code 060 [TCCN HIST 1302])	3	Life and Physical Sciences Component Code 030	3
Social and Behavioral Sciences Component Code 080	3	ENG Literature (Language, Philosophy, and Culture Component 040) <sup>1</sup>	3
COMM 1310 (Component Area Option Code 090/091 [SPCH 1311])	3	Modern Language 2320	3
ENG Literature (Component Area Option Code 090/094) <sup>1</sup>	3	HIST 2311 (TCCN HIST 2321)	3

Modern Language 2310	3 CI 2310 (TCCN EDUC 1301)	3
<b>15</b>		<b>15</b>
		<b>Junior</b>
<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
BA Science, Math, Computer Science, or Logic	3 HIST Group A - World History	3
HIST 2312 (TCCN HIST 2322)	3 HIST Group B - European History	3
HIST 3372	3 HIST Group C - U.S. History	3
HIST Group C - U.S. History <sup>1</sup>	3 Secondary Field Block I:	9
Education Core:	6 CI 3340	
CI 3325	CI 4343	
CI 4332	SPED 4344	
<b>18</b>		<b>18</b>
		<b>Senior</b>
<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
HIST Group A or B <sup>1</sup>	3 Clinical Practice (Student Teaching):	6
HIST 4399	3 EDST 4681	
Secondary Field Block II:	9	
CI 4370		
CI 4372		
RDG 3323		
<b>15</b>		<b>6</b>

**Total Hours: 120**

<sup>1</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

## HIST Advanced Group Electives

Code	Title	Hours
<b>GROUP A - WORLD HISTORY</b>		
HIST 3319	History of Brazil	3
HIST 3320	History of Mexico	3
HIST 3322	Colonial History of Latin America to 1828	3
HIST 3324	Latin America from Independence to Present	3
HIST 3325G	Modern Revolutions in Latin American History	3
HIST 3325I	Resistance and Rebellion in Colonial Latin America	3
HIST 3326	The Southern Cone of Latin America	3
HIST 3327	History of Mexico to 1848	3
HIST 3328	Militarism in Latin America	3
HIST 3337	History of U.S. Foreign Policy Making in the Muslim World <sup>1</sup>	3
HIST 3338	History of Religion in India	3
HIST 3368U	U.S. - Cuban Relations <sup>1</sup>	3
HIST 3368Z	A Global History of Pandemics	3
HIST 3384	History and Culture of Modern India	3
HIST 4318S	Britain and the World <sup>1</sup>	3
HIST 4318Y	The Global Teenager <sup>1</sup>	3
HIST 4325	Islamic History to 1798	3

HIST 4326	The Modern Middle East	3
HIST 4327	The Problem of Palestine	3
HIST 4328	History of India	3
HIST 4331	Piracy Through the Ages <sup>1</sup>	3
HIST 4332	European Colonialism <sup>1</sup>	3
HIST 4333	The History of Russia and Eurasia to 1917 <sup>1</sup>	3
HIST 4334	The History of Russia and Eurasia from 1917 to Present <sup>1</sup>	3
HIST 4342	Modern Africa	3
HIST 4343	Modern China, 1600-Present	3
HIST 4344	Modern Japan, 1600-Present	3
HIST 4345	Postwar Japan	3
HIST 4346	Modern Korea	3
HIST 4347	Hong Kong in the Modern World	3
HIST 4348	Mahatma Gandhi and Nonviolence	3
HIST 4349	History of Drugs	3
HIST 4350A	Slavery and Emancipation in the Americas	3
HIST 4350D	Empire and Identity in Central Asia	3
HIST 4350E	Gender in Latin American History	3
HIST 4350K	Gender & Militarization in the Arab World	3
HIST 4350L	History of Southeast Asia	3
HIST 4350R	Workers and Work in the Arab World	3
HIST 4350T	Japanese Urban Life	3
HIST 4350V	History of Pakistan	3
HIST 4350Y	Development of Secularism in Ottoman Empire and Modern Turkey	3
HIST 4353	WWI: The Great War <sup>1</sup>	3
HIST 4362	Peace and Nonviolence Movements <sup>1</sup>	3
HIST 4368	War and Society <sup>1</sup>	3
HIST 4369	Introduction to Ethnohistory	3
HIST 4373	Economic and Social History of the Americas <sup>1</sup>	3
HIST 4388	Problems in History <sup>2</sup>	3

Code	Title	Hours
<b>GROUP B - EUROPEAN HISTORY</b>		
HIST 3310	History of Europe, 1815-1919	3
HIST 3311	History of Europe Since 1919	3
HIST 3312	Renaissance and Reformation	3
HIST 3313	Europe During the Old Regime, 1600-1760	3
HIST 3314	Revolutionary Europe, 1760-1815	3
HIST 3315	History of England to 1603	3
HIST 3316	History of England Since 1603	3
HIST 3332	History of Early Modern Spain from 1492 to 1808	3
HIST 3333	History of Modern Spain from 1808 to Present	3
HIST 3368P	The U.S. and Britain in the Sixties <sup>1</sup>	3
HIST 4304	Ancient Rome and the Mediterranean 500 B.C. to 500 A.D.	3
HIST 4307	Medieval European History, 300-1400	3
HIST 4316	Roman and Medieval Britain	3
HIST 4317	Tudor-Stuart England, 1485-1689	3
HIST 4318N	Immigration in European History	3
HIST 4318S	Britain and the World <sup>1</sup>	3
HIST 4318U	Topics in Industrial Britain	3



HIST 4318W	Queer Youth History	3	HIST 3368S	History of Music and Race in the American South	3
HIST 4318X	Scottish History from the Wars of Independence to the Present	3	HIST 3368T	American Songbook	3
HIST 4318Y	The Global Teenager <sup>1</sup>	3	HIST 3368U	U.S. - Cuban Relations <sup>1</sup>	3
HIST 4318Z	Podcasting History: Making Marginalized Voices Heard	3	HIST 3368X	Organization of the Modern American State	3
HIST 4320	Origins of Christianity	3	HIST 3368Y	Walking in the Way of Peace, War & Slavery: Quakers in American History	3
HIST 4323	France and the Modern World	3	HIST 3371A	Conflict and Creativity in U.S. Urban and Suburban History	3
HIST 4331	Piracy Through the Ages <sup>1</sup>	3	HIST 3371B	Health and Illness in American History	3
HIST 4332	European Colonialism <sup>1</sup>	3	HIST 3371C	History Behind the Headlines: Current Debates in a Historical Perspective	3
HIST 4333	The History of Russia and Eurasia to 1917 <sup>1</sup>	3	HIST 3372	Texas History: A Survey	3
HIST 4334	The History of Russia and Eurasia from 1917 to Present <sup>1</sup>	3	HIST 3373C	The History of Rural Women	3
HIST 4335	20TH CENT EAST EUR	3	HIST 3373D	History of American Feminisms, 1960-2020	3
HIST 4336	Germany from 1815 to Present	3	HIST 3374A	History of Christianity 1300-1700	3
HIST 4337	Germany and National Socialism, 1918-1945	3	HIST 3375A	Topics in Working Class History	3
HIST 4341	The History of Modern Britain	3	HIST 3376	American Religious History	3
HIST 4353	WWI: The Great War <sup>1</sup>	3	HIST 3377	History of Country Music	3
HIST 4368	War and Society <sup>1</sup>	3	HIST 3378	History of the Blues	3
HIST 4388	Problems in History <sup>2</sup>	3	HIST 3379	History of Rock and Roll	3
<b>Code</b>	<b>Title</b>	<b>Hours</b>	HIST 3380	The Desegregation of the South from 1944-1970	3
<b>GROUP C - U.S. HISTORY</b>			HIST 3381	Democracy and Education	3
HIST 3317	U.S. Women's History to 1877	3	HIST 3382	Immigration and US History	3
HIST 3318	U.S. Women's History since 1877	3	HIST 4352	Black Women and Black Protest in America	3
HIST 3329	Spanish Borderlands, 1521-1821	3	HIST 4360	History of the United States, 1945 to 1968	3
HIST 3337	History of U.S. Foreign Policy Making in the Muslim World <sup>1</sup>	3	HIST 4361	History of the United States, 1968 to the Present	3
HIST 3340	History of the United States, 1877-1914	3	HIST 4362	Peace and Nonviolence Movements <sup>1</sup>	3
HIST 3341	History of the United States, 1914-1945	3	HIST 4364	Military History of the United States	3
HIST 3342	Social and Intellectual History of the United States, 1607-1865	3	HIST 4365	Age of Revolution in North America, 1763-1789	3
HIST 3343	Social and Intellectual History of the United States Since 1865	3	HIST 4367	US Antebellum Era, 1812-1861	3
HIST 3346	The Civil War and Reconstruction	3	HIST 4368	War and Society <sup>1</sup>	3
HIST 3349	The Constitution of the United States	3	HIST 4369	Introduction to Ethnohistory <sup>1</sup>	3
HIST 3352	Western America	3	HIST 4371	Introduction to American Indian History	3
HIST 3353	The U.S. - Mexico Border and its Communities: A History	3	HIST 4372	Latina/o/x Histories	3
HIST 3357	History of U.S. Foreign Relations	3	HIST 4373	Economic and Social History of the Americas <sup>1</sup>	3
HIST 3359	African American History	3	HIST 4374A	History of American Sexualities	3
HIST 3363	Colonial North America to 1763	3	HIST 4375A	Critical Issues in Texas History	3
HIST 3365	US Early Republic, 1788-1828	3	HIST 4375B	African-American Experience in Texas	3
HIST 3366	Introduction to Public History	3	HIST 4376	The History of Texas Music	3
HIST 3368B	Law and Society in Early America	3	HIST 4377	Social Justice and Reform Movements in the United States	3
HIST 3368E	United States Westward Expansionism, 1776-1861	3	HIST 4388	Problems in History <sup>2</sup>	3
HIST 3368H	LBJ's America	3			
HIST 3368J	The Space Race	3			
HIST 3368K	Topics in American Cultural History	3			
HIST 3368L	History of Mexican American Music in the Southwest	3			
HIST 3368M	Popular Music and Social Movements in 20th Century America	3			
HIST 3368P	The U.S. and Britain in the Sixties <sup>1</sup>	3			

<sup>1</sup> Course is listed in multiple groups based on content from a variety of regions; however, such courses may only apply to one group upon completion

<sup>2</sup> HIST 4388 is an independent study and may be applied to Group A, B, or C depending on content.

Minimum Hours: 121

Semester Credit Hours

Admission Requirements

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses. The History courses HIST 2327 (<http://mycatalog.txstate.edu/search/?P=HIST%202327>), HIST 2328 (<http://mycatalog.txstate.edu/search/?P=HIST%202328>), HIST 2381 (<http://mycatalog.txstate.edu/search/?P=HIST%202381>), and HIST 2382 (<http://mycatalog.txstate.edu/search/?P=HIST%202382>) are for general education core curriculum credit only and cannot apply toward the History major.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (<http://mycatalog.txstate.edu/undergraduate/degree-program-information/>) (B.A.) requires three additional hours of English literature, three additional hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor. For this program, the additional literature course may be satisfied by selecting a sophomore literature course for the 040 component of the core curriculum, the additional science may be satisfied through the completion of GEO 2410 in the major, and the second major in Education fulfills the minor requirement.
3. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
4. Nine hours of writing intensive (WI) courses are required for graduation.
5. To satisfy graduation requirements for teacher certification, students must have at least a 2.75 Overall GPA and a GPA of at least 2.50 in all assigned courses in the professional sequence of the Education major with no grade below a “C”.
6. This program is designed to prepare students for secondary teacher certification in History Social Studies Composite and requires students to pursue a second major in Education. The following courses are required for the major in History Social Studies Composite:

Code	Title	Hours
HIST 1310	History of the United States to 1877	3
HIST 1320	History of the United States, 1877 to Date	3
HIST 2311	History of World Civilization to the 17th Century	3
HIST 2312	History of World Civilization from the 17th Century	3
HIST 3372	Texas History: A Survey	3
HIST Group A - World History		3
HIST Group B - European History		3
HIST Group C - U.S. History		3

GEO 1309	Introduction to Cultural Geography	3
or GEO 1310	World Geography	
GEO 2410	Introduction to Physical Geography	4
GEO 3309	United States and Canada	3
or GEO 3329	Geography of Texas	
POSI 2310	Principles of American Government	3
POSI 2320	Functions of American Government	3
PS 3323	Congress and the Legislative Process	3
or PS 3324	The American Presidency	
or PS 3331	The Supreme Court and the Judicial Process	
ECO 2301	Principles of Economics	3
Total Hours		46

7. This program is designed to prepare students for secondary teacher certification in History Social Studies Composite and requires students to pursue a second major in Education. The following courses are required for the major in Education:

Code	Title	Hours
Education Foundation:		
CI 2310	Education for Change	3
CI 3325	Adolescents and Society	3
CI 4332	Secondary Teaching: Curriculum and Technology	3
Teaching and Learning:		
CI 3340	Teaching for Linguistic Diversity	3
CI 4343	Instructional Strategies for the Secondary Teacher	3
CI 4370	Building Relationships in the Secondary Classroom	3
CI 4372	Teaching in Communities	3
RDG 3323	Teaching Literacies in the Content Areas	3
SPED 4344	Educating Students with Mild Disabilities	3
Clinical Practice:		
EDST 4681	Clinical Teaching 7-12	6
Total Hours		33

8. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Ccholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c420f9a%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPbQjwNv%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Ccholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c420f9a%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPbQjwNv%3D&reserved=0)).
9. For transfer students, 6 semester credit hours in Curriculum and Instruction and Special Education may be transferred from a Texas public institution of higher education for the Associate of Arts in Teaching Field of Study and be applied to the Bachelor of Arts degree with a major in Education at Texas State University. More

information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list:

Code	Title	Hours
CI 2310	Education for Change	3
TCCN: EDUC 1301		
SPED 4344	Educating Students with Mild Disabilities (CI ELNA)	3
TCCN: EDUC 2301		

10. For transfer students, 21 semester credit hours in History may be transferred from a Texas public institution of higher education for the History Field of Study and be applied to the Bachelor of Arts degree with a major in History at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>)

Code	Title	Hours
HIST 1310	History of the United States to 1877	3
TCCN: HIST 1301		
HIST 1320	History of the United States, 1877 to Date	3
TCCN: HIST 1302		
HIST 2311	History of World Civilization to the 17th Century	3
TCCN: HIST 2321		
HIST 2312	History of World Civilization from the 17th Century	3
TCCN: HIST 2322		
<b>Total Hours</b>		<b>12</b>

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020 <sup>1</sup>	3	Creative Arts Component Code 050 [HUMA 1315]	3
Life and Physical Sciences Component Code 030	3	HIST 1310 (American History Component Code 060 [TCCN HIST 1301])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
Modern Language 1410	4	Modern Language 1420	4
US 1100	1		
<b>17</b>		<b>16</b>	

Sophomore			
First Semester Hours		Second Semester Hours	
ENG Literature (Language, Philosophy, and Culture Component 040) <sup>2</sup>	3	Life and Physical Sciences Component Code 030	3

HIST 1320 (American History Component Code 060 [TCCN HIST 1302])	3	ENG Literature (Component Area Option Code 090/094) <sup>2</sup>	3
ECO 2301 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 1301])	3	Modern Language 2320	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	HIST 2311 (TCCN HIST 2321)	3
Modern Language 2310	3	CI 2310 (TCCN EDUC 1301)	3
<b>15</b>		<b>15</b>	

Junior			
First Semester Hours		Second Semester Hours	
GEO 1309 or 1310 (TCCN GEOG 1302 or 1303)	3	HIST Group A - World History	3
HIST 2312 (TCCN HIST 2322)	3	GEO 2410 (BA Science, Math, Computer Science, or Logic)	4
HIST 3372	3	Secondary Field Block I:	9
HIST Group C - U.S. History	3	CI 3340	
Education Core:	6	CI 4343	
CI 3325		SPED 4344	
CI 4332			
<b>18</b>		<b>16</b>	

Senior			
First Semester Hours		Second Semester Hours	
HIST Group B - European History	3	Clinical Practice (Student Teaching):	6
GEO 3309 or 3329	3	EDST 4681	
PS 3324, 3323, or 3331	3		
Secondary Field Block II:	9		
CI 4370			
CI 4372			
RDG 3323			
<b>18</b>		<b>6</b>	

**Total Hours: 121**

<sup>1</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1317 (TCCN 1316), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2321 (TCCN 1323), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

<sup>2</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

## HIST Advanced Group Electives

Code	Title	Hours
<b>GROUP A - WORLD HISTORY</b>		
HIST 3319	History of Brazil	3
HIST 3320	History of Mexico	3
HIST 3322	Colonial History of Latin America to 1828	3

HIST 3324	Latin America from Independence to Present	3	HIST 3313	Europe During the Old Regime, 1600-1760	3
HIST 3325G	Modern Revolutions in Latin American History	3	HIST 3314	Revolutionary Europe, 1760-1815	3
HIST 3325I	Resistance and Rebellion in Colonial Latin America	3	HIST 3315	History of England to 1603	3
HIST 3326	The Southern Cone of Latin America	3	HIST 3316	History of England Since 1603	3
HIST 3327	History of Mexico to 1848	3	HIST 3332	History of Early Modern Spain from 1492 to 1808	3
HIST 3328	Militarism in Latin America	3	HIST 3333	History of Modern Spain from 1808 to Present	3
HIST 3337	History of U.S. Foreign Policy Making in the Muslim World <sup>1</sup>	3	HIST 3368P	The U.S. and Britain in the Sixties <sup>1</sup>	3
HIST 3338	History of Religion in India	3	HIST 4304	Ancient Rome and the Mediterranean 500 B.C. to 500 A.D.	3
HIST 3368U	U.S. - Cuban Relations <sup>1</sup>	3	HIST 4307	Medieval European History, 300-1400	3
HIST 3368Z	A Global History of Pandemics	3	HIST 4316	Roman and Medieval Britain	3
HIST 3384	History and Culture of Modern India	3	HIST 4317	Tudor-Stuart England, 1485-1689	3
HIST 4318S	Britain and the World <sup>1</sup>	3	HIST 4318N	Immigration in European History	3
HIST 4318Y	The Global Teenager <sup>1</sup>	3	HIST 4318S	Britain and the World <sup>1</sup>	3
HIST 4325	Islamic History to 1798	3	HIST 4318U	Topics in Industrial Britain	3
HIST 4326	The Modern Middle East	3	HIST 4318W	Queer Youth History	3
HIST 4327	The Problem of Palestine	3	HIST 4318X	Scottish History from the Wars of Independence to the Present	3
HIST 4328	History of India	3	HIST 4318Y	The Global Teenager <sup>1</sup>	3
HIST 4331	Piracy Through the Ages <sup>1</sup>	3	HIST 4318Z	Podcasting History: Making Marginalized Voices Heard	3
HIST 4332	European Colonialism <sup>1</sup>	3	HIST 4320	Origins of Christianity	3
HIST 4333	The History of Russia and Eurasia to 1917 <sup>1</sup>	3	HIST 4323	France and the Modern World	3
HIST 4334	The History of Russia and Eurasia from 1917 to Present <sup>1</sup>	3	HIST 4331	Piracy Through the Ages <sup>1</sup>	3
HIST 4342	Modern Africa	3	HIST 4332	European Colonialism <sup>1</sup>	3
HIST 4343	Modern China, 1600-Present	3	HIST 4333	The History of Russia and Eurasia to 1917 <sup>1</sup>	3
HIST 4344	Modern Japan, 1600-Present	3	HIST 4334	The History of Russia and Eurasia from 1917 to Present <sup>1</sup>	3
HIST 4345	Postwar Japan	3	HIST 4335	20TH CENT EAST EUR	3
HIST 4346	Modern Korea	3	HIST 4336	Germany from 1815 to Present	3
HIST 4347	Hong Kong in the Modern World	3	HIST 4337	Germany and National Socialism, 1918-1945	3
HIST 4348	Mahatma Gandhi and Nonviolence	3	HIST 4341	The History of Modern Britain	3
HIST 4349	History of Drugs	3	HIST 4353	WWI: The Great War <sup>1</sup>	3
HIST 4350A	Slavery and Emancipation in the Americas	3	HIST 4368	War and Society <sup>1</sup>	3
HIST 4350D	Empire and Identity in Central Asia	3	HIST 4388	Problems in History <sup>2</sup>	3
HIST 4350E	Gender in Latin American History	3			
HIST 4350K	Gender & Militarization in the Arab World	3	<b>Code</b>	<b>Title</b>	<b>Hours</b>
HIST 4350L	History of Southeast Asia	3	<b>GROUP C - U.S. HISTORY</b>		
HIST 4350R	Workers and Work in the Arab World	3	HIST 3317	U.S. Women's History to 1877	3
HIST 4350T	Japanese Urban Life	3	HIST 3318	U.S. Women's History since 1877	3
HIST 4350V	History of Pakistan	3	HIST 3329	Spanish Borderlands, 1521-1821	3
HIST 4350Y	Development of Secularism in Ottoman Empire and Modern Turkey	3	HIST 3337	History of U.S. Foreign Policy Making in the Muslim World <sup>1</sup>	3
HIST 4353	WWI: The Great War <sup>1</sup>	3	HIST 3340	History of the United States, 1877-1914	3
HIST 4362	Peace and Nonviolence Movements <sup>1</sup>	3	HIST 3341	History of the United States, 1914-1945	3
HIST 4368	War and Society <sup>1</sup>	3	HIST 3342	Social and Intellectual History of the United States, 1607-1865	3
HIST 4369	Introduction to Ethnohistory <sup>1</sup>	3	HIST 3343	Social and Intellectual History of the United States Since 1865	3
HIST 4373	Economic and Social History of the Americas <sup>1</sup>	3	HIST 3346	The Civil War and Reconstruction	3
HIST 4388	Problems in History <sup>2</sup>	3	HIST 3349	The Constitution of the United States	3
<b>Code</b>	<b>Title</b>	<b>Hours</b>	HIST 3352	Western America	3
<b>GROUP B - EUROPEAN HISTORY</b>			HIST 3353	The U.S. - Mexico Border and its Communities: A History	3
HIST 3310	History of Europe, 1815-1919	3			
HIST 3311	History of Europe Since 1919	3			
HIST 3312	Renaissance and Reformation	3			

HIST 3357	History of U.S. Foreign Relations	3
HIST 3359	African American History	3
HIST 3363	Colonial North America to 1763	3
HIST 3365	US Early Republic, 1788-1828	3
HIST 3366	Introduction to Public History	3
HIST 3368B	Law and Society in Early America	3
HIST 3368E	United States Westward Expansionism, 1776-1861	3
HIST 3368H	LBJ's America	3
HIST 3368J	The Space Race	3
HIST 3368K	Topics in American Cultural History	3
HIST 3368L	History of Mexican American Music in the Southwest	3
HIST 3368M	Popular Music and Social Movements in 20th Century America	3
HIST 3368P	The U.S. and Britain in the Sixties <sup>1</sup>	3
HIST 3368S	History of Music and Race in the American South	3
HIST 3368T	American Songbook	3
HIST 3368U	U.S. - Cuban Relations <sup>1</sup>	3
HIST 3368X	Organization of the Modern American State	3
HIST 3368Y	Walking in the Way of Peace, War & Slavery: Quakers in American History	3
HIST 3371A	Conflict and Creativity in U.S. Urban and Suburban History	3
HIST 3371B	Health and Illness in American History	3
HIST 3371C	History Behind the Headlines: Current Debates in a Historical Perspective	3
HIST 3372	Texas History: A Survey	3
HIST 3373C	The History of Rural Women	3
HIST 3373D	History of American Feminisms, 1960-2020	3
HIST 3374A	History of Christianity 1300-1700	3
HIST 3375A	Topics in Working Class History	3
HIST 3376	American Religious History	3
HIST 3377	History of Country Music	3
HIST 3378	History of the Blues	3
HIST 3379	History of Rock and Roll	3
HIST 3380	The Desegregation of the South from 1944-1970	3
HIST 3381	Democracy and Education	3
HIST 3382	Immigration and US History	3
HIST 4352	Black Women and Black Protest in America	3
HIST 4360	History of the United States, 1945 to 1968	3
HIST 4361	History of the United States, 1968 to the Present	3
HIST 4362	Peace and Nonviolence Movements <sup>1</sup>	3
HIST 4364	Military History of the United States	3
HIST 4365	Age of Revolution in North America, 1763-1789	3
HIST 4367	US Antebellum Era, 1812-1861	3
HIST 4368	War and Society <sup>1</sup>	3
HIST 4369	Introduction to Ethnohistory <sup>1</sup>	3
HIST 4371	Introduction to American Indian History	3
HIST 4372	Latina/o/x Histories	3
HIST 4373	Economic and Social History of the Americas <sup>1</sup>	3
HIST 4374A	History of American Sexualities	3
HIST 4375A	Critical Issues in Texas History	3
HIST 4375B	African-American Experience in Texas	3

HIST 4376	The History of Texas Music	3
HIST 4377	Social Justice and Reform Movements in the United States	3
HIST 4388	Problems in History <sup>2</sup>	3

<sup>1</sup> Course is listed in multiple groups based on content from a variety of regions; however, such courses may only apply to one group upon completion.

<sup>2</sup> HIST 4388 is an independent study and may be applied to Group A, B, or C depending on content.

## Minimum required: 129 semester credit hours

### Admission Requirement

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. The History courses HIST 2327, HIST 2328, HIST 2381, and HIST 2382 are not allowed for History major credit. Those History courses are for general education core curriculum credit only.
3. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses and a minor.
4. Nine hours of writing intensive (WI) courses are required for graduation, which can be completed by courses in the major, minor, or general education core curriculum (not including ENG 1310, ENG 1320).
5. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
6. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
7. [The Texas Education Agency \(TEA\) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: \[https://tea.texas.gov/Texas\\\_Educators/Investigations/Preliminary\\\_Criminal\\\_History\\\_Evaluation-FAQs/\]\(https://tea.texas.gov/Texas\_Educators/Investigations/Preliminary\_Criminal\_History\_Evaluation-FAQs/\).](#)
8. This major is designed to prepare students for secondary teacher certification in History and a second teaching field. Students must complete all requirements associated with an approved second teaching field.
9. This major requires 33 History hours including the following History courses:



Code	Title	Hours
HIST 1310	History of the United States to 1877	3
HIST 1320	History of the United States, 1877 to Date	3
HIST 2311	History of World Civilization to the 17th Century	3
HIST 2312	History of World Civilization from the 17th Century	3
HIST 3372	Texas History: A Survey	3
HIST 4380	Historical Resources and Practices	3
Advanced History electives <sup>3</sup>		15
<b>Total Hours</b>		<b>33</b>

10. In addition to the major, minor, and second field requirements, students must also complete 21 hours of professional sequence courses under the College of Education. All coursework must be completed prior to EDST 4681.
11. To satisfy graduation requirements for teacher certification, students must have at least a 2.75 Overall GPA. A GPA of at least 2.50 in all assigned courses in the professional sequence with no grade below a "C".
12. For transfer students, 21 semester credit hours in History (for the teacher certification track) may be transferred from a Texas public institution of higher education for the History Field of Study and be applied to the Bachelor of Arts degree with a major in History at Texas State University. More information about the [Field of Study \(http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/\)](http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
HIST 1310	History of the United States to 1877	3
TCCN: HIST 1301		
HIST 1320	History of the United States, 1877 to Date	3
TCCN: HIST 1302		
HIST 2311	History of World Civilization to the 17th Century	3
TCCN: HIST 2321		
HIST 2312	History of World Civilization from the 17th Century	3
TCCN: HIST 2322		
HIST ELNA		3
TCCN: HIST 2301		
CI 4332	Secondary Teaching: Curriculum and Technology	3
TCCN: EDUC 1301		
CI 3325	Adolescents and Society	3
TCCN: EDUC 2301		
<b>Total Hours</b>		<b>21</b>

## Course Requirements

### Freshman

First Hours Semester	Second Hours Semester	
ENG 1310 (Communication Component Code 010) <sup>1</sup>	3 ENG 1320 (Communication Component Code 010) <sup>1</sup>	3
US 1100	1 Modern Language 1420	4
POSI 2310 (Government/ Political Science Component Code 070)	3 American History Component Code 060	3
Modern Language 1410	4 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040) <sup>1</sup>	3
Mathematics Component Code 020	3 POSI 2320 (Government/ Political Science Component Code 070)	3
<b>14</b>		<b>16</b>

### Sophomore

First Hours Semester	Second Hours Semester	
COMM 1310 (Component Area Option Code 090/091) <sup>2</sup>	3 BA ENG Literature	3
ENG Literature (Component Area Option Code 090/094)	3 Modern Language 2320	3
Modern Language 2310	3 HIST 2311	3
Social and Behavioral Sciences Component Code 080	3 Life and Physical Sciences Component Code 030	3

American History Component Code 060	3 Second Teaching Field	3	
	15	15	
			Junior
<b>First Hours Semester</b>	<b>Second Hours Semester</b>		
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050)	3 BA Computer Science, Logic, Mathematics or science	3-4	
Second Teaching Field	3 CI 4332	3	
HIST 2312	3 HIST Advanced Group Electives <sup>3</sup>	6	
HIST 3372	3 Second Teaching Field	3	
Life and Physical Sciences Component Code 030	3		
	15	15	
			Senior
<b>First Hours Semester</b>	<b>Second Hours Semester</b>	<b>Third Hours Semester</b>	
HIST Advanced Group Electives <sup>3</sup>	6 HIST 4380	3 EDST 4681	6
Second Teaching Field	9 HIST Advanced Group Elective <sup>3</sup>	3	
CI 3325	3 CI 4370	3	
	CI 4343	3	
	RDG 3323	3	
	18	15	6

**Total Hours: 129**

<sup>1</sup> Must be completed with a grade of "C" or higher.

<sup>2</sup> Must be completed with a grade of "B" or higher. If the grade is lower than a "B", then an interview will need to be scheduled with the Office of Educator Preparation (OEP)

<sup>3</sup> Students are required to take one course from Group A (World History), one course from Group B (European History), two courses from Group C (U.S. History), and one course from either Group A or B. Course

allowable for credit in more than one group. Such courses may not be taken to satisfy more than one group.

## HIST Advanced Group Electives

Code	Title	Hours
<b>GROUP A - WORLD HISTORY</b>		
HIST 3319	History of Brazil	3
HIST 3320	History of Mexico	3
HIST 3322	Colonial History of Latin America to 1828	3
HIST 3324	Latin America from Independence to Present	3
HIST 3325F		3
HIST 3325G	Modern Revolutions in Latin American History	3
HIST 3326	The Southern Cone of Latin America	3
HIST 3327	History of Mexico to 1848	3
HIST 3329	Spanish Borderlands, 1521-1821 <sup>1</sup>	3
HIST 3368F	<sup>1</sup>	3
HIST 3368N	<sup>1</sup>	3
HIST 3368U	U.S. - Cuban Relations <sup>1</sup>	3
HIST 4318G	<sup>1</sup>	3
HIST 4318S	Britain and the World <sup>1</sup>	3
HIST 4325	Islamic History to 1798	3
HIST 4326	The Modern Middle East	3
HIST 4327	The Problem of Palestine	3
HIST 4328	History of India	3
HIST 4333	The History of Russia and Eurasia to 1917 <sup>1</sup>	3
HIST 4343	Modern China, 1600-Present	3
HIST 4344	Modern Japan, 1600-Present	3
HIST 4346	Modern Korea	3
HIST 4347	Hong Kong in the Modern World	3
HIST 4348	Mahatma Gandhi and Nonviolence	3
HIST 4350A	Slavery and Emancipation in the Americas	3
HIST 4350B		3
HIST 4350D	Empire and Identity in Central Asia	3
HIST 4350E	Gender in Latin American History	3
HIST 4350F		3
HIST 4350J		3
HIST 4350K	Gender & Militarization in the Arab World	3
HIST 4350L	History of Southeast Asia	3
HIST 4350N		3
HIST 4350O		3
HIST 4350P		3
HIST 4350R	Workers and Work in the Arab World	3
HIST 4350S	<sup>1</sup>	3
HIST 4350V	History of Pakistan <sup>1</sup>	3
HIST 4350W	<sup>1</sup>	3
HIST 4368	War and Society <sup>1</sup>	3
HIST 4369	Introduction to Ethnohistory <sup>1</sup>	3
HIST 4373	Economic and Social History of the Americas <sup>1</sup>	3
HIST 4388	Problems in History	3

Code	Title	Hours
<b>GROUP B - EUROPEAN HISTORY</b>		
HIST 3310	History of Europe, 1815-1919	3

HIST 3311	History of Europe Since 1919	3
HIST 3312	Renaissance and Reformation	3
HIST 3313	Europe During the Old Regime, 1600-1760	3
HIST 3314	Revolutionary Europe, 1760-1815	3
HIST 3315	History of England to 1603	3
HIST 3316	History of England Since 1603	3
HIST 3368B	Law and Society in Early America <sup>1</sup>	3
HIST 4303		3
HIST 4304	Ancient Rome and the Mediterranean 500 B.C. to 500 A.D.	3
HIST 4307	Medieval European History, 300-1400	3
HIST 4317	Tudor-Stuart England, 1485-1689	3
HIST 4318A		3
HIST 4318G		3
HIST 4318O		3
HIST 4318P		3
HIST 4318Q		3
HIST 4318R		3
HIST 4318S	Britain and the World <sup>1</sup>	3
HIST 4318T	<sup>1</sup>	3
HIST 4318U	Topics in Industrial Britain <sup>1</sup>	3
HIST 4320	Origins of Christianity	3
HIST 4333	The History of Russia and Eurasia to 1917	3
HIST 4334	The History of Russia and Eurasia from 1917 to Present	3
HIST 4336	Germany from 1815 to Present	3
HIST 4337	Germany and National Socialism, 1918-1945	3
HIST 4350P	<sup>1</sup>	3
HIST 4350S	<sup>1</sup>	3
HIST 4350W	<sup>1</sup>	3
HIST 4368	War and Society	3
HIST 4388	Problems in History	3

Code	Title	Hours
<b>GROUP C - U.S. HISTORY</b>		
HIST 3329	Spanish Borderlands, 1521-1821 <sup>1</sup>	3
HIST 3340	History of the United States, 1877-1914	3
HIST 3341	History of the United States, 1914-1945	3
HIST 3342	Social and Intellectual History of the United States, 1607-1865	3
HIST 3343	Social and Intellectual History of the United States Since 1865	3
HIST 3346	The Civil War and Reconstruction	3
HIST 3349	The Constitution of the United States	3
HIST 3352	Western America	3
HIST 3353	The U.S. - Mexico Border and its Communities: A History	3
HIST 3357	History of U.S. Foreign Relations	3
HIST 3359	African American History	3
HIST 3363	Colonial North America to 1763	3
HIST 3365	US Early Republic, 1788-1828	3
HIST 3368A		3
HIST 3368B	Law and Society in Early America	3

HIST 3368E	United States Westward Expansionism, 1776-1861	3
HIST 3368F		3
HIST 3368H	LBJ's America	3
HIST 3368J	The Space Race	3
HIST 3368K	Topics in American Cultural History	3
HIST 3368L	History of Mexican American Music in the Southwest	3
HIST 3368M	Popular Music and Social Movements in 20th Century America	3
HIST 3368N		3
HIST 3368O		3
HIST 3368P	The U.S. and Britain in the Sixties	3
HIST 3368R		3
HIST 3368S	History of Music and Race in the American South	3
HIST 3368T	American Songbook	3
HIST 3368U	U.S. - Cuban Relations <sup>1</sup>	3
HIST 3368X	Organization of the Modern American State <sup>1</sup>	3
HIST 3369Y		3
HIST 3369Z		3
HIST 3371A	Conflict and Creativity in U.S. Urban and Suburban History <sup>1</sup>	3
HIST 3372	Texas History: A Survey	3
HIST 3373A		3
HIST 3373B		3
HIST 3373C	The History of Rural Women	3
HIST 3375A	Topics in Working Class History	3
HIST 3377	History of Country Music	3
HIST 3378	History of the Blues	3
HIST 3380	The Desegregation of the South from 1944-1970	3
HIST 3381	Democracy and Education	3
HIST 4350W		3
HIST 4360	History of the United States, 1945 to 1968	3
HIST 4361	History of the United States, 1968 to the Present	3
HIST 4364	Military History of the United States	3
HIST 4365	Age of Revolution in North America, 1763-1789	3
HIST 4367	US Antebellum Era, 1812-1861	3
HIST 4368	War and Society <sup>1</sup>	3
HIST 4369	Introduction to Ethnohistory <sup>1</sup>	3
HIST 4371	Introduction to American Indian History	3
HIST 4372	Latina/o/x Histories	3
HIST 4373	Economic and Social History of the Americas <sup>1</sup>	3
HIST 4375A	Critical Issues in Texas History	3
HIST 4375B	African-American Experience in Texas	3
HIST 4376	The History of Texas Music	3
HIST 4388	Problems in History	3

Code	Title	Hours
<b>GROUP D - HISTORY CAPSTONE AND TEACHER CERTIFICATION PREPARATION</b>		
HIST 4380	Historical Resources and Practices	3
HIST 4399	Senior Seminar	3

The minor in History requires 24 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
HIST 1310	History of the United States to 1877	3
HIST 1320	History of the United States, 1877 to Date	3
HIST 2310	Western Civilization to 1715	3
or HIST 2311	History of World Civilization to the 17th Century	
HIST 2320	Western Civilization, 1715 to Date	3
or HIST 2312	History of World Civilization from the 17th Century	
<b>Electives</b>		
Choose 12 hours of advanced History courses <sup>1</sup>		12
<b>Total Hours</b>		<b>24</b>

<sup>1</sup> In choosing advanced electives, students are required to complete one course from Group A (World History), one course from Group B (European History), one course from Group C (U.S. History), and one additional course from any Group.

The minor in Peace and Social Justice Studies requires 18 semester credit hours. This minor is an interdisciplinary minor in that focuses on practical questions of how to realize peace and justice in the everyday world. It is designed to provide students with a historical perspective on injustice and corresponding movements for social justice and on the philosophy and methods of nonviolent protest and conflict resolution. It cultivates the knowledge and skills necessary to build peace with justice locally, at the family and community level, while also preparing students for a wide range of occupations in governmental and nongovernmental organizations that focus on diplomatic problem-solving and mediation of disputes.

Code	Title	Hours
<b>Required Course</b>		
HIST 4362	Peace and Nonviolence Movements	3
or HON 2304C	Nonviolence and Sustainable Social Change	
or PHIL 4360C	Philosophy, Nonviolence, Sustainability, and Social Change	
<b>Prescribed Electives</b>		
Choose 15 hours from the following:		15
BLAW 4382A		
CJ 3322	Race, Ethnicity and Criminal Justice	
COMM 3316F	Rhetoric, Race, and Memory	
COMM 3325	Communication and Conflict Management	
COMM 4345	Political Communication	
GEO 3310	Urban Geography	
GEO 3340	Political Geography	
GEO 3353	American Ethnic Geography	
GEO 4309	Cultural and Political Ecology	
HIST 3317	U.S. Women's History to 1877	
HIST 3318	U.S. Women's History since 1877	
HIST 3325G	Modern Revolutions in Latin American History	
HIST 3359	African American History	
HIST 3368M	Popular Music and Social Movements in 20th Century America	
HIST 3375A	Topics in Working Class History	
HIST 3380	The Desegregation of the South from 1944-1970	
HIST 3381	Democracy and Education	

HIST 3382	Immigration and US History	
HIST 4348	Mahatma Gandhi and Nonviolence	
HIST 4352	Black Women and Black Protest in America	
HIST 4373	Economic and Social History of the Americas	
HIST 4377	Social Justice and Reform Movements in the United States	
HON 2304C	Nonviolence and Sustainable Social Change	
HON 2306C	America in the 1960s: A History of Movements and Ideas	
PHIL 4360C	Philosophy, Nonviolence, Sustainability, and Social Change	
SOCI 3322	Sociology of Latinos and Immigration	
SOCI 3327	Sociology of Racial and Ethnic Relations	
SOCI 3330	Globalization and Development	
SOCI 3331	Social Movements	
SOCI 3365	Society and Environment	
SOWK 4302	Hip Hop and Social Justice for Individual and Community Change	
SOWK 4310	Diversity and Social Justice in Social Work	
Total Hours		18

For students who are seeking a teacher certification within their major and would like a second teaching field in History, the requirements are:

Code	Title	Hours
HIST 1310	History of the United States to 1877	3
HIST 1320	History of the United States, 1877 to Date	3
HIST 2311	History of World Civilization to the 17th Century	3
HIST 2312	History of World Civilization from the 17th Century	3
HIST 3372	Texas History: A Survey	3
HIST 4380	Historical Resources and Practices	3
Select one from Group A (World History)		3
Select one from Group B (European History)		3
Select one from Group C (U.S. History)		3
<b>Total Hours</b>		<b>27</b>

All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

Comal Building Room 102  
T: 512.245.2285 F: 512.245.8335  
[www.txstate.edu/philosophy](http://www.txstate.edu/philosophy) (<http://www.txstate.edu/philosophy/>)

The two disciplines that have a home in this department, Philosophy & Religious Studies, raise some of the most fundamental questions about our world and ourselves-questions about the nature of reality, knowledge, morality, God, and society. Students study the thinking of major scholars on such matters and learn to think critically and clearly on

their own. Our small classes cultivate student-faculty mentoring, research and learning. Our faculty - professional philosophers and scholars of religion, authors and leaders in the field - work one-on-one with students, encouraging independent research and professional preparation. And our co-curricular activities and organizations build strong rapport and camaraderie between our students, most notably by participation in dialogue. By fostering a love of learning, an appreciation of the value of critical and reflective thinking, and a collaborative intellectual community; we help prepare our students to become engaged, reflective citizens and lifelong learners while preparing them for graduate study or careers in government, law, the non-profit sector, business, or education.

The Department of Philosophy serves our majors and minors by providing an intensive and flexible course of study through which they rigorously engage in reflection and dialogue, logical analysis, conceptual interpretation, and develop and critique texts, arguments, and ideas. We help them develop a broad competence in critical thinking and analysis of arguments. Philosophy and Religious Studies students pursue the study and understanding of many different positions and perspectives, and are encouraged to consider the relevance of their course of study for their post-graduate plans.

Since philosophy is the home of the study of logic and the principles of good argumentation, it lends itself well to being joined with virtually any course of study as a second major or a minor. Philosophy students are highly valued for their communication skills, their ability to make ethical decisions and their adaptability in new situations. Through the study of philosophy, we learn how to explain why we know what we know and believe what we believe. Not only does this ability make us stand out as citizens and leaders, it also helps us navigate life's choices and better understand our world.

Religion intersects with all areas of culture including politics, science, economics, and law. This intersection of religion and culture is reflected in a wide variety of careers pursued by Religious Studies graduates across the spectrum of cultural work, human services, education, and the arts, such as hospital chaplaincies, secondary education, legal support work, and journalism. Furthermore, the conditions of globalization mean that there will be increasing demand for job candidates who can negotiate culturally diverse work environments. Knowledge of the world's religions is needed in business, law, health, law enforcement, and politics both national and international. Religious literacy is essential to responsible citizenship, and increasingly demanded by employers.

Our graduates have pursued careers in business, journalism, law, medicine, education, public safety, and the arts. In these cases, our former students realize that the successful practitioner is a good thinker, a clear communicator, and a culturally aware and morally responsible person. The courses of study offered in this department offer opportunities for all students to develop their critical and creative powers. Some of our students develop an interest in becoming professional philosophers or scholars of religion, and enroll in some of the nation's best graduate programs in philosophy or religious studies.

For those students with special interests in a particular area, the department offers the following recommendations:

## Pre-Professional Study of Philosophy

Students interested in pursuing graduate work in philosophy are advised to complete the B.A. with a major in Philosophy and to take:

Code	Title	Hours
PHIL 3320	Ethics	3
PHIL 3340	Philosophical Logic	3
PHIL 4356	Philosophy of Knowledge	3
PHIL 4370	Metaphysics	3

Students with a primary interest in Western thought should also develop a language proficiency in Spanish, French or German. Those interested in Asian philosophy are advised to study Japanese or Chinese, and those who wish to pursue Medieval or Islamic thought should study Arabic.

## Pre-Law and the Study of Philosophy

Pre-law students frequently pursue an undergraduate major in philosophy, often as a second major. Given the importance that both philosophy and law attach to analysis, argumentation, and the evaluation of evidence, adding a major in philosophy serves students well as they prepare and complete entrance exams and interviews, and also in the study and practice of law. Pre-law students should also consider taking the following courses:

Code	Title	Hours
PHIL 2330	Elementary Logic	3
PHIL 3320	Ethics	3
PHIL 3322	Professional Ethics	3
PHIL 3331	Philosophy of Law	3
PHIL 3332	Social and Political Philosophy	3

## Pre-Med, Pre-Dental and Professional Preparation for a Career in the Health Professions:

Students interested in a career in medicine or healthcare are advised to complete the minor in Medical Humanities.

## Pre-Professional Study in Religious Studies for A Career In Healthcare Chaplaincy:

Students interested in pursuing a career in Healthcare Chaplaincy are advised to complete the B.A. with a major in Religious Studies and to take:

Code	Title	Hours
Required Courses		
REL 1300	World Religions	3
REL 2330	What is Religion?	3
REL 4300	Advanced Methods in Religious Studies	3
Prescribed Electives		
Group A: REL 3386		
Group B: REL 2315		
Group C: REL 2360		
Group D: PHIL 3317		
Group E: REL 3390; PHIL 3324; REL 4388		
Electives: PHIL 4327; ANTH 3325; ANTH 3311; GEO 3351; SOCI 3363		
Recommended Minors: Aging and the Life Course, Anthropology, Health Communication, Medical Humanities, or Philosophy.		



## Pre-Professional Study in Religious Studies for A Career In Cultural Services:

Students interested in pursuing a career in Cultural Services are advised to complete the B.A. with a major in Religious Studies and to take:

Code	Title	Hours
Required Courses		
REL 1300	World Religions	3
REL 2330	What is Religion?	3
REL 4300	Advanced Methods in Religious Studies	3
Prescribed Electives		
Group A: REL 2360		
Group B: REL 2350		
Group C: REL 3342		
Group D: HIST 3374B; SOCI 3375P		
Group E: REL 3340; REL 3370; PHIL 3324; ARTH 4321X		
Electives: HIST 3368K		
Recommended Minors: African-American Studies, Art History, Dance, English, History, Latina/o Studies, Literature, Music, Theatre, or Writing		

## Pre-Professional Study for A Career in Communication About Religion:

Students interested in pursuing a career in Communication About Religion are advised to complete the B.A. with a major in Religious Studies and to take:

Code	Title	Hours
Required Courses		
REL 1300	World Religions	3
REL 2330	What is Religion?	3
REL 4300	Advanced Methods in Religious Studies	3
Prescribed Electives		
Group A: REL 2360		
Group B: REL 2350		
Group C: ANTH 3335		
Group D: REL 3361A; PS 4327		
Group E: PHIL 3317; REL 3340; REL 3330; REL 4388		
Electives: COMM 3318U; MC 3355		
Recommended Minors: Art History, Communication Studies, Journalism, Mass Communication, Media Studies, Theatre, or Writing		

## Bachelor of Arts (B.A.)

- Major in Philosophy (p. 585)
- Major in Religious Studies (p. 586)

## Minors

- Medical Humanities (p. 588)
- Philosophy (p. 588)
- Religious Studies (p. 588)
- Value Studies (p. 589)

Subjects in this department include: PHIL (p. 577), REL (p. 582)

## Courses in Philosophy (PHIL)

**PHIL 1305. Philosophy and Critical Thinking.**  
A study of universal philosophical problems and their solutions with a view toward developing clear thinking about knowledge, belief, and value. Approximately one half of this course will focus on the student's critical thinking skills. Credit cannot be given for both PHIL 1305 and PHIL 3301. (WI).  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Lang, Phil & Culture Core 040|Writing Intensive  
**Grade Mode:** Standard Letter  
**TCCN:** PHIL 1301

**PHIL 1320. Ethics and Society.**  
Study of ethics, its recent focus on social problems, and new fields of inquiry, including environmental ethics, ethics in business, professions, technology and sport. Also such global issues as poverty, minority rights, and stem cell research. Emphasis on development and application of principles of critical thinking and moral reasoning. (WI).  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Lang, Phil & Culture Core 040|Writing Intensive  
**Grade Mode:** Standard Letter  
**TCCN:** PHIL 2306

**PHIL 2311. History of Philosophy Before 1600.**  
Early Greek, Roman, and medieval systems of thought. (WI).  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Writing Intensive  
**Grade Mode:** Standard Letter  
**TCCN:** PHIL 2316

**PHIL 2312. History of Philosophy Since 1600.**  
Modern philosophical thought through the 19th century. (WI).  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Writing Intensive  
**Grade Mode:** Standard Letter  
**TCCN:** PHIL 2317

**PHIL 2330. Elementary Logic.**  
A study of the nature and forms of correct reasoning, both deductive and inductive.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter  
**TCCN:** PHIL 2303

**PHIL 3314. American Philosophy.**

Examination of contributions of Americans to perennial philosophical issues. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3315. Contemporary Philosophy.**

Selected readings in late 19th and 20th century philosophy: existentialism, positivism, analytic philosophy, phenomenology, and pragmatism. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3316. Existentialism and Phenomenology.**

A study of the nature of human experience and existence in the philosophies of Kierkegaard, Nietzsche, Husserl, Heidegger, Sartre, Merleau-Ponty, and Camus. Topics will include freedom, dread, emotion, death, other minds, faith, and the past as experienced by the individual. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3317. Science and Religion.**

An examination of modern science and religion, and an analysis of the issues and ideas involved in the relationships between them. (WI) (MULT) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3318. Reason, God, and Nature.**

This course is an analysis of the concept of God, terms predicated on God, and theological propositions. Topics include determining the nature of religious utterances and comparison of religious claims with those of everyday life, scientific discovery, morality, and imaginative expression. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3320. Ethics.**

This course is a study of classical and contemporary philosophical inquiries into our knowledge of the "good" and the grounds of moral obligation. (WI) Prerequisite: [PHIL 2311 or PHIL 2312] and PHIL 2330 both with grades of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3321. Contemporary Moral Problems.**

This course is an exploration of philosophical dimensions of contemporary moral problems such as abortion, euthanasia, poverty, animal rights, nuclear war, and privacy in a computer age. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3322. Professional Ethics.**

This course is a study of major topics in business and professional ethics, including what a profession is, whether it differs from business, and what is involved with the moral education, social responsibilities, and ethical standards of professionals and business people. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3323. Environmental Ethics.**

Study of ethical issues associated with the environment including nature, use, preservation, and restoration of the environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 3324. Meaning of Life.**

Investigation of major theories of the meaning of life in Western and Eastern philosophies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3325. Philosophy of Sex and Love.**

Critical survey of major thinking on sex and love from ancient to modern times. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3326. Philosophy and Sport.**

This course is an examination of philosophical issues in sport, including the social significance of sport, ethical issues, gender equity, sport and race, mind and body in sport, aesthetics, sport and self-knowledge, and the connection of sport and philosophy. (WI) (MULT) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3331. Philosophy of Law.**

This course is an examination of the major theses which have been set forth in the history of jurisprudence including foundations of law, natural law, legal positivism, and the judicial process. (WI) Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3332. Social and Political Philosophy.**

This course is a critical examination of major theories concerning the organization of societies and governments. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3333. Feminist Theory.**

In this course students examine major feminist theories including liberal feminism, Marxist feminism, radical feminism, and post-modernist feminism with an eye especially to revealing the complexity and diversity of contemporary feminist thought. (MULT) (WI). Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 or WS 3376 or WS 3377 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3334. Philosophy of Economics.**

In this course students are introduced to the various theoretical frameworks that have and continue to inform scholarship in philosophy of economics. Participants explore differences and commonalities between distinct theoretical traditions (including liberal, Marxist, post-structuralist, positivist, neo-liberal, rational choice) and learn to critically examine the nature of economic phenomena and the possibilities of knowledge in economics. Participants also develop tools to appraise economic outcomes, institutions, and processes. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3340. Philosophical Logic.**

Study of the logic of propositions through propositional calculi, formal proofs, and first-order functional calculi. Also included is an investigation into the philosophical assumptions and implications of formal systems and the axiomatic method as used in logic and mathematics, including the concepts of completeness and consistency. Prerequisite: PHIL 2330 or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 3351. Philosophy and Literature.**

The course explores the relation between philosophy and literature.

(WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4301. Applied Philosophy.**

This course explores the practical application of methods and teaching of philosophy to religion, science, morality, politics, art, or literature. The study of one or more of these areas will demonstrate how philosophy contributes to the identification of issues as well as their resolution.

(WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4302. Dialogue.**

Study of literature about the nature, purpose, and significance of dialogue along with active participation in the dialogues of the Department of Philosophy's Dialogue Series. (WI) Prerequisite: PHIL 1305 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4303. Philosophy of Technology.**

This course is a study of philosophical and ethical dimensions of technology including the nature of technology and technological progress, the relation of humans to the technological environment, whether technology is value-laden, and the social character of technology. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4304. Philosophy of Language.**

Students will examine the nature, structure, and uses of language and its role in conceptualizing and attempting to solve perennial philosophical problems. Features of language such as meaning, reference, truth, verification, and speech acts will be investigated and applied to issues of metaphysics and ontology, epistemology, ethics, and theory construction. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4327. Bioethics.**

In this course students will study ethical issues, dilemmas, codes of conduct, and social responsibilities of health care professionals and bioresearchers. Additionally, students will critically examine issues of ethics and justice in healthcare systems, clinical practice, and biotechnology. (WI) Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4350. Philosophy of the Arts.**

This course is a critical and historical analysis of the nature of aesthetic experience and creative genius. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4351. Philosophy of Education.**

Study of major philosophical theories on nature, values, and purpose of education. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4355. Philosophy of Science.**

This course is a study of the major theories concerning the nature and value of science and the scientific method. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4356. Philosophy of Knowledge.**

This course is a study of the major theories concerning knowledge, belief, certainty, and perception. (WI) Prerequisite: [PHIL 2311 or PHIL 2312] and PHIL 2330 both with grades of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4360A. Ethics and Dementia.**

This course provides an opportunity to examine ethical challenges posed by dementia for those with dementia, family members, caregivers, healthcare systems, policy makers, and others. Participants will critically explore ethics and dementia in clinical, social/cultural, everyday life, policy, end-of-life, and individual perspectives. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4360B. Moral Psychology.**

This course provides an introduction to the major theories, issues, and research relevant to the field of moral psychology. Drawing from a variety of fields—philosophy, social psychology, cognitive psychology, developmental psychology, and evolutionary theory—we will investigate what morality is, how it develops, and how it functions in society.

Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4360C. Philosophy, Nonviolence, Sustainability, and Social Change.**

In this course students will study themes and concepts related to nonviolence, sustainability, and social change. Participants will critically examine the works of thinkers such as Thoreau, Addams, Tolstoy, Gandhi, King, and Chavez. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4360D. Military Ethics.**

This course is a systematic study of ethical issues in military life and military action, and of such concerns as the relation of the military to the nation state and the relation of the military to civil society. Additional topics include ethical issues in cyber warfare, the military and privacy, and ethical issues of military life and actions across cultures and nations. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4360E. Ethics and Philosophy of Friendship.**

In this course students explore the nature, meaning, and theories of friendship. Participants examine historical and contemporary accounts of friendship, with special attention given to the ethical dimensions of each account. Additional topics include the intersection of friendship with marriage and partnership, professional relationships, work, disabilities, race, sexuality, and religion. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4360F. Biopolitics, Governmentality, and Ungovernability.**

This course is an introduction to (1) biopolitics, or the government of life, (2) governmentality, or the frameworks, modalities, and mechanisms of governance, and (3) ungovernability, or the limits of and resistances to governance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4361A. Philosophy of Biology.**

In this course students will explore foundational questions in biology concerning the justification of biological theories, methods and concepts. Possible topics include concepts of fitness, units of selection, adaptationism, species, phylogenetic inference, homology, developmental systems, neuroscience, behavioral evolution, cooperation, altruism, evolutionary psychology, evolutionary ethics, cultural evolution, and race and gender. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4361B. Philosophy of the Human Sciences.**

This course is a survey of current debates about the structure, nature, role, methodologies, scope, and aim of the human sciences. Prerequisite: Phil 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4361C. Philosophy of Emotion.**

In this course students examine the understandings of emotions as developed in the history of philosophy, including topics such as somatic theories, cognitive theories, and philosophical accounts of feelings, mood, and other affective experiences. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4361D. Philosophy of Mind.**

In this course, students analyze historical and contemporary philosophical attempts to explain the mind. Prerequisite: PHIL 1305 or PHIL 1320 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4361E. Philosophy and Ethics of Virtual Reality.**

In this course, students investigate philosophical and ethical issues in virtual reality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4361F. Ethics of Artificial Intelligence and Big Data.**

In this course, students will explore ethical dimensions of Artificial Intelligence and Big Data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4362A. History of Analytic Philosophy.**

Students in this course will examine major thinkers, works, theories, and problems of analytic philosophy. Topics will include the philosophy of language, logic, philosophy of mathematics, philosophy of mind, philosophy of science, metaphysics, epistemology, ethics, metaethics, and philosophical methodology. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter



**PHIL 4362B. 19th-Century Philosophy.**

This course offers a detailed introduction to central figures of 19th-century European philosophy such as Hegel, Marx, Kierkegaard, and Nietzsche in the context of their responses to the Enlightenment, the condition of modernity, the growth of democracy, nationalism, capitalism, Darwin, secularization, and the critical project of Kant. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4362C. Late 20th Century French Philosophy.**

This course offers a detailed introduction to central figures of 20th-century French philosophy such as Derrida, Foucault, Bergson, and Sartre in the context of their responses to technology, war, the condition of modernity, the growth of democracy and the so-called European Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4363A. Philosophy and Science Fiction.**

In this course students will examine intersections between philosophy and science fiction around topics such as the nature of reality, the existence and nature of the divine, the limits of human knowledge, the meaning of free will, the notions of personhood, the nature of morality, and the meaning of life. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4370. Metaphysics.**

This course is a systematic study of metaphysical problems by examination of classical and modern texts. Topics considered will involve being and unity, mind and matter, God, causation and necessity, free will and determinism. (WI) Prerequisite: [PHIL 2311 or PHIL 2312] and PHIL 2330 both with grades of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4371. Asian Philosophy.**

The course covers mainly Chinese and Indian philosophy, such as Confucianism, Taoism, Buddhism. How do people in the orient look at the meanings of life, the nature of the world and their place in the world? This course shall shed light on these issues. May be repeated for credit. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4372. Latin American Philosophy.**

Study of ancient Latin American thought, including Mayan, Aztec, Toltec, and Incan, pre- and post conquest Latin American philosophy, contemporary Latin American philosophy, and the thinking of Latin Americans in the U.S. (WI) (MULT) Prerequisite: PHIL 1305 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4373. Themes in Africana Philosophy.**

In this course students will examine philosophy and philosophical practice as it emerges from the historical experiences of African Americans and the African Diaspora. Participants in the course will evaluate how the African-American philosophical tradition alters conventional philosophical accounts of subjectivity, knowledge, time, language, history, embodiment, memory, and justice. (WI) (MULT) Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4388. Problems in Philosophy.**

Independent study of specific problems in philosophy. Open to students on an individual or small group basis by arrangement with the Department of Philosophy. Problem area, bibliography, and study paper outline are to be approved by the instructor. May be repeated once for additional credit. Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Courses in Religion (REL)

**REL 1300. World Religions.**

This course is a survey and comparative study of some of the major religious traditions and practices of the world including Judaism, Christianity, Islam, Hinduism, Buddhism, Taoism, Confucianism, and the Indigenous Religions. Students learn to analyze problems from different perspectives, and gain skills useful for working with diverse populations. Recommended as an entry course for religious studies minors. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** PHIL 1304

**REL 2310. Introduction to the Hebrew Bible.**

An introduction to the contemporary academic study of the Hebrew Bible ("Old Testament") and related Near Eastern and Second Temple Jewish literature. Representative texts will be examined using the historical and literary methods of scholarship. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**REL 2315. Introduction to the New Testament.**

An introduction to the contemporary academic study of the New Testament, including apocryphal and post-canonical works. Representative texts will be examined using the historical and literary methods of scholarship.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REL 2321. Founders, Prophets and Saints.**

Critical analysis of the life, works, and thought of a major religious figure, e.g., Jesus, Paul, Luther, St. Teresa, Maimonides, the Baal Shem Tov, Mohammad, al-Ghazzali, Rumi, Buddha, Gandhi. May be repeated for credit. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**REL 2330. What is Religion?.**

In this course, students examine different theories and claims about what religion is and does. Participants examine competing views and approaches to see what is persuasive. Students are introduced to methodologies in religious studies, learn to analyze problems from different perspectives, develop critical thinking competencies, and gain skills useful for working with diverse populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REL 2350. Mediterranean and European Religions.**

This course is a survey of religions that originated in the Near East, Mediterranean, and Europe, with emphasis on the ancient to medieval periods. The course includes Judaism, Christianity, and Islam, in the contexts of Egyptian, Persian, Greco-Roman, and old European traditions. Students learn to analyze problems from different perspectives, and gain skills useful for working with diverse populations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**REL 2360. Asian Religious Traditions.**

This course is a survey of the major religious traditions originating in Asia: Hinduism, Buddhism, Taoism, and others. Basic doctrines and practices will be covered in an historical framework. Students learn to analyze problems from different perspectives, and gain skills useful for working with diverse populations. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**REL 3320. Judaism.**

This course surveys the history, practices, core texts, and major movements of Rabbinic Judaism, from the destruction of the Second Temple to the contemporary global scene. Some attention is also given to earlier Israelite religion, dissident movements, mysticism, and Jewish communities beyond the Euro-American zone.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REL 3330. Religious Controversy in America.**

Students in this course analyze religious controversies and crises in America from the colonies to the present in order to interpret the role of religion in American history, culture, law, and politics. Topics include the Salem Witch Trials, the Jim Jones massacre, and Ten Commandments monuments on government property. Students develop communication competencies and learn to critically interpret data (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REL 3335. Cults and New Religious Movements.**

This course investigates New Religious Movements (NRMs) primarily within the contemporary American context. Controversial and emerging religions can be approached from many angles. Accordingly, the course introduces students to a variety of theoretical perspectives and approaches for studying NRMs. Students are encouraged to develop communication competencies and to learn to critically interpret data (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REL 3340. Religion, Literature, and the Arts.**

The course features a thematic selection of literary and artistic works in order to examine the connections and disconnections between the aesthetic and religious aspects of human culture. Students develop communication competencies. May be taken twice for credit with different topics. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**REL 3342. The Homeric Epic: The Iliad and the Odyssey.**

A close reading of the Iliad and the Odyssey in English translation, with emphasis on philosophical and religious issues. Prominent topics include the gods, religious rituals, heroic ethics, and the human condition. The course also considers the concept of a classic in religion and literature. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive  
**Grade Mode:** Standard Letter

**REL 3361A. Religion and Film.**

This course examines how religions are reflected in film and how films have taken on some of the functions of religion. Students develop communication competencies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive  
**Grade Mode:** Standard Letter

**REL 3361B. Mysticism.**

This course explores the dimension of mysticism that pervades both Western and Eastern religious traditions. We will analyze the nature of mystical experiences through a study of key figures and texts, and examine its peculiar relationship to language, arts, and human subjectivity and its place in the wider social context. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive  
**Grade Mode:** Standard Letter

**REL 3361C. Philosophical Issues in Judaism, Christianity, and Islam.**

This course provides a comparative perspective on philosophical issues that arise in Judaism, Christianity, and Islam, including the nature of God, reason and revelation, and religious ethics. Readings are drawn from both classical and contemporary sources. Students learn to analyze problems from different perspectives, develop critical thinking competencies, and gain skills useful for working with diverse populations. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive  
**Grade Mode:** Standard Letter

**REL 3370. Mythology and Cosmology.**

This course examines human efforts to address questions of cosmic origins, with a global, comparative survey of cosmogonic (creation) myths and a historical approach to modern cosmology. It examines the features and functions of mythopoetic and scientific thought, and reflects philosophically on questions of origin and meaning. Students gain skills useful for working with diverse populations and learn to analyze problems from different perspectives. May be taken twice for credit with different topics. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content  
**Grade Mode:** Standard Letter

**REL 3372. Apocalypticism.**

An historical-cultural survey of end-of-the-world literature, art, and thought in Western Civilization, from ancient Judaism and Christianity to the present. Historical and scientific methods provide the framework for this course. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive  
**Grade Mode:** Standard Letter

**REL 3381. The Philosophical and Spiritual Heritage of India.**

Indian philosophers predominantly present a spiritual, multi-dimensional outlook on the nature of reality and human consciousness; they combine reason, experience, yoga and meditation as methods of inquiry. This course explores Indian spiritual philosophy from the time of the ancient Vedas to the contribution of modern sages. Students gain skills useful for working with diverse populations. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive  
**Grade Mode:** Standard Letter

**REL 3383. An Introduction to Chinese Religions.**

This course examines the religious history of China from 3000 BCE to the present-day. It covers beliefs, practices, and histories of the four major religious communities in China—Buddhism, Daoism, Confucianism, and “Popular Religion”—as well as expressions of minority religions in China such as Islam and Christianity. Students gain skills useful for working with diverse populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive  
**Grade Mode:** Standard Letter

**REL 3385. Buddhism.**

This course surveys the main ideas, myths, symbols and practices of the diverse forms of Buddhism. Students explore and evaluate the manner in which Buddhist perspectives have influenced social values and arts in the South East and East Asian cultures. Students gain skills useful for working with diverse populations. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive  
**Grade Mode:** Standard Letter

**REL 3386. Yoga: Principles and Practice.**

This course is an in-depth study of the principles and the practice of yoga. Students explore the yogic conception of the mind and the body and how it relates to psychoanalytic and neuroscientific frameworks. Students also examine the parallels between the discipline of yoga and practices in other religious traditions. Students gain skills useful for working with diverse populations and learn to analyze problems from different perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive  
**Grade Mode:** Standard Letter

**REL 3390. Religion, Health, and Embodiment.**

This course is a survey of religious beliefs and practices relevant to embodiment, health, disease, disability, aging, and death. The approach is comparative, with non-exclusive emphasis on Jewish and Christian primary material. Students develop critical thinking and communication competencies, and gain skills useful for working with diverse populations. Prerequisite: [PHIL 1305 or PHIL 1320] and REL 1300 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REL 4300. Advanced Methods in Religious Studies.**

This course provides a rigorous grounding in the intellectual tradition of academic religious studies. It includes the major theorists and a sustained examination of the problem of method. This course is strongly urged for RS minors and students intending graduate work in the field. Prerequisite: ANTH 3305 or ANTH 3322 or ANTH 3326 or ANTH 3332 or ANTH 3349 or ANTH 4320 or ARTH 2301 or ARTH 2302 or ENG 3329 or HIST 3312 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REL 4388. Issues in Religion.**

Independent study of specific topics in religion. Open to students on an individual or small group basis. May be repeated for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**Minimum required: 120  
semester credit hours**

**General Requirements**

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses and a minor.
3. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Nine hours of writing intensive (WI) courses are required for graduation.
6. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete

depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

7. The Bachelor of Arts (B.A.) degree with a major in Philosophy requires 30 hours including the following Philosophy courses:

Code	Title	Hours
PHIL 1305 or PHIL 1320	Philosophy and Critical Thinking Ethics and Society	3
PHIL 2311	History of Philosophy Before 1600	3
PHIL 2312	History of Philosophy Since 1600	3
PHIL 2330	Elementary Logic	3
PHIL 3320 or PHIL 3332 or PHIL 4350	Ethics Social and Political Philosophy Philosophy of the Arts	3
PHIL 4370 or PHIL 4355 or PHIL 4356	Metaphysics Philosophy of Science Philosophy of Knowledge	3
Advanced Philosophy Electives		12
<b>Total Hours</b>		<b>30</b>

8. Graduating seniors must submit a portfolio of their work and participate in an exit interview with the Philosophy faculty. Details about the portfolio are available in the Department's main office.

**Course Requirements**

		Freshman	
		First Semester Hours	Second Semester Hours
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	Modern Language 1420	4
US 1100	1	ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
Modern Language 1410	4	PHIL 2330 (BA Computer Science, Logic, Mathematics or science [TCCN PHIL 2303])	3
Life and Physical Sciences Component Code 030	3	Life and Physical Sciences Component Code 030	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3	COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
Elective	3		
		<b>17</b>	<b>16</b>

		Sophomore	
		First Semester Hours	Second Semester Hours
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
Modern Language 2310	3	PHIL 2312	3
Mathematics Component Code 020	3	ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3

PHIL 2311 (TCCN PHIL 2316)	3 Modern Language 2320	3
American History Component Code 060	3 American History Component Code 060	3
<b>15</b>		<b>15</b>

**Junior**

First Semester Hours		Second Semester Hours
PHIL Advanced Electives	3 PHIL 3320, 3332, or 4350	3
PHIL 4370, 4355, or 4356	3 Social and Behavioral Sciences Component Code 080	3
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3 Minor	6
Minor	3	
BA ENG Literature [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3	
<b>15</b>		<b>12</b>

**Senior**

First Semester Hours		Second Semester Hours
PHIL Advanced Electives	6 PHIL Advanced Electives	3
Electives (as needed)	6 Minor	6
Minor	3 Electives (as needed)	6
<b>15</b>		<b>15</b>

**Total Hours: 120**

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of mathematics, science, logic, or computer science courses, a minor, and six hours of 2000-level modern language courses. Most students will have to complete 1410 and 1420 as prerequisites before attempting 2310.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.
- The degree program requires 30 hours of major coursework, with at least 21 hours of coursework in REL courses and at least 18 of the 30 hours at the 3000 or 4000 level.
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete

depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

- Graduating seniors must submit a portfolio of their work and participate in an exit interview with the Religious Studies faculty. Details about the portfolio are available in the Department's main office.

## Course Requirements

**Freshman**

First Semester Hours		Second Semester Hours
Communication Component Code 010	3 Communication Component Code 010	3
Government/Political Science Component Code 070	3 Mathematics Component Code 020	3
Modern Language 1410	4 Language, Philosophy, and Culture Component Code 040	
REL 1300 (TCCN PHIL 1304)	3 Government/Political Science Component Code 070	3
US 1100	1 Modern Language 1420	4
	REL 2330	3
<b>14</b>		<b>16</b>

**Sophomore**

First Semester Hours		Second Semester Hours
Life and Physical Sciences Component Code 030	3 Life and Physical Sciences Component Code 030	3
American History Component Code 060	3 American History Component Code 060	3
Social and Behavioral Sciences Component Code 080	3 ENG 2310, 2320, 2330, 2340, 2359, 2360, or 2371 (Component Area Option Code 090/094 [TCCN ENGL 2322, 2323, 2332, 2333, 2327, or 2328])	3
Modern Language 2310	3 Modern Language 2320	3
Group A Elective	3 Group B Elective	3
<b>15</b>		<b>15</b>

**Junior**

First Semester Hours		Second Semester Hours
Creative Arts Component Code 050	3 BA Science, Math, Computer Science, or Logic	3
Component Area Option Code 090/091	3 Group D Elective	3
BA English Literature	3 Group E Elective	3
Group C Elective	3 Minor	6
Minor	3	
<b>15</b>		<b>15</b>

**Senior**

First Semester Hours		Second Semester Hours
REL 4300	3 Minor	6
Group E Electives	6 Electives (as needed)	9
Minor	3	



Elective (as needed)	3
<b>15</b>	<b>15</b>

Total Hours: 120

**Prescribed Electives**

Code	Title	Hours
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**GROUP A - ASIAN TRADITIONS**

REL 2360	Asian Religious Traditions	3
REL 3381	The Philosophical and Spiritual Heritage of India	3
REL 3383	An Introduction to Chinese Religions	3
REL 3385	Buddhism	3
REL 3386	Yoga: Principles and Practice	3

Code	Title	Hours
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**GROUP B - LEVANTINE AND EUROPEAN TRADITIONS**

HIST 3335	Spain of the Three Religions: Muslims, Christians, and Jews in Premodern Iberia	3
HIST 3374A	History of Christianity 1300-1700	3
HIST 4320	Origins of Christianity	3
HIST 4325	Islamic History to 1798	3
PS 4331	Islamic Law and Politics	3
REL 2310	Introduction to the Hebrew Bible	3
REL 2315	Introduction to the New Testament	3
REL 2350	Mediterranean and European Religions	3
REL 3320	Judaism	3
REL 3361C	Philosophical Issues in Judaism, Christianity, and Islam	3

Code	Title	Hours
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**GROUP C - PRE-MODERN TRADITIONS**

ANTH 3335	The Anthropology of Native American Belief Systems	3
ANTH 3349	The Incas	3
HIST 4320	Origins of Christianity	3
HIST 4325	Islamic History to 1798	3
REL 2310	Introduction to the Hebrew Bible	3
REL 2315	Introduction to the New Testament	3
REL 2350	Mediterranean and European Religions	3
REL 2360	Asian Religious Traditions	3
REL 3342	The Homeric Epic: The Illiad and the Odyssey	3
REL 3361C	Philosophical Issues in Judaism, Christianity, and Islam	3

Code	Title	Hours
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**GROUP D - MODERN TRADITIONS**

GEO 4393F	Geographies of the Holocaust and Genocide	3
HIST 4348	Mahatma Gandhi and Nonviolence	3
HON 3395S	Geographies of the Holocaust and Genocide	3
PHIL 3317	Science and Religion	3
PS 4313	The Holocaust	3
PS 4327	Religion and American Public Life	3
REL 3330	Religious Controversy in America	3
REL 3335	Cults and New Religious Movements	3

REL 3361A	Religion and Film	3
SOCI 3375P	Sociology of Religion: A Global Perspective	3

Code	Title	Hours
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**GROUP E - RELIGIOUS STUDIES**

ANTH 3305	Magic, Ritual and Religion	3
ANTH 3322	Peoples and Cultures of Africa	3
ANTH 3327	Anthropology of Religion and Fundamentalism	3
ANTH 3332	Myths and Moundbuilders	3
ANTH 3335	The Anthropology of Native American Belief Systems	3
ANTH 3349	The Incas	3
ANTH 4320	Rise of Civilization	3
ARTH 2301	Ancient to Medieval Art	3
ARTH 2302	Renaissance to Modern Art	3
ARTH 4303	Pre-Columbian Art	3
ARTH 4306	Renaissance Art	3
ARTH 4316	Islamic Art	3
ENG 3329	Studies in Mythology	3
FR 4370	Cultures of the French-Speaking World	3
GEO 4393F	Geographies of the Holocaust and Genocide	3
HIST 3312	Renaissance and Reformation	3
HIST 3374A	History of Christianity 1300-1700	3
HIST 4320	Origins of Christianity	3
HIST 4325	Islamic History to 1798	3
HIST 4348	Mahatma Gandhi and Nonviolence	3
HON 2304A	The Meaning of Death	3
HON 2305C	Italy and Arts of the Islamic World	3
HON 3390H	Nature of Society: The Problem of Evil	3
HON 3392Y	The Nature of the Human Experience I: Immortality	3
HON 3395J	The Meaning of Death	3
HON 3395S	Geographies of the Holocaust and Genocide	3
HON 3396D	Mythology, Science and Creation	3
HON 3397S	Human Language: its evolution, mental representation, and learning	3
HON 3398N	The Anthropology of Religion and Fundamentalism	3
PHIL 3317	Science and Religion	3
PHIL 3318	Reason, God, and Nature	3
PHIL 3324	Meaning of Life	3
PHIL 4371	Asian Philosophy	3
PS 4313	The Holocaust	3
PS 4327	Religion and American Public Life	3
PS 4331	Islamic Law and Politics	3
REL 2310	Introduction to the Hebrew Bible	3
REL 2315	Introduction to the New Testament	3
REL 2321	Founders, Prophets and Saints	3
REL 2350	Mediterranean and European Religions	3
REL 2360	Asian Religious Traditions	3
REL 3320	Judaism	3
REL 3330	Religious Controversy in America	3
REL 3335	Cults and New Religious Movements	3
REL 3340	Religion, Literature, and the Arts	3
REL 3342	The Homeric Epic: The Illiad and the Odyssey	3

REL 3361A	Religion and Film	3
REL 3361B	Mysticism	3
REL 3361C	Philosophical Issues in Judaism, Christianity, and Islam	3
REL 3370	Mythology and Cosmology	3
REL 3372	Apocalypticism	3
REL 3381	The Philosophical and Spiritual Heritage of India	3
REL 3383	An Introduction to Chinese Religions	3
REL 3385	Buddhism	3
REL 3386	Yoga: Principles and Practice	3
REL 3390	Religion, Health, and Embodiment	3
REL 4388	Issues in Religion	3
SOCI 3375P	Sociology of Religion: A Global Perspective	3
SPAN 3301	Literatures of Spain I	3
SPAN 3302	Literatures of Spain II	3
SPAN 3305	Latin American Literatures I	3
SPAN 3309	Introduction to Hispanic Literature and Literary Analysis	3
SPAN 3370	Spanish Civilization	3
SPAN 3371	Latin American Civilization	3
SPAN 4302	The Spanish Novel	3
SPAN 4380G	Women, Minorities and Marginal Groups in Medieval Spanish Literature	3

The Medical Humanities minor requires 21 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
ANTH 3311	Disease and Society	3
or ANTH 3325	Medical Anthropology	
or ANTH 3331D	Dental Anthropology and Oral Biology	
or ANTH 3350	Gender and Sexuality in Cross-cultural Perspective	
or ANTH 4309	Culture, Medicine and the Body	
GEO 3351	Health Geography	3
or GEO 3349	World Population	
or GEO 3353	American Ethnic Geography	
or GEO 4339	Environmental Hazards	
HIST 3371B	Health and Illness in American History	3
or HIST 4349	History of Drugs	
or HIST 3375E	History of Women's Health in the United States	
or HIST 4374A	History of American Sexualities	
or COMM 4326	Health Communication	
or COMM 4350	Communication and Coping across the Lifespan	
PHIL 4327	Bioethics	3
REL 3390	Religion, Health, and Embodiment	3
PSY 3361	Health Psychology	3
or PSY 3316	Personality Psychology	
or PSY 3322	Brain and Behavior	
or PSY 4390N	Psychopharmacology	
SOCI 3363	Medical Sociology: The Sociology of Health and Illness Behavior	3
or SOCI 3375L		
or SOCI 3383	Aging and Society	

or SOCI 3384	The Sociology of Death and Dying	
<b>Total Hours</b>		<b>21</b>

The minor in Philosophy requires 18 semester credit hours.

Code	Title	Hours
<b>Required Course</b>		
PHIL 1305	Philosophy and Critical Thinking	3
or PHIL 1320	Ethics and Society	
<b>Electives</b>		
Choose 15 hours of PHIL courses, 9 of which must be advanced		15
<b>Total Hours</b>		<b>18</b>

The minor in Religious Studies requires **18 semester credit hours**, including the following requirements:

1. Either REL 1300 or REL 4300 are required of all minors.
2. At least 9 hours of coursework in the minor must be in REL courses. HON courses taught by regular Religious Studies faculty members may be counted toward this requirement.
3. At least 12 hours of all courses toward the minor must be advanced (3000- or 4000-level).

Code	Title	Hours
<b>Required Course:</b>		
REL 1300	World Religions	3
or REL 4300	Advanced Methods in Religious Studies	
<b>Electives</b>		
Choose 15 hours from the following:		
REL 2310	Introduction to the Hebrew Bible	
REL 2315	Introduction to the New Testament	
REL 2321	Founders, Prophets and Saints	
REL 2350	Mediterranean and European Religions	
REL 2360	Asian Religious Traditions	
REL 3320	Judaism	
REL 3330	Religious Controversy in America	
REL 3335	Cults and New Religious Movements	
REL 3340	Religion, Literature, and the Arts	
REL 3342	The Homeric Epic: The Iliad and the Odyssey	
REL 3361	Topics in Comparative Religions	
REL 3361A	Religion and Film	
REL 3361B	Mysticism	
REL 3361C	Philosophical Issues in Judaism, Christianity, and Islam	
REL 3370	Mythology and Cosmology	
REL 3372	Apocalypticism	
REL 3381	The Philosophical and Spiritual Heritage of India	
REL 3383	An Introduction to Chinese Religions	
REL 3385	Buddhism	
REL 3386	Yoga: Principles and Practice	
REL 4388	Issues in Religion	
HON 2305C	Italy and Arts of the Islamic World	
HON 3390H	Nature of Society: The Problem of Evil	
HON 3395J	The Meaning of Death	

HON 3396D	Mythology, Science and Creation
HON 3397R	Demonology, Possession, and Exorcism
HON 3398N	The Anthropology of Religion and Fundamentalism
ANTH 3305	Magic, Ritual and Religion
ANTH 3322	Peoples and Cultures of Africa
ANTH 3332	Myths and Moundbuilders
ANTH 3349	The Incas
ANTH 4320	Rise of Civilization
ARTH 2301	Ancient to Medieval Art
ARTH 2302	Renaissance to Modern Art
ENG 3329	Studies in Mythology
HIST 3312	Renaissance and Reformation
HIST 3376	American Religious History
HIST 4320	Origins of Christianity
HIST 4325	Islamic History to 1798
HIST 4348	Mahatma Gandhi and Nonviolence
PHIL 3317	Science and Religion
PHIL 3318	Reason, God, and Nature
PHIL 4371	Asian Philosophy
PHIL 4388	Problems in Philosophy
PS 4327	Religion and American Public Life
PS 4331	Islamic Law and Politics
PS 4313	The Holocaust
<b>Total Hours</b>	<b>18</b>

The minor in Value Studies requires 18 semester credit hours. The minor allows a student with special interests in value theory to pursue a course of study, which culminates in an independent research project in value studies. This project may be a study of a theoretical issue in value studies or something of an applied nature; students may affiliate with people in various work environments or service learning settings to identify value conflicts and suggest resolutions.

Code	Title	Hours
<b>Required Courses</b>		
PHIL 1305	Philosophy and Critical Thinking	3
or PHIL 1320	Ethics and Society	
PHIL 4388	Problems in Philosophy (for the independent research project)	3
Choose 12 hours from the following:		12
PHIL 3320	Ethics	
PHIL 3321	Contemporary Moral Problems	
PHIL 3322	Professional Ethics	
PHIL 3323	Environmental Ethics	
PHIL 3324	Meaning of Life	
PHIL 3326	Philosophy and Sport	
PHIL 3331	Philosophy of Law	
PHIL 3332	Social and Political Philosophy	
PHIL 3333	Feminist Theory	
PHIL 4303	Philosophy of Technology	
PHIL 4327	Bioethics	
PHIL 4350	Philosophy of the Arts	
PHIL 4351	Philosophy of Education	
PHIL 4360A	Ethics and Dementia	

PHIL 4360B	Moral Psychology
PHIL 4360C	Philosophy, Nonviolence, Sustainability, and Social Change
PHIL 4360D	Military Ethics
PHIL 4360E	Ethics and Philosophy of Friendship
<b>Total Hours</b>	<b>18</b>

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Political science is the study of government, the most important decision-making part of society, and of the social, economic, and other institutions and practices that influence this decision-making process. On the one hand, it is a discipline that can trace its roots to the ancient Greek political community, the polis; but it is also a modern social science, which uses techniques such as content analysis, public opinion surveys, and statistical analysis to create and evaluate generalizations about how government and people behave.

As a liberal arts discipline, the department is dedicated to developing analytical skills, effective oral and written communication, and promoting critical thinking. Students are encouraged to reflect not simply on their career goals, but also on what type of persons they want to become, and on their rights and duties as citizens. The department's internship program prepares students for the transition from college to career by offering opportunities to earn academic credit and gain practical experience working for various federal, state, local, or non-profit community agencies.

Political science prepares students for careers in various fields, not only in government, law, and education but also in business, journalism, urban planning, and many fields on which public policies have a significant effect.

In addition to bachelor degree options in political science and public administration, the department offers master's degree programs in political science, public administration, and legal studies, including a paralegal studies certificate. Undergraduate students have opportunities to begin graduate study while completing their undergraduate degree through 3+2 degree plan options.

## Recognition of Student Scholarship

### The Annual Professor Henderson Award

The Department of Political Science annually presents the Professor Henderson Award to the graduating Political Science major with the highest overall GPA (the award may be for either a December or May graduate of the current academic year). The award has the purpose of recognizing and honoring a student of Political Science who has, as a student at Texas State, displayed academic excellence and character in the tradition and values cherished and exhibited by Richard B. Henderson, Distinguished Professor Emeritus.

### The Howard M. "Prof" Greene Award

This award honors an academic mentor in politics to Lyndon B. Johnson and thousands of other Texas State alumni and goes to one or more graduating Political Science majors who have earned overall Texas State grade-point averages of 3.9 or above.

Interested students who believe they may be eligible for these awards should consult with the Department Chair.

## Bachelor of Arts (B.A.)

- Major in Political Science (p. 599)

## Bachelor of Public Administration (B.P.A.)

- Major in Public Administration (p. 601)

## Minors

- Political Communication (p. 603)
- Political Science (p. 603)
- Public Administration (p. 603)

**Subjects in this department include: POSI (p. 590), PS (p. 590), PA (p. 598)**

## Courses in Political Science (POSI)

### POSI 2310. Principles of American Government.

A survey of the principles of political science, of the American system of government, and of the origins and development of the constitutions of the United States and Texas. Satisfies the legislative requirements for teacher certification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Govt/Pol Science Core 070

**Grade Mode:** Standard Letter

**TCCN:** GOVT 2306

### POSI 2320. Functions of American Government.

This course is a study of functions performed in the American system of government, both national and state, within the framework of the U.S. and Texas Constitutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Govt/Pol Science Core 070

**Grade Mode:** Standard Letter

**TCCN:** GOVT 2305

## Courses in Political Science (PS)

### PS 2304. Introduction to Political Science.

This course is an introductory survey of the discipline of political science, focusing on the history, scope, and methods of the field and the substantive topics in the discipline. Prerequisite: POSI 2310 or POSI 2320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### PS 3300. Basic Political Ideas.

This course examines fundamental ideas of the Western political tradition including conservatism, liberalism, socialism, democracy, and totalitarianism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

### PS 3301. Basic Political Institutions.

This course examines political institutions emphasizing the fundamentals of political science research/analysis, the tools used in bibliographical research, and methods of locating and presenting data for comparing political institutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

### PS 3311. American Political Thought: From the Colonial Period to Civil War.

This course examines the development of American political ideas from the colonial period through the Civil War. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

### PS 3312. American Political Thought: From Reconstruction to Present.

This course examines the development of American political ideas from Reconstruction to the present. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

### PS 3313. Contemporary Political Theory.

This course examines selected theories, ideologies, and movements in 20th and 21st century political theory. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

### PS 3314. Politics and Personality.

This course is an undergraduate seminar exploring the relationship between political behavior and human motivation. Topics include: psychological perspectives and political theory, personality and political orientation, and the political personality. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3315. Quantitative Research in Political Science.**

This course introduces statistical theories and quantitative analyses, and examines methodological concepts, definitions and procedures, various hypotheses testing and integrated research applications in the discipline of Political Science. Prerequisite: MATH 1312 or MATH 1315 or MATH 1316 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 or HON 2302A or HON 2302B any with a grade of "C" or better. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3321. Campaigns and Elections.**

This course examines the dynamics of American political campaigns and elections at the federal and state level. The analysis and discussion will include theoretical evaluations of voting, campaigns, and elections as well as technical and practical information about campaign strategies. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3322. Political Parties and Party Politics.**

This course examines the American political party system, including its history and organization, suffrage, nominations, elections, campaigns, and the related areas of public opinion and pressure group activities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3323. Congress and the Legislative Process.**

This course examines the dynamics of lawmaking and legislative politics in the United States. This course analyzes, compares, and evaluates the structure, party organization, rules of procedure, and actual operation of the Congress and of selected state legislatures (including Texas). Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3324. The American Presidency.**

This course examines, in depth, both the presidency of the United States and the individuals who have held it.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3325. State and Local Government.**

This course examines the organization, functions, and powers of state, county, and municipal governments in the United States with particular reference to patterns of such governments in Texas. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3326. Issues and Interest Groups: Power and Pressure in America.**

This course examines selected issues at the state and national level and the interest groups which attempt to influence governmental decisions about them. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3327. The American Founding.**

This course examines the origins, nature, and foundations of the American Constitutional system with special emphasis on the Federalist and Anti-Federalist debates and the writing of the Constitution. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3328. Politics in Film.**

This course examines films which explicitly address political issues such as racism in the United States, the conflict between public duty and private conscience, politics and media manipulation, and the role of perception in all the actions people take.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3331. The Supreme Court and the Judicial Process.**

This course examines the judiciary, focusing upon the politics of judicial selection and the decision-making process of the judiciary as well as the position of the judiciary in the entire political process. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter



**PS 3332. Constitutional Law: Basic Structures and Principles.**

This course examines and analyzes, through a constitutional case study approach, the fundamental principles of governmental structure with an emphasis on the office and powers of the President, Congress, and inter-governmental relationships in the main body (Articles I through VII) of the U.S. Constitution. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3333. Constitutional Law: Individual Liberties.**

This course examines the area of constitutional interpretation commonly known as civil liberties or the relations between the individual and the government. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3334. Civil Law in American Society.**

This course examines the structure and functions of government, especially the judiciary, together with the laws regulating private social relations, (e.g., property law, tort law, etc.), and the relations between legal policies and societal goals and regulations. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3341. Comparative Politics.**

This course introduces students to the subfield of comparative politics through an examination of recent political history, political institutions, party systems, and public policies of some of the world's most important countries (including the United Kingdom, Germany, France, Russia, China, Iran, India, South Africa, Mexico and others).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3342. African Politics.**

This course examines the government and politics of African political systems in light of the traditional political cultures, the colonial and post-colonial experience and the diversity of regime experimentation with special attention to the struggle for genuine democracy. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3343. Government and Politics of Latin America.**

This course is a comparative analysis of political systems in Latin America, examining the impact of sociocultural and economic factors on political attitudes and behaviors. Special emphasis will be placed on the political systems of Mexico, Cuba, and Brazil. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3344. Government and Politics of Europe.**

This course examines the political history and political institutions of Europe and the European Union. Special emphasis will be placed on the political systems in the United Kingdom, France, Italy, Germany, and Russia. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3345. Government and Politics of Russia.**

This course examines the domestic and foreign policy of the former Soviet Union, examined both historically and analytically. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3346. Government and Politics of Asia.**

This course examines political development in the nations of Far East and South Asia, special consideration will be placed on the political systems of China, Japan, and India. (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 3347. Politics of Modern Southeast Asia.**

This course examines the political and economic significance of Southeast Asia through comparative analysis; it will include an empirical and conceptual examination of the political dynamics of the region. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3348. Revolution and Nationalism.**

This course examines the phenomena of modern revolution and nationalism focusing on different countries in various geographical areas such as the Middle East, Latin America, and others. This course is repeatable once with a different emphasis for an additional three credit hours. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3349. Latin America Party Politics: Theory and Practice.**

This course examines some key insights in party and party system theory and practice. Latin America is the regional referent for examining themes, and country examples are studied in depth to illustrate the theory. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3351. Introduction to International Studies.**

This course examines critical interdisciplinary questions pertaining to all courses in the International Studies Program. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3352. Theories of International Politics.**

This course examines theories and concepts in the study of international relations. Major theoretical works and illustrative case studies will be critically analyzed. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3353. Issues in World Politics.**

This course examines major issues in world politics, international relations, and comparative politics. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3354. United States-Latin America Relations.**

This course examines United States-Latin America relations as a subset of US global relations and US foreign policy. This course will examine policies, problems, and attitudes with a detailed analysis of U.S. relations with selected countries. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3355. International Human Rights.**

This course explores the role of human rights in global politics, including the impact of state and non-governmental organizations' actions on the issue of human rights.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4310A. Natural Law and Virtue Ethics.**

This course examines the development of natural law and virtue ethics theory from ancient through contemporary thought. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4310B. Topics on Freedom of Speech and Thought.**

This course considers freedom of speech and thought as foundational conditions in liberal conceptions of human flourishing. The course will combine a close reading of modern and contemporary authors with an analysis of recent controversies implicating these freedoms, such as debates about hate speech and political correctness. Corequisite: PS 3300 or PS 3301.

**3 Credit Hours. 0 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4311. Ancient and Medieval Political Thought (Greeks to 1600).**

This course examines classical and medieval political theory from Plato to Machiavelli. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4312. Modern Political Theory (1600 - 1900).**

This course examines the development of modern political ideas; and the meaning and relationships of the significant ideologies of our time including democracy, capitalism, the welfare state, socialism, fascism, and communism. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4313. The Holocaust.**

This course is an undergraduate seminar on The Holocaust. Topics include: victims and perpetrators, antisemitism, and representation of The Holocaust in film and fiction. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4314. Liberalism and Its Critics.**

This course examines the origins, nature, and evolution of one of the most influential intellectual traditions in modern Western political theory, liberal individualism, as well the views of its critics. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4315. The Politics of Dystopia.**

This course examines the idea of political utopia and the many ways in which it might be twisted into a darker, less-than-perfect society. Content will focus, in particular, on the relationship between fictional dystopias in novels and films, and political reality in 21st-century America. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4320A. American Political Culture.**

The course will explore selected problems related to American political culture through an examination of Alexis de Tocqueville's classic study, *Democracy in America*. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4320B. The Evolution of the United States Constitution.**

This course studies the relationship between politics and the US Constitution. Emphasis is placed on the evolution of the US Constitution from a political, historical, and theoretical perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4320C. Freedom in America.**

This course explores enduring questions about freedom in America. How has freedom in American society developed? Should limits be placed on individual freedom? Can individual freedom be harmful for American society? Why do defenders of community worry about the fissiparous consequences of unlimited freedom? How do defenders of liberty respond to these concerns? While freedom is perhaps Americans' favorite word, we will see that Americans have debated both the value and meaning of freedom throughout American history. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 with any grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4321. American Foreign Policy.**

This undergraduate seminar examines the roles of major institutions, American political culture, and the international setting in the making of American foreign policy. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4322. African American Politics.**

This course examines the political, cultural, and historical facets of the African American experience. The course will include a study of appropriate constitutional law cases, representation, identity, urban politics, protest movements, and ideology. Particular attention will be given to how these themes develop in Texas and the Southwest. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4323. Latina/o Politics.**

This course examines the participation of Latinos in US politics. Both formal political participation in electoral politics and involvement in grassroots and social movements are considered. While all Latino groups will be considered, the course has a special emphasis on the Mexican/Chicano experience in Texas and the Southwest. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4324. Women in Politics.**

This course examines the role of women in political life. The course will examine women's influence on politics as well as how various public policies affect women. Topics may include feminism, electoral politics, political representation, and the internal politics of women's groups. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4325. Texas Politics.**

This course examines the history, culture, institutions, issues, and policies of the Texas political system. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4326. Media and Public Opinion.**

This course examines how the media influences public opinion and voting behavior. Specific topics include media functions in campaigns and elections, media bias, new media, and media effects on political attitudes and behaviors. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4327. Religion and American Public Life.**

This course examines the ways in which religious beliefs and groups have influenced the course of American democratic experience, and the ongoing debate regarding the proper role of religion in American public life. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4330A. Environmental Law & Policy.**

This course examines the institutions, implementation, and regulation of American environmental law and policy. Laws and regulations explored can cover jurisdictions ranging from municipal, regional, state, federal, and international levels. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4330B. Free Speech and Democracy in the Digital Age.**

This course blends law, philosophy, history and political science in examining the role of free expression in the digital age. It will begin with an overview of various theories supporting the right of free expression and the historical development of free speech from the English common law to current struggles over free speech and what constraints on its practice are acceptable. The course will then consider modern challenges to free expression and democratic discourse posed by technology and the private companies that control much of the modern public square. Global threats to freedom of expression will also be examined. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4331. Islamic Law and Politics.**

This undergraduate seminar is an examination of the origins, development, divisions, law, and politics of Islam. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4332. The Politics of U.S. Economic Policy.**

This course examines the issues of political economy prominent in American public life. Emphasis will be placed on the constitutional, partisan, and sectional aspects of such issues as the Bank of the United States, slavery, gold standard, the Great Depression, banking, income distribution, and the Affordable Care Act. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4333. Issues in Law and Public Policy.**

This course examines selected legal issues by focusing on their relationship to public policy. Alternative views, social consequences, political responses, and legal issues resulting from alternative positions are considered. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4334. Legal Theories and Research.**

This course examines the American Legal System. Emphasis will be placed on the origins and development of law, the different sources of law, the process of legal research and analysis, and methods for interpreting and applying constitutional, statutory and case law. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4340A. Government and Politics of Japan.**

This course is a comparative analyses of political systems in Japan, examining the impact of sociocultural and economic factors on political attitudes and behaviors. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4340B. Authoritarian Regimes.**

While democracy became the most common political regime type around the world in the 1990s, many authoritarian regimes have continued to persist or have emerged in countries such as China, Cameroon, Saudi Arabia, Russia, and Venezuela. How do these regimes emerge and function in the presence of popular demands for democratization and leadership challenges from authoritarian regime elites? How do authoritarian regimes collapse and what are the prospects for democracy in current authoritarian regimes? How do authoritarian regimes act in international relations? This course applies these broad questions to past and present authoritarian regimes around the world. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4340C. Comparative Political Institutions.**

This course introduces students to the effect of institutions on political outcomes in developing countries. The role of formal institutions, informal institutions, and institutional weaknesses to understand political dynamics will be explored and analyzed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 4340D. Mexican Politics.**

The course delves into Mexico's XX century authoritarian period and its transition to democracy, including the workings of Mexico's institutions in the post 2000 era, and the evolution of US-Mexican relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 4340E. Civil War.**

This course provides an in-depth look at how civil wars begin and end, the dynamics in the conduct of civil wars, and the domestic and international consequences of civil wars. Case studies of post-WWII civil wars around the world will be used to illustrate theories of civil war and to speculate on the likely onset or termination of civil war in particular countries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4341. Civil-Military Relations in Comparative Politics.**

This course examines the primary empirical and normative theories of civil-military relations. Students will investigate the state of civil-military relations in the United States and around the globe. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4342. Economic Development in Latin America.**

This course examines the economic history of and current obstacles to economic development in Latin America. It explores the Import Substitution Industrialization Era, the debt crisis of the 1980s, free market economics, and the nature and revival of economic populism. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4343. Politics of Democratization in Developing Countries.**

This course examines the third wave of democratization in the developing world and the multiple challenges facing these new democracies. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4344. The Politics of Extremism.**

This undergraduate seminar examines international terrorism and extremist politics in America. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4345. Model International Institution Competition.**

This course is an applied introduction to diplomacy focusing on issues relevant to international institutions, in which students will engage in debate and role-playing. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4346. Organization of American States.**

This course is an introduction to major issues of the OAS including its functions and limitations and the evolving relations among member-states.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter



**PS 4350A. U.S. National Affairs and Homeland Security.**

This course examines current issues of national and international importance from political, economic, and social perspectives. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4351. International Conflict and Security.**

This course examines historical and spatial patterns of conflict (including war, terrorism, and economic coercion) from the perspectives of Realist, Idealist, and Marxian schools of thought. It will also examine strategies for conflict prevention and resolution such as deterrence, arms-control, collective security, and "building democracy." (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4352. International Law.**

This course will examine the nature, functions, sources, scope, practice, and development of public international law as both a legal and political process. Students will research contemporary international problems and participate in a Moot International Court of Justice. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4353. International Organizations.**

This course examines the historical roots of international organizations, the development of the League of Nations, and the evolution of the United Nations. The nature, process, and function of contemporary international organizations will be analyzed. Non-governmental organizations, transnational organizations, and multi-national corporations will be assessed. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4354. Politics of International Economic Relations.**

This course examines the institutional structure of interstate economic relations, trade and monetary regimes, foreign investment, foreign aid, and development policies of governments. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4355. US National Security Strategy.**

This course examines the decision-making processes and the substantive debates pertaining to issues of modern American national security policy and strategy. Emphasis may be placed on the theory of strategy and grand strategy, great power challenges from Russia and China, transnational threats, and the tools of power such as the use of military, intelligence, economic, and diplomatic means to advance strategic goals. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4379. Independent Study.**

This course is an individualized study including independent reading and/or research on various problem areas of political science. Instructor will approve specific problem area, bibliography, and student paper outline. Prerequisite: Instructor approval. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4380. Internship in Government.**

This course is designed for students to gain practical experience while participating in the ongoing work of a selected governmental or nonprofit unit. Interns will work under the joint direction of faculty and intern supervisors. One hundred fifty hours of service during the semester is required of interns. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4398. Practicum in Political Science: Concepts, Resources, and Applications in the Study of Politics.**

This course is designed to ensure familiarity with basic concepts and approaches used in the study of politics. This course is required of all B.A. students seeking a teaching certification; it may be taken as a substitute for PS 4399 for Political Science non teacher certification majors. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4399. Senior Seminar in Political Science.**

This course includes intensive reading, research, writing, and discussion focusing on different sub-fields in political science and is required of all political science majors. May be repeated once for additional credit with different instructor and department approval. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4680. Internship in Government.**

This course is designed for students to gain practical experience while participating in the ongoing work of a selected governmental or nonprofit unit. Interns will work under the joint direction of faculty and intern supervisors. Three hundred hours of service during the semester is required of interns. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Public Administration (PA)

**PA 3300. Introduction to Public and Nonprofit Administration.**

This course introduces students to the fundamentals of public and nonprofit administration including the context, nature, and structure of public and nonprofit administration in America; management of public organizations; and challenges of the future.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 3301. Political Institutions and Public Service.**

This course examines the fundamental political institutions and values of American democracy. The role of public service as it relates to government and nonprofit administration is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 3310. Public Finance Administration.**

This course introduces students to fiscal administration and budgeting at different levels of government and nonprofit organizations in the United States. The course includes a wide range of theoretical and applied aspects of fiscal policy and financial administration. Both expenditures and revenues are examined. Prerequisite: MATH 1312 or MATH 1315 or MATH 1316 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 or HON 2302A or HON 2302B any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 3311. Analytical Techniques.**

This course introduces quantitative analytical methods and fundamental statistics ranging from descriptive to inferential procedures. Emphases will be placed on appropriate analytical techniques, use of software for data analysis, interpretation of results and crafting of professional reports based on data analysis. Prerequisite: MATH 1312 or MATH 1315 or MATH 1316 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 or HON 2302A or HON 2302B any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 3314. State and Local Government.**

This course examines state and local government structure, organization, functions, powers and processes. The role of American and Texas state and local government institutions in the formulation and implementation of public policy will be covered. Corequisite: PA 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 3316. Metropolitan Politics.**

This course examines the political institutions and processes of urban and suburban America. Key contemporary metropolitan policy issues are used to highlight underlying tensions in policy formation and implementation. This course emphasizes the unique problems of cities and major metropolitan areas. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PA 3330. Public Personnel and Human Resource Administration.**

This course introduces the laws, context, procedures, personnel structures, techniques, and challenges associated with managing personnel in government and nonprofit organizations. Emphases will be placed on strategic planning for human resources, position classification, selection, recruitment, compensation and benefits, training, performance appraisal, collective bargaining and other aspects of personnel management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 3340. Administrative Law.**

This course examines the rule making, adjudication, and enforcement powers of federal and state agencies. The course also examines statutes that confer authority on such agencies and challenges to their constitutionality, as well as the principles that the courts employ to scrutinize agency actions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 3350. Public Policy Process.**

This course examines the theories, processes and practices of public policy formulation, implementation and evaluation. Emphasis may vary and include but not be limited to environment and sustainability issues, energy, social and economic policies.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 3351. Urban Management and Regional Policy.**

This course provides a critical introduction to the key aspects of regional and urban management and policy. Students will study how urban administration practices and regional policies influence the form and function of American cities. Corequisite: PA 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 4340. Issues in Law and Public Policy.**

This course examines contemporary legal issues and their relationship to public policy. Emphasis may include environmental protection, sustainability, climate change, voting rights, capital punishment, gun rights, and electronic challenges to privacy rights from the perspective of bureaucratic functions and non-profits. Corequisite: PA 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 4352. Comparative Public Administration.**

This course surveys the field of Public Administration emphasizing aspects of administration and public policy systems in the US and compares them with administration and public policy systems of other countries. Corequisite: PA 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 4362. Government, Nonprofit and American Business.**

This course examines the role of American business in public policy. It examines how the public, private and nonprofit sectors interact in the policy process. This includes ways in which policy and politics shape business and nonprofit culture and how businesses and nonprofits influence policy implementation through contracting. Corequisite: PA 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 4370. Ethics in American Government.**

This course examines key ethical and cultural challenges in public service, including service in government and in nonprofit and voluntary organizations. Content includes but is not limited to ethical theory and analysis, and examination of ethical issues in areas such as healthcare, privacy, accountability, education, research, planning, elections, and policy. Corequisite: PA 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 4389. Internship in Public Administration.**

This course provides students with meaningful work in public administration as interns in public or nonprofit organizations. Under faculty supervision, students complete 150 hours of service and conclude their internship by completing a report on their work experience. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PA 4398. Research in Public Administration.**

This course will examine basic concepts and approaches used in the study of public administration. Emphasis will be placed on identifying, locating, and employing resources to assist in understanding public administration at all governmental levels. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor.
3. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Nine hours of writing intensive (WI) courses are required for graduation.
6. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
7. For transfer students, 12 semester credit hours in government and mathematics (or their equivalents) may be transferred from a Texas public institution of higher education for the Political Science and Government Field of Study and be applied to the Bachelor of Arts degree with a major in Political Science at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas

Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
PS 2304	Introduction to Political Science	3
TCCN: GOVT 2304		
POSI 2310	Principles of American Government	3
TCCN: GOVT 2306		
POSI 2320	Functions of American Government	3
TCCN: GOVT 2305		
Any MATH course coded Mathematics Core Curriculum Component Code 020		3
TCCN: MATH 1342		
<b>Total Hours</b>		<b>12</b>

8. Students in the Bachelor of Arts (B.A.) degree with a major in Political Science must take a minimum of 36 hours in Political Science including the following courses:

Code	Title	Hours
POSI 2310	Principles of American Government	6
& POSI 2320 and Functions of American Government		
PS 2304	Introduction to Political Science	3
PS 3300	Basic Political Ideas	3
or PS 3301 Basic Political Institutions		
One advanced course from four of the five groups:		12
I. Political Theory and Methodology		
II. American Government		
III. Public Law and Public Administration		
IV. Comparative Government		
V. International Relations		
Advanced PS electives		9
PS 4399	Senior Seminar in Political Science	3
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> PS 3300 or PS 3301 serve as corequisites for all advanced courses in political science.

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020	3	Language, Philosophy, and Culture Component Code 040	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	American History Component Code 060	3
Modern Language 1410	4	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
US 1100	1	Modern Language 1420	4
<b>14</b>		<b>16</b>	

Sophomore			
First Semester Hours		Second Semester Hours	
Life and Physical Sciences Component Code 030	3	Social and Behavioral Sciences Component Code 080	3
Creative Arts Component Code 050	3	ENG 2310, 2320, 2330, 2340, 2359, 2360, or 2371 (Component Area Option Code 090/094 [TCCN ENGL 2322, 2323, 2332, 2333, 2327, or 2328])	3
American History Component Code 060	3	Modern Language 2320	3
Modern Language 2310	3	PS 2304 (TCCN GOVT 2304)	3
PS 3300 or 3301	3	Minor	3
<b>15</b>		<b>15</b>	

Junior			
First Semester Hours		Second Semester Hours	
Component Area Option Code 090/091	3	Life and Physical Sciences Component Code 030	3
BA Science, Math, Computer Science, or Logic	3	HIST 2320 or 2312 (TCCN HIST 2312 or 2322)	3
HIST 2310 or 2311 (TCCN HIST 2311 or 2321) <sup>1</sup>	3	PS Advanced Group Electives	6
PS Advanced Group Electives	6	Minor	3
<b>15</b>		<b>15</b>	

Senior			
First Semester Hours		Second Semester Hours	
BA English Literature	3	PS 4399	3
PS Advanced Electives	6	PS Advanced Elective	3
Minor	6	Minor	6
		Elective (as needed)	3
<b>15</b>		<b>15</b>	

**Total Hours: 120**

<sup>1</sup> Students are required to complete 6 additional hours of history in Western or World Civilization (HIST 2310 or HIST 2311 and HIST 2312 or HIST 2320).

<sup>2</sup> The senior seminar courses (PS 4398 or PS 4399) have a prerequisite of at least 21 hours of Political Science.

## Political Science Advanced Group Electives

Code	Title	Hours
<b>GROUP I - POLITICAL THEORY AND METHODOLOGY</b>		
PS 3311	American Political Thought: From the Colonial Period to Civil War	3
PS 4311	Ancient and Medieval Political Thought (Greeks to 1600)	3
PS 3313	Contemporary Political Theory	3
PS 4312	Modern Political Theory (1600 - 1900)	3
PS 3315	Quantitative Research in Political Science	3
PS 4313	The Holocaust	3
PS 3314	Politics and Personality	3

Code	Title	Hours
<b>GROUP II - AMERICAN GOVERNMENT</b>		
PS 3327	The American Founding	3
PS 4320C	Freedom in America	3
PS 4327	Religion and American Public Life	3
PS 3322	Political Parties and Party Politics	3
PS 3323	Congress and the Legislative Process	3
PS 3324	The American Presidency	3
PS 3325	State and Local Government	3
PA 3316	Metropolitan Politics	3
PA 3351	Urban Management and Regional Policy	3
PS 3328	Politics in Film	3
PS 3326	Issues and Interest Groups: Power and Pressure in America	3
PS 4324	Women in Politics	3
PS 4323	Latina/o Politics	3
PS 3321	Campaigns and Elections	3
PS 4325	Texas Politics	3
PS 4326	Media and Public Opinion	3
PS 4321	American Foreign Policy	3
PA 4362	Government, Nonprofit and American Business	3

Code	Title	Hours
<b>GROUP III - PUBLIC LAW AND PUBLIC ADMINISTRATION</b>		
PS 3332	Constitutional Law: Basic Structures and Principles	3
PS 3333	Constitutional Law: Individual Liberties	3
PA 3300	Introduction to Public and Nonprofit Administration	3
PA 3330	Public Personnel and Human Resource Administration	3
PA 4352	Comparative Public Administration	3
PA 3310	Public Finance Administration	3
PS 4330B	Free Speech and Democracy in the Digital Age	3
PS 4334	Legal Theories and Research	3
PS 3334	Civil Law in American Society	3
PS 4333	Issues in Law and Public Policy	3
PS 3331	The Supreme Court and the Judicial Process	3
PA 3350	Public Policy Process	3
PA 3340	Administrative Law	3

Code	Title	Hours
<b>GROUP IV - COMPARATIVE GOVERNMENT</b>		
PS 4342	Economic Development in Latin America	3
PS 3341	Comparative Politics	3
PS 3347	Politics of Modern Southeast Asia	3
PS 4331	Islamic Law and Politics	3
PS 3348	Revolution and Nationalism	3
PS 3352	Theories of International Politics	3
PS 3343	Government and Politics of Latin America	3
PS 3344	Government and Politics of Europe	3
PS 3345	Government and Politics of Russia	3
PS 4346	Organization of American States	3

PS 4343	Politics of Democratization in Developing Countries	3
PS 3346	Government and Politics of Asia	3
PS 3342	African Politics	3
PS 4344	The Politics of Extremism	3

Code	Title	Hours
<b>GROUP V - INTERNATIONAL RELATIONS</b>		
PS 3351	Introduction to International Studies	3
PS 3355	International Human Rights	3
PS 4341	Civil-Military Relations in Comparative Politics	3
PS 3353	Issues in World Politics	3
PS 3352	Theories of International Politics	3
PS 4352	International Law	3
PS 4353	International Organizations	3
PS 3354	United States-Latin America Relations	3
PS 4354	Politics of International Economic Relations	3
PS 4351	International Conflict and Security	3

**Minimum required: 120  
semester credit hours**

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.
- The Bachelor of Public Administration (B.P.A.) degree with a major in Public Administration requires the following 36 hours of Public Administration courses:

Code	Title	Hours
PA 3301	Political Institutions and Public Service	3
PA 3300	Introduction to Public and Nonprofit Administration	3
PA 3330	Public Personnel and Human Resource Administration	3
PA 3310	Public Finance Administration	3
PA 3311	Analytical Techniques	3
PA 3350	Public Policy Process	3
PA 4389	Internship in Public Administration	3
<b>Advanced Public Administration Electives (choose five of the following)</b>		<b>15</b>
PA 3314	State and Local Government	
PA 3316	Metropolitan Politics	
PA 4352	Comparative Public Administration	
PA 3351	Urban Management and Regional Policy	



PA 4340	Issues in Law and Public Policy	
PS 4323	Latina/o Politics	
PA 3340	Administrative Law	
PA 4362	Government, Nonprofit and American Business	
PA 4370	Ethics in American Government	
PA 4389	Internship in Public Administration	
PA 4398	Research in Public Administration	
<b>Total Hours</b>		<b>36</b>

6. Students are strongly encouraged, but not required, to choose their free electives from the following career support areas:

Code	Title	Hours
<b>Local Government</b>		
PA 3316	Metropolitan Politics	3
GEO 3310	Urban Geography	3
GEO 3320	Community and Regional Planning	3
<b>International</b>		
PS 4321	American Foreign Policy	3
PS 4352	International Law	3
PS 4353	International Organizations	3
ECO 3317	International Economics	3
<b>Social Services</b>		
SOCI 3328	Complex Organizations	3
SOWK 2375	Social Services in the Community	3
SOWK 4310	Diversity and Social Justice in Social Work	3
SOWK 4355	Policy Practice	3
<b>Legal Services</b>		
PS 3332	Constitutional Law: Basic Structures and Principles	3
PS 3333	Constitutional Law: Individual Liberties	3
PA 4340	Issues in Law and Public Policy	3
CJ 2360	Fundamentals of Criminal Law	3
<b>Health Services</b>		
HA 3308	Healthcare Organization	3
HIM 3380	Quality Management for HIM	3

7. Enrollment in PA 4389 requires completion of 24 hours of Political Science courses, a Texas State GPA of 2.25, and a Major GPA of 2.25.

8. There is no foreign language requirement for those who have completed two years of the same foreign language in high school.

## Course Requirements

		<b>Freshman</b>
First Semester Hours	Second Semester Hours	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
US 1100	1 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3

POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 American History Component Code 060	3
Modern Language 1410	4 Modern Language 1420	4
Mathematics Component Code 020	3 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
<b>14</b>		<b>16</b>

		<b>Sophomore</b>
First Semester Hours	Second Semester Hours	
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 PA 3300	3
ENG Literature (Component Area Option Code 090/094) [ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3 ENG 3303 or 3304	3
Elective	3 Social and Behavioral Sciences Component Code 080	3
PA 3301	3 Life and Physical Sciences Component Code 030	3
American History Component Code 060	3 HIST 2310 or 2311 (TCCN HIST 2311 or 2321)	3
<b>15</b>		<b>15</b>
		<b>Junior</b>
First Semester Hours	Second Semester Hours	
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3 PA 3310	3
Life and Physical Sciences Component Code 030	3 PA 3311	3
Advanced PA Electives	6 SOCI 3324, 3328, 3353, or 3365	3
PA 3330	3 HIST 2312 or 2320 (TCCN HIST HIST 2322 or 2312)	3
	Minor	3
<b>15</b>		<b>15</b>

		<b>Senior</b>
First Semester Hours	Second Semester Hours	
Minor	6 GEO 3310, 3320, or 3340	3
Advanced PA Electives	6 Minor	6
PA 3350	3 PA 4389	3
	Advanced PA Elective	3
<b>15</b>		<b>15</b>

**Total Hours: 120**

## This minor is administered by the Department of Communication Studies. For information regarding the requirements please click here (p. 306).

The minor in Political Science requires 24 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
POSI 2310	Principles of American Government	3
POSI 2320	Functions of American Government	3
PS 3300 or PS 3301	Basic Political Ideas Basic Political Institutions	3
Choose 12 hours of at least one course from 4 of the 5 groups of PS advanced courses		12
Choose a 3 hour PS advanced course		3
<b>Total Hours</b>		<b>24</b>

The minor in Public Administration requires 21 semester credit hours, including 12 hours of required courses in public administration and 9 hours of required advanced public administration electives.

Code	Title	Hours
<b>Required Courses</b>		
PA 3300	Introduction to Public and Nonprofit Administration	12
PA 3330	Public Personnel and Human Resource Administration	
PA 3310	Public Finance Administration	
PA 3350	Public Policy Process	
<b>Electives</b>		<b>9</b>
Choose 9 hours from the following:		
PA 3311	Analytical Techniques	21
PA 3314	State and Local Government	
PA 3316	Metropolitan Politics	
PA 3340	Administrative Law	
PA 3351	Urban Management and Regional Policy	
PS 4323	Latina/o Politics	
PA 4340	Issues in Law and Public Policy	
PA 4352	Comparative Public Administration	
PA 4362	Government, Nonprofit and American Business	
PA 4370	Ethics in American Government	
<b>Total Hours</b>		<b>21</b>

Undergraduate Academic Center Room 253  
Telephone: 512-245-2526 Fax: 512-2453153  
www.psych.txstate.edu (http://www.psych.txstate.edu)

The Department of Psychology offers an outstanding undergraduate program attracting more than 2,100 majors and a large number of minors. The curriculum provides both structure and flexibility with a required sequence of core courses and many electives to serve students' personal interests. Students have many opportunities to gain research experience in faculty laboratories and job experience in faculty coordinated

internships. Students can also develop leadership, communication, and team building skills via membership in the Psychology Association and the Texas State University Chapter of Psi Chi, the International Honor Society in Psychology.

Departmental faculty members are highly qualified as teachers, scholar-researchers, and mentors. They are committed to helping students succeed. Faculty have received numerous awards and honors including the Presidential Award for Excellence in Teaching, which is the highest level of recognition in teaching at Texas State University, and the Presidential Seminar Award, which is the highest level of recognition in research at Texas State University.

The department has a strong commitment to faculty-student research. Students can gain quality research experience by participating in a variety of research projects. The breadth and quality of faculty research is a valuable resource for students as they acquire strong research skills and partner in the advancement of knowledge.

Psychology graduates with B.A. or B.S. degrees hold positions in business, government, health, and education. A large number of graduates pursue further education in psychology as a science or as a profession by enrolling in masters or Ph.D. programs. Employment as a psychologist in clinical psychology and some other fields requires a doctoral degree.

## Course Prerequisite Sequence

The Department of Psychology strictly enforces all course prerequisites. Adherence to the following course sequence is necessary for completion of the B.A. and B.S. degrees. This sequence requires four separate semesters (or summer terms), because course prerequisites may not be taken concurrently.

Code	Title	Hours
PSY 1300	Introduction to Psychology <sup>1</sup>	3
MATH 1312	College Statistics and Algebra (or higher except MATH 1316) <sup>1</sup>	3
PSY 2301	Introduction to Statistics <sup>1</sup>	3
PSY 2101	Introduction to Statistics Laboratory <sup>1</sup>	1
PSY 3402	Experimental and Research Methods <sup>1</sup>	4
One course from Group C		
PSY 4391	History and Theory	3

<sup>1</sup> Or its equivalent, with a grade of "C" or higher.

*Note: Psychology majors are required to select a minor outside the major, thus, a Psychology major may not declare a minor in Forensic Psychology, General Psychology, or Sport Psychology.*

## Bachelor of Arts (B.A.)

- Major in Psychology (p. 608)

## Bachelor of Science (B.S.)

- Major in Psychology (p. 609)

## Minors

- Forensic Psychology (p. 611)
- Psychology
- Sport Psychology (p. 611)

## Courses in Psychology (PSY)

### PSY 1300. Introduction to Psychology.

A survey of the major principles derived from research on human and animal behavior. Topics studied include learning, thinking, motivation, emotion, personality, the senses, perception, and the form and functions of the nervous system. PSY 1300 with a grade of "C" or better is required for most other Psychology courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080

**Grade Mode:** Standard Letter

**TCCN:** PSYC 2301

### PSY 2100. Professional Seminar.

This course examines the characteristics of Psychology as a discipline and profession. Coverage includes current trends in Psychology and its subfields, degree options in Psychology and its subfields as they relate to professional and/or career issues, and how to be an intelligent consumer of discipline-specific data and information. Prerequisite: PSY 1300 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### PSY 2101. Introduction to Statistics Laboratory.

This statistics laboratory course provides an introduction to descriptive and inferential statistics used in psychological research with an emphasis on data analysis techniques through the use of computer applications (ex., SPSS, R, etc.). Prerequisite: PSY 1300 with a grade of "C" or better. Corequisite: PSY 2301 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### PSY 2301. Introduction to Statistics.

The course provides an introduction to statistical methods in behavioral sciences with special emphasis on application to psychological research. The topics covered include descriptive statistics, principles of statistical inference and common hypothesis testing techniques such as z-test, t-tests, analysis of variance, correlation and regression, and selected non-parametric tests. Prerequisite: PSY 1300 and [MATH 1312 or MATH 1315 or MATH 1317 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PSYC 2317

### PSY 2311. Psychology of Human Sexuality.

A psychological and physiological examination of the human sexual experience from conception through old age. Current research findings serve as a basis for study. Major consideration is given to the human sexual system, the sexual act, sexual attitudes and behavior, and sexual complications. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** PSYC 2306

### PSY 3300. Lifespan Development.

Survey of the psychology of human development from the pre-natal period through adulthood. Emphasis placed on cognitive, motivational, and physiological processes of development in childhood and adolescence. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### PSY 3312. Adolescent Psychology.

A developmental psychology course designed to examine the complex characteristics of human cognitive and emotional life during the period of adolescence. Emphasis is directed toward the basis of behavior, interpersonal relationships, development, growth, and motivation. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### PSY 3313. Psychology of Adulthood and Aging.

The development of individuals in the post-adolescent period, particularly after middle age. Topics studied include social, psychological, and physiological changes and problems associated with the aging process. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### PSY 3314. Psychology of Consciousness.

This course is an introduction to the study of consciousness from the perspective of psychology, neuroscience, and the natural sciences. Topics reviewed included philosophical foundations, cognitive and neuroscientific approaches, the physical correlates of consciousness, introspection, sleep and dreaming and altered states of consciousness. (WI) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3315. Psychopathology.**

An introduction to the study of psychopathology: (1) issues in defining and evaluating it, (2) examples, (3) theories and research attempting to categorize, describe, and explain it, and (4) approaches used to prevent or change it when it is deemed a problem by the individual and/or society. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3316. Personality Psychology.**

A comprehensive introduction to research, theory, and application in the field of personality. Individual differences and situation influences are examined concerning authoritarianism, achievement motivation, anxiety, intelligence, self-concept, interpersonal attraction, aggression, sexuality, and altruism. An integrative model is suggested for describing and predicting human behavior. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3321. Sensation and Perception.**

An introduction to the processes of perception. Topics will include perceptual measurement, the physiological bases of perception, basic visual processes, and basic haptic, olfactory, and gustatory processes. Prerequisite: PSY 1300 and PSY 3402 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3322. Brain and Behavior.**

This course covers research findings and theoretical concepts concerned with the physiological, anatomical, and pharmacological bases of behavior. Topics include sensory systems, the physiological mechanisms of motivation, and the physiological correlates of associate processes such as learning. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3323. Evolution and Behavior.**

The course provides a contemporary understanding of human behaviors, emotions, and cognitions through an examination of Darwin's theories of natural selection, sexual selection, and mental evolution. Relevant interdisciplinary perspectives from philosophy, history, anthropology, archaeology, biology, ethology, and genetics are incorporated. Prerequisites: PSY 1300 and PSY 3300 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3325. Psychology of Persuasion.**

This course uses a socio-psychological perspective to understand the dynamics of persuasion and propaganda. It applies selected theories and research on social influence, persuasion and attitude change to such areas as political and educational campaigns, product advertising, mass media and public opinion. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3331. Social Psychology.**

The study of how people influence each other. The course covers such topics as conformity, inter-personal attraction, prejudice, and aggression. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3332. Psychology of Women.**

The special problems and demands made on the woman within modern western culture. Topics studied include status, roles, values, opportunities, expectations, stress, and self-realization of the modern woman. (MULT) (WI) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3333. Industrial Psychology.**

The study of applying psychological knowledge and techniques to the modern industrial environment. Topics studied include employee needs, attitudes, selection, testing, boredom, motivation, anxiety, and job satisfaction. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3334. Psychology of Human Diversity.**

Explanations about how the environment, genetics and culture shape human differences, and how these differences are linked to world progress and understanding are addressed. (WI) (MULT) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3335. Forensic Psychology.**

Examines the relationships between psychology and the processes of the American courtroom. Sample issues to be addressed include; (a) What psychological theories are used to explain jury decisionmaking? (b) How accurate is the memory of eyewitnesses? (c) How do characteristics of defendants influence juries? Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3336. Sport Psychology.**

This course examines the relationships, psychological concepts, and individual's thoughts regarding sports, health and exercise. Sample topics include (1) current theoretical perspectives of personality factors at sports and exercise, (2) why people engage in sports, (3) exercise adherence, (4) mental skills, and (5) the psychological effects of sports and exercise. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3337. Psychology of Prejudice, Discrimination, and Hate.**

This course will explore psychological theories and factors that underlie prejudice, discrimination, and hate. Although the course will focus primarily on these issues as they have developed and influence realities in the United States, global issues will also be explored. (MULT) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PSY 3338. Service Learning: Protecting the Vulnerable.**

This course examines clinical, legal and psychosocial conditions of adults who, due to mental illness, developmental impairments, brain injuries or aging, are declared "incapacitated" and have court-appointed guardians. Students will serve as the probate court representatives who inspect living conditions and services for individuals under the court-ordered guardianships. Prerequisite: PSY 1300 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3341. Cognitive Processes.**

This course covers the acquisition and use of knowledge, contemporary research on perception, pattern recognition, memory, thinking, problem solving, and language comprehension. (WI) Prerequisite: PSY 1300 and PSY 3402 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3350. Cognitive Behavioral Therapies.**

The course provides theory, research, and application of psychological principles that affect humans in education, business, and personal life. Emphasis is placed on effective use of reinforcement, classroom management, self-control, relaxation, and assertiveness. (WI) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3361. Health Psychology.**

Surveys contemporary theory and research on body/mind interaction in physical and mental health. Emphasis on personality, psychosocial, and stress factors in physical health. Other topics include the effects of physical health on psychological well being, pain management, longevity and aging, and coping with illness and dying. (WI) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3402. Experimental and Research Methods.**

This course introduces students to basic instruction in experimental design, data collection, and technical report writing in Psychology. By examining applications of various methodologies, this course provides information on the steps involved in crafting and executing empirical research projects as well as instruction on procedures and software. (WI) Prerequisite: PSY 1300 and PSY 2101 and PSY 2301 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3404. Advanced Research Methods.**

The course provides students with the opportunity to conduct original research in psychology using best practices in research methods. Course requirements include obtaining IRB approval, conducting research, analyzing results and presenting findings in a professional setting. (WI) Prerequisite: PSY 1300 with a grade of "C" or better and PSY 3402 with a grade of "B" or better and instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 4318. Psychological Tests and Measurements.**

The course provides an introduction to basic principles, research, and theories on testing and measurement of psychological constructs. It includes validity, reliability, item analysis, administration, scoring, and interpretation of existing tests and measures, and construction of new measures including surveys and other psychological instruments. Prerequisites: PSY 1300 and PSY 2101 and PSY 2301 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 4342. Learning and Memory.**

A study of memory and learning in humans and animals. Attention is given to comparative cognition, cognitive and neuropsychological aspects of memory, and memory deficits. (WI) Prerequisite: PSY 1300 and PSY 3402 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content| Writing Intensive

**Grade Mode:** Standard Letter



**PSY 4350. Reality Therapy/Choice Theory.**

This course focuses on Glasser's concepts of Choice Theory and Reality Therapy. This course explores how the "total behaviors" and choices we make impact our lives, the kinds of relationships we want to have with others, health and quality of the life. (WI) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 4352. Introduction to Clinical Psychology.**

Overview of clinical psychology. Emphasis on current theories and methods of individual psychotherapy. Class discussions of readings, films, audiotapes, and live examples illustrating approaches. Experiential learning via class exercises in pairs and small groups and by role-playing both therapist and client in a series of helping sessions. (WI) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 4390B. Emotion and Human Behavior.**

This course will provide an advanced understanding of the multifaceted phenomenon of emotion and its effect on human behavior. Students will be introduced to the philosophical and theoretical underpinnings of emotion, the various individual emotions (e.g. fear, anger, happiness) and will learn how emotion can affect physical and psychological health.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 4390N. Psychopharmacology.**

This course reviews psychopharmacology topics including: neuronal and chemical mechanisms underlying drug action; environmental factors modulating the impact of drugs on emotion, cognition, perception and behavior; the processes underlying drug dependency, tolerance, and withdrawal; and the implications for drug abuse treatment and prevention strategies, especially concerning adolescents. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 4390P. Human Factors and Ergonomics.**

This course examines characteristics of people that are applicable to the design of systems and technological devices. This course will illustrate how methods and principles of human factors and ergonomics enhance the usability, safety and performance of human-machine systems. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 4390Q. Introduction to Developmental Disabilities.**

This course will provide students with perspectives on the causes, manifestations, and treatment of developmental disabilities throughout the lifespan. Historical views and societal issues will be investigated along with current practices and research. Prerequisite: PSY 1300 and PSY 3315 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 4390R. Intermediate Statistics.**

This course introduces statistical methods designed for psychological research with multiple independent variables. Topics include factorial analysis of variance and multiple regression. Interpreting interaction effects is a main focus. This is a practice-based course that will cover both the theoretical constructs and also step-by-step computer procedures. Prerequisite: PSY 1300 and PSY 2101 and PSY 2301 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 4390S. Latinx Psychology.**

This course examines psychological perspectives of the Latinx experience. The importance of culture and its links with the mental health, educational attainment, sexuality, gender expression, and the health of Latinos will be explored. Additionally, the course will address the impact of prejudice, discrimination, and acculturation on Latinxs. Students are expected to gain an appreciation and understanding of the influence of Latinx culture on human behavior, an enhanced awareness of challenges facing Latinxs, and critical thinking skills in evaluating the validity of psychological knowledge about Latinxs. Prerequisite: PSY 1300 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PSY 4391. History and Theory.**

Study of the evolution of psychology as a science through a systematic review of the principal scientific and philosophic antecedents of modern psychology, and analysis of the status of the major contemporary theoretical schools. (WI) Prerequisite: PSY 1300 and PSY 3402 both with grades of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 4393. International Psychology.**

The course focuses on the history, status, and future directions of scientific and professional psychology throughout the world. It requires reading about, discussing, and writing about the relatively new specialty area of international psychology. The objective is to deepen students' knowledge of psychology's relevance to the solution of global problems. Prerequisite: PSY 1300 with a grade of "C" or better. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 4395. Individual Study.**

Students design and execute original research, or engage in extensive fieldwork, in the field of psychology under the supervision of a faculty member. All students planning to attend Graduate School are advised to enroll in the course. May be repeated once for additional credit.

Prerequisite: PSY 1300 and PSY 3402 both with grades of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**PSY 4396. Internship in Psychology.**

Extensive field work in a professional setting related to psychology. May be repeated once for additional credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor.
3. For transfer students, 18 semester credit hours may be transferred from a Texas public institution of higher education for the Psychology Field of Study and be applied to the Bachelor of Arts degree with a major in Psychology at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
PSY 1300	Introduction to Psychology	3
TCCN: PSYC 2301		
PSY 3300	Lifespan Development	3
TCCN: PSYC 2314		
PSY 2301	Introduction to Statistics	3
TCCN: PSYC 2317		
PSY 3331	Social Psychology	3
TCCN: PSYC 2319		
PSY 3315	Psychopathology	3
TCCN: PSYC 2320		
PSY 3322	Brain and Behavior	3
TCCN: PSYC 2330		
<b>Total Hours</b>		<b>18</b>

4. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). Students majoring in Psychology may not minor in Forensic Psychology or Sport Psychology.
5. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses). Of these, at least 18 advanced hours must be in Psychology. Sufficient courses from the minor and other electives must be selected to ensure a total of 36 hours of advanced coursework.
6. This major requires 36 semester credit hours including the following Psychology courses:

Code	Title	Hours
PSY 1300	Introduction to Psychology	3
PSY 2100	Professional Seminar	1
PSY 2301 & PSY 2101	Introduction to Statistics and Introduction to Statistics Laboratory	4
PSY 3402	Experimental and Research Methods	4
PSY 3322	Brain and Behavior	3
PSY 4391	History and Theory	3
Group A - Human Development		3
PSY 3300 or PSY 3311 or PSY 3311	Lifespan Development Adolescent Psychology Psychology of Adulthood and Aging	
Group B - Individual Differences/Social Behavior		3
PSY 3315 or PSY 3311 or PSY 3331	Psychopathology Personality Psychology Social Psychology	
Group C - Cognition and Learning		3
PSY 3321 or PSY 3341 or PSY 4341	Sensation and Perception Cognitive Processes Learning and Memory	
PSY Electives		9
<b>Total Hours</b>		<b>36</b>

7. Nine hours of writing intensive (WI) courses are required for graduation.
8. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete

depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

## Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020 <sup>4</sup>	3	Life and Physical Sciences Component Code 030 <sup>1</sup>	3-4
Modern Language 1410	4	BIO 1320 (TCCN BIOL 1308)	
PSY 1300 (TCCN PSYC 2301) <sup>2</sup>	3	BIO 1330 & BIO 1130 (TCCN BIOL 1330 & 1106)	
US 1100	1	American History Component Code 060	3
		Government/Political Science Component Code 070	3
		Modern Language 1420	4
	<b>14</b>		<b>16</b>

		Sophomore	
First Semester Hours		Second Semester Hours	
Life and Physical Sciences Component Code 030 <sup>1</sup>	3-4	Language, Philosophy, and Culture Component Code 040	3
BIO 1321 (TCCN BIOL 1309)		Government/Political Science Component Code 070	3
BIO 1331 & BIO 1131 (TCCN BIOL 1307 & 1107)		Modern Language 2320	3
American History Component Code 060	3	PSY 2301 & PSY 2101 <sup>2</sup>	4
Social and Behavioral Sciences Component Code 080 (not to include PSY 1300)	3	PSY 3315, 3316, or 3331	3
Modern Language 2310	3		
PSY 2100	1		
PSY 3300, 3312, or 3313	3		
	<b>16</b>		<b>16</b>

		Junior	
First Semester Hours		Second Semester Hours	
Creative Arts Component Code 050 [TCCN HUMA 1315]	3	BA Science, Math, Computer Science, or Logic <sup>3</sup>	3
ENG Literature (Component Area Option Code 090/094) <sup>5</sup>	3	Component Area Option 090	3
PSY 3402 <sup>2</sup>	4	PSY Electives	6
PSY 3322 <sup>2</sup>	3	Minor	3
Minor	3		
	<b>16</b>		<b>15</b>

## Senior

First Semester Hours		Second Semester Hours
BA English Literature	3	PSY 3321, 3341, or 4342
PSY Elective	3	PSY 4391
Minor	6	Minor
Elective (as needed)	3	
	<b>15</b>	<b>12</b>

### Total Hours: 120

<sup>1</sup> Students minoring in Biology are required to complete BIO 1330 & BIO 1130 and BIO 1331 & BIO 1130.

<sup>2</sup> Foundation course for all serious study of psychology; much material covered in later courses depends on a thorough knowledge of topics in these courses. Students must complete a three-semester prerequisite sequence prior to taking PSY 4391 and Group C courses. PSY 1300 is a prerequisite for all other PSY courses (except PSY 2311).

<sup>3</sup> Students are required to complete their BA Science requirement by taking one additional science and/or mathematics course, to be selected from the following disciplines: ANTH 2301 or ANTH 2302, any advanced biological anthropology or archaeology course, biology, chemistry, physics, mathematics (1317 and above), computer science (1319 and above), geology, PHIL 2330, or GEO 1305 or GEO 2410.

<sup>4</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1315 (TCCN 1314), MATH 1317 (TCCN 1316), MATH 1319 (TCCN 1324), MATH 1329 (TCCN 1325), MATH 2321 (TCCN 1323), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

<sup>5</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

## Minimum required: 120 semester credit hours

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- For transfer students, 18 semester credit hours may be transferred from a Texas public institution of higher education for the Psychology Field of Study and be applied to the Bachelor of Science degree with a major in Psychology at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
PSY 1300	Introduction to Psychology	3
TCCN: PSYC 2301		
PSY 3300	Lifespan Development	3

TCCN: PSYC 2314		
PSY 2301	Introduction to Statistics	3
TCCN: PSYC 2317		
PSY 3331	Social Psychology	3
TCCN: PSYC 2319		
PSY 3315	Psychopathology	3
TCCN: PSYC 2320		
PSY 3322	Brain and Behavior	3
TCCN: PSYC 2330		
<b>Total Hours</b>		<b>18</b>

- A science minor must be selected from the Departments of Anthropology (elective courses must include biological, forensic, or archaeological content), Biology, Chemistry and Biochemistry, Computer Science, Geography, Mathematics, or Physics.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses). Of these, at least 18 advanced hours must be in Psychology. Sufficient courses from the minor and other electives must be selected to ensure a total of 36 hours of advanced coursework.
- This major requires 36 semester credit hours including the following Psychology courses:

Code	Title	Hours
PSY 1300	Introduction to Psychology	3
PSY 2100	Professional Seminar	1
PSY 2301 & PSY 2101	Introduction to Statistics and Introduction to Statistics Laboratory	4
PSY 3402	Experimental and Research Methods	4
PSY 3322	Brain and Behavior	3
PSY 4391	History and Theory	3
Group A - Human Development		3
PSY 3300	Lifespan Development	
PSY 3312	Adolescent Psychology	
PSY 3313	Psychology of Adulthood and Aging	
Group B - Individual Differences/Social Behavior		3
PSY 3315	Psychopathology	
PSY 3316	Personality Psychology	
PSY 3331	Social Psychology	
Group C - Cognition and Learning		3
PSY 3321	Sensation and Perception	
PSY 3341	Cognitive Processes	
PSY 4342	Learning and Memory	
PSY Electives		9
<b>Total Hours</b>		<b>36</b>

- Nine hours of writing intensive (WI) courses are required for graduation.
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

## Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020 <sup>3</sup>	3	Life and Physical Sciences Component Code 030 <sup>1</sup>	3-4
Modern Language 1410	4	BIO 1320 (TCCN BIOL 1308)	
PSY 1300 (TCCN PSYC 2301) <sup>2</sup>	3	BIO 1330 & BIO 1130 (TCCN BIOL 1306 & 1106)	
US 1100	1	American History Component Code 060	3
		Government/Political Science Component Code 070	3
		Modern Language 1420	4
		<b>14</b>	<b>16</b>

		Sophomore	
		First Semester Hours	Second Semester Hours
Life and Physical Sciences Component Code 030 <sup>1</sup>	3-4	Language, Philosophy, and Culture Component Code 040	3
BIO 1321 (TCCN BIOL 1309)		Government/Political Science Component Code 070	3
BIO 1331 & BIO 1131 (TCCN BIOL 1307 & 1107)		PSY 2301 & PSY 2101 <sup>2</sup>	4
Creative Arts Component Code 050 [TCCN HUMA 1315]	3	PSY 3315, 3316, or 3331	3
American History Component Code 060	3	Minor	3
Social and Behavioral Sciences Component Code 080 (not to include PSY 1300)	3		
PSY 2100	1		
PSY 3300, 3312, or 3313	3		
		<b>16</b>	<b>16</b>

		Junior	
		First Semester Hours	Second Semester Hours
ENG Literature (Component Area Option Code 090/094) <sup>4</sup>	3	Component Area Option 090	3
PSY 3402 <sup>2</sup>	4	PSY Electives	6
PSY 3322 <sup>2</sup>	3	Minor	6
Minor	6		
		<b>16</b>	<b>15</b>

		Senior	
		First Semester Hours	Second Semester Hours
BS Literature or Technical Writing	3	PSY 3321, 3341, or 4342	3
PSY Elective	3	PSY 4391	3

Minor	3 Electives (as needed)	6
Electives (as needed)	6	
	<b>15</b>	<b>12</b>

**Total Hours: 120**

<sup>1</sup> Students minoring in Biology are required to complete BIO 1330 & BIO 1130 and BIO 1331 & BIO 1131.

<sup>2</sup> Foundation course for all serious study of psychology; much material covered in later courses depends on a thorough knowledge of topics in these courses. Students must complete a three-semester prerequisite sequence prior to taking PSY 4391 and Group C courses. PSY 1300 is a prerequisite for all other PSY courses (except PSY 2311).

<sup>3</sup> One course from the following may be chosen to satisfy the Mathematics Component Code 020: MATH 1312 (TCCN 1342) MATH 1315 (TCCN 1314), MATH 1317 (TCCN 1316), MATH 1319 (TCCN 1324), MATH 2321 (TCCN 2313), MATH 2417 (TCCN 2412), or MATH 2471 (TCCN 2413).

<sup>4</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

The minor in Forensic Psychology requires 21 semester credit hours. Forensic is defined as "evidence" or "relating to, used in, or appropriate for courts of law." This minor looks at forensic issues from both psychological and criminal justice perspectives. The minor is suitable for criminal justice majors or any individual wishing to pursue a background in psychology and criminal justice. The minor also would be good preparation for those individuals wishing to pursue pre-law or social work and for individuals considering graduate coursework in forensic psychology. This minor is not allowed in the Bachelor of Arts major in Psychology. Enrollment in the following required PSY courses assumes that students will have completed PSY 1300 as part of their social and behavioral science component of the general education core curriculum. If not, PSY 1300 is a prerequisite for PSY 3315, PSY 3316, PSY 3331, and PSY 3335. The prerequisite requirements for CJ 3329 and CJ 4340 will be waived only for students pursuing this minor. This is justified by the fact that students will be exploring many of the issues covered in those requisite courses in the psychology coursework portion of the minor.

Code	Title	Hours
<b>Required Courses</b>		
CJ 1310	Introduction to Criminal Justice	3
CJ 2360	Fundamentals of Criminal Law	3
CJ 3329	Forensic Evidence	3
PSY 3315	Psychopathology	3
or PSY 3316	Personality Psychology	
PSY 3331	Social Psychology	3
PSY 3335	Forensic Psychology	3
Choose 3 hours from the following:		3
ANTH 3380	Forensic Anthropology	
CJ 4340	Crime Theory and Victimization	
SOCI 3343	Criminology	
An elective approved by the Department		
<b>Total Hours</b>		<b>21</b>

The minor in Psychology requires 18 semester credit hours.

Code	Title	Hours
<b>Required Course</b>		
PSY 1300	Introduction to Psychology	3
Choose 15 hours of any PSY courses, of which 12 hours must be advanced (3000 or 4000 level)		15
<b>Total Hours</b>		<b>18</b>

The minor in Sport Psychology requires 21 semester credit hours. Sport Psychology examines the relationships between psychological concepts, theories and an individual's thoughts toward health and exercise.

Current theoretical perspectives of personality factors in exercise, why people exercise, exercise adherence, mental skills and the psychological effects of exercise will be investigated. The minor will focus on topics such as methods of training and coaching, teamwork and leadership, motivation and stress, and social issues in sport. Students will study the relationships between brain biology and behavior. Students will learn to apply psychological theories and perspectives toward understanding thoughts about exercise, an individual's willingness to exercise, choice of exercise, and to assess the relationships between physical health and mental health. This minor is not allowed in the Bachelor of Arts major in Psychology.

Enrollment in the required PSY courses assumes that majors will have completed PSY 1300 as part of their social and behavioral science component of the general education core curriculum. If not, PSY 1300 is a prerequisite for PSY 3321, PSY 3331, PSY 3350, PSY 3361, PSY 3322, and PSY 3336.

Code	Title	Hours
<b>Required Courses</b>		
ESS 3323	Psychosocial Aspects of Exercise of Sport Sciene	3
ESS 3329	Motor Learning	3
PSY 3321	Sensation and Perception	3
or PSY 3322	Brain and Behavior	
PSY 3331	Social Psychology	3
PSY 3336	Sport Psychology	3
PSY 3350	Cognitive Behavioral Therapies	3
or PSY 3361	Health Psychology	
Choose 3 hours from the following:		3
PHIL 3326	Philosophy and Sport	
SOCI 3340	Sociology of Sport and Leisure	
Choose 3 hours of an advisor-approved elective		
<b>Total Hours</b>		<b>21</b>

Trauth Huffman Hall Room 449

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[www.soci.txstate.edu](http://www.soci.txstate.edu) (<http://www.soci.txstate.edu>)

Sociology is the scientific study of individuals and groups within society. Through research and critical examination, sociologists study human interaction and social institutions to answer society's most complex questions. The Department of Sociology is home to student-centered faculty who bring diverse research interests into the classroom. Students have the opportunity to take courses from content areas of race and social class, gender and sexuality, criminology and social deviance, aging and dementia, popular culture, social movements, sustainability, and the environment. Sociology remains essential to a liberal arts education by



preparing students to think critically about the world around them while applying practical skills in research methods and data analysis.

Sociology majors may choose the Bachelor of Arts in Sociology or the Bachelor of Science in Applied Sociology. The B.A. degree prepares students for professional or graduate study in the liberal arts tradition; whereas the B.S. provides practical research skills for students who wish to attend graduate school or to enter the work force upon graduation. Both degrees require 39 hours of Sociology coursework; however, the B.S. in Applied Sociology affords students the opportunity to complete an internship prior to graduation. Throughout the internship, students learn how to connect their classroom education to employment or graduate school opportunities.

Both degree programs include a data analysis course where students will use statistical software packages to learn how to collect, analyze, interpret, and present data on a variety of social phenomena. Qualitative and quantitative research courses teach students practical methods for conducting research while enhancing critical thinking and writing skills. Graduates are prepared for a variety of employment opportunities, including law, management, education, non-profit and community work, data analysis, politics and public administration, social services, and human resource management in business, government and industrial settings.

The Department of Sociology provides academic advising and encourages all students - declared and prospective - to take advantage of these services. Suggested degree plans, while helpful in planning an academic schedule, should not be used in lieu of academic advising.

## Bachelor of Arts (B.A.)

- Major in Sociology (p. 616)

## Bachelor of Science (B.S.)

- Major in Applied Sociology (p. 617)

## Minors

- Aging and the Life Course
- Latina/o Studies
- Sociology (p. 619)
- Studies in Popular Culture (p. 619)
- Sustainability Studies (p. 620)

## Courses in Latina/o (LATS)

### LATS 2300. Introduction to Latina/o Studies.

This course is an introduction to Latina/o studies, which includes an emphasis upon the historical origins, the demographic changes, and contemporary issues facing Latinas/os. It will focus on the development of Latina/o ethnicities, identities, and their impact in American society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

### LATS 4300. Independent Research in Latina/o Studies.

This course is an independent study course in Latina/o Studies with readings, research, and tutorials for students pursuing projects outside the context of regularly offered courses. Students engage in learning about Latina/o Studies through readings, research, an oral presentation, and the creation of a bibliography approved by the instructor. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

### LATS 4325. Latina/o Identities, Communities and Social Change.

This course examines the social continuities, sociopolitical and geographic complexities, and diversities of Latina/os in the U.S. It focuses on crucial issues confronting Latina/os such as the role of race, culture, identity, community development, and leadership practices influencing public policy.(MULT) Prerequisite: LATS 2300 with a minimum grade of a "C".

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Sociology (SOCI)

### SOCI 1310. Introduction to Sociology.

A survey of the basic concepts in sociology including social organization, culture, socialization, groups, and human population leading to the development of a sociological perspective of human behavior. SOCI 1310 and SOCI 3300 may not both be counted for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SOCI 1301

### SOCI 3307. Statistics for the Behavioral Sciences.

The application of descriptive and inferential statistics of behavioral science data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### SOCI 3317. Popular Culture and Society.

The content of popular culture, including movies, television, genre novels, popular music, fads and fashion, sports, contemporary folklore, festivals and celebrations, clothing and body decoration, and related cultural material, is examined and analyzed for social significance. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3318. Applied Data Analysis.**

This course introduces the student to some of the uses of various existing statistical software packages including proper application, limitations, and interpretations of results. Prerequisite: SOCI 3307 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3320. Population Dynamics.**

A study of the composition of the world's population, focusing on growth, problems, politics, and controls. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3322. Sociology of Latinos and Immigration.**

This class will examine the impact that immigration and migration have on the growth of the Latino population as well as current debates surrounding immigration and its future in the U.S.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3323. Sociology of Consumption.**

Consumption is an integral part of social life in the United States, shaping how we see ourselves and others. While consumption can enhance consumers' lives, it is linked to a host of social and environmental problems. This course critically examines such problems and explores alternatives to the way of life that is consumerism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3324. Social Stratification.**

The study of inequality as it relates to occupational, educational, religious, political, and other social activities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3325. Social Deviance.**

Theoretical and descriptive analysis of the major types of deviant behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3327. Sociology of Racial and Ethnic Relations.**

This course focuses upon sociological perspectives in understanding race, ethnicity, and the relations between minority and majority groups with special reference to the American scene. (MULT) (MULP).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3328. Complex Organizations.**

The study and analysis of complex organizations, bureaucracies, and professions and their influence on individuals and society and its institutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3329. Life Course Sociology.**

This course examines major sociological approaches to the study of the human life course. Theoretical approaches reviewed include age stratification, the life course perspective, and constructivist and critical approaches to the life course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3330. Globalization and Development.**

This course covers the sociology of globalization and development. Students will learn about theories of globalization; the effects of globalization on cultural, economic and political life; and factors at different levels of analysis affecting socioeconomic development, security, human rights, and democracy around the world. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3331. Social Movements.**

This course examines social movements – the repeated display of collective action outside sanctioned political channels to bring about social change. Different theoretical approaches to social movements are reviewed to determine how movements organize, attract members, utilize resources, ideologically frame their issues, and engage in nonconventional tactics to influence public policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3333. The Sociology of Popular Music.**

This course explores the dynamic and interactive relationships between music, culture, and society. Popular American music - from blues, gospel, ragtime, jazz, country, and swing to rock, disco, punk, alternative, and rap - will be analyzed as reflections of culture, as society's "voice," and as a powerful instrument of socialization and social change. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3334. Mind and Society.**

This course provides an overview of mental health and illness with an emphasis on how social environments and structures influence mental well-being. The course explores the causes and consequences of mental health disorders. The course examines policies and programs aimed at improving mental health in society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3337. The Family.**

A comparative study of the family in various cultures, both historical and contemporary, with attention to the family in terms of social organization, social change, and social disorganization. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3338. Family Problems.**

This course applies sociological knowledge to common problems encountered in families: spouse and child abuse, elder abuse, catastrophic illness, suicide, unemployment, poverty, teen pregnancy, aging and gender issues. Worldwide traditions and norms affecting the institution of the family are also reviewed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3340. Sociology of Sport and Leisure.**

The theories and research in leisure and popular culture will serve as the broad framework. An emphasis will be placed on the sub-area of sport sociology, including such topics as sport and aggression, competition, children, women, minorities, professionalism, and others. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3343. Criminology.**

The various theories of crime, the cause of crime, areas of crime, treatment of criminals through the courts, punishment, reform, education, probation, and parole, and means of crime prevention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3347. Juvenile Delinquency.**

Delinquency in modern society, basic factors and conditions of juvenile delinquency, and the problem of delinquency control. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3349. Drugs and Society.**

A sociological examination of the social context of drug abuse with emphasis on the social factors, processes, and institutions that impact drug abuse. Applications of sociological theories and research methods will be studied. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3350. Gender and Society.**

This course examines the relations between gender roles throughout the world. Special attention is given to changes in these roles and the consequences of such changes for societies, including familial, marital, and sexual relationships. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3353. Urban Society.**

A study of urbanization as a social phenomenon with attention to traditional sociological studies of the community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3358. Work and Society.**

This course will explore sociological studies of work and occupations, including the structure of work, economic changes, and concerns of workers such as earnings, promotions, and unemployment. It is divided into three main topics: the social organization of work, current work trends, and inequalities at work. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3363. Medical Sociology: The Sociology of Health and Illness Behavior.**

An examination of the social determinants and consequences of human health, morbidity, and mortality, including considerations of health institutions, organizations, professionals, and clients. Social epidemiology of human diseases and mortality and changing relationships of acute and chronic diseases are stressed. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SOCI 3365. Society and Environment.**

This course addresses issues emerging from the reciprocal relationship between society and its environment. The impacts of social and economic organization, social class, and government policies on the physical and social milieu will be examined in order to produce a better understanding of social and environmental interactions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3367. Sustainable Cities.**

This course uses sociological insight to develop a broader understanding of key concepts and debates about the sustainability of cities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3372. Food and Society.**

This course surveys the sociological study of food. Students will examine how people in societies socially construct "food"; how people obtain food and the implications of this process for our health, economy, and environment; and how food relates to issues of race-ethnicity, social class, and gender. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3375M. Latinos and Aging.**

This course offers an understanding of the growing Latino aging population in American society, highlighting issues related to their social, familial, economic, physical, and mental well-being. This course will also cover social programs, health and human service needs, and social policies affecting Latino elders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 3375N. Urban Sociology in Comparative Perspective.**

Topics include the historical development of cities, cities as engines of culture, planning, and gentrification. The comparative emphasis permits analysis of London in light of corresponding phenomena in American cities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 3375O. Culture and Society in Comparative Perspective.**

Topics include cultural change and diffusion and social concerns such as inequality, gender, popular culture, etc. The comparative emphasis permits analysis of these phenomena in England vis-à-vis the United States.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 3375P. Sociology of Religion: A Global Perspective.**

This course is an introduction to the tools and concepts central to the sociological study of religion and religiosity. It takes a global perspective on religions, inspecting the ideas of classic and modern sociological theorists concerning the various roles, functions, conflicts, prejudices and symbols of religion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 3383. Aging and Society.**

This course is an introduction to the sociology of aging and social gerontology. It employs a multicultural perspective to examine diversity in the aging process as influenced by societal forces. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3384. The Sociology of Death and Dying.**

A study of the sociological and social psychological perspectives on death and dying in contemporary societies with particular emphasis on the meanings of death, on dying as a social process, and on death in the context of both social organization and the life cycle.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3390. Technology and Society.**

The subject of this course is the relationship between technologies and social institutions. Topics covered may include but are not limited to theories of sociotechnical change, diffusion, social constructivism, modernity and rationalism, and case studies of transformative technologies such as the clock, the car, and the birth control pill.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3395. Sociology of Sexuality.**

Sexuality is explored from a social constructionist perspective, in contrast to essentialist and biological determinist perspectives dominating the Western understanding of sexual roles and behavior. Sexual identity, desire, behavior, response, and health are viewed as socially constructed, largely in response to concerns about societal order. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 4306. Sociological Theory.**

This course examines classical sociological theories and the contemporary theories that follow from them. The major approaches covered are functionalism, conflict theory, symbolic interaction, and phenomenology. (WI) (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SOCI 4308. Quantitative Research Methods.**

Basic issues in social research are introduced, while emphasizing design and analysis of quantitative research studies. Research exercises culminate in a major research paper analyzing secondary data from The General Social Survey. Critique of published research articles is also required. (WI) Prerequisite: SOCI 3307 with a grade of "D" or better. Corequisite: SOCI 3318 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**SOCI 4309. Qualitative Research Methods.**

This course examines issues in the sociological research process with an emphasis on qualitative methods. Students will design, propose, and submit a qualitative study based on an extensive review of the sociological literature. (WI) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**SOCI 4360. Directed Study.**

A course of independent study open to superior students. May be repeated with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 4690. Internship in Applied Sociology.**

This course is a supervised work experience related to students' career interests. Requirements include seminars and a 300-hour internship for 15 weeks during long semesters or 10 weeks in the summer. This course is limited to BS majors who meet all prerequisites and can be taken for credit only once.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

Minimum required: 120 semester credit hours

General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor.
3. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).

4. For transfer students, 12 semester credit hours in Sociology (or their equivalents) may be transferred from a Texas public institution of higher education for the Sociology Field of Study (FOS) and be applied to the Bachelor of Arts degree with a major in Sociology at Texas State University. More information about the [Field of Study \(<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>\)](http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. In the case where there is no Texas State University course number equivalent to a FOS number, an advanced elective will be counted.

Code	Title	Hours
SOCI 1310	Introduction to Sociology	3
TCCN: SOCI 1301		
SOCI Advanced Elective		3
TCCN: SOCI 1306		
SOCI Advanced Elective		3
TCCN: SOCI 2301		
SOCI Advanced Elective		3
TCCN: SOCI 2319		
Total Hours		12

5. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
6. Nine hours of writing intensive courses are required for graduation.
7. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
8. Students in the B.A. major in Sociology are required to complete the following Sociology courses:

Code	Title	Hours
SOCI 1310	Introduction to Sociology	3
SOCI 3307	Statistics for the Behavioral Sciences	3
SOCI 3318	Applied Data Analysis	3
SOCI 4306	Sociological Theory	3
SOCI 4308	Quantitative Research Methods	3
SOCI 4309	Qualitative Research Methods	3

The remaining 21 hours of coursework may be selected from any 21 SOCI advanced courses. Students are encouraged to consult with the undergraduate academic advisor for elective course selection.

Course Requirements

		Freshman
First Semester Hours		Second Semester Hours
Communication Component Code 010	3	Communication Component Code 010 3
Life and Physical Sciences Component Code 030	3	Mathematics Component Code 020 3
Creative Arts Component Code 050 [TCCN HUMA 1315]	3	Life and Physical Sciences Component Code 030 3



Modern Language 1410	4 Social and Behavioral Sciences Component Code 080 (not to include SOCI 1310)	3
SOCI 1310 (TCCN SOCI 1301)	3 Modern Language 1420	4
US 1100	1	

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**Sophomore**

First Semester Hours		Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3 American History Component Code 060	3	
American History Component Code 060	3 Government/Political Science Component Code 070	3	
Government/Political Science Component Code 070	3 Component Area Option 090	3	
Modern Language 2310	3 Modern Language 2320	3	
SOCI 3307	3 SOCI 3318	3	
	15	15	

**Junior**

First Semester Hours		Second Semester Hours	
ENG Literature (Component Area Option Code 090/094) <sup>1</sup>	3 SOCI 4306	3	
BA Science, Math, Computer Science, or Logic	3 SOCI Advanced Elective	3	
SOCI Advanced Electives	6 Minor	6	
Minor	3		
	15	12	

**Senior**

First Semester Hours		Second Semester Hours	
BA English Literature	3 SOCI 4309	3	
SOCI 4308	3 SOCI Advanced Electives	6	
SOCI Advanced Electives	6 Minor	6	
Minor	3		
	15	15	

**Total Hours: 120**

<sup>1</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

2. Students are required to complete the following Sociology courses:

Code	Title	Hours
SOCI 1310	Introduction to Sociology	3
SOCI 3307	Statistics for the Behavioral Sciences	3
SOCI 3318	Applied Data Analysis	3
SOCI 4306	Sociological Theory	3
SOCI 4308	Quantitative Research Methods	3
SOCI 4309	Qualitative Research Methods	3
SOCI 4690	Internship in Applied Sociology	6

The remaining 15 hours of upper division sociology coursework should be related to their occupational goals or free SOCI advanced electives. Courses should be chosen with the advice of the undergraduate academic advisor.

3. In addition to general education core curriculum and degree requirements, students must complete two semesters of coursework in the same foreign language (1410, 1420) unless they successfully completed two years of foreign language in high school, and must complete one additional English sophomore literature course or ENG 3303 or ENG 3304.
4. For transfer students, 12 semester credit hours in Sociology (or their equivalents) may be transferred from a Texas public institution of higher education for the Sociology Field of Study and be applied to the Bachelor of Science with a major in Applied Sociology at Texas State University. More information about the [Field of Study](http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/) (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list. In the case where there is no Texas State University course number equivalent to a FOS number, an elective will be counted.

Code	Title	Hours
SOCI 1310	Introduction to Sociology	3
TCCN: SOCI 1301		
Elective		3
TCCN: SOCI 1306		
Elective		3
TCCN: SOCI 2301		
Elective		3
TCCN: SOCI 2319		
<b>Total Hours</b>		<b>12</b>

5. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
6. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
7. Nine hours of writing intensive (WI) courses are required for graduation.
8. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

## Course Requirements

Freshman	
First Semester Hours	Second Semester Hours
Communication Component Code 010	3 Communication Component Code 010
Life and Physical Sciences Component Code 030	3 Mathematics Component Code 020
Creative Arts Component Code 050	3 Life and Physical Sciences Component Code 030
Government/Political Science Component Code 070	3 American History Component Code 060
SOCI 1310 (TCCN SOCI 1301)	3 Government/Political Science Component Code 070
US 1100	1
<b>16</b>	<b>15</b>

Sophomore	
First Semester Hours	Second Semester Hours
American History Component Code 060	3 Language, Philosophy, and Culture Component Code 040
Social and Behavioral Sciences Component Code 080 (not to include SOCI 1310)	3 ENG Literature (Component Area Option Code 090/094) <sup>2</sup>
Modern Language 1410 (if needed) or Elective	4 Modern Language 1420 (if needed) or Elective
SOCI 3307	3 SOCI 3318
SOCI Advanced Elective	3 SOCI Advanced Elective
<b>16</b>	<b>16</b>

Junior	
First Semester Hours	Second Semester Hours
BS Literature or Technical Writing	3 Component Area Option 090
SOCI 4306	3 SOCI 4308
SOCI Advanced Elective	3 SOCI Advanced Elective
Minor	6 Minor
	Elective (as needed)
<b>15</b>	<b>18</b>

Senior	
First Semester Hours	Second Semester Hours
SOCI 4309	3 SOCI 4690 <sup>1</sup>
SOCI Advanced Elective	3
Minor	6
Electives (as needed)	6
<b>18</b>	<b>6</b>

**Total Hours: 120**

<sup>1</sup> In the senior year, students must complete a field internship (SOCI 4690) related to their applied sociological training and minor concentration. Enrollment in the internship requires completion of all other course work in the major and a Texas State GPA of 2.00, a major GPA of 2.25 and a minor GPA of 2.00.

<sup>2</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

The minor in Aging and the Life Course requires 18 semester credit hours. Students who want a minor that may lead to a career studying gerontology or working with people in their various life stages, including their final stage, should select Aging and the Life Course as a minor.

Code	Title	Hours
<b>Required Courses</b>		
Choose 9 hours from the following:		9
PSY 3313	Psychology of Adulthood and Aging	
SOCI 3329	Life Course Sociology	
SOCI 3383	Aging and Society	
SOWK 4320	Social Work with Older Adults	
Choose 9 hours from the following:		9
COMM 3326	Family Communication	
COMM 4326	Health Communication	
COMM 4350	Communication and Coping across the Lifespan	
PSY 3313	Psychology of Adulthood and Aging	
PSY 3361	Health Psychology	
SOCI 3327	Sociology of Racial and Ethnic Relations	
SOCI 3329	Life Course Sociology	
SOCI 3337	The Family	
SOCI 3338	Family Problems	
SOCI 3358	Work and Society	
SOCI 3383	Aging and Society	
SOCI 3384	The Sociology of Death and Dying	
SOCI 3395	Sociology of Sexuality	
SOWK 4320	Social Work with Older Adults	
<b>Total Hours</b>		<b>18</b>

The minor in Latina/o Studies requires 18 semester credit hours. The Latina/o Studies minor is an interdisciplinary program for students to learn about social, political, economic, historical and cultural processes that impact Latina/o communities in the United States. Using a complement of courses from disciplines across the university, this minor will: (1) offer an academic and scholarly foundation for students to understand the experiences of Latinas/os using a global perspective; (2) educate students about the cultural competency skills necessary to work with Latina/o communities; and (3) expose students to the theoretical and research methodologies in Latina/o Studies.

Code	Title	Hours
<b>Required Courses</b>		
LATS 2300	Introduction to Latina/o Studies	3
LATS 4325	Latina/o Identities, Communities and Social Change	3
<b>Electives</b>		
Choose 12 hours from the following:		12
ANTH 3324	Mexican American Culture	
ANTH 3350	Gender and Sexuality in Cross-cultural Perspective	

ARTH 4314	Art and Politics	
CJ 3322	Race, Ethnicity and Criminal Justice	
COMM 3329	Intercultural Communication	
CTE 3315	Leadership and Professional Development	
CTE 3324	Entrepreneurship in Schools, Communities, and the Workplace	
DVST 3301	Introduction to Diversity Studies	
ENG 3344	Chicana/o/x Narrative and Social History	
ENG 4325	Literature of the Southwest	
GEO 3308	Latin America	
GEO 3349	World Population	
GEO 3353	American Ethnic Geography	
HIST 3320	History of Mexico	
HIST 3327	History of Mexico to 1848	
HIST 3329	Spanish Borderlands, 1521-1821	
HIST 3371B	Health and Illness in American History	
HIST 3382	Immigration and US History	
HIST 4372	Latina/o/x Histories	
HIST 4373	Economic and Social History of the Americas	
LATS 4300	Independent Research in Latina/o Studies	
MC 4319	Latinas/Latinos and the Media	
MKT 3385	Ethnic and Niche Marketing	
MUSE 3102	Salsa Del Rio	
MUSE 3108	Orquesta del Rio	
PHIL 4372	Latin American Philosophy	
PS 3354	United States-Latin America Relations	
PS 4323	Latina/o Politics	
PSY 3334	Psychology of Human Diversity	
PSY 4390S	Latinx Psychology	
SOCI 3320	Population Dynamics	
SOCI 3322	Sociology of Latinos and Immigration	
SOCI 3327	Sociology of Racial and Ethnic Relations	
SOCI 3333	The Sociology of Popular Music	
SOWK 4300K	Innovative Community Engagement with Vulnerable Populations	
SPAN 3307	Advanced Composition for Spanish Heritage Speakers	
SPAN 3308	Advanced Composition	
SPAN 4312	Contemporary Aspects of Hispanic Linguistics	
SPAN 4370	Hispanic Literature of the Southwest	
TH 3339	Latinx Theatre and Performance	
TH 4303	Multicultural Perspectives in American Theatre	
Total Hours		18

The minor in Sociology requires 18 semester credit hours.

Code	Title	Hours
<b>Required Course</b>		
SOCI 1310 or SOCI 3300	Introduction to Sociology	3
<b>Electives</b>		

Choose 15 hours of SOCI courses, 12 of which must be advanced (3000-4000) level	15
<b>Total Hours</b>	<b>18</b>

The minor in Studies in Popular Culture requires 18 semester credit hours. The minor is designed to acquaint students with trends in American popular culture. Techniques of research, social meanings and consequences of popular culture are the major foci of the minor.

Courses for the Studies in Popular Culture minor were selected because they deal with significant aspects of everyday life ranging from mass media through the history of cultural trends and phenomenon. The courses selected deal with subjects that both are influenced by and influence popular culture.

Code	Title	Hours
<b>Required Course</b>		
SOCI 3317 or SOCI 3333	Popular Culture and Society The Sociology of Popular Music	3
Choose 15 hours from the following:		15
ANTH 3302	Introduction to Linguistic Anthropology	
ANTH 3309	Cultures Through Film	
ANTH 3322	Peoples and Cultures of Africa	
ANTH 3331F	Body Talk: Gestures, Communication, and Society	
ANTH 4304	Language, Culture and Society	
ARTH 3307	Issues in Contemporary Art	
ARTH 4312	The Arts in Popular Culture	
COMM 3332	The Dark Side of Communication	
COMM 4327	Social Media in Organizations	
ENG 3307	Introduction to the Study of Film	
ENG 3308	Advanced Topics in Film	
ENG 3309	The Southwest in Film	
ENG 3326	US Drama on Film	
ENG 3329	Studies in Mythology	
ENG 3331	Black Literature	
ENG 3385	Children's Literature	
ENG 3386	Adolescent Literature	
ENG 4350	Senior Seminar in Film	
ENG 4385	Advanced Studies in Children's or Adolescent Literature	
HIST 3343	Social and Intellectual History of the United States Since 1865	
HIST 3368K	Topics in American Cultural History	
HIST 3368M	Popular Music and Social Movements in 20th Century America	
HIST 3368S	History of Music and Race in the American South	
HIST 3377	History of Country Music	
HIST 3378	History of the Blues	
HIST 3379	History of Rock and Roll	
HIST 4360	History of the United States, 1945 to 1968	
HIST 4361	History of the United States, 1968 to the Present	
HIST 4376	The History of Texas Music	
HON 3399Q	Harry Styles And The Cult Of Celebrity: Identity, The Internet, And European Pop Culture	
MC 3355	Mass Media and Society	

MC 4308	Women and Minorities in the Media
MU 3308	History of Rock Music
MU 3375	History of Jazz
PHIL 3325	Philosophy of Sex and Love
PHIL 3326	Philosophy and Sport
PHIL 4360A	Ethics and Dementia
PHIL 4360B	Moral Psychology
PS 3328	Politics in Film
PS 4315	The Politics of Dystopia
REL 3361A	Religion and Film
SOCI 3317	Popular Culture and Society
SOCI 3324	Social Stratification
SOCI 3333	The Sociology of Popular Music
SOCI 3340	Sociology of Sport and Leisure
SOCI 3349	Drugs and Society
SOCI 3358	Work and Society
SOCI 3365	Society and Environment
SOCI 3372	Food and Society
SOCI 3390	Technology and Society
SOCI 3395	Sociology of Sexuality
<b>Total Hours</b>	<b>18</b>

The minor requires 18 semester credit hours. Sustainability Studies examines the human dimensions of the environment and sustainability in an interdisciplinary context. The program goals include providing students with an opportunity to explore the connections between social and physical systems, developing skills consistent with critical analysis and interdisciplinary knowledge for students who seek careers in sustainability, and a mechanism for students to learn about sustainability and to apply that knowledge to real-world problems.

Code	Title	Hours
<b>Required Courses</b>		
PHIL 3323	Environmental Ethics	3
SOCI 3365	Society and Environment	3
<b>Society and Sustainability</b>		
Choose 6 hours from the following:		6
BLAW 4310	Sustainable Development & Law	
COMM 4346	Environmental Communication and Sustainability	
ECO 3304	Environmental Economics for Decision Makers	
GEO 3310	Urban Geography	
GEO 3320	Community and Regional Planning	
GEO 3349	World Population	
GEO 4323	Conservation Leadership	
GEO 4326	Parks and Protected Places	
PHIL 4360C	Philosophy, Nonviolence, Sustainability, and Social Change	
PH 2340	Community Health	
PH 3301	Environmental Health	
SOCI 3320	Population Dynamics	
SOCI 3330	Globalization and Development	
SOCI 3353	Urban Society	
SOCI 3367	Sustainable Cities	
SOCI 3372	Food and Society	

SOCI 3375J	
SOCI 3390	Technology and Society
<b>Ecology and Sustainability</b>	
Choose 6 hours from the following:	
ANTH 3306	World Prehistory
ANTH 3307	History of Evolutionary Thought
ANTH 3311	Disease and Society
ANTH 3348	Primate Conservation: Adapting to Rapidly Changing Landscapes
BIO 1321	Ecology, Evolution and Society
BIO 4304	Wildlife and Recreation: Impact, Policy, and Management
BIO 4331	Human Dimensions of Wildlife and Fisheries Conservation
GEO 2310	Global Environmental Change
GEO 3313	Natural Resource Use and Management
GEO 3321	Energy Resource Management
GEO 3351	Health Geography
<b>Total Hours</b>	<b>18</b>

Centennial Hall Room 214  
 Telephone: 512-245-2360 Fax: 512-245-8298  
[www.worldlang.txstate.edu](http://www.worldlang.txstate.edu) (<https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.worldlang.txstate.edu&data=02%7C01%7Csg42%40txstate.edu%7Ca0d558661d564dce78b008d6ca74f39a%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C636919000996726585&sdata=VxGHBrfbeeOPKN6oWiMjbmXj%2B9XXo1D4FOiyyw99JbE%3D&reserved=0>)

The Department of World Languages & Literatures offers courses in, Arabic, Chinese, French, German, Italian, Japanese, Latin, Portuguese, Russian, Spanish, and American Sign Language. Instruction focuses on the acquisition of proficiency in the language and on the development of knowledge of the culture, traditions, and literature of the communities. The department also offers several faculty-led and independent education abroad programs as well as experiential learning opportunities including professional internships and service learning. Students who major in French, German, or Spanish complete 24 hours of upper division coursework and may simultaneously earn teacher certification. Students who minor in French, German, or Spanish complete 15 hours of upper division coursework, and students who minor in Arabic, Italian, Japanese, or Chinese complete 12 hours of upper division coursework. Students are offered courses focusing on literature, culture, linguistics, and professional contexts. For language coursework that is not offered at Texas State, the "MODL" course prefix is used as a transcript placeholder to allow students to receive transfer credit for successful completion of the language coursework from other universities. "MODL" is also used for students who receive the requisite score on the ACTFL-OPI exam in a language for which no prefix exists. The "MODL" course is not an academic credit bearing course.

Individuals with proficiency in a second language are always in demand in both the public and private sectors. They facilitate communication among people and nations and make possible the free interchange of information and ideas. Career opportunities abound in such diverse fields as national security, international business, marketing, international law, foreign affairs, criminal justice, AI & UX, translation, interpretation, politics, publishing, journalism, broadcasting, social work,

and teaching. Job candidates with advanced foreign language skills and an international perspective generally receive greater consideration from potential employers.

## Modern Languages Requirement

Students seeking a Bachelor of Arts (B.A.) degree are required to successfully complete an intermediate proficiency level in a language of their choice. Students with limited language background may need to complete the first year of the language (1410 and 1420) before beginning the intermediate level (2310 and 2320). Contact the Department of World Languages & Literatures for information concerning placement exams for beginning and intermediate language coursework. Students can choose from the following language courses:

Code	Title	Hours
ASL 2310 & ASL 2320	Intermediate American Sign Language I and Intermediate American Sign Language II	
ARAB 2310 & ARAB 2320	Intermediate Arabic I and Intermediate Arabic II	
CHI 2310 & CHI 2320	Intermediate Chinese I and Intermediate Chinese II	
FR 2310 & FR 2320	Intermediate French I and Intermediate French II	
GER 2310 & GER 2320	Intermediate German I and Intermediate German II	
ITAL 2310 & ITAL 2320	Intermediate Italian I and Intermediate Italian II	
JAPA 2310 & JAPA 2320	Intermediate Japanese I and Intermediate Japanese II	
LAT 2310 & LAT 2320	Intermediate Latin I and Intermediate Latin II	
POR 2310 & POR 2320	Intermediate Portuguese I and Intermediate Portuguese II	
RUSS 2310 & RUSS 2320	Intermediate Russian I and Intermediate Russian II	
SPAN 2310 & SPAN 2320	Intermediate Spanish I and Intermediate Spanish II <sup>1</sup>	

<sup>1</sup> Students who choose Spanish to satisfy their B.A. language requirement must earn a grade of "C" or better in each course (SPAN 1410, SPAN 1420, SPAN 2310, and SPAN 2320) to advance to the next level course.

## Bachelor of Arts (B.A.)

- Major in French (p. 636)
- Major in French (Secondary Education; Teacher Certification in French, Early Childhood through Grade Twelve, with Double Major in B.A. Education)
- Major in German (p. 639)
- Major in German (Secondary Education; Teacher Certification in German, Early Childhood through Grade Twelve, with Double Major in B.A. Education)
- Major in Spanish (p. 641)
- Major in Spanish (Hispanic Literature and Culture Concentration) (p. 642)

- Major in Spanish (Secondary Education; Teacher Certification in Spanish, Early Childhood through Grade Twelve, with Double Major in B.A. Education)
- Major in Spanish (Spanish for the Professions Concentration) (p. 645)
- Major in Spanish (Spanish Linguistics Concentration) (p. 646)

## Certificate

- Business Spanish (p. 648)
- Professional Spanish (p. 648)

## Minors

- Arabic (p. 648)
- Chinese (p. 649)
- French
- German (p. 649)
- Italian (<http://mycatalog.txstate.edu/undergraduate/liberal-arts/world-languages-literatures/italian-minor/>)
- Japanese (p. 649)
- Spanish (p. 649)

**Subjects in this department include: ASL (p. 621), ARAB (p. 622), CHI (p. 623), FR (p. 624), GER (p. 627), HSPN (p. 629), ITAL (p. 629), JAPA (p. 630), LAT (p. 631), LING (p. 632), POR (p. 632), RUSS (p. 632), SPAN (p. 633).**

## Courses in American Sign Language (ASL)

Note: American Sign Language courses are taught by extension. For additional information please contact the Office of Correspondence and Extension Studies at 512.245.2322 or <http://www.studyanywhere.txstate.edu/>

**ASL 1410. Beginning American Sign Language I.**  
Introduction to understanding and using American Sign Language within the cultural framework of the deaf community. Students who take ASL 1410 toward degree requirements must also complete ASL 1420. (MULT).  
**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter  
**TCCN:** SGNL 1401

**ASL 1420. Beginning American Sign Language II.**  
Continued practice in understanding and using American Sign Language within the cultural framework of the deaf community. Students who take ASL 1410 toward degree requirements must also complete ASL 1420. Prerequisite: ASL 1410 with a grade of "D" or better. (MULT).  
**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter  
**TCCN:** SGNL 1402



**ASL 2310. Intermediate American Sign Language I.**

Continued development and review of American Sign Language within the cultural framework of the deaf community. Prerequisite: ASL 1420 with a grade of "D" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SGNL 2301

**ASL 2320. Intermediate American Sign Language II.**

More advanced practice in American Sign Language within the cultural framework of the deaf community. Prerequisite: ASL 2310 with a grade of "D" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SGNL 2302

## Courses in Arabic (ARAB)

Note: Arabic courses are taught by extension. For additional information please contact the Office of Correspondence and Extension Studies at 512.245.2322 or <http://www.studyanywhere.txstate.edu/>

**ARAB 1410. Beginning Arabic I.**

Introduction to listening, speaking, reading, and writing skills within an Arabic cultural framework. Students who take ARAB 1410 toward degree requirements must also complete ARAB 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ARAB 1411

**ARAB 1420. Beginning Arabic II.**

Continued practice in listening, speaking, reading, and writing skills within an Arabic cultural framework. Students who take ARAB 1410 toward degree requirements must also complete ARAB 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ARAB 1412

**ARAB 2310. Intermediate Arabic I.**

Continued development and review of all language skills within an Arabic cultural framework. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ARAB 2311

**ARAB 2320. Intermediate Arabic II.**

More advanced practice in all language skills with greater emphasis on reading within an Arabic cultural framework. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ARAB 2312

**ARAB 3301. Levantine Arabic.**

An introduction to Arab dialects with a focus on Levantine Arabic ( Jordan, Syria, Lebanon, and Palestinian territories). The course will emphasize oral communication and using the dialect correctly in its cultural context. It will also compare Levantine Arabic to Modern Standard Arabic. Repeatable once with different content. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**ARAB 3302. Media Arabic.**

Introduction to Arab media designed to advance students' proficiency in Arabic. It will present cultural characteristics of Arab media and describe how those characteristics differ from those of US media. The course will increase students' vocabulary knowledge and enable them to understand various Arab media sources. Repeatable once with different content. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**ARAB 3303. Business Arabic.**

This course focuses on the use of written Arabic in business contexts, as well as economic, demographic, and cultural factors that influence commercial interactions in the Arabic-speaking world.(MULT)  
Prerequisite: ARAB 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ARAB 3304. Arab Civilization and Culture.**

Students study the civilizations and cultures of the Arab world. The course provides background for understanding Arab societies.(MULT)  
Prerequisite: ARAB 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ARAB 4390. Studies in Arabic Language and Culture.**

In this course students will conduct an independent study project on Arabic language or culture. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

## Courses in Chinese (CHI)

Note: Chinese courses are taught by extension. For additional information please contact the Offi of Correspondence and Extension Studies at 512.245.2322 or <http://www.studyanywhere.txstate.edu/>

**CHI 1410. Beginning Chinese I.**

Introduction to listening, speaking, reading, and writing skills within a Chinese cultural framework. Students who take CHI 1410 toward degree requirements must also complete CHI 1420. (MULT)

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** CHIN 1411

**CHI 1420. Beginning Chinese II.**

This course provides continued instruction and practice in listening, speaking, reading, and writing skills within a Chinese cultural framework. Students who take CHI 1410 toward degree requirements must also complete CHI 1420. (MULT) Prerequisite: CHI 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** CHIN 1412

**CHI 2310. Intermediate Chinese I.**

This course provides continued development and review in listening, speaking, reading, and writing skills within a Chinese cultural framework. (WI)(MULT) Prerequisites: CHI 1420 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** CHIN 2311

**CHI 2320. Intermediate Chinese II.**

This course provides more advanced practice in all language skills with greater emphasis on reading within a Chinese cultural framework. (WI)(MULT) Prerequisites: CHI 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** CHIN 2312

**CHI 3301. Conversational Chinese.**

This course is designed to improve oral communication skills in Chinese using current video and text media. The course will include the development of vocabulary and grammar necessary for communication and will focus on selected cultural themes. Students' group video projects will be posted on a course blog. Course may be repeated once for credit when topics vary. (WI)(MULT) Prerequisites: CHI 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CHI 3302. Chinese for Business.**

This course focuses on the use of written and spoken Chinese in global business contexts, as well as exploring economic, demographic, and cultural factors that influence commercial interactions. Students learn to use formal Chinese to write reports, job-related letters, and emails and to give presentations. (MULT) Prerequisite: CHI 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CHI 3303. Chinese for Media.**

This course focuses on the study of Chinese-language media to enhance understanding of political affairs and social concerns while developing students' oral and written language skills. The course includes materials from various types of media outlets from across the Chinese-speaking world. (MULT) Prerequisite: CHI 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CHI 3304. Chinese-English Translation.**

This course engages students in translation as a method of improving their reading ability in Chinese as well as developing the cultural competence needed to render the nuances of Chinese texts into English. The course emphasizes key concepts of translation theory and methodology. Texts include media articles, literature, and professional or technical texts. Prerequisite: CHI 3302 or CHI 3303 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHI 3305. Modern Chinese Literature and Film.**

This course offers a survey of Chinese and Taiwanese literature and film in the Chinese language since the beginning of the 20th century. Readings include poems, short stories, and essays in styles as varied as revolutionary, romantic, modernist, nativist, popular, and experimental. Major themes of discussion include tradition and modernity, masculinity and femininity, elite and popular, individual and national identities, class consciousness, and tensions between Chinese and Western culture. This course is taught in Chinese. Written texts are level-appropriate excerpts or abridged editions of original works. Films are shown in Chinese with English subtitles. The course includes a service-learning component. Prerequisite: CHI 3302 or CHI 3303 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHI 4390. Studies in Chinese Language and Culture.**

Students will conduct an independent study project in Chinese language or culture. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

## Courses in French (FR)

**FR 1410. Beginning French I.**

Introduction to listening, speaking, reading, and writing skills within a French cultural framework. Students who take FR 1410 toward degree requirements must also complete FR 1420. (MULT)

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** FREN 1411

**FR 1420. Beginning French II.**

Continued practice in listening, speaking, reading, and writing skills within a French cultural framework. Students who take FR 1410 toward degree requirements must also complete FR 1420. (MULT) Prerequisite: FR 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** FREN 1412

**FR 1421. Beginning French for Speakers of Spanish.**

This course introduces speakers of Spanish to listening, speaking, reading, and writing skills within a French-speaking cultural framework. Students apply their knowledge of Spanish to communicate more effectively in French. Students may not apply credit to their degree plans for both FR 1420 and FR 1421.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FR 2310. Intermediate French I.**

Students will continue to develop and review all language skills within a French and Francophone cultural framework. (MULT) Prerequisite: FR 1420 or FR 1421 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** FREN 2311

**FR 2311. Intermediate French for Speakers of Spanish I.**

This course facilitates Spanish speakers to continue to develop and review all language skills within a French-speaking cultural framework. Spanish speakers will apply their knowledge of Spanish to communicate more effectively in French. Students may not apply credit to their degree plans for both FR 2310 and FR 2311. Prerequisite: FR 1420 or FR 1421 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FR 2320. Intermediate French II.**

Students will practice more advanced language skills with greater emphasis on reading within a French cultural framework. (MULT) Prerequisite: FR 2310 or FR 2311 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** FREN 2312

**FR 2321. Intermediate French for Speakers of Spanish II.**

This course exposes students to the practice of more advanced language skills with greater emphasis on reading within a French-speaking cultural framework. Spanish speakers will apply their knowledge of Spanish to communicate more effectively in French. Prerequisite: FR 2310 or FR 2311 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FR 3303. French Composition and Conversation.**

This course introduces students to extended writing and conversation in French. Students will examine contemporary French and Francophone life from a variety of focuses: social, cultural, and professional. This course will prepare students for taking other advanced literature, cultural, and business courses in French. (MULT) Prerequisite: FR 2320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 3305. Acting French.**

An introduction to upper division courses in French designed to strengthen reading skills and oral command of the language through the study and performance of short French plays from the classical to the contemporary period. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FR 3306. Masterpieces of French Literature.**

Masterpieces of French literature in various genres from different periods with emphasis on the modern period. Repeatable for credit with different emphasis. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 3308. French Translation I.**

This course introduces students to translation from French to English. Students identify key translation techniques, interpret and discuss French texts, and propose translations for them. They compare, analyze and evaluate translations and revise their own work based on suggestions. This course prepares students for a course in specialized translation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 3310. French Pronunciation and Intonation.**

Study and intensive practice of problems in French pronunciation and intonation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FR 3341. Advanced Grammar in French.**

A study of more advanced grammatical, syntactical, and stylistic problems in mastering the French language with the aim of strengthening students' command of the structure of French and developing skills for more effective writing. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FR 3350. History of French Cinema I, 1895-1960.**

This course introduces students to the history of French Cinema from the medium's origins in 1895 to the late 1950s. Students will learn about major developments in film narrative and technology in France from the silent to the classic eras. May be repeated for credit when topic varies. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 3351. Cinema of the French-Speaking World, 1960-present.**

This course introduces students to the history of cinema of the French-speaking world from the late 1950s to the present. May be repeated for credit when topic varies. (MULT)(WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 3381. Business French I.**

A course designed for students interested in business related careers. The course will help students to become familiar with basic French business language and the specifics of Francophone business cultures. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FR 4304B. French Genre Fiction.**

This course focuses on the study of specific fictional works associated with a particular genre (e.g., crime fiction, the fantastic, and science-fiction) and the authors who are exemplars of that narrative category. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4304C. Francophone Literature, Cinema, and Culture.**

This course introduces students to the richness and diversity of the Francophone world through the study of its literature, film, and art. Prerequisite: FR 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4304D. Iconic Figures of the French-Speaking World.**

This course introduces students to major historical periods and/or cultural movements through the examination of an iconic figure-actual or allegorical-that served as a catalyst of events and cultural productions in the French-speaking world. The course may be repeated for credit when topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4307. Study of French Language.**

This course introduces students to the scientific study of the French language through discussion of readings with examples in both English and French.(MULT) Prerequisite: FR 3310 or FR 3341 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4308. French Translation II.**

This course provides a theoretical framework for the advanced study of translation and an introduction to specific fields such as legal, business, financial, technical and medical translation as well as localization. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4330A. History of French Media.**

This course introduces students to a survey of the history of the French press from the early modern to the post-World War II period. Topics include the roles of ideology and collective memory, of illustration and caricature, of propaganda and censorship, and of the development of the French intellectual figure. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4330B. Contemporary Issues in French Media.**

This course focuses on contemporary French media – printed, broadcast, and online – from the postwar period to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4341. French Composition and Stylistics.**

Students will incorporate their more advanced grammatical and syntactical skills with the study of style in the writing of compositions in French. Writing exercises will explore a variety of expository techniques from description, narration, dialogue, portraits, to the writing of letters. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4350A. French Poetic Realist Cinema.**

This course will study the films and directors associated with Poetic Realism, the film style of the 1930s in France and an important precursor to Italian Neorealism.(MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**FR 4350C. French Directors' Series.**

This course offers students an in-depth examination of the films, themes, and styles associated with specific contemporary or classic French directors. Taught in English. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4370. Cultures of the French-Speaking World.**

This course is a survey of the cultural institutions of France or the French-speaking world. Repeatable for credit with different emphasis. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4380. Service-Learning in French.**

This course is a supervised work (business or educational) or volunteer (refugee shelter) experience in a French-speaking environment. Students work a minimum of 75 hours, performing duties at least 80% in French. Prerequisite: FR 2320 with a grade of "D" or better AND department approval.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**FR 4390. Studies in French Culture, Language, or Literature.**

A course designed to offer students an opportunity to pursue independent studies in special areas of interest beyond those of other catalog courses. The course is generally available only to graduating seniors who have completed at least two advanced courses or graduate students with special needs. May be repeated once for additional credit. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

## Courses in German (GER)

**GER 1410. Beginning German I.**

Introduction to listening, speaking, reading, and writing skills within a German cultural framework. Students who take GER 1410 toward degree requirements must also complete GER 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** GERM 1411

**GER 1420. Beginning German II.**

Continued practice in listening, speaking, reading, and writing skills within a German cultural framework. Students who take GER 1410 toward degree requirements must also complete GER 1420. (MULT) Prerequisite: GER 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** GERM 1412

**GER 2310. Intermediate German I.**

Continued development and review of all language skills within a German cultural framework. (MULT) Prerequisite: GER 1420 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** GERM 2311

**GER 2320. Intermediate German II.**

More advanced practice in all language skills with greater emphasis on reading within a German cultural framework. (MULT) Prerequisite: GER 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** GERM 2312

**GER 3304A. German Cinema.**

This course explores German film, history, and theory. Emphasis is placed on the interrelation of German and American uses of the medium. The course includes classic style (1910s), German Expressionism (1920s), cinema of Nazi Propaganda (1940s), the period of reconstruction (1950s), and the German New, and New New Waves. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**GER 3304B. German Colonialism, Orientalism, and Exoticism in Film and Literature.**

This course surveys German colonial narratives and theories from the 19th and the mid-20th century. The course examines how critics today interpret the political and aesthetic tropes around which texts are organized, focusing on how these "colonial fantasies" emphasized national differences between German and other European powers. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**GER 3304C. The Many Faces of Weimar Cinema: German Expressionist Films.**

The course provides an overview of the changing roles of German cinema in the early 20th century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GER 3304D. German Translation.**

In this course, students approach translation as a method of improving their reading ability in German, not only through language, but also in terms of cultural competence in dealing with texts from the German-speaking world. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GER 3305. German on the Stage.**

This course is designed to strengthen reading skills and oral command of the language through the study and performance of a classical or contemporary German-language play. May be repeated for credit twice with different topics. (MULT) Corequisite: GER 3310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**GER 3310. German Phonetics.**

This course introduces students to German phonetics, primarily German pronunciation, intonation, and stress. The course is taught in German. It may be repeated once with different content for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**GER 3320. Improving German Communication Skills.**

This course provides extensive practice in speaking and writing German and in mastering advanced grammatical structures in speaking and writing. The course may be repeated once with different content for additional credit. Prerequisites: GER 2320 with a grade of "D" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**GER 3341. Review of German Grammar.**

Students will review the foundations of German grammar and expand their skills at the intermediate/advanced level. A strong foundation in German grammar is essential for mastering the language and communicating effectively in it.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GER 3370. The Contemporary German-Speaking World.**

This course provides a background for a better understanding of Germany since the beginning of the twentieth century and of contemporary life and culture in Germany, Austria, and Switzerland. Course activities include oral and written reports. This course is taught in German. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GER 3380. Business German in Global Economy.**

An introduction to the individual economies of each German state, the language and standards of the German business world, the tourist industry of Germany, and Germany's role in the European Community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GER 4300. Professional Internship in German.**

This course is a supervised work experience that provides an opportunity to use German in a professional setting. Planning sessions, training, and language lessons prepare students for the internship. Other requirements include reflective practice reports as assigned by the course instructor. Prerequisite: GER 2320 with a grade of "D" or better and department approval.

**3 Credit Hours. 1 Lecture Contact Hour. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GER 4310. Masterpieces of German Literature.**

An examination of major literary works representing the major genres and periods of German literature. The course may be repeated once with different content for additional credit. (MULT) Prerequisite: one GER 3000-level course or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GER 4340. Advanced Conversation, Composition, and Stylistics.**

This course is designed to strengthen command of the language through reading, writing, conversation, and oral presentations in German. The course may be repeated once with different content for additional credit. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GER 4380. German Civilization.**

The course introduces the history and culture of the German-speaking world from the Middle Ages through the nineteenth century. Students explore historical events and developments that have shaped this part of Europe, and engage with original texts that reflect those developments. This course is taught in German. Prerequisite: GER 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GER 4390. Studies in German Culture, Language, or Literature.**

A course designed to offer students an opportunity to pursue independent studies in special areas of interest beyond those of other catalog courses. The course is generally available only to graduating seniors who have completed at least two advanced courses or graduate students with special needs. Applications must be submitted prior to the registration period each semester. May be repeated once for additional credit. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

## Courses in Hispanic Literature and Culture in English (HSPN)

### HSPN 2301. Cultures and Literatures of the Hispanic World.

In this course, taught in English, students survey writers and texts that reflect the diversity of cultural identities and literary traditions of the Hispanic world, broadly defined. Through study of primary and secondary texts (in English translation), students discover the complex interrelationships among artistic, historical, linguistic, and socio-political factors that inform and enrich writing produced in Latin America, the Caribbean, Europe, and the U.S. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Italian (ITAL)

Note: Italian courses are taught by extension. For additional information please contact the Office of Correspondence and Extension Studies at 512.245.2322 or <http://www.studyanywhere.txstate.edu/>

### ITAL 1410. Beginning Italian I.

Introduction to listening, speaking, reading, and writing skills within an Italian cultural framework. Students who take ITAL 1410 toward degree requirements must also complete ITAL 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ITAL 1411

### ITAL 1420. Beginning Italian II.

This course provides continued practice in listening, speaking, reading, and writing skills within an Italian cultural framework. Students who take ITAL 1410 toward degree requirements must also complete ITAL 1420. (MULT) Prerequisites: ITAL 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ITAL 1412

### ITAL 2310. Intermediate Italian I.

This course provides continued development and review of all language skills within an Italian cultural framework. (MULT). Prerequisite: ITAL 1420 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ITAL 2311

### ITAL 2320. Intermediate Italian II.

This course provides more advanced practice in all language skills with greater emphasis on reading within an Italian cultural framework. (MULT). Prerequisite: ITAL 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ITAL 2312

### ITAL 3308. Advanced Grammar and Composition.

This course is designed to improve writing skills in Italian through the reading and writing of Italian texts. The focus is on writing skills and the reading of selected works from Italian literature. The course may be repeated once with different content. (MULT) Prerequisite: ITAL 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

### ITAL 3309. Italian Film and Media Studies.

This course engages students in a theoretical, methodological and critical debate on Italian film and media of the last 100 years. The course trains students to comprehend, analyze, and participate in Italian and global film and screen media cultures and industries, and to express their thoughts in Italian. The course includes screenings, workshops with visiting professionals, and talks on film and media-related issues. (MULT) Prerequisite: ITAL 2320 with a grade of "D" or better. Corequisite: ITAL 3308 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

### ITAL 4304. Italian Literature and Culture.

This course addresses key historical and aesthetic issues related to Italian literature and culture in the last two millennia. Class discussions, oral presentations and written work provide students with opportunities to develop their Italian skills in the context of literary and cultural topics. Course may be repeated with different emphasis. (MULT) Prerequisite: ITAL 3308 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ITAL 4370. Italian Civilization.**

This survey of the cultural institutions of Italy provides a background for a better understanding of the Italian people, encompassing the development of Italian culture and the forces that have shaped modern Italy. Recent essays, films, and comparative analyses of Italo-American relations will also be presented. Repeatable for credit with different emphasis. (MULT) Prerequisite: ITAL 3308 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ITAL 4390. Studies in Italian Language and Culture.**

Students will conduct an independent study project in Italian language and culture. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

## Courses in Japanese ( JAPA)

**JAPA 1410. Beginning Japanese I.**

This course is an introduction to listening, speaking, reading, and writing skills within a Japanese cultural framework. Students who take JAPA 1410 toward degree requirements must also complete JAPA 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** JAPN 1411

**JAPA 1420. Beginning Japanese II.**

This course provides continued practice in listening, speaking, reading, and writing skills within a Japanese cultural framework. Students who take JAPA 1410 toward degree requirements must also complete JAPA 1420. (MULT) Prerequisite: JAPA 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** JAPN 1412

**JAPA 2310. Intermediate Japanese I.**

This course provides continued development and review of all language skills in a Japanese cultural framework. (MULT). Prerequisite: JAPA 1420 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** JAPN 2311

**JAPA 2320. Intermediate Japanese II.**

This course provides advanced practice in all language skills in a Japanese cultural framework. (MULT). Prerequisite: JAPA 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** JAPN 2312

**JAPA 3304. Advanced Japanese Grammar I.**

Course designed to strengthen written command of the language through grammar instruction as well as readings and reports in Japanese. (MULT). Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**JAPA 3306. Modern Japanese Literature and Culture.**

Students analyze Japanese literature and culture while developing their proficiency in Japanese, increasing their vocabulary in the language, and extending their knowledge of critical kanji necessary for understanding the written language. (MULT) Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**JAPA 3307. Advanced Japanese Writing and Grammar.**

This is a writing-intensive course designed to strengthen students' knowledge of the structure of Japanese and written command of the language. Course may be repeated once with a different emphasis for additional credit. (WI) (MULT) Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**JAPA 3308. Advanced Japanese for Business.**

This is an advanced course designed to develop the skills needed to succeed in the complex business world of Japan. Course may be repeated once with a different emphasis for additional credit. (MULT). Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**JAPA 3309. Japanese Language through Popular Culture.**

Students will improve Japanese reading comprehension through the study of popular Japanese media such as manga (graphic novels) or anime (film animation) or kayoo kyoku (Japanese popular song). The course will emphasize how language is used to tell stories for diverse audiences. Repeatable with different emphases.(MULT) Prerequisite: JAPA 2320 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**JAPA 4301. Japanese-English Translation: Theory and Practice.**

This course introduces the concepts of translation theory, methodology, and practice. The course focuses on Japanese-to-English translation of a variety of sources, including newspaper articles, short stories, essays, social media posts, J-pop lyrics, business documents, and scripts from anime and drama.(MULT) Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**JAPA 4304. Advanced Japanese Grammar II.**

This course will build on skills learned in JAPA 3304 to further strengthen command of written Japanese through more advanced grammar topics, readings, and reports.(MULT) Prerequisite: JAPA 3304 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**JAPA 4310. Postwar Japanese Literature and Film.**

This course focuses on literature and film from the period after World War II in Japan in the context of postwar social, political, and cultural changes.(MULT) Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**JAPA 4320. Japanese Science Fiction.**

The course focuses on Japanese science fiction and its cultural contexts.(MULT) Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**JAPA 4330. Early Modern Japanese Literature & Culture.**

This course introduces students to literature, theater, visual arts, and other aspects of traditional culture of the Tokugawa era (1603-1867). Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**JAPA 4390. Studies in Japanese Language and Culture.**

Students conduct an independent study project in Japanese language or culture. The course is recommended for students in their last year who have already completed at least one advanced course. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

## Courses in Latin (LAT)

Note: Latin courses are taught by extension. For additional information please contact the Offi of Correspondence and Extension Studies at 512.245.2322 or <http://www.studyanywhere.txstate.edu/>

**LAT 1410. Beginning Latin I.**

Introduction to reading and writing skills in Latin with a Latin cultural framework. Students who take LAT 1410 toward degree requirements must also complete LAT 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** LATI 1411

**LAT 1420. Beginning Latin II.**

Continued practice in reading and writing skills in Latin within a Latin cultural framework. Students who take LAT 1410 toward degree requirements must also complete LAT 1420. (MULT) Prerequisites: LAT 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** LATI 1412

**LAT 2310. Intermediate Latin I.**

Introduction to complex grammatical structures and syntax of Latin. Focus on the application of the rules of grammar and syntax to the translation of original classical texts. Some attention given to the diction and written styles of individual authors. (MULT) Prerequisites: LAT 1420 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** LATI 2311

**LAT 2320. Intermediate Latin II.**

Continued acquisition of complex grammatical structures and syntax. Introduction to reading Latin poetry. Some attention given to meter and scansion as needed. (MULT) Prerequisite: LAT 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** LATI 2312



## Courses in Applied Linguistics and Language Learning (LING)

### LING 3301. Introduction to Translation.

This course provides a foundation for translating various types of texts by building a conceptual framework for confronting practical problems that arise in translation and by introducing key principles and techniques of text analysis and translation strategies. Prerequisite: SPAN 2320 or FR 2320 or GER 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### LING 4307. Foreign Language Acquisition.

An introduction to the nature of language development and to the theories that describe foreign language acquisition and development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### LING 4390. Independent Study in Applied Linguistics and Language Learning.

This course is generally open only to students with special needs. Students select a topic in line with their special interests and requirements. May be repeated once with different topic for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Courses in Portuguese (POR)

Note: Portuguese courses are taught by extension. For additional information please contact the Offi of Correspondence and Extension Studies at 512.245.2322 or <http://www.studyanywhere.txstate.edu/>.

### POR 1410. Beginning Portuguese I.

Introduction to listening, speaking, reading, and writing skills within a Brazilian cultural framework. Students who take POR 1410 toward degree requirements must also complete POR 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** PORT 1411

### POR 1420. Beginning Portuguese II.

Continued practice in listening, speaking, reading, and writing skills within a Portuguese cultural framework. Students who take POR 1410 toward degree requirements must also complete POR 1420. (MULT) Prerequisites: POR 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** PORT 1412

### POR 2310. Intermediate Portuguese I.

Continued development and review of all language skills within a Portuguese cultural framework. (MULT) Prerequisite: POR 1420 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** PORT 2311

### POR 2320. Intermediate Portuguese II.

More advanced practice in all language skills with greater emphasis on reading with a Portuguese cultural framework. (MULT). Prerequisite: POR 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** PORT 2312

### POR 3308. Advanced Composition and Conversation through the Brazilian Short Story.

This course will help students advance their knowledge of the Portuguese language through the reading, discussion, and analysis of modern and contemporary Brazilian short stories. By reading the works of renowned writers students will be able to expand their vocabulary and develop fluent reading and writing skills. (WI) (MULT) Prerequisite: POR 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Russian (RUSS)

### RUSS 1410. Beginning Russian I.

This course is an introduction to listening, speaking, reading, and writing skills within a Russian cultural framework. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### RUSS 1420. Beginning Russian II.

This course provides continued instruction and practice in listening, speaking, reading, and writing skills within a Russian cultural framework. (MULT) Prerequisite: RUSS 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RUSS 2310. Intermediate Russian I.**

This course provides continued development and review of all language skills within a Russian framework.(MULT) Prerequisite: RUSS 1420 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RUSS 2320. Intermediate Russian II.**

This course provides more advanced practice in all language skills with greater emphasis on reading within a Russian cultural framework.(MULT) Prerequisite: RUSS 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RUSS 3302. Advanced Russian I.**

This course provides students an opportunity to develop advanced-level oral and written communication skills in the Russian language, along with enhanced comprehension skills in listening and reading. The course focuses on vocabulary and sentence building; listening and reading comprehension; and pronunciation practice. Prerequisite: RUSS 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RUSS 4301. Advanced Russian through Film.**

This course focuses on Russian and Soviet films. In addition to the thematic and formal aspects of the films, the course examines their social, historical, and cultural contexts. Course activities allow students to develop their skills in reading, writing, speaking, and listening. Prerequisite: RUSS 3301 or RUSS 3302 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RUSS 4390. Studies in Russian Language and Culture.**

Students will conduct independent study projects in Russian language and culture.(MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

## Courses in Spanish (SPAN)

**SPAN 1410. Beginning Spanish I.**

Introduction to listening, speaking, reading, and writing skills within a Spanish cultural framework. Students who take SPAN 1410 toward degree requirements must also complete SPAN 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SPAN 1411

**SPAN 1420. Beginning Spanish II.**

Continued practice in listening, speaking, reading, and writing skills within a Spanish cultural framework. Prerequisite: SPAN 1410 with a grade of "C" or better. Students who take SPAN 1410 toward degree requirements must also complete SPAN 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SPAN 1412

**SPAN 2310. Intermediate Spanish I.**

Continued development and review of all language skills within a Spanish framework. (MULT) Prerequisite: SPAN 1420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SPAN 2311

**SPAN 2320. Intermediate Spanish II.**

More advanced practice in all language skills with greater emphasis on reading within a Spanish cultural framework. (MULT) Prerequisite: SPAN 2310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SPAN 2312

**SPAN 3301. Literatures of Spain I.**

Students will study significant literary texts of the Iberian Peninsula from the Muslim conquest in 711 A.D. through 1700. The course will also consider the literature's historical, religious, social, and political contexts. Prerequisite: SPAN 3309 with a grade of "C" or better. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3302. Literatures of Spain II.**

Students will study significant literary texts of the Iberian Peninsula from the Enlightenment through the twenty-first century. The course will also consider the literature's historical, social, and political contexts. Prerequisite: SPAN 3309 with a grade of "C" or better. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3305. Latin American Literatures I.**

Students will study literary texts in Latin American from the period before the Conquest through the Colonial and Independence periods. The course will also consider the literature's historical, religious, social, and political contexts. Prerequisite: SPAN 3309 with a grade of "C" or better. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3306. Latin American Literatures II.**

Students will study literary texts of Latin American from Modernismo to the twenty-first century. The course will also consider the literature's historical, social, and political contexts. (MULT) (WI) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3307. Advanced Composition for Spanish Heritage Speakers.**

This is an advanced composition course for students who have grown up in an environment in which Spanish is spoken. It is designed to improve writing skills in Spanish through reading and responding to texts in Spanish. Students may not apply credit to their degree plans for both SPAN 3307 and 3308. (MULT) Prerequisite: SPAN 2320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3308. Advanced Composition.**

This advanced composition course is designed to improve writing skills in Spanish through reading and responding to texts in Spanish. Students may not apply credit to their degree plans for both SPAN 3307 and SPAN 3308. (WI) (MULT) Prerequisite: SPAN 2320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3309. Introduction to Hispanic Literature and Literary Analysis.**

This course focuses on writing skills, literary analysis, and the reading of selected works from Spanish, Latin American and Hispanic literature. (MULT) (WI) Prerequisite: SPAN 2320 with a grade of "C" or better. Corequisite: SPAN 3307 or SPAN 3308 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3310. Spanish Phonetics and Phonemics.**

Articulatory phonetics and sound discrimination and production; phonemic and allophonic variants; geographical and social distribution. (MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 3311. Business Spanish I.**

This course focuses on the use of written and oral Spanish in global business contexts, as well as exploring economic, demographic, and cultural factors that influence commercial interactions in the Hispanic world. Topics include business management, banking, and human resources. (WI)(MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3312. Business Spanish II.**

This course focuses on the use of written and oral Spanish in global business contexts, as well as exploring economic, demographic, and cultural factors that influence commercial interactions in the Hispanic world. Topics include marketing, financing, and imports/exports. (WI) (MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3313. Spanish and Media.**

This course provides an overview of mass communication in Spanish-speaking regions of the world. Students explore the use of radio, television, newspapers, and the internet as practiced in various Hispanic cultural contexts. Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 3314. Translation Practice and Theory.**

This course is an introduction to Spanish translation for upper-division students. Students approach translation as a method of improving their reading comprehension—a fundamental skill for translators—while increasing overall Spanish language proficiency and acquiring the cultural competence required to address the complexities of the translation process. Prerequisite: SPAN 3307 or SPAN 3308 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 3315. Spanish for Health Professions.**

This course focuses on the use of oral and written Spanish in U.S. and global health professions. Topics include: general and diagnostic health-related terminology in Spanish; communication with Spanish-speaking patients, families, and other health professionals; and the impact of cultural factors on health matters in Hispanic communities. (WI) Prerequisite: SPAN 3307 or SPAN 3308 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3340. Advanced Spanish Grammar and Stylistics.**

This course places major emphasis on syntax, usage, and grammatical nomenclature. (MULT) Corequisite: SPAN 3307 or SPAN 3308 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 3370. Spanish Civilization.**

Students will study the civilizations and cultures of Spain. The course provides a background for understanding Spanish society. (MULT) (WI)

Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3371. Latin American Civilization.**

Students will study the cultures of Latin America and the Hispanic U.S. The course provides a background of the history and civilization of both groups. (MULT) (WI) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4300. Professional Internship in Spanish.**

This course is a supervised work experience in a Spanish-speaking environment. Students will work a minimum of 140 hours, performing duties at least 80% in Spanish. Other requirements include internship reports as required by course instructor. (MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 4302. The Spanish Novel.**

Students will study selected novels of Spain from the 16th through the 21st century. The course will also consider the literature's historical, religious, and political contexts. (MULT) (WI) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4311. Historical Aspects of Hispanic Linguistics.**

Course designed to develop knowledge and skills required for analysis and discussion of structural and external aspects of the history of the Spanish language with special focus on word formation and social aspects of language variation. The course provides an overview of morphology, sociolinguistics, and historical linguistics. (MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 4312. Contemporary Aspects of Hispanic Linguistics.**

This course is designed to develop knowledge and skills required for analysis and discussion of the structural and social aspects of the Spanish language. The course provides an overview of semantics, syntax, pragmatics, dialectology, and language acquisition in Spanish. (MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 4330. The Latin American Novel.**

Students will study selected novels from Latin America. The course will also consider the literature's historical and political contexts. (MULT) (WI) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4341. Gabriel Garcia Marquez.**

Students will read and analyze works by Nobel Prize author Gabriel Garcia Marquez, focusing on literature, history, politics and art of Latin America. (WI)(MULT) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4342. Don Quijote.**

Students will read and analyze Miguel de Cervantes' Don Quijote. The course will also consider the novel's literary sources and historical and cultural context. (WI)(MULT) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4350. Hispanic Film.**

Students will study Hispanic artistic, cultural, and historical issues through film and selected readings. (WI) (MULT) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4361. Hispanic Poetry.**

Students will read and analyze selected poems from Latin America and Spain. The course will consider the cultural and historical contexts of the works. (MULT) (WI) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4362. Hispanic Drama.**

Students will read and analyze selected plays from Latin America and Spain. The course will also consider the cultural context of the works. (MULT) (WI) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4370. Hispanic Literature of the Southwest.**

Students will study the Hispanic literature of the Southwest in order to have a better understanding of the cultural diversity of the region. (WI) (MULT) Prerequisite: SPAN 3309 a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4380A. Hispanic Nobel Prizes in Literature.**

Hispanic Nobel prizes in Literature. (WI) (MULT) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4380F. Mexican Literature.**

This course focuses on the most representative works of Mexican Literature produced since Mexican Independence in the early 19th century. Course objectives include a better understanding of major literary trends and the cultural development of Mexican society since its beginning as an independent republic. (WI) (MULT) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4380G. Women, Minorities and Marginal Groups in Medieval Spanish Literature.**

This course will present some of the principal literary works which portray women, religious minorities and marginal groups in medieval Spain. Special focus will be given on deconstructing historical myths and stereotypes based on behavioral, religious and sexual identity as reflected by the authors and their selected works. (WI) (MULT) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4380H. Nature and Nation in Latin American Literature.**

Students will study the interaction of nature and nation in Latin American literature after Independence by taking into account both Western and indigenous approaches to nature. Students will read a selection of literary works that reinforce and/or contest notions of nature, nation and cultural identity. (WI) (MULT) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4390. Studies in Spanish Culture, Language, or Literature.**

The course is generally available only to graduating seniors who have completed several advanced courses or graduate students with special needs. Repeatable for credit with different emphasis. (MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 4600. Professional Internship in Spanish.**

This course is a supervised work experience in a Spanish-speaking environment. Students work a minimum of 280 hours, performing duties at least 80% in Spanish. Other requirements include internship reports as required by course instructor. (MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better and instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 18 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.



- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor.
- Nine hours of writing intensive (WI) courses are required for graduation.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Students in the Bachelor of Arts (B.A.) degree with a major in French must complete 24 advanced hours in French and maintain a GPA of at least a 2.50 in all advanced French course work to meet graduation requirements.
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- Graduating seniors must submit a portfolio of their work to the French faculty in their last semester. Details about the portfolio are available in the Department's main office and on the French Program webpage.
- Graduating seniors must participate in an exit interview with French faculty in their last semester. Details about the exit interview are available in the Department's main office and on the French Program webpage.

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020	3	Life and Physical Sciences Component Code 030	3
Government/Political Science Component Code 070	3	American History Component Code 060	3
FR 1410 (TCCN FREN 1411)	4	Government/Political Science Component Code 070	3
US 1100	1	FR 1420 (TCCN FREN 1412)	4
14		16	
Sophomore			
First Semester Hours		Second Semester Hours	
Life and Physical Sciences Component Code 030	3	Language, Philosophy, and Culture Component Code 040	3
American History Component Code 060	3	Creative Arts Component Code 050	3
Social and Behavioral Sciences Component Code 080	3	Component Area Option Code 090/091	3
ENG Literature (Component Area Option Code 090/094) <sup>1</sup>	3	FR 2320 (TCCN FREN 2312)	3

FR 2310 (TCCN FREN 2311)	3	Minor	3
<b>15</b>		<b>15</b>	
First Semester Hours		Second Semester Hours	
BA Science, Math, Computer Science, or Logic	3	BA English Literature	3
FR Advanced Electives	6	FR Advanced Electives	6
Minor	6	Minor	6
<b>15</b>		<b>15</b>	
First Semester Hours		Second Semester Hours	
FR Advanced Electives	6	FR Advanced Electives	6
Minor	3	Electives (as needed)	9
Electives (as needed)	6		
<b>15</b>		<b>15</b>	

**Total Hours: 120**

<sup>1</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

## Minimum Hours: 120 Semester Credit Hours

## Admission Requirements

- All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (<http://mycatalog.txstate.edu/undergraduate/degree-program-information/>) (B.A.) requires three additional hours of English literature, three additional hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor. For this program, the additional literature course may be satisfied by selecting a sophomore literature course for the 040 component of the core curriculum and the second major in Education fulfills the minor requirement.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine hours of writing intensive (WI) courses are required for graduation.

5. The major in French requires 27 hours including 24 hours of advanced French coursework and LING 4307. Students must earn a “C” or higher in all major course work and maintain a major GPA of at least 2.50.
6. Graduating seniors must submit a portfolio of their work to the French faculty in their last semester. Details about the portfolio are available in the Department’s main office and on the French Program webpage.
7. Graduating seniors must participate in an exit interview with French faculty in their last semester. Details about the exit interview are available in the Department’s main office and on the French Program webpage.
8. To satisfy graduation requirements for teacher certification, students must have at least a 2.75 Overall GPA and a GPA of at least 2.50 in all assigned courses in the professional sequence of the Education major with no grade below a “C”.
9. This degree program is designed to prepare students for all-level teacher certification in French and requires that students pursue a double major by declaring and completing requirements for the major in French and the major in Education. The following courses are required for the major in Education:

Code	Title	Hours
Education Foundation:		
CI 2310	Education for Change	3
CI 3325	Adolescents and Society	3
CI 4332	Secondary Teaching: Curriculum and Technology	3
Teaching and Learning:		
CI 3340	Teaching for Linguistic Diversity	3
CI 4343	Instructional Strategies for the Secondary Teacher	3
CI 4370	Building Relationships in the Secondary Classroom	3
CI 4372	Teaching in Communities	3
RDG 3323	Teaching Literacies in the Content Areas	3
SPED 4344	Educating Students with Mild Disabilities	3
Clinical Practice:		
EDST 4380	Clinical Teaching All-Level I	3
EDST 4381	Clinical Teaching All-Level II	3

10. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPt%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPt%3D&reserved=0)).

11. For transfer students, 6 semester credit hours in Curriculum and Instruction and Special Education may be transferred from a Texas public institution of higher education for the Associate of Arts in Teaching Field of Study and be applied to the Bachelor of Arts degree with a major in Education at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list:

Code	Title	Hours
CI 2310	Education for Change	3
TCCN: EDUC 1301		
SPED 4344	Educating Students with Mild Disabilities	3
TCCN: EDUC 2301		

## Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
Communication Component Code 010	3 Communication Component Code 010	3
Life and Physical Sciences Component Code 030	3 Mathematics Component Code 020	3
Government/Political Science Component Code 070	3 American History Component Code 060	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 Government/Political Science Component Code 070	3
FR 1410 (TCCN FREN 1411)	4 FR 1420 (TCCN FREN 1412)	4
US 1100	1	
17		16
Sophomore		
First Semester Hours	Second Semester Hours	
Life and Physical Sciences Component Code 030	3 ENG Literature (Language, Philosophy, and Culture Component 040) <sup>1</sup>	3
American History Component Code 060	3 Creative Arts Component Code 050	3
Social and Behavioral Sciences Component Code 080	3 BA Science, Math, Computer Science, or Logic	3
ENG Literature (Component Area Option Code 090/094) <sup>1</sup>	3 FR 2320 (TCCN FREN 2312)	3
FR 2310 (TCCN FREN 2311)	3 CI 2310 (TCCN EDUC 1301)	3
15		15
Junior		
First Semester Hours	Second Semester Hours	
FR Advanced Electives	9 FR Advanced Electives	9
Education Core:	6 Field Block I:	9
CI 3325	CI 3340	
CI 4332	CI 4343	
	SPED 4344	
15		18

First Semester Hours		Second Semester Hours	Senior
FR Advanced Electives	6	Clinical Practice (Student Teaching):	6
LING 4307	3	EDST 4380	
Field Block II:	9	EDST 4381	
CI 4370			
CI 4372			
RDG 3323			
18			6
<b>Total Hours: 120</b>			

<sup>1</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor.
- Nine hours of writing intensive (WI) courses are required for graduation.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Students in the Bachelor of Arts (B.A.) degree with a major in German must complete 24 advanced hours in German and maintain a GPA of at least a 2.50 in all advanced German course work to meet graduation requirements.
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.

### Course Requirements

First Semester Hours		Second Semester Hours	Freshman
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020	3	Life and Physical Sciences Component Code 030	3

Government/Political Science Component Code 070	3	American History Component Code 060	3
GER 1410 (TCCN GERM 1411)	4	Government/Political Science Component Code 070	3
US 1100	1	GER 1420 (TCCN GERM 1412)	4
14		16	

### Sophomore

First Semester Hours		Second Semester Hours	
Life and Physical Sciences Component Code 030	3	Language, Philosophy, and Culture Component Code 040	3
American History Component Code 060	3	Creative Arts Component Code 050	3
Social and Behavioral Sciences Component Code 080	3	Component Area Option Code 090/091	3
ENG Literature (Component Area Option Code 090/094) <sup>1</sup>	3	GER 2320 (TCCN GERM 2312)	3
GER 2310 (TCCN GERM 2311)	3	Minor	3
15		15	

### Junior

First Semester Hours		Second Semester Hours	
BA Science, Math, Computer Science, or Logic	3	BA English Literature	3
GER Advanced Electives	6	GER Advanced Electives	6
Minor	6	Minor	6
15		15	

### Senior

First Semester Hours		Second Semester Hours	
GER Advanced Electives	6	GER Advanced Electives	6
Minor	3	Electives (as needed)	9
Electives (as needed)	6		
15		15	

**Total Hours: 120**

<sup>1</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

## Minimum Hours: 120 Semester Credit Hours

### Admission Requirements

- All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (<http://mycatalog.txstate.edu/undergraduate/degree-program-information/>) (B.A.) requires three additional hours of English literature, three additional hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor. For this program, the additional literature course may be satisfied by selecting a sophomore literature course for the 040 component of the core curriculum and the second major in Education fulfills the minor requirement.
3. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
4. Nine hours of writing intensive (WI) courses are required for graduation.
5. The major in German requires 27 hours including 24 hours of advanced German coursework and LING 4307. Students must earn a “C” or higher in all major course work and maintain a major GPA of at least 2.50.
6. To satisfy graduation requirements for teacher certification, students must have at least a 2.75 Overall GPA and a GPA of at least 2.50 in all assigned courses in the professional sequence of the Education major with no grade below a “C”.
7. This degree program is designed to prepare students for all-level teacher certification in German and requires that students pursue a double major by declaring and completing requirements for the major in German and the major in Education. The following courses are required for the major in Education:

Code	Title	Hours
Education Foundation:		
CI 2310	Education for Change	3
CI 3325	Adolescents and Society	3
CI 4332	Secondary Teaching: Curriculum and Technology	3
Teaching and Learning:		
CI 3340	Teaching for Linguistic Diversity	3
CI 4343	Instructional Strategies for the Secondary Teacher	3
CI 4370	Building Relationships in the Secondary Classroom	3
CI 4372	Teaching in Communities	3
RDG 3323	Teaching Literacies in the Content Areas	3
SPED 4344	Educating Students with Mild Disabilities	3
Clinical Practice:		

EDST 4380	Clinical Teaching All-Level I	3
EDST 4381	Clinical Teaching All-Level II	3

8. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c420f94%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPbQjwNv%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c420f94%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPbQjwNv%3D&reserved=0)).
9. For transfer students, 6 semester credit hours in Curriculum and Instruction and Special Education may be transferred from a Texas public institution of higher education for the Associate of Arts in Teaching Field of Study and be applied to the Bachelor of Arts degree with a major in Education at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list:

Code	Title	Hours
CI 2310	Education for Change (CI ELNA)	3
TCCN: EDUC 1301		
SPED 4344	Educating Students with Mild Disabilities (CI ELNA)	3
TCCN: EDUC 2301		

Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
Communication Component Code 010	3	Communication Component Code 010	3
Life and Physical Sciences Component Code 030	3	Mathematics Component Code 020	3
Government/Political Science Component Code 070	3	American History Component Code 060	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	Government/Political Science Component Code 070	3
GER 1410 (TCCN GERM 1411)	4	GER 1420	4
US 1100	1		
17		16	

Sophomore	
First Semester Hours	Second Semester Hours
Life and Physical Sciences Component Code 030	ENG Literature (Language, Philosophy, and Culture Component 040) <sup>1</sup> 3
ENG Literature (Component Area Option Code 090/094) <sup>1</sup>	3 Creative Arts Component Code 050 3
American History Component Code 060	3 BA Science, Math, Computer Science, or Logic 3
Social and Behavioral Sciences Component Code 080	3 GER 2320 (TCCN GERM 2312) 3
GER 2310 (TCCN GERM 2311)	3 CI 2310 (TCCN EDUC 1301) 3
<b>12</b>	<b>15</b>
Junior	
First Semester Hours	Second Semester Hours
GER Advanced Electives	9 GER Advanced Electives 9
Education Core:	6 Field Block I: 9
CI 3325	CI 3340
CI 4332	CI 4343
	SPED 4344
<b>15</b>	<b>18</b>
Senior	
First Semester Hours	Second Semester Hours
GER Advanced Electives	6 Clinical Practice (Student Teaching): 6
LING 4307	3 EDST 4380
Field Block II:	9 EDST 4381
CI 4370	
CI 4343	
RDG 3323	
<b>18</b>	<b>6</b>
<b>Total Hours: 117</b>	

<sup>1</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor.

- Nine hours of writing intensive (WI) courses are required for graduation.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- Students in the Bachelor of Arts (B.A.) degree with a major in Spanish must complete 24 advanced hours in Spanish and maintain a GPA of at least 2.50 in all advanced Spanish course work to meet graduation requirements. Students should complete the following advanced Spanish courses:

Code	Title	Hours
SPAN 3307	Advanced Composition for Spanish Heritage Speakers <sup>1</sup>	3
or SPAN 3308 Advanced Composition		
SPAN 3309	Introduction to Hispanic Literature and Literary Analysis <sup>2</sup>	3
SPAN 3340	Advanced Spanish Grammar and Stylistics	3
Select three of the following:		9
SPAN 3301	Literatures of Spain I	
SPAN 3302	Literatures of Spain II	
SPAN 3305	Latin American Literatures I	
SPAN 3306	Latin American Literatures II	
SPAN 3310	Spanish Phonetics and Phonemics	
SPAN 3311	Business Spanish I	
SPAN 3312	Business Spanish II	
SPAN 3313	Spanish and Media	
SPAN 3314	Translation Practice and Theory	
SPAN 3315	Spanish for Health Professions	
SPAN 3370	Spanish Civilization	
SPAN 3371	Latin American Civilization	
Select two of the following:		6
SPAN 4300	Professional Internship in Spanish	
SPAN 4302	The Spanish Novel	
SPAN 4311	Historical Aspects of Hispanic Linguistics	
SPAN 4312	Contemporary Aspects of Hispanic Linguistics	
SPAN 4330	The Latin American Novel	
SPAN 4341	Gabriel Garcia Marquez	
SPAN 4342	Don Quijote	
SPAN 4350	Hispanic Film	
SPAN 4361	Hispanic Poetry	
SPAN 4362	Hispanic Drama	
SPAN 4370	Hispanic Literature of the Southwest	
SPAN 4380A	Hispanic Nobel Prizes in Literature	
SPAN 4380F	Mexican Literature	
SPAN 4380G	Women, Minorities and Marginal Groups in Medieval Spanish Literature	
SPAN 4380H	Nature and Nation in Latin American Literature	
<b>Total Hours</b>		<b>24</b>



<sup>1</sup> Prerequisite to all other upper division courses; may be taken simultaneously with SPAN 3309.

<sup>2</sup> Prerequisite to all other upper division courses in literature; may be taken simultaneously with SPAN 3307 or SPAN 3308.

## Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020	3	Life and Physical Sciences Component Code 030	3
Government/Political Science Component Code 070	3	American History Component Code 060	3
SPAN 1410 (TCCN SPAN 1411)	4	Government/Political Science Component Code 070	3
US 1100	1	SPAN 1420 (TCCN SPAN 1412)	4
<b>14</b>		<b>16</b>	

		Sophomore	
First Semester Hours		Second Semester Hours	
Life and Physical Sciences Component Code 030	3	Language, Philosophy, and Culture Component Code 040	3
American History Component Code 060	3	Creative Arts Component Code 050	3
Social and Behavioral Sciences Component Code 080	3	Component Area Option Code 090/091	3
ENG Literature (Component Area Option Code 090/094) <sup>1</sup>	3	SPAN 2320 (TCCN SPAN 2312)	3
SPAN 2310 (TCCN SPAN 2311)	3	Minor	3
<b>15</b>		<b>15</b>	

		Junior	
First Semester Hours		Second Semester Hours	
BA Science, Math, Computer Science, or Logic	3	BA English Literature	3
SPAN 3307 or 3308	3	SPAN 3340	3
SPAN 3309	3	SPAN Advanced Elective	3
Minor	6	Minor	6
<b>15</b>		<b>15</b>	

		Senior	
First Semester Hours		Second Semester Hours	
SPAN Advanced Electives	6	SPAN Advanced Electives	6
Minor	3	Electives (as needed)	9
Electives (as needed)	6		
<b>15</b>		<b>15</b>	

**Total Hours: 120**

<sup>1</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL

2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

## Minimum required: 120 semester credit hours

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor.
- Nine hours of writing intensive (WI) courses are required.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Students must complete a minimum of 36 advanced hours (3000 or 40000 level courses).
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- Students in the Bachelor of Arts (B.A.) degree with a major in Spanish must complete 24 advanced hours in Spanish and maintain a GPA of at least 2.50 in all advanced Spanish course work to meet graduation requirements. Students must complete the following SPAN required courses: SPAN 3307 or SPAN 3308, SPAN 3309, and SPAN 3340.
- Three hours must be chosen from the following SPAN Advanced Electives: SPAN 3301, SPAN 3302, SPAN 3305, SPAN 3306.
- Three hours must be chosen from the following SPAN Advanced Electives: SPAN 3370 or SPAN 3371.
- Six hours must be chosen from the following SPAN Advanced Electives: SPAN 4302, SPAN 4330, SPAN 4341, SPAN 4342, SPAN 4350, SPAN 4361, SPAN 4362, SPAN 4370, SPAN 4380A, SPAN 4380F, SPAN 4380G, SPAN 4380H.
- Three hours must be chosen from the following SPAN Advanced Electives: SPAN 3301, SPAN 3302, SPAN 3305, SPAN 3306, SPAN 3310, SPAN 3311, SPAN 3312, SPAN 3313, SPAN 3314, SPAN 3315, SPAN 3370, SPAN 3371, SPAN 4300, SPAN 4302, SPAN 4311, SPAN 4312, SPAN 4330, SPAN 4341, SPAN 4342, SPAN 4350, SPAN 4361, SPAN 4362, SPAN 4370, SPAN 4380A, SPAN 4380F, SPAN 4380G, SPAN 4380H, SPAN 4390.

## Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
Communication Component Code 010	3	Communication Component Code 010	3
Mathematics Component Code 020	3	Life and Physical Sciences Component Code 030	3

Government/Political Science Component Code 070	3 American History Component Code 060	3
SPAN 1410 (TCCN SPAN 1411)	4 Government/Political Science Component Code 070	3
US 1100	1 SPAN 1420 (TCCN SPAN 1412)	4
	<b>14</b>	<b>16</b>

**Sophomore**

First Semester Hours	Second Semester Hours	
Life and Physical Sciences Component Code 030	3 Language, Philosophy, and Culture Component Code 040	3
American History Component Code 060	3 Creative Arts Component Code 050	3
Social and Behavioral Sciences Component Code 080	3 Component Area Option Code 090/091	3
ENG Literature (Component Area Option Code 090/094) <sup>1</sup>	3 SPAN 2320 (TCCN SPAN 2312)	3
SPAN 2310 (TCCN SPAN 2311)	3 Minor	3
	<b>15</b>	<b>15</b>

**Junior**

First Semester Hours	Second Semester Hours	
BA Science, Math, Computer Science, or Logic	3 BA English Literature	3
SPAN 3307 or 3308	3 SPAN 3340	3
SPAN 3309	3 SPAN 3301, 3302, 3305, or 3306	3
Minor	6 Minor	6
	<b>15</b>	<b>15</b>

**Senior**

First Semester Hours	Second Semester Hours	
SPAN 3370 or 3371	3 SPAN Advanced Electives	6
SPAN Advanced Elective	3 Electives (as needed)	9
Minor	3	
Electives (as needed)	6	
	<b>15</b>	<b>15</b>

**Total Hours: 120**

<sup>1</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

**SPAN Advanced Electives****Group A: Hispanic Literature and Culture**

Code	Title	Hours
SPAN 3301	Literatures of Spain I	3
SPAN 3302	Literatures of Spain II	3
SPAN 3305	Latin American Literatures I	3
SPAN 3306	Latin American Literatures II	3

SPAN 3370	Spanish Civilization	3
SPAN 3371	Latin American Civilization	3
SPAN 4302	The Spanish Novel	3
SPAN 4330	The Latin American Novel	3
SPAN 4341	Gabriel Garcia Marquez	3
SPAN 4342	Don Quijote	3
SPAN 4350	Hispanic Film	3
SPAN 4361	Hispanic Poetry	3
SPAN 4362	Hispanic Drama	3
SPAN 4370	Hispanic Literature of the Southwest	3
SPAN 4380A	Hispanic Nobel Prizes in Literature	3
SPAN 4380F	Mexican Literature	3
SPAN 4380G	Women, Minorities and Marginal Groups in Medieval Spanish Literature	3
SPAN 4380H	Nature and Nation in Latin American Literature	3

**Group B: Spanish Linguistics**

Code	Title	Hours
SPAN 3310	Spanish Phonetics and Phonemics	3
SPAN 3314	Translation Practice and Theory	3
SPAN 4311	Historical Aspects of Hispanic Linguistics	3
SPAN 4312	Contemporary Aspects of Hispanic Linguistics	3

**Group C: Spanish for the Professions**

Code	Title	Hours
SPAN 3311	Business Spanish I	3
SPAN 3312	Business Spanish II	3
SPAN 3313	Spanish and Media	3
SPAN 3314	Translation Practice and Theory	3
SPAN 3315	Spanish for Health Professions	3
SPAN 4300	Professional Internship in Spanish	3
SPAN 4600	Professional Internship in Spanish (No more than 6 hours of Internship may be counted toward the Spanish major or minor)	6

## Minimum Hours: 120

## Semester Credit Hours

**Admission Requirements**

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (<http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/>).

**General Requirements**

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (<http://mycatalog.txstate.edu/undergraduate/degree-program-information/>) (B.A.) requires three

additional hours of English literature, three additional hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor. For this program, the additional literature course may be satisfied by selecting a sophomore literature course for the 040 component of the core curriculum and the second major in Education fulfills the minor requirement.

3. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
4. Nine hours of writing intensive (WI) courses are required for graduation.
5. The major in Spanish requires 27 hours including 24 hours of advanced Spanish coursework and LING 4307. Students must earn a "C" or higher in all major course work and maintain a major GPA of at least 2.50. Course requirements include the following:

Code	Title	Hours
SPAN 3307	Advanced Composition for Spanish Heritage Speakers	3
or SPAN 3308	Advanced Composition	
SPAN 3309	Introduction to Hispanic Literature and Literary Analysis	3
SPAN 3340	Advanced Spanish Grammar and Stylistics	3
Select 3 of the following:		9
SPAN 3301	Literatures of Spain I	
SPAN 3302	Literatures of Spain II	
SPAN 3305	Latin American Literatures I	
SPAN 3306	Latin American Literatures II	
SPAN 3370	Spanish Civilization	
SPAN 3371	Latin American Civilization	
Select 2 of the following:		6
SPAN 4302	The Spanish Novel	
SPAN 4330	The Latin American Novel	
SPAN 4341	Gabriel Garcia Marquez	
SPAN 4342	Don Quijote	
SPAN 4350	Hispanic Film	
SPAN 4361	Hispanic Poetry	
SPAN 4362	Hispanic Drama	
SPAN 4370	Hispanic Literature of the Southwest	
SPAN 4380A	Hispanic Nobel Prizes in Literature	
SPAN 4380F	Mexican Literature	
SPAN 4380G	Women, Minorities and Marginal Groups in Medieval Spanish Literature	
SPAN 4380H	Nature and Nation in Latin American Literature	
LING 4307	Foreign Language Acquisition	3
<b>Total Hours</b>		<b>27</b>

6. To satisfy graduation requirements for teacher certification, students must have at least a 2.75 Overall GPA and a GPA of at least 2.50 in all assigned courses in the professional sequence of the Education major with no grade below a "C".
7. This degree program is designed to prepare students for all-level teacher certification in Spanish and requires that students pursue a double major by declaring and completing requirements for the major in Spanish and the major in Education. The following courses are required for the major in Education:

Code	Title	Hours
Education Foundation:		
CI 2310	Education for Change	3
CI 3325	Adolescents and Society	3
CI 4332	Secondary Teaching: Curriculum and Technology	3
Teaching and Learning:		
CI 3340	Teaching for Linguistic Diversity	3
CI 4343	Instructional Strategies for the Secondary Teacher	3
CI 4370	Building Relationships in the Secondary Classroom	3
CI 4372	Teaching in Communities	3
RDG 3323	Teaching Literacies in the Content Areas	3
SPED 4344	Educating Students with Mild Disabilities	3
Clinical Practice:		
EDST 4380	Clinical Teaching All-Level I	3
EDST 4381	Clinical Teaching All-Level II	3

8. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c420f9a%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPbQjwNv%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cholschuh%40txstate.edu%7C9bbf815b943a454a19a608d656f08553%7Cb19c134a14c94d4caf65c420f9a%7C0%7C0%7C636791988354269026&sdata=iMfRHq4PpASueZ4L69PPbQjwNv%3D&reserved=0)).
9. For transfer students, 6 semester credit hours in Curriculum and Instruction and Special Education may be transferred from a Texas public institution of higher education for the Associate of Arts in Teaching Field of Study and be applied to the Bachelor of Arts degree with a major in Education at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list:

Code	Title	Hours
CI 2310	Education for Change (CI ELNA)	3
TCCN: EDUC 1301		
SPED 4344	Educating Students with Mild Disabilities (CI ELNA)	3
TCCN: EDUC 2301		

## Course Requirements

First Semester Hours		Second Semester Hours		Freshman
Communication Component Code 010	3	Communication Component Code 010	3	
Life and Physical Sciences Component Code 030	3	Mathematics Component Code 020	3	
Government/Political Science Component Code 070	3	American History Component Code 060	3	
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	Government/Political Science Component Code 070	3	
SPAN 1410 (TCCN SPAN 1411)	4	SPAN 1420 (TCCN SPAN 1412)	4	
US 1100	1			
17		16		

First Semester Hours		Second Semester Hours		Sophomore
Life and Physical Sciences Component Code 030	3	Creative Arts Component Code 050	3	
American History Component Code 060	3	BA ENG Literature (Language, Philosophy, and Culture Component 040) <sup>1</sup>	3	
Social and Behavioral Sciences Component Code 080	3	BA Science, Math, Computer Science, or Logic	3	
ENG Literature (Component Area Option Code 090/094) <sup>1</sup>	3	SPAN 2320 (TCCN SPAN 2312)	3	
SPAN 2310 (TCCN SPAN 2311)	3	CI 2310 (TCCN EDUC 1301)	3	
15		15		

First Semester Hours		Second Semester Hours		Junior
SPAN 3307 or 3308	3	SPAN Advanced Electives	9	
SPAN 3309	3	Field Block I:	9	
SPAN 3340	3	CI 3340		
Education Core:	6	CI 4343		
CI 3325		SPED 4344		
CI 4332				
15		18		

First Semester Hours		Second Semester Hours		Senior
SPAN Advanced Electives	6	Clinical Practice (Student Teaching):	6	
LING 4307	3	EDST 4380		
Field Block II:	9	EDST 4381		
CI 4370				
CI 4372				
RDG 3323				
18		6		

Total Hours: 120

<sup>1</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

**Minimum required: 120 semester credit hours**

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/computer science courses, six hours of 2000-level modern language courses, and a minor.
- Nine hours of writing intensive (WI) courses are required.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Students must complete a minimum of 36 advanced hours (3000 or 40000 level courses).
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- Students in the Bachelor of Arts (B.A.) degree with a major in Spanish must complete 24 advanced hours in Spanish and maintain a GPA of at least 2.50 in all advanced Spanish course work to meet graduation requirements. Students must complete the following SPAN required courses: SPAN 3307 or SPAN 3308, SPAN 3309, and SPAN 3340.
- Nine hours must be chosen from the following SPAN Advanced Electives: SPAN 3311, SPAN 3312, SPAN 3313, SPAN 3314, SPAN 3315, SPAN 4300, SPAN 4600. No more than six hours of internship (SPAN 4300 and SPAN 4600) may be applied to the degree.
- Three hours must be chosen from the following SPAN Advanced Electives: SPAN 4302, SPAN 4330, SPAN 4341, SPAN 4342, SPAN 4350, SPAN 4361, SPAN 4362, SPAN 4370, SPAN 4380A, SPAN 4380F, SPAN 4380G, SPAN 4380H.
- Three hours must be chosen from the following SPAN Advanced Electives: SPAN 3301, SPAN 3302, SPAN 3305, SPAN 3306, SPAN 3310, SPAN 3311, SPAN 3312, SPAN 3313, SPAN 3314, SPAN 3315, SPAN 3370, SPAN 3371, SPAN 4300, SPAN 4302, SPAN 4311, SPAN 4312, SPAN 4330, SPAN 4341, SPAN 4342, SPAN 4350, SPAN 4361, SPAN 4362, SPAN 4370, SPAN 4380A, SPAN 4380F, SPAN 4380G, SPAN 4380H, SPAN 4390.

## Course Requirements

First Semester Hours		Second Semester Hours		Freshman
Communication Component Code 010	3	Communication Component Code 010	3	

Mathematics Component Code 020	3 Life and Physical Sciences Component Code 030	3
Government/Political Science Component Code 070	3 American History Component Code 060	3
SPAN 1410 (TCCN SPAN 1411)	4 Government/Political Science Component Code 070	3
US 1100	1 SPAN 1420 (TCCN SPAN 1412)	4
<b>14</b>		<b>16</b>

**Sophomore**

First Semester Hours		Second Semester Hours
Life and Physical Sciences Component Code 030	3 Language, Philosophy, and Culture Component Code 040	3
American History Component Code 060	3 Creative Arts Component Code 050	3
Social and Behavioral Sciences Component Code 080	3 Component Area Option Code 090/091	3
ENG Literature (Component Area Option Code 090/094) <sup>1</sup>	3 SPAN 2320 (TCCN SPAN 2312)	3
SPAN 2310 (TCCN SPAN 2311)	3 Minor	3
<b>15</b>		<b>15</b>

**Junior**

First Semester Hours		Second Semester Hours
BA Science, Math, Computer Science, or Logic	3 BA English Literature	3
SPAN 3307 or 3308	3 SPAN 3340	3
SPAN 3309	3 SPAN 3311, 3312, 3313, 3314, 4300, or 4600	3
Minor	6 Minor	6
<b>15</b>		<b>15</b>

**Senior**

First Semester Hours		Second Semester Hours
SPAN 3311, 3312, 3313, 3314, 4300, or 4600	3 SPAN 3311, 3312, 3313, 3314, 4300, or 4600	3
SPAN Advanced Elective	3 SPAN Advanced Elective	3
Minor	3 Electives (as needed)	9
Electives (as needed)	6	
<b>15</b>		<b>15</b>

**Total Hours: 120**

<sup>1</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371

**SPAN Advanced Electives****Group A: Hispanic Literature and Culture**

Code	Title	Hours
SPAN 3301	Literatures of Spain I	3
SPAN 3302	Literatures of Spain II	3
SPAN 3305	Latin American Literatures I	3
SPAN 3306	Latin American Literatures II	3
SPAN 3370	Spanish Civilization	3
SPAN 3371	Latin American Civilization	3
SPAN 4302	The Spanish Novel	3
SPAN 4330	The Latin American Novel	3
SPAN 4341	Gabriel Garcia Marquez	3
SPAN 4342	Don Quijote	3
SPAN 4350	Hispanic Film	3
SPAN 4361	Hispanic Poetry	3
SPAN 4362	Hispanic Drama	3
SPAN 4370	Hispanic Literature of the Southwest	3
SPAN 4380A	Hispanic Nobel Prizes in Literature	3
SPAN 4380F	Mexican Literature	3
SPAN 4380G	Women, Minorities and Marginal Groups in Medieval Spanish Literature	3
SPAN 4380H	Nature and Nation in Latin American Literature	3

**Group B: Spanish Linguistics**

Code	Title	Hours
SPAN 3310	Spanish Phonetics and Phonemics	3
SPAN 3314	Translation Practice and Theory	3
SPAN 4311	Historical Aspects of Hispanic Linguistics	3
SPAN 4312	Contemporary Aspects of Hispanic Linguistics	3

**Group C: Spanish for the Professions**

Code	Title	Hours
SPAN 3311	Business Spanish I	3
SPAN 3312	Business Spanish II	3
SPAN 3313	Spanish and Media	3
SPAN 3314	Translation Practice and Theory	3
SPAN 3315	Spanish for Health Professions	3
SPAN 4300	Professional Internship in Spanish	3
SPAN 4600	Professional Internship in Spanish (No more than 6 hours of Internship may be counted toward the Spanish major or minor)	6

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of math/science/logic/



computer science courses, six hours of 2000-level modern language courses, and a minor.

3. Nine hours of writing intensive (WI) courses are required.
4. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
5. Students must complete a minimum of 36 advanced hours (3000 or 40000 level courses).
6. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
7. Students in the Bachelor of Arts (B.A.) degree with a major in Spanish must complete 24 advanced hours in Spanish and maintain a GPA of at least 2.50 in all advanced Spanish course work to meet graduation requirements. Students must complete the following SPAN required courses: SPAN 3307 or SPAN 3308, SPAN 3309, and SPAN 3340.
8. Nine hours must be chosen from the following SPAN Advanced Electives: SPAN 3310, SPAN 3314, SPAN 4311, SPAN 4312.
9. Three hours must be chosen from the following SPAN Advanced Electives: SPAN 4302, SPAN 4330, SPAN 4341, SPAN 4342, SPAN 4350, SPAN 4361, SPAN 4362, SPAN 4370, SPAN 4380A, SPAN 4380F, SPAN 4380G, SPAN 4380H.
10. Three hours must be chosen from the following SPAN Advanced Electives: SPAN 3301, SPAN 3302, SPAN 3305, SPAN 3306, SPAN 3310, SPAN 3311, SPAN 3312, SPAN 3313, SPAN 3314, SPAN 3315, SPAN 3370, SPAN 3371, SPAN 4300, SPAN 4302, SPAN 4311, SPAN 4312, SPAN 4330, SPAN 4341, SPAN 4342, SPAN 4350, SPAN 4361, SPAN 4362, SPAN 4370, SPAN 4380A, SPAN 4380F, SPAN 4380G, SPAN 4380H, SPAN 4390.

ENG Literature (Component Area Option Code 090/094) <sup>1</sup>	3 SPAN 2320 (TCCN SPAN 2312)	3
SPAN 2310 (TCCN SPAN 2311)	3 Minor	3

**15**

**Junior**

First Semester Hours		Second Semester Hours
BA Science, Math, Computer Science, or Logic	3 BA English Literature	3
SPAN 3307 or 3308	3 SPAN 3340	3
SPAN 3309	3 SPAN 3310, 3314, 4311, or 4312	3
Minor	6 Minor	6

**15**

**Senior**

First Semester Hours		Second Semester Hours
SPAN 3310, 3314, 4311, or 4312	3 SPAN 3310, 3314, 4311, or 4312	3
SPAN Advanced Elective	3 SPAN Advanced Elective	3
Minor	3 Electives (as needed)	9
Electives (as needed)	6	

**15**

**Total Hours: 120**

<sup>1</sup> An ENG Literature course may be selected from the following: ENG 2310 (TCCN ENGL 2322), ENG 2320 (TCCN ENGL 2323), ENG 2330 (TCCN ENGL 2332), ENG 2340 (TCCN ENGL 2333), ENG 2359 (TCCN ENGL 2327), ENG 2360 (TCCN ENGL 2328), ENG 2371.

## Course Requirements

Freshman	
First Semester Hours	Second Semester Hours
Communication Component Code 010	3 Communication Component Code 010
Mathematics Component Code 020	3 Life and Physical Sciences Component Code 030
Government/Political Science Component Code 070	3 American History Component Code 060
SPAN 1410 (TCCN SPAN 1411)	4 Government/Political Science Component Code 070
US 1100	1 SPAN 1420 (TCCN SPAN 1412)
<b>14</b>	<b>16</b>

Sophomore	
First Semester Hours	Second Semester Hours
Life and Physical Sciences Component Code 030	3 Language, Philosophy, and Culture Component Code 040
American History Component Code 060	3 Creative Arts Component Code 050
Social and Behavioral Sciences Component Code 080	3 Component Area Option Code 090/091

## SPAN Advanced Electives

### Group A: Hispanic Literature and Culture

Code	Title	Hours
SPAN 3301	Literatures of Spain I	3
SPAN 3302	Literatures of Spain II	3
SPAN 3305	Latin American Literatures I	3
SPAN 3306	Latin American Literatures II	3
SPAN 3370	Spanish Civilization	3
SPAN 3371	Latin American Civilization	3
SPAN 4302	The Spanish Novel	3
SPAN 4330	The Latin American Novel	3
SPAN 4341	Gabriel Garcia Marquez	3
SPAN 4342	Don Quijote	3
SPAN 4350	Hispanic Film	3
SPAN 4361	Hispanic Poetry	3
SPAN 4362	Hispanic Drama	3
SPAN 4370	Hispanic Literature of the Southwest	3
SPAN 4380A	Hispanic Nobel Prizes in Literature	3
SPAN 4380F	Mexican Literature	3
SPAN 4380G	Women, Minorities and Marginal Groups in Medieval Spanish Literature	3
SPAN 4380H	Nature and Nation in Latin American Literature	3

**Group B: Spanish Linguistics**

Code	Title	Hours
SPAN 3310	Spanish Phonetics and Phonemics	3
SPAN 3314	Translation Practice and Theory	3
SPAN 4311	Historical Aspects of Hispanic Linguistics	3
SPAN 4312	Contemporary Aspects of Hispanic Linguistics	3

**Group C: Spanish for the Professions**

Code	Title	Hours
SPAN 3311	Business Spanish I	3
SPAN 3312	Business Spanish II	3
SPAN 3313	Spanish and Media	3
SPAN 3314	Translation Practice and Theory	3
SPAN 3315	Spanish for Health Professions	3
SPAN 4300	Professional Internship in Spanish	3
SPAN 4600	Professional Internship in Spanish (No more than 6 hours of Internship may be counted toward the Spanish major or minor)	6

The Department of World Languages and Literatures offers a Certificate in Business Spanish. The program is intended for students who wish to gain targeted, advanced training in Spanish for business without having to complete the full major or minor in Spanish, as well as for those who wish to include the certificate as part of their major or minor. Students in the certificate program will broaden the scope of their scholastic mastery and develop/refine their professional skills, thereby increasing their likelihood of obtaining favorable employment using Spanish in business-related fields in the U.S. and internationally.

The program's advanced coursework in Business Spanish is designed to provide students a competitive advantage by professionalizing their written and spoken Spanish and Spanish/English skills while helping prepare them to meet market demands for Spanish-language proficiency and intercultural sophistication, particularly pertaining to business and commercial employment contexts

The certificate requires 9 semester credit hours of advanced Spanish coursework preceded by up to four lower-division prerequisite courses—between zero and credit 14 hours—or testing equivalency with credit optional. While all undergraduate students may pursue this certificate, it is primarily designed to benefit our many bilingual and heritage speakers of Spanish, who routinely test out of all 14 lower-division Spanish credit hours, and our students who will complete (or test out of) most or all lower-division Spanish courses for the foreign language requirement of all Texas State BA degrees.

Code	Title	Hours
<b>Required Courses</b>		
Testing equivalency or the following:		0-14
SPAN 1410 & SPAN 1420 & SPAN 2310 & SPAN 2320	Beginning Spanish I and Beginning Spanish II and Intermediate Spanish I and Intermediate Spanish II	
SPAN 3307 or SPAN 3308	Advanced Composition for Spanish Heritage Speakers Advanced Composition	3
SPAN 3311	Business Spanish I	3

SPAN 3312	Business Spanish II	3
<b>Total Hours</b>		<b>9-23</b>

Students interested in pursuing the certificate program should contact the Chair of World Languages & Literatures to discuss [testing options for prerequisite coursework](#) in Centennial Hall 214 or visit the Department website at <https://www.worldlang.txst.edu/>.

The Department of World Languages and Literatures offers a Certificate in Professional Spanish. This program is intended for students who wish to gain targeted, advanced training in professional Spanish contexts without having to complete the full major or minor in Spanish, as well as for those who wish to include the certificate as part of their major or minor. Students in the certificate program will broaden the scope of their scholastic mastery and develop/refine their professional skills, thereby increasing their likelihood of obtaining favorable employment related to their area(s) of expertise. The program will significantly expand student access to advanced coursework in professional Spanish.

The certificate requires nine semester credit hours of advanced Spanish coursework preceded by up to four lower-division prerequisite courses—between zero and 14 credit hours—or testing equivalency with credit optional. While all undergraduate students may pursue this certificate, it is primarily designed to benefit our many bilingual and heritage speakers of Spanish, who routinely test out of all 14 lower-division Spanish credit hours, and our students who will complete (or test out of) most or all lower-division Spanish courses for the foreign language requirement of all Texas State BA degrees

Code	Title	Hours
<b>Required Courses</b>		
Testing equivalency or the following:		0-14
SPAN 1410 & SPAN 1420 & SPAN 2310 & SPAN 2320	Beginning Spanish I and Beginning Spanish II and Intermediate Spanish I and Intermediate Spanish II	
SPAN 3307 or SPAN 3308	Advanced Composition for Spanish Heritage Speakers Advanced Composition	3
Choose 6 hours from the following:		6
SPAN 3311 or SPAN 3312	Business Spanish I Business Spanish II	
SPAN 3313	Spanish and Media	
SPAN 3314	Translation Practice and Theory	
SPAN 3315	Spanish for Health Professions	
SPAN 4300	Professional Internship in Spanish	
<b>Total Hours</b>		<b>9-23</b>

Students interested in pursuing the certificate program should contact the Chair of World Languages & Literatures to discuss [testing options for prerequisite coursework](#) in Centennial Hall 214 or visit the Department website at <https://www.worldlang.txst.edu/>.

The minor in Arabic requires 26 semester credit hours, including 12 upper-division hours in the language. The first two years (or equivalent via testing) of beginning- and intermediate-level course work serve as prerequisites to all upper-division courses. These prerequisites include ARAB 1410, ARAB 1420, ARAB 2310, and ARAB 2320. For most students, the first two years of beginning (1410 and 1420) and intermediate level

(2310 and 2320) courses serve as prerequisites to all upper division courses. However, if a student can successfully complete the three-hour 2320 course or receive credit through testing, the other prerequisite courses may be waived in the minor requirement.

Code	Title	Hours
<b>Required Courses</b>		
ARAB 1410	Beginning Arabic I	4
ARAB 1420	Beginning Arabic II	4
ARAB 2310	Intermediate Arabic I	3
ARAB 2320	Intermediate Arabic II	3
Choose 12 hours from the following:		12
ARAB 3301	Levantine Arabic	
ARAB 3302	Media Arabic	
ARAB 3303	Business Arabic	
ARAB 3304	Arab Civilization and Culture	
ARAB 4390	Studies in Arabic Language and Culture	
<b>Total Hours</b>		<b>26</b>

The minor in Chinese requires 26 semester credit hours, including 12 upper-division hours in the language. The first two years of beginning- and intermediate-level coursework serve as prerequisites to all upper-division courses. These prerequisites include CHI 1410, CHI 1420, CHI 2310, and CHI 2320. For most students, the first two years of beginning (1410 and 1420) and intermediate level (2310 and 2320) courses serve as prerequisites to all upper division courses. However, if a student can successfully complete the three-hour 2320 course or receive credit through testing, the other prerequisite courses may be waived in the minor requirement.

Code	Title	Hours
<b>Required Courses</b>		
CHI 1410	Beginning Chinese I	4
CHI 1420	Beginning Chinese II	4
CHI 2310	Intermediate Chinese I	3
CHI 2320	Intermediate Chinese II	3
Choose 12 hours from the following:		12
CHI 3301	Conversational Chinese	
CHI 3302	Chinese for Business	
CHI 3303	Chinese for Media	
CHI 4390	Studies in Chinese Language and Culture	
<b>Total Hours</b>		<b>26</b>

The minor in French requires 29 semester credit hours. The first two years of beginning and intermediate level courses serve as prerequisites to all upper division courses. These prerequisites include FR 1410, FR 1420, FR 2310, and FR 2320. For most students, the first two years of beginning (1410 and 1420) and intermediate level (2310 and 2320) courses serve as prerequisites to all upper division courses. However, if a student can successfully complete the three-hour 2320 course or receive credit through testing, the other prerequisite courses may be waived in the minor requirement.

Code	Title	Hours
<b>Required Courses</b>		
FR 1410	Beginning French I	4
FR 1420	Beginning French II	4

FR 2310	Intermediate French I	3
FR 2320	Intermediate French II	3
Choose 15 hours of advanced courses in French		15
<b>Total Hours</b>		<b>29</b>

The minor in German requires 29 semester credit hours, including 15 upper division hours in the language. The first two years of beginning and intermediate level course work serve as prerequisites to all upper division courses. These prerequisites include GER 1410, GER 1420, GER 2310, and GER 2320. For most students, the first two years of beginning (1410 and 1420) and intermediate level (2310 and 2320) courses serve as prerequisites to all upper division courses. However, if a student can successfully complete the three-hour 2320 course or receive credit through testing, the other prerequisite courses may be waived in the minor requirement.

Code	Title	Hours
GER 1410	Beginning German I	4
GER 1420	Beginning German II	4
GER 2310	Intermediate German I	3
GER 2320	Intermediate German II	3
Advanced hours in German		15
<b>Total Hours</b>		<b>29</b>

The minor in Japanese requires 26 semester credit hours, including 12 upper division hours in the language. The first two years of beginning and intermediate level course work serve as prerequisites to all upper division courses. These prerequisites include JAPA 1410, JAPA 1420, JAPA 2310, and JAPA 2320. For most students, the first two years of beginning (1410 and 1420) and intermediate level (2310 and 2320) courses serve as prerequisites to all upper division courses. However, if a student can successfully complete the three-hour 2320 course or receive credit through testing, the other prerequisite courses may be waived in the minor requirement.

Code	Title	Hours
<b>Required Courses</b>		
JAPA 1410	Beginning Japanese I	4
JAPA 1420	Beginning Japanese II	4
JAPA 2310	Intermediate Japanese I	3
JAPA 2320	Intermediate Japanese II	3
Choose 12 hours of advanced hours in Japanese		12
<b>Total Hours</b>		<b>26</b>

The minor in Spanish requires 29 semester credit hours, including 15 upper division hours in the language. The first two years of beginning and intermediate level courses serve as prerequisites to all upper division courses. These courses are SPAN 1410, SPAN 1420, SPAN 2310, and SPAN 2320. In addition, SPAN 3307 or SPAN 3308 is a prerequisite to all other upper division courses, and SPAN 3309 is a prerequisite to all other upper division literature courses. For most students, the first two years of beginning (1410 and 1420) and intermediate level (2310 and 2320) courses serve as prerequisites to all upper division courses. However, if a student can successfully complete the three-hour 2320 course or receive credit through testing, the other prerequisite courses may be waived in the minor requirement. The internship SPAN 4300 is available for the minor, but not SPAN 4600.

Code	Title	Hours
<b>Required Courses</b>		
SPAN 1410	Beginning Spanish I	4
SPAN 1420	Beginning Spanish II	4
SPAN 2310	Intermediate Spanish I	3
SPAN 2320	Intermediate Spanish II	3
Choose 15 hours of advanced hours in Spanish		15
<b>Total Hours</b>		<b>29</b>

**Dean**

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**Associate Dean for Academic Affairs**

Chad Booth, Ph.D.

**Associate Dean for Research**

Paula Williamson, Ph.D.

**Assistant Dean for Outcomes and Assessment**

Gregory B. Passty, Ph.D.

**Department Chairs/School Directors**

Agricultural Sciences—Madan M. Dey, Ph.D.  
 Biology—Dittmar Hahn, Ph.D.  
 Chemistry and Biochemistry—William J. Brittain, Ph.D.  
 Computer Science—Hongchi Shi, Ph.D.  
 Ingram School of Engineering—Jesus Jimenez, Ph.D.  
 Engineering Technology—James Wilde, Ph.D.  
 Mathematics—Susan Morey, Ph.D.  
 Physics—Edwin Piner, Ph.D.

The College of Science and Engineering has a threefold mission:

To teach core concepts and promote literacy in science and mathematics for a diverse student body, while providing students with advanced knowledge and skills for careers in science, technology, engineering, mathematics, and related fields including education.

To support high-quality teaching and internationally recognized research programs in an inclusive, equitable, and accessible environment for students, staff, and faculty.

To serve the citizens of Texas and the nation with educational and research programs that embrace opportunities for innovation in solving regional and global challenges.

To ensure an understanding of basic scientific and engineering concepts, the college offers extensive opportunities for student participation. Students gain experience in laboratories, interact with the environment through field studies, conduct undergraduate research, participate in design experiences and train using technologically advanced instrumentation. A combination of student participation, rigorous classroom instruction, and hands on experiences gives majors a competitive advantage in career advancement or in the selection of professional or graduate programs. The non-science major is assured of adequate scientific knowledge to make informed decisions essential to citizens in a science-oriented, technological world.

The seven academic units in the College of Science and Engineering are the Departments of Biology, Chemistry and Biochemistry, Computer

Science, Engineering Technology, Mathematics, Physics, and the Ingram School of Engineering.

Majors offered in the College include applied mathematics, aquatic biology, biochemistry, biology, chemistry, civil engineering, computer science, concrete industry management, construction science and management, electrical engineering, engineering technology, industrial engineering, manufacturing engineering, mathematics, mechanical engineering, microbiology, physics, and wildlife biology. In addition, pre-professional minors are available for students interested in applying to physician assistant, dentistry, medicine, or pharmacy programs. Four programs offer a double major with education for students who wish to teach in a secondary education program.

## Academic Advising Center

Centennial Hall Room 202  
 T: 512-245-1315 F: 512-245-9210  
[www.cose.txstate.edu/advising/](http://www.cose.txstate.edu/advising/) (<http://www.cose.txstate.edu/advising/>)

The College of Science and Engineering Undergraduate Academic Advising Center advises current students on academic and administrative issues. Students are informed about matters related to academic general education core requirement, the selection of an appropriate major and minor, the selection of appropriate courses, transfer and correspondence courses, academic probation/suspension, the choice of an educational program leading to a bachelor's degree, and participation in pre-professional minors. The Advising Center is a resource for current students who are considering a major and/ or minor within the College of Science and Engineering and provides assistance for students applying for graduation. Career and professional counseling are available in the academic unit of the student's major and through Career Services.

## Teacher Certification

Currently, there are four programs that offer a double major with education leading to the Texas science- and math- related teacher certification.

- Chemistry (double major with B.S. in Chemistry and Education)
- Life Sciences (double major with B.S. in Biology and Education)
- Mathematics (double major with B.S. in Mathematics and Education)
- Physics/Mathematics (double major with B.S. in Physics and Education)

Students interested in a double major with education are strongly encouraged to see a Science and Engineering Advisor early in their undergraduate program.

## Minors

- Minor in Pre-Dental Studies (p. 650)
- Minor in Pre-Medical Studies (p. 651)
- Minor in Pre-Pharmacy Studies (p. 652)
- Minor in Pre-Physician Assistant Studies (p. 652)
- Minor in Pre-Veterinarian Studies (p. 653)
- Second Teaching Field in Physical Science (Grades 6-12) (p. 654)

The undergraduate minor in Pre-Dental Studies requires 60 semester credit hours. This minor contains prerequisite courses commonly required by dental schools in the United States. Individual dental schools may require or recommend additional courses, and prerequisites can

change without notice. Visit the admissions websites for dental schools you are interested in to ensure you meet all their requirements.

Code	Title	Hours
<b>Required Courses</b>		
<b>Biology</b>		
BIO 1330 & BIO 1130	Functional Biology and Functional Biology Laboratory	4
BIO 1331 & BIO 1131	Organismal Biology and Organismal Biology Laboratory	4
BIO 2400	Microbiology	4
BIO 2450	Genetics	4
Choose 8 hours from the following:		8
BIO 3425 & BIO 3426	Human Anatomy and Human Physiology	
BIO 3421 & BIO 4464	Vertebrate Physiology and Vertebrate Anatomy	
<b>Chemistry</b>		
CHEM 1341 & CHEM 1141	General Chemistry I and General Chemistry Laboratory I	4
CHEM 1342 & CHEM 1142	General Chemistry II and General Chemistry Laboratory II	4
CHEM 2341 & CHEM 2141	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 2342 & CHEM 2142	Organic Chemistry II and Organic Chemistry Laboratory II	4
CHEM 3375	Principles of Biochemistry	3
or CHEM 4375	Biochemistry	
<b>Physics</b>		
Choose 4 hours from the following:		4
PHYS 1315 & PHYS 1115	General Physics I and General Physics I Laboratory	
PHYS 1335 & PHYS 1115	General Physics I for Life Sciences Majors and General Physics I Laboratory	
PHYS 2325 & PHYS 2125	Mechanics and Mechanics Laboratory	
Choose 4 hours from the following:		4
PHYS 1325 & PHYS 1125	General Physics II and General Physics II Laboratory	
PHYS 1345 & PHYS 1125	General Physics II for Life Science Majors and General Physics II Laboratory	
PHYS 2326 & PHYS 2126	Electricity and Magnetism and Electricity and Magnetism Laboratory	
<b>English</b>		
Choose 6 hours from the following:		6
ENG 1310	College Writing I	
ENG 1320	College Writing II	
ENG 1321	Writing for Sustainable Change	
ENG 2310	British Literature before 1785	
ENG 2320	British Literature since 1785	
ENG 2330	World Literature before 1600	
ENG 2340	World Literature since 1600	
ENG 2359	US Literature before 1865	
ENG 2360	US Literature since 1865	
ENG 2371	U.S. Literature: Writing Identities	

ENG 3303	Technical Writing	
HON 2301A	Writing to Change the World	
HON 2301B	Writing Yourself into Academia: Creating Portraiture	
<b>Statistics</b>		
Choose 3 hours from the following:		3
CJ 3347	Statistics For Criminal Justice	
HON 3399K	Data Visualization and Interpretation: Honors Statistics	
HP 3325	Healthcare Statistics	
MATH 2328	Elementary Statistics	
MATH 3305	Introduction to Probability and Statistics	
PSY 2301	Introduction to Statistics	
ANLY 2333	Business Statistics	
SOCI 3307	Statistics for the Behavioral Sciences	
<b>Total Hours</b>		<b>60</b>

The undergraduate minor in Pre-Medical Studies requires 55 semester credit hours. This minor contains prerequisite courses commonly required by medical schools in the United States. Individual medical schools may require or recommend additional courses, and prerequisites can change without notice. Visit the admissions websites for medical schools you are interested in to ensure you meet all their requirements.

Code	Title	Hours
<b>Required Courses</b>		
<b>Biology</b>		
BIO 1330 & BIO 1130	Functional Biology and Functional Biology Laboratory	4
BIO 1331 & BIO 1131	Organismal Biology and Organismal Biology Laboratory	4
BIO 2450	Genetics	4
BIO 3421 or BIO 3426	Vertebrate Physiology and Human Physiology	4
<b>Chemistry</b>		
CHEM 1341 & CHEM 1141	General Chemistry I and General Chemistry Laboratory I	4
CHEM 1342 & CHEM 1142	General Chemistry II and General Chemistry Laboratory II	4
CHEM 2341 & CHEM 2141	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 2342 & CHEM 2142	Organic Chemistry II and Organic Chemistry Laboratory II	4
CHEM 3375	Principles of Biochemistry	3
or CHEM 4375	Biochemistry	
<b>Physics</b>		
Choose 4 hours from the following:		4
PHYS 1315 & PHYS 1115	General Physics I and General Physics I Laboratory	
PHYS 1335 & PHYS 1115	General Physics I for Life Sciences Majors and General Physics I Laboratory	
PHYS 2325 & PHYS 2125	Mechanics and Mechanics Laboratory	
Choose 4 hours from the following:		4



PHYS 1325 & PHYS 1125	General Physics II and General Physics II Laboratory	
PHYS 1345 & PHYS 1125	General Physics II for Life Science Majors and General Physics II Laboratory	
PHYS 2326 & PHYS 2126	Electricity and Magnetism and Electricity and Magnetism Laboratory	
<b>English</b>		
Choose 6 hours from the following:		6
ENG 1310	College Writing I	
ENG 1320	College Writing II	
ENG 1321	Writing for Sustainable Change	
ENG 2310	British Literature before 1785	
ENG 2320	British Literature since 1785	
ENG 2330	World Literature before 1600	
ENG 2340	World Literature since 1600	
ENG 2359	US Literature before 1865	
ENG 2360	US Literature since 1865	
ENG 2371	U.S. Literature: Writing Identities	
ENG 3303	Technical Writing	
HON 2301A	Writing to Change the World	
HON 2301B	Writing Yourself into Academia: Creating Portraiture	
<b>Statistics</b>		
Choose 3 hours from the following:		3
CJ 3347	Statistics For Criminal Justice	
HON 3399K	Data Visualization and Interpretation: Honors Statistics	
HP 3325	Healthcare Statistics	
MATH 2328	Elementary Statistics	
MATH 3305	Introduction to Probability and Statistics	
PSY 2301	Introduction to Statistics	
ANLY 2333	Business Statistics	
SOCI 3307	Statistics for the Behavioral Sciences	
<b>Psychology</b>		
PSY 1300	Introduction to Psychology	3
<b>Total Hours</b>		<b>55</b>

The undergraduate minor in Pre-Pharmacy Studies requires 62-63 semester credit hours. The minor contains prerequisite courses commonly required by pharmacy schools in the United States. Individual pharmacy schools may require or recommend additional courses, and prerequisites can change without notice. Visit the admissions websites for pharmacy schools you are interested in to ensure you meet all their requirements.

Code	Title	Hours
<b>Required Courses</b>		
<b>Biology</b>		
BIO 1330 & BIO 1130	Functional Biology and Functional Biology Laboratory	4
BIO 1331 & BIO 1131	Organismal Biology and Organismal Biology Laboratory	4
BIO 2400	Microbiology	4
BIO 2450	Genetics	4
Choose 8 hours from the following:		8

BIO 2451 & BIO 2452	Human Anatomy and Physiology I and Human Anatomy and Physiology II	
BIO 3425 & BIO 3426	Human Anatomy and Human Physiology	
<b>Chemistry</b>		
CHEM 1341 & CHEM 1141	General Chemistry I and General Chemistry Laboratory I	4
CHEM 1342 & CHEM 1142	General Chemistry II and General Chemistry Laboratory II	4
CHEM 2341 & CHEM 2141	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 2342 & CHEM 2142	Organic Chemistry II and Organic Chemistry Laboratory II	4
CHEM 3375	Principles of Biochemistry	3
	or CHEM 4375 Biochemistry	
<b>Mathematics</b>		
Choose 6-7 hours from the following:		6-7
MATH 2321	Calculus for Life Sciences I	
	or MATH 2421 Calculus I	
MATH 2328	Elementary Statistics	
	or MATH 3305 Introduction to Probability and Statistics	
<b>Physics</b>		
Choose 4 hours from the following:		4
PHYS 1315 & PHYS 1115	General Physics I and General Physics I Laboratory	
PHYS 1335 & PHYS 1115	General Physics I for Life Sciences Majors and General Physics I Laboratory	
PHYS 2325 & PHYS 2125	Mechanics and Mechanics Laboratory	
<b>English</b>		
Choose 6 hours from the following:		6
ENG 1310	College Writing I	
ENG 1320	College Writing II	
ENG 1321	Writing for Sustainable Change	
ENG 2310	British Literature before 1785	
ENG 2320	British Literature since 1785	
ENG 2330	World Literature before 1600	
ENG 2340	World Literature since 1600	
ENG 2359	US Literature before 1865	
ENG 2360	US Literature since 1865	
ENG 2371	U.S. Literature: Writing Identities	
ENG 3303	Technical Writing	
HON 2301A	Writing to Change the World	
HON 2301B	Writing Yourself into Academia: Creating Portraiture	
Choose 3 hours from the following:		3
ECO 2315	Principles of Macroeconomics	
SOCI 1310	Introduction to Sociology	
PSY 1300	Introduction to Psychology	
<b>Total Hours</b>		<b>62-63</b>

The undergraduate minor in Pre-Physician Assistant Studies requires 48 semester credit hours. This minor contains prerequisite courses commonly required by physician assistant (PA) programs in the United

States. Individual PA schools may require or recommend additional courses, and prerequisites can change without notice. Visit the admissions websites for PA schools you are interested in to ensure you meet all their requirements.

Code	Title	Hours
<b>Required Courses</b>		
<b>Biology</b>		
BIO 1330 & BIO 1130	Functional Biology and Functional Biology Laboratory	4
BIO 1331 & BIO 1131	Organismal Biology and Organismal Biology Laboratory	4
BIO 2400	Microbiology	4
BIO 2450	Genetics	4
BIO 3425	Human Anatomy	4
BIO 3426	Human Physiology	4
<b>Chemistry</b>		
CHEM 1341 & CHEM 1141	General Chemistry I and General Chemistry Laboratory I	4
CHEM 1342 & CHEM 1142	General Chemistry II and General Chemistry Laboratory II	4
CHEM 2341 & CHEM 2141	Organic Chemistry I and Organic Chemistry Laboratory I	4
<b>Statistics</b>		
Choose 3 hours from the following:		3
CJ 3347	Statistics For Criminal Justice	
HON 3399K	Data Visualization and Interpretation: Honors Statistics	
HP 3325	Healthcare Statistics	
MATH 2328	Elementary Statistics	
MATH 3305	Introduction to Probability and Statistics	
PSY 2301	Introduction to Statistics	
ANLY 2333	Business Statistics	
SOCI 3307	Statistics for the Behavioral Sciences	
<b>Psychology</b>		
PSY 1300	Introduction to Psychology	3
PSY Elective		3
<b>Health Information Management</b>		
HIM 2360	Medical Terminology	3
<b>Total Hours</b>		<b>48</b>

The minor in Pre-Veterinary Studies requires 57-58 semester hours. The minor contains commonly required prerequisites for veterinary schools. Individual veterinary schools determine their own prerequisite course requirements. This minor does not guarantee that students will fulfill all prerequisites courses for all veterinary schools. Visit the admissions websites for veterinary schools you are interested in to ensure you meet all their requirements.

Code	Title	Hours
<b>Biology/ Genetics</b>		<b>15-16</b>
BIO 1330 & BIO 1130	Functional Biology and Functional Biology Laboratory	
BIO 1331 & BIO 1131	Organismal Biology and Organismal Biology Laboratory	
BIO 2400	Microbiology	

BIO 2450	Genetics	
or AG 3301	Principles of Livestock Genetics	
<b>Chemistry</b>		<b>19</b>
CHEM 1341 & CHEM 1141	General Chemistry I and General Chemistry Laboratory I	
CHEM 1342 & CHEM 1142	General Chemistry II and General Chemistry Laboratory II	
CHEM 2341 & CHEM 2141	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2342 & CHEM 2142	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 3375	Principles of Biochemistry	
or CHEM 4375	Biochemistry	
<b>Physics</b>		<b>8</b>
PHYS 1315 & PHYS 1115	General Physics I and General Physics I Laboratory	
or PHYS 1335	General Physics I for Life Sciences Majors and General Physics I Laboratory	
& PHYS 1115		
or PHYS 2325	Mechanics and Mechanics Laboratory	
& PHYS 2125		
PHYS 1325 & PHYS 1125	General Physics II and General Physics II Laboratory	
or PHYS 1345	General Physics II for Life Science Majors and General Physics II Laboratory	
& PHYS 1125		
or PHYS 2325	Electricity and Magnetism and Electricity and Magnetism Laboratory	
& PHYS 2125		
<b>Animal Nutrition</b>		<b>3</b>
AG 3325	Animal Nutrition	
or AG 4325	Feeds and Feeding	
<b>English</b>		<b>6</b>
Choose 6 hours from the following:		
ENG 1310	College Writing I	
ENG 1320	College Writing II	
ENG 1321	Writing for Sustainable Change	
ENG 2310	British Literature before 1785	
ENG 2320	British Literature since 1785	
ENG 2330	World Literature before 1600	
ENG 2340	World Literature since 1600	
ENG 2359	US Literature before 1865	
ENG 2360	US Literature since 1865	
ENG 2371	U.S. Literature: Writing Identities	
ENG 3303	Technical Writing	
ENG 3313	Scientific Writing	
HON 2301A	Writing to Change the World	
HON 2301B	Writing Yourself into Academia: Creating Portraiture	
<b>Statistics</b>		<b>3</b>
MATH 3305	Introduction to Probability and Statistics	
or AG 3352	Quantitative Methods in Agricultural Economics	
<b>Communication</b>		<b>3</b>

COMM 2330 Small Group Communication or COMM 23 Public Speaking	
<b>Total Hours</b>	<b>57-58</b>

For students who are seeking a teacher certification within their major and would like a second teaching field in Physical Science, the requirements are:

Code	Title	Hours
CHEM 1341 & CHEM 1141	General Chemistry I and General Chemistry Laboratory I	4
CHEM 1342 & CHEM 1142	General Chemistry II and General Chemistry Laboratory II	4
CHEM 2341 & CHEM 2141	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 2342 & CHEM 2142	Organic Chemistry II and Organic Chemistry Laboratory II	4
CHEM 3410	Quantitative Analysis	4
CHEM 4295	Laboratory Development and Practice	2
Advanced CHEM		3
PHYS 1430		4
PHYS 2425		4
PHYS 2435		4
PHYS 3312	Modern Physics	3
Advanced PHYS		6
<b>Total Hours</b>		<b>46</b>

All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

Agriculture Building Room 206  
Telephone: 512-245-2130  
[www.ag.txstate.edu](http://www.ag.txstate.edu) (<http://www.ag.txstate.edu/>)

Agricultural Sciences majors have a choice of three different degree tracks:

- Agriculture,
- Animal Science,
- Agricultural Business and Management.

The Department of Agricultural Sciences offers programs reflecting the diversity of choices available and skills required in modern agriculture and its related professions. This dynamic, global industry uses new technologies to improve the production, management, manufacture, and distribution of food and agricultural products.

## Major in Agriculture

Agriculture majors provide a broad exposure to agricultural disciplines. With this curriculum, students may expect to manage a ranch or a farm,

or work in any career that requires a general agriculture education such as county extension agents, banking or government service. Students in this major may pursue the following concentrations/certifications:

- **Horticulture Concentration.** This concentration teaches management of commercial establishments and institutions that produce ornamental plants such as greenhouses and nurseries, floral shops and plant therapy businesses. The major also contains specialized courses in horticulture that utilize greenhouses, the Freeman Center and the Living Library Gardens.
- **Agricultural Mechanics Concentration.** This concentration offers one of the most popular agricultural pathways offered at the secondary level in the state of Texas. The junior agricultural mechanics shows at the major livestock shows and rodeos in Texas are also some of the most well attended events among secondary agriculture students.
- **Teacher Certification in Agriculture, Food and Natural Resources.** A comprehensive educational program concerned with the broad field of agriculture. Emphasis in the major is on production techniques, managerial skills and competencies necessary to function as agricultural scientists, educators, or agricultural managers in today's complex agricultural industry. Agriculture teachers are certified to teach in grades six through twelve in the public schools of Texas.

## Major in Animal Science

The study of all aspects of the livestock and poultry industries including commercial production and management; food processing; and animal feed/animal health including nutrition, biotechnology and veterinary medicine. Involvement of students in ongoing faculty research prepares graduates for careers in research and industry; and for further education in veterinary schools or graduate schools. Students may pursue a Pre-Veterinary concentration with this major. The Pre-Veterinary concentration provides specialized course work required for students planning to enter veterinary school.

## Major in Agricultural Business and Management

This major reaches far beyond the farm to encompass the activities involved in bringing food and fiber to consumers. The degree prepares students to be competent in agribusiness management, agricultural marketing in domestic and international trade, food safety, sustainability, and agricultural and natural resource policy.

## Internship

Students are encouraged to apply for internships and enroll in AG 4310 (<http://mycatalog.txstate.edu/search/?P=AG%204310>) after their junior year. Students will identify a faculty member to facilitate their experience and request permission for enrollment in the internship course. Students are required to have a 3.00 overall GPA. The department will assist students in securing internships in agriculturally related businesses or agencies.

## Minors

The Department of Agricultural Sciences offers five undergraduate minors (Agricultural Mechanics, Agriculture, Animal Science, Horticulture, and Plant and Soil Sciences). Students with a declared major within the Department of Agricultural Sciences require at least nine (9) unique hours to select a minor in another agriculture subject.

## Bachelor of Science in Agriculture (B.S.A.G.)

- Major in Agriculture (p. 662)
- Major in Agriculture (Agricultural Mechanics Concentration) (p. 663)
- Major in Agriculture (Horticulture Concentration) (p. 664)
- Major in Agriculture (Teacher Certification in Agriculture, Food and Natural Resources, Grades 6-12) (p. 666)
- Major in Animal Science (p. 667)
- Major in Animal Science (Pre-Veterinary Concentration) (p. 667)
- Major in Agricultural Business and Management (p. 668)

## Minors

- Agriculture (p. 670)
- Agricultural Mechanics (p. 670)
- Animal Science (p. 670)
- Horticulture (p. 670)
- Plant and Soil Science (p. 670)
- Second Teaching Field in Agriculture, Food and Natural Resources (Grades 6-12)

## Courses in Agriculture (AG)

### AG 1110. Careers in Agriculture.

This course is an introduction to careers available in the broad field of agriculture including an overview of personal and career qualifications needed for workplace success.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** AGRI 1131

### AG 1445. Basic Animal Science.

An introductory course designed to acquaint students with the importance of the livestock industry. A study of the types and breeds; market classes and grades of beef cattle, swine, sheep, goats, horses, and poultry; attention will be given to breeding, judging, care, and management.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** AGRI 1419

### AG 2275. Agricultural Safety.

This course covers the fundamentals of hazards, methods of injury prevention, safety education, regulations and advancing safety and health in the agriculture industry. This course will identify potential industrial hazards and means to mitigate these hazards and develop a culture of safety within an organization.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

### AG 2313. Agronomic Crops.

A study of the production, harvest practices, storage, and use of cereal and feed grains, fiber crops, forages, and other related crops requiring special technology.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** AGRI 1307

### AG 2318. Anatomy and Physiology of Livestock and Poultry.

This course provides a fundamental knowledge of major anatomical and physiological features of the skeletal, muscular, endocrine, cardiovascular, urinary, respiratory, and nervous systems of various livestock species. Gross and microanatomy of livestock and poultry will also be covered. Prerequisite: AG 1445 with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

### AG 2345. Horse Management.

A course designed as a broad but thorough coverage of most areas of horse husbandry and production, including anatomy, physiology, breeding, feeding, training, and health care. Laboratory sessions are designed to acquaint the student with modern methods of breeding, training, and care of the horse.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

### AG 2373. Introduction to Agricultural Engineering.

An introductory course designed to acquaint students with a wide range of concepts, principles and applied technologies in agricultural engineering. A problem solving course.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** AGRI 2303

### AG 2374. Metal Fabrication and Welding Technology for Agriculture.

This course covers the principles and practices of applied metallurgy and welding. Emphasis is given to the management of the technologies and techniques associated with oxy-fuel cutting, shielded metal arc welding (SMAW), Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW), and Plasma Arc Cutting (PAC). Prerequisite: AG 2373 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 2379. General Horticulture.**

A survey of the general field of horticulture including general areas of employment.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** AGRI 1315

**AG 2383. Introduction to Agricultural Economics.**

The role of agriculture in the general economy; the study of basic economic concepts with their application to the agricultural firm; the structure and operation of the marketing system; the functional and institutional aspects of agricultural finance; international trade; and government farm programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** AGRI 2317

**AG 2390. Computer Applications in Agriculture.**

Introduction to computers and computer technology; operation and application of the computer in production agriculture and agricultural business, services and industries. Includes characteristics of computer hardware and software, accessing and using the computer in agriculture.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** AGRI 1309

**AG 2391. Livestock Behavior and Welfare.**

This course provides foundational knowledge on how livestock behave. It also provides the knowledge of how to handle livestock humanely. Livestock stress and physiological response to human interaction will also be discussed. Prerequisite: AG 1445 and [BIO 1330 and BIO 1130] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3300. Undergraduate Research in Agricultural Sciences.**

This course introduces students to the fundamentals of scientific inquiry in agriculture. Topics include quantitative and qualitative research methods, data management, data analysis, data interpretation, and data dissemination, with emphasis on their applications in agriculture. Prerequisite: A minimum 3.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3301. Principles of Livestock Genetics.**

This course focuses on the fundamental principles of genetics and their application to animals. The physical basis of Mendelian inheritance, expression and interaction of genes, gene frequency, linkage, sex linkage, inbreeding, line breeding, and crossbreeding as applied to selection indices for livestock are examined. (WI) Prerequisites: AG 1445 and BIO 1130 and BIO 1330 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**AG 3302. Herbaceous Plant Materials.**

This course will include the identification, selection, use, and management of annuals, perennials, herbs, and ornamental grasses in the landscape. Each student will learn irrigation, fertilization, pruning, and other cultural needs of such plants. The laboratory will complement lecture.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3304. Propagation of Horticultural Plants.**

Principles and practices of propagating ornamental plants, vegetables, and fruits by sexual and asexual methods including germination of seed, layerage, graftage, division, cuttage, bulbs, corms, and other vegetative plant structures. Study of physical, physiological and environmental factors affecting propagation of ornamental plants.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3305. Woody Plant Materials for Outdoor Landscapes.**

Study of woody plant material including fruit and ornamental trees, shrubs, and ground covers and their identification, nomenclature, and use in the planting and development of home landscapes.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3306. Flowers and Plants for Interior Design.**

Study of flowers, cut flowers, foliage and blooming pot plants to enhance the interior design of homes and businesses including their identification, cultural requirements, uses, diagnoses and corrective measures of disorders. Basic principles of flower arrangement and the preparation of floral and plant decoration as used in interior design. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter



**AG 3308. Organic Gardening.**

This course introduces the principles and practices of basic gardening using organic methods. Topics include an overview of soil preparation, warm and cool season crops, propagation of plants, and weed, insect, and disease identification and management.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3310. Agriculture Power and Machinery Technology.**

This course covers the principles of 2 stroke and 4-stroke cycle engines, ignition, and combustion types including injection systems. Components including power and power transmissions and hydraulic systems will also be addressed. Prerequisites: AG 2373 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] both with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3314. Animal Health and Disease Control.**

This course is designed to introduce immunology and provide a basic understanding of veterinary principles as applied to prevention and treatment of domestic livestock diseases. Common diseases of livestock are considered, with emphasis on immune function, symptoms, prevention, and treatment. Prerequisite: AG 1445 and AG 2318 and BIO 1330 and BIO 1130 all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3317. Farm Management.**

Tools and techniques which are basic to the study of farm organization and decision making, the wise allocation of factors of production, the keeping of records, and income tax management. Prerequisites: AG 2383 and AG 2390 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] all with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3318. Agricultural Business Management.**

This course introduces institutions and functions of agribusiness. The institutional structure of agribusiness such as feed, farm machinery and equipment, farm chemicals, financial institutions and private and public agri-services will be delineated. Various agribusiness functions such as organizational behavior and financial, market and human resource management will be discussed. Prerequisite: AG 2383 and AG 2390 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3319. International Food and Fiber Systems.**

This course presents the food and fiber system from an international perspective. Analysis of food production and consumption patterns under different world economic systems, causes of surpluses and shortages throughout the world; the role of trade in solving food and agricultural problems. Global outlook and situation for food and fiber. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Multicultural Content

**Grade Mode:** Standard Letter

**AG 3321. Range Management.**

Practical problems met in managing native pastures and rangelands. Attention to determining range condition and proper stocking rates, methods of handling livestock on the range, range reseeding, brush control, and poisonous plants. The ecological and physiological response of range vegetation to grazing. Prerequisite: AG 1445 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3325. Animal Nutrition.**

Principles of animal nutrition with emphasis on digestion, absorption, metabolism, and function of nutrients; estimation of feedstuff nutritive value; and requirements of animals. (WI) Prerequisite: AG 1445 and BIO 1130 and BIO 1330 and CHEM 1141 and CHEM 1341 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**AG 3329. Economic Entomology.**

A study of the most common insects of field crops, fruits, and vegetables; life history, methods of attack, damage, and means of preventing and controlling. Collection and mounts of insects will be made.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3330. Applied Wildlife Nutrition.**

Basic and fundamental principles of nutrition for ruminant and non-ruminant wildlife with emphasis in North American and African wildlife. Attention will be given to digestive physiology and anatomy, feed sources, forage resources, and nutrient requirements. Prerequisite: AG 1445 or [BIO 1130 and BIO 1330] any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3331. Reproduction in Farm Animals.**

An examination of the anatomy and physiology of reproductive systems of livestock of economic importance. Attention is given to reproductive failure and disease. The laboratory includes pregnancy testing, semen collection and evaluation, artificial insemination techniques, and evaluation of breeding records. Prerequisites: AG 1445 and AG 2318 and [AG 3301 or BIO 2450] all with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3341. Leadership Development in Agricultural Sciences.**

This course focuses on the foundations of leadership concepts and theories useful in agricultural careers of science, government agency, non-profits and business. Emphasis is placed on the development of individual leadership skills, group situations, and strategies necessary for effective leadership."

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Multicultural Perspective

**Grade Mode:** Standard Letter

**AG 3345. Livestock Selection and Evaluation.**

Detailed consideration of the factors involved in the selection and evaluation of beef cattle, sheep, swine, rabbits, goats, and chickens. Emphasis will be placed on the care, grooming and exhibition of livestock projects. (Junior and Senior standing only) Prerequisite: AG 1445 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3350. Intermediate Microeconomics and Agricultural Application.**

This course focuses on intermediate-level microeconomics and its application in agriculture. The course covers topics such as consumer and producer theories, game theory, labor and capital markets, uncertainty, externalities, and public goods. Prerequisite: AG 2383 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3351. Agricultural Marketing and Sales.**

A study of the food marketing system and farm input sales; includes the functional systems approach that integrates the agricultural input industries into a discussion of food marketing; takes a micro approach to the development of marketing management skills needed in agribusiness; and provides a critical outlook on issues ranging from inputs to final food products. (WI) Prerequisite: AG 2383 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**AG 3352. Quantitative Methods in Agricultural Economics.**

Principles involved in collection, tabulating and analyzing agricultural data. Topics include sampling procedures, questionnaire development, descriptive analysis of data, correlation, prediction and forecasting and tests of significance. Simple computer programs will be stressed for class exercises during the course. Prerequisite: MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3353. Agricultural Structures and Environment.**

Principles and practices associated with structural components, selection, materials of construction, heat and moisture control, and the environmental issues of waste management systems; a problem solving course. Prerequisites: AG 2373 and AG 2390 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] all with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3355. International Agricultural Trade.**

This course focuses on economic forces associated with trade in food and agricultural products between the United States and other countries. The course covers gains from trade, agricultural trade policies (of exporters and importers), exchange rates, and multilateral trade negotiations. The course also explains how economic principles and analytical techniques are applied to international trade and multi-national markets of agricultural products. Prerequisite: AG 2383 and ECO 2315 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471] all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3367. Livestock Ultrasonography.**

This course provides students with the current developments and utilization of ultrasound technology in the livestock industry. Emphasis will be placed on understanding the functionality of an ultrasound machine and the use of ultrasonography in live animal carcass evaluation as well as reproductive techniques including pregnancy determination, fetal sexing, and fetal aging. Prerequisite: AG 1445 and AG 2318 both with grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3375. Management of Agricultural Machinery and Equipment.**

This course addresses the optimization of the equipment phases of agricultural production and processing. Emphasis will be placed on management and decision making principles concerned with the efficient selection, operation, repair, maintenance, and replacement of machinery and equipment. Prerequisites: AG 2373 and AG 2390 and CHEM 1141 and CHEM 1341 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] all with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3381. Beef Cattle Production.**

This course provides students with practical application in the principles of breeding, feeding, and management of commercial and purebred cattle. Students receive first-hand experience and knowledge of breeding techniques, animal handling, genetic selection, nutrition application, marketing, and technology. Prerequisite: AG 3325 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3426. Soil Science I.**

This course introduces fundamental principles of soil science to acquaint the student with some physical, chemical, and biological properties of the soil. Prerequisites: CHEM 1141 and CHEM 1341 and [AG 2313 or AG 2379 or BIO 1330] all with grades of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3427. Soil Science II.**

Management of soils as pertaining to their place in the environment. Special emphasis will be given to the role of soil in conventional agricultural systems, natural resource systems, waste management systems, and reclaimed and artificial soil systems. (WI) Prerequisite: AG 3426 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4113. Summer Programs in Agricultural Education.**

This course provides students field experience in summer agricultural education programming in secondary school settings. Students will receive individualized instruction during supervised visits while they are engaged in their field experience. The course includes program planning and educating diverse student learning populations. Prerequisite: AG 4212 with a grade of "C" or better.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4185. Independent Study.**

This course provides advanced undergraduates with opportunities to study any subject matter of special interest in agricultural Sciences. May be repeated two times. (WI) Prerequisite: Department approval and a minimum 3.0 Texas State GPA.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Dual Enrollment Permitted|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4212. Program Building.**

This course focuses on program and curriculum development in agricultural education settings. Primary course elements will include determining program and curriculum goals and objectives, implementing the program, and curriculum evaluation. Corequisite: AG 4343 with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4300. Greenhouse and Nursery Management.**

Planning greenhouses for commercial and home use; plant-nursery layouts. Study of the physical and economic factors affecting the production of plants in the greenhouse and other forcing structures, and in the field; management techniques used in the production and marketing of greenhouse and nursery plants. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4302. Fruit and Vegetable Crop Production.**

Factors influencing small-fruit and tree-fruit and vegetable crop production in the field including root stocks, varieties, soil, planting, transplanting, irrigating, fertilizing, pruning, insects, diseases, nematodes, weeds, chemicals, harvesting, storing, and marketing; greenhouse production of certain vegetables. (WI) Prerequisite: AG 2313 or AG 2379 either with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4304. Landscape Management.**

To acquaint students with the practices and techniques used in professional landscape construction and management, and with the scientific and technical basis for such practices.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 4305. Landscape Design.**

Landscaping combines elements of art and science to create functional, aesthetically pleasing outdoor space. This class helps students develop knowledge of design elements and principles. Students learn site and client analysis techniques for critiquing landscapes. Students learn to communicate ideas through the planning and drawing of landscape plans.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 4307. Professional Development in Agriculture.**

This course requires students to select a topic of current interest appropriate to the major. Critical analysis of the situation including both positive and negative aspects will be encouraged. Findings will be presented in both oral and written form. (Capstone Course).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4310. Agricultural Internship.**

This course integrates professional and academic experience through internship with an external employer. The internship is designed to provide actual work experience, observation and analysis in the student's chosen career field. Prerequisite: Minimum 3.0 Overall GPA.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4311. Instructional Methods for Career and Technology Educators.**

An analysis of the instructional techniques, strategies and methods appropriate to the effective teaching of career and technology subjects. Teaching special populations and teaching in multicultural environments will be addressed. To be taken the Fall semester before student teaching.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4325. Feeds and Feeding.**

Study of feedstuffs used in livestock enterprises. Application of basic nutrients to the needs of different species of livestock. Formulating rations, methods of feeding, feed control laws, and feeding investigation. Prerequisites: AG 3325 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 4326. Advanced Animal Science-Ruminants.**

The application of scientific and technological advances to production and management in ruminant animal production and management.

Prerequisite: AG 1445 and AG 2318 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 4328. Advanced Animal Science-NonRuminants.**

Application of basic principles in the production and management of nonruminant animals. Scientific and technological advances with emphasis on overall management, health care, nutrition, genetics, physiology, and marketing of nonruminant animals. Prerequisite: AG 1445 and AG 2318 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4330. Food Technology: Processing Meats.**

Evaluation and grading of carcasses; wholesale and retail cuts of beef, pork, lamb, and poultry. Emphasis on quality controls, testing of finished products that have been frozen, cured, fried, pickled, and canned. Prerequisites: AG 1445 and BIO 1130 and BIO 1330 and CHEM 1141 and CHEM 1341 all with grades of "D" or better or instructor approval.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 4331. Disaster Preparedness and Management in Agriculture.**

This course provides an investigation of past disaster events that have impacted the global and domestic food and agriculture supply. This course also provides the information needed to develop and execute an action response plan for disasters affecting agricultural operations. Both preparation and mitigation of the disaster will be covered. Prerequisite: AG 3341 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4343. Organization and Management for Laboratory Programs.**

This course examines instructional programs involving laboratory equipment and facilities. Curriculum, teaching methods, equipment and facility management practices including various aspects of safety, tool management, inventory and security are emphasized along with facilities layout planning. Must be taken in last semester of program. Corequisite: AG 4212 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 4355. Precision Applications in Land Management.**

This course focuses on engineering practices used in surveying including differential profile leveling and construction surveys. Topics include the use of dumpy levels, transits, total stations, and Global Positioning Systems. This course introduces students to the fundamental components of small unmanned aerial systems (sUAS), sensors and platforms, UAS operational concepts, the principles of UAS data collection, the legal framework within which UAS should be operated and applied, and data processing software in agricultural settings.

Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319] and AG 2373 and AG 2390 all with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4361. Agriculture Electric and Mechanical Systems.**

Electrical fundamentals applied to agricultural production and processing. Circuits, power, energy, wiring design, and motor fundamentals; selection, installation and operational characteristics. Sensors and control devices including switches, relays, timers, and circuit breakers will be studied. Prerequisite: AG 2373 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 4371T. International Horticulture.**

The purpose of this program is to introduce students to the English culture and way of life, as well as England's historic role in Horticulture, past and present. Students will intensely study from the following four horticultural fields: Ornamental Horticulture, Landscape Design, Vegetables/Fruit Crops, and Vineyards and Hops. The program includes basic instruction in English history, as well as lectures and field trips.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**AG 4371V. Green Revolution & Agricultural Development in Asia.**

This course will provide a detailed retrospective of the Green Revolution in Asia, its achievement and limits in terms of agricultural productivity improvement, and its broader impact at social, environmental, and economic levels.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**AG 4371X. Data Analysis and its Application in Agriculture.**

This course is an introduction to data science that analyze big data with emphasis on its application in agriculture. Students will learn 1) how to analyze big data and make data-driven predictions through probabilistic modeling and statistical inference, 2) how to identify and utilize appropriate statistical and econometric methodologies to extract meaningful information for decision making in agriculture, and 3) how to use software such as Excel and R to implement statistical and econometric analysis and present results. Prerequisite: AG 2390 and AG 3352 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**AG 4371Y. Field Experiences in Regenerative Agriculture.**

This course focuses on experiential field-based activities and technologies in regenerative agriculture that improve the health and functioning of an ecosystem. Students will gain experience with metrics to assess agroecological health as well as methods, tools and technologies to improve soil biophysical qualities, biodiversity, water and nutrient cycling, and energy balance. Creating resilience to climate change, developing circular economies, and increasing farm profitability are explored. In a field setting, regenerative agriculture techniques with respect to crop production are practiced. Prerequisite: [AG 2313 or AG 2379] and AG 3426 both with grades of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**AG 4379. Agriculture Irrigation Technology.**

This course teaches the principles associated with water management practices in maintaining soil productivity and the influence of water management on environmental quality. Emphasis will be placed on the selection and layout of irrigation and drainage systems, waste management systems, and the impact on the environment. Prerequisite: AG 2373 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4380. Agricultural Finance.**

This course introduces finance and financial problems faced by agribusiness managers. The subject matter includes financial analysis, planning, and control; capital budgeting; capital structure, liquidity, and risk management; and financial markets. Prerequisite: ACC 2361 and AG 2383 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter



**AG 4381. Agricultural Policy.**

Identification and analysis of governmental programs and policies affecting the production and marketing of agricultural products. An economic evaluation of alternative policies and their application for farmers, consumers and agribusinesses will be considered. (WI) Prerequisite: AG 2383 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4382. Agricultural Price Analysis.**

This course focuses on the forces that influence agricultural price movements and behavior, including consumer and producer theory, and market demand and supply with their associated determinants. The course also covers commodity futures and their use by agribusiness firms to reduce price risk. An explanation of simple and multiple regression is introduced to help the student understand empirical estimation of commodity demand and supply relationships, and reduced-form, price-dependent equations that offer insight into price-making forces. Price determination under alternative market structures is also reviewed and expanded. (WI) Prerequisite: AG 3350 and AG 3352 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4383. Agricultural Resource Economics.**

This course introduces economic concepts and institutional factors relating to the use of agricultural resources such as land, air, water, energy, space, etc. Emphasis is on the conservation of resources and the environmental interactions resulting from the use of natural resources for agricultural production. (WI) Prerequisite: AG 2383 and [MATH 1315 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4390. Global Agriculture.**

This study abroad course focuses on global agricultural industries and markets, including analysis of production, marketing and trade. The course examines the shape of international agriculture; how culture, history and geography in foreign countries affect the production and management of agricultural products; agricultural policy formation; countries' natural resources and competitive strategies. Course may be repeated when topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4401. Genetics and Breeding for Crop Selection.**

This course covers traditional breeding and selection in crops with an emphasis on genetics. The course includes topics on phenology, phenotype, genotype, heritability and epigenetics. The course includes a lab. Prerequisites: AG 1445 and [AG 2313 or AG 2379] and BIO 1130 and BIO 1330 and CHEM 1141 and CHEM 1341 all with grades of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4681. Student Teaching in Agriculture, Food, and Natural Resources 6-12.**

Students will apply knowledge and skills learned during the teacher preparation program while engaging in clinical practice with experienced Agriculture mentor teachers in school settings with university instruction and supervision. This culmination experience is required for Texas teacher certification. Prerequisite: Minimum 2.75 Overall GPA and instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Credit/No Credit

## Minimum required: 120 semester credit hours

### General Requirements

- Students cannot enroll in upper-level (3000 or 4000) agriculture courses until they have successfully completed MATH 1315, MATH 1319, or MATH 2417, and CHEM 1341 and CHEM 1141.
- If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine semester credit hours must be writing intensive (WI).
- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

### Course Requirements

		Freshman	
	First Semester Hours	Second Semester Hours	
US 1100		1 Communication Component Code 010	3
Communication Component Code 010		3 BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3
AG 1110		1 BIO 1130 (TCCN BIOL 1106)	1

MATH 1315, 1319, or 2417 (Mathematics Component Code 020 [MATH 1314, 1324 or 2412])	3 AG 2390 (TCCN AGRI 1309)	3
AG 1445 (TCCN AGRI 1419)	4 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 Component Area Option Codes 090, 091, 092, 093 and 094	3
<b>15</b>	<b>16</b>	

**Sophomore**

First Semester Hours	Second Semester Hours	
American History Component Code 060	3 American History Component Code 060	3
AG 2383 (TCCN AGRI 2317)	3 AG 2374	3
AG 2373 (TCCN AGRI 2303)	3 CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3
AG 2313 or 2379 (TCCN AGRI 1307 or 1315)	3 CHEM 1141 (TCCN CHEM 1111)	1
Social and Behavioral Sciences Component Code 080	3 Creative Arts Component Code 050	3
	Component Area Option Codes 090, 091, 092, 093 and 094	3
<b>15</b>	<b>16</b>	

**Junior**

First Semester Hours	Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3 ENG 3303	3
AG 3310	3 AG Elective I	3
AG 3426	4 AG 3427	4
AG 3319	3 AG 3341	3
AG Elective I	3	
<b>16</b>	<b>13</b>	

**Senior**

First Semester Hours	Second Semester Hours	
AG Elective I	6 AG Electives II	8
AG 3317 or 3318	3 AG 4326	3
AG 3353 or 4361	3 AG 4307	3
AG 4325	3	
<b>15</b>	<b>14</b>	

**Total Hours: 120****AG Electives I**

Code	Title	Hours
AG 3300	Undergraduate Research in Agricultural Sciences	3
AG 3301	Principles of Livestock Genetics	3
AG 3302	Herbaceous Plant Materials	3

AG 3304	Propagation of Horticultural Plants	3
AG 3305	Woody Plant Materials for Outdoor Landscapes	3
AG 3306	Flowers and Plants for Interior Design	3
AG 3308	Organic Gardening	3
AG 3314	Animal Health and Disease Control	3
AG 3325	Animal Nutrition	3
AG 3330	Applied Wildlife Nutrition	3
AG 3331	Reproduction in Farm Animals	3
AG 3345	Livestock Selection and Evaluation	3
AG 3350	Intermediate Microeconomics and Agricultural Application	3
AG 4328	Advanced Animal Science-NonRuminants	3
AG 4330	Food Technology: Processing Meats	3

**AG Electives II**

Code	Title	Hours
AG 3321	Range Management	3
AG 3329	Economic Entomology	3
AG 3351	Agricultural Marketing and Sales	3
AG 3352	Quantitative Methods in Agricultural Economics	3
AG 3355	International Agricultural Trade	3
AG 3455		4
AG 4185	Independent Study (3 hour maximum)	1
AG 4300	Greenhouse and Nursery Management	3
AG 4302	Fruit and Vegetable Crop Production	3
AG 4304	Landscape Management	3
AG 4305	Landscape Design	3
AG 4310	Agricultural Internship	3
AG 4371Y	Field Experiences in Regenerative Agriculture	3
AG 4381	Agricultural Policy	3
AG 4383	Agricultural Resource Economics	3
AG 4401	Genetics and Breeding for Crop Selection	4

**Minimum required: 120  
semester credit hours**

**General Requirements**

- Students cannot enroll in upper-level (3000 or 4000) agriculture courses until they have successfully completed MATH 1315, MATH 1319, or MATH 2417, and CHEM 1341 and CHEM 1141.
- If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine semester credit hours must be writing intensive (WI).
- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this

catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

## Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
US 1100	1 Communication Component Code 010	3	
Communication Component Code 010	3 BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3	
AG 1110 (TCCN AGRI 1131) <sup>1</sup>	1 BIO 1130 (TCCN BIOL 1106)	1	
MATH 1315, 1319, or 2417 (Mathematics Component Code 020 [TCCN MATH 1314, 1324 or 2412])	3 AG 2390 (TCCN AGRI 1309) <sup>1</sup>	3	
AG 1445 (TCCN AGRI 1419)	4 AG 2275	2	
Government/Political Science Component Code 070	3 Component Area Option Codes 090, 091, 092, 093 and 094	3	
	<b>15</b>	<b>15</b>	

		Sophomore	
First Semester Hours		Second Semester Hours	
American History Component Code 060	3 American History Component Code 060	3	
AG 2383 (TCCN AGRI 2317)	3 AG 2374	3	
AG 2373 (TCCN AGRI 2303)	3 CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3	
AG 2313 or 2379 (TCCN AGRI 1307 or 1315)	3 CHEM 1141 (TCCN CHEM 1111)	1	
TECH 1311	3 Creative Arts Component Code 050	3	
	Component Area Option Codes 090, 091, 092, 093 and 094	3	
	<b>15</b>	<b>16</b>	

		Junior	
First Semester Hours		Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3 ENG 3303	3	
AG 3310	3 AG Elective	3	
AG 3426	4 Government/Political Science Component Code 070	3	
AG 3319	3 Social and Behavioral Sciences Component Code 080	3	
TECH 2310	3 AG 4355 or 4379	3	
	<b>16</b>	<b>15</b>	

		Senior	
First Semester Hours		Second Semester Hours	
AG Elective	3 AG Electives	3	

AG 4361	3 AG 3375	3
AG 3353	3 AG 3317 or 3318	3
PHYS 1315 (TCCN PHYS 1301)	3 AG 4307	3
PHYS 1115 (TCCN 1101)	1 AG 3341	3
	<b>13</b>	<b>15</b>

**Total Hours: 120**

<sup>1</sup> Must be successfully completed in the first 45 college credit hours at Texas State.

## AG Electives

Code	Title	Hours
AG 3300	Undergraduate Research in Agricultural Sciences	3
AG 3301	Principles of Livestock Genetics	3
AG 3302	Herbaceous Plant Materials	3
AG 3304	Propagation of Horticultural Plants	3
AG 3305	Woody Plant Materials for Outdoor Landscapes	3
AG 3306	Flowers and Plants for Interior Design	3
AG 3308	Organic Gardening	3
AG 3314	Animal Health and Disease Control	3
AG 3321	Range Management	3
AG 3325	Animal Nutrition	3
AG 3329	Economic Entomology	3
AG 3330	Applied Wildlife Nutrition	3
AG 3331	Reproduction in Farm Animals	3
AG 3345	Livestock Selection and Evaluation	3
AG 3350	Intermediate Microeconomics and Agricultural Application	3
AG 3351	Agricultural Marketing and Sales	3
AG 3352	Quantitative Methods in Agricultural Economics	3
AG 3355	International Agricultural Trade	3
AG 3427	Soil Science II	4
AG 4185	Independent Study	1
AG 4300	Greenhouse and Nursery Management	3
AG 4302	Fruit and Vegetable Crop Production	3
AG 4304	Landscape Management	3
AG 4305	Landscape Design	3
AG 4325	Feeds and Feeding	3
AG 4326	Advanced Animal Science-Ruminants	3
AG 4328	Advanced Animal Science-NonRuminants	3
AG 4330	Food Technology: Processing Meats	3
AG 4381	Agricultural Policy	3
AG 4382	Agricultural Price Analysis	3
AG 4383	Agricultural Resource Economics	3
AG 4401	Genetics and Breeding for Crop Selection	4

**Minimum required: 120 semester credit hours**

## General Requirements

- Students cannot enroll in upper-level (3000 or 4000) agriculture courses until they have successfully completed

MATH 1315, MATH 1319, or MATH 2417 and CHEM 1341 and CHEM 1141.

2. If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.
3. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
4. Nine semester credit hours must be writing intensive (WI).
5. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

## Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
US 1100	1 Communication Component Code 010	3	
Communication Component Code 010	3 BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3	
AG 1110 (TCCN AGRI 1131) <sup>1</sup>	1 BIO 1130 (TCCN BIOL 1106)	1	
MATH 1315, 1319, or 2417 (Mathematics Component Code 020 [TCCN MATH 1314, 1324 or 2412])	3 Component Area Option Codes 090, 091, 092, 093 and 094	3	
AG 1445 (TCCN AGRI 1419)	4 AG 2390 (TCCN AGRI 1309) <sup>1</sup>	3	
Government/Political Science Component Code 070	3		
15		13	

		Sophomore	
First Semester Hours		Second Semester Hours	
American History Component Code 060	3 American History Component Code 060	3	
AG 2383 (TCCN AGRI 2317)	3 Social and Behavioral Sciences Component Code 080	3	
AG 2373 (TCCN AGRI 2303)	3 CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3	
AG 2313 or 2379 (TCCN AGRI 1307 or 1315)	3 CHEM 1141 (TCCN CHEM 1111)	1	
AG Elective	3 Component Area Option Codes 090, 091, 092, 093 and 094	3	
	Creative Arts Component Code 050	3	
15		16	

		Junior	
First Semester Hours		Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3 AG 4304 or 4305	3	
AG 3302	3 AG Elective	3	
AG 3426	4 Government/Political Science Component Code 070	3	
AG 3319	3 AG 3308 or 4302	3	
AG 3304 or 4300	3 AG 3427	4	
16		16	
		Senior	
First Semester Hours		Second Semester Hours	
AG Elective	3 AG Electives	5	
AG 3341	3 AG 3305	3	
AG 3306	3 AG 3317 or 3318	3	
AG 3329	3 AG 4307	3	
ENG 3303	3		
15		14	

### Total Hours: 120

<sup>1</sup> Must be successfully completed in the first 45 college credit hours at Texas State.

### AG Electives

Code	Title	Hours
AG 3300	Undergraduate Research in Agricultural Sciences	3
AG 3301	Principles of Livestock Genetics	3
AG 3310	Agriculture Power and Machinery Technology	3
AG 3314	Animal Health and Disease Control	3
AG 3321	Range Management	3
AG 3325	Animal Nutrition	3
AG 3330	Applied Wildlife Nutrition	3
AG 3331	Reproduction in Farm Animals	3
AG 3345	Livestock Selection and Evaluation	3
AG 3350	Intermediate Microeconomics and Agricultural Application	3
AG 3351	Agricultural Marketing and Sales	3
AG 3352	Quantitative Methods in Agricultural Economics	3
AG 3353	Agricultural Structures and Environment	3
AG 4185	Independent Study	1
AG 4310	Agricultural Internship	3
AG 4325	Feeds and Feeding	3
AG 4328	Advanced Animal Science-NonRuminants	3
AG 4361	Agriculture Electric and Mechanical Systems	3
AG 4371U		3
AG 4371V	Green Revolution & Agricultural Development in Asia	3
AG 4371Y	Field Experiences in Regenerative Agriculture	3
AG 4379	Agriculture Irrigation Technology	3
AG 4381	Agricultural Policy	3
AG 4383	Agricultural Resource Economics	3

AG 4390	Global Agriculture	9
AG 4401	Genetics and Breeding for Crop Selection	4
HON 3396Y	Urban Horticulture	3

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students cannot enroll in upper-level (3000-4000) agriculture courses until they have successfully completed MATH 1315, MATH 1319, or MATH 2417, (Freshman Year), and CHEM 1341 and CHEM 1141.
- If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine semester credit hours must be writing intensive (WI).
- In addition to the general education core curriculum and major requirements, students must also complete 12 hours of professional sequence courses through the College of Education. All coursework must be completed prior to AG 4681.
- To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
- The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in the student's criminal history, the student may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If the student has a criminal history, the student may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).
- A minor in Education is required for this major. Courses for the minor in Education are included in the following degree plan.

### Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
US 1100	1 Communication Component Code 010	3	
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3	
AG 1110 (TCCN AGRI 1311) <sup>1</sup>	1 BIO 1130 (TCCN BIOL 1106)	1	

MATH 1315, 1319, or 2417 (Mathematics Component Code 020 [TCCN MATH 1314, MATH 1324 or MATH 2412])	3 AG 2390 (TCCN AGRI 1309) <sup>1</sup>	3
AG 1445 (TCCN AGRI 1419)	4 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 Component Area Option Codes 090	3

15

16

#### Sophomore

First Semester Hours		Second Semester Hours	
American History Component Code 060	3 American History Component Code 060	3	
AG 2383 (TCCN AGRI 2317)	3 AG 2374	3	
AG 2373 (TCCN AGRI 2303)	3 CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3	
AG 2313 or 2379 (TCCN AGRI 1307 or 1315)	3 CHEM 1141 (TCCN CHEM 1111)	1	
Social and Behavioral Sciences Component Code 080	3 Advanced AG Elective	3	
Creative Arts Component Code 050 [HUMA 1315]	3 Component Area Option Codes 090	3	

18

16

#### Junior

First Semester Hours		Second Semester Hours	
Language, Philosophy, and Culture Component Code 040	3 CI 3325	3	
AG 3345	3 AG 3341	3	
AG 3426	4 AG 4113	1	
AG 3319	3 AG 3317 or 3318	3	
AG 3310, 3353, or 4361	3 AG 4343	3	
AG 4212	2 AG 4307	3	

18

16

#### Senior

First Semester Hours		Second Semester Hours	
CI 4370	3 AG 4681	6	
CI 4372	3		
AG 4311	3		
RDG 3323	3		
AG 2318 or 3325	3		

15

6

**Total Hours: 120**



## Minimum required: 120 semester credit hours

### General Requirements

- Students cannot enroll in upper-level (3000 or 4000) agriculture courses until they have successfully completed MATH 1315 (<http://mycatalog.txstate.edu/search/?P=MATH%201315>) or MATH 1319 (<http://mycatalog.txstate.edu/search/?P=MATH%201319>), or MATH 2417, and CHEM 1341 (<http://mycatalog.txstate.edu/search/?P=CHEM%201341>) and CHEM 1141 (<http://mycatalog.txstate.edu/search/?P=CHEM%201141>).
- If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine semester credit hours must be writing intensive (WI).
- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

### Course Requirements

Freshman			
Fall Semester Hours		Spring Semester Hours	
US 1100	1	AG 2318	3
AG 1110	1	POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3
MATH 1315, 1319, or 2417 (Mathematics Component Code 020 [TCCN MATH 1314, 1324 or 2412])	3	Communication Component Code 010	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	Social and Behavioral Sciences Component Code 080	3
BIO 1330 (TCCN BIOL 1306)	3		
BIO 1130 (TCCN BIOL 1106)	1		
AG 1445 (TCCN AGRI 1419)	4		
16		12	

Sophomore			
Fall Semester Hours		Spring Semester Hours	
CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3	AG 2313, 3321, or 2379 (TCCN AGRI 1307 or 1315)	3
CHEM 1141 (TCCN CHEM 1111)	1	CHEM 1342 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1312])	3

American History Component Code 060	3	ENG Literature (Component Area Option Code 090/094) [TCCN ENGL 2322, 2323, 2327, 2328, 2332 or 2333]	3
POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3	CHEM 1142 (TCCN CHEM 1112)	1
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	American History Component Code 060	3
AG 2383 (TCCN AGRI 2317)	3	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
16		16	

Junior			
Fall Semester Hours		Spring Semester Hours	
AG 2390	3	AG 3331	3
AG 3301	3	AG 3325	3
AG 3314	3	AG 3426	4
BIO 1331 (TCCN BIOL 1307)	3	ENG 3303	3
BIO 1131 (TCCN BIOL 1107)	1	Free Elective	1
ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [TCCN HUMA 1315])	3		
16		14	

Senior			
Fall Semester Hours		Spring Semester Hours	
AG 4326	3	AG 4307	3
AG 4325	3	AG 3352	3
AG 3317, 3318, or 3351	3	AG 4328	3
Agriculture electives	6	AG 3341	3
		Agriculture Elective (3000-4000 level AG course)	3
15		15	

Total Hours: 120

## Minimum required: 120 semester credit hours

### General Requirements

- Students cannot enroll in upper-level (3000 or 4000) agriculture courses until they have successfully completed MATH 1315 or MATH 1319, or MATH 2417, and CHEM 1341 and CHEM 1141
- If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).

- Nine semester credit hours must be writing intensive (WI).
- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

## Course Requirements

		Freshman
Fall Semester Hours	Spring Semester Hours	
US 1100	1 Communication Component Code 010	3
AG 1110	1 POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 Social and Behavioral Sciences Component Code 080	3
MATH 1315, 1319, or 2417 (Mathematics Component Code 020 [TCCN MATH 1314, MATH 1324, or MATH 2412])	3 BIO 1131 (TCCN BIOL 1107)	1
BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3 BIO 1331 (TCCN BIOL 1307)	3
BIO 1130 (TCCN BIOL 1106)	1 AG 2318	3
AG 1445	4	
<b>16</b>	<b>16</b>	

		Sophomore
Fall Semester Hours	Spring Semester Hours	
CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3 CHEM 1342 (TCCN CHEM 1312)	3
CHEM 1141 (TCCN CHEM 1111)	1 CHEM 1142 (TCCN CHEM 1112)	1
American History Component Code 060	3 AG 3314	3
POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3 ART 2313, DAN 2313, MU 2313, or TH 2313 (Creative Arts Component Code 050 [HUMA 1315])	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 American History Component Code 060	3
ENG Literature (Component Area Option Code 090/094)	3 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or PHIL 2306])	3
<b>16</b>	<b>16</b>	

		Junior
Fall Semester Hours	Spring Semester Hours	
AG 3301	3 AG 3331	3

CHEM 2341	3 AG 3325	3
CHEM 2141	1 CHEM 2342	3
COMM 2330 or 2338	3 CHEM 2142	1
BIO 2400	4 ENG 3303	3
<b>14</b>	<b>13</b>	

		Senior
Fall Semester Hours	Spring Semester Hours	
CHEM 4375	3 AG 4307	3
PHYS 1315	3 PHYS 1325	3
PHYS 1115	1 PHYS 1125	1
AG 4325	3 AG 3352	3
Agriculture Elective (3000-4000 level AG course)	6 AG 4326 or 4328	3
<b>16</b>	<b>13</b>	

**Total Hours: 120**

**Minimum required: 120 semester credit hours**

## General Requirements

- Students cannot enroll in upper-level (3000 or 4000) agriculture courses until they have successfully completed MATH 1315 or MATH 1319, and CHEM 1341 and CHEM 1141.
- If two years of the same modern language are taken in high school, then no additional language hours will be required for the degree. In the absence of modern language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine semester credit hours must be writing intensive (WI).
- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- For transfer students, 36 semester credit hours may be transferred from a Texas public institution of higher education for the Agricultural Business and Management Field of Study and be applied to the Bachelor of Science in Agriculture (B.S.A.G.) degree with a major in Agricultural Business and Management at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional courses please contact the College of Applied Arts Academic Advising Center for assistance. The transferable Texas Common Course Numbers (TCCN) is listed below the Texas State University course numbers in the following course list.

Code	Title	Hours
MATH 1319	Mathematics for Business and Economics I	3
	or MATH 1315 College Algebra	
	TCCN: MATH 1324 or MATH 1314	

AG 1445	Basic Animal Science (or AG ELNA 3 hour and AG ELNA 1 hour)	4
TCCN: AGRI 1419 or (AGRI 1319 and AGRI 1119)		
CHEM 1341 & CHEM 1141	General Chemistry I and General Chemistry Laboratory I	4
TCCN: CHEM 1411 (or CHEM 1311 and CHEM 1111)		
ECO 2315	Principles of Macroeconomics	3
TCCN: ECON 2301		
CIS 1323		3
or AG 2390	Computer Applications in Agriculture	
TCCN: BCIS 1305 or AGRI 1309		
AG 2383	Introduction to Agricultural Economics	3
TCCN: AGRI 2317		
ACC 2361	Introduction to Financial Accounting	3
TCCN: ACCT 2301		
ACC 2362	Introduction to Managerial Accounting	3
TCCN: ACCT 2302		
AG ELNA		3
TCCN: AGRI 1325		
AG 2379	General Horticulture (and AG ELNA 1 hour)	4
or AG 2313	Agronomic Crops	
TCCN: AGRI 1415; or AGRI 1315 and AGRI 1115; or AGRI 1307 and AGRI 1107		
MATH 2328	Elementary Statistics	3
or MATH 1329	Mathematics for Business and Economics II	
TCCN: MATH 1342 or MATH 1325		
Total Hours		36

Course Requirements

		Freshman
First Semester Hours	Second Semester Hours	
US 1100	1 Communication Component Code 010	3
Communication Component Code 010	3 BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3
AG 1110 (TCCN AGRI 1131) <sup>1</sup>	1 BIO 1130 (TCCN BIOL 1106)	1
MATH 1315, 1319, or 2417 (Mathematics Component Code 020 [TCCN MATH 1314])	3 AG 2390 (TCCN AGRI 1309) <sup>1</sup>	3
AG 1445 (TCCN AGRI 1419)	4 MATH 1329, 2471, or 2328 (TCCN MATH 1325, 2413, or 1342)	3
Government/Political Science Component Code 070	3 Component Area Option Codes 090, 091, 092, 093 and 094	3
15		16
		Sophomore
First Semester Hours	Second Semester Hours	
American History Component Code 060	3 American History Component Code 060	3

AG 2383 (TCCN AGRI 2317)	3 Government/Political Science Component Code 070	3
ACC 2361 (TCCN ACCT 2301)	3 CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3
AG 2313 or 2379 (TCCN AGRI 1307 or 1315)	3 Creative Arts Component Code 050	3
Social and Behavioral Sciences Component Code 080	3 CHEM 1141 (TCCN CHEM 1111)	1
15		13
		Junior
First Semester Hours	Second Semester Hours	
ECO 2315	3 ENG 3303	3
AG 3351	3 AG Elective	3
AG 3426	4 ACC 2362 (TCCN ACCT 2302)	3
AG 3319	3 AG 3341	3
AG 3352	3 Language, Philosophy, and Culture Component Code 040	3
16		15
		Senior
First Semester Hours	Second Semester Hours	
AG 3350	3 AG 4381	3
AG 4382	3 AG 4383	3
AG Elective	3 AG 4307	3
AG 4380	3 AG 3317 or 3318	3
Component Area Option Codes 090, 091, 092, 093 and 094	3 AG 3355	3
15		15
Total Hours: 120		

<sup>1</sup> Must be successfully completed in the first 45 college credit hours at Texas State.

AG Electives

Code	Title	Hours
Select six hours of the following:		6
AG 3300	Undergraduate Research in Agricultural Sciences	
AG 3301	Principles of Livestock Genetics	
AG 3302	Herbaceous Plant Materials	
AG 3304	Propagation of Horticultural Plants	
AG 3305	Woody Plant Materials for Outdoor Landscapes	
AG 3306	Flowers and Plants for Interior Design	
AG 3308	Organic Gardening	
AG 3314	Animal Health and Disease Control	
AG 3321	Range Management	
AG 3325	Animal Nutrition	
AG 3329	Economic Entomology	
AG 3331	Reproduction in Farm Animals	

AG 3345	Livestock Selection and Evaluation
AG 3427	Soil Science II
AG 3455	
AG 4185	Independent Study (3 hour maximum)
AG 4300	Greenhouse and Nursery Management
AG 4302	Fruit and Vegetable Crop Production
AG 4304	Landscape Management
AG 4305	Landscape Design
AG 4310	Agricultural Internship
AG 4325	Feeds and Feeding
AG 4326	Advanced Animal Science-Ruminants
AG 4328	Advanced Animal Science-NonRuminants
AG 4330	Food Technology: Processing Meats
AG 4371V	Green Revolution & Agricultural Development in Asia
AG 4390	Global Agriculture
BLAW 3363	International Business Law

The minor in Agriculture requires 19 semester credit hours. A minor in agriculture is ideal for someone majoring in the life sciences, family and consumer sciences, or in any discipline where knowledge of the food and fiber industry would be beneficial. Agriculture majors may not select a minor in Agriculture due to course duplication.

Code	Title	Hours
<b>Required Courses</b>		
AG 1445	Basic Animal Science	4
AG 2313	Agronomic Crops	3
AG 2373	Introduction to Agricultural Engineering	3
Choose 9 hours of advanced AG courses		9
<b>Total Hours</b>		<b>19</b>

The minor in Agricultural Mechanics requires 18 semester credit hours. The minor in Agricultural Mechanics opens additional career opportunities for students in Engineering, Technology, Geology, and the students majoring in Agricultural Business.

Code	Title	Hours
<b>Required Courses</b>		
AG 2373	Introduction to Agricultural Engineering	3
AG 2374	Metal Fabrication and Welding Technology for Agriculture	3
AG 3353	Agricultural Structures and Environment	3
AG 4361	Agriculture Electric and Mechanical Systems	3
<b>Prescribed Electives</b>		
Choose 6 hours from the following:		6
AG 3310	Agriculture Power and Machinery Technology	
AG 3375	Management of Agricultural Machinery and Equipment	
AG 3455		
AG 4379	Agriculture Irrigation Technology	
<b>Total Hours</b>		<b>18</b>

The minor in Animal Science requires 19 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
AG 1445	Basic Animal Science	4
AG 3325	Animal Nutrition	3
AG 3331	Reproduction in Farm Animals	3
Choose 9 hours from the following:		9
AG 3301	Principles of Livestock Genetics	
AG 3314	Animal Health and Disease Control	
AG 3321	Range Management	
AG 3352	Quantitative Methods in Agricultural Economics	
AG 4326	Advanced Animal Science-Ruminants	
AG 4330	Food Technology: Processing Meats	
<b>Total Hours</b>		<b>19</b>

The minor in Horticulture requires 18 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
AG 2379	General Horticulture	3
AG 3302	Herbaceous Plant Materials	3
AG 3305	Woody Plant Materials for Outdoor Landscapes	3
Choose 9 hours from the following:		9
AG 3304	Propagation of Horticultural Plants	
AG 3306	Flowers and Plants for Interior Design	
AG 3308	Organic Gardening	
AG 3426	Soil Science I	
AG 3427	Soil Science II	
AG 3455		
AG 4300	Greenhouse and Nursery Management	
AG 4302	Fruit and Vegetable Crop Production	
AG 4304	Landscape Management	
AG 4305	Landscape Design	
AG 4379	Agriculture Irrigation Technology	
<b>Total Hours</b>		<b>18</b>

The minor in Plant and Soil Science requires 20 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
AG 2313	Agronomic Crops	3
or AG 2379	General Horticulture	
AG 3426	Soil Science I	4
AG 4302	Fruit and Vegetable Crop Production	3
Choose 10 hours from the following:		10
AG 3304	Propagation of Horticultural Plants	
AG 3308	Organic Gardening	
AG 3329	Economic Entomology	
AG 3427	Soil Science II	
AG 3455		
AG 4401	Genetics and Breeding for Crop Selection	
<b>Total Hours</b>		<b>20</b>

For students who are seeking a teacher certification within their major and would like a second teaching field in Agriculture, Food and Natural Resources, the requirements are:

Code	Title	Hours
AG 2373	Introduction to Agricultural Engineering	3
AG 2374	Metal Fabrication and Welding Technology for Agriculture	3
AG 2383	Introduction to Agricultural Economics	3
AG 3345	Livestock Selection and Evaluation	3
AG 4212	Program Building	2
AG 4325	Feeds and Feeding	3
AG 4343	Organization and Management for Laboratory Programs	3
Select one of the following:		3
AG 2313	Agronomic Crops	
AG 2379	General Horticulture	
Select one of the following:		3
AG 3310	Agriculture Power and Machinery Technology	
AG 3353	Agricultural Structures and Environment	
AG 4361	Agriculture Electric and Mechanical Systems	
Select one of the following:		3-4
AG 3305	Woody Plant Materials for Outdoor Landscapes	
AG 3306	Flowers and Plants for Interior Design	
AG 3426	Soil Science I	
<b>Total Hours</b>		<b>29-30</b>

All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

Supple Building Room 384  
T: 512-245-2178 F: 512-245-8713  
[www.bio.txstate.edu](http://www.bio.txstate.edu) (<http://www.bio.txstate.edu>)

Biology is the study of living systems and how they function. Because the biological sciences have had and continue to have profound impact on questions of concern to human society - longevity, environmental quality, biotechnology - knowledge of the biological sciences is an important aspect of higher education. The mission of the Department of Biology is to advance the life sciences through research and to educate and prepare the next generations of scientists, educators, professionals, and scientifically literate citizens. Students select one of four majors: Aquatic Biology, Biology, Microbiology, or Wildlife Biology.

Biology majors take a minimum of eleven courses that include the core curriculum of functional biology, organismal biology, genetics, a biological diversity course, a physiology course, ecology, and evolution. Additional required courses in chemistry, mathematics, and physics provide the broad scientific background that is foundational to biological sciences. At the sophomore level and above, a variety of courses in

cellular, molecular, computational and organismal biology assure a student can attain a broad education in the biological sciences as well as a level of specialization in its subdisciplines. A minor outside the Biology Department is required for all areas of study except for the Wildlife Biology program.

## Teacher Certification

Students may earn the Life Science (Texas Grades 7-12) certification through a double major with a B.S. major in Biology and a B.S. major in Education. Initial or additional certification may also be acquired as a post-baccalaureate or graduate student. Students interested in certification are strongly encouraged to see the Science Education program advisor in the Department of Biology early in their undergraduate program or certification process.

## Bachelor of Science (B.S.)

- Major in Aquatic Biology (p. 684)
- Major in Biology (p. 686)
- Major in Biology (Secondary Education; Teacher Certification in Life Science, Grades Seven through Twelve, with Double Major in B.S. Education) (p. 687)
- Major in Microbiology and Molecular Genetics (<http://mycatalog.txstate.edu/undergraduate/science-engineering/biology/microbiology-molecular-genetics-bs/>)
- Major in Wildlife Biology (p. 690)

## Minors

- Biology (p. 692)
- Second Teaching Field in Life Science (7-12)

**Subjects in this department include: BIO (p. 671), GS (p. 684)**

## Courses in Biology (BIO)

### BIO 1130. Functional Biology Laboratory.

Fundamental techniques and instruments used in cellular biological research will be taught while emphasizing safety, measurements, and scientific methods. Students will design and implement controlled experiments, identify independent and dependent variables, analyze data, draw conclusions, and communicate results with appropriate tables and graphs in oral presentations and written papers.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** BIOL 1106

### BIO 1131. Organismal Biology Laboratory.

This course introduces the students to the basics of experimental design, scientific method and inquiry, use of statistical analyses and writing research papers. Topics covered include Mendelian and population genetics, natural selection, population ecology, phylogeny, and behavioral ecology.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** BIOL 1107



**BIO 1320. Modern Biology I, Molecules, Cells, and Physiology.**

Provides students with basic scientific and biological principles. Current problems in biology and the ethics of science are presented with perspectives of public policy from a scientific viewpoint. This course is not recommended for majors in the natural sciences, including biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** BIOL 1308

**BIO 1321. Ecology, Evolution and Society.**

This course provides the non-science major an overview of the ecological and evolutionary principles that govern relationships between living organisms, including humans, and their environment. Special attention is given to environmental issues of current concern, such as overpopulation, climate change, pollution, resource depletion, and conservation biology.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering|Multicultural Perspective

**Grade Mode:** Standard Letter

**TCCN:** BIOL 1309

**BIO 1330. Functional Biology.**

This course provides the students with a strong foundation in cellular and molecular biology. Topics include biochemistry, energy metabolism, molecular bases of gene regulation and protein functions, cell division and control, and cell signaling. This course is required for all biology majors and is not recommended for non-science majors. Prerequisite: College Readiness in English Language Arts and Reading (ELAR) according to the TSI regulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 1306

**BIO 1331. Organismal Biology.**

This course provides science majors with a foundation in organismal biology, Mendelian and population genetics, evolution and ecology. Topic include: patterns of inheritance, genetics, evolution, speciation, phylogenetics, and behavioral population, community, and ecosystem ecology. This course is required for all biology majors and is not recommended for non-science majors. Prerequisite: College Readiness in English Language Arts and Reading (ELAR) according to the TSI regulations and College Readiness in Mathematics according to the TSI regulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 1307

**BIO 2400. Microbiology.**

Principles of microbiology, morphology, anatomy, physiology and taxonomy of representative groups of non-pathogenic organisms. Laboratory methods stress studies of pure cultures, the use of laboratory apparatus in quantitative determinations and the detection and identification of microbial populations in the environment. Prerequisites: BIO 1130 and BIO 1131 and BIO 1330 and BIO 1331 and CHEM 1341 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 2421

**BIO 2410. Intermediate General Botany.**

An introduction to the biology of plants and plant-like organisms, emphasizing their role in ecosystem processes, relationships between structure and function, and the evolutionary relationships among the major plant groups. Prerequisites: BIO 1130 and BIO 1131 and BIO 1330 and BIO 1331 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 2411. Intermediate Zoology.**

Provides biology majors a strong foundation in animal biology at the organismal level. The format will include details of animal form and function as well as concepts relating to classification, phylogeny, evolution, and ecology. Topics will include natural history, biogeography, adaptations to local environments, shared characters, and behavior. All material is presented in an accepted phylogenetic sequence. Prerequisites: BIO 1130 and BIO 1131 and BIO 1330 and BIO 1331 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 2430. Human Physiology and Anatomy.**

A course on human physiology covering the various organ systems. Principles of molecular biology, cell and tissue structure, anatomy and relationship of structure and function are stressed. May not be credited toward a Biology major or minor.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 2404

**BIO 2440. Principles of Microbiology.**

The Basic Principles of microbiology, morphology, physiology, immunology and the relationship of microorganisms to diseases. This course is designed primarily to meet the requirements for students in allied health sciences and other programs requiring only one semester of microbiology. This course may not be credited toward a biology major or minor. Prerequisites: BIO 1330 and CHEM 1341 both with grades of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 2420

**BIO 2450. Genetics.**

An introduction to basic principles of Genetics by studies of Mendelian, molecular, quantitative and population genetics. Topics include: classical transmission genetics, and gene mapping, DNA replication and repair, transcription, translation, control of gene expression, genetic engineering techniques, Hardy-Weinberg equilibrium, evolutionary change via natural selection, and genetic drift. Prerequisites: BIO 1130 and BIO 1131 and BIO 1330 and BIO 1331 and CHEM 1141 and CHEM 1142 and CHEM 1341 and CHEM 1342 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 2416

**BIO 2451. Human Anatomy and Physiology I.**

Part I of a two semester course on the structure and function of the human body. Designed specifically to prepare students for nursing and other health professions. Prerequisites: BIO 1330 and CHEM 1341 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 2401

**BIO 2452. Human Anatomy and Physiology II.**

This course is the second part of a two semester course on the structure and function of the human body designed specifically to prepare students for nursing and other health professions. Prerequisites: BIO 1330 and BIO 2451 and CHEM 1341 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 2402

**BIO 3200. Genetic Engineering Technology.**

This course introduces the technologies used for genetic engineering with an emphasis on the CRISPR-Cas system. Students will examine various applications in medicine, agriculture, and biotechnology and evaluate the potential benefits and problems, including the underlying technological, ethical and safety concerns. Students will gain hands-on experience tagging genes in the model nematode worm, *Caenorhabditis elegans*. Prerequisite: BIO 2450 with a grade of "C" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 3210. Biology Pedagogy and Learning.**

This course provides an introduction to pedagogical ideas relevant to the teaching and learning of biology for biology learning assistants. Students will learn key education theories and methods from STEM education research and cognitive science. Students will evaluate the processes of teaching and learning and examine structures and practices that facilitate and/or inhibit student learning. Students will apply what they've learned to the teaching of biology as they collaborate with biology faculty as learning assistants for an undergraduate biology course and complete a final project. Prerequisite: Department approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 3300. Cell and Molecular Biology.**

Fundamentals of structure and function of prokaryotic and eukaryotic cells. This course includes cell and organelle structure, basic biochemistry, principles of thermodynamics and energy transformation, nucleic acid and protein synthesis, enzyme kinetics, cell motility and cell signaling. Prerequisites: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 3301. Biology of Sex and Reproduction.**

This course focuses on animals, especially vertebrates, and covers topics such as the evolution of sexual reproduction, genetic variation, sex differentiation during development, reproductive anatomy and physiology, reproductive endocrinology, gestation, disease transmission, and reproductive technologies. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 3308. Global Ecology.**

An interdisciplinary introduction to the science of global environmental change. Emphasis will be placed on understanding principles of earth system science, the scientific basis underlying the major components of global environmental change, the linkages between these components, and the central role of humanity in contributing to the observed changes. (WI) Prerequisites: BIO 1130 and BIO 1131 and BIO 1330 and BIO 1331 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 3341. Aquatic Toxicology.**

This course examines the basic concepts of aquatic toxicology, including uptake mechanisms, interactions, and elimination of different toxicants. Students will understand how toxic substances impact freshwater and marine organisms and identify potential health impacts to humans. Topics to be discussed include nutrients, metals, oil, pesticides, radionuclides, plastics, and emerging contaminants. Prerequisites: BIO 1331 and CHEM 1341 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 3371. Marine Resources.**

This course examines the exploitation and fragility of the marine environment and the economic importance of marine resources. Topics to be examined include ocean ownership, overfishing, aquaculture, shark finning, whaling, ocean mining, marine transportation, tourism, pollution, harvesting energy from the ocean, and the importance of creating marine reserves. Prerequisite: BIO 1331 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 3376. Introduction to Biotechnology.**

This course is an introduction to biotechnology. It provides an insight into how biotechnological applications can solve scientific and societal problems for the benefit of humankind. Prerequisite: BIO 1330 and BIO 1331 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 3406. Economic Botany.**

An introduction to the utilization of plants by humans and their economic and ecological significance. Laboratories will stress plant features beneficial to economic and societal needs. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 3421. Vertebrate Physiology.**

The study of the physiology of vertebrate organ systems, including the nervous system, musculoskeletal system, endocrine system, cardiovascular system, respiratory system, digestive system, reproductive system and urinary system. Mammalian systems will be emphasized. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 3425. Human Anatomy.**

This course introduces students to the anatomy of the human body. Aspects of both gross and micro anatomy of tissues, organs, and systems will be covered with an emphasis on hands-on laboratory exploration. This course is designed for students interested in a variety of health professions. Prerequisite: BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 all with grades of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 3426. Human Physiology.**

This course focuses on human physiology and covers topics such as the nervous system, muscular system, endocrine system, cardiovascular system, respiratory system, digestive system, exocrine system, and reproductive system. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 3430. Mycology.**

A study of the fungal kingdom including slime molds and lichens. Laboratory studies will emphasize taxonomy, morphology and culture techniques. Prerequisites: [BIO 2400 or BIO 2410] and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 3442. Virology.**

The structure, multiplication and genetics of bacterial, plant, and animal viruses. The role of viruses in human and plant disease. (WI) Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 3460. Aquatic Ecology.**

An introduction to the diversity and ecology of aquatic organisms. Students will learn to use ecological concepts to understand aquatic ecosystems and how they are impacted by human activities. They will also summarize and extract relevant information from scientific papers in aquatic ecology, analyze collected data, and communicate the results effectively. The laboratory sessions will include both lab and field work and at least a one-day field trip. Prerequisite: BIO 4416 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 3461. Plant Taxonomy.**

Principles of identification and classification of plants; nomenclature and characteristics of various plant groups with emphasis on the higher plants. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 3480. Histology.**

A study of the structural and functional relationships between cells and tissues in organs. The laboratory includes the study of prepared slides and of microtechnique. This course is designed to meet the needs of pre-professional students. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4126. Immunology Laboratory.**

This laboratory-based course will cover cells of the immune system and basic serological reactions, including bacterial and viral agglutination reactions, precipitation, immunoelectrophoresis, immunofluorescence, and enzyme-linked immunosorbent assays. (WI) Prerequisite: BIO 2400 and BIO 2450 both with grades of "C" or better. Corequisite: BIO 4326 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4166. Medical Microbiology Laboratory.**

This laboratory-based course will cover pathogenic bacteria emphasizing identification of selected groups of pathogens and the biological basis for virulence. (WI) Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better. Corequisites: BIO 4366.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4176. Microbial Biotechnology Laboratory.**

This laboratory-based course will cover use of microbes for biotechnological applications and is designed to provide practical explorations into fields of biotechnology. Topics include laboratory techniques for recombinant protein purification, fermentation, identification of markers in genetically modified food and bioremediation of pollutants. Prerequisite: BIO 2400 and BIO 2450 both with grades of "C" or better. Corequisite: BIO 4376.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4299. Undergraduate Research.**

Supervised individual research projects in a mentor-student relationship with a biology professor. May be repeated once for credit. Prerequisites: BIO 2450 with a grade of "C" or better and a minimum 3.0 Texas State GPA and instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4300. Neurobiology.**

This course will give students an overview of neuroscience, particularly the areas of neuroanatomy, neurophysiology, and evolutionary and developmental neurobiology. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4301. Evolution.**

Basic genetic principles applied to natural selection, adaptation, populations, speciation and man's future. Consideration is given to the origin of life, nature of chromosomal variation, evolution of genetic systems and certain other selected topics. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4304. Wildlife and Recreation: Impact, Policy, and Management.**

Students will be introduced to the impact human recreational activities have on wildlife habitats and populations. Management practices to enhance human-wildlife encounters or to minimize detrimental effects on wildlife populations will be presented. Prerequisite: BIO 4416 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4305. Nature Study.**

This course provides a comprehensive survey of natural events. It includes laboratory and field work emphasizing observation, collection and discovery of relationships. It is creditable only for those seeking elementary or middle school certification and is required for those seeking grade 4-8 Science or Science/Mathematics teaching certification. This course must be taken the semester immediately prior to student teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4307. Ecology of Rarity.**

This course will examine the ecology of rarity and its ability to inform public awareness and environmental policy. This course will explore how we define rarity, persistence and viability and address the question, "Is rarity more or less common than might be expected, and is there anything we can or should do about it?" Prerequisite: BIO 4416 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4311. Cancer Biology.**

Cancer Biology provides a foundation for understanding the complex molecular, biochemical, and cellular processes associated with cancer development. Topics include the role of tumor suppressor genes, oncogenes, DNA repair, apoptosis, ECM, cell-cycle control, cell signaling pathways, immune function and cancer-causing viruses. Emerging diagnostics and/or therapeutics will also be discussed. Prerequisite: BIO 2450 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4317. Interpretive Biology Programming and Design.**

In this course, students will explore the methods and principles used by the National Park Service, museums, environmental centers, and state park systems to interest a variety of audiences as well as interpret biology and natural environments effectively. Students will practice skills in both personal and non-personal interpretation by creating science outreach programs, interpretive literature, brochures, path waysides, and other interpretive media. Service-learning is an integral and mandatory part of this course. (WI) Prerequisite: [BIO 2410 or BIO 2411] and BIO 2450 with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4319. Biological Resources: Conservation and Planning.**

This course is an introduction to the protection and sustainable use of populations, species, habitats, and ecosystems. Course also includes study of the methods used to analyze biodiversity and population regulation. Corequisite: BIO 4416 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4326. Immunology.**

This lecture-based course will cover the biology of the immune system and its relationship to disease, emphasizing B and T cell immunity, immune diseases, hypersensitivities, transplantation, and cancer. (WI) Prerequisite: BIO 2400 and BIO 2450 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4327. Issues in Irish Biodiversity and Conservation.**

In this course, students will learn about Irish flora and fauna, ecosystems, conservation strategies in areas of high ecological concern, and public involvement. Emphasis will be placed on case studies and service-learning opportunities. Prerequisite: BIO 1131 and BIO 1331 both with grades of "D" or better and instructor approval. Corequisite: BIO 4328 with a grade of "D" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4328. Field Biology of Ireland.**

In this course, students will use multiple techniques to explore biodiversity across multiple ecosystems in Ireland. Prerequisite: BIO 1131 and BIO 1331 both with grades of "D" or better and instructor approval. Corequisite: BIO 4327 with a grade of "D" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter



**BIO 4329. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4331. Human Dimensions of Wildlife and Fisheries Conservation.**

Humans play a role in nearly every aspect of wildlife and fisheries conservation. This course will provide students with principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will also have an opportunity to integrate human dimensions into local decision-making. Prerequisite: BIO 4416 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4332. Biology in Film and Television: An Analysis of the Biology in Fiction and Non-Fiction Film and TV.**

This course explores how biology is portrayed in popular motion pictures with an emphasis on analyzing biological accuracy, misconceptions perpetuated or portrayed, and investigating the rationale behind motion picture directors' and writers' decisions about how they portray biological content in the final product. Students will watch and discuss a curated list of films and television shows and write an analysis of each film or TV episode. Prerequisite: BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4337. Biology and Conservation of Sharks.**

This course examines the biology and conservation of sharks and their relatives (skates, rays, chimaeras, and sawfish). Topics to be examined include evolutionary history, distribution, anatomy and physiology, daily movements and migration, diet, reproduction, relationship with humans, fisheries, conservation, and field methods used in shark research. Prerequisite: BIO 1331 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4338. Tropical Ecology and Conservation.**

In this course students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. This is an immersive and intensive study abroad course combining traditional lecture, field-based instruction, and primary literature-based discussions while observing actual tropical ecosystems. Prerequisite: BIO 1130 and BIO 1131 and BIO 1330 and BIO 1331 all with grades of "C" or better and a minimum 2.5 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4343. Fish Physiology.**

This course examines the primary physiological functions in fish, including how fish sense and interact with the environment, maintain their energetic metabolism (respiration, digestion and excretion), reproduce and maintain water balance. Students will learn about the diverse adaptations fish use to cope with environmental and physiological challenges. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4350B. Biological Implications of Water Planning in Texas.**

Current topics in understanding the biological implications of water planning in Texas. This course will be of particular interest to students who have a background in aquatic biology and who intend to stay in Texas post-graduation. May be repeated once with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350D. Watershed Management Frameworks and Applications.**

Introduction to integrated watershed assessment and management tools for identifying programmatic water quality and quantity issues and their root causes and solutions, and their practical application. The scientific and socio-economic elements are considered within the context of planning and developing watershed protection plans and programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350E. Techniques in Aquatic Biology.**

This course will provide hands on experience with a suite of physical, chemical, and biological sampling techniques and gear used in applied river studies. Students will be exposed to the fundamentals of data quality objectives, accuracy, precision, detection limits, data visualization, exploratory analysis, univariate and multivariate statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350I. Bird Conservation and Management.**

This course is an introduction to the conservation and management of bird populations in an ecological context. Course covers a variety of species and spatial scales from landscape to ecoregion. Laboratory portion will involve field trips, intensive computer-based labs, and class discussion. Corequisites: BIO 4416 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350J. Environmental Physiology of Animals.**

This course is a study of how animals respond physiologically to changes in environmental temperature, moisture, salinity, partial pressure of gases, and toxins. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350K. Genomics.**

The course is a lecture covering modern genomics, including principles of genome function, the human genome, comparative genomics, genome sequencing, evolution and genomic change, databases and medicine, ethical, legal and social issues. The course also includes discussion of transcriptomics, proteomics, metabolomics, directed evolution, protein design, and systems biology. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350M. Wildlife Policy and Law in North America.**

This course provides the student with a historical and cultural context within which wildlife policy and law have developed in North America, particularly in the United States. Federal treaties, statutes, case law, and regulations pertaining to wildlife will be presented. Wildlife law from representative states will be referenced as well. Corequisite: BIO 4423 or BIO 4435 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350P. Tropical Ecology and Conservation Lab.**

This laboratory course complements the lecture course, in which students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Co-requisite(s):** BIO 43500

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350Y. Introduction to Laboratory Research Methods.**

This course is for students interested in undergraduate research and introduces the fundamental methods and practices utilized in biological research labs. This hands on course covers keeping a lab notebook, following standard protocols, and collecting/analyzing data. Student will be introduced to current research programs offered in the Biology department. Prerequisite: BIO 1330 and BIO 1331 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350Z. Diversity and Cultural Impact of Geoparks.**

Students will explore biological differences in diversity across Geoparks in the United States and Ireland. Additionally, students will study the cultural impact that Geoparks have on the local community and national policy by focusing on differences between science communication strategies and community engagement practices conducted at the parks. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351A. Vertebrate Endocrinology.**

This course teaches function and organization of the endocrine system. It describes the major endocrine glands, the synthesis and release of their hormone products, and the interaction with target tissues. Endocrine control of digestion, growth, reproduction, and homeostasis will be compared between mammals and other vertebrate groups. Prerequisite: BIO 2450 and CHEM 2342 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351D. Ecology of Temporary Waters.**

Temporary waters (which regularly go dry) are often overlooked. This course explores their diversity, their ecological role and how these systems are impacted by humans. We will also look at the species that rely on temporary waters, their special adaptations, and their populations and community dynamics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351E. Natural History of America.**

In this field course students will examine the terrestrial and aquatic wildlife of a chosen study area in relation to their conservation and management. Local geology and climate change impacts on wildlife diversity will also be discussed. Prerequisite: BIO 1331 and BIO 1131 both with grades of "C" or better and a minimum 2.5 overall GPA and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351F. Marine Ecology and Conservation.**

In this field course students will examine the ecology, management, and conservation of marine flora and fauna, and the impact of humans on marine life. Prerequisite: BIO 1331 and BIO 1131 both with grades of "C" or better and a minimum 2.5 overall GPA and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351H. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351I. Global Change Biology.**

This course will give an in-depth analysis of the major global changes occurring in present day biological systems. The focus of the course will be on climate change, invasive species, eutrophication, land use change and biodiversity loss. Emphasis will be placed on peer-reviewed literature to better understand how biologists study processes at the global scale. Potential solutions to these global challenges will also be discussed.

Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351J. Comparative Immunology.**

While most textbooks would present the immune system of animals as a monolith with little variation between species, we are quickly learning that this is not the case. Indeed animal immune systems are immensely diverse. This class will consist of a taxonomic survey of metazoan immune systems, focusing on the evolutionary causes and ecological consequences of this diversity in immune systems across animals.

Prerequisite: BIO 4326 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351K. R for Biologists.**

This course broadly introduces biologists to the programming language R for statistical computing. The course will focus on the programming aspects of R using Base-R and tidyverse. This includes fundamentals like accessing the RStudio environment; loading, analyzing, and visualizing data; declaring variables, as well as navigating through and installing new modules. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351N. Marine Mammals, Reptiles, and Birds.**

This course is a field course where students will examine the ecology, management, rehabilitation, and conservation of marine mammals, reptiles, and birds. The impact of humans (e.g., pollution, climate change, habitat destruction, transportation, tourism) on their survival and rules and regulations in place to protect them will also be evaluated. Prerequisite: BIO 1331 and 1131 with a grade of "C" or better and Minimum 2.5 overall GPA and Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 4351P. Ecology and Conservation Abroad.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 4351Q with a grade of "C" or better.

**3 Credit Hours. 20 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351Q. Ecology and Conservation Abroad Lab.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 4351P with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4360. Molecular Biology.**

This course offers advanced insights into the realm of molecular biology. The curriculum covers a range of subjects such as gene expression (which encompasses the transcription and translation processes in bacteria and other organisms), post-translational protein modifications, chromosomal DNA replication, controls at cell cycle checkpoints, DNA damage and its repair mechanisms, and theories related to cancer and aging. Prerequisite: [BIO 2450 and BIO 2400] or CHEM 3375 or CHEM 4375, with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4363. History of Medicine.**

This course covers significant concepts, developments, individuals, and events in the history of medicine from antiquity to modern day. Topics include the impact of disease on medical practice, the development of hospitals as sites for care, teaching, and research, how medical science and technology are continuously defined by social, cultural, and political ideas, and the historical roots of several themes in medical ethics. This course will be delivered as an Education Abroad course. (WI) Prerequisite: BIO 2400 or BIO 2440 or BIO 2450 or BIO 2451 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4364. Explorations in Physiology.**

This course will cover the basic principles of physiological systems and the function of organ systems with an emphasis on humans and other mammals. The focus will be on the interplay between and among multiple organ systems and holistic systems integration. Other topics include the pathophysiology underlying common diseases, drug therapies and treatments, and emerging physiological research. This course will also provide the opportunity for experiential learning gained in diverse cultural settings. Prerequisite: BIO 2400 or BIO 2440 or BIO 2450 or BIO 2451 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4366. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their relationship to disease, epidemiology and the biological basis for virulence. Students may take only one of BIO 4345, BIO 4350G or BIO 4445 for credit. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4374. Principles of Zoo Management.**

This course is designed to introduce the principles of captive animal management within conservation and education-based zoos. Zoo management requires a broad understanding of the life history and biological needs of many different species; we will explore the ways modern zoos address these needs and the ways in which future zoos could address them more effectively. Specific topics will include animal husbandry, welfare, nutrition, and behavior as well as environmental enrichment, captive breeding, conservation, zoo regulatory frameworks, ethical concerns, and zoo careers. Prerequisite: BIO 2411 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4376. Microbial Biotechnology.**

This course provides an overview of how microbes (e.g., bacteria, viruses and yeast) are manipulated to solve practical problems through biotechnology. This course is based on topics of applied microbiology as recommended by American Society of Microbiology. Prerequisite: BIO 2400 and BIO 2450 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4377. Genome Informatics.**

The course will cover basic knowledge on genomics and its bioinformatics tools. Students will learn current topics on genomics and bioinformatics, and will analyze genomic data using statistical software. All the analyses will be performed using a personal and a cluster computer. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4388. Habitat Ecology.**

The course will introduce students to the importance of habitat in understanding a wide range of processes and patterns in Ecology. Course will explore the process of habitat selection, in the context of animal behavior as well as population dynamics. Students will learn methods and techniques of statistically analyzing the habitat associations of species. The central role of habitat in species conservation will also be discussed. Prerequisite: BIO 4416 with "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4400. Plants Important for Wildlife.**

This course explores plant and plant part (specifically gall, fruit, seed, and twig) identification, phylogenetics, co-evolution of plant defenses, economic and ecological impacts of plant uses by wildlife. Prerequisite: BIO 2410 or BIO 2450 either with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4402. Earth Science I.**

The description and interpretation of earth phenomena considered from the standpoint of meteorology and astroscience. Includes field observations, methods of measurement and interpretation of data related to the physical environment and space technology. May not be counted toward a major or minor in biology. Required for those seeking grade 4-8 Science and Mathematics/Science certification.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4403. Earth Science II.**

The description and interpretation of earth phenomena considered from the standpoint of geology and oceanography. Includes field observations, methods of sampling and interpretation of data related to the physical environment. May not be counted toward a major or a minor in biology. Required for those seeking grade 4-8 Science and Mathematics/Science certification.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4408. Science Processes and Research.**

Students will analyze scientific research design, design research, interpret data, and communicate results. Stress will be placed on broad-field structure and integration of major science concepts and research-based science pedagogy. This course must be taken the semester prior to student teaching and is required for those seeking 7-12 Life Science or Science teacher certification. This course may not count as one of the four upper-level Biology courses required of general Biology majors, or one of the three upper-level Biology courses required of Biology minors.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4410. Field Biology of Plants.**

Ecological relationships and natural history of plants, including historical geology, geography, soils, vegetational regions and surface geology of central Texas. Emphasis is placed on plant-soil-water relationships to develop conservation concepts. Students will make a representative collection of plants. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4411. Morphology of the Vascular Plants.**

The structure, life-cycles and evolution of fossil and living vascular plants. Emphasis on such topics as the origin of land plants, evolution of the ovule, angiospermy, the flower and fruit. Prerequisites: BIO 2450 and CHEM 1342 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4412. Plant Anatomy.**

The anatomy of vascular plants stressing descriptive, development and comparative aspects of seed plants and the anatomical adaptations of plants to environmental factors. Prerequisites: BIO 2450 and CHEM 1342 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4413. Parasitology.**

The biology and biological significance of the common parasites of man and animals. Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter



**BIO 4415. Ichthyology.**

An introduction to the morphology, taxonomy, natural history and evolution of fishes. Field trips will be made to collect specimens and laboratory periods will be devoted to morphological and systematic analysis. Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4416. General Ecology.**

The ecological relationships that exist between organisms and those relationships that exist between organism and environment. Laboratory sessions will be devoted to literature review and/or specific ecological problems. This course or BIO 4454 is required of all biology majors. (WI) Prerequisites: BIO 2450 and [BIO 2400 or BIO 2410 or BIO 2411] both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4418. Field Ornithology.**

This course is designed to introduce and provide an advanced knowledge of the application of various field, laboratory, and statistical methods and techniques in the study of avian species. The course will include topics related to survey methodology, sampling design, marking/banding, measurement/sample extraction, and aging/sexing of avian species.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4420. Natural History of the Vertebrates.**

Environmental relationships and natural history of vertebrates. Emphasis is upon taxonomy, speciation and biotic provinces. The laboratory will include field trips for the study and collection of animals in their natural habitats. Students will assemble a representative collection of animals. (WI) Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better and instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4421. Ornithology.**

Introduction to anatomy, behavior, ecology and identification of birds of Texas. Laboratory will emphasize field studies of birds and their habitat requirements. Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4422. Mammalogy.**

The taxonomy, distribution, ecology, behavior and evolution of mammals with particular emphasis on wild animals of the southwest. Laboratory will emphasize anatomy, identification, preparation of specimens and field exercises in the methods of population analysis. Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4423. Wildlife Management.**

Applications of the principles of ecology and natural history to the management of wildlife habitats and control of wildlife populations. Laboratory will involve demonstrations and practice exercises with wildlife management techniques and instrumentation and field trips to observe wildlife management projects. (WI) Prerequisites: BIO 2411 and BIO 2450 with grades of "C" or better and BIO 2410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4425. Biometry.**

Basic principles of statistical methods as applied to biological problems such as sampling techniques, analysis of data, experimental design and population dynamics. Emphasis will be on practical application. Prerequisites: BIO 2450 and [MATH 1315 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471] both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4429. Wetland Plant Ecology and Management.**

This course focuses on the biological, physical, chemical, and ecological aspects of major wetland ecosystems. The management and restoration of wetlands will also be discussed. Special attention will be spent on the ecology and identification of wetland plants. Prerequisite: BIO 2410 or BIO 2450 either with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4431. Bacterial Diversity.**

The overall goal of this research-based course is to isolate, cultivate, characterize, and identify under-explored bacterial lineages from environmental samples. Methods and techniques employed in this course include aseptic techniques, cutting-edge cultivation approaches, maintaining bacterial cultures, gel electrophoresis, DNA isolation, amplification, and sequencing. Prerequisite: BIO 2400 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4432. Bacterial Genomics.**

The course offers hands-on training on contemporary approaches, techniques, and bioinformatic tools used to study bacterial genomes. Topics covered include, DNA sequencing, genomic assembling, and annotation, with a strong emphasis in computation biology and genomic data handling/analytics. At the end of this course, students will be familiar with bioinformatics tools used to analyze genes and genomes. Prerequisite: BIO 4431 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4434. Herpetology.**

A course treating the origin and evolution of amphibians and reptiles; their reproductive and physiological tactics; taxonomy/systematics; and population biology. Emphasis will be placed on North American species and those groups inhabiting Texas. Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4435. Techniques in Wildlife Management.**

The basic methodology of practical wildlife management. This involves techniques in monitoring and data collection related to population dynamics and habitat parameters of wildlife species. Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better and instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4436. Tropical Biology.**

This course entails an analysis and evaluation of the governing principles of tropical ecosystems, including wildlife ecologies, geological processes, and environmental-cultural interactions. In the laboratories, students will compare ecological relationships that influence tropical biology, discuss peer-reviewed literature and examine tropical flora and fauna during field trips to regional sub-tropical areas. Prerequisite: BIO 2410 and BIO 2411 and BIO 2450 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4441. Cellular Physiology.**

Advanced cellular biology, including membrane physiology, thermodynamics, energy transduction and distribution, and cellular movement in non-muscle and muscle cells. Laboratory includes discussion of current research and exercises in cellular physiology. (WI) Prerequisites: BIO 2450 and [CHEM 2330 or CHEM 2341 or CHEM 2342] both with grades of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4446. Microbial Ecology.**

This course will illustrate the wide variety of bacteria in nature, their interactions with other organisms and the environments, and their roles in global cycling of elements such as carbon, nitrogen, and sulfur. Undergraduate research is a major component of this course. (WI) Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4447. Microbial Physiology.**

This course will cover fundamental concepts in bacterial and archaeal physiology, including central and specialized metabolism. Undergraduate research is a major component of this course. (WI) Prerequisites: BIO 2400 and BIO 2450 and CHEM 2142 and CHEM 2342 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4448. Bacterial Genetics.**

This course will cover concepts and mechanisms involved in the genetics of Archaea and Bacteria. Prerequisite: BIO 2400 and BIO 2450 both with grades of "C" or better. (WI).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4454. Plant Ecology.**

Physiological ecology and community structure and function in the organization of terrestrial plant ecosystems. Quantitative vegetational sampling and the use of field and laboratory physiological equipment are included in the laboratory. (WI) Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4455. Plant Physiology.**

Basic principles of plant physiology are studied in lecture and laboratory. One semester of organic chemistry is strongly recommended. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4464. Vertebrate Anatomy.**

This course is a comparative study of vertebrate anatomy. Fossil histories are evaluated to understand how vertebrate radiation occurred in the geological past, along with changes in structure of organs and organ systems. Lab includes dissection of representative members of each major vertebrate group. Prerequisite: BIO 2450 with a grade of "C" or better. (WI).

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4465. General Entomology.**

Principles of morphology, physiology and taxonomy of insects. Laboratory time will be devoted to a taxonomic study of the common orders and families of insects. Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4470. Limnology.**

The physical, chemical, and biological factors affecting productivity in lakes, ponds, and streams. Limnological sampling methods, chemical, and biological analysis of samples and hydrographic surveying are included in the laboratory. (WI) Prerequisites: BIO 2450 and CHEM 1342 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4472. Animal Behavior.**

This course presents all the major facets of the study of animal behavior, giving special attention to its evolution and ecological significance. We will discuss major conceptual models guiding past and present research in the field. Laboratories will emphasize experimental techniques and statistical analysis. (WI) Prerequisites: BIO 2450 and [BIO 2400 or BIO 2410 or BIO 2411] both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4480. Cytology and Microtechnique.**

A study of cellular structure and microscopic technique. The lecture portion of the course presents cytology of all cell types and theoretical aspects of microscopy including light and electron-based technologies. The laboratory portion of the course provides training in standard light and electron microscopy, laser scanning confocal microscopy, and digital microscopy. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4481. Internship in Biological Laboratory Technologies.**

The student will participate in the work of a selected biology unit (private, commercial, or governmental). A research paper, reporting the internship experience conducted at the biological unit under the supervision of a faculty member, will be required. This course may be credited toward a biology major with prior approval of the biology department adviser and chair. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4490. Principles of Developmental Biology.**

This course will cover basic principles of developmental biology in both plant and animal systems. The course will mainly address cell, molecular and genetic mechanisms underlying the development of model organisms, mainly focusing on *Drosophila* (animal) and *Arabidopsis* (plant). Prerequisite: BIO 2450 with grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

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## Courses in General Science (GS)

**GS 2310. Life Science Concepts.**

This laboratory course is designed to acquaint the student with the fundamentals of biological science and introductory chemistry. It cannot be taken for credit by science majors.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**GS 3310. Earth Science Concepts.**

This laboratory course acquaints students with the fundamentals of chemistry and earth space science. It is non-creditable for science majors but is a required course for select education majors. Prerequisites: PHYS 1310 or PHYS 1315 or PHYS 1320 or PHYS 1325 or PHYS 1360 or PHYS 1365 or PHYS 1370 or PHYS 1410 or PHYS 1420 any with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). The recommended minor is Chemistry or Biochemistry. Minor and electives should be chosen in consultation with the academic advisor.
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student completes depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- Nine semester credit hours must be writing intensive (WI).
- If two years of the same foreign language were taken in high school, then no additional language hours will be required. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
- For transfer students, 24 semester credit hours in biology, chemistry and physics (or their equivalents) may be transferred from a Texas public institution of higher education for the Biology Field of Study and be applied to the Bachelor of Science degree with a major in Aquatic Biology at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
BIO 1330	Functional Biology	3
TCCN: BIOL 1306		
BIO 1130	Functional Biology Laboratory	1
TCCN: BIOL 1106		
BIO 1331	Organismal Biology	3
TCCN: BIOL 1307		
BIO 1131	Organismal Biology Laboratory	1
TCCN: BIOL 1107		
CHEM 1341	General Chemistry I	3
TCCN: CHEM 1311		
CHEM 1141	General Chemistry Laboratory I	1
TCCN: CHEM 1111		
CHEM 1342	General Chemistry II	3
TCCN: CHEM 1312		
CHEM 1142	General Chemistry Laboratory II	1
TCCN: CHEM 1112		
CHEM 2341	Organic Chemistry I	3
TCCN: CHEM 2323		
CHEM 2141	Organic Chemistry Laboratory I	1
TCCN: CHEM 2123		
PHYS 1315	General Physics I	3
TCCN: PHYS 1301		
PHYS 1115	General Physics I Laboratory	1

TCCN: PHYS 1101

Total Hours	24
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## Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3	BIO 1331 (Life and Physical Sciences Component Code 030 [BIOL 1307])	3
BIO 1130 (TCCN BIOL 1106)	1	BIO 1131 (BIOL 1107)	1
CHEM 1341 & CHEM 1141 (TCCN CHEM 1311 & 1111)	4	CHEM 1342 & CHEM 1142 (TCCN CHEM 1312 & 1112)	4
US 1100	1	Communication Component Code 010	3
Communication Component Code 010	3	American History Component Code 060	3
Government/Political Science Component Code 070	3		
		15	14

		Sophomore	
		First Semester Hours	Second Semester Hours
BIO 2450 (TCCN BIOL 2416)	4	BIO 2411	4
CHEM 2341 & CHEM 2141 (TCCN CHEM 2323 & 2123)	4	CHEM 2342 & CHEM 2142 (TCCN CHEM 2325 & 2125)	4
American History Component Code 060	3	Creative Arts Component Code 050	3
MATH 2321 or 2471 (Mathematics Component Code 020 [TCCN MATH 2313 or 2413])	3-4	MATH 2328, 2331, or 2472 (Mathematics Component Code 020 [TCCN MATH 1342 or MATH 2414])	3-4
		Government/Political Science Component Code 070	3
		14-15	17-18

		Junior	
		First Semester Hours	Second Semester Hours
Physiology Elective <sup>3</sup>	3-4	BIO 4416	4
Choose 1 course from the following:		Component Area Option Codes 090	3
BIO 3421		Social and Behavioral Sciences Component Code 080	3
BIO 4343		Minor/Advanced Electives	3
BIO 4350J		Choose 4 hours from the following:	4
BIO 4447		PHYS 1325 & PHYS 1125 (TCCN PHYS 1302 & PHYS 1102, or PHYS 1402)	

BIO 4455		PHYS 1345 & PHYS 1125 (TCCN PHYS 1302 & PHYS 1102, or PHYS 1402)
Component Area Option Codes 090	3	PHYS 2326 & PHYS 2126 (TCCN PHYS 2326 & PHYS 2126 )
Language, Philosophy, and Culture Component Code 040 <sup>1</sup>	3	
Choose 4 hours from the following:	4	
		PHYS 1315 & PHYS 1115 (TCCN PHYS 1301 & PHYS 1101, or PHYS 1401)
		PHYS 1335 & PHYS 1115 (TCCN PHYS 1301 & PHYS 1101, or PHYS 1401)
		PHYS 2325 & PHYS 2125 (TCCN PHYS 2325 & PHYS 2125)
<b>13-14</b>		<b>17</b>
		<b>Senior</b>
<b>First Semester Hours</b>		<b>Second Semester Hours</b>
BIO 4415	4	BIO 4301 3
BIO 4470	4	Minor/Advanced Electives 4
BIO 3460	4	BIO Advanced Elective <sup>2,3</sup> 3
Minor/Advanced Elective	3	Electives 5-4
<b>15</b>		<b>15-14</b>

**Total Hours: 120-122**

<sup>1</sup> While PHIL 1305 or PHIL 1320 are strongly preferred, the department will allow other Language, Philosophy, and Culture Component Code 040 courses to satisfy this requirement.

<sup>2</sup> Biology advanced electives are 3000-4000 level Biology courses.

- Biology advanced electives cannot be chosen from: BIO 4305, BIO 4402, BIO 4403, or BIO 4408.
- BIO 4299 requires faculty and departmental approval, and in order to apply as an advanced biology elective, students must take BIO 4299 two times in succession.

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).

3. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). The recommended minor is Chemistry or Biochemistry. Minor and electives should be chosen in consultation with the academic advisor.
4. The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
5. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
6. Nine semester credit hours must be writing intensive (WI).
7. If two years of the same foreign language were taken in high school, then no additional language hours will be required. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
8. For transfer students, 24 semester credit hours in biology, chemistry and physics (or their equivalents) may be transferred from a Texas public institution of higher education for the Biology Field of Study and be applied to the Bachelor of Science degree with a major in Biology at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
BIO 1330	Functional Biology	3
TCCN: BIOL 1306		
BIO 1130	Functional Biology Laboratory	1
TCCN: BIOL 1106		
BIO 1331	Organismal Biology	3
TCCN: BIOL 1307		
BIO 1131	Organismal Biology Laboratory	1
TCCN: BIOL 1107		
CHEM 1341	General Chemistry I	3
TCCN: CHEM 1311		
CHEM 1141	General Chemistry Laboratory I	1
TCCN: CHEM 1111		
CHEM 1342	General Chemistry II	3
TCCN: CHEM 1312		
CHEM 1142	General Chemistry Laboratory II	1
TCCN: CHEM 1112		
CHEM 2341	Organic Chemistry I	3
TCCN: CHEM 2323		
CHEM 2141	Organic Chemistry Laboratory I	1
TCCN: CHEM 2123		
PHYS 1315	General Physics I	3
TCCN: PHYS 1301		
PHYS 1115	General Physics I Laboratory	1



TCCN: PHYS 1101

**Total Hours 24**

## Course Requirements

		<b>Freshman</b>	
		<b>First Semester Hours</b>	<b>Second Semester Hours</b>
BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3	BIO 1331 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1307])	3
BIO 1130 (TCCN BIOL 1106)	1	BIO 1131 (TCCN BIOL 1107)	1
CHEM 1341 & CHEM 1141 (TCCN CHEM 1311 & CHEM 1111)	4	CHEM 1342 & CHEM 1142 (TCCN CHEM 1312 & CHEM 1112)	4
US 1100	1	Communication Component Code 010	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	American History Component Code 060	3
Communication Component Code 010	3		
	<b>15</b>		<b>14</b>

		<b>Sophomore</b>	
		<b>First Semester Hours</b>	<b>Second Semester Hours</b>
BIO 2450 (TCCN BIOL 2416)	4	BIO 2400, 2410, or 2411 (TCCN BIOL 2421)	4
CHEM 2341 & CHEM 2141 (TCCN CHEM 2323 & CHEM 2123)	4	CHEM 2342 & CHEM 2142 (TCCN CHEM 2325 & CHEM 2125)	4
MATH 2321 or 2471 (Mathematics Component Code 020 [TCCN MATH 2313 or MATH 2413])	3-4	MATH 2328, 2331, or 2472	3-4
American History Component Code 060	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
		Creative Arts Component Code 050 [HUMA 1315]	3
	<b>14-15</b>		<b>17-18</b>

		<b>Junior</b>	
		<b>First Semester Hours</b>	<b>Second Semester Hours</b>
BIO 4416	4	Advanced Physiology: <sup>3</sup>	4
Component Area Option Codes 090	3	BIO 3421, 3426, 4447, 4455, or 4441	
Choose 4 hours from the following:	4	Component Area Option Codes 090	3
PHYS 1315 & PHYS 1115 (TCCN PHYS 1301 & PHYS 1101)		Choose 4 hours from the following:	4
PHYS 1335 & PHYS 1115 (TCCN PHYS 1301 & PHYS 1101)		PHYS 1325 & PHYS 1125 (TCCN PHYS 1302 & PHYS 1102)	
PHYS 2325 & PHYS 2125 (TCCN PHYS 2325 & PHYS 2125)		PHYS 1345 & PHYS 1125 (TCCN PHYS 1302 & PHYS 1102)	

PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or PHIL 2306])<sup>1</sup>

3 PHYS 2326 & PHYS 2126 (TCCN PHYS 2326 & PHYS 2126)

Social and Behavioral Sciences Component Code 080	3
<b>14</b>	<b>14</b>

		<b>Senior</b>	
		<b>First Semester Hours</b>	<b>Second Semester Hours</b>
BIO Advanced Electives <sup>2,3</sup>	8-9	BIO 4301	3
Minor/Advanced Electives	8-7	BIO Advanced Electives <sup>2,3</sup>	6-7
		Minor/Advanced Electives	3-2
		Free Electives	4
	<b>16</b>		<b>16</b>

**Total Hours: 120-122**

<sup>1</sup> While PHIL 1305 or PHIL 1320 are strongly preferred, the department will allow other Language, Philosophy, and Culture Component Code 040 courses to satisfy this requirement.

<sup>2</sup> Biology advanced electives are 3000-4000 level Biology courses.

- Biology advanced electives cannot be chosen from: BIO 4305, BIO 4402, BIO 4403, or BIO 4408.
- BIO 4299 requires faculty and departmental approval, and in order to apply as an advanced biology elective, students must take BIO 4299 two times in succession.

<sup>3</sup> Students may apply only one course from [BIO 3421 or BIO 3426] towards the biology major requirements.

## Minimum required: 120-121 semester credit hours

### Admission Requirement

- All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- This degree program is designed to prepare students for secondary teacher certification in Life Science and requires that students pursue a double major by declaring and completing requirements for both the major in Biology and the major in Education, which includes the following courses:

Code	Title	Hours
<b>Education Foundations</b>		
CI 2310	Education for Change	3
CI 3325	Adolescents and Society	3
CI 4332	Secondary Teaching: Curriculum and Technology	3

#### Teaching and Learning

CI 3340	Teaching for Linguistic Diversity	3
CI 4343	Instructional Strategies for the Secondary Teacher	3
CI 4370	Building Relationships in the Secondary Classroom	3
CI 4372	Teaching in Communities	3
RDG 3323	Teaching Literacies in the Content Areas	3
SPED 4344	Educating Students with Mild Disabilities	3
<b>Clinical Practice</b>		
EDST 4681	Clinical Teaching 7-12	6
<b>Total Hours</b>		<b>33</b>

- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine credit hours must be writing intensive (WI).
- To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor
- If two years of the same foreign language were taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
- All students seeking teacher certification must apply for and be admitted to the Educator Preparation Program in order to enroll in education coursework and student teaching in the Junior and Senior years. Refer to the requirements for Admittance to the Educator Preparation Program through the Office of Educator Preparation (p. 263). (Hyperlink is <https://next.mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/> (p. 263))
- The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).
- For transfer students, 24 semester credit hours in biology, chemistry and physics (or their equivalents) may be transferred from a Texas public institution of higher education for the Biology Field of Study and be applied to the Bachelor of Science degree with a major in Biology at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
BIO 1330	Functional Biology	3
TCCN: BIOL 1306		

BIO 1130	Functional Biology Laboratory	1
TCCN: BIOL 1106		
BIO 1331	Organismal Biology	3
TCCN: BIOL 1307		
BIO 1131	Organismal Biology Laboratory	1
TCCN: BIOL 1107		
CHEM 1341	General Chemistry I	3
TCCN: CHEM 1311		
CHEM 1141	General Chemistry Laboratory I	1
TCCN: CHEM 1111		
CHEM 1342	General Chemistry II	3
TCCN: CHEM 1312		
CHEM 1142	General Chemistry Laboratory II	1
TCCN: CHEM 1112		
CHEM 2341	Organic Chemistry I	3
TCCN: CHEM 2323		
CHEM 2141	Organic Chemistry Laboratory I	1
TCCN: CHEM 2123		
PHYS 1315	General Physics I	3
TCCN: PHYS 1301		
PHYS 1115	General Physics I Laboratory	1
TCCN: PHYS 1101		
<b>Total Hours</b>		<b>24</b>

- For transfer students, 6 semester credit hours in Curriculum and Instruction and Special Education may be transferred from a Texas public institution of higher education for the Associate of Arts in Teaching Field of Study and be applied to the Bachelor of Science degree with a major in Education at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
CI 2310	Education for Change (CI ELNA)	3
TCCN: EDUC 1301		
SPED 4344	Educating Students with Mild Disabilities (CI ELNA)	3
TCCN: EDUC 2301		

## Course Requirements

### Freshman

First Hours Semester	Second Hours Semester	
BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3 BIO 1331 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1307])	3
BIO 1130	1 BIO 1131	1

CHEM 1341	4 CHEM 1342	4
& CHEM 1141	& CHEM 1142	
US 1100	1 Communica Component Code 010	3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
Communica Component Code 010	3 POSI 2320 (Governmen Political Science Component Code 070 [TCCN GOVT 2305])	3
<b>15</b>	<b>17</b>	

Sophomore			
First Hours Semester	Second Hours Semester	Summer Hours	
BIO 2450	4 Choose one from the following:	4 American History Component Code 060	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or PHIL 2306]) <sup>1</sup>	3 BIO 2410	American History component Code 060	3
MATH 2321 or 2471 (Mathematics Component Code 020 [TCCN MATH 2313 or MATH 2413])	3-4 BIO 2411		
CHEM 2330	4 MATH 2328, 2331, or 2472	3-4	
& CHEM 213	CI 2310	3	

Choose 4 hours from the following:	4
PHYS 1315	
& PHYS 1115	
PHYS 13:	
& PHYS 1	
PHYS 2325	
& PHYS 2125 (TCCN PHYS 2325 & PHYS 2125)	

14-15		14-15	6 Junior
First Hours Semester	Second Hours Semester		
Education Core:	6 Block I:	9	
CI 3325	CI 3340		
CI 4332	CI 4343		
BIO 4416	4 SPED 43 <sup>4</sup>		
Social and Behavioral Sciences Component Code 080	3 Choose 4 hours from the following:	4	
Component Area Option Codes 090	3 BIO 3421		
	BIO 3426		
	BIO 4441		
	BIO 4455		
	Creative Arts Component Code 050 [HUMA 1315]	3	
<b>16</b>	<b>16</b>		

Senior			
First Hours Semester	Second Hours Semester		
BIO 4408 or 4305 <sup>2</sup>	4-3 Clinical Practice: Student Teaching	6	
BIO 4301	3 EDST 468		
Block II:	9		
CI 4370			
CI 4372			

RDG 332	
16-15	6

Total Hours: 120-121

- <sup>1</sup> While PHIL 1305 or PHIL 1320 are strongly preferred, the department will allow other Language, Philosophy, and Culture Component Code 040 courses to satisfy this requirement.
- <sup>2</sup> Neither BIO 4305 nor BIO 4408 count as advanced electives in any other degree program in Biology.

# Minimum required: 121-125 semester credit hours

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- The minimum number of hours required for this degree program is 127. The number of elective hours a student completes depends on the number of hours a student may need to achieve the required 127 total or 36 advanced hours.
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
- Nine semester credit hours must be writing intensive (WI).
- If two years of the same foreign language were taken in high school, then no additional language hours will be required. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
- This Bachelor of Science degree plan includes courses in preparation for The Wildlife Society certification as an Associate Wildlife Biologist (<https://wildlife.org/learn/professional-development-certification/certification-programs/>), and does not require a minor.
- For transfer students, 24 semester credit hours in biology, chemistry and physics (or their equivalents) may be transferred from a Texas public institution of higher education for the Biology Field of Study and be applied to the Bachelor of Science degree with a major in Wildlife Biology at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
BIO 1330	Functional Biology	3
TCCN: BIOL 1306		
BIO 1130	Functional Biology Laboratory	1
TCCN: BIOL 1106		
BIO 1331	Organismal Biology	3
TCCN: BIOL 1307		

BIO 1131	Organismal Biology Laboratory	1
TCCN: BIOL 1107		
CHEM 1341	General Chemistry I	3
TCCN: CHEM 1311		
CHEM 1141	General Chemistry Laboratory I	1
TCCN: CHEM 1111		
CHEM 1342	General Chemistry II	3
TCCN: CHEM 1312		
CHEM 1142	General Chemistry Laboratory II	1
TCCN: CHEM 1112		
CHEM 2341	Organic Chemistry I	3
TCCN: CHEM 2323		
CHEM 2141	Organic Chemistry Laboratory I	1
TCCN: CHEM 2123		
PHYS 1315	General Physics I	3
TCCN: PHYS 1301		
PHYS 1115	General Physics I Laboratory	1
TCCN: PHYS 1101		
Total Hours		24

## Course Requirements

		Freshman	
First Hours Semester	Second Hours Semester		
BIO 1330 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1306])	3 BIO 1331 (Life and Physical Sciences Component Code 030 [TCCN BIOL 1307])	3	
BIO 1130 (TCCN BIOL 1106)	1 BIO 1131 (TCCN BIOL 1107)	1	
CHEM 1341	4 CHEM 1342	4	
& CHEM 1141 (TCCN 1311 & 1111)	& CHEM 1142 (TCCN CHEM 1312 & 1112)		
US 1100	1 American History Component Code 060	3	
Communication Component Code 010	3 Creative Arts Component Code 050	3	

Government Political Science Component Code 070	3	
	15	14
		Sophomore
First Hours Semester	Second Hours Semester	
BIO 2410	4 BIO 2411	4
BIO 2450 (TCCN BIOL 2416)	4 Component Area Option 090/091/09	3
American History Component Code 060	3 Government/ Political Science Component Code 070	3
MATH 2321 or 2471 (Mathematic Component Code 020 [TCCN MATH 2313 or 2413])	3-4 MATH 2328, HP 3302, or AG 3352 (TCCN MATH 1342 or 2342)	3
	CHEM 2330	4
	& CHEM 2130	
	14-15	17

			Junior
First Hours Semester	Second Hours Semester	Summer Hours	
Component Area Option 090/091/092/093/094	3 ENG 3303 (Communication Component Code 010)	3 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1305 or PHIL 2306]) <sup>1</sup>	3
BIO 4416	4 Advanced Vertebrate Elective <sup>2,3</sup>	3-4 Advanced Vertebrate Elective <sup>2,3</sup>	3-4
Botany Elective <sup>2</sup>	3-4 Physiology Course <sup>2</sup>	4	
Choose 4 hours from the following:	4 Botany Elective <sup>2</sup>	3-4	

PHYS 1315		
& PHYS 1115 (TCCN PHYS 1301 & 1101)		
PHYS 1315		
& PHYS 1 (TCCN PHYS 1101)		
	14-15	13-14
		6-7 Senior
First Hours Semester	Second Hours Semester	
Advanced Vertebrate Elective <sup>2,3</sup>	4 BIO 4301	3
BIO 4423	4 BIO 4425	4
Policy Elective	3 BIO 4435	4
Social and Behavioral Sciences Component Code 080	3 Conservatio Elective	3
	14	14

Total Hours: 121-125

- <sup>1</sup> While PHIL 1305 or PHIL 1320 are strongly preferred, the department will allow other Language, Philosophy, and Culture Component Code 040 courses to satisfy this requirement.
- <sup>2</sup> Individual biology advanced electives can apply to only one requirement and cannot satisfy multiple requirements.
- <sup>3</sup> Students must complete (1) advanced vertebrate elective from group one and (2) vertebrate electives from group two.

## Electives

Code	Title	Hours
Advanced Vertebrate Elective Group One		
Choose 1 course from the following		
BIO 4350I	Bird Conservation and Management	
BIO 4418	Field Ornithology	
BIO 4420	Natural History of the Vertebrates	
BIO 4421	Ornithology	
BIO 4422	Mammalogy	
BIO 4434	Herpetology	
BIO 4436	Tropical Biology	
Advanced Vertebrate Elective Group Two		
Choose 2 from the following:		
BIO 4324	Natural History and Conservation of Large Mammals	
BIO 4338	Tropical Ecology and Conservation	
BIO 4350I	Bird Conservation and Management	



BIO 4351Q	International Ecology and Conservation of Wildlife
BIO 4415	Ichthyology
BIO 4418	Field Ornithology
BIO 4420	Natural History of the Vertebrates
BIO 4421	Ornithology
BIO 4422	Mammalogy
BIO 4434	Herpetology
BIO 4436	Tropical Biology
BIO 4472	Animal Behavior

**Botany Elective Option**

Choose 2 from the following:

BIO 3406	Economic Botany
BIO 3461	Plant Taxonomy
BIO 4351F	Marine Ecology and Conservation
BIO 4400	Plants Important for Wildlife
BIO 4410	Field Biology of Plants
BIO 4429	Wetland Plant Ecology and Management
BIO 4454	Plant Ecology

**Physiology Course Options**

Choose 1 from the following:

BIO 3421	Vertebrate Physiology
BIO 4343	Fish Physiology
BIO 4350J	Environmental Physiology of Animals
BIO 4455	Plant Physiology

**Policy Elective Option**

Choose 1 from the following:

BIO 4304	Wildlife and Recreation: Impact, Policy, and Management
BIO 4350M	Wildlife Policy and Law in North America
BIO 4307	Ecology of Rarity
BIO 4331	Human Dimensions of Wildlife and Fisheries Conservation

**Conservation Elective Option**

Choose 1 from the following:

BIO 4307	Ecology of Rarity
BIO 4319	Biological Resources: Conservation and Planning
BIO 4351P	International Ecology and Conservation of Plants
BIO 4351Q	International Ecology and Conservation of Wildlife

The minor in Biology requires 29 semester credit hours. A grade of "C" or higher is required in all prerequisite courses.

Code	Title	Hours
<b>Required Courses</b>		
BIO 1130	Functional Biology Laboratory	1
BIO 1131	Organismal Biology Laboratory	1
BIO 1330	Functional Biology	3
BIO 1331	Organismal Biology	3
BIO 2450	Genetics	4
Choose 9 hours of advanced BIO courses <sup>1</sup>		9
CHEM 1141	General Chemistry Laboratory I	1
CHEM 1142	General Chemistry Laboratory II	1
CHEM 1341	General Chemistry I	3

CHEM 1342	General Chemistry II	3
<b>Total Hours</b>		<b>29</b>

<sup>1</sup> Not to include BIO 4299, BIO 4305, BIO 4402, BIO 4403, or BIO 4408.

For students who are seeking a teacher certification within their major and would like a second teaching field in Life Science, the requirements are:

Code	Title	Hours
BIO 1330 & BIO 1130	Functional Biology and Functional Biology Laboratory	4
BIO 1331 & BIO 1131	Organismal Biology and Organismal Biology Laboratory	4
BIO 2410	Intermediate General Botany	4
BIO 2450	Genetics	4
BIO 4408	Science Processes and Research	4
BIO 4416 or BIO 4454	General Ecology Plant Ecology	4
CHEM 1341 & CHEM 1141	General Chemistry I and General Chemistry Laboratory I	4
CHEM 1342 & CHEM 1142	General Chemistry II and General Chemistry Laboratory II	4
<b>Total Hours</b>		<b>32</b>

All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

Chemistry Building Room 238  
T: 512-245-2156 F: 512-245-2374  
[www.txstate.edu/chemistry](http://www.txstate.edu/chemistry) (<http://www.txstate.edu/chemistry/>)

The study of chemistry provides the essential knowledge needed to address many of society's most pressing needs, such as clean water, tapping new sources of energy, improving health and conquering disease, providing renewable substitutes for dwindling resources, strengthening our national security, and monitoring and protecting our environment.

Chemists and biochemists find careers in research, production, teaching, quality control, technical services, and/or sales. Graduates from the Department of Chemistry and Biochemistry have an excellent record of job placement in industrial, academic, and government positions. Many also seek advanced degrees or pursue careers in medicine, dentistry, pharmacy or other health-related professions.

The department fosters innovative research programs that expand knowledge through discovery and development, actively contribute to the broader scientific community, and address critical global needs. We are committed to the professional development and mentoring of a diverse and inclusive community of faculty, staff, and students.

Students are encouraged to actively engage in undergraduate research, and to work as laboratory instructors, learning assistants, and supplemental instructors for lower division courses. Students may also participate in internships and research programs both on and off campus, particularly during the summer.

The faculty, facilities, library holdings, and chemistry curriculum of the Department of Chemistry and Biochemistry have been accredited by the American Chemical Society. Recipients of a B.S. major in Chemistry or B.S. major in Biochemistry who have fulfilled the minimum requirements for professional chemists are awarded certification by the American Chemical Society. Receipt of the ACS certificate is recommended as preparatory training for work in industry or for continued graduate studies in chemistry or biochemistry. The Biochemistry program is also accredited by the American Society for Biochemistry and Molecular Biology and recipients of a B.S. major in Biochemistry are awarded an ASBMB certified degree upon successful completion of a scored examination. Students interested in careers in medicine, dentistry, pharmacy, or as physicians assistants are encouraged to choose a corresponding minor in Pre-Dental, Pre-Medical, Pre-Pharmacy, or Pre-Physicians Assistant Studies to prepare for post-graduate professional degrees.

Students seeking a B.S. major in Chemistry begin their studies taking foundation courses in chemistry, physics and mathematics. After completion of the foundation courses, students take advanced courses and laboratories in physical chemistry, analytical chemistry, inorganic chemistry and organic chemistry. A minor is required for this degree. (Chemistry majors are not allowed to double major in Biochemistry or choose a Minor in Biochemistry.)

Students seeking a B.S. major in Biochemistry begin their studies taking foundation courses in chemistry, biology, physics and mathematics. After completion of the foundation courses, students take advanced courses and laboratories to gain knowledge and experience in the modern techniques of biochemistry and molecular genetics. The Biochemistry curriculum meets the standards set by the American Society for Biochemistry and Molecular Biology. A minor is required for this degree. (Biochemistry majors are not allowed to double major in Chemistry or choose a Minor in Chemistry.)

Qualified chemistry or biochemistry majors completing their junior year of chemistry courses who plan to pursue advanced studies have the opportunity to complete both B.S. and M.S. degrees with one additional year of course work and research after receipt of a B.S. degree. Students must be active in undergraduate research prior to their senior year to be eligible for the program.

## Pharmacy

Pharmacy is a professional program leading to a Doctor of Pharmacy (Pharm.D.) degree. Minor in Pre-Pharmacy Studies provides a strong foundation for future studies and includes prerequisite coursework required in order to apply to professional programs in Pharmacy. The Pharmacy schools in Texas (including Texas A&M Health Science Center-Irma Lerma Rangel College of Pharmacy, Texas Southern University College of Pharmacy and Health Sciences, Texas Tech University Health Sciences Center School of Pharmacy, The University of Texas at Austin College of Pharmacy, The University of Texas-El Paso School of Pharmacy, The University of Texas at Tyler-Ben and Maytee Fisch College of Pharmacy, University of Houston College of Pharmacy, University of the Incarnate Word Feik School of Pharmacy, and University of North Texas Health Science Center College of Pharmacy) all require

prerequisite courses in chemistry, biology, math, physics, English, humanities and social sciences. Some requirements vary by professional school, so it is imperative that pre-pharmacy students consult with a pre-pharmacy advisor prior to and during completion of their major at Texas State.

## Teacher Certification

Students may earn a Chemistry (Grades 7-12) certification in Texas, while pursuing a double major with a B.S. major in Chemistry and a B.S. major in Education. Initial or additional certification may also be acquired as a post-baccalaureate or graduate student. Students interested in certification should meet with their academic advisor early in their undergraduate program or certification process.

## Bachelor of Science (B.S.)

- Major in Biochemistry (p. 698)
- Major in Biochemistry (American Chemical Society approved program) (p. 699)
- Major in Chemistry (p. 700)
- Major in Chemistry (Secondary Education; Teacher Certification in Chemistry, Grades Seven through Twelve, with Double Major in B.S. Education) (p. 701)

## Bachelor of Science (B.S.) and Master of Science (M.S.)

- Major in Biochemistry (Early-Entry Program) (p. 703)
- Major in Chemistry (Early-Entry Program) (p. 703)

## Minors

- Biochemistry (p. 703)
- Chemistry (p. 703)
- Second Teaching Field in Chemistry (Grades 7-12) (p. 703)

## Courses in Chemistry (CHEM)

### **CHEM 1135. Engineering Chemistry Laboratory.**

This laboratory course is designed to accompany CHEM 1335. This course introduces students to experimental measurements and the study of thermodynamics, kinetics, and equilibria. Corequisite: CHEM 1335 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1109

### **CHEM 1141. General Chemistry Laboratory I.**

First of two laboratory courses in general chemistry for science-related majors. Course introduces the students to the basics of experimental measurements, including density, separation techniques, formula determinations, titrations, thermodynamics, gas laws, and descriptive chemistry. Corequisite: CHEM 1310 or CHEM 1341 either with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1111

**CHEM 1142. General Chemistry Laboratory II.**

Second of two laboratory courses in general chemistry. Laboratory techniques are emphasized, and applied to both qualitative and quantitative analysis. Prerequisites: CHEM 1141 and CHEM 1341 both with grades of "D" or better. Corequisite: CHEM 1342 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1112

**CHEM 1310. Introductory Chemistry for Non-Science Majors.**

A one semester principles course for students in non-science related majors, this course covers the major concepts of chemistry and the role of chemistry in contemporary society. (It is not intended as an introductory course for general chemistry or for science majors.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1305

**CHEM 1320. Foundations of Chemistry.**

This course is a preparatory course for CHEM 1335 and CHEM 1341. It provides a background in fundamental chemical mathematics, in writing and understanding chemical formulas and equations and in the application of scientific laws in the behavior of matter from macro to atomic levels. Students have the option to complete online ALEKS modules and test out of this course. Corequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 any with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [SAT Mathematics score of 550 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 1330. Chemistry for Non-Science Majors.**

This is the second of two lecture courses for non-science majors. The course surveys organic and biochemistry and current topics which may include energy-related topics, nuclear chemistry, environmental chemistry, medicinal chemistry, and synthetic and natural polymers. Prerequisite: CHEM 1310 or CHEM 1341 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1307

**CHEM 1335. Engineering Chemistry.**

This course is a one-semester lecture course that focuses on engineering-related applications. Topics include stoichiometry, gases, chemical bonding and structure, periodic trends, materials, energy, kinetics, equilibrium, and electrochemistry. Prerequisite: [[MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 any with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Mathematics score of 550 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better]] and [[CHEM 1320 with any grade of "C" or better] or [ALCH00 score of 80 or better]].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1309

**CHEM 1341. General Chemistry I.**

This course is the first lecture course in the general chemistry sequence for science-related majors, and covers atomic and molecular structure, bonding, states of matter, solutions, and descriptive chemistry. Prerequisite: [[MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 any with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Mathematics score of 550 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better]] and [[CHEM 1320 with any grade of "C" or better] or [ALCH00 score of 80 or better]].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1311

**CHEM 1342. General Chemistry II.**

Second of two lecture courses in general chemistry for science-related majors, covering equilibrium processes, acid-base chemistry, and kinetics, and electrochemistry. A basic knowledge of algebra is needed. Prerequisite: CHEM 1341 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1312

**CHEM 2130. Laboratory Technique in Organic Chemistry.**

An optional laboratory to accompany CHEM 2330, covers experimental techniques of preparation, purification, and determination of physical and chemical properties of organic compounds. Prerequisites: CHEM 1142 and CHEM 1342 both with grades of "D" or better. Corequisite: CHEM 2330 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 2141. Organic Chemistry Laboratory I.**

This laboratory introduces the student to the general techniques of organic chemistry. Prerequisites: CHEM 1342 with a grade of "C" or better and CHEM 1142 with a grade of "D" or better. Corequisite: CHEM 2341 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 2123

**CHEM 2142. Organic Chemistry Laboratory II.**

This laboratory involves the study of typical organic reactions. Prerequisites: CHEM 2341 with a grade of "C" or better and CHEM 2141 with a grade of "D" or better. Corequisite: CHEM 2342 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 2125

**CHEM 2150. Biochemistry & Metabolism Lab.**

An optional laboratory to accompany CHEM 2350. This laboratory examines the physical properties and chemistry of carbohydrates, amino acids, proteins, lipids and nucleotides. Course is designed for students majoring in nutrition, clinical laboratory science and agriculture. Prerequisites: [CHEM 2130 and CHEM 2330] or [CHEM 2142 and CHEM 2342] any with a grade of "D" or better. Corequisites: CHEM 2350 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 2330. Fundamentals of Organic Chemistry.**

A one-semester course which covers nomenclature, structure and reactions of organic compounds with an introduction to bioorganic molecules. Course is designed for students majoring in nutrition, clinical laboratory sciences and agriculture. Prerequisites: CHEM 1142 and CHEM 1342 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 2341. Organic Chemistry I.**

This course covers the nomenclature, reactions and reaction mechanisms of the hydrocarbons and the alkyl halides. Prerequisites: CHEM 1342 with a grade of "C" or better. Corequisite: CHEM 1142 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 2323

**CHEM 2342. Organic Chemistry II.**

This course covers the nomenclature, reactions and reaction mechanisms of the major functional groups. Prerequisite: CHEM 2341 with a grade of "C" or better. Corequisite: CHEM 2141 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 2325

**CHEM 2350. Biochemistry & Metabolism.**

A one-semester study of carbohydrate, proteins, lipids and nucleotides which presents both structure and intermediary metabolism along with an introduction to the function of enzymes and coenzymes.

Course is designed for students majoring in nutrition, clinical laboratory science and agriculture. Prerequisites: [CHEM 2130 and CHEM 2330] or [CHEM 2142 and CHEM 2342] any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3190. Cooperative Education.**

This course provides cooperative education students the opportunity to study particular problems in chemistry and biochemistry in an occupational setting. Problems are related to the student's work assignment, culminating in an industrial supervisor's evaluation and the student's technical report or presentation. A total of 3 hours of cooperative education credit may be applied to the student's major elective. Prerequisite: Minimum 2.25 Overall GPA and Instructor Approval.

**1 Credit Hour. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3245. Physical Chemistry Laboratory.**

Experiments illustrating principles and methods of physical chemistry are performed. Written reports on the experiments are prepared. (WI) Prerequisites: CHEM 3330 with a grade of "C" or better and CHEM 3410 with a grade of "D" or better. Corequisites: CHEM 3340 with a grade of "D" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**CHEM 3276. Experimental Biochemistry.**

Course introduces biochemistry minors to the fundamental techniques used in modern biochemistry. Experiments use the essential techniques employed in the study of proteins, enzymes and nucleic acids with emphasis on the use of modern instrumentation and the manipulation and analysis of experimental data. Prerequisites: CHEM 3375 or CHEM 4375 either with a grade of "C" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CHEM 3290. Advanced Cooperative Education.**

This course provides cooperative education students the opportunity to study particular problems in chemistry and biochemistry in an occupational setting. Problems are related to the student's work assignment, culminating in an industrial supervisor's evaluation and the student's technical report or presentation. A total of 3 hours of cooperative education credit may be applied to the student's major elective. Prerequisite: Minimum 2.25 Overall GPA and instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3330. Physical Chemistry I.**

The course covers principles of thermodynamics and thermochemistry, phase equilibria, electrochemistry and elementary kinetics including rate laws and mechanisms. Prerequisites: CHEM 1142 with a grade of "D" or better and CHEM 1342 and MATH 2472 both with grades of "C" or better.

**3 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3340. Physical Chemistry II.**

The course covers kinetics, quantum mechanics, spectroscopy, and other selected topics. Prerequisite: CHEM 3330 and PHYS 2326 both with grades of "C" or better.

**3 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3341. Descriptive Inorganic Chemistry.**

An analysis of atomic, molecular, and solid state bonding and structure with an emphasis on coordination compounds and bioinorganic chemistry. Representative compounds and reactions of the elements will be surveyed. Prerequisite: CHEM 2342 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3375. Principles of Biochemistry.**

This course provides biochemistry majors and minors with a rigorous introduction to biochemistry. Topics include the chemical function and structure of proteins, nucleic acids, lipids and carbohydrates, and enzyme mechanisms, kinetics and regulation. Corequisite: CHEM 2342 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3380. Analytical Biochemistry.**

This course is designed to acquaint the student with the chemical and physical principles of modern biochemical methods. Emphasis is placed upon the application of the methods to current problems in biochemistry and molecular biology and the interpretation of data. Prerequisite: CHEM 3375 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3381. Biochemistry Techniques.**

Course introduces biochemistry majors to techniques in analytical and physical biochemistry. Experiments reinforce fundamental concepts and utilize modern instrumentation. Experimental design, interpretation of results, and data reporting will be emphasized. (WI) Prerequisites: CHEM 3375 with a grade of "C" or better. Corequisite: CHEM 3380 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CHEM 3390. Physical Chemistry for Biochemists.**

A study of the theories and laws of physical chemistry as it relates to biochemistry. The topics covered include ideal and real gases, classical thermodynamics, reaction kinetics, phase equilibria, electrochemistry, quantum mechanics, spectroscopy and statistical mechanics. Prerequisite: MATH 2472 with a grade of "C" or better. Corequisite: PHYS 2325 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3410. Quantitative Analysis.**

Course covers the general theory and practice of typical methods of gravimetric and volumetric analysis, satisfies the quantitative analysis requirements for chemistry majors, minors, pre-medical and pharmacy students. Prerequisites: CHEM 1342 with a grade of "C" or better and CHEM 1142 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter



**CHEM 4099. Predoctoral Biomedical Research Development for Undergraduates.**

This course is a weekly professional development seminar for NIH-supported trainees and affiliates in the Texas State U-RISE program (NIH GM136483). Prerequisite: Instructor approval.

**0 Credit Hours. 0 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Credit/No Credit

**CHEM 4231. Advanced Laboratory I.**

An advanced integrated lab illustrating a variety of chemical techniques for the preparation, characterization and analysis of organic and inorganic materials. (WI) Prerequisites: CHEM 3245 and CHEM 3340 and CHEM 3410 all with grades of "D" or better. Corequisites: CHEM 4331 with a grade of "D" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**CHEM 4241. Advanced Laboratory II.**

An advanced integrated lab illustrating a variety of chemical techniques for the preparation, characterization and analysis of inorganic and organic materials. (WI) Prerequisites: CHEM 4231 and CHEM 4331 both with grades of "D" or better. Corequisite: CHEM 4341 with a grade of "D" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**CHEM 4295. Laboratory Development and Practice.**

This course develops the laboratory instructional abilities of students seeking either 8-12 Chemistry or 8-12 Physical Science Teaching Certification. Topics include both traditional laboratory techniques and guided inquiry techniques, safety, laboratory management, pedagogical theory and practical knowledge of laboratory experiments. Prerequisite: Minimum 2.5 Overall GPA.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CHEM 4299. Undergraduate Research.**

This course is available to undergraduate chemistry or biochemistry majors only. It may be repeated for credit but a maximum of four semester hours from this course are applicable toward advanced chemistry electives. Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CHEM 4310. Medicinal Chemistry.**

This course surveys modern approaches to drug discovery and mechanisms of drug action with the focus on molecular structures of drugs. Examples of drug discovery for the chemotherapy of cancer, microbial and cardiovascular diseases will be examined. Prerequisites: [CHEM 2342 and CHEM 2350] or CHEM 3375 or CHEM 4375 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4312. Organometallic Chemistry.**

This course will survey the structure, bonding, and reactivity of organometallic complexes. Homogeneous catalysis of the transition metals as well as the main group elements along with specialized "seminal research papers" in the field of organometallic chemistry will also be presented. Prerequisites: CHEM 2342 and CHEM 3341 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4331. Instrumental Analysis.**

The theory and methodology associated with the quantitative analysis of materials, i.e., electronics, spectroscopy, electrochemistry and chromatography are presented. Prerequisite: CHEM 3340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4333. Spectroscopy.**

The study of various spectrometric techniques in qualitative and structural analysis of chemical substances. Prerequisite: CHEM 2342 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4341. Advanced Inorganic Chemistry.**

This course will use group theory analysis to predict vibrational spectra and bonding in molecules, including metal complexes. Numerous approaches (acid/base, redox, etc.) will be employed to rationalize the products of inorganic and organometallic reactions. The materials properties of solids and nanomaterials will also be discussed. Prerequisites: CHEM 3340 and CHEM 3341 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4350. Modern Molecular Modeling.**

A study of the application of computational techniques to molecular modeling. Topics covered include quantum mechanical modeling, forcefield based molecular modeling, molecular energy minimization, molecular dynamics, vibrational spectra, solution of crystalline structures, diffraction patterns, molecular blends, phase equilibria, crystal morphology, physical property prediction and mesoscale modeling. Prerequisite: CHEM 3340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4351. Introduction to Polymers.**

This course is designed to develop the student's general understanding of polymer history and importance as well as terminology, structure, and synthesis. The overall scope of the course will be to develop the student's general knowledge of polymer synthesis and structure. Prerequisite: CHEM 2342 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4360. Molecular Biology.**

This course provides Biochemistry majors and minors with advanced knowledge of the field of molecular biochemistry. Topics include gene expression (transcription and translation of genes in bacteria and higher organisms), post-translational modification of proteins, chromosomal DNA replication, cell cycle checkpoint controls, DNA damage and repair, as well as theories of cancer and aging. Prerequisite: CHEM 3375 or CHEM 4375 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4371. Directed Study.**

Independent study on a particular subject area in chemistry or biochemistry. The specific study area, resource material, goals, and achievements will be approved by the instructor. Prerequisites: CHEM 2342 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4375. Biochemistry.**

This course provides a challenging introduction to biochemistry, covering the structure and function of nucleic acids, proteins, lipids, and carbohydrates. Major metabolic pathways of carbohydrates and lipids are also examined. This course is not intended for biochemistry majors. Corequisite: CHEM 2342 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4382. Advanced Biochemistry Research Laboratory II.**

This course is the second of two laboratory courses providing instruction in the modern techniques of biochemistry. Students will perform independent research projects involving isolation, manipulation and characterization of biomolecules. Results of these experiments and the scientific literature investigations will be used to prepare formal written reports and oral presentations. Prerequisite: CHEM 4481 with a grade of "C" or better. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CHEM 4385. Metabolism.**

A study of the biodegradation and biosynthesis of carbohydrates, lipids, amino acids, proteins, and nucleic acids. Prerequisite: CHEM 3375 or CHEM 4375 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4390. Supramolecular Chemistry.**

This course is designed to be a survey of the nature of non-covalent interactions between host and guest species. Emphasis will be focused on the rational design of hosts, thermodynamic and kinetic parameters involved in binding and the applications of various binding/recognition phenomena. Prerequisite: CHEM 2342 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CHEM 4481. Advanced Biochemistry Lab I.**

The first of two laboratory courses providing instruction in the modern techniques of biochemistry. Experiments are performed on the isolation, manipulation and characterization of DNA, RNA and proteins. Students will prepare formal written reports and oral presentations. (WI) Prerequisites: CHEM 3381 with a grade of "C" or better and CHEM 3380 with a grade of "D" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
3. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/>)

undergraduate/minors/). The recommended minor is Biology. Minor and electives should be chosen in consultation with the academic advisor.

- The minimum number of hours required for this degree program is 120. The number of free elective hours a student completes depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- Nine semester credit hours must be writing intensive (WI).
- If two years of the same foreign language were taken in high school, then no additional language hours will be required. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
- Elective credit for CHEM 3190, CHEM 3290, and CHEM 4299 is limited to a total of 4 credit hours.

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
CHEM 1141 (TCCN CHEM 1111)	1	CHEM 1142 (TCCN CHEM 1112)	1
CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3	CHEM 1342 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1312])	3
BIO 1130 (TCCN BIOL 1106)	1	BIO 1131 (TCCN BIOL 1107)	1
BIO 1330 (TCCN BIOL 1306)	3	BIO 1331 (TCCN BIOL 1307)	3
US 1100	1	MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])	4
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	Communication Component Code 010	3
Language, Philosophy, and Culture Component Code 040	3		
15		15	

Sophomore			
First Semester Hours		Second Semester Hours	
CHEM 2141 (TCCN CHEM 2123)	1	CHEM 2142 (TCCN CHEM 2125)	1
CHEM 2341 (TCCN CHEM 2323)	3	CHEM 2342 (TCCN CHEM 2325)	3
MATH 2472 (Component Area Option Code 090/092 [TCCN MATH 2414])	4	BIO 2450 (TCCN BIOL 2416)	4
PHYS 2325 & PHYS 2125 (TCCN PHYS 2325 and 2125)	4	PHYS 2326 & PHYS 2126 (Component Area Option Code 090/093 [TCCN PHYS 2326 and 2126])	4

Elective	3 Social and Behavioral Sciences Component Code 080	3
15		15
Junior		
First Semester Hours	Second Semester Hours	
CHEM 3375	3 CHEM 3380	3
CHEM 3390	3 CHEM 3381	3
BIO 2400 (TCCN BIOL 2421)	4 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 American History Component Code 060	3
American History Component Code 060	3 Advanced Elective	3
16		15
Senior		
First Semester Hours	Second Semester Hours	
CHEM 4360	3 CHEM 4385	3
CHEM 4481	4 CHEM 4382	3
Minor Advanced Elective	3 Minor Advanced Elective	3
Minor Advanced Elective	3 Advanced Elective <sup>1</sup>	2
Electives <sup>1</sup>	2 Creative Arts Component Code 050 [TCCN HUMA 1315]	3
15		14
Total Hours: 120		

<sup>1</sup> Certification of the degree as approved by the American Chemical Society requires 2 credit hours of a combination of CHEM 3190, CHEM 3290, or CHEM 4299.

**Minimum required: 120 semester credit hours**

## General Requirements

- This Bachelor of Science (B.S.) degree with a major in Biochemistry will be certified as approved by the American Chemical Society (ACS). The ACS approved program provides external validation for the curriculum, faculty and resources in the Department of Chemistry and Biochemistry that will certify to potential employers that the department and curriculum has met certain industry standards, and thus should increase the student's marketable skills.
- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). The recommended minor is Biology. Minor

and electives should be chosen in consultation with the academic advisor.

- The minimum number of hours required for this degree program is 120. The number of elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- Nine semester credit hours must be writing intensive (WI).
- If two years of the same foreign language were taken in high school, then no additional language hours will be required. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
- Elective credit for CHEM 3190, CHEM 3290, and CHEM 4299 is limited to a total of 4 credit hours.

## Course Requirements

Freshman	
First Semester Hours	Second Semester Hours
CHEM 1141	1 CHEM 1142 1
CHEM 1341 (Life and Physical Sciences Component Code 030)	3 CHEM 1342 (Life and Physical Sciences Component Code 030) 3
BIO 1130	1 BIO 1131 1
BIO 1330	3 BIO 1331 3
US 1100	1 MATH 2471 (Mathematics Component Code 020) 4
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 Communication Component Code 010 3
Language, Philosophy, and Culture Component Code 040	3
<b>15</b>	<b>15</b>

Sophomore	
First Semester Hours	Second Semester Hours
CHEM 2141	1 CHEM 2142 1
CHEM 2341	3 CHEM 2342 3
MATH 2472 (Component Area Option Code 090/092)	4 BIO 2450 4
PHYS 2325 & PHYS 2125 (TCCN PHYS 2325 & PHYS 2125)	4 PHYS 2326 & PHYS 2126 (Component Area Option Code 090/093 [TCCN PHYS 2326 and 2126]) 4
Elective	2 Social and Behavioral Sciences Component Code 080 3
<b>14</b>	<b>15</b>

Junior	
First Semester Hours	Second Semester Hours
CHEM 3375	3 CHEM 3380 3
CHEM 3390	3 CHEM 3381 3

BIO 2400	4 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305]) 3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 American History Component Code 060 3
American History Component Code 060	3 Advanced Elective 3
<b>16</b>	<b>15</b>

Senior	
First Semester Hours	Second Semester Hours
CHEM 3341	3 CHEM Advanced Elective <sup>1</sup> 2
CHEM 4360	3 CHEM 4385 3
CHEM 4481	4 CHEM 4382 3
Minor Advanced Elective	3 Creative Arts Component Code 050 [HUMA 1315] 3
Minor Advanced Elective	3 Minor Advanced Elective 3
<b>16</b>	<b>14</b>

Total Hours: 120

<sup>1</sup> Certification of the degree as approved by the American Chemical Society requires 2 credit hours of a combination of CHEM 3190, CHEM 3290, or CHEM 4299.

## Minimum required: 120 semester credit hours

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). Minor and electives should be chosen in consultation with the academic advisor.
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student completes depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
- Nine semester credit hours must be writing intensive (WI).
- If two years of the same foreign language were taken in high school, then no additional language hours will be required. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.

8. Elective credit for CHEM 3190, CHEM 3290, and CHEM 4299 is limited to a total of 4 credit hours.

Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
CHEM 1141 (TCCN CHEM 1111)	1	CHEM 1142 (TCCN CHEM 1112)	1
CHEM 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1311])	3	CHEM 1342 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1312])	3
US 1100	1	MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])	4
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	Communication Component Code 010	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	American History Component Code 060	3
Elective	3		
14		14	

Sophomore			
First Semester Hours		Second Semester Hours	
CHEM 2141 (TCCN CHEM 2123)	1	CHEM 2142 (TCCN CHEM 2125)	1
CHEM 2341 (TCCN CHEM 2323)	3	CHEM 2342 (TCCN CHEM 2325)	3
MATH 2472 (Component Area Option Code 090/092 [TCCN MATH 2414])	4	PHYS 2326 & PHYS 2126 (Component Area Option Code 090/093 [TCCN PHYS 2326 and 2126])	4
PHYS 2325 & PHYS 2125 (TCCN 2325 and 2125)	4	Elective	3
Social and Behavioral Sciences Component Code 080	3	Creative Arts Component Code 050 [HUMA 1315]	3
		Language, Philosophy, and Culture Component Code 040	3
15		17	

Junior			
First Semester Hours		Second Semester Hours	
CHEM 3330	3	CHEM 3340	3
CHEM 3410	4	CHEM 3245	2
Elective	3	Advanced Electives	3
American History Component Code 060	3	Minor Advanced Elective	3

Minor Advanced Elective	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
16		14	
First Semester Hours		Second Semester Hours	
CHEM 3341	3	CHEM 4341	3
CHEM 4331	3	CHEM 4241	2
CHEM 4231	2	CHEM Advanced Elective <sup>1</sup>	3-4
CHEM 4375	3	Elective	3
Minor Advanced Elective	3	Elective	2-3
Elective	2		
16		14	

Total Hours: 120

<sup>1</sup> Certification of the degree as approved by the American Chemical Society requires 4 credit hours of a combination of CHEM 3190, CHEM 3290, or CHEM 4299.

Minimum required: 123 semester credit hours

Admission Requirement

- 1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

General Requirements

- 1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- 2. In addition to this chemistry major and general education core requirements, students must also complete 33 hours in a double major with the Bachelor of Science (B.S.) in Education (Secondary Education Teacher Certification) which includes:

Code	Title	Hours
Education Foundations		
CI 2310	Education for Change	3
CI 3325	Adolescents and Society	3
CI 4332	Secondary Teaching: Curriculum and Technology	3
Teaching and Learning		
CI 3340	Teaching for Linguistic Diversity	3
CI 4343	Instructional Strategies for the Secondary Teacher	3
CI 4370	Building Relationships in the Secondary Classroom	3
CI 4372	Teaching in Communities	3
RDG 3323	Teaching Literacies in the Content Areas	3
SPED 4344	Educating Students with Mild Disabilities	3
Clinical Practice		
EDST 4681	Clinical Teaching 7-12	6



3. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
4. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
5. Nine credit hours must be writing intensive (WI).
6. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of “C” or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
7. If two years of the same foreign language were taken in high school, then no additional language hours will be required. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
8. All students seeking teacher certification must apply for and be admitted to the Educator Preparation Program in order to enroll in education coursework and student teaching in the Junior and Senior years. Refer to the requirements for Admittance to the Educator Preparation Program through the Office of Educator Preparation (p. 263). (Hyperlink is <https://next.mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation/> (p. 263))
9. [The Texas Education Agency \(TEA\) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: \[https://tea.texas.gov/Texas\\\_Educators/Investigations/Preliminary\\\_Criminal\\\_History\\\_Evaluation-FAQs/\]\(https://tea.texas.gov/Texas\_Educators/Investigations/Preliminary\_Criminal\_History\_Evaluation-FAQs/\).](#)
10. For transfer students, 6 semester credit hours in Curriculum and Instruction and Special Education may be transferred from a Texas public institution of higher education for the Associate of Arts in Teaching Field of Study and be applied to the Bachelor of Science degree with a major in Education at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
CI 2310	Education for Change (CI ELNA)	3
TCCN: EDUC 1301		
SPED 4344	Educating Students with Mild Disabilities (CI ELNA)	3
TCCN: EDUC 2301		

## Course Requirements

Freshman			
First Hours	Second Hours	Summer Hours	
Semester	Semester		
CHEM 1141	1 CHEM 1142	1 Summer I:	
CHEM 1341 (Life and Physical Sciences Component Code 030)	3 CHEM 1342 (Life and Physical Sciences Component Code 030)	3 CHEM 2141	1
MATH 2471 (Mathematics Component Code 020)	4 MATH 2472 (Component Area Code 090/092)	4 CHEM 2341	3
US 1100	1 PHYS 2325 & PHYS 212 (TCCN PHYS 2325 & PHYS 2125)	4 Summer II:	
Communication Component Code 010	3 Communication Component Code 010	3 CHEM 2142	1
Language, Philosophy, and Culture Component Code 040	3	CHEM 2342	3
15		15	8

Sophomore			
First Hours	Second Hours	Summer Hours	
Semester	Semester		
CHEM 3330	3 CHEM 3340	3 Summer I:	
CHEM 3410	4 CHEM 3245	2 Government Political Science Component Code 070	3
PHYS 2326 & PHYS 2126 (Component Area Option Code 090/093 [TCCN PHYS 2326 and 2126])	4 American History Component Code 060	3 Summer II:	
CI 2310	3 Creative Arts Component Code 050	3 Government Political Science Component Code 070	3

American History Component Code 060		3	
14		14	6
			Junior
<b>First Hours Semester</b>	<b>Second Hours Semester</b>		
CHEM 3341	3 CHEM 4341	3	
CHEM 4331	3 CHEM 4241	2	
CHEM 4231	2 Block I:	9	
CHEM 4295	2 CI 3340		
Education	6 CI 4343		
Core:			
CI 3325	SPED 434		
CI 4332			
16		14	
			Senior
<b>First Hours Semester</b>	<b>Second Hours Semester</b>		
Block II:	9 Clinical Practice: Student Teaching	6	
CI 4370	EDST 466		
CI 4372			
RDG 332			
Social and Behavioral Sciences Component Code 080	3		
CHEM 4375	3		
15		6	
<b>Total Hours: 123</b>			

Qualified biochemistry majors completing their junior year of biochemistry courses who plan to pursue advanced studies in Biochemistry have the opportunity to complete both a Bachelor of Science and a Master of Science degree with two additional years (including summers) of course work and research in chemistry. Students may be admitted to the M.S. program without entrance qualification exams if they have a 3.00 GPA or higher in all chemistry and biochemistry courses, have completed CHEM 3380, CHEM 3381, and two semesters of CHEM 4299, have taken the Graduate Record Exam, and have been accepted by a graduate thesis advisor. Applicants will be evaluated by the Graduate Evaluation Committee to determine their suitability to enter the program. The application process is the same as for other graduate applicants to The Graduate College. Graduate status is provisional until the B.S. degree is awarded. The B.S. degree will be certified as approved by the American Chemical Society for students completing CHEM 3341 (fall only course) as an advanced elective.

Qualified chemistry majors completing their junior year of chemistry courses who plan to pursue advanced studies in Chemistry have the opportunity to complete both a Bachelor of Science and a Master of Science degree with two additional years (including summers) of course

work and research in chemistry. Students may be admitted to the M.S. program without entrance qualification exams if they have a 3.00 GPA or higher in all chemistry courses, have completed CHEM 3245, CHEM 3340 and two semesters of CHEM 4299, have taken the Graduate Record Exam, and have been accepted by a graduate thesis advisor. Applicants will be evaluated by the Graduate Evaluation Committee to determine their suitability to enter the program. The application process is the same as for other graduate applicants to The Graduate College. Graduate status is provisional until the B.S. degree is awarded.

The minor in Biochemistry requires 24 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
CHEM 1141	General Chemistry Laboratory I	1
CHEM 1142	General Chemistry Laboratory II	1
CHEM 1341	General Chemistry I	3
CHEM 1342	General Chemistry II	3
CHEM 2141	Organic Chemistry Laboratory I	1
CHEM 2142	Organic Chemistry Laboratory II	1
CHEM 2341	Organic Chemistry I	3
CHEM 2342	Organic Chemistry II	3
CHEM 3276	Experimental Biochemistry	2
CHEM 3375	Principles of Biochemistry	3
	or CHEM 4375 Biochemistry	
CHEM 4360	Molecular Biology	3
	or CHEM 4385 Metabolism	
<b>Total Hours</b>		<b>24</b>

The minor in Chemistry requires 23 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
CHEM 1141	General Chemistry Laboratory I	1
CHEM 1142	General Chemistry Laboratory II	1
CHEM 1341	General Chemistry I	3
CHEM 1342	General Chemistry II	3
CHEM 2141	Organic Chemistry Laboratory I	1
CHEM 2142	Organic Chemistry Laboratory II	1
CHEM 2341	Organic Chemistry I	3
CHEM 2342	Organic Chemistry II	3
CHEM 3410	Quantitative Analysis	4
Choose 3 hours of advanced CHEM courses not to include CHEM 4299		3
<b>Total Hours</b>		<b>23</b>

For students who are seeking a teacher certification within their major and would like a second teaching field in Chemistry, the requirements are:

Code	Title	Hours
CHEM 1341 & CHEM 1141	General Chemistry I and General Chemistry Laboratory I	4
CHEM 1342 & CHEM 1142	General Chemistry II and General Chemistry Laboratory II	4
CHEM 2341 & CHEM 2141	Organic Chemistry I and Organic Chemistry Laboratory I	4

CHEM 2342	Organic Chemistry II	4
& CHEM 2142	and Organic Chemistry Laboratory II	
CHEM 3410	Quantitative Analysis	4
CHEM 4295	Laboratory Development and Practice	2
CHEM 4375	Biochemistry	3
<b>Total Hours</b>		<b>25</b>

All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

Comal Building Room 211  
T: 512-245-3409 F: 512-245-8750  
[www.cs.txst.edu](http://www.cs.txst.edu) (<http://www.cs.txst.edu/>)

The mission of the Department of Computer Science is to advance the knowledge of computer science and technology through education, research, and service for the betterment of society.

The Department of Computer Science offers two degree options for students - a Bachelor of Arts (B.A.) and a Bachelor of Science (B.S.). The Bachelor of Science in Computer Science degree program is accredited by the Computing Accreditation Commission of ABET, [www.abet.org](http://www.abet.org) (<http://www.abet.org/>), under the commission's General Criteria and Program Criteria for Computer Science. All students complete a core sequence of courses designed to provide them with a solid foundation in computer science. The upper-division electives offer students the opportunity to explore cutting-edge topics aligned with the department's research strengths, ensuring that our graduates are well-prepared for the dynamic landscape of the computing industry. Upon completion of their studies, Computer Science graduates enter diverse professional domains, including software development, cybersecurity, User Interface (UI) and User Experience (UX) design, machine learning and data science, and game development. Students also enter graduate programs to further their knowledge and pursue research in computer science.

**Please note: Students cannot major/minor or double major within the Department of Computer Science.**

## Bachelor of Arts (B.A.)

- Major in Computer Science (p. 709)

## Bachelor of Science (B.S.)

- Major in Computer Science (p. 710)
- Major in Computer Science (Computer Engineering Concentration) (p. 712)

## Minor

- Computer Science (p. 714)

## Courses in Computer Science (CS)

### CS 1308. Computer Literacy and the Internet.

A study of the uses of computers and their effects on society. Text processing, spreadsheets, databases, and Web programming. Does not count for computer science credit towards a minor, a BS, or a BA in computer science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** COSC 1301

### CS 1319. Fundamentals of Computer Science.

Provides fundamental knowledge of the six layers of computer science as per the ACM CS0 curriculum. The information, hardware, programming, operating system, applications, and communications layers are presented plus appropriate open computer laboratory exercises. Does not count for computer science credit towards a minor, BS, or BA in computer science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** COSC 1336

### CS 1342. Programming for Scientists and Engineers.

This course is an introduction to computer science and problem solving techniques with applications in engineering and the physical sciences. Topics include an introduction to computer organization, data representation, algorithm development, and computer programming in a high-level language.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

### CS 1428. Foundations of Computer Science I.

Introductory course for computer science majors, minors and others desiring technical introduction to computer science. Contains overview of history and structure of the digital computer, including binary data representation. Problem solving, algorithm development, structured programming, good coding style, and control structures of C++ are emphasized. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2417 or MATH 2471 with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Mathematics score of 520 or better] or [SAT Math Section score of 550 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** COSC 1437

**CS 2308. Foundations of Computer Science II.**

The course is an introduction to Abstract Data Types (ADTs) including lists, stacks, and queues. Searching and sorting, pointers and dynamic memory allocation, and simple classes and objects also will be covered. The course is a continuation of CS 1428. Prerequisite: CS 1428 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** COSC 2336

**CS 2315. Computer Ethics.**

This course is primarily for computer science majors, focusing on the ethical codes of the professional societies, the philosophical bases of ethical decision-making, and the examination of several contemporary case studies. (WI) Prerequisites: CS 1428 and [COMM 1310 or COMM 2338] and [ENG 1310 or ENG 1320 or ENG 1321 or ENG 3303] and [PHIL 1305 or PHIL 1320] all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CS 2318. Assembly Language.**

A course covering assembly language programming, including instruction sets, addressing modes, instruction formats, looping, logic, data representation, subroutines and recursion; and the interface between hardware and software. Prerequisites: CS 2308 and MATH 2358 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** COSC 2325

**CS 3190. Cooperative Education.**

This course provides cooperative education students the opportunity to study particular problems in computer science in an occupational setting. Problems are related to the student's work assignment, culminating in the student's technical report or presentation. A total of 3 hours of cooperative education credit may be applied to the student's major elective. Prerequisite: Minimum 2.25 Overall GPA and instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3279A. Career Preparation and Job Search Strategies.**

This course will help computer science students plan and launch their careers and find internships. Topics include career assessment, job search strategies, resume writing, interview skills, development of coding skills required for interviews, networking and negotiation. Prerequisite: CS 2308 and CS 2315 both with grades of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**CS 3290. Advanced Cooperative Education.**

This course provides cooperative education students the opportunity to study particular problems in computer science in an occupational setting. Problems are related to the student's work assignment, culminating in the student's technical report or presentation. A total of 3 hours of cooperative education credit may be applied to the student's major elective. Prerequisite: A minimum 2.25 Overall GPA and instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3320. Internet Software Development.**

A course providing foundations for the construction and design of static and dynamic Web pages with database applications. This will include server-side and client-side software development. Prerequisite: CS 2308 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3339. Computer Architecture.**

This course provides instruction on the use of fundamental hardware components. Topics include arithmetic logic units (ALU), single and multiple cycle datapath and control, Reduced Instruction Set Computer (RISC) vs. Complex Instruction Set Computer (CISC), pipelining, caches, Input/Output, virtual memory and related performance issues. Prerequisite: CS 2308 and [CS 2318 or EE 3420] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3354. Object-Oriented Design and Programming.**

The course covers object-oriented design principles and programming for students with prior programming experience. The topics include inheritance and polymorphism, object-oriented design process, UML diagrams, design patterns, exception handling and multithreading. Students will design and implement programs in Java. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3358. Data Structures and Algorithms.**

This is a course that covers classic data structures and the analysis of algorithms. Prerequisites: CS 2308 and MATH 2358 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3360. Computing Systems Fundamentals.**

This course covers fundamental concepts underlying the design and implementation of computing systems. It introduces students to problems that reoccur in computing systems and the tools and algorithms used to solve them. Topics include performance evaluation, resource management and scheduling, concurrency and synchronization, and communication and networks. Prerequisite: CS 2318 and CS 3358 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3369. Embedded Computer Systems.**

This course studies the architecture of embedded systems, micro-controllers, their peripherals, languages, and operating systems and the special techniques required to use them. Prerequisite: CS 2318 or EE 3420 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3378. Theory of Automata.**

An introduction to automata theory, computability, and formal languages. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3393. Software Testing.**

This course introduces basic concepts and techniques for testing software and finding bugs. Topics include test design, test process, unit, integration and system testing, manual and automatic techniques for generation of test inputs and validation of test outputs, and coverage criteria. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3398. Software Engineering.**

The study of software design, implementation, and validation techniques through team projects. Structured analysis, programming style, and project documentation are emphasized in large software projects. (WI) Prerequisite: CS 3354 and CS 3358 and [CS 2315 or EE 2400] all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CS 4100. Computer Science Internship.**

Provides on-the-job training supervised by computer scientists in industry internship programs approved by the department.

**1 Credit Hour. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Credit/No Credit

**CS 4298. Undergraduate Research I.**

Supervised individual research project in a mentor-student relationship with a computer science faculty member. Cannot be given degree credit until the satisfactory completion of CS 4299. Prerequisites: Minimum 3.00 Major GPA and instructor approval.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Credit/No Credit

**CS 4299. Undergraduate Research II.**

Supervised individual research projects in a mentor-student relationship with a computer science faculty member. Prerequisites: CS 4298 with a grade of "C" or better and instructor approval.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4310. Computer Networks.**

This course covers the fundamental concepts in the design of computer networks and networking protocols with emphasis on the Internet (TCP/IP) architecture. The covered topics include: protocol layering, media access, internet routing, transport protocols, and applications. Prerequisite: CS 3360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4315. Introduction to Data Mining and Information Retrieval.**

This course covers fundamental concepts and techniques in data mining and information retrieval. Data mining topics include classification, cluster analysis and pattern mining. Information retrieval topics include Boolean retrieval, vector space model, and Web search. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4318. Compiler Construction.**

This course investigates theoretical and practical issues in the design and construction of modern compilers. Topics covered include lexical and syntactic analysis, syntax-directed translation, type checking, intermediate representation, code generation, and runtime systems.

A major portion of the course involves implementing a compiler from scratch for a C-like programming language. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter



**CS 4326. Human Factors of Computer Systems.**

Principles and methods in human factors and ergonomics applied to the design and use of computer systems. Prerequisite: CS 3358 with a grade of "C" or better. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CS 4328. Operating Systems.**

This course covers the principles of operating systems design.

The covered topics include: process management, CPU scheduling algorithms, inter-process communication and synchronization, memory management, virtual machines, and I/O device management.

Prerequisite: CS 3339 and CS 3360 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4332. Introduction to Database Systems.**

Introduction to database concepts, data models, file structures, query languages, database management systems. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4337. Introduction to Computer Vision.**

This course covers fundamental topics of computer vision. Topics include elementary image operations and transformations, template matching, feature extraction, object recognition, classification and tracking, deep learning, camera models and stereo vision, and image searching. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4346. Introduction to Artificial Intelligence.**

An introduction to the basic concepts of artificial intelligence; search techniques, knowledge representation, problem solving. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4347. Introduction to Machine Learning.**

This course provides systematic introduction to machine learning, covering basic theoretical as well as practical aspects of the use of machine learning methods. Topics include learning theory, learning methods, and recent learning models. Application examples include multimedia information retrieval, text recognition, and computer vision. Prerequisite: CS 3358 and MATH 3305 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4350. Unix Systems Programming.**

Fundamentals of Unix operating systems, Unix file system and environment, C memory allocation, development tools, processes and signals, threads, device drivers, and programming for security. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4353. Introduction to Graphical User Interfaces.**

This course covers abstract and practical foundations of graphical user interface design, evaluation, and implementation. Students will learn the fundamentals of computer graphics and interactive computer/human interfaces. The course includes a survey of usability measures, the major GUI standards, and GUI tools. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4355. Algorithms and Analysis.**

This course covers classic algorithms in computer science and their applications. Emphasis is on algorithm design, algorithm analysis, problem formulation, and problem solving. Topics include advanced tree and graph algorithms, advanced sorting and searching algorithms, greedy algorithms, dynamic programming, string processing algorithms, and algorithm complexity (time and memory). Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4368. Survey of Computer Languages.**

A survey of computer languages. Criteria for choosing languages to be covered include history, important development paradigms and environments, and language implementations. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4371. Computer System Security.**

Course covers practical aspects of computer system security including managing and producing code for secure systems. Theory, such as cryptography, is introduced as needed. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4372. Introduction to Digital Multimedia.**

The course covers concepts, problems and techniques in digital multimedia. Topics include digital representation and data compression of text, speech, audio, natural and synthetic images, and video, as well as multimedia applications, transmission, and standards. In addition, the course introduces perceptual aspects of multimedia signals and sources. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4379D. Distributed Ledger Systems and Blockchains: Theory and Applications.**

This course covers fundamental concepts underlying the design, implementation, research, and applications of Distributed Ledger Technology (DLT) systems (e.g., blockchains). It introduces implementations, applications, and performance evaluation of DLT systems. Topics include cryptographic encryption, security, anonymity, cryptographic data structures, DLT performance evaluation, DLT applications, and current DLT research. Prerequisite: CS 3358 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**CS 4379E. Introduction to Network Science.**

This course covers fundamental concepts and algorithms in the fields of social network analysis and network science as well as practical aspects of analyzing network-structured data. Topics include graph representations, network visualization, graph algorithms, random graph models, centrality measures, link analysis and ranking algorithms, and community detection and graph partitioning. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 4379Q. Introduction to Recommender Systems.**

This course covers the basic concepts of recommender systems, including personalization algorithms, evaluation tools, and user experiences. We will discuss how recommender systems are deployed in e-commerce sites, social networks, and many other online systems. Additionally, we will review current research in the field. Prerequisite: CS 3358 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**CS 4379Y. Introduction to Green Computing.**

Reducing energy consumption of mobile devices, cloud computing platforms, and supercomputers is a paramount but daunting problem. This course covers fundamental concepts and techniques in green computing, including a hardware energy efficiency roadmap; energy efficient software design, resource management, and storage solutions; and green data centers and mobile computing. Prerequisites: CS 3339 and CS 3358 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**CS 4380. Parallel Programming.**

This course teaches practical aspects of parallel programming. Topics include multi-core processors and shared-memory programming, hardware accelerator programming, and distributed-memory machines, and message-passing programming. Students will gain the knowledge and skills needed for developing parallel software by writing programs for a variety of parallel computers. Prerequisite: CS 3339 and CS 3360 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4381. Practical Game Development.**

This course teaches practical aspects of computer game design and implementation. Topics include graphics game engines, game physics, AI methods applied to games, and software architectures for computer games. Students will gain knowledge and skills needed for game development via team projects. Prerequisite: CS 3398 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4388. Computer Graphics.**

This course is a study of the hardware and software used in graphic representation and interpretation of data. Prerequisite: CS 3358 and [MATH 1317 or MATH 2321 or MATH 2417 or MATH 2471 or MATH 2472] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4395. Independent Study in Computer Science.**

Open to undergraduate students on an independent basis by arrangement with the faculty member concerned. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Credit/No Credit

**CS 4398. Software Engineering Project.**

Students undertake a software development project. They work in teams, developing requirements and designs which they will implement and test.

Prerequisite: CS 3398 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three hours of math/science/logic/computer science courses, a minor and six hours of 2000-level modern language courses. Most students will have to complete 1410 and 1420 as prerequisites before attempting 2310.
3. For transfer students, 26-32 semester credit hours in computer science (or their equivalents) may be transferred from a Texas public institution of higher education for the Computer Science Field of Study and be applied to the Bachelor of Arts degree with a major in Computer Science at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional computer science courses please contact the Department of Computer Science for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
CS 1319	Fundamentals of Computer Science	3
TCCN: COSC 1336 or 1436 (CS 1319 + 1 hour CS ELNA)		
CS 1428	Foundations of Computer Science I	4
TCCN: COSC 1337 or 1437		
CS 2308	Foundations of Computer Science II	3
TCCN: COSC 2336 or 2436 (CS 2308 + 1 hour CS ELNA)		
CS 2318	Assembly Language	3
TCCN: COSC 2325 or 2425 (CS 2318 + 1 hour CS ELNA)		
MATH 2471	Calculus I	4
TCCN: MATH 2313 or 2413		
MATH 2472	Calculus II	4
TCCN: MATH 2314 or 2414		
PHYS 2325 & PHYS 2125	Mechanics and Mechanics Laboratory	4
TCCN: PHYS 2325 and 2125		
PHYS 2326 & PHYS 2126	Electricity and Magnetism and Electricity and Magnetism Laboratory	4

TCCN: PHYS 2326 and 2126

Total 26-32

4. Students pursuing the B.A. are required to complete an additional 3 hours of English beyond the general education core curriculum. Students may select from the following English courses.

Code	Title	Hours
<b>Choose one from:</b>		
ENG 2310	British Literature before 1785	3
ENG 2320	British Literature since 1785	3
ENG 2330	World Literature before 1600	3
ENG 2340	World Literature since 1600	3
ENG 2359	US Literature before 1865	3
ENG 2360	US Literature since 1865	3
ENG 2371	U.S. Literature: Writing Identities	3

5. Computer Science students must complete 37 hours of Computer Science courses, including one CS project course from: CS 4318, CS 4326, CS 4371, CS 4380, or CS 4398.
6. No more than 3 hours of credit may be applied to the student's major elective from any combination of the following courses:

Code	Title	Hours
CS 3190	Cooperative Education	1
CS 3290	Advanced Cooperative Education	2
CS 4100	Computer Science Internship	1
CS 4298	Undergraduate Research I	2
CS 4299	Undergraduate Research II	2
CS 4395	Independent Study in Computer Science	3
HON 4390B	Honors Capstone	3
RES 4399	Mentored Research and Creative Expression	3

7. Nine hours of writing intensive (WI) courses are required for graduation.
8. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
9. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
10. In addition to satisfying the University graduation requirements, students must earn a grade of "C" or higher in all computer science and mathematics courses used to satisfy the requirements of the computer science major.
11. The number of free electives a student will complete varies, depending on the number of hours needed to satisfy the 120 and/or the 36 advanced or 9 hours writing intensive requirements. Students should consult with the academic advisor before enrolling in any free elective courses to ensure that electives are needed.
12. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.

## Course Requirements

		Freshman	
First Semester Hours		Second Semester Hours	
CS 1428 (TCCN COSC 1437)	4	CS 2308 (TCCN COSC 2336 or 2436)	3
Mathematics Component Code 020 select one of the following:	3-4	MATH 2358 (BA Computer Science, Logic, Mathematics or science [TCCN MATH 2305 or 2405])	3
MATH 1317 (TCCN MATH 1316)		PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
MATH 1329 (TCCN MATH 1325)		Social and Behavioral Sciences Component Code 080	3
MATH 2321 (TCCN MATH 2313)		Government/Political Science Component Code 070	3
MATH 2417 (TCCN MATH 2412)			
MATH 2471 (TCCN MATH 2413)			
US 1100	1		
ENG 1310, 1320, or 1321 (Communication Component Code 010)	3		
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3		
<b>14-15</b>		<b>15</b>	

		Sophomore	
First Semester Hours		Second Semester Hours	
CS 2318 (TCCN COSC 2325)	3	CS 2315	3
CS 3358	3	CS 3354	3
MATH 3398	3	Modern Language 1420	4
Life and Physical Sciences Component Code 030 <sup>1</sup>	4	Life and Physical Sciences Component Code 030 <sup>1</sup>	4
Modern Language 1410	4	Component Area Option Codes 090	3
<b>17</b>		<b>17</b>	

		Junior	
First Semester Hours		Second Semester Hours	
CS 3339	3	CS Advanced Elective	3
CS 3398	3	Modern Language 2320	3
BA English Literature (TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328)	3	Minor	3
Modern Language 2310	3	American History Component Code 060	3
Minor	3	ENG 3303 (Communication Component Code 010) <sup>2,3</sup>	3
<b>15</b>		<b>15</b>	

		Senior	
First Semester Hours		Second Semester Hours	
CS Advanced Elective	3	Computer Science Project Course	3
Minor	3	CS Advanced Elective	3
Creative Arts Component Code 050	3	Minor	6
American History Component Code 060	3		
Government/Political Science Component Code 070	3		
<b>15</b>		<b>12</b>	

**Total Hours: 120-121**

<sup>1</sup> Computer Science students must take eight hours (2 courses) of the Life & Physical Sciences Component Code 030 from: BIO 1330/BIO 1130 & BIO 1331/BIO 1131; PHYS 1315/PHYS 1115 & PHYS 1325/PHYS 1125 [or PHYS 2325/PHYS 2125 & PHYS 2326/PHYS 2126]; CHEM 1341/CHEM 1141, and CHEM 1342/CHEM 1142; or GEOL 1410 & GEOL 1420. The eight hours (2 courses) must be from the same science (BIO, CHEM, GEOL, or PHYS) as listed above. Field of Study requirements of PHYS 1430 and PHYS 2425 will be used to satisfy this requirement.

<sup>2</sup> Students may take ENG 3313 instead of ENG 3303. If students take ENG 3313, they will need to complete an additional CORE 010 course.

<sup>3</sup> A grade of C or better is required in ENG 3303 or ENG 3313 to satisfy the graduation requirements for the BA in Computer Science.

### Computer Science Project Course Options

Code	Title	Hours
Choose one from:		
CS 4318	Compiler Construction	3
CS 4326	Human Factors of Computer Systems	3
CS 4371	Computer System Security	3
CS 4380	Parallel Programming	3
CS 4398	Software Engineering Project	3

**Minimum required: 120 semester credit hours**

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to satisfying the University graduation requirements, students must earn a grade of C or higher in all computer science and mathematics courses used to satisfy the requirements of the computer science major.
- For transfer students, 26-32 semester credit hours in computer science (or their equivalents) may be transferred from a Texas public institution of higher education for the Computer Science Field of Study and be applied to the Bachelor of Science degree with a major in Computer Science at Texas State University. More

information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional computer science courses please contact the Department of Computer Science for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
CS 1319	Fundamentals of Computer Science	3
TCCN: COSC 1336 or 1436 (CS 1319 + 1 hour CS ELNA)		
CS 1428	Foundations of Computer Science I	4
TCCN: COSC 1337 or 1437		
CS 2308	Foundations of Computer Science II	3
TCCN: COSC 2336 or 2436 (CS 2308 + 1 hour CS ELNA)		
CS 2318	Assembly Language	3
TCCN: COSC 2325 or 2425 (CS 2318 + 1 hour CS ELNA)		
MATH 2471	Calculus I	4
TCCN: MATH 2313 or 2413		
MATH 2472	Calculus II	4
TCCN: MATH 2314 or 2414		
PHYS 2325	Mechanics	4
& PHYS 2125	and Mechanics Laboratory	
TCCN: PHYS 2325 and 2125		
PHYS 2326	Electricity and Magnetism	4
& PHYS 2126	and Electricity and Magnetism Laboratory	
TCCN: PHYS 2326 and 2126		
Total		26-32

- Students pursuing this B.S. degree program are required to complete 3 hours of technical or scientific writing. A grade of C or higher is required in these hours to satisfy the graduation requirements of the computer science major. Students may select from ENG 3303 or ENG 3313.
- No more than 3 credit hours may be applied to the student's major elective from any combination of the following courses:

Code	Title	Hours
CS 3190	Cooperative Education	1
CS 3290	Advanced Cooperative Education	2
CS 4100	Computer Science Internship	1
CS 4298	Undergraduate Research I	2
CS 4299	Undergraduate Research II	2
CS 4395	Independent Study in Computer Science	3
HON 4390B	Honors Capstone (Department approval required)	3
RES 4399	Mentored Research and Creative Expression (Department approval required)	3

- The required courses for this major include 14 of the 20 hours of coursework required for a Mathematics or Applied Mathematics minor. Therefore, this degree plan includes two additional courses needed to complete one of these minors.
- Nine hours of writing intensive (WI) courses are required for graduation.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).

9. If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirement will be added to the student's degree audit.

- Students must complete 43 hours of Computer Science courses, including one CS project course from: CS 4318, CS 4326, CS 4380, or CS 4398.
- The number of free electives a student will complete varies, depending on the number of hours needed to satisfy the 120 and/or the 36 advanced or 9 hours writing intensive requirements. Students should consult with the academic advisor before enrolling in any free elective courses to ensure that electives are needed.
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
CS 1428 (TCCN COSC 1437)	4	CS 2308 (TCCN COSC 2336 or 2436 )	3
MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])	4	MATH 2472 (Component Area Option Code 090/092 [TCCN MATH 2414])	4
US 1100	1	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
ENG 1310, 1320, or 1321 (Communication Component Code 010)	3	MATH 2358 (TCCN MATH 2305 or 2405)	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3
15		16	
Sophomore			
First Semester Hours		Second Semester Hours	
CS 2318 (TCCN COSC 2325)	3	CS 2315	3
CS 3358	3	CS 3354	3
MATH 3398	3	Life and Physical Sciences Component Code 030 <sup>1</sup>	4
Life and Physical Sciences Component Code 030 <sup>1</sup>	4	Social and Behavioral Sciences Component Code 080	3
		Elective	3
13		16	
Junior			
First Semester Hours		Second Semester Hours	
CS 3339	3	CS 3360	3
CS 3398	3	CS Advanced Elective	3
Life and Physical Sciences <sup>1</sup>	4	CS Advanced Elective	3
ENG 3303 <sup>2</sup>	3	MATH 3305	3



American History Component Code 060	3 American History Component Code 060	3
<b>16</b>		<b>15</b>
		<b>Senior</b>
<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
CS 4371	3 CS Advanced Elective	3
CS Advanced Elective	3 Math/Applied Math Minor	3
Math/Applied Math Minor	3 Computer Science Project Course	3
Creative Arts Component Code 050 [HUMA 1315]	3 Elective	2
Elective	3 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
<b>15</b>		<b>14</b>
<b>Total Hours: 120</b>		

<sup>1</sup> Life & Physical Sciences must be chosen from: BIO 1330/BIO 1130 & BIO 1331/BIO 1131; PHYS 1315/PHYS 1115 & PHYS 1325/PHYS 1125 [or PHYS 2325/PHYS 2125 & PHYS 2326/PHYS 2126]; CHEM 1341/CHEM 1141 and CHEM 1342/CHEM 1142; or GEOL 1410 & GEOL 1420. Eight hours (2 courses) must be from the same science (BIO, CHEM, GEOL, or PHYS) as listed above. Field of Study requirements of PHYS 1430 and PHYS 2425 will be used to satisfy this requirement.

<sup>2</sup> Students may take ENG 3313 instead of ENG 3303. If students take ENG 3313, they will need to complete an additional CORE 010 course.

### Computer Science Project Course Options

Code	Title	Hours
Choose 3 hours from the following:		
CS 4318	Compiler Construction	3
CS 4326	Human Factors of Computer Systems	3
CS 4380	Parallel Programming	3
CS 4398	Software Engineering Project	3

**Minimum required: 120  
semester credit hours**

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to satisfying the University graduation requirements, students must earn a grade of C or higher in all computer science, computer engineering concentration, and mathematics courses used to satisfy the requirements of the computer science major.
- For transfer students, 26-32 semester credit hours in computer science (or their equivalents) may be transferred from a Texas public institution of higher education for the Computer Science Field of Study and be applied to the Bachelor of Science degree with a major in Computer Science at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional computer science courses please contact the Department of Computer Science for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.
- Students pursuing this B.S. degree program are required to complete 3 hours of technical or scientific writing. A grade of C or higher is required in these hours to satisfy the graduation requirements of the computer science major. Students may select from ENG 3303 or ENG 3313.
- Nine hours of writing intensive (WI) courses are required for graduation.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- The required courses for this major include 14 of the 20 hours of coursework required for a Mathematics or Applied Mathematics minor. Therefore, this degree plan includes two additional courses needed to complete one of these minors.
- If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of language taken in high school, then two semesters of the same modern language (1410 and 1420) must be taken at the college level, and the requirements will be added to the student's degree audit.
- The number of free electives a student will complete varies, depending on the number of hours needed to satisfy the 120 and/or the 36 advanced or 9 hours writing intensive requirements. Students should consult with the academic advisor before enrolling in any free elective courses to ensure that electives are needed.
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students

Code	Title	Hours
CS 1319	Fundamentals of Computer Science	3
TCCN: COSC 1336 or 1436 (CS 1319 + 1 hour CS ELNA)		
CS 1428	Foundations of Computer Science I	4
TCCN: COSC 1337 or 1437		
CS 2308	Foundations of Computer Science II	3
TCCN: COSC 2336 or 2436 (CS 2308 + 1 hour CS ELNA)		
CS 2318	Assembly Language	3
TCCN: COSC 2325 or 2425 (CS 2318 + 1 hour CS ELNA)		
MATH 2471	Calculus I	4
TCCN: MATH 2313 or 2413		
MATH 2472	Calculus II	4
TCCN: MATH 2314 or 2414		
PHYS 2325 & PHYS 2125	Mechanics and Mechanics Laboratory	4
TCCN: PHYS 2325 and PHYS 2125		
PHYS 2326 & PHYS 2126	Electricity and Magnetism and Electricity and Magnetism Laboratory	4
TCCN: PHYS 2326 and PHYS 2126		
Total		26-32

may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.

11. Students with the Computer Engineering (CE) concentration must complete one CS project course from: CS 4318 or CS 4380. This course cannot also be used to satisfy the CE concentration elective.
12. The concentration in Computer Engineering consists of the following courses:

Code	Title	Hours
EE 2400	Circuits I	4
EE 2420	Digital Logic	4
Choose 2 courses from the following:		6
CS 4310	Computer Networks	3
CS 4318	Compiler Construction	3
CS 4328	Operating Systems	3
CS 4337	Introduction to Computer Vision	3
CS 4347	Introduction to Machine Learning	3
CS 4350	Unix Systems Programming	3
CS 4380	Parallel Programming	3
CS 4388	Computer Graphics	3
EE 3326	Numerical and Scientific Data Analysis Using Python	3
EE 3400	Circuits II	4
EE 4331	Introduction to Machine Learning for Engineering Applications	3
EE 4332	Introduction to Computer-Aided Engineering Simulation on HPC Systems	3
CS 4347 and EE4331 cannot both be applied to the concentration.		

## Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
CS 1428		4	CS 2308 3
MATH 2471 (Mathematics Component Code 020)		4	MATH 2472 (Component Area Option Code 090/092) 4
US 1100		1	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040) 3
ENG 1310, 1320, or 1321 (Communication Component Code 010)		3	MATH 2358 3
COMM 1310 (Component Area Option Code 090/091)		3	POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306]) 3
		15	16
		Sophomore	
		First Semester Hours	Second Semester Hours
CS 2318		3	CS 2315 3
CS 3358		3	CS 3354 3
EE 2420		4	MATH 3398 3
Life and Physical Sciences Component Code 030 <sup>1</sup>		4	Life and Physical Sciences Component Code 030 <sup>1</sup> 4

POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305]) 3

		14	16
		First Semester Hours	Second Semester Hours
CS 3339		3	CS 3360 3
EE 2400		4	CS 3398 3
ENG 3303 (Communication Component Code 010) <sup>2</sup>		3	MATH 3305 3
Life and Physical Sciences <sup>1</sup>		4	American History Component Code 060 3
			Computer Engineering Concentration Elective 3
		14	15
		First Semester Hours	Second Semester Hours
CS 4371		3	Select one of the following: 3
Math/Applied Math Minor		3	CS 4318 3
American History Component Code 060		3	CS 4380 3
Creative Arts Component Code 050 [HUMA 1315]		3	Math/Applied Math Minor 3
Computer Engineering Concentration Elective		3	Social and Behavioral Sciences Component Code 080 3
			Electives 6
		15	15

Total Hours: 120

<sup>1</sup> Life & Physical Sciences must be chosen from: BIO 1330/BIO 1130 & BIO 1331/BIO 1131; PHYS 1315/PHYS 1115 & PHYS 1325/PHYS 1125 [or PHYS 2325/ PHYS 2125 & PHYS 2326/PHYS 2126]; CHEM 1341/CHEM 1141 and CHEM 1342/CHEM 1142; or GEOL 1410 & GEOL 1420. Eight hours (2 courses) must be from the same science (BIO, CHEM, GEOL, or PHYS) as listed above. Field of Study requirements of PHYS 1430 and PHYS 2425 will be used to satisfy this requirement.

<sup>2</sup> Students may take ENG 3313 instead of ENG 3303. If students take ENG 3313, they will need to complete an additional CORE 010 course.

## Computer Engineering Concentration Elective Options

Code	Title	Hours
Choose two courses from the following:		
CS 4310	Computer Networks	3
CS 4318	Compiler Construction	3
CS 4328	Operating Systems	3
CS 4337	Introduction to Computer Vision	3
CS 4347	Introduction to Machine Learning	3
CS 4350	Unix Systems Programming	3
CS 4380	Parallel Programming	3
CS 4388	Computer Graphics	3
EE 3326	Numerical and Scientific Data Analysis Using Python	3

EE 3400	Circuits II	4
EE 4331	Introduction to Machine Learning for Engineering Applications	3
EE 4332	Introduction to Computer-Aided Engineering Simulation on HPC Systems	3

The minor in Computer Science requires 22 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
CS 1428	Foundations of Computer Science I	4
CS 2308	Foundations of Computer Science II	3
CS 2318	Assembly Language	3
CS 3358	Data Structures and Algorithms	3
Choose 6 hours of advanced CS courses		6
MATH 2358	Discrete Mathematics I	3
<b>Total Hours</b>		<b>22</b>

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The Bachelor of Science (B.S.) degree with a major in Civil Engineering is designed to provide students with an education that addresses the emerging field of technology-enhanced (Smart) infrastructure, as well as fundamental concepts in environmental, geotechnical, materials, structural, transportation, and water resources engineering. In addition to being capable of designing a range of infrastructure assets, graduates will have experience with sensor devices, data transmission and storage systems, big data and machine learning methods, predictive modeling, and automated infrastructure management technologies. Further, students will be prepared to take the Fundamentals of Engineering and, later in their professional career, Principles and Practice of Engineering exams. The B.S. major in Civil engineering will seek accreditation in accordance with the process specified by the Engineering Accreditation Commission of ABET ([www.abet.org](http://www.abet.org) (<https://www.abet.org/>)).

The Bachelor of Science (B.S.) degree with a major in Electrical Engineering provides students with the background that is essential for the conception, design, development, and manufacture of electrical, electronic, computer, and information technology products and systems. Students may specialize in the areas of networks and communication systems, micro and nano devices and systems, or computer engineering. Proficiency in mathematics is especially important in Electrical Engineering. The B.S. with a major in Electrical Engineering and the B.S. with a major in Electrical Engineering with Computer Engineering Concentration are both accredited by the Engineering Accreditation Commission of ABET ([www.abet.org](http://www.abet.org) (<http://www.abet.org/>)).

The Bachelor of Science (B.S.) degree with a major in Industrial Engineering provides students the background that is essential for improving the productivity, quality, safety, sustainability, and cost effectiveness of all types of systems and processes. Industrial engineers are typically engaged in the areas of quality control, human factors and ergonomics, facilities design, work design, production and operations management, supply chain design or redesign, information technology, manufacturing and service systems optimization, and industrial safety. The B.S. major in Industrial Engineering is accredited by the

Engineering Accreditation Commission of ABET ([www.abet.org](http://www.abet.org) (<https://www.abet.org/>)).

The Bachelor of Science (B.S.) degree with a major in Manufacturing Engineering is designed to provide students with the mathematics, science, management, engineering, and applications skills needed to become manufacturing engineers. Manufacturing engineering is a broad area that includes the design and development of products, emphasizing their manufacturability. This engineering discipline involves researching and developing the tools, processes, machines, and equipment required for manufacturing. It also includes integrating facilities and systems to produce high-quality products using the most cost-effective manufacturing methods. The degree has a concentration in general manufacturing or mechanical systems. The B.S. major in Manufacturing Engineering is accredited by the Engineering Accreditation Commission of ABET ([www.abet.org](http://www.abet.org) (<https://www.abet.org/>)).

The Bachelor of Science (B.S.) degree with a major in Mechanical Engineering is designed to provide students with an education that combines a strong foundation in traditional mechanical engineering principles with a unique education in designing and developing mechanical products and systems that are intelligent, interconnected, and integrated with the virtual world and emerging digital infrastructure. The curriculum will prepare students to apply principles of engineering, basic science, and mathematics to model, analyze, design, and realize thermal and mechanical physical systems, components, or processes. In addition, students will have the necessary background to use modern tools and technologies such as engineering simulation, rapid prototyping, additive manufacturing, sensor systems, robotics, real-time communication, and big data and data analytics. The B.S. major in Mechanical Engineering will seek accreditation in accordance with the process specified by the Engineering Accreditation Commission of ABET ([www.abet.org](http://www.abet.org) (<https://www.abet.org/>)).

## The Ingram School of Engineering Mission Statement

1. To provide students with an exceptional education in various disciplines of engineering,
2. To establish, through dedicated faculty, a nationally recognized research program, preparing interested students to achieve excellence in graduate studies and research, and
3. To serve the State of Texas and the nation by creating highly skilled, diverse, and motivated professionals capable of technological innovation and dedicated to the improvement of society.

## The Ingram School of Engineering Vision Statement

The Ingram School of Engineering will be a nationally recognized institution of higher education, serving students and employers with a complete set of accredited engineering programs supported by a faculty which maintains high standards of teaching, research, and service. To accomplish this vision, we will:

1. Engage undergraduate and graduate students with innovative, multidisciplinary, and nationally recognized funded research programs,
2. Emphasize quality undergraduate and graduate education using a practical, interactive, and contemporary learning environment,
3. Produce first-generation professional college graduates as part of an HSI-designated university; be recognized for exceptional community service; and create tight bonds with alumni who will serve as professional mentors, sponsors, and advisors, and

4. Promote a student-centered culture based on collegiality, scholarship, enthusiasm, integrity, and mutual respect among diverse faculty, staff, and students.

## Admissions Requirements

### Electrical Engineering

1. In order to declare Electrical Engineering as a major, students must meet one of the following prerequisites:

- ACT Math score of 24 or higher,
- SAT Math score of 550 or higher, or
- credit for one of the following math courses with a grade of "C" or higher:

Code	Title	Hours
MATH 1315	College Algebra	3
MATH 1317	Plane Trigonometry	3
MATH 1319	Mathematics for Business and Economics I	3
MATH 1329	Mathematics for Business and Economics II	3

2. Students who do not meet the above prerequisites may choose Pre-Electrical Engineering as their major. Pre-Electrical Engineering students who complete one of the following math courses with a grade of "C" or higher may declare Electrical Engineering as their major:

Code	Title	Hours
MATH 1315	College Algebra	3
MATH 1317	Plane Trigonometry	3
MATH 1319	Mathematics for Business and Economics I	3
MATH 1329	Mathematics for Business and Economics II	3

## Bachelor of Science (B.S.)

- Major in Civil Engineering (p. 731)
- Major in Electrical Engineering (Computer Engineering Concentration) (p. 733)
- Major in Electrical Engineering (Micro and Nano Devices and Systems Concentration) (p. 735)
- Major in Electrical Engineering (Networks and Communication Systems Concentration) (p. 737)
- Major in Industrial Engineering (p. 739)
- Major in Manufacturing Engineering (Smart Manufacturing Concentration) (<http://mycatalog.txstate.edu/undergraduate/science-engineering/ingram-school/manufacturing-engineering-smart-concentration-bs/>)
- Major in Manufacturing Engineering (Mechanical Systems Concentration) (p. 740)
- Major in Mechanical Engineering (<http://mycatalog.txstate.edu/undergraduate/science-engineering/ingram-school/mechanical-bs/>)

## Minor

- Engineering (<http://mycatalog.txstate.edu/undergraduate/science-engineering/ingram-school/-engineering-minor/>)

### Subjects in this school include:

CE, EE (p. 715), ENGR (p. 722), IE (p. 724), ME (p. 726), MFGE (p. 729)

## Courses in Civil Engineering (CE)

### CE 1210. Introduction to Smart Infrastructure.

This course is an overarching study of municipal and private infrastructure and the use of modern technology and techniques to monitor and manage these assets. Topics and case studies examine transportation, water resources, utilities, and other construction projects. General topics related to the civil engineering profession are also covered.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

### CE 2340. Infrastructure Materials.

This course examines the composition, production, engineering properties, and in-place behavior of materials used to construct and repair infrastructure assets. Sensing devices used to monitor a material are discussed. Students will learn to follow standard test methods, perform data acquisition, conduct data analysis, and visualize test data. Prerequisite: CHEM 1335 and ENGR 3311 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

### CE 2350. Structural Analysis.

This course is an introduction to the loading, response, analysis, and monitoring of infrastructure assets. Determinate and indeterminate structures are studied. Analysis by classic and modern computational methods are covered. The analysis of data obtained from sensing devices in, on, or remote to an infrastructure asset is discussed. Prerequisite: ENGR 3311 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

### CE 3310. Applications in Smart Infrastructure.

This course presents students with realistic civil engineering scenarios involving various infrastructure assets. The course is taught in a combination of classroom lectures and lab hands-on projects. With concepts learned in lectures, students work in teams on state of the art smart infrastructure sensor technologies to gather, transmit, and analyze measured data with the objective of developing a solution for each individual project. Prerequisite: CE 1210 and CS 1342 and ENGR 3373 all with grades of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 3320. Environmental Engineering.**

This course is an introduction to environmental engineering. Topics include treatment of water, wastewater, air pollution, solid waste pollution, and hazardous materials. Standard test procedures for evaluating physical, chemical, and biological treatment processes are introduced. The use of technology to manage treatment processes and facilities will be introduced. Prerequisite: CHEM 1335 and [(BIO 1130 and BIO 1330) or (BIO 1131 and BIO 1331) or GEOL 1410] all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 3330. Soil Mechanics.**

This course examines the engineering characteristics of soil. Topics include identification, compaction, shear strength, consolidation, vertical stress, and deformation. Standard laboratory test methods are followed. Advanced data analysis, interpretation, and visualization techniques are presented. Prerequisite: ENGR 3311 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 3331. Infrastructure Foundations.**

This course investigates foundation systems which support infrastructure assets. Shallow and deep foundations, piles, footings, mats, and retaining walls may be covered. Foundations are evaluated for consolidation, rate of settlement, stress distribution, elastic settlement, and bearing capacity. Life-cycle management of foundations will be examined. Prerequisite: CE 3330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 3350. Design of Reinforced Concrete Infrastructure.**

This course covers the analysis and design of reinforced concrete infrastructure assets. Topics include columns, beams, one-way slabs, and footings. Students will learn how to read, interpret, and use specifications and design codes. The use of technology to monitor the behavior of a reinforced concrete infrastructure asset will be introduced. Prerequisite: CE 2340 and CE 2350 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 3360. Transportation Planning and Infrastructure.**

This course is an introduction to the planning and design of transportation infrastructure assets. Social, economic, safety, and engineering issues impacting transportation are examined. Interactions between users, vehicles, and the infrastructure will be addressed. The expanding use of technology to enhance transportation systems will be examined. Prerequisite: IE 3320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4100. Civil Engineering Undergraduate Research.**

Undergraduate students investigate a special topic in civil engineering by developing a research idea, conducting a literature review, researching the topic, and presenting the findings. Research plans will be developed on an individual basis with strict faculty supervision.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4200. Civil Engineering Undergraduate Research.**

Undergraduate students investigate a special topic in civil engineering by developing a research idea, conducting a literature review, researching the topic, and presenting the findings. Research plans will be developed on an individual basis with strict faculty supervision.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4300. Civil Engineering Undergraduate Research.**

Undergraduate students investigate a special topic in civil engineering by developing a research idea, conducting a literature review, researching the topic, and presenting the findings. Research plans will be developed on an individual basis with strict faculty supervision.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4310. Infrastructure Sensor Technologies.**

This course is an advanced study of the sensor technologies available to monitor the performance and behavior of infrastructure assets. Prerequisite: CE 3310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4311. Communication Systems for Smart Infrastructure.**

This course examines the issues and processes involved in the transmission of data between sensor devices and data storage centers. Topics include data communication principles, transmission signals, wireless and wired communication systems, security, and examples of best practices. Prerequisite: ENGR 3373 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter



**CE 4320. Biological Wastewater Management.**

This course examines biological treatment processes for domestic and industrial wastewater. The use of sensor technologies to monitor the effectiveness of a treatment option is also addressed. Prerequisite: CE 3320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4321. Hazardous Waste Management.**

This course is a study of best management practices relative to hazardous waste. Topics include contamination processes, site investigations, detection, analysis methods, evaluation methods, and risk management, and treatment protocols. The use of technology to manage the life-cycle performance of contaminated hazardous wastes sites will be studied. Prerequisite: CE 3320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4322. Air Pollution Management.**

This course is an introductory study of air pollution. Topics include sources, quality, meteorological influences, atmospheric dispersion modeling, and control methods. The use of sensor technologies to monitor the effectiveness of an air pollution control option is also addressed. Prerequisite: CE 3320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4323. Physical and Chemical Treatment of Water.**

This course is a study of the physical and chemical processes used to clean water and wastewater. The use of sensors to monitor treatment processes is also addressed. Prerequisite: CE 3320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4330. Design of Retaining Structures.**

This course examines the design of geotechnical structures, such as a retaining wall, that retain soil or another material. The use of technology to manage the life-cycle performance of retaining structures will be studied. Prerequisite: CE 3331 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4350. Design of Prestressed Concrete Infrastructure.**

This course covers the analysis and design of prestressed concrete infrastructure assets. Topics include columns, beams, slabs, pipes, and piles. Students will learn how to read, interpret, and use specifications and design codes. The use of technology to monitor the behavior of a prestressed concrete infrastructure asset will be introduced. Prerequisite: CE 3350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4351. Design of Steel Infrastructure.**

This course covers the analysis and design of steel infrastructure assets. Topics include connections, columns, beams, and beam-columns. Students will learn how to read, interpret, and use specifications and design codes. The use of technology to analyze the behavior of steel infrastructure assets will be introduced. Prerequisite: CE 2350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4360. Intelligent Transportation Systems.**

This course is a study of the components, technologies, and infrastructure assets that comprise intelligent transportation systems (ITS). Smart technologies, data acquisition, and communication sub-systems will be examined within the context of personal, commercial, and public transportation. Coverage will include mobility, public safety, socio-economic and environmental factors impacting transportation systems. Prerequisite: CE 3310 and CE 3360 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4361. Highway Engineering.**

This course covers alignment, interchange, construction, and maintenance issues related to highways. Topics include cross-sections, horizontal and vertical alignment, sight distance, pavement design, drainage analysis, traffic engineering, highway capacity, and construction materials. The analysis of data obtained from sensing devices during construction or use of a highway is also discussed. Prerequisite: CE 3360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4362. Traffic Engineering.**

This course is a basic introduction of the components of a highway traffic system and fundamentals of traffic engineering; analysis of traffic stream characteristics, levels of service, and capacity of urban and rural highways; study of warrants for traffic control devices; design and analysis of traffic signals and timing plans; analysis of urban and highway traffic characteristics using simulation software. Prerequisite: CE 3360 with a grade of 'C' or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4370. Hydraulics.**

This course is an examination of the properties, distribution, and circulation of water. Topics include pipe flow, pipe networks, pumps, and open channel flow. The use of sensors to monitor fluid flow, pressure, and leaks will be addressed. Advanced data analysis and visualization techniques will be presented. Prerequisite: ENGR 3380 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4371. Hydrology.**

This course is an examination of surface and groundwater hydrology. Topics include the hydrologic cycle, groundwater flow, wells, storm water management practices, open channel flow, stream flow measurements, hydrologic routing, modeling, probability, and applications. The use of sensors to monitor hydrologic activity is also addressed. Prerequisite: CE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4390. Civil Engineering Design I.**

This is the first in a two-course sequence meant to prepare students for engineering practice with a culminating major design experience. This course covers the planning, scheduling, budgeting, and management aspects of a technology-enhanced infrastructure design project. (WI) Prerequisite: CE 3330 with grade of "C" or better. Corequisite: CE 3310 and CE 3350 and CE 3360, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CE 4391. Civil Engineering Design II.**

This is the second in a two-course sequence meant to prepare students for engineering practice with a culminating major design experience. This course focuses on the completion of all phases of the design project. Prerequisite: CE 3320 and CE 4390 both with grades of "C" or better. Corequisite: CE 3331 and CE 4370 and GEO 4356 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CE 4392. Sustainable Infrastructure.**

This course examines the sustainability characteristics of various infrastructure assets. The assets and characteristics examined will be established by the course instructor. Examples include pervious pavements, sustainable construction materials, and sustainability in the design process. The use of technology to manage the life-cycle performance of an asset will be studied. Prerequisite: CE 3331, CE 3350, CE 3360, and ENGR 3380 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

## Courses in Electrical Engineering (EE)

**EE 2400. Circuits I.**

This course provides an introduction to the profession of Electrical Engineering and its specialties. Fundamental DC and sinusoidal steady-state circuit analysis techniques include Ohm's law, power, Kirchhoff's laws, and Thevenin and Norton equivalent circuits. Prerequisites: MATH 2471 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 2420. Digital Logic.**

An introduction to fundamental computer technologies, including Boolean logic design, logic circuits and devices, and basic computer hardware are studied. Laboratories provide hands-on experience with electricity, combinational and sequential digital circuits, and computer hardware. Corequisite: CS 1428 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 3326. Numerical and Scientific Data Analysis Using Python.**

This course introduces Python programming for engineers. Topics include basics of Python programming, introduction to numerical Python (NumPy), scientific programming using Python (SciPy), data visualization using Matplotlib, data processing using Pandas and introduction to Object Oriented Programming using Python. Prerequisite: CS 1342 or CS 1428 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 3340. Electromagnetics.**

Topics in this course include wave propagation, Maxwell's equations, transmission lines, wave guides, and antennas. Prerequisite: EE 3400 and MATH 2393 and PHYS 2326 and PHYS 2335 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 3350. Electronics I.**

Analysis and design of active device equivalent circuits with emphasis on transistors, switching circuits, and operational amplifiers. Prerequisites: EE 3400 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 3355. Solid State Devices.**

Semiconductor materials, principles of carrier motion, operating principles and circuit models for diodes, bipolar transistors and field-effect transistors. Introduction to integrated circuits. Prerequisite: EE 3400 and PHYS 2326 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 3370. Signals and Systems.**

Frequency domain representation of signals and systems and frequency domain concepts for circuit analysis and design. Transfer function and frequency response, Laplace and z-transforms, Fourier series, Fourier transform, and sampling. Prerequisite: EE 3400 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 3400. Circuits II.**

This course includes a brief review of EE 2400, transient analysis, application of Laplace transforms, Bode plots, and network principles. Materials learning in EE 2400 is extended and applied here. Prerequisites: EE 2400 and MATH 3323 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 3420. Microprocessors.**

Introduction to microprocessors, principles of operation, assembly language programming, timing analysis, and I/O interfacing. Prerequisites: EE 2420 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**EE 4180. Electric Machines Lab.**

This course is the lab component of EE 4380 Electric Machines and consists of the hands-on exploration and analysis of various electric machines and their controllers. Prerequisite: EE 3340 with a grade of "C" or better. Corequisite: EE 4380 and EE 4360 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4321. Digital Systems Design Using HDL.**

This course will cover the design of digital systems using HDL including implementation of custom microprocessor and peripheral architectures. Prerequisite: EE 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4323. Digital Image Processing.**

This course provides the necessary fundamental techniques to analyze and process digital images. It covers principles, concepts, and techniques of digital image processing and computer vision. Prerequisite: EE 3370 and EE 3420 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4331. Introduction to Machine Learning for Engineering Applications.**

This course covers an introduction to machine learning focused on deep learning techniques using engineering applications with Python. Topics include model characteristics, neural network theory, classifiers for network and signal processing applications, regression and convolutional modeling for object-detection, time-series and forecasting machine learning models for Smart City concepts. Prerequisite: CS 1428 or CS 1342 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4332. Introduction to Computer-Aided Engineering Simulation on HPC Systems.**

This course covers the introductory development of simulations for engineering applications that are solved using High-Performance Computing environments. Topics include programming techniques for multicore processors, processor and memory architecture, computation for dense and sparse linear algebra applications, computational temperature analysis, fluid dynamics, stencil, stochastic algorithms, and other applications. Prerequisite: CS 1428 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4350. Electronics II.**

Analysis and design of integrated circuits, feedback, and frequency response. Prerequisites: EE 3350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Multicultural Perspective

**Grade Mode:** Standard Letter

**EE 4351. Fundamentals of Electroceramics.**

Introduction to binary and ternary phase diagrams, non-centro-symmetric crystal structures and symmetry groups, nonlinear dielectrics (including ferroelectricity, piezoelectricity, pyroelectricity), nonlinear magnetics, oxide wideband gap semiconductors, detectors and sensors, brief introduction to MEMS, radhard electronics, and spintronics technology. Research oriented labs related to materials processing, characterization, fabrication, and testing. Prerequisite: ENGR 2300 with a grade of "C" or better and a minimum 2.25 Overall GPA. Corequisite: EE 3355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4352. Introduction to VLSI Design.**

Analysis of design of CMOS integrated circuits. Introduction to CAD tools for VLSI design. Prerequisites: EE 3350 and [CS 2420 or EE 2420] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4353. Fundamentals of Advanced Semiconductor Technology.**

Key concepts of advanced semiconductor technology including Moore's law, MOSFETs and CMOS, CMOS scaling, high-K gate dielectrics, new channel materials replacing silicon, three dimensional device structures, compound semiconductor MESFET, HEMT, LED, Lasers and solar cells. Prerequisite: EE 3355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4354. Flexible Electronics.**

This course will cover the materials systems, processes, device physics and applications of flexible electronics. The materials range from amorphous and nanocrystalline silicon, organic and polymeric semiconductors to solution cast films of carbon nanotubes. Real device discussions include high speed transistors, photovoltaics, flexible flat-panel displays, medical image sensors, etc. Prerequisites: EE 3350 and EE 3355 and EE 4350 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4355. Analog and Mixed Signal Design.**

Operational amplifier design applications, feedback, offset, stability, and compensation. Introduction to random signals and noise, discrete time circuitry analog-to-digital converters, and digital-to-analog converters. Prerequisites: EE 3370 and EE 4350 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4356. Power Electronics.**

This course provides an introduction to power electronics and the use of such circuits for the control and conversion of electric power. Topics include semiconductor power devices and characteristics, DC-DC and multilevel converters, power inverters, and AC voltage controllers. Prerequisite: EE 4350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4357. Introduction to Power Systems.**

This course introduces the analysis of various elements of power systems, including power generation, transformer action, transmission line modeling, symmetrical components, power factor correction, real and quadrature power calculations, load flow analysis, and economic considerations in operating systems. Prerequisite: EE 3400 or ENGR 3373 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4358. Introduction to Microelectromechanical Systems.**

This course will cover fabrication techniques for microelectromechanical devices and systems as well as provide an introduction to the design of micromechanical transducers. Co-requisite: MFGE 4392 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4359. Advanced Electronic Materials and Devices.**

This course introduces students to modern fabrication techniques, properties, and applications of conventional and emerging electronic materials. Topics include thin film deposition techniques and modern fabrication concepts, heterointerfaces, and structural, electronic, thermal, magnetic, and optical properties of electronic materials. The course includes discussions about practical devices, including solar cells, light-emitting devices, display devices, and emerging flexible electronic devices. Prerequisite: EE 3350 with a grade "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4360. Linear Control Systems.**

This course provides an introduction to linear continuous-time and discrete-time automatic control systems. Topics include time and frequency domain modeling and analysis, state variable analysis, feedback, transient and steady state response, stability, and sensitivity. Prerequisite: EE 3370 and MATH 3377 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4370. Communication Systems.**

This course covers transmission of signals through linear systems, analog and digital modulation, filtering, and noise. Prerequisites: EE 3370 and IE 3320 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4372. Communication Networks.**

This course covers data communication concepts, protocols, algorithms, 7-layer OSI model, physical media, LAN architecture and components, Ethernet, TCP/IP, and related standards. Prerequisite: EE 3420 with a grade of "C" or better. Corequisite: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4374. Introduction to Wireless Communication.**

Principles, practice, and system overview of mobile systems. Modulation, demodulation, coding, encoding, and multiple access techniques.

Prerequisites: EE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4375. Building a Smart Grid Architecture.**

In this course, students will learn the current 20th-century power grid structure and the key elements required to transform it to a 21st-century Smart Grid. Topics include two-way power/data flow to monitor, control, manage and integrate traditional bulk generation and bulk/renewable/distributed generation. Prerequisite: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4376. Introduction to Telecommunications.**

Fundamentals of telecommunications, telephone networks, switching and transmission systems, circuit and packet switching, cell processing, and queuing theory and applications. Co-requisite: EE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4377. Introduction to Digital Signal Processing.**

Discrete systems, convolution, spectral analysis, and FIR and IIR filter design. Prerequisites: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4378. Data Compression and Error Control Coding.**

Introduction to information theory, information content of messages, entropy and source coding, data compression, channel capacity data translation codes, and fundamentals of error correcting codes. Corequisite: EE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4380. Electric Machines.**

This course teaches the principles and analysis of electromechanical systems. Students will develop analytical techniques for predicting device and system interaction characteristics, strengthen understanding of the phenomena and interactions in electromechanics, and learn to design major classes of electric machines. Prerequisite: EE 3340 with a grade of "C" or better. Corequisite: EE 4180 and EE 4360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4381. Sustainable Energy & Storage.**

This course examines the consumption and production of energy and the principles and technologies behind renewable energy sources. It also introduces the basics of energy storage systems such as batteries, gravitational, and hybrid. Prerequisite: EE 3400 and PHYS 2326 and CHEM 1335 all with a grade of "C" or better. Corequisite: EE 4357 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4382. Advanced Power Systems.**

This course is an advanced treatment of various elements of power systems, including symmetrical and unsymmetrical faults, symmetrical components, system protection, transient stability, transient operation of transmission lines, and supervisory control and data acquisition (SCADA). Prerequisite: EE 4357 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4390. Electrical Engineering Design I.**

This course is a team-based design of a system or component, which will include oral presentations and written reports. (WI) Prerequisites: EE 3420 and EE 3350 and EE 3370 and IE 3320 all with grades of "C" or better. Corequisites: EE 4352 or EE 4356 or EE 4360 or EE 4370 any with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter



**EE 4391. Electrical Engineering Design II.**

Advanced team-based design of a system or component, which will include oral presentations and written reports. (WI) Prerequisites: EE 4390 with a grade of "C" or better. Corequisite: EE 4352 or EE 4370 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**EE 4392. Microelectronics Manufacturing I.**

This course provides an overview of integrated circuit fabrication. This includes crystal growth, wafer preparation, epitaxial growth, oxidation, diffusion, ion-implantation, thin film deposition, lithography, etching, device and circuit formation, packaging, and testing. The laboratory component involves production and testing of a functional semiconductor device. Prerequisite: CHEM 1341 or CHEM 1335 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4394. Microelectronics Manufacturing II.**

Topics include atomic models for diffusion, oxidation and ion implantation; topics related to thin film processes, e.g. CVD and PVD; planarization by chemical-mechanical polishing and rapid thermal processing; and process integration for bipolar and MOS device fabrication. Students will design processes and model them using a simulation. Prerequisite: EE 4392 or MFG 4392 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4399A. Dynamic Data Acquisition and Analysis.**

Methods for acquiring and analyzing dynamic (time-varying) data. Frequency domain analysis, analog-to-digital conversion, windowing, and digital filtering taught in the context of various industrial applications. Prerequisite: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**EE 4399B. Overview of Information Theory and Coding.**

Fundamentals of Information Theory, Huffman coding, image encoding techniques, Hamming and BCH error control codes, Reed-Solomon coding, convolutional codes and the Viterbi decoding algorithm. Prerequisite: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**EE 4399I. Fundamentals of Sound Systems Engineering.**

This course provides an introduction to sound systems engineering and its fundamental principles applied in developing audio and sound systems for various industries. This course will develop a theoretical and practical understanding of the fundamentals of sound engineering, including acoustics, audio components, sound processing, and test & measurement. Prerequisite: EE 2420 and EE 3350 and EE 3370 and PHYS 2326 and PHYS 2126 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

## Courses in Engineering (ENGR)

**ENGR 1304. Engineering Graphics.**

This course covers the introduction to computer-aided drafting using CAD software and sketching to generate two- and three-dimensional drawings based on the conventions of engineering graphical communication in the tools and techniques utilized to produce various types of working drawings. Principles of multiview projections, geometric relationships, shape and size description, and pictorial methods are included with emphasis on technical applications and design problem solving. Corequisite: MATH 2417 or MATH 2471 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** ENGR 1304

**ENGR 2300. Materials Engineering.**

This course covers topics including structure, properties and behavior of engineering materials including metals, polymers, composites, and ceramics. Mechanical, electrical, magnetic, thermal, and optical properties are covered. Prerequisite: [CHEM 1335 and CHEM 1135] or [CHEM 1341 and CHEM 1141] with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ENGR 2301. Statics.**

This course covers the theory of engineering mechanics. Topics include forces, moments, and couples acting on stationary engineering structures. Additionally, two and three dimensional equilibrium, free-body diagrams, friction, centroids, and centers of gravity are covered. Prerequisite: PHYS 2325 and 2125 with grades of "C" or better. Corequisite: MATH 2472 or MATH 2473 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** ENGR 2301

**ENGR 2302. Dynamics.**

This course introduces the fundamentals of kinematics and kinetics of individual particles, systems of particles, and rigid bodies. Topics include the rectilinear, curvilinear, and general motion, Newton's laws of motion, work and energy relationship, principles of impulse and momentum, and application of kinetics and kinematics to the solution of engineering problems. Prerequisite: ENGR 2301 and MATH 2472 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** ENGR 2302

**ENGR 3190. Cooperative Education.**

This course provides cooperative education students the opportunity to study particular problems in engineering in an occupational setting. Problems are related to the student's work assignment and culminate in an industrial supervisor's evaluation and technical report or presentation. This course may be taken up to three times for a maximum of three credits applying towards the major elective. Prerequisite: A minimum 2.25 Overall GPA and instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ENGR 3290. Advanced Cooperative Education.**

This course provides cooperative education students the opportunity to study particular problems in engineering in an occupational setting. Problems are related to the student's work assignment and culminate in an industrial supervisor's evaluation and technical report. This course maybe taken up to 2 times for a maximum of 3 credits applying towards the major elective. Prerequisite: A minimum 2.25 Overall GPA and instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ENGR 3311. Mechanics of Materials.**

This course covers the principles of the mechanics of materials and includes the following topics: stress and strain, elastic modulus and Poisson's ratio, constitutive equations, torsion, bending, axial, shear and bending moment diagrams, deflection of beams, and stability of columns. Prerequisite: ENGR 2301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**ENGR 3315. Engineering Economic Analysis.**

Interest formulas, economic equivalence, rate of return analysis, techniques of economic analysis for engineering decisions and an introduction to cost estimation. Prerequisite: MATH 1315 or MATH 2417 or MATH 2471 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ENGR 3373. Circuits and Devices.**

In this course, circuits and devices are introduced. Topics include circuit analysis and network theorems with emphasis on applications of analog and digital electronic devices, transducers, sensors, and electromechanical devices. Prerequisite: PHYS 2326 and PHYS 2126 and [CS 1428 or CS 1342] with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**ENGR 3380. Fluid Mechanics.**

This course is an introduction to fluid motion. Fluid flow, pressure, energy, and momentum are examined. Dimensional analysis is also covered. Sensing devices used to monitor a fluid are discussed. Students will learn to follow standard laboratory procedures, perform data acquisition, conduct data analysis, and visualize test data. Prerequisite: ENGR 2301 and MATH 3323 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ENGR 4299. Engineering Undergraduate Research.**

In this course undergraduates investigate a special topic in engineering by developing a research idea, conducting a literature review, researching the topic, writing a technical report, and presenting the findings. Research plans will be developed on an individual basis with strict faculty supervision.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ENGR 4390. Internship.**

Supervised on-the-job professional learning experience in engineering and other technical areas. This course provides practical work experience in their particular field of interest.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ENGR 4395. Independent Studies in Engineering.**

Open to undergraduate students on an independent basis by arrangement with the faculty member concerned.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

## Courses in Industrial Engineering (IE)

**IE 1310. Introduction to Industrial Engineering.**

This course gives an overview of what industrial engineering is, how this field of study has evolved, what contributions of individuals have been key to its development, what are some of the methods and techniques that industrial engineers use to solve company's problems and what job opportunities exist after earning a degree in industrial engineering.

Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 any with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [SAT Mathematics score of 520 or better] or [SAT Math Section score of 550 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 3305. Introduction to Data Analysis.**

This course introduces principles and applications of data analysis using Microsoft Excel, Access, VBA, and machine learning. Students will utilize these applications to develop solutions to challenging industrial engineering problems. Emphasis will be placed on computing productivity in a spreadsheet-based setting to develop practical, useful decision support applications to facilitate engineering decisions. Corequisite: IE 3320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 3320. Engineering Statistics.**

This course covers the fundamentals of probability and statistics, including probability distributions, visualization techniques of large-scale datasets, interval estimation, hypothesis testing, and regression modeling. The students will be exposed to traditional engineering applications of statistical modeling, as well as those modern problems encountered in big data analysis. Prerequisites: MATH 2472 or MATH 2473 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 3330. Quality Engineering.**

Quality assurance systems, quality costs, statistical quality control, and approaches for engineering quality into products and processes.

Prerequisite: IE 3320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 3340. Operations Research.**

This course covers models in operations research including linear programs, the simplex method, duality theory, sensitivity analysis, integer programs, and network flows. The emphasis is on learning to recognize, formulate, solve, and analyze practical industrial problems. The course also introduces commercial mathematical programming languages.

Prerequisite: [CS 1428 or CS 1342] and ENGR 3315 and MATH 3377 and IE 1310 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 3360. Methods Engineering and Ergonomics.**

This course is a survey of methods for assessing and improving performance of individuals and groups in organizations. Techniques include various basic industrial engineering tools, work analysis, data acquisition and application, performance evaluation and appraisal, and work measurement procedures. Prerequisite: IE 3320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4310. Statistical Design of Experiments.**

Statistically designed experiments for engineering applications. Topics include analysis of variance, randomized complete designs, factorial designs, empirical models generated from controlled experiments, and response surfaces. Prerequisite: IE 3320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4320. Integrated Production Systems.**

Basic concepts in the design and control of integrated production systems to include forecasting, inventory models, material requirements planning, scheduling, planning, and shop floor control. Prerequisite: IE 3340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4330. Reliability Engineering.**

Reliability of components and systems, reliability models, life testing, failure analysis, and maintainability. Prerequisite: IE 3320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4335. Lean Six Sigma Methodologies.**

This course covers the principles and methodologies of Six Sigma and Lean Six Sigma. Emphasis is on the tools and techniques used in Lean Six Sigma projects, including statistical process control, experimental design, project management and Lean tools. Prerequisite: IE 3330 and IE 4310 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4340. Non-Linear Optimization Techniques.**

This course introduces engineering applications of mathematical modeling and computational methods for non-linear programming problems. Prerequisite: IE 3340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4342. Advanced Linear and Integer Programming.**

This course discusses advanced mathematical modeling computational methods for solving linear and integer programming problems in engineering. Additional topics include solution techniques, such as stochastic and dynamic programming, that may also apply for solving non-linear programs, and formulation and solution of decision models arising in manufacturing, service, supply chain, healthcare and electrical systems. Prerequisite: IE 3340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4350. Supply-Chain Engineering.**

The analysis of supply chain problems to include facility location, customer assignment, vehicle routing, inventory management, and the role of information and decision support systems in supply chains. Prerequisite: IE 3340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4355. Facilities Planning.**

Planning, design, and analysis of facilities. Emphasizes the principles and methods used for solving plant layout, facility location, material handling, automation, computer integration, and warehouse operations. Prerequisite: ENGR 3315 and MFG 2332 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4360. Human Factors Design.**

This course will emphasize the applications of human factors engineering to systems design. Prerequisites: IE 3360 with a grade of "D" or better. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**IE 4370. Probabilistic Operations Research.**

This course describes probabilistic models in operations research to include queuing theory, simulation, and Markov chains. Emphasis will be placed on modeling applications to solve problems in industry and computing. Prerequisite: [CS 1428 or CS 1342] and IE 3320 with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4381. Introduction to Systems Engineering.**

This course is an introduction to the systems thinking process, systems of systems, and the fundamental considerations associated with the engineering of large-scale systems, or systems engineering. These topics include the system development process, needs analysis, concept exploration, concept definition, engineering design, integration and evaluation, and systems engineering management. Prerequisite: IE 3320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4392. Industrial Engineering Design I.**

Student teams apply engineering principles and standards under realistic constraints to develop solutions for industrial problems and/or systems engineering issues. This course is the first part of a two-course sequence and is followed by Industrial Engineering Design II (IE 4393). Prerequisite: IE 3330 and IE 3340 and IE 3360 all with grades of "D" or better. Corequisite: 6 hours from [IE 4310 or IE 4355 or IE 4370] both with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**IE 4393. Industrial Engineering Design II.**

Student teams complete implementation of solutions to industrial problems and/or systems engineering issues with realistic constraints. This course is the the second in a two-course sequence, and is continuation of Industrial Engineering Design I (IE 4392). Prerequisite: IE 4392 and 6 hours from [IE 4310 or IE 4355 or IE 4370] all with grades of "D" or better. Corequisite: 6 hours from [IE 4320 or IE 4350 or MFGE 4396] both with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**IE 4399D. Heuristic Optimization Techniques.**

Heuristic methods that search beyond local optima such as simulated annealing, tabu search, genetic algorithms, ant-colony systems, and particle swarm. Papers from the literature, problem-specific heuristics, evaluation methods and serial/parallel implementations are discussed. This course is an advanced undergraduate course for students in engineering and related fields. Prerequisite: [CS 1428 or CS 1342] and IE 3340 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**IE 4399F. Introduction to Data-Intensive Analysis and Simulation.**

This course covers the foundational topics in data science and consists of three parts: The first part focuses on data extraction from databases, sensors and social media. The second part reviews data-intensive analysis through statistics and machine learning tools. The third part introduces the concept of farming data using design of experiments methodologies and computer simulation. Prerequisites: IE 3340 and IE 4310 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**IE 4399G. Special Topics in Project Management.**

This course provides undergraduate students with solid foundations of project management. Classical, prescriptive and adaptive methodologies are presented. Students will get to know different standards in project management, whereas the main focus will be on those from PMI (Project Management Institute). This course covers all phases of project management and introduces the most relevant tools and techniques to initiate, plan and execute projects in different contexts successfully. In addition to techniques, the "soft" perspective of managing people and their cooperation within projects will be addressed in detail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

## Courses in Mechanical Engineering (ME)

**ME 1101. Introduction to Digital Mechanical Engineering Lab.**

This lab course introduces students to engineering labs and digital equipment. Topics include instruction in design labs, a brief introduction to computer-aided design (CAD), and digital additive manufacturing and making. Corequisite: [MATH 2417 or MATH 2471] and ENGR 1304 and ME 1201 all with grades of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 1201. Introduction to Digital Mechanical Engineering.**

This course introduces students to mechanical engineering as a discipline and a profession. Topics include instruction in the engineering design process, use of digital sensors, AI, the Internet of Things and the security of sensors in mechanical systems, engineering simulation and application of mathematical and scientific principles to solve practical problems, ethics, and career opportunities. Corequisite: MATH 2417 or MATH 2471 with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 3112. Mechanical Behavior of Materials Lab.**

This laboratory course introduces students to experimental stress analysis techniques and tests used to characterize the mechanical behavior of materials. It also addresses the interpretation of experimental data and comparison of measurements to analytical predictions. The experiments investigate tension, compression, bending, hardness, impact, fracture toughness, cyclic fatigue, creep and relaxation, photoelasticity, and digital image correlation tests. Prerequisite: ENGR 2300 with a grade of "C" or better. Corequisite: ME 3311 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 3151. Smart Instrumentation and Measurement Lab.**

In this lab course, students conduct Internet of Things concept experiments for mechanical measurements using digital instrumentation and transducers via wireless digital communication and computer-based data acquisition tools. Lab experiments cover fundamental experimental techniques, operational principles of various digital instruments and transducers, and statistical data analysis techniques. Prerequisite: ME 1101 and ENGR 3373 and ENGR 3311 and ME 3330 all with grades of "C" or better. Corequisite: ME 3351 and IE 3320 both with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter



**ME 3311. Mechanics of Solids.**

This course covers advanced topics in solid mechanics including combined loadings, statically indeterminate loadings, thermal stresses, unsymmetrical bending, stress concentrations, inelastic deformations, stress and strain transformations, plane stress, plane strain, Mohr's circle, failure criteria, curved beams, and torsion of prismatic bars. Prerequisite: ENGR 3311 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 3314. Machine Design.**

This course will apply knowledge of statics, dynamics, mechanics of solids, and engineering materials, to the design and selection of machine elements. Topics include fatigue failure theories, material selection, impact loading, and typical machine elements such as transmission shafts, keys, bearings, gears, springs, and fasteners. Prerequisite: ENGR 2302 and ME 3311 both with grades of "C" or better. Corequisite: ME 3112 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 3330. Engineering Thermodynamics.**

This course covers introductory concepts of thermodynamics, energy transfer and general energy analysis, properties of pure substances, ideal gas model, mass and energy analysis of control volumes, first and second laws of thermodynamics, entropy, power cycles, and refrigeration cycles. Prerequisite: [PHYS 2325 and PHYS 2125] and MATH 2472 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 3331. Heat Transfer.**

This course covers introductory concepts of heat transfer, steady-state and transient conduction in one- and two-dimensions, external forced convection, internal forced convection, natural convection, heat exchangers, and fundamentals of radiation. Prerequisite: ME 3335 and MATH 3323 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 3335. Engineering Fluid Mechanics.**

This course is an introduction to fluid mechanics, fluid properties, fluid statics, fluid dynamics, control volume analysis, differential analysis of fluid flow, dimensional analysis, viscous flow in pipes, external flows, and open channel flows. Prerequisite: ENGR 2302 and MATH 2393 and ME 3330 all with grades of "C" or better. Corequisite: MATH 3323 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 3351. Smart Instrumentation and Measurement.**

This course covers basic concepts and principles of instrumentation and measurement systems, analog and digital devices, basic electronics, sensors and transducers, introduction to the Internet of Things (IoT) and big data, cybersecurity of IoT devices, wireless digital network and communication, probability and statistics to characterize measurement uncertainty, data acquisition and analysis using software packages, and measurements of physical properties such as temperature, pressure, and strain. Prerequisite: ME 1101 and ENGR 3373 and ENGR 3311 and ME 3330 all with grades of "C" or better. Corequisite: ME 3151 and IE 3320 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 3361. Computer Aided Design and Digital Manufacturing.**

This course provides an in-depth study of computer aided design (CAD), computer aided manufacturing (CAM), and digital manufacturing. Topics include the product development process, CAD file formats and data exchange, fundamentals of computer numerical control (CNC) machines, numerical control programming for milling processes, CNC code generation and simulation by CAD/CAM software, and an overview of other digital manufacturing processes such as additive manufacturing, laser cutting, welding, and waterjet cutting. In the lab, students get hands-on experience in reading CAD drawing standards, lab safety, machine tools operation, and operation of digital manufacturing processes, including CNC machining, additive manufacturing, and laser cutting. Prerequisite: MATH 2472 and ENGR 1304 and ENGR 2300 and ME 1101 all with grades of "C" or better. Corequisite: ME 3311 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**ME 4131. Fluids/Thermal Lab.**

This laboratory course is designed for students to conduct experiments based on various principles of fluid mechanics, thermodynamics, and heat transfer. Students need to use proper experimental methods and interpret data using these principles and uncertainty analysis. Prerequisite: ME 3151 and ME 3331 and ME 3351 all with grades of "C" or better. Corequisite: ME 4390 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ME 4311. Mechanical Vibrations.**

This course introduces fundamental concepts on the vibration of mechanical systems. Topics include equations of motion, free and forced vibrations of damped/undamped single- and multi-degree-of-freedom mechanical systems, self-excitation and stability analysis, application of transfer functions for vibration problems, Lagrange's equations, and determination of natural frequencies and mode shapes of multi-degree-of-freedom systems. Prerequisite: ENGR 2302 and [MATH 3376 or MATH 3383] and MATH 3323 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 4312. Mechanics of Composite Materials.**

This course focuses on the elastic properties of a wide range of composites, including unidirectional and multidirectional laminates, particulate and fiber-reinforced composites, invariant properties of an orthotropic lamina, classical lamination theory, strength of laminates, and use of general purpose computer codes for classical laminate theory. Prerequisite: [MATH 3376 or MATH 3383] and ME 3314 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 4321. Applied Finite Element Analysis.**

This course provides an introduction to the finite element method (FEM). Two aspects are considered in the course: The theoretical foundations of the method and the use of existing finite element analysis (FEA) software. Topics covered in the theory portion include the direct method, the variational method, and the weighted residuals method. Topics covered in the laboratory portion include typical pre- and post-processing modules, different types of elements, analysis of simple time independent stress analysis and heat transfer problems, and practical aspects related to the creation of a finite element model. Prerequisite: MATH 3323 and [MATH 3376 or MATH 3383] and ME 3314 all with grades of "C" or better. Corequisite: ME 3331 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 4332. Modern Heating, Ventilating, and Air Conditioning.**

This course focuses on current and upcoming practices in heating, ventilating, and air conditioning (HVAC), including psychometrics, standards, ventilation requirements, load estimates, filtration, air sterilization, and building energy system design, simulation, and control. Prerequisite: ME 3331 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 4341. Computational Fluid Dynamics.**

This course introduces the scientific principles and practical engineering applications of Computational Fluid Dynamics (CFD). Although it provides a brief overview of the fundamental mathematics governing fluid flow and heat transfer phenomena, its emphasis is to apply the knowledge using commercial CFD software. Additional topics include set-up of appropriate CFD parameters, conduct of steady-state and transient fluid flow simulations, solutions for both isothermal and non-isothermal thermo-fluid applications, solutions for both incompressible and compressible fluid flow applications, solutions for fluid flow through porous media and rotating machinery, and extraction of the required results including plots. Prerequisite: MATH 3323 and [MATH 3376 or MATH 3383] and ME 3335 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 4351. Control Systems.**

This course covers introductory concepts of linear control systems. Topics include mathematical modeling of physical systems, Laplace transform, transfer function, modeling and analysis in state space, transient and steady state responses, root locus and stability, control systems in time and frequency domains, Bode plot, and design of PID controllers. Prerequisite: ENGR 2302 and MATH 3323 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 4355. Autonomous Systems and Robotics.**

This course introduces different types of autonomous systems, such as autonomous driving vehicles, drones, and robots. It provides an introduction to the methods and algorithms used in the design, construction, and operation of such systems. The emphasis is on the application of autonomous systems, their components, and their underlying control algorithms, including sensor fusion, real-time decision-making and learning, information processing, path planning, localization, and intelligent control. Prerequisite: ENGR 2302 and IE 3320 and [MATH 3376 or MATH 3383] and ME 4351 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ME 4390. Mechanical Engineering Design I.**

This course is the first of a two-course sequence involving integrated design and development of products and processes, the impact of ethical issues on design, the discussion of real-world engineering problems and emerging engineering issues with practicing engineers, preparation of reports indicating use of appropriate engineering standards and multiple constraints, plans and specifications, cost estimation, project management, and communication. (WI) Prerequisite: ME 3331 and ME 3314 and ME 3361 all with grades of "C" or better. Corequisite: ME 4131 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**ME 4391. Mechanical Engineering Design II.**

This course is the second of a two course sequence involving implementation of Integrated design and development of products and processes; impact of ethical issues; the discussion of real-world engineering problems and emerging engineering issues with practicing engineers; preparation of reports indicating use of appropriate engineering standards and multiple constraints, plans and specifications; cost estimation; project management; and communication. Prerequisite: ME 4131 and ME 4390 both with grades of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**ME 5310. Continuum Mechanics.**

This course provides an introduction to continuum mechanics. Topics include indicial notation, tensor algebra, tensor calculus, curvilinear coordinates, kinematics of a continuum, strain, stress, constitutive models, field equations governing continuous media, and applications to problems in solid and fluid mechanics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ME 5312. Stress Analysis of Composite Materials.**

This course covers the mechanical analysis of continuous-fiber-polymer-matrix laminated composites. Topics include fabrication and testing of composite materials, lamination theory, micromechanics, design analysis and computerized implementation, environmentally induced stresses, and failure theories for composites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Courses in Manufacturing Engineering (MFGE)

**MFGE 2132. Manufacturing Lab 1: Manufacturing Process and Digital Engineering.**

In this lab, students get hands-on experience in reading CAD drawing standards, lab safety, machine tools operation, welding, plastics and composites manufacturing, mechanical testing, and the use of Excel spreadsheets and functions in solving practical problems. Corequisite: MFGE 2332 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 2332. Material Selection and Manufacturing Processes.**

This course provides an overview of material processing, material selection, and process parameter determination. Processes covered include material removal, forming, casting, polymer processing, semiconductor manufacturing, and assembly. Corequisite: ENGR 1304 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 3116. Manufacturing Lab 2: Computer Aided Design and Manufacturing.**

In this lab, student conduct hands-on experiments on digital manufacturing processes including 2D and 3D CNC machining, additive manufacturing, laser cutting, and waterjet cutting. Corequisite: MFGE 3316 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 3316. Computer Aided Design and Manufacturing.**

This course introduces Computer Aided Design and Manufacturing (CAD/CAM), design process, description of wireframe, surface, and solid models, transformation and manipulation of objects, data exchange, process planning, and machine elements. Topics include fundamentals of computer numerical control (CNC) programming for turning and milling processes, fundamentals of Computer Aided Design and Manufacturing (CAD/CAM) systems, and CNC code generation by CAD/CAM software for 2D and 3D operations on CNC machines. Prerequisites: ENGR 1304 and ENGR 2300 and MFGE 2332 with grades of "D" or better. Corequisites: MATH 2471 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4176. Manufacturing Lab 3: Intelligent Robotics and Control.**

In this lab, students conducting hands-on experiments on intelligent robotics, control system and instrumentation including industrial robot applications, PLC control systems, PID control systems, sensors and devices Prerequisite: ENGR 3373 with a grade of "D" or better. Corequisite: MFGE 4376 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4315. Energy and Thermofluids Engineering.**

This course covers core engineering concepts of energy and thermofluids based on fluid mechanics, thermodynamics, and heat transfer. The main topics include properties of pure substances, fluid statics and dynamics, differential analysis of fluid flow, viscous flow in pipes, external flows, open channel flows, mass and energy analysis of control volumes, first and second laws of thermodynamics, steady-state and transient conduction, internal and external forced convection, natural convection, and fundamentals of radiation. Prerequisite: MATH 3323 and PHYS 2326 and PHYS 2126 with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4318. Additive Manufacturing.**

In this course CAD standards, development of additive manufacturing technology, photopolymerization, powder bed fusion, extrusion-based systems, printing processes, sheet lamination processes, beam deposition processes, design for additive manufacturing, and safety considerations in a hands-on approach will be explained. The concept learned from this course will help students manage large systems or complex infrastructures in a more efficient and sustainable way. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4355. Design of Machine Elements.**

This course will cover the general procedures in designing various machine elements. These elements include shafts and flexible elements, springs, welded/riveted/brazed joints, screw fasteners, rolling/sliding contact bearings, gears, cams, and followers. Emphasis will be placed on using standard design practices. Prerequisite: ENGR 3311 or TECH 2351 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4357. Dynamics of Machinery.**

This course will cover kinematics and kinetics of particles; kinematics and kinetics of rigid bodies in two and three dimensions; application of dynamics to the analysis and design of machine and mechanical components; mechanical vibrations; linkages; gear trains; and balancing of machines. Prerequisite: [ENGR 2301 or ENGR 3375] and MATH 3323 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4363. Concurrent Process Engineering.**

Integrated design and development of products and processes; impact of ethical issues on design; the discussion of real-world engineering problems and emerging engineering issues with practicing engineers; preparation of reports; plans or specifications; cost estimation; project management, communication and the fabrication of an engineered product/system. (WI) Prerequisites: ENGR 3311 and MFGE 4365 both with grades of "D" or better. Corequisites: IE 3330 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MFGE 4365. Tool Design.**

Design of single and multi-point cutting tools, jig and fixture design, gage design, and the design of tooling for polymer processing and sheet metal fabrication. Laboratory projects will involve the use of computer aided design and rapid prototyping. Prerequisite: MFGE 3316 or TECH 2310 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**MFGE 4367. Polymer Properties and Processing.**

Structure, physical & mechanical properties, design considerations and processing methods for polymer-based materials are presented. Processing methods include: injection molding, blow molding, thermoforming, compression molding, extrusion, filament winding, lay-up methods, vacuum bag molding and pultrusion. Prerequisite: MFGE 2332 or TECH 4362 or ME 3361 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4376. Control Systems and Instrumentation.**

This course covers the theory of automated control systems and its application to manufacturing systems. Topics include modeling of systems, time and frequency domain feedback control systems, stability analysis, transducer and sensor technology, and digital control. Prerequisite: ENGR 2300 and PHYS 2325 and PHYS 2125 and [EE 3370 or MFGE 2332 or TECH 4362] all with grades of "D" or better. Corequisite: MATH 3323 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4377. Introduction to Polymer Nanocomposites.**

This course introduces reinforced polymer nanocomposites, focusing on materials, manufacturing, characterization, and applications. Topics include primarily nanoclay polymer matrix composites. The course will emphasize challenges in low-cost manufacturing for industrial applications, commercial successes, and impact on current and future materials market. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4378. Introduction to Industrial Robotics.**

This course covers the basic principles and techniques involved in industrial robotics. Emphasis is on industrial robot applications, analysis of robot manipulators, components of industrial robots, robot programming and control. Prerequisite: MFGE 4376 or [ME 3351 and ME 3151] with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4390. Manufacturing Engineering Design I.**

This course is the first of a two course sequence involving integrated design and development of products and processes, impact of ethical issues on design, the discussion of real-world engineering problems and emerging engineering issues with practicing engineers, preparation of reports, plans and specifications, cost estimation, project management, and communication. Prerequisites: ENGR 3311 with grades of "D" or better. Corequisite: IE 3330 and MFGE 4365 both with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**MFGE 4391. Manufacturing Engineering Design II.**

This course is the second of a two course sequence involving implementation of Integrated design and development of products and processes; impact of ethical issues; the discussion of real-world engineering problems and emerging engineering issues with practicing engineers; preparation of reports, plans and specifications; cost estimation; project management; and communication. Prerequisites: IE 3330 and MFGE 4390 both with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**MFGE 4392. Microelectronics Manufacturing I.**

This course provides an overview of integrated circuit fabrication including crystal growth, wafer preparation, epitaxial growth, oxidation, diffusion, ion-implantation, thin film deposition, lithography, etching, device and circuit formation, packaging and testing. The laboratory component involves production and testing of a functional semiconductor device. Prerequisites: CHEM 1341 or CHEM 1335 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**MFGE 4394. Microelectronics Manufacturing II.**

This course covers topics including atomic models for diffusion, oxidation and ion implantation; topics related to thin film processes i.e. CVD, PVD; planarization by chemical-mechanical polishing and rapid thermal processing; and process integration for bipolar and MOS device fabrication. Students will design processes and model them using a simulation. Prerequisite: EE 4392 or MFGE 4392 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4395. Computer Integrated Manufacturing.**

This course is an overview of computer integrated manufacturing in the digital world. Topics include control strategies for advanced manufacturing, automated testing, distributed manufacturing, automated material handling systems, manufacturing databases and their integration, and man/machine interfaces. (WI) Prerequisites: MFGE 3316 and [CS 1428 or CS 1342] with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MFGE 4396. Manufacturing Systems Design.**

Applications of simulation modeling to the design and analysis of manufacturing systems are presented in this course. Topics covered include queuing theory and discrete event simulation methods. Design projects will involve the use of current simulation language for modeling and analysis of manufacturing systems. (WI) Prerequisite: IE 3320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MFGE 4399C. Introduction to Industrial Robotics.**

This course will cover the basic principles and techniques involved in industrial robotics. Emphasis will be placed on industrial robot applications, analysis of robot manipulators, components of industrial robots, robot programming and control. Prerequisite: MFGE 4376 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

## Minimum required: 126 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
3. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course.
4. No minor is required in this Bachelor of Science degree program because of the breadth of the foundation and support coursework.
5. Nine semester credit hours must be writing intensive (WI).
6. If two years of the same, non-English language are taken in high school, then no additional language hours will be required for the



degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.

7. All students in the Civil Engineering degree programs must complete Civil Engineering (CE) course prerequisites with a grade of "C" or higher.
8. For transfer students, 39 semester credit hours in chemistry, engineering, mathematics and physics (or their equivalents) may be transferred from a Texas public institution of higher education for the Civil Engineering Field of Study and be applied to the Bachelor of Science degree with a major in Civil Engineering at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
MATH 2471	Calculus I	4
TCCN: MATH 2413		
MATH 2472	Calculus II	4
TCCN: MATH 2414		
MATH 2473	Integral Calculus with Multivariables and Series	4
TCCN: MATH 2415		
MATH 3323	Differential Equations	3
TCCN: MATH 2320		
CHEM 1335	Engineering Chemistry	3
TCCN: CHEM 1309		
CHEM 1135	Engineering Chemistry Laboratory	1
TCCN: CHEM 1109		
PHYS 2325 & PHYS 2125	Mechanics and Mechanics Laboratory	4
TCCN: PHYS 2325 & PHYS 2125		
PHYS 2326 & PHYS 2126	Electricity and Magnetism and Electricity and Magnetism Laboratory	4
TCCN: PHYS 2326 & PHYS 2126		
ENGR 3311	Mechanics of Materials	3
TCCN: ENGR 2332		
<b>Total Hours</b>		<b>30</b>

## Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
US 1100	1 ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3
MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])	4 ENGR 2301 (TCCN ENGR 2301)	3
ENGR 1304	3 MATH 2473 (Component Area Option Code 090/092 [TCCN MATH 2415])	4

PHYS 2325 & PHYS 2125 (Life and Physical Sciences Component Code 030 [TCCN PHYS 2325 & PHYS 2125])	4 CHEM 1335 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1309 or 1409])	3
CE 1210	2 CHEM 1135 (TCCN CHEM 1109 [taken with TCCN CHEM 1309])	1
CS 1342		3
<b>14</b>		<b>17</b>

### Sophomore

First Semester Hours	Second Semester Hours	
MATH 3323	3 PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3
ENGR 3311	3 MATH 3376	3
PHYS 2326 & PHYS 2126 (Component Area Option Code 090/093 [TCCN PHYS 2326 & PHYS 2126])	4 ENGR 3373	3
Basic Science Elective	4 CE 2340	3
ENG 3303 (Communication Component Code 010)	3 CE 2350	3
CE 3320		3
<b>17</b>		<b>18</b>

### Junior

First Semester Hours	Second Semester Hours	
American History Component Code 060	3 American History Component Code 060	3
ENGR 3380	3 CE 3310	3
IE 3320	3 CE 3331	3
CE 3330	3 CE 3360	3
CE 3350	3 CE 4370	3
<b>15</b>		<b>15</b>

### Senior

First Semester Hours	Second Semester Hours	
CE 4390	3 Creative Arts Component Code 050 [HUMA 1315]	3
ECO 2301 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 1301])	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 CE 4391	3
CE Technical Elective I	3 CE Technical Elective III	3
CE Technical Elective II	3 CE Technical Elective IV	3
<b>15</b>		<b>15</b>

**Total Hours: 126**

Code	Title	Hours
<b>Basic Science Electives</b>		
BIO 1330 & BIO 1130	Functional Biology and Functional Biology Laboratory	4
BIO 1331 & BIO 1131	Organismal Biology and Organismal Biology Laboratory	4
GEOL 1410	Physical Geology	4
<b>CE Technical Electives</b>		
CE 4320	Biological Wastewater Management	3
CE 4321	Hazardous Waste Management	3
CE 4323	Physical and Chemical Treatment of Water	3
CE 4330	Design of Retaining Structures	
CE 4350	Design of Prestressed Concrete Infrastructure	3
CE 4351	Design of Steel Infrastructure	3
CE 4361	Highway Engineering	
CE 4362	Traffic Engineering	3
CE 4371	Hydrology	3
CE 4392	Sustainable Infrastructure	3
ENGR 3315	Engineering Economic Analysis	3
GEO 4356	Urban Infrastructure Management	3
Choose a maximum of 3 hours from the following:		
CE 4100	Civil Engineering Undergraduate Research	
CE 4200	Civil Engineering Undergraduate Research	
CE 4300	Civil Engineering Undergraduate Research	
ENGR 3190	Cooperative Education	
ENGR 3290	Advanced Cooperative Education	

**Minimum required: 130  
semester credit hours**

## Admission Requirements

1. The Bachelor of Science (B.S.) degree with a major in Electrical Engineering requires admission to the university and admission to the program. Information about the program admissions can be found at: <http://mycatalog.txstate.edu/undergraduate/science-engineering/ingram-school/#admissiontext>
2. In order to declare Electrical Engineering as a major, students must meet one of the following prerequisites:
3. ACT Math score of 24 or higher,
4. SAT Math score of 550 (re-centered) or higher, or
5. credit for one of the following Math courses with a grade of "C" or higher:

Code	Title	Hours
MATH 1315	College Algebra	3
MATH 1317	Plane Trigonometry	3
MATH 1319	Mathematics for Business and Economics I	3
MATH 1329	Mathematics for Business and Economics II	3

3. Students who do not meet the above prerequisites may choose Pre-Electrical Engineering as their major. Pre-Electrical Engineering students who complete one of the following Math courses with a grade of "C" or higher may declare Electrical Engineering as their major.

Code	Title	Hours
MATH 1315	College Algebra	3
MATH 1317	Plane Trigonometry	3
MATH 1319	Mathematics for Business and Economics I	3
MATH 1329	Mathematics for Business and Economics II	3

## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. For transfer students, 30-31 semester credit hours may be transferred from a Texas public institution of higher education for the Electrical Engineering Field of Study and be applied to the Bachelor of Science degree with a major in Electrical Engineering at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
MATH 2471	Calculus I	4
TCCN: MATH 2413		
MATH 2472	Calculus II	4
TCCN: MATH 2414		
MATH 2393	Calculus III	3
TCCN: MATH 2315		
MATH 3323	Differential Equations	3
TCCN: MATH 2320		
PHYS 2325 & PHYS 2125	Mechanics and Mechanics Laboratory	4
TCCN: PHYS 2425 or 2325/2125		
PHYS 2326 & PHYS 2126	Electricity and Magnetism and Electricity and Magnetism Laboratory	4
TCCN: PHYS 2426 or 2326/2126		
CS 1428	Foundations of Computer Science I	4
TCCN: COSC 1420 or 1320		
EE 2400	Circuits I	4
TCCN: ENGR 2405 or 2305/2105		
<b>Total Hours</b>		<b>30</b>

3. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
4. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course.
5. Nine semester credit hours must be writing intensive (WI).
6. All students in the Electrical Engineering degree programs must complete Electrical Engineering (EE) course prerequisites with a grade of "C" or higher.
7. If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the

absence of such high school language, two semesters of the same modern language must be taken at the college level.

8. The Electrical Engineering degree programs include all the courses required for an Applied Mathematics minor.

## Course Requirements

Freshman			
First Semester Hours		Second Semester Hours	
CHEM 1335 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1309 or 1409])	3	PHYS 2325 & PHYS 2125 (Life and Physical Sciences Component Code 030 [TCCN PHYS 2325 & PHYS 2125])	4
CHEM 1135 (TCCN CHEM 1109 [taken with TCCN 1309])	1	CS 2308 (TCCN COSC 2336)	3
CS 1428 (TCCN COSC 1420 or 1320)	4	MATH 2472 (Component Area Option Code 090/092 [TCCN MATH 2414])	4
MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])	4	EE 2420	4
US 1100	1	Communication Component Code 010	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3		
16		18	

Sophomore			
First Semester Hours		Second Semester Hours	
MATH 2358 (TCCN MATH 2305)	3	EE 3420	4
EE 2400 (TCCN ENGR 2405 or 2305/2105)	4	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or TCCN 2306])	3
PHYS 2326 & PHYS 2126 (Component Area Option Code 090/093 [TCCN PHYS 2326 & 2126])	4	EE 3400	4
MATH 3323 (TCCN MATH 2320)	3	MATH 2393 (TCCN MATH 2315)	3
		CS 3358	3
14		17	

Junior			
First Semester Hours		Second Semester Hours	
ECO 2301 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 1301 or 2302])	3	EE 3370	3
EE 3350	3	EE 4352	3
CS 3339	3	IE 3320	3
MATH 3377	3	CS 3360 or EE 4331	3

American History Component Code 060	3	POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3
American History Component Code 060	3		

Senior			
First Semester Hours		Second Semester Hours	
EE 4350	3	EE 4391	3
CS 3354	3	EE Electives <sup>1</sup>	8
EE 4372 or CS 4310	3	Creative Arts Component Code 050 [HUMA 1315]	3
EE 4377	3		
EE 4390	3		
POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3		
18		14	

Total Hours: 130

<sup>1</sup> A minimum of eight (8) hours of advanced Electrical Engineering electives chosen from the list below are required.

## Advanced Electrical Engineering Electives

Code	Title	Hours
CS 3398	Software Engineering	3
CS 4332	Introduction to Database Systems	3
CS 4388	Computer Graphics	3
EE 3340	Electromagnetics	3
EE 4180	Electric Machines Lab	1
EE 4321	Digital Systems Design Using HDL	3
EE 4323	Digital Image Processing	3
EE 4332	Introduction to Computer-Aided Engineering Simulation on HPC Systems	3
EE 4351	Fundamentals of Electroceramics	3
EE 4353	Fundamentals of Advanced Semiconductor Technology	3
EE 4354	Flexible Electronics	3
EE 4356	Power Electronics	3
EE 4358	Introduction to Microelectromechanical Systems	3
EE 4360	Linear Control Systems	3
EE 4375	Building a Smart Grid Architecture	3
EE 4380	Electric Machines	3
EE 4381	Sustainable Energy & Storage	3
EE 4382	Advanced Power Systems	3
ENGR 4395	Independent Studies in Engineering	3
EE 4357	Introduction to Power Systems	3
EE 4359	Advanced Electronic Materials and Devices	3
Choose a maximum of 3 hours from the following:		

ENGR 3190	Cooperative Education
ENGR 3290	Advanced Cooperative Education

## Minimum required: 131 semester credit hours

### Admission Requirements

1. The Bachelor of Science (B.S.) degree with a major in Electrical Engineering requires admission to the university and admission to the program. Information about the program admissions can be found at: <http://mycatalog.txstate.edu/undergraduate/science-engineering/ingram-school/#admissionstext>
2. In order to declare Electrical Engineering as a major, students must meet one of the following prerequisites:
  - ACT Math score of 24 or higher,
  - SAT Math score of 550 (re-centered) or higher, or
  - credit for one of the following Math courses with a grade of "C" or higher:

Code	Title	Hours
MATH 1315	College Algebra	3
MATH 1317	Plane Trigonometry	3
MATH 1319	Mathematics for Business and Economics I	3
MATH 1329	Mathematics for Business and Economics II	3

3. Students who do not meet the above prerequisites may choose Pre-Electrical Engineering as their major. Pre-Electrical Engineering students who complete one of the following Math courses with a grade of "C" or higher may declare Electrical Engineering as their major:

Code	Title	Hours
MATH 1315	College Algebra	3
MATH 1317	Plane Trigonometry	3
MATH 1319	Mathematics for Business and Economics I	3
MATH 1329	Mathematics for Business and Economics II	3

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. For transfer students, 30-31 semester credit hours may be transferred from a Texas public institution of higher education for the Electrical Engineering Field of Study and be applied to the Bachelor of Science degree with a major in Electrical Engineering at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
MATH 2471	Calculus I	4
TCCN: MATH 2413		
MATH 2472	Calculus II	4

TCCN: MATH 2414		
MATH 2393	Calculus III	3
TCCN: MATH 2315		
MATH 3323	Differential Equations	3
TCCN: MATH 2320		
PHYS 2325	Mechanics	4
& PHYS 2125	and Mechanics Laboratory	
TCCN: PHYS 2425 or 2325/2125		
PHYS 2326	Electricity and Magnetism	4
& PHYS 2126	and Electricity and Magnetism Laboratory	
TCCN: PHYS 2426 or 2326/2126		
CS 1428	Foundations of Computer Science I	4
TCCN: COSC 1420 or 1320		
EE 2400	Circuits I	4
TCCN: ENGR 2405 or 2305/2105		
<b>Total Hours</b>		<b>30</b>

3. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
4. Nine semester credit hours must be writing intensive (WI).
5. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course.
6. All students in the Electrical Engineering degree programs must complete Electrical Engineering (EE) course prerequisites with a grade of "C" or higher.
7. If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
8. The Electrical Engineering degree programs include all the courses required for an Applied Mathematics minor.

### Course Requirements

	First Hours Semester	Second Hours Semester	Summer Hours	Freshman
CHEM 1335 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1309 or 1409])	3	PHYS 2325 & PHYS 2125 (Life and Physical Sciences Component Code 030 [TCCN PHYS 2325 & 2125])	4 American History Component Code 060	3
CHEM 1135 (TCCN CHEM 1109 [taken with TCCN 1309])	1	MATH 2472 (Component Area Option Code 090/092 [TCCN MATH 2414])	4	

MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])	4 American History Component Code 060	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component code 040 [TCCN PHIL 1301 or PHIL 2306])	3 Communica Component Code 010	3
US 1100	1	
ENG 1310 (Communica Component Code 010 [TCCN ENGL 1301])	3	
	15	14

**Sophomore**

First Hours Semester	Second Hours Semester	Summer Hours	
EE 2400 (TCCN: ENGR 2405 or 2305/2105)	4 EE 2420	4 POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3
MATH 2393 (TCCN MATH 2315)	3 ENGR 2301 (TCCN ENGR 2301)	3	
MATH 3323 (TCCN MATH 2320)	3 MATH 3377	3	
PHYS 2326 & PHYS 212 (Component Area Option Code 090/093 [TCCN PHYS 2326 & PHYS 2126])	4 PHYS 2335 & PHYS 213	4	

CS 1428 (TCCN COSC 1437)	4 ECO 2301 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 1301 or ECON 2302])	3
18	17	3
<b>Junior</b>		

First Hours Semester	Second Hours Semester	
EE 3400	4 EE 3340	3
EE 3420	4 EE 3350	3
EE 4392	3 EE 3355	3
IE 3320	3 EE 3370	3
POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3 Creative Arts Component Code 050 [HUMA 1315]	3
17	15	

**Senior**

First Hours Semester	Second Hours Semester	
EE 4350	3 EE 4355 or 4394	3
EE 4352	3 EE 4391	3
EE 4390	3 EE Electives <sup>1</sup>	6
ENGR 3315	3	
EE Elective <sup>1</sup>	5	
17	12	

**Total Hours: 131**

<sup>1</sup> A minimum of eleven (11) hours of advanced Electrical Engineering electives chosen from the list below are required.

**Advanced Electrical Engineering Electives**

Code	Title	Hours
EE 3326	Numerical and Scientific Data Analysis Using Python	3
EE 4180	Electric Machines Lab	1
EE 4321	Digital Systems Design Using HDL	3
EE 4323	Digital Image Processing	3
EE 4351	Fundamentals of Electroceramics	3
EE 4353	Fundamentals of Advanced Semiconductor Technology	3
EE 4354	Flexible Electronics	3



EE 4355	Analog and Mixed Signal Design	3
EE 4356	Power Electronics	3
EE 4360	Linear Control Systems	3
EE 4375	Building a Smart Grid Architecture	3
EE 4377	Introduction to Digital Signal Processing	3
EE 4380	Electric Machines	3
EE 4381	Sustainable Energy & Storage	3
EE 4382	Advanced Power Systems	3
ENGR 4395	Independent Studies in Engineering	3
EE 4357	Introduction to Power Systems	3
EE 4359	Advanced Electronic Materials and Devices	3

Choose a maximum of 3 hours from the following:

ENGR 3190	Cooperative Education
ENGR 3290	Advanced Cooperative Education

## Minimum required: 131 semester credit hours

### Admission Requirements

- The Bachelor of Science (B.S.) degree with a major in Electrical Engineering requires admission to the university and admission to the program. Information about the program admissions can be found at: <http://mycatalog.txstate.edu/undergraduate/science-engineering/ingram-school/#admissionstext>
- In order to declare Electrical Engineering as a major, students must meet one of the following prerequisites:
  - ACT Math score of 24 or higher,
  - SAT Math score of 550 (re-centered) or higher, or
  - credit for one of the following Math courses with a grade of "C" or higher:

Code	Title	Hours
MATH 1315	College Algebra	3
MATH 1317	Plane Trigonometry	3
MATH 1319	Mathematics for Business and Economics I	3
MATH 1329	Mathematics for Business and Economics II	3

3. Students who do not meet the above prerequisites may choose Pre-Electrical Engineering as their major. Pre-Electrical Engineering students who complete one of the following Math courses with a grade of "C" or higher may declare Electrical Engineering as their major:

Code	Title	Hours
MATH 1315	College Algebra	3
MATH 1317	Plane Trigonometry	3
MATH 1319	Mathematics for Business and Economics I	3
MATH 1329	Mathematics for Business and Economics II	3

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

- For transfer students, 30-31 semester credit hours may be transferred from a Texas public institution of higher education for the Electrical Engineering Field of Study and be applied to the Bachelor of Science degree with a major in Electrical Engineering at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
MATH 2471	Calculus I	4
TCCN: MATH 2413		
MATH 2472	Calculus II	4
TCCN: MATH 2414		
MATH 2393	Calculus III	3
TCCN: MATH 2315		
MATH 3323	Differential Equations	3
TCCN: MATH 2320		
PHYS 2325	Mechanics	4
& PHYS 2125	and Mechanics Laboratory	
TCCN: PHYS 2425 or 2325/2125		
PHYS 2326	Electricity and Magnetism	4
& PHYS 2126	and Electricity and Magnetism Laboratory	
TCCN: PHYS 2426 or 2326/2126		
CS 1428	Foundations of Computer Science I	4
TCCN: COSC 1420 or 1320		
EE 2400	Circuits I	4
TCCN: ENGR 2405 or 2305/2105		
<b>Total Hours</b>		<b>30</b>

- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine semester credit hours must be writing-intensive (WI).
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course.
- All students in the Electrical Engineering degree programs must complete Electrical Engineering (EE) course prerequisites with a grade of "C" or higher.
- If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
- The Electrical Engineering degree programs include all the courses required for an Applied Mathematics minor.

## Course Requirements

Course Requirements				Sophomore			
Freshman			First Hours	Second Hours	Summer Hours		
First Hours	Second Hours	Summer Hours	Semester	Semester			
CHEM 1335 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1309 or 1409])	3 PHYS 2325 & PHYS 2125 (Life and Physical Sciences Component Code 030 [TCCN PHYS 2325 & PHYS 2125])	4 American History Component Code 060	3	EE 2400 (TCCN ENGR 2405 or ENGR 2305/2105)	4 ECO 2301 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 1301 or ECON 2302])	3 POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3
CHEM 1135 (TCCN CHEM 1109 [taken with TCCN 1309])	1 MATH 2472 (Component Area Option Code 090/092 [TCCN MATH 2414])	4		MATH 3323 (TCCN MATH 2320)	3 EE 2420	4	
MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])	4 American History Component Code 060	3		MATH 2393 (TCCN MATH 2315)	3 ENGR 2301 (TCCN ENGR 2301)	3	
US 1100	1 Communicative Component Code 010	3		PHYS 2326 & PHYS 212 (Component Area Option Code 090/093 [TCCN PHYS 2326 & PHYS 2126])	4 MATH 3377	3	
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or TCCN PHIL 2306])	3			CS 1428 (TCCN COSC 1420 or 1320)	4 PHYS 2335 & PHYS 2135	4	
ENG 1310 (Communicative Component Code 010 [TCCN ENGL 1301])	3						
15	14	3		18	17	3	
						Junior	
			First Hours	Second Hours			
			Semester	Semester			
			EE 3400	4 EE 3340	3		
			EE 3420	4 EE 3350	3		
			ENGR 3315	3 EE 3355	3		
			IE 3320	3 EE 3370	3		
			POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3 Creative Arts Component Code 050 [HUMA 1315]	3		
			17	15			

**Senior**

First Hours Semester	Second Hours Semester	
EE 4350	3 EE 4372	3
EE 4370	3 EE 4391	3
EE 4323 or 4377	3 EE Electives <sup>1</sup>	6
EE 4390	3	
EE Elective <sup>1</sup>	5	
<b>17</b>	<b>12</b>	

**Total Hours: 131**

<sup>1</sup> A minimum of eleven (11) hours of advanced Electrical Engineering electives chosen from the list below are required.

**Advanced Electrical Engineering Electives**

Code	Title	Hours
EE 3326	Numerical and Scientific Data Analysis Using Python	3
EE 4180	Electric Machines Lab	1
EE 4321	Digital Systems Design Using HDL	3
EE 4351	Fundamentals of Electroceramics	3
EE 4353	Fundamentals of Advanced Semiconductor Technology	3
EE 4354	Flexible Electronics	3
EE 4355	Analog and Mixed Signal Design	3
EE 4356	Power Electronics	3
EE 4358	Introduction to Microelectromechanical Systems	3
EE 4360	Linear Control Systems	3
EE 4374	Introduction to Wireless Communication	3
EE 4375	Building a Smart Grid Architecture	3
EE 4376	Introduction to Telecommunications	3
EE 4378	Data Compression and Error Control Coding	3
EE 4380	Electric Machines	3
EE 4381	Sustainable Energy & Storage	3
EE 4382	Advanced Power Systems	3
ENGR 4395	Independent Studies in Engineering	3
EE 4357	Introduction to Power Systems	3
EE 4359	Advanced Electronic Materials and Devices	3

Choose a maximum of 3 hours from the following:

ENGR 3190	Cooperative Education
ENGR 3290	Advanced Cooperative Education

**Minimum required: 129  
semester credit hours**

**Admission Requirements**

- The Bachelor of Science (B.S.) degree with a major in Industrial Engineering requires admission to the university.
- In order to declare Industrial Engineering as a major, students must meet one of the following prerequisites:

- ACT Math score of 24 or higher,
- SAT Math score of 550 or higher, or
- credit for one of the following math courses with a grade of "C" or higher:

Code	Title	Hours
MATH 1315	College Algebra	3
MATH 1317	Plane Trigonometry	3
MATH 1319	Mathematics for Business and Economics I	3
MATH 1329	Mathematics for Business and Economics II	3

**General Requirements**

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Nine semester credit hours must be writing intensive (WI).
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course.
- If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
- The Industrial Engineering major includes all the courses required for an Applied Mathematics minor.

**Course Requirements**

		<b>Freshman</b>	
		First Semester Hours	Second Semester Hours
CHEM 1335 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1309 or 1409])	3	PHYS 2325 & PHYS 2125 (Life and Physical Sciences Component Code 030 [TCCN PHYS 2125 & PHYS 2325])	4
CHEM 1135 (TCCN CHEM 1109 [taken with TCCN CHEM 1309])	1	IE 1310	3
MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])	4	MATH 2472 (Component Area Option Code 090/092 [TCCN MATH 2414])	4
ENGR 1304 (TCCN ENGR 1304)	3	ENG 3303 (Communication Component Code 010)	3
US 1100	1	American History Component Code 060	3
ENG 1310, 1320, or 1321 (Communication Component Code 010 [TCCN ENGL 1301, ENG 1302])	3		
		<b>15</b>	<b>17</b>

		Sophomore
First Semester Hours	Second Semester Hours	
PHYS 2326 & PHYS 2126 (Life and Physical Sciences Component Code 030 [TCCN PHYS 2326 & PHYS 2126])	4 CS 1342	3
MATH 3377	3 MATH 3323	3
MFGE 2332	3 ENGR 2301 (TCCN ENGR 2301)	3
POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3 ECO 2301 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 1301])	3
American History Component Code 060	3 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
	Creative Arts Component Code 050 [HUMA 1315]	3
<b>16</b>	<b>18</b>	
		Junior
First Semester Hours	Second Semester Hours	
ENGR 3311	3 MATH 2393 (TCCN MATH 2315)	3
ENGR 3315	3 IE 3330	3
ENGR 3373	3 IE 3340	3
IE 3320	3 IE 3360	3
PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or PHIL 2306])	3 IE Elective <sup>1</sup>	3
<b>15</b>	<b>15</b>	
		Senior
First Semester Hours	Second Semester Hours	
IE 4310	3 IE 4320	3
IE 4355	3 IE 4350	3
IE 4392	3 IE 4393	3
IE 4370	3 MFGE 4396	3
MATH/Science Elective <sup>1</sup>	3 IE Elective <sup>1</sup>	3
IE Elective <sup>1</sup>	3	
<b>18</b>	<b>15</b>	

**Total Hours: 129**

<sup>1</sup> Three (3) hours in Math/Science electives and a minimum of nine (9) hours in Advanced Industrial Engineering electives (AIEE) chosen from the two tables below.

### Math/Science Electives

Code	Title	Hours
MATH 2358	Discrete Mathematics I	3
MATH 3330	Introduction to Advanced Mathematics	3
PHYS 2335 & PHYS 2135	Waves and Heat and Waves and Heat Laboratory	4

PHYS 3315	Thermodynamics	3
HON 3392V	Nature of Man: Elementary Number Theory	3

### Advanced Industrial Engineering Electives (AIEE)

Code	Title	Hours
EE 3326	Numerical and Scientific Data Analysis Using Python	3
EE 4331	Introduction to Machine Learning for Engineering Applications	3
EE 4357	Introduction to Power Systems	3
EE 4392	Microelectronics Manufacturing I	3
ENGR 4395	Independent Studies in Engineering	3
IE 3305	Introduction to Data Analysis	3
IE 4330	Reliability Engineering	3
IE 4335	Lean Six Sigma Methodologies	3
IE 4340	Non-Linear Optimization Techniques	3
IE 4342	Advanced Linear and Integer Programming	3
IE 4360	Human Factors Design	3
IE 4381	Introduction to Systems Engineering	3
IE 4399D	Heuristic Optimization Techniques	3
IE 4399F	Introduction to Data-Intensive Analysis and Simulation	3
IE 4399G	Special Topics in Project Management	3
MFGE 4318	Additive Manufacturing	3
MFGE 4367	Polymer Properties and Processing	3
<b>Students may choose up to 3 hours from the following:</b>		
ENGR 3190	Cooperative Education	1
ENGR 3290	Advanced Cooperative Education	2
ENGR 4299	Engineering Undergraduate Research	2

## Minimum required: 126 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course.
- Nine semester credit hours must be writing intensive (WI).
- If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
- The Manufacturing Engineering degree programs include all the courses required for an Applied Mathematics minor.

Course Requirements

			Sophomore			
			Freshman	First Hours Semester	Second Hours Semester	Summer Hours
First Hours Semester	Second Hours Semester					
MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])	4 ENGR 2300	3		MFGE 2332	3 CS 1342	3 MATH 3377
				MATH 3323	3 IE 3330	3 PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or PHIL 2306])
ENGR 1304	3 MATH 2472 (Component Area Option Code 090/092)	4		IE 3320	3 ENGR 2301	3
US 1100	1 Communication Component Code 010	3		MFGE 2132	1 ECO 2301 (Social and Behavioral Sciences Component Code 080)	3
ENG 1310 (Communic Component Code 010 [TCCN ENGL 1301])	3 PHYS 2325 & PHYS 212 (Life and Physical Sciences Component Code 030 TCCN PHYS 2325 & PHYS 2125)	4		PHYS 2326	4 American History Component Code 060	3
				& PHYS 2126 (Component Area Option Code 090/093)		
				American History Component Code 060	3	
Choose 4 hours from the following:				17	15	6
Life and Physical Sciences Component Code 030	4					Junior
CHEM 1335				First Hours Semester	Second Hours Semester	
				MFGE 3316	3 MFGE 4365	3
& CHEM 1135 (TCCN CHEM 1309 & CHEM 1109)				ENGR 3311	3 MFGE 4396	3
CHEM 13				ENGR 3315	3 PHYS 3315	3
				ENGR 3373	3 Creative Arts Component Code 050 [HUMA 1315]	3
& CHEM (TCCN: CHEM 1311 & CHEM 1111)				MFGE 3116	1	
				POSI 2310 (Governmen Political Science Component Code 070 [TCCN GOVT 2306])	3	
15	14			16	12	



Senior

First Hours Semester	Second Hours Semester	
MFGE 4357	3 MFGE 4355	3
MFGE 4390	3 MFGE 4376	3
MFGE 4395	3 MFGE 4391	3
IE 4355	3 MFGE 4176	1
MFGE Electives <sup>1</sup>	3 MFGE Electives <sup>1</sup>	3
	POSI 2320 (Government Political Science Component Code 070 [TCCN GOVT 2305])	3
<b>15</b>	<b>16</b>	

**Total Hours: 126**

<sup>1</sup> A minimum of six (6) hours of advanced Manufacturing Engineering electives chosen from the list below are required.

### Advanced Manufacturing Engineering Electives

Code	Title	Hours
EE 4392	Microelectronics Manufacturing I	3
EE 4394	Microelectronics Manufacturing II	3
ENGR 4395	Independent Studies in Engineering	3
MFGE 4318	Additive Manufacturing	3
MFGE 4367	Polymer Properties and Processing	3
MFGE 4377	Introduction to Polymer Nanocomposites	3
MFGE 4378	Introduction to Industrial Robotics	3
TECH 4330	Foundry & Heat Treatment	3
MFGE 4315	Energy and Thermofluids Engineering	3

No more than 3 hours of credit may be applied to the student's major electives from any combination of the following courses:

ENGR 3190	Cooperative Education
ENGR 3290	Advanced Cooperative Education
ENGR 4299	Engineering Undergraduate Research

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www.txstate.edu/technology (<http://www.txstate.edu/technology/>)

The mission of the Department of Engineering Technology is to prepare students for technical/professional careers in industry and education. The mission is accomplished through dedicated faculty offering programs in specialized areas with a formal, technical focus. Upon graduation, students are prepared to assume positions of professional responsibility in the areas of manufacturing, construction, concrete industry management, computer aided technologies, electronics, and education. Sixteen well-equipped technical laboratories serve to educate students in the techniques and processes used by contemporary world class industries.

## The Bachelor of Science major in Concrete Industry Management

The Bachelor of Science (B.S.) degree with a major in Concrete Industry Management (CIM) prepares students for professional careers in the concrete construction industry. The concrete construction industry requires graduates who are knowledgeable in concrete material technology and techniques, able to manage people and systems to promote products and technologies related to the concrete industry, and grounded in basic construction management principles. CIM students complete coursework related to concrete material science, concrete technology, concrete products, methods of concrete construction, and a required business administration minor. CIM graduates find a wide array of opportunities in the \$1 trillion concrete industry worldwide including positions in project management, estimating, sales, plant operations, technical services, logistics, quality control and quality assurance, environmental and regulatory, and safety professions. The Concrete Industry Management program at Texas State University is accredited by the Association of Technology, Management, and Applied Engineering (ATMAE).

## The Bachelor of Science major in Construction Science and Management

The Bachelor of Science (B.S.) degree with a major in Construction Science and Management (CSM) prepares students to enter professional careers in the construction industry. To meet the growing demands of industry, students may choose a residential or a commercial construction concentration. Many graduates become construction project managers, estimators, schedulers, field engineers, virtual design and construction (VDC) specialists, general and/or subcontractors, code inspectors, material suppliers and technical sales representatives. Students learn the technical aspects of how construction projects are built through classes in residential, commercial, and heavy civil/highway construction. They also learn how to manage construction through the required business administration minor and the major courses in estimating, scheduling, project management and construction finance. Career opportunities are many in this industry, with total national construction spending over \$1.98 trillion in 2023. Students entering this degree need to successfully complete the Pre-Construction Curriculum before registering for advanced Construction Science and Management courses. Also, an internship is required, where students spend 400 hours over 10 weeks working in the construction industry. Students interested in pursuing the Construction Science and Management degree program can receive more information on the major by contacting a CSM Faculty Advisor. The CSM degree program is accredited by the American Council for Construction Education (ACCE).

## The Bachelor of Science major in Engineering Technology

The Bachelor of Science (B.S.) degree with a major in Engineering Technology provides students with a comprehensive technical foundation for engaging in engineering projects. This program covers various aspects including planning and design of production processes and automated systems, creation of innovative products and production facilities, development of tooling solutions, establishment of quality assurance and continuous improvement procedures, implementation of test and maintenance plans, development of safety programs, and establishment of work methods and lean systems. Students can specialize in Electrical Engineering Technology, Civil Engineering

Technology, Environmental Engineering Technology, Manufacturing Engineering Technology, and Mechanical Engineering Technology. An internship is required, where students spend 10 weeks and 400 hours working in industry. A minor is not required for the B.S. in Engineering Technology degree. This degree program is accredited by the Engineering Technology Accreditation Commission of ABET, [www.abet.org](http://www.abet.org) (<https://www.abet.org/>).

## Admissions Requirements

### Construction Science and Management

1. Construction Science and Management majors must complete 30 semester credit hours of Pre-Construction coursework, which will consist of:

Code	Title	Hours
MATH 2328	Elementary Statistics	3
MATH 2417	Pre-Calculus Mathematics	4
PHYS 1315 & PHYS 1115	General Physics I and General Physics I Laboratory	4
CHEM 1335 & CHEM 1141	Engineering Chemistry and General Chemistry Laboratory I	4
PHYS 1325 & PHYS 1125	General Physics II and General Physics II Laboratory	4
CSM 1260	Introduction to the Construction and Concrete Industry	2
CSM 2313	Architecture Design I - Construction Documents	3
CSM 2342	Construction Materials and Processes	3
TECH 2351	Statics and Strength of Materials	3
<b>Total Hours</b>		<b>30</b>

2. When a student completes their Pre-Construction coursework, with the required GPA, or is currently enrolled in their final Pre-Construction course(s), the student can apply to become a "Full Major" in the Construction Science and Management program.

3. After completing the Pre-Construction coursework, students will be allowed to enter the Bachelor of Science major in Construction Science and Management, and will be allowed to enroll in the following Construction classes:

Code	Title	Hours
CSM 2160	Introduction to Construction Surveying and Site Layout	1
CSM 2360	Residential I: Construction Practices	3
CSM 3360	Structural Analysis	3
CSM 3361	Commercial Building Construction Systems	3
CSM 3363	Heavy, Civil and Highway Construction Systems	3
CSM 3366	Soils and Foundations	3
CSM 3367	Mechanical, Electrical and Plumbing Systems	3
CSM 4360	Senior Construction Management Capstone	3
CSM 4361	Construction Estimating	3
CSM 4364	Construction Project Management and Scheduling	3
CSM 4368	Sustainable & Lean Construction Practices	3
CSM 4369	Construction Contracts, Risks, and Ethics	3
<b>Total Hours</b>		<b>34</b>

## Bachelor of Science (B.S.)

- Major in Concrete Industry Management (p. 751)
- Major in Construction Science and Management (p. 752)
- Major in Construction Science and Management (Residential Construction Concentration) (p. 754)
- Major in Engineering Technology (Civil Engineering Technology Concentration) (p. 756)
- Major in Engineering Technology (Electrical Engineering Technology Concentration) (p. 758)
- Major in Engineering Technology (Environmental Engineering Technology Concentration) (p. 759)
- Major in Engineering Technology (Manufacturing Engineering Technology Concentration) (p. 760)
- Major in Engineering Technology (Mechanical Engineering Technology Concentration) (p. 762)

## Minor

- Engineering (p. 763) Technology (p. 763)

**Subjects in this department include: CIM (p. 743), CSM (p. 745), TECH (p. 747).**

## Courses in Concrete Industry Management (CIM)

### CIM 3330. Concrete Construction Methods.

This course covers forming, shoring, placing and reinforcing operations. Transporting, placing, consolidating, finishing, jointing and curing concrete for cast-in-place foundations, pavements, slabs on ground, structural frames, and other structural members are studied. Other topics include waterproofing concrete foundations and erecting precast concrete members. Corequisite: CIM 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

### CIM 3340. Understanding the Concrete Construction System.

This course provides a detailed look at how the concrete construction industry works. The course includes a review of model building codes, building officials and their functions, concrete industry codes and standards, concrete construction processes, quality assurance systems, contract documents, estimating, construction scheduling and concrete construction markets. Prerequisite: CIM 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 3350. Precast and Prestressed Management.**

This course provides students with an opportunity to further develop their technical and laboratory knowledge in precast/prestressed concrete topics to include common shapes and uses, materials and methods, mix designs and batching in precast/prestressed, reinforcing and formwork in precast/prestressed, plant management, layout and processes, logistics and supply chain, quality control, technical sales, and cost estimating.

Prerequisite: CIM 3420 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 3366. Applications of Concrete in Construction.**

This course is a detailed study of the many uses of concrete in the construction of buildings, pavements and other facilities. Emphasis will be placed on the advantages, disadvantages, and unique problems faced by materials suppliers, contractors and design professionals when concrete is chosen for specific applications. Prerequisite: CIM 3330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 3420. Fundamentals of Concrete: Properties and Testing.**

This course examines effects of concrete-making materials (aggregates, cements, admixtures, etc.) on the properties of fresh and hardened concrete. Concrete mixture proportioning calculations and statistical analysis of strength tests are also studied. Prerequisite: MATH 2328 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CIM 4290. Capstone.**

This course will provide students the opportunity to work individually to develop a business plan with increased emphasis on the technical and financial aspects of the concrete industry, building upon previous coursework. Students then work in groups, preparing a proposal based on a real-world construction or concrete project. The final presentation will be made to an industry panel. A portion of this course includes guest speakers from the concrete industry. Prerequisite: CIM 4330 and CSM 3368 both with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 4299. Capstone II.**

This course is a continuation of CIM 4398; students continue developing a business plan with increased emphasis on the technical and financial aspects of the concrete industry, building upon previous coursework. The final presentation will be made to an industry panel. A portion of the course is a seminar with guest speakers from the concrete industry. Prerequisite: CIM 4398 with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 4310. Senior Concrete Lab.**

This course provides students with an opportunity to further develop their technical and laboratory knowledge and pursue a project of individual interest. A formal report/presentation will be required at the conclusion of the course. Prerequisites: CIM 3366 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 6 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 4330. Management of Concrete Products – Ordering and Scheduling.**

This course is designed to provide the student with a basic understanding of managing the ordering and delivery process common to all concrete products. Emphasis will be in planning, organizing and controlling at both the first-line supervisory and managerial levels.

Prerequisite: CIM 3340 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 4340. Concrete Problems: Diagnosis, Prevention and Dispute Resolution.**

Course involves diagnosing/preventing problems related to concrete production, testing, construction and performance. Students learn to identify causes of fresh and hardened concrete problems, i.e. fast and slow setting, air content variations, low strength, cracking and scaling. Pre-job conferences and dispute resolution methods are examined.

Prerequisite: CIM 3366 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 4350. Advanced Concrete Technology.**

This course provides students with an opportunity to further develop their technical and laboratory knowledge in advanced concrete properties, test methods and mix designs. Topics include high-performance concrete (HPC), self-consolidating concrete (SCC), roller compacted concrete (RCC), mass concrete, concrete repair, advanced fiber reinforcing, and chemical admixtures. Prerequisite: CIM 3420 with a grade of a "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 4398. Capstone.**

This course covers the business aspects of the concrete industry with appropriate application to the student's career interests and builds upon the technical and practical industry components learned in previous courses. The final project will be presented to an industry committee. (WI) Prerequisites: ACC 2362 with a grade of "D" or better and CIM 4330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Construction Science and Management (CSM)

**CSM 1260. Introduction to the Construction and Concrete Industry.**

This is an introductory course for Construction and Concrete Industry Management (CIM) majors. Residential, commercial, heavy, civil, and highway construction is explored including the concrete industry. The role of the contractor, architect/engineer, and owner are covered including contracts, careers, sustainability, and economic importance of the construction industry.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 1360. Introduction to the Construction Industry.**

This is an introductory course to the Construction and Concrete Industry. Major construction sectors are explored including: Residential; Building Construction; Heavy, Civil and Highway; and Industrial and Offshore, along with common construction materials used in the industry. The role of the Construction Owner, Architect/Engineer and Constructor are covered in addition to Contracts, Construction Documents, sustainability, and the economic and historical importance of the Construction Industry. Degree requirements, course sequencing and Construction Careers are also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 2160. Introduction to Construction Surveying and Site Layout.**

Common construction surveying and site layout techniques are studied using both optical levels and total stations. Benchmarks, building lines, property lines, differential and profiling are discussed in lecture with applied exercises performed in the laboratory.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 2262. Construction Lab.**

This lab provides hands-on experience for students to apply technical construction processes, equipment safety, and teamwork by building components using industry-standard materials and equipment. Practical application of techniques used in residential and commercial construction will be performed, as well as the use of innovative technology associated with the Virtual Design & Construction (VDC) movement in the industry.

**2 Credit Hours. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 2313. Architecture Design I - Construction Documents.**

This course is an introduction to the language and process of producing architectural construction documents in residential projects utilizing computers and CAD software. Site plans, floor plans, sections, elevations, and details are drawn individually and as a team as orthographic projection theory and its importance in resolving complex building geometry are covered.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 2342. Construction Materials and Processes.**

This course will introduce students to various types of construction materials including ceramics, ferrous, non-ferrous, and organic materials used in construction. Their properties, working characteristics and processes used to manufacture and assemble these materials are studied. Laboratory activities are used to reinforce lecture material. Prerequisites: [PHYS 1115 and PHYS 1315] or [PHYS 2325 and PHYS 2125] with grades of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 2360. Residential I: Construction Practices.**

This course deals with the process of constructing a home on an improved lot, including residential plan and specification interpretation, cost centers, profit and overhead, construction phases, subcontractor sequencing, materials, estimating, scheduling, building codes, permits, and mechanical, electrical and plumbing home requirements.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 2361. Construction Surveying.**

This course covers practical construction surveying and site layout applications for Construction Management. Topics covered include surveying terminology, the use of surveying equipment, grade, distance, and angular measurements, construction site layout and project control, surveying documentation with fieldwork conducted in the laboratory portion of the course. It also covers current technology in surveying equipment and processes. Prerequisite: MATH 2321 or MATH 2417 or MATH 2471 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 3360. Structural Analysis.**

This course is a structural engineering fundamentals class to include design loads, reactions, force systems, functions of a structure, and both the analysis and design of determinate structures by classical and modern techniques. Prerequisite: TECH 2351 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 3361. Commercial Building Construction Systems.**

This is a commercial building construction systems class that deals with soils, site work, heavy foundations, steel, reinforced concrete and pre-cast structures along with common assemblies. Commercial MEP's are studied along with CSI master format, as-built and shop drawings, schedule of values, AIA documents and appropriate building codes. Corequisite: CSM 2360 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 3363. Heavy, Civil and Highway Construction Systems.**

Selection, acquisition and capabilities of heavy construction equipment are presented. Applications of economics to performance characteristics and production of equipment is discussed. Sector-specific construction management methods are covered, including unit price estimating, equipment fleet design, repetitive scheduling and major components of highways, bridges and engineered facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 3366. Soils and Foundations.**

The properties of subsurface materials and the principles of subsurface construction are studied. Topics include soil classification and testing, soil mechanics, and foundation systems, including site layout, excavation, caissons, piles, slurry wall, slab, and spread footings. Prerequisite: TECH 2351 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 3367. Mechanical, Electrical and Plumbing Systems.**

This course covers typical Mechanical, Electrical and Plumbing (MEPs) systems found in residential and commercial construction along with design and installation methods used to conserve both energy and water in new and remodeled structures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 3368. Construction Finance.**

This course provides an introduction to financial analysis and financing of construction-related companies and projects. Topics include analysis of financial statements, contractor payment methods, construction loans, and project cost controls. Prerequisite: ACC 2301 or ACC 2362 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 3369. Residential II: Construction Business Practices.**

This course will prepare students in the business practices used by residential land developers and home-builders. Technical skills are applied to the work process inside conventional home-building departments and how those collaborating departments and co-workers operate to become an efficient and sustainable new home-building company. Prerequisite: CSM 2360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 4313. Architectural Design II - Technology in Construction.**

In this course students create individual and group commercial projects which include plans, elevations, sections, details, and 3D drawings utilizing 3D building information modeling (BIM) and other current technologies used in the industry. Structural, mechanical, electrical, plumbing, accessibility, and sustainable building issues are discussed. Prerequisite: CSM 2313 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 4360. Senior Construction Management Capstone.**

In this course students work in groups, preparing a bid proposal based on a real-life construction project involving contract negotiations, construction documents interpretation, estimating, bidding, scheduling, safety, and quality control plans. Emphasis is on developing leadership, team building, and written and oral communication skills. Students will be prepared to sit for the AIC Level 1 Examination after this course. Prerequisites: CSM 4313 and CSM 4361 and CSM 4364 and CSM 4369 and TECH 2190 all with grades of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter



**CSM 4361. Construction Estimating.**

This course covers the fundamentals of construction estimating, including feasibility and constructability, quantities, units, labor, equipment productivity, and different types of estimates such as preliminary, engineering, range, and contractor's detail bids. Plans and specifications are used along with estimating software to develop estimates commonly used in the construction industry. Prerequisite: CSM 3361 or CIM 3340 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 4364. Construction Project Management and Scheduling.**

This course covers the concepts of construction management beginning with contract documents through the effective management of manpower, machines, material, and money necessary to complete construction projects on time and within budget. Gantt Charts and PERT/CPM schedules are developed using contemporary software. Prerequisite: CSM 2360 with a grade of "C" or better. Corequisite: CSM 4361 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 4368. Sustainable & Lean Construction Practices.**

This course covers environmentally sustainable and lean management practices in building design and construction. The LEED system will be used to guide the course on sustainable practices, which covers aspects of sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and the CAD design process. It will also cover the integration and relationship between lean and sustainable construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**CSM 4369. Construction Contracts, Risks, and Ethics.**

Legal aspects of design and construction contract documents are presented, including contract formation, interpretation, rights and duties and changes. Legal liabilities are explored in the context of professional ethics for design firms and constructors. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CSM 4370. Residential Capstone.**

This is a course in residential construction related to developing communities and building homes. Students work in groups to develop proposals to select and develop raw land into buildable lots, design and schedule site-specific homes, and develop a marketing plan. Students will be prepared to sit for the AIC Level 1 Examination after this course. Prerequisite: TECH 2190 and CSM 3369 and CSM 4313 and CSM 4364 and CSM 4369 all with grades of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 4380. Construction Safety.**

This course is an introduction to the fundamentals of occupational safety and health for the construction industry. Topics include Occupational Safety and Health Administration (OSHA) policies and compliance, governmental regulations, standards, laws, worker's compensation, record keeping, environmental safety and health hazard identification, the hierarchy of controls to mitigate hazards, and creation of a written Safety Management Plan (SMP). (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

## Courses in Technology (TECH)

**TECH 1311. Engineering Design Graphics.**

This course provides an introduction to the fundamentals of technical drawing and the related graphical tools used to communicate engineering design concepts. The topics include two dimensional graphics, orthographic projections, geometric dimensioning and tolerancing, computer-aided graphics, parametric solid modeling, and introduction to three dimensional graphics.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 1363. Manufacturing Processes I.**

The course will provide an overview of the manufacturing processes. Major emphasis is placed on machining theory, setup and tooling. Metal forming and fabrication procedures are introduced. Joining and assembly includes welding, mechanical fastening, adhesive bonding and surface finishing concepts. Laboratory demonstrations and tutorials involve machining, joining and forming techniques.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 1393. Manufacturing Processes II.**

The course involves the fundamentals of casting and molding processes. Emphasis is placed on casting terminology, molding sand, molding processes, pattern making, coremaking and quality control. Ferrous and non-ferrous alloy composition and casting geometry are explored. Plastic and composite forming concepts are included. Microelectronic manufacturing principles and processes are introduced. Prerequisite: TECH 1363 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 2190. Industrial Internship.**

This is a supervised experiential learning course in various technical disciplines as appropriate to a student's degree program. This work-integrated learning course helps the student link theory with practice. Prerequisites: Instructor approval and a minimum 2.25 major GPA.

**1 Credit Hour. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Credit/No Credit

**TECH 2310. Computer-Aided Design.**

In this course, principles of 3D modeling are introduced in the preparation of drawings for manufacturing processes. Emphasis includes the parametric solid modeling of machine elements, geometric dimensioning, and tolerancing. The laboratory component involves production of engineering drawings and simulations connecting this course to computer-aided engineering. Prerequisite: ENGR 1304 or TECH 1311 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 2340. Environmental Technology I.**

This course emphasizes the fundamental chemical, biological, ecological and hydrological principles, and mass and energy balances involved in solving environmental problems. Specific environmental areas covered include water, water quality and wastewater treatment. Environmental regulations and testing as pertinent to water will be covered. Prerequisite: CHEM 1335 and [PHYS 2325 or PHYS 1315] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 2344. Power Technology.**

This class deals with understanding the basic laws of thermodynamics. It probes efficiency and examines energy-converting devices from the inputs, processes, outputs model. Internal combustion engines, electric motors, hydraulic, pneumatic, and gearing systems, and fuel analysis are reviewed from a practical and theoretical perspective. Prerequisites: [MATH 1315 or MATH 1317 or MATH 2417 or MATH 2471] and [(PHYS 1115 and PHYS 1315) or (PHYS 2325 and PHYS 2125)] all with grades of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 2351. Statics and Strength of Materials.**

This course covers principles of statics and strength of materials to include forces, equilibrium, friction, centroids, and stress/strain relationships, axial stress and deformation, thermal stress and deformation, stress concentrations, factor of safety, torsional stress, beam stresses and combined stress. Prerequisite: [CSM 2342 or ENGR 2300 or CIM 3420] and [(PHYS 1115 and PHYS 1315) or (PHYS 2325 and PHYS 2125)] all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 2370. Electricity/Electronics Fundamentals.**

This course covers fundamentals of safety, Ohm's Law, series, parallel, and series/parallel circuits, meters, relays, DC/AC circuit analysis and basic semiconductors.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** ENGR 2305

**TECH 3322. Development of Technology.**

The role of technology in the development of Western World culture is studied from a technical perspective. Social repercussions resulting from the introduction of foundational technical developments are reviewed. Examples of technical areas examined are agriculture, transportation, manufacturing, engineering, defense, and communications. Readings focus discussions and papers on specific topics and encourage synthesis level understanding. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**TECH 3340. Environmental Technology II.**

This course covers air pollution, solid waste and hazardous waste management, sustainability and risk management. Environmental regulations and testing as pertinent to soils, sediments, residual and air will be covered. Prerequisite: TECH 2340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 3344. Applied Thermofluids.**

This course covers basic concepts, first and second laws of thermodynamics, and thermodynamic properties. Heat transfer by conduction, convection, and radiation, as well as fluid statics and fluid dynamics will also be discussed. Prerequisite: PHYS 2325 and PHYS 2125 and TECH 2344 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 3345. Principles of Lean Systems.**

The course provides an in-depth understanding of the lean principles as they apply to manufacturing and service organizations with emphasis on lean tools and concepts such as Value Stream Mapping, 5S, kaizen, waste, takt/cycle time, visual control, six-sigma, mistake proofing, single piece flow, cell design and pull systems. (WI) Prerequisite: TECH 3364 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**TECH 3354. Applied Dynamics.**

This course provides the fundamentals of modeling dynamics of mechanical systems, including both particles and rigid bodies, mathematically. Topics covered include basic theory of engineering mechanics, mechanics of rigid bodies, Newton's Laws, work and energy relationships, principles of impulse and momentum, and the application of kinetics and kinematics to solve engineering problems. Prerequisite: TECH 2351 and MATH 2472 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 3357. Facilities Planning and Design.**

This project-based course provides students with a practical knowledge of designing efficient facility layout and material handling system. Systematic layout planning (SLP) based on a product and process information is studied in depth. Simulation tools are used for flow analysis. Prerequisites: TECH 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 3364. Quality Assurance.**

This course covers the principles of quality management and control to include basic probability and statistics concepts, control charts for attributes and variables, statistical process control, sampling plans and methods, quality audits, and quality costs. Prerequisite: IE 3320 or MATH 2328 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 3370. Electronics.**

This course is a study of the characteristics of basic electronic circuits and their component parts. Course content includes the use of electronic test equipment, inductance, capacitance, reactance, impedance, rectification, switching, amplification, and electronic circuit fabrication. Prerequisite: EE 2400 or TECH 2370 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 3373. Communication Systems.**

This course deals with basic principles of communication systems. Specific topics include analysis of signals and systems, modulation techniques (digital and analog), analysis of transmitters and receivers, networking, and wireless communication systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 4330. Foundry & Heat Treatment.**

The technical aspects of foundry and heat treatment of ferrous and non-ferrous metals are reviewed. Students gain proficiency with interpretation of binary phase diagrams, mathematical modeling of gate and runner systems, micro-structural analysis, process cost evaluation, sand casting, and investment casting. The course includes writing technical reports and conducting experiments. Prerequisites: ENGR 2300 and [ENGR 1313 or ENGR 1304 or TECH 1311] and [MFG 2332 or TECH 1393 or ME 3361] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**TECH 4340. Design for Environment.**

This course covers the basic principles of design for environment. Topics covered include: industrial ecology, resource depletion, product design, process design, material selection, energy efficiency, product delivery, use, end of life and life cycle analysis. Prerequisite: TECH 3340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 4362. Manufacturing Process Engineering.**

This course will provide students with fundamentals of manufacturing processes planning and engineering. Major emphasis will be placed on make-buy analysis, tolerance analysis and dimensional control, tool and fixture design, process and material selection, design for manufacturing, design for assembly, and process planning. Prerequisites: TECH 1393 and TECH 2310 both with grades of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 4365. Machine Elements: Dynamics and Design.**

Principles of the design of mechanical components; theories of failure; material selection; design of shafts, gears, cams, fasteners, springs and brakes; dynamics; balancing of machinery and vibration control are studied. Prerequisite: TECH 2310 and TECH 2351 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 4372. Electronic Devices and Circuits.**

This course covers transistor configurations, field effect transistors and circuits, voltage regulation, amplifier feedback principles, operational amplifiers and circuitry, and unijunction transistors and applications.

Prerequisites: EE 2400 or TECH 2370 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 4373. Control Systems and Instrumentation.**

This course is an introduction to modern control systems and instrumentation. Topics covered include transducers, sensors, actuators, instrumentation, open and closed loop control systems, PID controllers, programmable logic controllers and ladder logic, and computer interface software and hardware. Prerequisites: EE 2400 or TECH 2370 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 4374. Digital Systems.**

This course covers solid state digital electronics from basic concepts to current industrial needs in terms of logic gates, number systems counters, registers, sequential control circuits, and shift register generator. Prerequisite: [PHYS 2326 and PHYS 2126] or TECH 2370 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 4380. Industrial Safety.**

This course introduces the field of industrial safety with emphasis on compliance with Federal and State regulations. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**TECH 4381. Senior Design I.**

This course is the first of a two-course sequence involving the application of technical and non-technical skills and knowledge, using a multidisciplinary team-based approach, for solving real-world problems related to product and process development. The topics include systematic product design, requirements analysis, material and process selection, project management, cost estimation, design documentation and presentation, prototyping, fabrication, and design test and verification. Prerequisite: EE 3400 or TECH 3340 or TECH 3370 or TECH 3345 any with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**TECH 4382. Senior Design II.**

This course is the second of a two-course sequence involving the application of technical and non-technical skills and knowledge, using a multidisciplinary team-based approach, for solving real-world problems related to product and process development. The topics include systematic product design, requirements analysis, material and process selection, project management, cost estimation, design documentation and presentation, prototyping, fabrication, and design test and verification. Prerequisite: TECH 4381 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 4390. Internship.**

Supervised on-the-job professional learning experience in construction, manufacturing, electronics, and other technical areas. This course provides practical work experience in their particular field of interest. Repeatable for credit. (WI) Prerequisites: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Dual Enrollment Permitted|Time Conflicts Permitted|Writing Intensive

**Grade Mode:** Standard Letter

**TECH 4392. Micro and Nano Manufacturing.**

This course covers the basic principles of micro and nano manufacturing. Emphasis is placed on the process descriptions, terminology, equipment requirements, and processes for micro and nano systems. Basic physics and process chemistry is combined with control schemes to arrive at overall systems descriptions. Prerequisite: [CHEM 1335 or CHEM 1341] and [PHYS 1325 or (PHYS 2326 and PHYS 2126)] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 4395. Automated Manufacturing Systems I.**

This course primarily deals with automation in industrial systems. In particular, this course focuses on automation and control technologies in manufacturing systems at machine and device levels. Included in its structure are areas such as fundamentals of industrial automation, sensors and actuators, numerical control, robotics, and PLC.

Prerequisites: TECH 2310 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 4396. Automated Manufacturing Systems II.**

This course primarily deals with automation, simulation, and digitization in industrial systems. Course topics include discrete-event simulation of manufacturing systems, automated quality control and inspection, automated identification, industrial Internet of Things, automated material handling, automated data acquisition systems, and applied finite element analysis. Prerequisites: TECH 4395 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 4397. Special Problems.**

The investigation of a special topic by developing the problem, researching the topic, and presenting the findings as they apply to industry/technology. This course will be applicable to all areas of technology, and must be done only with the approval of the cooperating faculty member and Department Chair. Repeatable for credit with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 4398. Senior Design.**

This course deals with application of technical and non-technical skills and knowledge using a multidisciplinary team-based approach for solving real-world problems related to product and process development. The topics include systematic product design, requirements analysis, project management, cost estimation, documentation and presentation, prototyping, fabrication and concurrent engineering. (WI) Prerequisites: EE 3400 or TECH 3340 or TECH 3370 or TECH 4372 or TECH 4395 any with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
- Nine semester credit hours must be writing intensive (WI).
- If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
- A minor in Business Administration is required for this degree program. Courses for the minor in Business Administration are included in the following degree plan.

## Course Requirements

Freshman

First Hours Semester	Second Hours Semester	
US 1100	1 Communication Component Code 010	3
CSM 1260	2 Government Political Science Component Code 070	3
Communication Component Code 010	3 American History Component Code 060	3
American History Component Code 060	3 CSM 2361	3
MATH 2328 (TCCN MATH 1342)	3 PHYS 1315 (Life and Physical Sciences Component Code 030 [TCCN PHYS 1301 or 1401])	3
Component Area Option Codes 090 and 091	3 PHYS 1115 (TCCN PHYS 1101)	1
		15
		16

**Minimum required: 120  
semester credit hours**

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this



Sophomore		
First Hours Semester	Second Hours Semester	Summer Hours
CHEM 1335 or 1341 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1309 or 1409])	3 MATH 2321 (Mathematics Component Code 020 [TCCN MATH 2313])	3 TECH 2190
CHEM 1135 or 1141 (TCCN 1109)	1 ACC 2301	3
ECO 2301 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 1301])	3 CSM 2313	3
CIM 3330	3 CIM 3340	3
CIM 3420	4 TECH 2351	3
<b>14</b>	<b>15</b>	<b>1</b>

Junior

First Hours Semester	Second Hours Semester	
Creative Arts Component Code 050	3 Language, Philosophy, and Culture Component Code 040	3
MGT 3301	3 Government Political Science Component Code 070	3
CSM 3368	3 CIM 4330	3
CIM 3350	3 CIM 3366	3
CIM 4350	3 CSM 4361	3
<b>15</b>	<b>15</b>	

Senior

First Hours Semester	Second Hours Semester	
MKT 3343	3 Component Area Option Codes 090 and 094	3
BLAW 3301	3 CSM 4369	3
CIM 4310	3 CIM 4290	2

Technical Elective Group 1 (one course from this list)	3 Technical Elective Group 3 (one course from this list)	3
Technical Elective Group 2 (one course from this list)	3 CIM 4340	3
<b>15</b>	<b>14</b>	

Total Hours: 120

Code	Title	Hours
<b>Technical Elective Group 1 (one course from this list)</b>		
GEOL 1410	Physical Geology	4
TECH 3364	Quality Assurance	3
CSM 3363	Heavy, Civil and Highway Construction Systems	3
CSM 3366	Soils and Foundations	3
CSM 2342	Construction Materials and Processes	3
<b>Technical Elective Group 2 Sustainability (one course from this list)</b>		
TECH 2340	Environmental Technology I	3
CSM 4368	Sustainable & Lean Construction Practices	3
<b>Technical Elective Group 3 Safety (one course from this list)</b>		
TECH 4380	Industrial Safety	3
CSM 4380	Construction Safety	3

<sup>1</sup> Credit earned successfully through testing of previously earned course credit for MGT 3303 may be substituted for MGT 3301.

<sup>2</sup> Credit previously earned for BLAW 2361 may be substituted for BLAW 3301.

## Minimum required: 120 semester credit hours

### Admission Requirements

- This degree program requires admission to the university and admission to the program. Information about the program admissions can be found at: <http://mycatalog.txstate.edu/undergraduate/science-engineering/technology/#admissionstext>
- Students must complete the following 30 semester credit hours of Pre-Construction coursework:

Code	Title	Hours
MATH 2328	Elementary Statistics	3
MATH 2417	Pre-Calculus Mathematics	4
PHYS 1315 & PHYS 1115	General Physics I and General Physics I Laboratory	4
Choose 4 hours from the following:		

CHEM 1335 & CHEM 1135	Engineering Chemistry and Engineering Chemistry Laboratory	
CHEM 1341 & CHEM 1141	General Chemistry I and General Chemistry Laboratory I	
CSM 1260	Introduction to the Construction and Concrete Industry	2
CSM 2313	Architecture Design I - Construction Documents	3
CSM 2342	Construction Materials and Processes	3
<b>Total Hours</b>		<b>19</b>

2. When a student completes the above Pre-Construction coursework, with the required GPA, or is currently enrolled in their final Pre-Construction course(s), the student can apply to become a "Full Major".

## General Requirements

- Students are required to complete the following Pre-Construction Science Management coursework with grades of C or better and a overall GPA (for this set of courses) of 2.50 to be considered for the full major:

Code	Title	Hours
MATH 2328	Elementary Statistics	3
MATH 2417	Pre-Calculus Mathematics	4
PHYS 1315 & PHYS 1115	General Physics I and General Physics I Laboratory	4
Choose 4 hours from the following:		4
CHEM 1341 & CHEM 1141	General Chemistry I and General Chemistry Laboratory I	
CHEM 1335 & CHEM 1135	Engineering Chemistry and Engineering Chemistry Laboratory	
CSM 1260	Introduction to the Construction and Concrete Industry	2
CSM 2313	Architecture Design I - Construction Documents	3
CSM 2342	Construction Materials and Processes	3
<b>Total Hours</b>		<b>23</b>

- After completing the Pre-Construction coursework, students will be allowed to enter the major and to enroll in the following Construction courses:

Code	Title	Hours
CSM 2262	Construction Lab	2
CSM 2360	Residential I: Construction Practices	3
CSM 2361	Construction Surveying	3
CSM 3360	Structural Analysis	3
CSM 3361	Commercial Building Construction Systems	3
CSM 3363	Heavy, Civil and Highway Construction Systems	3
CSM 3366	Soils and Foundations	3
CSM 3367	Mechanical, Electrical and Plumbing Systems	3
CSM 4313	Architectural Design II - Technology in Construction	3
CSM 4360	Senior Construction Management Capstone	3
CSM 4361	Construction Estimating	3
CSM 4364	Construction Project Management and Scheduling	3
CSM 4368	Sustainable & Lean Construction Practices	3
CSM 4369	Construction Contracts, Risks, and Ethics	3

CSM 4380	Construction Safety	3
TECH 2190	Industrial Internship	1
TECH 2351	Statics and Strength of Materials	3
<b>Total Hours</b>		<b>48</b>

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
- Nine semester credit hours must be writing intensive (WI).
- If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
- A minor in Business Administration is required for this degree program. Courses for the minor in Business Administration are included in the following degree plan.
- No "D" grades received at other institutions will be credited towards the major.

## Course Requirements

### Freshman

First Hours Semester	Second Hours Semester	
CSM 1260	2 CSM 2313	3
PHYS 1315	4 CSM 2342	3
& PHYS 111 (Life and Physical Sciences Component Code 030 [TCCN PHYS 1301])		
MATH 2417 (Mathematics Component Code 020 [TCCN MATH 2412])	4 MATH 2328 (TCCN MATH 1342)	3
US 1100	1 ENG 3303 (Communic: Component Code 010)	3

Communication Component Code 010	3 Choose 4 hours from the following:	4	
Government Political Science Component Code 070	3 CHEM 13 & CHEM 1 (TCCN: CHEM 1311 & CHEM 1111) CHEM 1335		
	& CHEM 1135 (TCCN: CHEM 1309 & CHEM 1109)		
	<b>17</b>	<b>16</b>	
<b>Sophomore</b>			
<b>First Hours Semester</b>	<b>Second Hours Semester</b>	<b>Summer Hours</b>	
CSM 2262	2 CSM 2360	3 TECH 2190	1
CSM 2361	3 CSM 3360	3	
TECH 2351	3 CSM 3361	3	
ACC 2301	3 PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306]) <sup>2</sup>	3	
BLAW 3301 <sup>1</sup>	3 Component Area Option Codes 090	3	
Government Political Science Component Code 070	3		
	<b>17</b>	<b>15</b>	<b>1</b>
<b>Junior</b>			
<b>First Hours Semester</b>	<b>Second Hours Semester</b>		
CSM 4361	3 CSM 3363	3	
CSM 4364	3 CSM 3366	3	
CSM 4369	3 CSM 3367	3	

ECO 2301 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 1301]) <sup>2</sup>	3 CSM 4313	3	
	American History Component Code 060	3	
	<b>12</b>	<b>15</b>	
<b>Senior</b>			
<b>First Hours Semester</b>	<b>Second Hours Semester</b>		
CSM 4368	3 CSM 3368	3	
CSM 4380	3 CSM 4360	3	
MGT 3301 <sup>4</sup>	3 MKT 3343	3	
American History Component Code 060	3 Creative Arts Component Code 050 [HUMA 1315]	3	
Component Area Option Codes 090 literature	3		
	<b>15</b>	<b>12</b>	

**Total Hours: 120**

<sup>1</sup> Credit previously earned for BLAW 2361 may be substituted for BLAW 3301.

<sup>2</sup> While PHIL 1320 is strongly preferred, the department will allow PHIL 1305 to satisfy this requirement. Other Language, Philosophy, and Culture Component Code 040 courses will not satisfy this requirement.

<sup>3</sup> While ECO 2301 is strongly preferred, the department will allow an ECO 2314 course that is assigned component Code 080 to satisfy this requirement. Students who complete ECO 2314 in lieu of ECO 2301 will also need to complete ECO 2315 for the required Business Administration minor.

<sup>4</sup> Credit earned successfully through testing of previously earned course credit for MGT 3303 may be substituted for MGT 3301.

**Minimum required: 120 semester credit hours**

## Admission Requirements

1. This degree program requires admission to the university and admission to the program. Information about the program admissions can be found at: <http://mycatalog.txstate.edu/undergraduate/science-engineering/technology/#admissiontext>
2. Students must complete the following 30 semester credit hours of Pre-Construction coursework:

Code	Title	Hours
Choose 4 hours from the following:		
CHEM 1335 & CHEM 1135	Engineering Chemistry and Engineering Chemistry Laboratory	
CHEM 1341 & CHEM 1141	General Chemistry I and General Chemistry Laboratory I	
CSM 1260	Introduction to the Construction and Concrete Industry	2
CSM 2313	Architecture Design I - Construction Documents	3
CSM 2342	Construction Materials and Processes	3
MATH 2328	Elementary Statistics	3
MATH 2417	Pre-Calculus Mathematics	4
PHYS 1115	General Physics I Laboratory	1
PHYS 1125	General Physics II Laboratory	1
PHYS 1315	General Physics I	3
<b>Total Hours</b>		<b>20</b>

3. When a student completes the above Pre-Construction coursework, with the required 2.50 GPA and a "C" or better in all the Pre-Construction coursework, or is currently enrolled in their final Pre-Construction course(s), the student can apply to become a "Full Major".

## General Requirements

1. Students are required to complete the following Pre-Construction Science Management coursework with grades of C or better and an overall GPA (for this set of courses) of 2.50 to be considered for the full major:

Code	Title	Hours
MATH 2328	Elementary Statistics	3
MATH 2417	Pre-Calculus Mathematics	4
PHYS 1315 & PHYS 1115	General Physics I and General Physics I Laboratory	4
Choose 4 hours from the following:		4
CHEM 1341 & CHEM 1141	General Chemistry I and General Chemistry Laboratory I	
CHEM 1335 & CHEM 1135	Engineering Chemistry and Engineering Chemistry Laboratory	
CSM 1260	Introduction to the Construction and Concrete Industry	2
CSM 2313	Architecture Design I - Construction Documents	3
CSM 2342	Construction Materials and Processes	3
<b>Total Hours</b>		<b>23</b>

2. After completing the Pre-Construction coursework, students will be allowed to enter the major and to enroll in the following Construction courses:

Code	Title	Hours
CSM 2262	Construction Lab	2
CSM 2360	Residential I: Construction Practices	3
CSM 2361	Construction Surveying	3
CSM 3360	Structural Analysis	3
CSM 3361	Commercial Building Construction Systems	3
CSM 3363	Heavy, Civil and Highway Construction Systems	3
CSM 3366	Soils and Foundations	3

CSM 3367	Mechanical, Electrical and Plumbing Systems	3
CSM 3369	Residential II: Construction Business Practices	3
CSM 4313	Architectural Design II - Technology in Construction	3
CSM 4361	Construction Estimating	3
CSM 4364	Construction Project Management and Scheduling	3
CSM 4369	Construction Contracts, Risks, and Ethics	3
CSM 4370	Residential Capstone	3
CSM 4380	Construction Safety	3
TECH 2190	Industrial Internship	1
TECH 2351	Statics and Strength of Materials	3
<b>Total Hours</b>		<b>48</b>

3. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
6. Nine semester credit hours must be writing intensive (WI).
7. If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
8. A minor in Business Administration is required for this degree program. Courses for the minor in Business Administration are included in the following degree plan.
9. No "D" grades received at other institutions will be credited towards the major.

## Course Requirements

### Freshman

First Hours Semester	Second Hours Semester	
CSM 1260	2 CSM 2313	3
MATH 2417 (Mathematical Component Code 020 [TCCN 2412])	4 CSM 2342	3
US 1100	1 MATH 2328	3
Communication Component Code 010	3 ENG 3303 (Communication Component Code 010)	3

Government/ Political Science Component Code 070	3 Choose 4 hours from the following:	4	
PHYS 1315	4	CHEM 13	
& PHYS 111 (Life and Physical Sciences Component Code 030 [TCCN PHYS 1301])		& CHEM 1 (TCCN: CHEM 1311 & CHEM 1111)	
		CHEM 1335	
		& CHEM 1135 (TCCN: CHEM 1309 & CHEM 1109)	
	17	16	
			<b>Sophomore</b>
	<b>First Hours Semester</b>	<b>Second Hours Semester</b>	<b>Summer Hours</b>
CSM 2262	2	CSM 2360	3 TECH 2190
CSM 2361	3	CSM 3360	3
TECH 2351	3	CSM 3361	3
ACC 2301	3	COMM 131C (Component Area Option Code 090/091 [TCCN SPCH 1311])	3
BLAW 3301 <sup>1</sup>	3	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306]) <sup>2</sup>	3
Government Political Science Component Code 070	3		
	17	15	1
			<b>Junior</b>
	<b>First Hours Semester</b>	<b>Second Hours Semester</b>	
CSM 4361	3	CSM 3366	3
CSM 4364	3	CSM 3367	3

CSM 4369	3	CSM 3369	3
ECO 2301 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 1301]) <sup>3</sup>	3	CSM 4313	3
		American History Component Code 060	3
	12	15	
			<b>Senior</b>
	<b>First Hours Semester</b>	<b>Second Hours Semester</b>	
CSM 3363	3	CSM 3368	3
CSM 4380	3	CSM 4370	3
MGT 3301 <sup>4</sup>	3	MKT 3343	3
American History Component Code 060	3	Creative Arts Component Code 050 [HUMA 1315]	3
Component Area Option Codes 090 literature	3		
	15	12	
<b>Total Hours: 120</b>			

- <sup>1</sup> Credit previously earned for BLAW 2361 may be substituted for BLAW 3301.
- <sup>2</sup> While PHIL 1320 is strongly preferred, the department will allow PHIL 1305 to satisfy this requirement. Other Language, Philosophy, and Culture Component Code 040 courses will not satisfy this requirement.
- <sup>3</sup> While ECO 2301 is strongly preferred, the department will allow an ECO 2314 course that is assigned component Code 080 to satisfy this requirement. Students who complete ECO 2314 in lieu of ECO 2301 will also need to complete ECO 2315 for the required Business Administration minor.
- <sup>4</sup> Credit earned successfully through testing of previously earned course credit for MGT 3303 may be substituted for MGT 3301.

## Minimum required: 120-121 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.



- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
- Nine semester credit hours must be writing intensive (WI).
- If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.

## Course Requirements

Freshman		
First Hours Semester	Second Hours Semester	
MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])	4 MATH 2472 (Component Area Option Code 092 [TCCN MATH 2414])	4
CHEM 1335 & CHEM 113 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1409 or 1309 & 1109])	4 CSM 2313	3
US 1100	1 PHYS 2325 & PHYS 2125 (Component Area Option Code 030 [TCCN PHYS 2325 & PHYS 2125])	4
Communications Component Code 010 Government/ Political Science Component Code 070	3 Communications Component Code 010	3
	3	
15	14	

Sophomore		
First Hours Semester	Second Hours Semester	Summer Hours
American History Component Code 060	3 TECH 2351	3 TECH 2190
PHYS 2326 & PHYS 212 (Component Area Option Code 093 [TCCN PHYS 2326 & PHYS 2126])	4 American History Component Code 060	3
CSM 2342	3 CSM 2160	1
Social and Behavioral Sciences Component Code 080 <sup>1</sup>	3 TECH 2344	3
	CS 1342 or 1428 (TCCN COSC 1437)	3-4
	Government Political Science Component Code 070	3
13	16-17	1
Junior		
First Hours Semester	Second Hours Semester	
CSM 3360	3 CIM 3420	4
PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306]) <sup>2</sup>	3 MGT 3301 <sup>3</sup>	3
CSM 3361	3 CSM 4361	3
IE 3320	3 ENGR 3315	3
CSM 4313	3 Creative Arts Component Code 050 [HUMA 1315]	3
15	16	

First Hours Semester	Second Hours Semester	
CSM 3366	3 MGT 4330	3
CSM 4364	3 TECH 3345	3
TECH 3364	3 CSM 4360	3
CSM 4369	3 CSM 4380	3
CIM 3340	3 CSM 3363	3
<b>15</b>	<b>15</b>	
<b>Total Hours: 120-121</b>		

<sup>1</sup> While ECO 2301 or ECO 2314 are strongly preferred, the department will allow other Social and Behavioral Sciences Component Code 080 courses to satisfy this requirement.

<sup>2</sup> While PHIL 1320 is strongly preferred, the department will allow PHIL 1305 to satisfy this requirement. Other Language, Philosophy, and Culture Component Code 040 courses will not satisfy this requirement.

<sup>3</sup> Credit earned successfully through testing of previously earned course credit for MGT 3303 may be substituted for MGT 3301.

## Minimum required: 120-121 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
3. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
4. Nine semester credit hours must be writing intensive (WI).
5. If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.

### Course Requirements

First Hours Semester	Second Hours Semester	
MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])	4 ENGR 2300	3

#### Senior

CHEM 1335 & CHEM 113 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1409 or 1309 & 1109])	4 MATH 2472 (Component Area Option 092 [TCCN MATH 2414])	4
US 1100	1 Communication Component Code 010	3
Communica Component Code 010	3 American History Component Code 060	3
Government/ Political Science Component Code 070	3	
<b>15</b>	<b>13</b>	

#### Sophomore

First Hours Semester	Second Hours Semester	Summer Hours	
TECH 1311	3 EE 2420	4 TECH 2190	1
CS 1342 or 1428 ([TCCN COSC 1437])	3-4 PHYS 2326 & PHYS 212 (Component Area Option 093 [TCCN PHYS 2326 & PHYS 2126])	4	
PHYS 2325	4 TECH 2344	3	
& PHYS 2125 (Life and Physical Sciences Component Code 030 [TCCN PHYS 2325 & 2125])	3 IE 3320	3	
American History Component Code 060			

Government/  
Political  
Science  
Component  
Code 070

13-14		17	1
First Hours Semester		Second Hours Semester	Junior
TECH 2370 (TCCN ENGR 2305)	3	TECH 3373	3
EE 3420	4	PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306]) <sup>2</sup>	3
TECH 2351	3	TECH 3370	3
TECH 3364	3	ENGR 3315	3
Social and Behavioral Sciences Component Code 080 <sup>1</sup>	3	Creative Arts Component Code 050 [HUMA 1315]	3
16		15	Senior
First Hours Semester		Second Hours Semester	
TECH 3345	3	MGT 4330	3
MGT 3301 <sup>3</sup>	3	TECH 4392	3
TECH 4372	3	TECH 4382	3
TECH 4381	3	EE 4321, 4331, or 4332	3
TECH 4373	3	TECH 4380	3
15		15	

**Total Hours: 120-121**

<sup>1</sup> While ECO 2301 or ECO 2314 are strongly preferred, the department will allow other Social and Behavioral Sciences Component Code 080 courses to satisfy this requirement.

<sup>2</sup> While PHIL 1320 is strongly preferred, the department will allow PHIL 1305 to satisfy this requirement. Other Language, Philosophy, and Culture Component Code 040 courses will not satisfy this requirement.

<sup>3</sup> Credit earned successfully through testing of previously earned course credit for MGT 3303 may be substituted for MGT 3301.

## Minimum required: 122-123 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
3. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
4. Nine semester credit hours must be writing intensive (WI).
5. If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.

### Course Requirements

First Hours Semester		Second Hours Semester	Freshman
MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])	4	ENGR 2300	3
CHEM 1335 & CHEM 113 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1409 or 1309 & 1109])	4	MATH 2472 (Component Area Option Code 093 [TCCN MATH 2414])	4
US 1100	1	PHYS 2325 & PHYS 2125 (Life and Physical Sciences Component Code 030 [TCCN PHYS 2325 & 2125])	4

Communica Component Code 010	3 Communica Component Code 010	3
Government/ Political Science Component Code 070	3	
<b>15</b>		<b>14</b>

First Hours Semester	Second Hours Semester	Summer Hours	Sophomore
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American History Component Code 060	3 PHYS 2326 & PHYS 2126 (Component Area Option 093 [TCCN PHYS 2326 & PHYS 2126])	4 TECH 2190	1
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TECH 1311	3 TECH 2344	3
CS 1342 or 1428 ([TCCN COSC 1437])	3-4 Social and Behavioral Sciences Component Code 080 <sup>1</sup>	3
TECH 2340	3 TECH 2351	3
Government/ Political Science Component Code 070	3 GEOL 1410 (TCCN GEOL 1403)	4

<b>15-16</b>		<b>17</b>	<b>1</b>
			<b>Junior</b>

First Hours Semester	Second Hours Semester	
PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306]) <sup>2</sup>	3 TECH 4380	3
CE 3320	3 TECH 3340	3
MGT 3301 <sup>3</sup>	3 ENGR 3315	3
IE 3320	3 MGT 4330	3
Creative Arts Component Code 050 [HUMA 1315]	3 TECH 3364	3
<b>15</b>		<b>15</b>

Senior

First Hours Semester	Second Hours Semester	
CSM 4368	3 American History Component Code 060	3
TECH 3344	3 TECH 4382	3
TECH 4381	3 CE 4321	3
CE 4320	3 CE 4322	3
TECH 4340	3 TECH 3345	3
<b>15</b>		<b>15</b>

**Total Hours: 122-123**

<sup>1</sup> While ECO 2301 or ECO 2314 are strongly preferred, the department will allow other Social and Behavioral Sciences Component Code 080 courses to satisfy this requirement.

<sup>2</sup> While PHIL 1320 is strongly preferred, the department will allow PHIL 1305 to satisfy this requirement. Other Language, Philosophy, and Culture Component Code 040 courses will not satisfy this requirement.

<sup>3</sup> Credit earned successfully through testing of previously earned course credit for MGT 3303 may be substituted for MGT 3301.

## Minimum required: 121-122 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
- Nine semester credit hours must be writing intensive (WI).
- If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.

## Course Requirements

Freshman				Sophomore				Junior				Senior			
First Hours Semester		Second Hours Semester		First Hours Semester		Second Hours Semester		First Hours Semester		Second Hours Semester		First Hours Semester		Second Hours Semester	
CHEM 1335 & CHEM 1135 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1409 or 1309 & 1109])		4 ENGR 2300		3				PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306]) <sup>1</sup>		3 TECH 2344		3			
MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])		4 MATH 2472 (Component Area Option 092 [TCCN MATH 2414])		4				Creative Arts Component Code 050 [HUMA 1315]		3 IE 3320		3			
US 1100		1 TECH 1393		3				ENGR 3373, TECH 4374, MFGE 4367, or MFGE 4365		3 TECH 4362		3			
TECH 1363		3		3				American History Component Code 060		3 TECH 3345		3			
Communication Component Code 010		3		3				Social and Behavioral Sciences Component Code 080 <sup>2</sup>		3 TECH 3357		3			
TECH 1311		3		4		1		TECH 3364		3		3			
		& PHYS 2126 (Component Area Option 093 [TCCN PHYS 2326 & PHYS 2126])						Government/Political Science Component Code 070		3		3			
PHYS 2325 & PHYS 212 (Life and Physical Sciences Component Code 030 [TCCN PHYS 2325 & 2125])		4		3						15		15			
								TECH 4330		3		3			
								TECH 4392		3		3			
								MGT 3301 <sup>3</sup>		3		3			
								TECH 4381		3		3			
								TECH 4395		3		3			
								15		15					
								Total Hours: 121-122							



<sup>1</sup> While PHIL 1320 is strongly preferred, the department will allow PHIL 1305 to satisfy this requirement. Other Language, Philosophy, and Culture Component Code 040 courses will not satisfy this requirement.

<sup>2</sup> While ECO 2301 or ECO 2314 are strongly preferred, the department will allow other Social and Behavioral Sciences Component Code 080 courses to satisfy this requirement.

<sup>3</sup> Credit earned successfully through testing of previously earned course credit for MGT 3303 may be substituted for MGT 3301.

Minimum required: 121-122 semester credit hours

General Requirements

- 1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- 2. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- 3. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
- 4. Nine semester credit hours must be writing intensive (WI).
- 5. If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.

Course Requirements

Freshman		
First Hours Semester	Second Hours Semester	
MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])	4 ENGR 2300	3
US 1100	1 MATH 2472 (Component Area Option 092 [TCCN MATH 2414])	4
TECH 1363	3 TECH 1393	3

CHEM 1335 & CHEM 1113 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1409 or 1309 & 1109])	4 Communication Component Code 010	3
Communication Component Code 010	3 American History Component Code 060	3
15	16	
Sophomore		
First Hours Semester	Second Hours Semester	Summer Hours
TECH 1311	3 TECH 2310	3 TECH 2190
CS 1342 or 1428 (TCCN COSC 1437)	3-4 PHYS 2326 & PHYS 212 (Component Area Option 092 [TCCN PHYS 2326 & PHYS 2126])	4
PHYS 2325	4 TECH 2351	3
& PHYS 2125 (Component Area Option 030 [TCCN PHYS 2325 & PHYS 2125])		
PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306]) <sup>1</sup>	3 TECH 2344	3
Creative Arts Component Code 050 [HUMA 1315]	3 IE 3320	3
16-17	16	1

**Junior**

First Hours Semester	Second Hours Semester	
TECH 3373 or ENGR 3373	3 TECH 3345	3
TECH 3364	3 ENGR 3315	3
Social and Behavioral Sciences Component Code 080 <sup>2</sup>	3 TECH 3354	3
TECH 3344	3 American History Component Code 060	3
Government/ Political Science Component Code 070	3 Government/ Political Science Component Code 070	3
<b>15</b>	<b>15</b>	

**Senior**

First Hours Semester	Second Hours Semester	
TECH 4395	3 TECH 4380	3
TECH 4365	3 TECH 4396	3
TECH 4381	3 MGT 4330	3
MGT 3301 <sup>3</sup>	3 TECH 4382	3
TECH 4392, 4330, or 3357 (TECH Elective)	3	
<b>15</b>	<b>12</b>	

**Total Hours: 121-122**

<sup>1</sup> While PHIL 1320 is strongly preferred, the department will allow PHIL 1305 to satisfy this requirement. Other Language, Philosophy, and Culture Component Code 040 courses will not satisfy this requirement.

<sup>2</sup> While ECO 2301 is strongly preferred, the department will allow other Social and Behavioral Sciences Component Code 080 courses to satisfy this requirement.

<sup>3</sup> Credit earned successfully through testing of previously earned course credit for MGT 3303 may be substituted for MGT 3301.

The minor in Engineering Technology requires 18 semester credit hours of Technology courses, of which 9 hours must be advanced. Courses will be determined by conference with a departmental faculty advisor or the Chair of the Department of Engineering Technology.

Math/Computer Science Building Room 470  
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www.math.txst.edu

The study of mathematics spans over four millennia, brimming with an extensive tapestry of knowledge. Mathematics continues to be a dynamic

realm of inquiry, constantly giving rise to novel theories and intriguing questions. The wealth of accumulated wisdom and the puzzles being unraveled extend to many applications beyond pure mathematics, from business and finance to computation and engineering and science to social sciences.

Mathematics is a fundamental skill that permeates all facets of education and is indispensable to numerous professions. Our department's educational mission is to cultivate reasoning and computational skills, preparing our majors and minors for careers that demand a profound understanding of mathematics. We maintain a nationally recognized community of faculty and students in mathematics, mathematics education, and related disciplines.

## Centers for Excellence

Mathworks, a center for innovation in mathematics and math education, designs and hosts programs for elementary, middle, and high school students, researches and develops math curriculum, and provides professional development for prospective and practicing teachers. Mathworks received the 2001 Star Award for Closing the Gaps from the Texas Higher Education Coordinating Board and the 2007 Siemens Founders Award.

## Majors

The department offers a Bachelor of Science with a major in Mathematics, a Bachelor of Science with a major in Applied Mathematics, and a Bachelor of Arts with a major in Mathematics. Students majoring in Mathematics can obtain teacher certification in mathematics, grades 7-12, through a double major with a Bachelor of Science in Mathematics Education.

A student majoring in one of the programs offered by the Department of Mathematics who wishes to minor in a different program within the Department must take **18 hours** of math courses in addition to, and not duplicated by, those courses taken to satisfy the requirements of the Mathematics or Applied Mathematics Major programs. The 18 additional hours must be taken from the courses listed as electives for the desired minor.

## Bachelor of Arts (B.A.)

- Major in Mathematics (p. 769)

## Bachelor of Science (B.S.)

- Major in Applied Mathematics (p. 770)
- Major in Mathematics (p. 771)
- Major in Mathematics (Secondary Education; Teacher Certification in Mathematics, Grades Seven through Twelve, with Double Major in B.S. Education) (p. 773)

## Minors

- Applied Mathematics (p. 774)
- Mathematics (p. 775)
- Second Teaching Field in Mathematics (Grades 7-12) (p. 775)

## Courses in Mathematics (MATH)

### **MATH 1101. Math Education Intervention.**

Students benefit from innovative, research-based approaches for learning mathematics, and this course will deliver supplemental mathematical instruction as one such intervention. Students will be assessed using college readiness indicators or other information to determine individualized approaches. The course is designed for students in 1000 level mathematics courses who feel they would benefit from additional course based support. Prerequisite: Departmental Approval. Corequisite: MATH 1312 or MATH 1315 or MATH 1316 or MATH 1319.

**1 Credit Hour. 0 Lecture Contact Hours. 24 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Credit/No Credit

### **MATH 1300. Elementary Algebra.**

This course is designed to review and strengthen basic mathematical skills. Topics may include number concepts, computation, elementary algebra, geometry, and mathematical reasoning. The credit earned for this course does not count toward any degree offered at this university.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Developmental/ Remedial|Dif Tui- Science & Engineering

**Grade Mode:** Developmental

### **MATH 1311. Intermediate Algebra.**

This preparatory course for college algebra includes linear equations and inequalities, rational expressions, exponents and radicals, quadratics and word problems. This course is designed for students who've graduated from high school with no more than the minimum mathematics requirements or for students who've been away from mathematics for years. Prerequisites: TSI Assessment Test Score of 345 or more.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Developmental/ Remedial|Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Developmental

### **MATH 1312. College Statistics and Algebra.**

Algebra (as used in elementary statistics) is studied, including linear and quadratic equations, inequalities, functions and their graphs, logarithms, systems of equations, and applications of mathematics. Emphasis is made on statistical concepts, such as least squares regression, distributions confidence intervals, & hypothesis testing. This course is not intended to substitute for MATH 1315 as a prerequisite. Prerequisite: College Readiness in Mathematics according to the TSI regulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

### **MATH 1315. College Algebra.**

Course topics include linear and quadratic equations, inequalities, functions, exponentials and logarithms, systems of equations using matrices, applications, and other college algebra topics as time permits. Prerequisite: College Readiness in Mathematics according to the TSI regulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1314

### **MATH 1316. Survey of Contemporary Mathematics.**

This course is a study of the uses of mathematics in society today. Emphasis is on concepts rather than technical details. Prerequisite: College Readiness in Mathematics according to TSI regulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1332

### **MATH 1317. Plane Trigonometry.**

This course covers right triangles, radian and degree measures, trigonometric functions and their graphs, trigonometric identities, including multiple and half-angle identities, inverse trigonometric functions, trigonometric equations, general triangles, and complex numbers. Prerequisite: [MATH 1315 with a grade of "C" or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1316

### **MATH 1319. Mathematics for Business and Economics I.**

Topics from college algebra and finite mathematics applied to business and economics are covered, including applications of equations and inequalities, simple and compound interest, and annuities. Prerequisite: College Readiness in Mathematics according to the TSI regulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1324

**MATH 1329. Mathematics for Business and Economics II.**

This course covers topics from finite mathematics and elementary differential calculus applied to business and economics. Prerequisite: [MATH 1315 or MATH 1319 with a grade of "C" or better] or [ACT Mathematics score of 27 or better] or [SAT Math Section score of 600 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1325

**MATH 2311. Principles of Mathematics I.**

This course is intended to build and reinforce a foundation in fundamental mathematics concepts and skills for teaching. It includes the conceptual development of the base ten numeration system, the structure and properties of the various number systems and operations, and number theory. All topics are explored with an emphasis on problem-solving and critical thinking. Prerequisite: MATH 1312 or MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1350

**MATH 2312. Informal Geometry.**

As a continuation of MATH 2311, this course builds and reinforces a foundation in fundamental mathematical concepts and skills. It includes the concepts of geometry, measurement, probability, and statistics with an emphasis on geometry and measurement as well as problem-solving and critical thinking. Prerequisite: MATH 2311 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1351

**MATH 2321. Calculus for Life Sciences I.**

This course studies exponential, logarithmic, and trigonometric functions and their applications, limits, derivatives, indefinite and definite integrals, and the Fundamental Theorem of Calculus. Applications from the life sciences receive particular emphasis. Prerequisite: [MATH 1315 or MATH 1319 or MATH 1329 or MATH 2417 with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Math Section score of 550 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 2313

**MATH 2328. Elementary Statistics.**

This course is an algebra-based introduction to descriptive statistics, the interpretation of data, random sampling, design of experiments, probability, and the Central Limit Theorem. Inferential statistics topics include the foundational concepts for confidence intervals and hypothesis testing for simple experiments. Prerequisite: [MATH 1312 or MATH 1315 or MATH 1319 with a grade of "C" or better] or [MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 with a grade of "D" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Math Section score of 550 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1342

**MATH 2331. Calculus for Life Science II.**

This course is an extension of MATH 2321 and includes techniques and applications of integration, differential equations, probability, and discrete and continuous distributions. Prerequisite: MATH 2321 with a grade of "C" or better or MATH 2471 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 2358. Discrete Mathematics I.**

This course is a study of discrete mathematical structures commonly encountered in computing hardware and software are studied. Topics include logic, functions, elementary set theory, proof techniques, mathematical induction, numeric sequences, elementary number theory, and graph theory. Prerequisite: [MATH 1315 or MATH 1329 with a grade of "C" or better] or [MATH 2417 or MATH 2471 with a grade of "D" or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 2305

**MATH 2393. Calculus III.**

The course topics include vectors and the geometry of space, functions of several variables, vector-valued functions, partial derivatives, extreme values, multiple integrals, vector fields, line and surface integrals, Green's Theorem, Stokes' Theorem, the Divergence Theorem, and applications of the preceding in the sciences. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 2315

**MATH 2417. Pre-Calculus Mathematics.**

This course is a survey of functions, trigonometry, and analytic geometry. Students' algebraic skills are reinforced throughout the course.

Prerequisites: [MATH 1315 or MATH 1319 with a grade of C or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Math Section score of 550 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** MATH 2412

**MATH 2471. Calculus I.**

This first course in differential and integral calculus covers limits and continuity, functions and graphing, derivatives, integrals, and applications of calculus to science, engineering, and other technical fields. Prerequisites: [MATH 2417 with a grade of C or better] or [ACT Mathematics score of 27 or better] or [SAT Math Section score of 600 or better] or [Accuplacer College Mathematics score of 103 or better] or [Compass Trigonometry score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test score of 276 or better].

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** MATH 2413

**MATH 2472. Calculus II.**

This course continues the study of differential and integral calculus from MATH 2471. The topics include techniques of integration, improper integrals, parametric equations and polar coordinates, applications of calculus, sequences and series, and an introduction to partial derivatives. (MULP) Prerequisite: MATH 2471 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Mathematics CAO 092|Dif Tui- Science & Engineering|Lab Required|Multicultural Perspective

**Grade Mode:** Standard Letter

**TCCN:** MATH 2414

**MATH 2473. Integral Calculus with Multivariables and Series.**

This course is a continuation of differential and integral calculus. Select topics from Calculus II and Calculus III are covered including methods of integration, sequences and series, and introduction to partial derivatives. Prerequisite: MATH 2471 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Mathematics CAO 092|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3305. Introduction to Probability and Statistics.**

This is a calculus-based probability and statistics course. Topics include probability, conditional probability, discrete and continuous random variables, univariate and multivariate distributions of random variables, mathematical expectations, and moment-generating functions. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3306. Introduction to Statistical Methods.**

This is a calculus-based statistics course covering such topics as essential descriptive statistics, probability, discrete and continuous probability distributions, sampling distributions, concepts of estimation and hypothesis testing, confidence intervals, hypothesis tests based on one or more samples, and simple linear regression. Prerequisite: MATH 2472 with a grade of "C" or better and a 2.75 overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3315. Foundations of Geometry.**

In this course students seeking teacher certification will study Euclidean Geometry and will be introduced to non-Euclidean Geometries. Dynamic geometry software and historical aspects of geometry will be integrated into the course. This course may not be applied to a minor in mathematics. Prerequisite: MATH 2321 or MATH 2471 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3323. Differential Equations.**

In this course various methods of solving common types of ordinary differential equations are studied. Students learn the conditions under which solutions to first-order and second-order ordinary differential equations exist and are unique. Applications to science, engineering, and technology receive emphasis throughout the course. Prerequisite: MATH 2472 or MATH 2473 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3324. Applied Multivariate Statistics.**

This course is an introduction to applied multivariate statistical methods including multiple regression, analysis of variance, logistic regression, and time series. In addition, this course introduces the student to the use of statistical software including the proper application, limitations, and interpretations of results. Prerequisite: [MATH 2471 or MATH 2321] and [MATH 2328 or MATH 3305] both with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter



**MATH 3325. Number Systems.**

In this course, students construct the natural numbers algebraically, establishing the basic vocabulary and proof techniques of abstract algebra and the structural properties of the natural, integral, rational, real, and complex number systems. Corequisite: MATH 2471 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3330. Introduction to Advanced Mathematics.**

This course introduces fundamental methods of proof and the core language of modern mathematics. Topics include the theory of sets, logic, relations, functions, the cardinality of sets, and related subjects. Prerequisite: MATH 2471 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3348. Deterministic Operations Research.**

This course provides a broad overview of deterministic operations research techniques. Linear programming, including the simplex method, duality, and sensitivity analysis, will be covered. Further selected topics are integer programming, dynamic programming, scheduling models, game theory, and associated topics. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3376. Applied Linear Algebra.**

This course covers linear algebra and matrix theory while considering their computational aspects. Topics include a variety of methods for solving systems and related properties. Emphasis is placed on topics useful in civil engineering, applied mathematics, and other disciplines, serving as a preparatory course for the finite element method. Prerequisite: MATH 2472 or MATH 2473 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3377. Linear Algebra.**

An introductory course in linear algebra covering systems of linear equations, vector spaces, linear transformations, matrices, and additional topics as time permits. Mathematical proofs are an essential part of this course. Prerequisite: MATH 2472 with a grade of "C" or higher.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3380. Analysis I.**

This is a course covering the introduction to the theory of real functions. Topics include limits, continuity, derivatives, and associated topics. Prerequisite: MATH 3330 and MATH 2472 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3383. Numerical Analysis I.**

This course focuses on basic numerical methods in mathematics to solve functional problems in fields such as engineering and applied sciences.

This course covers instructions in computer arithmetic, solutions of equations, interpolation, numerical differentiation/integration, and applications to scientific and industrial applications. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3398. Discrete Mathematics II.**

This course continues the studies in Discrete Math I, topics include combinatorics, countability and counting arguments, discrete probability, relations, recursion and recurrence, generating functions, algorithms, and growth of functions. Prerequisite: MATH 2358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4302. Principles of Mathematics II.**

Algebraic reasoning and probability with selected topics from quantitative reasoning, measurement, statistics, and geometry are integrated with middle school pedagogical practices such as inquiry-based learning and the use of technology. Appropriate correlated lessons, writing components, and culturally responsive teaching are incorporated. (WI) Prerequisite: MATH 2312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**MATH 4303. Capstone Mathematics for Middle School Teachers.**

A rigorous, integrated, analytical perspective of mathematical topics; quantitative reasoning, geometry and measurement, probability and statistics, number theory, and algebraic reasoning. This course may not be applied to a mathematics minor. Must be taken before student teaching. Prerequisite: [MATH 2331 or MATH 2472] and MATH 3315 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4304. Capstone Mathematics for Secondary Teachers (of Mathematics).**

Basic concepts underlying algebra, geometry, trigonometry, and calculus are taught from an advanced standpoint, including historical, philosophical, and cultural significance. This course may not be applied to a minor in mathematics. Must be taken before student teaching. Prerequisite: MATH 3315 and [MATH 2331 or MATH 2472] with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4305. Advanced Probability and Statistics.**

This mathematical statistics course focuses on statistical inferences and data analysis. Topics include functions of random variables and their distributions, the Central Limit Theorem, point estimators and their properties, concepts and applications of interval estimation of population parameters, and the theory and applications of statistical tests of hypotheses. Prerequisite: MATH 3305 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4306. Fourier Series and Boundary Value Problems.**

Advanced solution methods for ordinary differential equations and partial differential equations are studied, focusing on series approximations and Fourier series solutions. Applications of boundary value problems typical of scientific applications are studied. Prerequisite: MATH 3323 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4307. Modern Algebra.**

This course covers structures, structure-preserving functions, and other fundamental concepts of modern algebra, emphasizing group theory. Prerequisite: MATH 3330 and [MATH 3325 or MATH 3377] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4311. Introduction to the History of Mathematics.**

This course is a survey of the development of major mathematical topics, including geometry, algebra, calculus, and advanced mathematics. Philosophical and cultural aspects will be integrated with the structure, theorems, and applications of mathematics. (WI) Prerequisite: MATH 3315 and [MATH 2331 or MATH 2472] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**MATH 4315. Analysis II.**

A continuation of MATH 3380, this course's topics include differentiation, integration, series, and sequences of functions, and associated topics.

Prerequisite: MATH 3380 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4327. Introduction to Complex Analysis and Its Applications.**

This course introduces topics in the theory of functions of a complex variable (contour integrals, series, residues of analytic functions, and conformal mappings) with engineering and science applications.

These include solving boundary value problems, locating zeros of analytic functions, analyzing two-dimensional heat and fluid flows, and calculating inverse Laplace transforms. Prerequisite: [MATH 2393 or MATH 2473] and MATH 3323 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4330. General Topology.**

In this course, students study the concepts of convergence, continuity, compactness, connectedness, and fixed points in topological spaces, particularly in metric spaces. Prerequisite: MATH 3330 and MATH 2472 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4336. Studies in Applied Mathematics.**

This course covers selected topics including Laplace transforms, complex variables, advanced calculus for applications, calculus of variations, integral and differential equations, vector analysis, and other topics from applied mathematics. It may be repeated once for credit with a different topic. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4337A. Topological Data Analysis.**

This research-based course introduces students to computational topology and topological data analysis. In addition to studying existing data studies from the recent scientific literature, students will also analyze a data set they have personally chosen. Students will present their progress and results both orally and in writing. Prerequisite: MATH 3377.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MATH 4337B. Research in Discrete Mathematics.**

This course is an introduction to creative mathematical activities. It provides an opportunity to perform research in discrete mathematics, as well as to learn how to present mathematical results both orally and in writing. These skills are essential for those students continuing into graduate studies. Prerequisite: Texas State GPA 3.25; MATH 2358. Corequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MATH 4337C. Numerical Methods for Ordinary Differential Equations.**

This research-based course has students investigate known methods of numerically solving ordinary differential equations (Runge-Kutte, Adams, Predictor-Corrector, etc.). Students will research the effect of variations on these methods by implementing their algorithm modifications in mathematical software and reporting on their results. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MATH 4337D. Topics in Topology and Algebra.**

This course introduces students to modern research methods in topology and algebra. Specific topics will vary based on student interest and input, but the basic concepts and methods of algebraic topology (homology and cohomology groups, homotopy groups), homotopy theory, and simplicial methods form the backbone of this course. Prerequisite: MATH 3330 with a grade of "C" or better and a minimum 2.0 Texas State GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**MATH 4337H. Undergraduate Research in Topology and Artificial Neural Networks.**

The course will introduce the mathematics behind Artificial Neural Networks (ANN) with an eye towards applying topology to study ANN's. Topics include general machine learning concepts, feedforward neural networks, the gradient descent algorithm, the universal approximation theorem, convolutional neural networks, topology, and VC dimension. Students will customize a basic artificial neural network written in Python through hands-on projects. Prerequisite: MATH 2471 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 4350. Introduction to Combinatorics.**

This course presents fundamental combinatorial concepts, including standard techniques and methods of proof specific to the field. Topics include advanced counting, generating functions, linear and nonlinear recurrence relations, combinatorial designs. Applications of the topics will be explored as time permits. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4383. Numerical Analysis II.**

This course focuses on various mathematical and computational methods in modeling, analyzing, and simulating scientific and engineering problems. Topics include approximation, optimization, differential equations, scientific computation, and scientific and industrial applications. Prerequisite: MATH 3383 and MATH 3323 both with a grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4393. Introduction to Finite Element Methods.**

This course introduces weak formulations of the partial differential equations and the finite element approximation of this weak form. Theory and computations are balanced. Topics include finite element methods for approximating solutions of partial differential equations and related properties. Emphasis topics are in civil engineering, applied mathematics, and related disciplines. Prerequisite: [MATH 3376 or MATH 3377] and MATH 3323 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature, three hours of mathematics, science, logic, or computer science courses, a minor and six hours of 2000-level modern language courses. Most students will have to complete the 1410 and 1420 language courses as prerequisites before attempting the 2310 course.
3. Nine hours of writing intensive (WI) courses are required for graduation.
4. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).

- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- The minimum number of hours required for this degree program is 120. The number of free elective hours a student will complete depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours.
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.

## Course Requirements

		Freshman	
		First Semester Hours	Second Semester Hours
US 1100	1	MATH 2472 (Component Area Option Code 090 and 092 [TCCN MATH 2414])	4
MATH 2471 (Mathematics Component Code 020 [TCCN 2413]) <sup>1</sup>	4	Communication Component Code 010	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	American History Component Code 060	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3	Life and Physical Sciences Component Code 030	3
Social and Behavioral Sciences Component Code 080	3	Language, Philosophy, and Culture Component Code 040	3
	<b>14</b>		<b>16</b>
		Sophomore	
		First Semester Hours	Second Semester Hours
MATH 2393 (TCCN MATH 2315)	3	MATH Advanced Elective	3
MATH 3330	3	CS 1428 (TCCN COSC 1437)	4
Minor	3	Modern Language 1420	4
Modern Language 1410	4	Component Area Option Codes 090	3
Life and Physical Sciences Component Code 030	4		
	<b>17</b>		<b>14</b>
		Junior	
		First Semester Hours	Second Semester Hours
MATH 3377	3	MATH 3380	3
Minor	3	MATH Advanced Elective	3
Modern Language 2310	3	Minor	3
American History Component Code 060	3	Modern Language 2320	3
Creative Arts Component Code 050 [HUMA 1315]	3	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
	<b>15</b>		<b>15</b>

		Senior	
		First Semester Hours	Second Semester Hours
MATH 4330	3	MATH 4307	3
Minor	6	MATH 4315	3
BA ENG Literature [TCCN ENGL 2322, ENGL 2323, ENGL 2332, ENGL 2333, ENGL 2327, ENGL 2328]	3	Minor	3
Elective	2	MATH Advanced Elective	3
		Elective	3
	<b>14</b>		<b>15</b>

**Total Hours: 120**

<sup>1</sup> Even though MATH 2471 is the first required mathematics course, some students will need to take courses numbered below 2471. Credit examinations in MATH 1315, MATH 2417 and MATH 2471 are available.

## MATH Advanced Electives

Code	Title	Hours
MATH 3305	Introduction to Probability and Statistics	3
MATH 3323	Differential Equations	3
MATH 3325	Number Systems	3
MATH 3348	Deterministic Operations Research	3
MATH 3383	Numerical Analysis I	3
MATH 3398	Discrete Mathematics II	3
MATH 4305	Advanced Probability and Statistics	3
MATH 4306	Fourier Series and Boundary Value Problems	3
MATH 4327	Introduction to Complex Analysis and Its Applications	3
MATH 4336	Studies in Applied Mathematics	3
MATH 4337A	Topological Data Analysis	3
MATH 4337B	Research in Discrete Mathematics	3
MATH 4337C	Numerical Methods for Ordinary Differential Equations	3
MATH 4350	Introduction to Combinatorics	3
MATH 4383	Numerical Analysis II	3
MATH 4393	Introduction to Finite Element Methods	3

**Minimum required: 120 semester credit hours**

## General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).

4. Nine semester credit hours must be writing intensive (WI).
5. If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
6. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.

## Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
US 1100	1 MATH 2472 (Component Area Option Code 090/092 [TCCN MATH 2414])	4
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3
MATH 2471 (Mathematics Component Code 020 [TCCN 2413]) <sup>1</sup>	4 Life and Physical Sciences Component Code 030 (PHYS 1430 [TCCN 2425] is recommended.)	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 American History Component Code 060	3
Social and Behavioral Sciences Component Code 080	3 Language, Philosophy, and Culture Component Code 040	3
14		16
Sophomore		
First Semester Hours	Second Semester Hours	
MATH 2393 (TCCN MATH 2315)	3 MATH 3305	3
Minor	3 Minor	3
Life and Physical Sciences Component Code 030	4 CS 1428 (TCCN COSC 1437)	4
MATH 2358 (TCCN MATH 2305)	3 MATH 3323	3
Elective	3 Component Area Option Codes 090	3
16		16
Junior		
First Semester Hours	Second Semester Hours	
MATH 3330	3 MATH 3376 or 3377 <sup>2</sup>	3
CS 2308 (TCCN COSC 2336)	3 MATH Advanced Elective	3
Minor	3 Minor	3
Creative Arts Component Code 050 [HUMA 1315]	3 Electives	3
American History Component Code 060	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
15		15

Senior		
First Semester Hours		Second Semester Hours
MATH 3380	3 MATH Advanced Elective	3
MATH 3383	3 Minor	3
Minor	3 Electives	7
Electives	3	
ENG 3303	3	
15		13
Total Hours: 120		

<sup>1</sup> Even though MATH 2471 is the first required mathematics course, some students will need to take courses numbered below 2471.

Credit examinations in MATH 1315, MATH 2417, and MATH 2471 are available.

<sup>2</sup> Only one of MATH 3376 or MATH 3377 may be taken for credit. For this degree program, MATH 3376 is the preferred alternative.

## MATH Advanced Electives

Code	Title	Hours
ENGR 2301	Statics	3
MATH 3348	Deterministic Operations Research	3
MATH 3398	Discrete Mathematics II	3
MATH 4305	Advanced Probability and Statistics	3
MATH 4306	Fourier Series and Boundary Value Problems	3
MATH 4307	Modern Algebra	3
MATH 4315	Analysis II	3
MATH 4327	Introduction to Complex Analysis and Its Applications	3
MATH 4336	Studies in Applied Mathematics	3
MATH 4337A	Topological Data Analysis	3
MATH 4337B	Research in Discrete Mathematics	3
MATH 4337C	Numerical Methods for Ordinary Differential Equations	3
MATH 4350	Introduction to Combinatorics	3
MATH 4383	Numerical Analysis II	3
MATH 4393	Introduction to Finite Element Methods	3

**Minimum required: 120 semester credit hours**

## General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
3. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.



- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Nine semester credit hours must be writing intensive (WI).
- Students pursuing this B.S. degree program are required to complete an additional 3 hours of English which are not taken to meet the code 010 core requirements. Students may select from the following English courses.

Code	Title	Hours
ENG 2310	British Literature before 1785	3
ENG 2320	British Literature since 1785	3
ENG 2330	World Literature before 1600	3
ENG 2340	World Literature since 1600	3
ENG 2359	US Literature before 1865	3
ENG 2360	US Literature since 1865	3
ENG 3303	Technical Writing	3

- If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.

## Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
US 1100	1 MATH 2472 (Component Area Option Code 090/092 [TCCN MATH 2414])	4
MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413]) <sup>1</sup>	4 American History Component Code 060	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 Communication Component Code 010	3
POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3 Life and Physical Sciences Component Code 030	3
Social and Behavioral Sciences Component Code 080	3 Language, Philosophy, and Culture Component Code 040	3
Component Area Option Codes 090	3	
<b>17</b>	<b>16</b>	

Sophomore		
First Semester Hours	Second Semester Hours	
MATH 2393 (TCCN MATH 2315)	3 Minor	3
MATH 3330	3 CS 1428 (TCCN COSC 1437)	4
Minor	3 MATH 3377	3
Life and Physical Sciences Component Code 030	4 MATH Advanced Electives	3
Electives	3	
<b>16</b>	<b>13</b>	

Junior		
First Semester Hours	Second Semester Hours	
MATH 3380	3 MATH Advanced Electives	6
Creative Arts Component Code 050 [HUMA 1315]	3 Minor	3
American History Component Code 060	3 Electives	3
Minor	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
Electives	3	
<b>15</b>	<b>15</b>	

Senior		
First Semester Hours	Second Semester Hours	
MATH 4330	3 MATH 4307	3
MATH Advanced Elective	3 MATH 4315	3
Electives	4 Minor	6
ENG 3303 (or ENG Literature)	3 Elective	3
<b>13</b>	<b>15</b>	

**Total Hours: 120**

<sup>1</sup> Even though MATH 2471 is the first required mathematics course, some students will need to take courses numbered below 2471. Credit examinations in MATH 1315, MATH 2417 and MATH 2471 are available.

## MATH Advanced Electives

Code	Title	Hours
MATH 3305	Introduction to Probability and Statistics	3
MATH 3323	Differential Equations	3
MATH 3325	Number Systems	3
MATH 3348	Deterministic Operations Research	3
MATH 3383	Numerical Analysis I	3
MATH 3398	Discrete Mathematics II	3
MATH 4305	Advanced Probability and Statistics	3
MATH 4306	Fourier Series and Boundary Value Problems	3
MATH 4327	Introduction to Complex Analysis and Its Applications	3
MATH 4336	Studies in Applied Mathematics	3
MATH 4337A	Topological Data Analysis	3
MATH 4337B	Research in Discrete Mathematics	3
MATH 4337C	Numerical Methods for Ordinary Differential Equations	3
MATH 4337D	Topics in Topology and Algebra	3
MATH 4350	Introduction to Combinatorics	3
MATH 4383	Numerical Analysis II	3
MATH 4393	Introduction to Finite Element Methods	3

## Minimum required: 120 semester credit hours

### Admission Requirement

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. This degree program is designed to prepare students for secondary teacher certification in Mathematics and requires that students pursue a double major by declaring and completing requirements for both the major in Mathematics and the major in Education. The following courses are required for the major in Education:

Code	Title	Hours
Education Foundation		
CI 2310	Education for Change	3
CI 3325	Adolescents and Society	3
CI 4332	Secondary Teaching: Curriculum and Technology	3
Teaching and Learning		
CI 3340	Teaching for Linguistic Diversity	3
CI 4343	Instructional Strategies for the Secondary Teacher	3
CI 4370	Building Relationships in the Secondary Classroom	3
CI 4372	Teaching in Communities	3
RDG 3323	Teaching Literacies in the Content Areas	3
SPED 4344	Educating Students with Mild Disabilities	3
Clinical Practice		
EDST 4681	Clinical Teaching 7-12	6
<b>Total Hours</b>		<b>33</b>

3. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
5. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
6. Nine credit hours must be writing intensive (WI).
7. If two years of the same foreign language were taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.
8. All students seeking teacher certification must apply for and be admitted to the Educator Preparation Program in order to enroll in education coursework and student teaching in the Junior and Senior

years. Refer to the requirements for Admittance to the Educator Preparation Program through the Office of Educator Preparation (p. 263).

9. The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

10. For transfer students, 6 semester credit hours in Curriculum and Instruction and Special Education may be transferred from a Texas public institution of higher education for the Associate of Arts in Teaching Field of Study and be applied to the Bachelor of Science degree with a major in Education at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
CI 2310	Education for Change (CI ELNA)	3
TCCN: EDUC 1301		
SPED 4344	Educating Students with Mild Disabilities (CI ELNA)	3
TCCN: EDUC 2301		

### Course Requirements

Freshman

First Hours Semester	Second Hours Semester	
US 1100	1 MATH 2472 (Component Area Option Code 090/092)	4
ENG 1310 (Communication Component Code 010)	3 CS 1428	4
POSI 2310 (Government/ Political Science Component Code 070)	3 American History Component Code 060	3
MATH 2471 (Mathematics Component Code 020) <sup>1</sup>	4 Language, Philosophy, and Culture Component Code 040	3

Social and Behavioral Sciences Component Code 080	3 Communication Component Code 010	3
<b>14</b>	<b>17</b>	

**Sophomore**

First Hours Semester	Second Hours Semester	Summer Hours	
MATH 3330	3 MATH 3306	3 Summer I:	
MATH 3315	3 MATH 3377	3 American History Component Code 060	3
Life and Physical Sciences Component Code 030	3-4 Life and Physical Sciences Component Code 030	4 Elective	3
Electives	1-2 CI 2310	3 Summer II:	
Creative Arts Component Code 050	3 COMM 1310 (Component Area Option Code 090/091)	3 Government / Political Science Component Code 070	3
<b>13</b>	<b>16</b>	<b>9</b>	

**Junior**

First Hours Semester	Second Hours Semester	
Education Core:	6 MATH 4307	3
CI 3325	MATH 4304	3
CI 4332	ENG 3303 (or ENG Literature)	3
MATH 3380	3 Block I:	9
MATH 4311	3 CI 3340	
MATH Advanced Elective	3 CI 4343	
	SPED 4344	
<b>15</b>	<b>18</b>	

**Senior**

First Hours Semester	Second Hours Semester	
MATH Elective	3 Clinical Practice: Student Teaching	6
Block II:	9 EDST 466	
CI 4370		
CI 4372		

RDG 3323

**12****6****Total Hours: 120**

<sup>1</sup> Even though MATH 2471 is the first required mathematics course, some students will need to take courses numbered below 2471. Credit examinations in MATH 1315, MATH 2417 and MATH 2471 are available. Electives should be chosen in consultation with the academic advisor.

**MATH Electives**

Code	Title	Hours
MATH 2393	Calculus III	3
MATH 3323	Differential Equations	3
MATH 3325	Number Systems	3
MATH 4305	Advanced Probability and Statistics	3
MATH 4315	Analysis II	3
MATH 4330	General Topology	3

The minor in Applied Mathematics requires 20 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
MATH 2471	Calculus I	4
MATH 2472	Calculus II	4
Choose 12 hours from the following:		12

**Prescribed Electives**

MATH 2393	Calculus III
MATH 3305	Introduction to Probability and Statistics <sup>1</sup>
MATH 3323	Differential Equations
MATH 3324	Applied Multivariate Statistics
MATH 3348	Deterministic Operations Research
MATH 3376	Applied Linear Algebra <sup>2</sup>
MATH 3377	Linear Algebra <sup>2</sup>
MATH 3398	Discrete Mathematics II
MATH 3383	Numerical Analysis I
MATH 4305	Advanced Probability and Statistics
MATH 4306	Fourier Series and Boundary Value Problems
MATH 4327	Introduction to Complex Analysis and Its Applications
MATH 4336	Studies in Applied Mathematics
MATH 4337A	Topological Data Analysis
MATH 4337B	Research in Discrete Mathematics
MATH 4337C	Numerical Methods for Ordinary Differential Equations
MATH 4337F	Undergraduate Research in Autonomous Systems
MATH 4337H	Undergraduate Research in Topology and Artificial Neural Networks
MATH 4350	Introduction to Combinatorics
MATH 4383	Numerical Analysis II
MATH 4393	Introduction to Finite Element Methods
<b>Students may complete one of the following:</b>	
CS 3378	Theory of Automata

ENGR 2301	Statics	
IE 3320	Engineering Statistics <sup>2</sup>	
PHYS 3320	Introduction to Mathematical Physics	
<b>Total Hours</b>		<b>20</b>

<sup>1</sup> Students may not receive credit for both MATH 3305 and IE 3320.

<sup>2</sup> Students may not receive credit for both MATH 3376 and MATH 3377. Students with this minor are encouraged to take MATH 3376.

The minor in Mathematics requires 20 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
MATH 2471	Calculus I	4
MATH 2472	Calculus II	4
Choose 12 hours from the following:		12
<b>Prescribed Electives</b>		
MATH 2393	Calculus III	
MATH 3305	Introduction to Probability and Statistics	
MATH 3323	Differential Equations	
MATH 3324	Applied Multivariate Statistics	
MATH 3325	Number Systems	
MATH 3330	Introduction to Advanced Mathematics	
MATH 3348	Deterministic Operations Research	
MATH 3377	Linear Algebra	
MATH 3380	Analysis I	
MATH 3383	Numerical Analysis I	
MATH 3398	Discrete Mathematics II	
MATH 4305	Advanced Probability and Statistics	
MATH 4306	Fourier Series and Boundary Value Problems	
MATH 4307	Modern Algebra	
MATH 4315	Analysis II	
MATH 4327	Introduction to Complex Analysis and Its Applications	
MATH 4330	General Topology	
MATH 4336	Studies in Applied Mathematics	
MATH 4337A	Topological Data Analysis	
MATH 4337B	Research in Discrete Mathematics	
MATH 4337C	Numerical Methods for Ordinary Differential Equations	
MATH 4337D	Topics in Topology and Algebra	
MATH 4337E	Set Theory	
MATH 4337F	Undergraduate Research in Autonomous Systems	
MATH 4337H	Undergraduate Research in Topology and Artificial Neural Networks	
MATH 4350	Introduction to Combinatorics	
MATH 4383	Numerical Analysis II	
MATH 4393	Introduction to Finite Element Methods	
<b>Total Hours</b>		<b>20</b>

For students who are seeking a teacher certification within their major and would like a second teaching field in Mathematics, the requirements are:

Code	Title	Hours
MATH 2471	Calculus I	4
MATH 2472	Calculus II	4
MATH 3306	Introduction to Statistical Methods	3
MATH 3315	Foundations of Geometry	3
MATH 3330	Introduction to Advanced Mathematics	3
MATH 3377	Linear Algebra	3
MATH 3380	Analysis I	3
MATH 4304	Capstone Mathematics for Secondary Teachers (of Mathematics)	3
MATH 4307	Modern Algebra	3
<b>Total Hours</b>		<b>29</b>

All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/).

Roy F. Mitte Building Room 3240  
T: 512.245.2131 F: 512.245.8233  
[www.txstate.edu/physics/](http://www.txstate.edu/physics/) (<http://www.txstate.edu/physics/>)

Physics, the study of matter and energy, is at the root of every field of natural science and underlies all physical phenomena. The problem-solving skills learned in the study of physics are valuable even if one's career is not in a physics-related field.

The B.S. with a major in Physics provides a rigorous background in physics as a preparation for graduate studies or a career in industry. The B.A. with a major in Physics is for students who want a background in physics but plan to pursue fields of interest other than physics as a life's work. The B.S. with a major in Physics (Astronomy Concentration) provides a rigorous background in physics as well as an overview of modern astronomy as a preparation for work at astronomical observatories or graduate study in astronomy.

Career opportunities for a physics major exist in a wide variety of settings, from teaching in a classroom to basic research in an industrial or government laboratory, as a self-employed consultant, or as a member of a multidisciplinary research team.

Students who enter Texas State needing mathematics at a level below MATH 2417 are urged to attend a summer session to avoid any delay in starting their physics courses.

For more information contact the College of Science and Engineering Advising Center or the departmental advisor for the Department of Physics. For information on engineering technology, mechanical engineering, electrical engineering, civil engineering, industrial engineering, and manufacturing engineering, see the Ingram School of Engineering or The Department of Engineering Technology sections of this catalog.

Students may not both major and minor in programs offered by The Department of Physics except for those students who are double

majoring in physics and education who have the opportunity to minor in advanced physics.

## Teacher Certification

Physics teacher preparation is one of the specialties of the Department of Physics. Through various peer teaching opportunities in the department, students may discover at any point during their undergraduate career that they have an interest in teaching physics at the secondary level (grades 7-12). There are multiple pathways for becoming a physics teacher, and which one is best for a particular student depends partly on the stage of degree progress at which the student identifies their interest. For those who identify a teaching interest early on, the recommended pathway is to pursue a B.S. Major in Physics (Secondary Education; Teacher Certification in Physics/Mathematics, Grades Seven Through Twelve, with Double Major in B.S. Education). This double major is required for any physics student wishing to graduate with a bachelor's degree and physics teacher certification. Students may choose to add a minor in Advanced Physics if they want to study all of the standard undergraduate physics curriculum that is offered in the regular B.S. Major in Physics. Students who are not pursuing Teacher Certification may not pursue the minor in Advanced Physics. Some students choose to pursue teacher certification after graduation. In any case, the department provides customized, one-on-one advising to each future physics teacher. Students should contact the department's Faculty Undergraduate Advisor as early as possible if they are interested in pursuing physics teaching.

## Bachelor of Arts (B.A.)

- Major in Physics (p. 781)

## Bachelor of Science (B.S.)

- Major in Physics (p. 782)
- Major in Physics (Astronomy Concentration) (<http://mycatalog.txstate.edu/undergraduate/science-engineering/physics/physics-astronomy-bs/>)
- Major in Physics (Secondary Education; Teacher Certification in Physics/Mathematics, Grades Seven through Twelve, with Double Major in B.S. Education) (p. 783)

## Minors

- Advanced Physics (<http://mycatalog.txstate.edu/undergraduate/science-engineering/physics/advanced-physics-minor/>)
- Physics

## Courses in Physics (PHYS)

### PHYS 1115. General Physics I Laboratory.

First of two laboratory courses in General Physics for science-related majors. The course introduces students to the basics of measurement. Topics cover mechanics and heat. Corequisite: PHYS 1315 or PHYS 1335 either with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1101

### PHYS 1125. General Physics II Laboratory.

This is the second of two laboratory courses in general Physics. The course introduces the students to experimental measurements and demonstration of principles of electricity, magnetism, optics, modern physics, electromagnetic waves. Corequisite: PHYS 1325 or PHYS 1345 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1102

### PHYS 1310. Elementary Physics I.

This course is a non-mathematical survey of mechanics, properties of matter, heat, and sound. These topics are described conceptually with applications relating to the world around us. PHYS 1310 and PHYS 1320 are designed for the liberal arts student. The order in which they are taken is not important. They are not recommended for pre-engineering students or majors and minors in science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1305

### PHYS 1315. General Physics I.

This is the first course in a two semester sequence which is a survey of the basic laws and principles of physics and includes the topics of mechanics and heat. The course is designed for students whose program requires technical physics, but who are not pre-engineering students or majors or minors in physics. Prerequisite: [MATH 1315 or MATH 1317 or MATH 2321 or MATH 2417 or MATH 2471 with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Mathematics score of 520 or better] or [SAT Math section score of 550 or better] or [Next-Generation Advanced Algebra and Functions Test score of 263 or better]. Corequisite: PHYS 1115 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Co-requisite(s):** PHYS 1115

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1301

### PHYS 1320. Elementary Physics II.

This course is a non-mathematical survey of electricity, magnetism, light, relativity, and atomic and nuclear physics. These topics are described conceptually with applications relating to the world around us. PHYS 1310 and PHYS 1320 are designed for the liberal arts student. The order in which they are taken is not important. They are not recommended for pre-engineering students or majors and minors in science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1307



**PHYS 1325. General Physics II.**

This is the second course in a two semester sequence which is a survey of the basic laws and principles of physics and includes the topics of waves, light, electricity and magnetism. This course is designed for students whose program requires technical physics, but who are not pre-engineering students or majors or minors in physics. Prerequisites: PHYS 1315 or PHYS 1335 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Co-requisite(s):** PHYS 1125

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1302

**PHYS 1335. General Physics I for Life Sciences Majors.**

This is the first course in a two-semester sequence which surveys the fundamental principles of physics. This focus of this first course is on the topics of mechanics, fluids, and heat. The course is designed for biology, pre-health, and life-science majors whose program requires technical physics. Credit for both PHYS 1335 and PHYS 1315 cannot be given.

Prerequisite: [MATH 1315 or MATH 1317 or MATH 2321 or MATH 2417 or MATH 2471 with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Mathematics score of 520 or better] or [SAT Math section score of 550 or better] or [AAF score of 263 - 300]. Corequisite: PHYS 1115 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 1340. Astronomy: Solar System.**

A study of the solar system. Topics included are a study of the sun, the planets and their satellites, the comets, and other components of the solar system. Some aspects of telescopes and ancient astronomy will be included also.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** ASTR 1304

**PHYS 1345. General Physics II for Life Science Majors.**

This is the second course in a two-semester sequence which surveys the fundamental principles of physics. The focus of this second course is on the topics of oscillations, light, and electrical phenomena. This course is designed for biology, pre-health, and life-science majors whose program requires technical physics. Prerequisite: PHYS 1315 or PHYS 1335 with a grade of "C" or better. Corequisite: PHYS 1125 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 1350. Astronomy: Stars and Galaxies.**

A study of the universe beyond the solar system. Topics included are a study of the stars and star clusters, nebulae, galaxies, and an introduction to some aspects of cosmology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** ASTR 1303

**PHYS 1365. Physics for Educators.**

This studio-style course introduces physics concepts through active exploration and discussion of physical phenomena. Course content includes developing concepts of force and motion, light, sound, waves, electricity, magnetism, energy, and conservation laws. Focus is on how physics helps make sense of everyday experience, and on the learning and teaching of children in grades K-8.

**3 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1310

**PHYS 2125. Mechanics Laboratory.**

This course introduces students to experimental methods in the study of motion, forces, energy, momentum, and other topics in mechanics. This laboratory course is designed to accompany PHYS 2325. Corequisite: PHYS 2325 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2126. Electricity and Magnetism Laboratory.**

This course introduces students to experimental methods in the study of electric charges and fields, electric circuits, magnetic materials, and electromagnetic induction. This laboratory course is designed to accompany PHYS 2326. Corequisite: PHYS 2326 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2135. Waves and Heat Laboratory.**

This course introduces students to experimental methods in the study of geometrical and physical optics and of thermodynamics. This laboratory course is designed to accompany PHYS 2335. Corequisite: PHYS 2335 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2150. Professional Development for Beginning Physicists.**

This course introduces to physics majors career options and opportunities for internships, scholarships, and research internal and external to the university. The course also develops essential practical skills for job seekers. Prerequisite: PHYS 2326 and PHYS 2126 and PHYS 2335 and PHYS 2135 all with grades of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2230. Introduction to Computational Modeling for Physics.**

This course is an introduction to computational concepts and tools that physicists use for data analysis, simulation and modeling, and visualization in research and dissemination. Python and its various libraries are emphasized. Prerequisite: PHYS 2325 and PHYS 2125 with grades of "C" or better. Corequisite: [PHYS 2326 and PHYS 2126] or [PHYS 2335 and PHYS 2135] with grades of "C" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2325. Mechanics.**

This course covers the principles of introductory classical mechanics through problem-solving and research-validated interactive instruction. Corequisite: MATH 2471 with a grade of "C" or better and PHYS 2125 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2326. Electricity and Magnetism.**

This course covers the principles of classical electricity and magnetism through problem-solving and research-validated interactive instruction. Prerequisite: PHYS 2325 and [MATH 2472 or MATH 2473] with grades of "C" or better. Corequisite: PHYS 2126 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Life & Phys Sciences CAO 093|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2335. Waves and Heat.**

This course covers the principles of thermodynamics, geometric optics, and physical optics through problem solving and research-validated interactive instruction. Prerequisite: MATH 2471 and PHYS 2325 with grades of "C" or better. Corequisite: [MATH 2472 or MATH 2473] with a grade of "C" or better and PHYS 2135 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3210. Physics Cognition and Pedagogy.**

This course is an introduction to physics-specific pedagogy and the methods and results of physics education research (PER). Students will investigate relevant literature in PER and cognitive science, engage in discussions about physics teaching and learning, and reflect on their own teaching practice in the role of Physics Learning Assistants. (WI).

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 3301. Musical Acoustics.**

A survey of the physics of sound and acoustic measurement. Special emphasis will be placed on sound production, propagation, and perception as applied to music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3311. Classical Mechanics.**

This course discusses the fundamentals of classical mechanics focusing on the physical description of the behavior of single and multiple particle systems. Topics include advanced problem-solving strategies for systems with position and velocity dependent forces, simple harmonic oscillators, and non-inertial reference frames. Prerequisite: PHYS 2335 and PHYS 2135 with grades of "C" or better. Corequisite: PHYS 3320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3312. Modern Physics.**

This course is an introduction to the foundations of modern physics, including the following topics: relativistic mechanics, foundational experiments in the development of quantum mechanics, light and energy, wave nature of particles, and nuclear physics. Prerequisite: PHYS 2335 and PHYS 2135 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3313. Astrophysics.**

This course surveys a variety of issues in astrophysics through problem solving, quantitative measurements, and theoretical reasoning. Topics include celestial mechanics, stellar dynamics and evolution, galaxy evolution, and cosmology. Corequisite: PHYS 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3315. Thermodynamics.**

This course is a fundamental study of thermodynamics and statistical mechanics. Prerequisite: MATH 3323 and [(PHYS 2335 and PHYS 2135) or (ENGR 2300 and PHYS 2326 and PHYS 2126)] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3318. Galactic and Extragalactic Astrophysics.**

A survey of the physical properties, dynamics, and distribution of galaxies. Topics include the contents, origin, and evolution of the Milky Way and other galaxies; the large-scale distribution of galaxies in groups, clusters and superclusters; interactions between galaxies; dark matter; active galaxies and supermassive black holes; high redshift Universe.

Prerequisite: PHYS 3313 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3320. Introduction to Mathematical Physics.**

This course is an introduction to the mathematical methods of theoretical physics with emphasis on development of mathematical tools used in upper division core physics courses. Students will also develop their ability to communicate mathematical ideas in the context of physics.

Prerequisite: MATH 2393 and PHYS 2326 and PHYS 2126 all with grades of "C" or better. Corequisite: MATH 3323 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3411. Advanced Physics Laboratory.**

This course is an introduction to experimental modern physics, with emphasis on the design and assembly of physics apparatus and the development of practical skills for controlling and automating data collection. (WI) Prerequisites: PHYS 2326 and PHYS 2126 with grades of "C" or better. Corequisites: PHYS 2335 and PHYS 2135 with grades of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 3416. Applied Electronics.**

This Laboratory/lecture course is an introduction to electronic test bench methods for the construction, operation and analysis of important DC/AC circuits utilizing resistors, capacitors, diodes, BJTs, FETs, and OpAmps. The behavior of the circuits will be modeled in SPICE. Elementary semiconductor device physics and microfabrication methods will be discussed. (WI) Prerequisites: PHYS 2326 and PHYS 2126 and PHYS 2335 and PHYS 2135 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 3417. Optics.**

This course is a one-semester survey of geometrical and physical optics accompanied by laboratory experience. Topics covered include electromagnetic waves and their propagation, geometrical optics, polarization, interference, diffraction, Fourier optics, and holography. (WI) Prerequisites: PHYS 2326 and PHYS 2126 and PHYS 2335 and PHYS 2135 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 3418. Methods in Observational Astrophysics.**

This course is an introduction to methods and instrumentation used in observational astrophysics. Topics include image processing, data acquisition and analysis, and detectors for data across the electromagnetic spectrum. Prerequisite: PHYS 2326 and PHYS 2126 and PHYS 2335 and PHYS 2135 all with grades "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 4121. Undergraduate Research.**

This course represents a student's research project in physics to be carried out under the supervision of a faculty member. The student must contact a faculty member in advance to arrange the topic and specific course objectives. This course may be repeated for credit. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4221. Undergraduate Research.**

This course represents a student's research project in physics to be carried out under the supervision of a faculty member. The student must contact a faculty member in advance to arrange the topic and specific course objectives. This course may be repeated for credit. Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4305. Statistical Physics.**

Statistical physics is the study of energy flow and energy distributions within systems in equilibrium. Students will explore a range of phenomena including black-body radiation, diffusion, phase transitions, and magnetism. Emphasis will be placed on topics of entropy, probability, free energy, Boltzmann distributions, and the atomic behavior of these systems. Prerequisite: MATH 3323 and PHYS 3312 and PHYS 3320 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4310. Electromagnetic Field Theory I.**

An introduction to the electromagnetic field theory of classical physics for static fields. Topics included will be the electrostatic field, polarization and dielectrics, electrostatic energy, magnetic field of steady currents, magneto static energy, and magnetic properties of matter. Prerequisite: [MATH 2393 or MATH 3373] and MATH 3323 and PHYS 3320 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4311. Condensed Matter Physics.**

Application of physics principles to solid materials. Topics include crystal structure and the reciprocal lattice, including x-ray diffraction, crystal binding and elastic properties, lattice vibrations, energy bands, semiconductors and metals. Prerequisite: PHYS 3312 and PHYS 3320 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4312. Quantum Mechanics I.**

This course introduces students to quantum mechanics. Topics include mathematical foundations, fundamental postulates, time development, and one dimensional problems. Prerequisite: PHYS 3312 PHYS 3320 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4315. Electromagnetic Field Theory II.**

An introduction to the electromagnetic field theory of classical physics for time varying fields. Topics included will be electromagnetic induction, time varying electric and magnetic fields, Maxwell's equations, electromagnetic energy, electromagnetic waves and radiation, and a brief introduction to some specialized topics. Prerequisite: PHYS 4310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4320. Selected Study in Physics.**

Topics are chosen in theoretical and experimental areas of current interest in physics with specific topic to be discussed agreed upon prior to registration. May be repeated once with different emphasis and professor for additional credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4321. Undergraduate Research.**

A research project in physics to be carried out under the supervision of a faculty member by upper division physics majors. Student must contact a faculty member in advance to arrange topic and specific course objective. Course may be repeated only as an elective towards the BS or BA in physics. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4330. Relativity.**

This course includes a review of special relativity, an introduction to the mathematics of tensor calculus and differential geometry, and covers such topics from general relativity as the Schwarzschild solution, black holes, tests of general relativity, cosmological models, gravitational waves, and the Einstein equation. Prerequisite: PHYS 3312 and PHYS 3320 with a grade of "C" or better. Corequisite: PHYS 3311 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4345. Biophysics.**

This course applies the principles of physics to the study of living organisms. An emphasis will be placed on the topics of structure, fluids, diffusion, entropy, probabilities, and stochastic processes, as well as on scientific modes of thinking, including modeling, estimation, and data analysis. Prerequisite: PHYS 3320 and PHYS 2230 and PHYS 2335 and PHYS 2135 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4350F. Astronomical Spectroscopy.**

A lecture course introducing students to spectroscopy in astronomy, with particular emphasis on molecular spectroscopy. The course will cover a broad range of aspects including the development of spectroscopy in astronomy, the theory of atomic and molecular spectra, spectra in different astrophysical environments, instrumentation and data reduction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**PHYS 4350G. Nuclear and Particle Physics.**

This course covers the theoretical, phenomenological, and experimental foundations of nuclear and particle physics including the fundamental forces, particles, and composites. An emphasis will be on the fundamental structure of nucleus (nuclear masses and nuclear sizes), nuclear interactions (alpha, beta, and gamma radiation), Fission, Fusion, beyond nuclear physics (quarks and leptons as basic constituents of matter), brief introduction to the Standard model: electroweak interactions, Higgs boson, QCD and basic nuclear Astrophysics (nucleosynthesis of stellar particles). Prerequisite: PHYS 2326 and PHYS 2126 and PHYS 3312 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**PHYS 4350H. Optical Materials and Characterization Methods.**

This course is an introduction to optical properties of solids including electronic and vibrational transitions in inorganic and organic thin films and multilayers. Various optical characterization methods and techniques will be reviewed including Raman, FTIR, Photoluminescence, and X-ray Fluorescence spectroscopy. Students will learn to work with those characterization methods and learn how to interpret the various spectra.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 4360. Physics Cognition and Pedagogy II.**

This course addresses historical, philosophical, and cognitive perspectives on the learning, teaching, and discovery of physics, including results from contemporary research on learning. It is recommended for students pursuing teacher certification. Prerequisite: PHYS 3210 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

Minimum required: 120 semester credit hours

General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition to the general education core curriculum requirements, the Bachelor of Arts degree (p. 60) (B.A.) requires three additional hours of English literature; three hours of mathematics, science, logic, or computer science courses; a minor; and six hours of 2000-level modern language courses. Most students will have to complete the 1410 and 1420 language courses as prerequisites before attempting the 2310 course.
3. Nine hours of writing intensive (WI) courses are required for graduation.

4. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). Students should consult the department advisor or the College of Science and Engineering Advising Center before choosing a minor.
5. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
6. The minimum number of hours required for this degree program is 120. The number of free elective hours a student completes depends on the number of hours a student may need to achieve the required 120 total or 36 advanced hours. Students should consult the department advisor or the College of Science and Engineering Advising Center before choosing the electives.
7. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.

Course Requirements

Freshman		
First Semester Hours	Second Semester Hours	
US 1100	1 PHYS 2335 & PHYS 2135 (TCCN PHYS 2427)	4
MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])	4 MATH 2472 (Component Area Option Code 090/092 [TCCN MATH 2414])	4
PHYS 2325 & PHYS 2125 (Life and Physical Sciences Component Code 030 [TCCN PHYS 2325 and 2125])	4 American History Component Code 060	3
American History Component Code 060	3 Communication Component Code 010	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	
15	14	
Sophomore		
First Semester Hours	Second Semester Hours	
CHEM 1135 (TCCN CHEM 1109)	1 PHYS 2230	2
CHEM 1335 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1309]) <sup>1</sup>	3 PHYS 2150	1
PHYS 2326 & PHYS 2126 (Component Area Option Code 090/093 [TCCN PHYS 2326 and 2126])	4 PHYS 3312	3
Social and Behavioral Sciences Component Code 080	3 POSI 2310 (Government/ Political Science Component Code 070 [TCCN GOVT 2306])	3
MATH 2393 (TCCN MATH 2315)	3 Modern Language 1410	4



	Language, Philosophy, and Culture Component Code 040	3
<b>14</b>		<b>16</b>
		<b>Junior</b>
<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
Modern Language 1420	4 PHYS Upper Division Lab <sup>2</sup>	4
PHYS 3320	3 PHYS Electives <sup>3</sup>	3
Electives/Minor	3 POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
MATH 3323	3 Modern Language 2310	3
PHYS Electives <sup>3</sup>	3 Electives/Minor	3
<b>16</b>		<b>16</b>
		<b>Senior</b>
<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
PHYS Upper Division Lab <sup>2</sup>	4 PHYS Electives <sup>3</sup>	7
Minor	3 Electives/Minor	6
Modern Language 2320	3	
BA ENG Literature [TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328]	3	
Creative Arts Component Code 050 [HUMA 1315]	3	
<b>16</b>		<b>13</b>

**Total Hours: 120**

<sup>1</sup> BIO 1330/BIO 1130 or BIO 1331/BIO 1131 may be taken instead of CHEM 1335/CHEM 1135.

<sup>2</sup> Upper division laboratory courses: PHYS 3411, PHYS 3416, PHYS 3417, PHYS 3418.

<sup>3</sup> The Physics Faculty Undergraduate Advisor invites students to propose substituting PHYS 4321 for one required advanced course.

### PHYS Electives

Code	Title	Hours
PHYS 3210	Physics Cognition and Pedagogy	2
PHYS 3311	Classical Mechanics	3
PHYS 3313	Astrophysics	3
PHYS 3411	Advanced Physics Laboratory	4
PHYS 3416	Applied Electronics	4
PHYS 3417	Optics	4
PHYS 3418	Methods in Observational Astrophysics	4
PHYS 4121	Undergraduate Research	1
PHYS 4221	Undergraduate Research	2
PHYS 4305	Statistical Physics	3
PHYS 4310	Electromagnetic Field Theory I	3
PHYS 4311	Condensed Matter Physics	3
PHYS 4312	Quantum Mechanics I	3
PHYS 4315	Electromagnetic Field Theory II	3
PHYS 4320	Selected Study in Physics	3
PHYS 4321	Undergraduate Research (Students may request to substitute PHYS 4321 for one of the required advanced PHYS courses.)	3

PHYS 4330	Relativity	3
PHYS 4345	Biophysics	3
PHYS 4360	Physics Cognition and Pedagogy II	3
PHYS 4350F	Astronomical Spectroscopy	3
PHYS 4350G	Nuclear and Particle Physics	3
ENGR 3311	Mechanics of Materials	3
ENGR 3380	Fluid Mechanics	3
MATH 4306	Fourier Series and Boundary Value Problems	3

Or courses approved by the department advisor

## Minimum required: 120 semester credit hours

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
3. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.
4. Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>). The recommended minor is Applied Mathematics. The minor should be chosen in consultation with the academic advisor.
5. Nine semester credit hours must be writing intensive (WI).
6. If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.

### Course Requirements

		<b>Freshman</b>	
	<b>First Semester Hours</b>	<b>Second Semester Hours</b>	
US 1100	1 PHYS 2335 & PHYS 2135		4
PHYS 2325 & PHYS 2125 (Life and Physical Sciences Component Code 030 [TCCN PHYS 2325 and 2125])	4	MATH 2472 (Component Area Option Code 090/092 [TCCN MATH 2414])	4
MATH 2471 (Mathematics Component Code 020 [TCCN MATH 2413])	4	American History Component Code 060	3
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3	Communication Component Code 010	3

Social and Behavioral Sciences Component Code 080	3		
	<b>15</b>		<b>14</b>
			<b>Sophomore</b>
<b>First Semester Hours</b>		<b>Second Semester Hours</b>	
PHYS 2326 & PHYS 2126 (Component Area Option Code 090/093 [TCCN PHYS 2326 and 2126])	4	PHYS 2150	1
PHYS 2230	2	PHYS 3320	3
MATH 2393 (TCCN MATH 2315)	3	PHYS 3311	3
CHEM 1335 (Life and Physical Sciences Component Code 030 [TCCN CHEM 1309]) <sup>1</sup>	3	MATH 3323	3
CHEM 1135 (TCCN CHEM 1109)	1	POSI 2310 (Government/Political Science Component Code 070 [TCCN GOVT 2306])	3
Language, Philosophy, and Culture Component Code 040	3	Electives/Minor	3
	<b>16</b>		<b>16</b>

			<b>Junior</b>
<b>First Semester Hours</b>		<b>Second Semester Hours</b>	
PHYS 3312	3	PHYS 4305	3
PHYS Upper Division Lab <sup>2</sup>	4	POSI 2320 (Government/Political Science Component Code 070 [TCCN GOVT 2305])	3
American History Component Code 060	3	PHYS Upper Division Lab <sup>2</sup>	4
Electives/Minor	3	Electives/Minor	6
Creative Arts Component Code 050 [HUMA 1315]	3		
	<b>16</b>		<b>16</b>

			<b>Senior</b>
<b>First Semester Hours</b>		<b>Second Semester Hours</b>	
PHYS 4310	3	PHYS Electives	7
PHYS 4312	3	Electives/Minor	7
PHYS Electives	3		
Electives/Minor	4		
	<b>13</b>		<b>14</b>

**Total Hours: 120**

<sup>1</sup> BIO 1330/BIO 1130 or BIO 1331/BIO 1131 may be taken instead of CHEM 1335/CHEM 1135.

<sup>2</sup> Upper Division Labs: PHYS 3411, PHYS 3416, PHYS 3417, PHYS 3418

### PHYS Electives

Code	Title	Hours
PHYS 3210	Physics Cognition and Pedagogy	2
PHYS 3313	Astrophysics	3

PHYS 3318	Galactic and Extragalactic Astrophysics	3
PHYS 3411	Advanced Physics Laboratory	4
PHYS 3416	Applied Electronics	4
PHYS 3417	Optics	4
PHYS 3418	Methods in Observational Astrophysics	4
PHYS 4121	Undergraduate Research	1
PHYS 4221	Undergraduate Research	2
PHYS 4311	Condensed Matter Physics	3
PHYS 4320	Selected Study in Physics	3
PHYS 4321	Undergraduate Research (see dept.)	3
PHYS 4330	Relativity	3
PHYS 4345	Biophysics	3
PHYS 4350F	Astronomical Spectroscopy	3
PHYS 4350G	Nuclear and Particle Physics	3
PHYS 4360	Physics Cognition and Pedagogy II	3
ENGR 3311	Mechanics of Materials	3
ENGR 3380	Fluid Mechanics	3
MATH 4306	Fourier Series and Boundary Value Problems	3

Or courses approved by the department advisor

## Minimum Required: 120 semester credit hours

### Admission Requirement

1. All students pursuing teacher certification must apply and be accepted to the Office of Educator Preparation (p. 263).

### General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (p. 58) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
2. In addition, to the general education core curriculum requirements, students must also complete 33 hours in a double major with the Bachelor of Science (B.S.) in Education in the College of Education. All coursework must be completed prior to enrolling in EDST 4681.

Code	Title	Hours
Education Foundations		
CI 2310	Education for Change	3
CI 3325	Adolescents and Society	3
CI 4332	Secondary Teaching: Curriculum and Technology	3
Teaching and Learning		
CI 3340	Teaching for Linguistic Diversity	3
CI 4343	Instructional Strategies for the Secondary Teacher	3
CI 4370	Building Relationships in the Secondary Classroom	3
CI 4372	Teaching in Communities	3
RDG 3323	Teaching Literacies in the Content Areas	3
SPED 4344	Educating Students with Mild Disabilities	3
Clinical Practice		

EDST 4681 Clinical Teaching 7-12		6	Freshman			
Total Hours		33	First Hours Semester	Second Hours Semester	Summer Hours	
3. To satisfy graduation requirements for teacher certification, students must have an Overall GPA of at least 2.75, as well as grades of "C" or better in all courses within the Major(s), Teaching Field(s), Certification area(s), and/or in the Education Minor.			PHYS 1340 or 1350	3 MATH 2472 (Component Area Option Code 090/092 [TCCN MATH 2414])	4 American History Component Code 060	3
4. Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).						
5. Nine credit hours must be writing intensive (WI).						
6. Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.			MATH 2471 (Mathematic Component Code 020 [TCCN 2413])	4 PHYS 2325 & PHYS 212 (Life and Physical Sciences Component Code 030 [TCCN PHYS 2325 and 2125])	4 POSI 2310 (Governmen Political Science Component Code 070 [TCCN GOVT 2306])	3
7. If two years of the same foreign language were taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.						
8. All students seeking teacher certification must apply for and be admitted to the Educator Preparation Program in order to enroll in education coursework and student teaching in the Junior and Senior years. Refer to the requirements for Admittance to the Educator Preparation Program through the Office of Educator Preparation (p. 263).			US 1100	1 MATH 3315	3 POSI 2320 (Government/ Political Science Component Code 070 [TCCN GOVT 2305])	3
9. <u>The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: <a href="https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/">https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/</a>.</u>						
10. For transfer students, 6 semester credit hours in Curriculum and Instruction and Special Education may be transferred from a Texas public institution of higher education for the Associate of Arts in Teaching Field of Study and be applied to the Bachelor of Science degree with a major in Education at Texas State University. More information about the Field of Study ( <a href="http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/">http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/</a> ) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.						
Code	Title	Hours				
CI 2310	Education for Change (CI ELNA)	3				
TCCN: EDUC 1301						
SPED 4344	Educating Students with Mild Disabilities (CI ELNA)	3				
TCCN: EDUC 2301						
			14	17		9
			Sophomore			
			First Hours Semester	Second Hours Semester	Summer Hours	
			MATH 2393	3 PHYS 3312	3 MATH 3323	3

PHYS 2335 & PHYS 213	4 PHYS 2326 & PHYS 212 (Component Area Option Code 090/093 [TCCN PHYS 2326 and 2126])	4 Creative Arts Component Code 050 [HUMA 1315]	3
Life and Physical Sciences Component Code 030	4 PHYS 2230	2	
Choose 4 hours from the following:	CI 2310	3	
BIO 1330	MATH 3330	3	
& BIO 1130			
BIO 1331			
& BIO 1131			
CHEM 1335			
& CHEM 1135			
Language, Philosophy, and Culture Component Code 040	3		
PHYS 3210	2		
	16	15	6

Junior

First Hours Semester	Second Hours Semester	
PHYS elective <sup>1</sup>	6 MATH 4304	3
PHYS 2150	1 PHYS 4360	3
Education Core:	6 Block I:	9
CI 3325	CI 3340	
CI 4332	CI 4343	
	SPED 434	
13	15	

Senior

First Hours Semester	Second Hours Semester	
PHYS elective	3 Clinical Practice: Student Teaching	6
Block II: CI 4370	9 EDST 466	

CI 4372	
RDG 3323	
12	6

**Total Hours: 123**<sup>1</sup> Physics electives:

PHYS 3301, PHYS 3311, PHYS 3313, PHYS 3315, PHYS 3320, PHYS 3411, PHYS 3417, PHYS 3418, PHYS 4305, PHYS 4310, PHYS 4311, PHYS 4312, PHYS 4315, PHYS 4321, MATH 4306, ENGR 3311, ENGR 3380.

The minor in Physics requires 20 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
PHYS 2230	Introduction to Computational Modeling for Physics	2
PHYS 2325 & PHYS 2125	Mechanics and Mechanics Laboratory	4
PHYS 2326 & PHYS 2126	Electricity and Magnetism and Electricity and Magnetism Laboratory	4
PHYS 2335 & PHYS 2135	Waves and Heat and Waves and Heat Laboratory	4
PHYS 3312	Modern Physics	3
Choose 3 hours of advanced physics courses <sup>1</sup>		3
<b>Total Hours</b>		<b>20</b>

<sup>1</sup> Students may also apply CHEM 3330 to the physics minor.**Provost and Executive Vice President for Academic Affairs**

Pranesh Aswath, Ph.D.

**Senior Vice Provost for Faculty and Academic Resources Faculty Development**

Debbie Thorn, Ph.D.

**Vice Provost for Academic Innovation and Success**

Vedaraman Sriraman, D.E.

**Vice Provost and University Librarian**

Kelly Visnak, Ph.D.

**Director, The Wittliff Collections**

David Coleman, Ph. D.

**Provost Units**

Assistant Provost–Matthew Brooks, Ph.D.

Assistant Vice Provost for Academic Advising and Transitions–Kambra Bolch, J.D.

Assistant Vice Provost for Experiential and Academic Initiatives–Nicolas Weimer, M.B.A., M.P.A.

Assistant Vice Provost for Program Accreditation and Assessment–Lon Olson, Ph.D.

Assistant Vice Provost for Curriculum and Academic Programs–Jeff Housman, Ph.D.

**College Deans**

College of Applied Arts–Angela Ausbrooks, Ph.D. (Interim Dean)

McCoy College of Business—Sanjay Ramchander, D.B.A.  
 College of Education—Michael O'Malley, Ed.D.  
 College of Fine Arts and Communication—John Fleming, Ph.D.  
 College of Health Professions—Gary Sayed, Ph.D.  
 Honors College—Heather Galloway, Ph.D.  
 College of Liberal Arts—Mary Brennan, Ph.D.  
 College of Science and Engineering—Barrett Bryant, Ph.D.  
 The Grad College, Andrea Golato, Ph.D.

Trauth-Huffman Hall Room 146  
 T: 512.245.7952 F: 512.245.7908  
[www.txstate.edu/universityseminar/](http://www.txstate.edu/universityseminar/) (<https://www.txstate.edu/universityseminar/>)

University Seminar (US 1100 (<http://mycatalog.txstate.edu/search/?P=US%201100>)) helps first-year students transition successfully to Texas State University by connecting new students to the campus and its resources, developing skills that support academic success, encouraging involvement in the university community, and exploring career opportunities. The course is designed to be taken during a student's first semester at Texas State, and its small class setting allows students to get to know each other as well as their faculty member.

The course is taught by a diverse group of professors, staff members, and administrators from departments across the university. All have at least a master's degree and lend their unique and varied perspectives to enrich each classroom. Distinct sections of the course may serve students with common interests. These are labeled in the Schedule of Classes.

Subjects in this department include: US

## Course in University Seminar (US)

### US 1100. University Seminar.

University Seminar is an introduction to the nature and aims of university education, with special emphasis on the value of broad learning. US 1100 is required of all undergraduate students entering the university with 0-15 semester credit hours completed since high school graduation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

Undergraduate Academic Center, First Floor  
 T: 512.245.3942 F: 512.245.7648  
[www.txstate.edu/tsip/](http://www.txstate.edu/tsip/) (<https://www.txstate.edu/tsip/>)

The Texas Success Initiative (TSI) is a statewide initiative created to improve student success in college-level coursework. As part of the program, all students enrolled in Texas public colleges or universities complete required assessments to determine Math, English/Language Arts, and Reading proficiency. Developmental course instruction is provided to students needing to strengthen their basic academic skills. More information about this program, assessment requirements, and exemptions may be found in the Academic Policies section of the catalog under Texas Legislative Requirements.

Harris Hall 1st Floor  
 T: 512.245.2978  
[www.txstatebobcats.com](http://www.txstatebobcats.com/sports/2010/7/27/GEN_0727103235.aspx) ([http://www.txstatebobcats.com/sports/2010/7/27/GEN\\_0727103235.aspx](http://www.txstatebobcats.com/sports/2010/7/27/GEN_0727103235.aspx))

Located on the lower level of Harris Dining Hall, the Athletic Academic Center (AAC) is an integral part of the life of Bobcat student-athletes and has a vast number of services and assistance available. The AAC is structured to provide student-athletes with five basic components, Academic Excellence, Athletic Excellence, Community Service, Career Development, and Personal Development. The AAC, which is open six days a week (Sunday-Friday), houses a state-of-the-art computer lab, areas for both individuals and group study, and offices for the AAC staff.

The AAC is led by seven full-time professional staff members, four graduate assistant students, and university-trained tutors. The AAC staff, in conjunction with the Assistant Athletic Director for Compliance Services, strives to educate student-athletes about the numerous NCAA rules and regulations while monitoring their progress for continuing eligibility.

Each student-athlete works with their College (Major) Advisor to make sure that they are enrolled in the correct classes to graduate. The AAC staff verifies the classes to ensure that the student-athlete is working towards their degree, making yearly satisfactory progress, and meeting GPA requirements.



Texas State will not discriminate against any person in employment or exclude any person from participating in or receiving the benefits of any of its activities or programs on any basis prohibited by law, including race, color, age, national origin, religion, sex, disability, veterans' status, or sexual orientation. Equal employment opportunities include: personnel transactions of recruitment, employment, training, upgrading, promotion, demotion, termination, and salary.

The information in the 2024-2025 Graduate Catalog is subject to change without notice and may not reflect the most recent changes. This catalog is a general information publication only. It is not intended to, nor does it contain, all regulations that relate to students. In the event of a conflict between the provisions of this catalog and the *Rules and Regulations* of the Board of Regents of the Texas State University System, the latter shall prevail. The provisions of this catalog do not constitute a contract, express or implied, between an applicant, a student, a faculty member, or a staff employee and Texas State University or the Texas State University System. Texas State reserves the right to withdraw courses at any time, to change fees or tuition, calendar, curriculum, degree requirements, admissions and graduation requirements or procedures, and other requirements affecting students. Changes will become effective whenever authorities determine and will apply to both prospective students and those already enrolled. Questions regarding current information should be addressed to the office of the Provost and Vice President for Academic Affairs.

**Please use one of these recommended browsers for the best performance of this system:**  
**Chrome or Firefox.**

## University Organization

Texas State University is organized into the College of Applied Arts, the Emmett and Miriam McCoy College of Business, the College of Education, the College of Fine Arts and Communication, the College of Health Professions, the College of Liberal Arts, the College of Science and Engineering, Honors College, and The Graduate College.

## Overview of Graduate Studies

### Authorization

The establishment of The Graduate College at Texas State was authorized by the Board of Regents at its meeting on June 15, 1935. Graduate courses were first offered during the summer of 1936, and the first master of arts degree was conferred at the 1937 spring commencement. The first doctoral programs were authorized by the Board of Regents in 1996 in geographic education and environmental geography. The first doctorates were awarded in 2000.

### Mission of The Graduate College

The mission of The Graduate College is to provide vision, leadership, and direction for achieving excellence in graduate education at Texas State University with the goal of offering the optimal infrastructure and learning environment for the training of innovative and successful scholars, teachers, and professionals. The Graduate College does so by:

- articulating, promoting and supporting the highest standards of quality in graduate education in keeping with the University's overall mission of teaching, research and public service
- constructing and maintaining an environment conducive to successful graduate education in concert with all graduate programs

- supporting programs' efforts to foster a diverse student population who actively participate in a global society
- promoting and supporting rigor in graduate education
- providing key process and procedure guidance and support to graduate programs from admission to graduation
- aiding in student recruitment, application processing, policy monitoring and degree auditing
- leading initiatives designed to provide best practices in graduate education leading to timely degree completion
- providing graduate student support for creative and scholarly activities
- offering professional development opportunities for graduate students at key stages in their graduate career
- engaging in research on graduate education.

## Characteristics of Graduate Study

Graduate study affords students of exceptional academic ability many opportunities to continue their intellectual growth and development.

Doctoral study in particular seeks to integrate students into the professional community of scholars in a manner that emphasizes the completion, presentation, and publication of original research.

Graduate education differs from study at the undergraduate level in at least the following respects:

- Graduate students are expected to assume greater responsibility and demonstrate more self-initiative in meeting their academic goals;
- Graduate students are expected to engage in more extensive reading, emphasizing primary source material in a specialized field;
- Graduate students are expected to become familiar with the current literature in their fields, with emphasis on recently published developments in research methods and results;
- Doctoral students are expected to assume responsibility for the planning, completion, and presentation of original scholarly research;
- Doctoral programs utilize seminar courses that stress active participation by students in intellectual exchange with both faculty and peers and in the critique of published research;
- Doctoral course-work emphasizes integrating student research into the norms of an academic discipline; and:
- Master's courses differ from undergraduate courses, and doctoral courses differ from master's courses in their learning outcomes and in the breadth and depth of readings and assignments.

## The Texas State University System

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*Madisonville*

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*El Paso*

Charlie Amato  
*San Antonio*

Earl C. "Duke" Austin, Jr.,  
*Houston*

Sheila Faske  
*Rose City*

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Stephen Lee  
*Beaumont*

Tom Long  
*Frisco*

William "Bill" F. Scott  
*Nederland*

Kelly R. Damphousse, Ph.D., President

Pranesh Aswath, Ph.D., Provost and Executive Vice President, Academic Affairs

Eric Algae, M.B.A., Executive Vice President for Operations and Chief Financial Officer

Donald B. Coryell, B.A., Director, Department of Athletics

Cynthia L. Hernandez, Ph.D., Vice President, Student Success

Matthew Hall, M.S., Vice President and Chief Information Officer, Information Technology

Brooks A. Hull, M.H.R., Vice President for University Advancement, Executive Director for the Texas State University Development Foundation

Julie A. Lessiter, Ed.D., Vice President, Round Rock Campus

Lisa K. Lloyd, Ph.D., Vice President, Chief of Staff

Shreekanth A. Mandayam, Ph.D., Vice President, Research

Sandy L. Pantlik, B.S., Vice President, Marketing and Communications

Thillainatarajan Sivakumaran, Ph.D., Vice President for TXST Global

Angela R. Ausbrooks, Ph.D.  
*College of Applied Arts*

Sanjay Ramchander, D.B.A  
*Emmett and Miriam McCoy College of Business Administration*

Michael P. O'Malley, Ed.D.  
*College of Education*

John Fleming, Ph.D.  
*College of Fine Arts and Communication*

Andrea Golato, Ph.D.  
*The Graduate College*

M. Gary Sayed, Ph.D.  
*College of Health Professions*

Heather C. Galloway, Ph.D.  
*Honors College*

Mary C. Brennan, Ph.D.  
*College of Liberal Arts*

Barrett Bryant, Ph.D.  
*College of Science and Engineering*

**The following Council on Higher Education Accreditation (CHEA) and U.S. Department of Education (USDE)-recognized accrediting organization accredits Texas State University.**

Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)

- Accreditation Council for Education in Nutrition and Dietetics Academy of Nutrition and Dietetics
- Accrediting Council on Education in Journalism and Mass Communications
- American Council for Construction Education
- American Physical Therapy Association, Commission on Accreditation in Physical Therapy Education
- Association of Technology, Management, and Applied Engineering
- Commission on Accreditation for Health Informatics and Information Management Education
- Commission on Accreditation for Respiratory Care
- Commission on Accreditation of Athletic Training Education
- Commission on Accreditation of Healthcare Management Education
- Commission on Collegiate Nursing Education
- Council for Accreditation of Counseling and Related Educational Programs
- Council for Interior Design Accreditation
- Council of the Section of Legal Education and Admissions to the Bar, American Bar Association
- Council on Academic Accreditation in Audiology and Speech-Language Pathology American Speech-Language-Hearing Association
- Council on Accreditation of Parks, Recreation, Tourism, and Related Professions
- Council on Social Work Education, Commission on Accreditation
- Joint Review Committee on Education in Radiologic Technology
- National Accrediting Agency for Clinical Laboratory Sciences
- National Association of Schools of Music, Commission on Accreditation
- Network of Schools of Public Policy, Affairs, and Administration Commission on Peer Review and Accreditation

**The following organizations not recognized by either the Council on Higher Education Accreditation (CHEA) or the U.S. Department of Education (USDE) accredit or certify other Texas State degree programs.**

- AACSB International - The Association to Advance Collegiate Schools of Business
- ABET - Accreditation Board for Engineering and Technology
- American Chemical Society
- American Society of Biochemistry and Molecular Biology
- Association of University Programs in Health Administration
- Foundry Education Foundation
- National Association of School Psychologists
- Texas Certified Public Manager Program

The following organizations accredit Texas State academic support services.

- Accreditation Association for Ambulatory Health Care, Inc.
- American Psychological Association Commission on Accreditation
- National Administrator Credential (NAC)

Authorized by the Texas Legislature in 1899, Southwest Texas State Normal School opened its doors in 1903. During the first century, the Legislature retained the regional designation in the name, but as its mission changed it became first Normal College, then successively Teachers College, College and University. These changes reflected the transformation from a teacher-preparation institution to a regional university. In 2003, the Legislature dropped the regional designation and the institution became Texas State University-San Marcos, and in 2013 the place name was eliminated as Texas State University became an emerging research university within the state.

The demographics of the university's student body more closely mirror the population of Texas than any other public university in the state. Texas State became a Hispanic Serving Institution (HSI) in 2010, and continues to expand efforts to promote diversity, equity, and inclusion among all faculty, staff, and students.

While Texas State was originally renowned for preparing public school teachers, today it has grown into a major institution of higher education approaching an enrollment of 40,000. The university's two campuses currently offer programs not only in the College of Education, but also in the College of Applied Arts, Emmett and Miriam McCoy College of Business Administration, College of Fine Arts and Communication, College of Health Professions, Honors College, College of Liberal Arts, College of Science and Engineering, and University College. University College oversees first-year advising as well as other activities of the first-year experience in addition to guiding students who have not yet chosen a major. The Graduate College provides opportunities for continued intellectual growth through advanced and specialized education that develops leaders in the professions and in research up through the doctoral degree.

As Texas State's student population has grown — from 303 in 1903 to nearly 38,376 in 2022 — the campuses, too, have expanded and today Texas State is the seventh largest public university in the state.

Texas State's San Marcos campus is located in a Hill Country community about halfway between Austin and San Antonio. Its location on the banks of the San Marcos River provides recreational and leisure activities for students throughout the year.

Overlooking the San Marcos campus from Chautauqua Hill and serving as a landmark since 1903 is Old Main, a red-gabled Victorian building restored to its original grandeur. In 1979, after adding a number of classroom buildings and residence halls on the San Marcos Campus, Texas State purchased the former San Marcos Baptist Academy adjacent to the original campus. In 1981, South Texas entrepreneur Harry M. Freeman donated a 3,500-acre ranch to Texas State to be held in perpetual trust as the Harold M. Freeman Educational Foundation. The working ranch is used as a laboratory for students in agriculture, animal science, anthropology, biology, and a variety of other academic disciplines. In 1990, the university opened the seven-story Albert B. Alkek Library. The building, conveniently located in the center of campus, is named for the noted Texas rancher, oil man, and educational philanthropist who died in 1995.

Texas State acquired one of the most unique ecosystems in the world in 1994 when it purchased the former Aquarena Springs resort and theme park. The purchase allowed Texas State to serve as steward of the headwaters of the San Marcos River, preserving and protecting one of the oldest inhabited spots in North America for future generations of Texans. Now called The Meadows Center for water and the Environment, the 90-acre property is the site of a wide variety of educational and research pursuits. The Meadows Center is home to eight endangered species of plants and animals that exist nowhere else in the world.

In 1998, as the lead institution, Texas State joined forces with other area universities to establish the Round Rock Higher Education Center, now known as the Texas State University Round Rock Campus (RRC). The RRC, located on 101 acres north of Austin, houses the majority of Texas State's health professions academic programs, and offers upper-division and graduate educational opportunities in Williamson County and Austin.

Texas State became part of the Texas State University System in 1911. The System, governed by a nine-member Board of Regents, also includes Lamar University, Lamar Institute of Technology, Lamar State College—Orange, Lamar State College—Port Arthur, Sam Houston State University, Sul Ross State University, and Sul Ross University Rio Grande College. The first president of Texas State was Mr. T.G. Harris, who served from 1903 to 1911. He was followed by Dr. C.E. Evans, 1911–1942; Dr. J.G. Flowers, 1942–1964; Dr. James H. McCrocklin, 1964–1969; Dr. Leland E. Derrick, 1969; Dr. Billy Mac Jones, 1969–1973; Mr. Jerome C. Cates, 1973–1974; Dr. Lee H. Smith, 1974–1981; Mr. Robert L. Hardesty, 1981–1988; Dr. Michael L. Abbott, 1988–1989; Dr. Jerome Supple, 1989–2002; Dr. Denise M. Trauth, 2002–2022; and Dr. Kelly Damphousse, 2022–present.

Code	Title	Hours
	Andrea Golato, Dean, The Graduate College, Chair	
Code	Title	Hours
	Taylor Acee, Associate Professor, Curriculum and Instruction (R)	
	Lisa Baumgartner, Professor, Counseling, Leadership, Adult Education, and School Psychology (R)	
	Anthony Cross, Lecturer, Philosophy (2023-2026) (R)	
	Agustin Cuadrado, Professor, World Languages and Literatures (2023-2026) (R)	
	Jose Carlos de la Puente, Professor, History (2021-2024) (R)	
	David Dietrich, Associate Professor, Sociology (2021-2024) (R)	
	Ravindranath Droopad, Professor, Ingram School of Engineering (2022-2024) (R)	
	Priscilla Goble, Associate Professor, Family and Consumer Sciences (2023-2026) (R)	
	Ronald Hagelman III, Professor, Geography and Environmental Studies	
	Paul Hart, Professor, International Studies (2022-2025) (R)	
	Vanessa Higgins Joyce, Associate Professor, Mass Communication, (2023-2026)	
	Jan Hodges, Associate Professor, Health and Human Performance (2023-2023) (R)	
	Paul Jantz, Associate Professor, Counseling, Leadership, Adult Education, and School Psychology (2023-2026) (R)	
	Chang Ji, Associate Professor, Chemistry and Biochemistry (2021-2024) (R)	
	Shayne Jones, Professor, Criminal Justice and Criminology (R)	

Sean Kerwin, Professor, Materials Science, Engineering and Commercialization
Soon-Jae Lee, Professor, Engineering Technology (2023-2026) (R)
David Lemke, Professor, Biology (2021-2024) (R)
Kasey Martin, Associate Professor, Accounting (2017-2023) (R)
Jason Martina, Assistant Professor, Biology
Ana Martinez, Assistant Professor, Theatre and Dance (2022-2025) (R)
Melissa Martinez, Professor, Counseling, Leadership, Adult Education, and School Psychology
Yoichi Miyahara, Assistant Professor, Physics (2022-2025) (R)
Anne Hee-Hiong Ngu, Professor, Computer Science
Suzanna Okere, Clinical Associate Professor, Physical Therapy (R)
Pratheesh Omana Sudhakaran, Assistant Professor, Agricultural Sciences (2021-2024)
Greg Passty, Professor, Mathematics (2022-2025) (R)
Janet Payne, Professor, Finance and Economics (2023-2026) (R)
Wuxu Peng, Professor, Computer Science (2023-2026) (R)
Indu Ramachandran, Associate Professor, Management (2023-2025) (R)
Zo Ramamonjiravelo, Associate Professor, Health Administration (2021-2024) (R)
Nandhini Rangarajan, Associate Professor, Political Science (2022-2025) (R)
James Reeves, Assistant Professor, English (2023-2026) (R)
Diego Vacaflares Rivero, Professor, Finance and Economics (2021-2024) (R)
Sean Roche, Associate Professor, Criminal Justice and Criminology (2023-2026) (R)
Chris Russian, Professor, Respiratory Care (2023-2026) (R)
Nico Schüler, Professor, Music (2023-2026)
Amy Louise Schwarz, Associate Professor, Communication Disorders (2023-2026) (R)
Jaymeen Shah, Professor, Information Systems and Analytics (2022-2025) (R)
Molly Sherman, Associate Professor, Art and Design (2023-2026) (R)
Shailen Singh, Assistant Professor, Organization, Workforce, and Leadership Studies (2022-2025) (R)
Heather Smith, Assistant Professor, Anthropology (2023-2026) (R)
Kathy Smith, Assistant Professor, St. David's School of Nursing (2023-2026) (R)
Sharon Strickland, Professor, Mathematics
Nicole Taylor, Associate Professor, Anthropology
Lindsay Timmerman, Associate Professor, Communication Studies (2022-2025) (R)
Susan Waite, Assistant Professor, Curriculum and Instruction (2021-2024) (R)
Tiankai Wang, Professor, Health Information Management (2021-2024) (R)
Katherine Warnell, Associate Professor, Psychology (2022-2025) (R)
Gail Zank, Professor, Marketing (2023-2026) (R)

The Graduate Council also has two master’s students and one doctoral student serving on the committee. The appointments rotate on a semester-by-semester basis among programs.

Code	Title	Hours
	Dr. Pranesh Aswath, Provost and Vice President for Academic Affairs (T)	
	Dr. Kelly Damphousse, President, Texas State University (T)	
	Ms. Martha Fraire-Cuellar, University Registrar, University Registrar (T)	
	Ms. Cynthia Justice, Assistant Vice President, Student Affairs (T)	

**Function**

Recommends Graduate College policies to the Dean of The Graduate College, who in turn administers the policies or submits recommendations to the Provost and Vice President for Academic Affairs and the President’s Cabinet. The Graduate Council also reviews standards for admissions, retention, and enrollment patterns, in concurrence with the Dean. The Graduate Council also approves membership standards for graduate faculty.

Texas State University is a public, student-centered research institution dedicated to excellence, discovery, and innovation. We create new knowledge, embrace a diversity of people and ideas, foster cultural and economic development, and educate our students to participate fully and freely in the communities of Texas, the nation, and the world.

**Shared Values**

In pursuing our mission, we, the faculty, staff, and students of Texas State University, are guided by a shared collection of values:

- Teaching and learning based on research, student needs, and the free exchange of ideas in a supportive environment;
- Research and creative activities that encompass the full range of academic disciplines;
- Meaningful student engagement built on active involvement, accessibility, and intentional educational experiences;
- The cultivation of university community that consistently practices integrity, civility, compassion, and respect;
- A shared commitment to creating a sense of belonging across unique communities, identities, ideas, and contributions;
- A welcoming spirit and a global perspective;
- Dedication to service and leadership for the public good;
- Responsible stewardship of our resources and environment; and
- Continued reflection and evaluation to ensure that our strengths always benefit those we serve locally and globally.

**The Graduate College Mission**

The mission of The Graduate College is to provide vision, leadership, and direction for excellence in graduate education at Texas State University with the aim of providing the appropriate infrastructure and learning environment for the training of innovative and successful scholars, teachers, and professionals. The Graduate College does so by

- articulating, promoting, and supporting the highest standards of quality in graduate education in keeping with the university’s overall mission of teaching, research, including creative expression and service;



- constructing and maintaining an environment conducive to successful graduate education in concert with all graduate programs;
- supporting programs' efforts to foster a diverse student population which participates in a global society;
- promoting and supporting rigor in graduate education;
- providing key process and procedure guidance and support to graduate programs from admission to graduation;
- aiding in student recruitment, application processing, policy monitoring, and degree auditing;
- promoting initiatives designed to provide best practices in graduate education leading to timely degree completion;
- providing support to graduate students for creative and scholarly activities;
- offering professional development opportunities for graduate students at key stages in their graduate careers; and
- engaging in research on graduate education.

The stakeholders of The Graduate College include students, faculty, and staff involved in graduate education at Texas State University.

Texas State is committed to the value of a racial and ethnic diversity and believes that the primary purpose of higher education is to promote learning for all and to stimulate inquiry for truth in an atmosphere of freedom. Accordingly, Texas State encourages students to exercise the rights of citizenship. However, these rights are subject to reasonable limitations necessary for the orderly operation of the university. Texas State expects students to accept their responsibilities as citizens and members of a scholarly community. Paramount among these responsibilities is respect for the rights of others, academic and personal integrity, and adherence to federal, state, and local law as well as university regulations.

The faculty and administration are genuinely concerned with the physical and ethical welfare of students. To that end, Texas State has established rules of conduct and has published these in a Code of Student Conduct and Honor Code. These regulations guide students in achieving personal and academic goals and help the university function in an orderly way. Since students voluntarily associate themselves with Texas State, they should know that these rules are honestly and faithfully enforced. The rules include clear prohibitions against sexual or discrimination and racial harassment.

Texas State has established a grievance procedure for the prompt and equitable resolution of complaints related to illegal discrimination or harassment. Texas State, to the extent not in conflict with federal or state law, prohibits discrimination or harassment on the basis of race, color, national origin, age, sex, religion, disability, veterans' status, sexual orientation, gender identity, or expression. This grievance procedure is described in University Policy and Procedure Statement 04.04.46 (<http://www.txstate.edu/effective/UPPS/UPPS-04-04-46.HTML>), *Prohibition of Discrimination*. The Texas State University System Sexual Misconduct Policy outlines our policy and procedure related to Title IX (sexual misconduct). Students should follow the procedures for reporting instances of discrimination or harassment.

The administration and faculty encourage students to participate in managing Texas State through its system of advisory councils and committees. Students are invited to serve as voting members on many of these groups, and are expected to contribute actively to their success. Students may submit recommendations for changes in policy, not only

through the committee structure, but also through their own student government.

In 1990, Congress enacted the *Crime Awareness and Campus Security Act of 1990* which amended the *Higher Education Act* of 1965. In 1998, the law was renamed *the Clery Act*. This law requires institutions that participate in the federal student financial aid programs to disclose crime statistics and security information to the campus community. Among such requirements, the university must prepare and distribute an Annual Security and Fire Safety Report (ASFSR) annually. The ASFSR must include crime statistics for the three most recent calendar years concerning reported crimes that occurred on campus; in on-campus student housing facilities; in non-campus buildings or property owned or controlled by the university or a recognized student organization; and on public property within, or immediately adjacent to and accessible from, the campus. Additionally, the report contains information about law enforcement authority, timely warnings or emergency notifications of crimes that represent a threat to the campus community, the daily crime log, missing student notification procedures that pertain to students residing in on-campus student housing, crime reporting policies, programs to prevent dating violence, domestic violence, sexual assault and stalking, and the procedures the university will follow when one of these crimes is reported. The university must also disclose fire safety information and fire statistics for the three previous calendar years for on-campus student housing facilities, among other safety and security information.

Texas State's Annual Security Report section applies to the San Marcos, Round Rock, and Advanced Law Enforcement Rapid Response Training Center (ALERRT Center) campuses, and the Fire Safety Report section applies only to the San Marcos Campus as Round Rock and the ALERRT Center do not currently have on-campus student housing facilities.

You may request a paper copy of the ASFSR by contacting Institutional Compliance and Ethics at Elliott Hall A (201 Talbot Street, San Marcos, TX 78666), by calling (512)245-4961, or by emailing [cleryreport@txstate.edu](mailto:cleryreport@txstate.edu). A PDF of the Texas State ASFSR can be accessed electronically at <http://www.clery.txst.edu/report> (<http://www.clery.txst.edu/report/>).

## Correct Data

All students are responsible for making certain Texas State has correct demographic data. A student's name will appear on official records as it is stated on the application for admission, unless a student has previously attended Texas State under a different name. Changes in name, local and/or permanent address, telephone number, marital status, etc. should be reported immediately to the Office of the University Registrar. Texas State is not responsible for loss of correspondence credits due to unreported name changes. Address changes can be completed through Texas State Self-Service. .

## Family Educational Rights and Privacy Act of 1974 (FERPA)

FERPA protects the privacy of educational records, establishes the right of students to inspect and review their educational records, and provides guidelines for the correction of inaccurate or misleading data. Students also have the right to file complaints with the U.S. Department of Education, Student Privacy Policy Office, 400 Maryland Ave, SW, Washington, DC 20202-8520, concerning alleged failures by Texas State to comply with the Act. University policy explains in detail the procedures to be used in complying with the Act. The policy is available



at [www.registrar.txst.edu/legislative-policies/ferpa.html](http://www.registrar.txst.edu/legislative-policies/ferpa.html) (<https://www.registrar.txst.edu/legislative-policies/ferpa.html>). The Dean of Students and the Office of the University Registrar both presume that each student is independent of their parents when dealing with the student's educational records. Procedures for establishing dependency status are available in both offices.

## Communications

Most university offices use Texas State email as the official means of communication. Students are expected to set up and read their Texas State email frequently.

As required by the Texas Occupations Code, Section 1, Chapter 53, Sections 53.151 – 53.152, amended in 2017 by House Bill 1508, if you are applying for admission to or currently enrolled in an educational program that may prepare an individual for an initial occupational license as defined under Texas Occupations Code Section 58.001 and/or if you later decide to change to an educational program that prepares you for an initial occupational license as defined under Texas Occupations Code Section 58.001, in accordance with state law, please be advised of the following:

1. An individual who has been convicted of an offense may be ineligible for issuance of an occupational license upon completion of the educational program.
2. Each licensing authority that may issue an occupational license to an individual who completes an educational program must establish guidelines that state the reasons a particular crime is considered to relate to a particular license and any other criterion that affects the decisions of the licensing authority.
3. Local or county licensing authorities may issue additional guidelines related to criminal history. Applicants should contact their respective local or county licensing authority for more details.
4. A person may request a criminal history evaluation letter regarding the personal eligibility for a license issued by a licensing authority under Texas Occupations Code Section 53.102.

Applicants are encouraged to review all applicable eligibility requirements related to the respective occupational license. Questions related to eligibility requirements should be directed to the applicable licensing authority.

A list of the Texas State University degree and certificate programs that prepare a student for an initial occupational license as defined under Texas Occupations Code Section 58.001 is available here. (<http://www.txstate.edu/curriculumservices/programs/occupational-license-HB-1508.html>)

Abandoned and unclaimed personal property discovered on campus is turned over to the University Police Department (UPD) Community Engagement Office. UPD utilizes Crowdfind Program to assist with managing abandoned and unclaimed personal property and is located on the UPD website under programs and services. Items of value should be sent or bought to UPD for safekeeping. Examples of these items: are credit cards, wallets, jewelry, watches, handbags, computers, computer storage, storage media, electronic devices and items considered valuable. All other property found on campus may be disposed of by the department that oversees the building in which the property was found. Examples include inexpensive clothing, personal care supplies, and similar items that do not include ownership identification. Abandoned and unclaimed property held by UPD will be disposed of after 60 days. For

further information please see UPPS 05.01.20 Abandoned and Unclaimed Property (<https://policies.txstate.edu/university-policies/05-01-20.html>).

### Alkek Library

[www.library.txst.edu](http://www.library.txst.edu) (<http://www.library.txst.edu/>)  
Telephone: 512-245-2686 Fax: 512-245-0392

The Albert B. Alkek Library, located in the heart of the San Marcos Campus, is where students and researchers come to find abundant information resources, cutting-edge technology, and diverse work and study spaces that support successful research and academic endeavors. The Alkek Library is the architectural centerpiece and intellectual hub of the campus and is open year-round with early-morning and late-night hours during the fall and spring semesters. In addition, the library's online services and resources can be accessed through the University Libraries website ([library.txst.edu](http://library.txst.edu) (<http://library.txst.edu/>)).

Special holdings of the library include The Wittliff Collections ( includes the Southwestern Writers Collection, the Southwestern and Mexican Photography Collection and the Texas Music Collection) and the Special Collections & Archives. The Alkek Library is also a selective depository for federal government documents. As a member of the Texas Digital Library, the library's Research and Scholarship Repository ([digital.library.txstate.edu/](http://digital.library.txstate.edu/) (<http://digital.library.txstate.edu/>)) features unique Texas State collections, including scholarly works authored by university faculty, students and staff. A separate repository houses Digital Collections from The Wittliff and Special Collections & University Archives ([dc.library.txstate.edu](https://dc.library.txstate.edu/) (<https://dc.library.txstate.edu/>)).

Wireless access to the university network is available within the Alkek Library. Laptop computers may be checked out for building use and there are multiple workstations, laser printers and scanners located throughout the building.

The first floor of the library known as Alkek One, includes a suite of creative technology spaces designed to give students from all disciplines access to resources that will help them explore, create, and discover. These spaces include: the Immersion Studio, for exploring virtual, augmented and mixed realities; MakerSpace, for creating physical innovations; GeoSpace, for GIS and data story telling exploration; DesignSpace for discovering 2D and 3D design possibilities; and the YouStar Studios, for recording audio and video projects and editing polished productions.

The Alkek Library also boasts a Graduate Commons space for graduate students and other education, instruction, and research spaces and features within its seven stories.

The library maintains cooperative borrowing agreements with other libraries in the region. Through TexShare, a statewide resource sharing program, students and faculty may borrow materials held by most public and private university libraries in the state. In addition, books and articles not available through Texas State can be requested through Interlibrary Loan and they will be borrowed from libraries across the country and sometimes even internationally.

### LBJ Student Center, 5th Floor

[www.careerservices.txstate.edu](http://www.careerservices.txstate.edu) (<http://www.careerservices.txstate.edu/>)  
Telephone: 512-245-2645

Career Services prepares, inspires, and empowers students for career success, serving as a bridge between students' college experience and life after Texas State University. Starting their first year, and continuing

beyond graduation, we are here to help support students on their career journey. In addition we help them connect their experiences—whether from the classroom, campus activities, on- or off-campus employment, internships, or even graduate school—to their post-graduation goals.

Among our services are:

**Career Planning and Exploration** - Career center staff are available to help you learn how skills and interests relate to prospective career opportunities, research career pathways, and plan and implement post-graduation goals.

**Job Search Assistance** – Whether seeking part-time or fulltime employment, career center staff are available to provide support throughout the job search process, including identification of job opportunities, developing resumes, writing cover letters, and improving interview skills.

**Internships** - There are multiple internship pathways available to Texas State students. Career center staff are available to help you research, identify, and apply to a variety of internship opportunities.

**Employer Connections** - Career Services works with employers to create opportunities for students to connect with potential internships and jobs while building their professional network. This is achieved by hosting a wide range of engagement and discovery opportunities including career fairs, information sessions, on-campus interviews, and networking events.

LBJ Student Center 5-5.1  
www.ods.txst.edu/ (<https://www.ods.txst.edu/>)  
Telephone: 512-245-3451 Fax: 512-245-3452

The Office of Disability Services (ODS) at Texas State University is dedicated to promoting equal access to all university programs and activities for students with disabilities through the coordination of academic accommodations and support services. Texas State students should contact the ODS to discuss the services the office can provide and how to register with the office. It is the student's responsibility to provide documentation of their disability. Forms of documentation include the student's self-report and evidence from external sources (e.g., medical records, school records).

Texas State University does not discriminate on the basis of disability in the recruitment and admission of students or in the operation of any of its programs and activities. Students with disabilities must meet the same admission requirements as all other prospective students. If a student believes their educational and/or personal goals for success have been negatively impacted due to disability-based reasons, then they may address these issues in the supplemental essay portion of the admission application. Students needing sign language services for meetings with Admissions, the Office of Disability Services, or their academic advisor should contact the ODS at least one week prior to the event to ensure interpreter availability.

Students with disabilities may receive financial assistance from the following entities: Federal Student Aid, which is an Office of the U.S. Department of Education; the Texas Workforce Commission (TWC); the Texas State University Financial Aid and Scholarships and the Office of Disability Services.

The Office of Disability Services has a procedure for enrolled students to file a concern they may have with a faculty and/or staff member related to their accommodations. Students have the option to raise their concern

to a grievance if they feel it is appropriate; however, an ODS staff member may raise a concern into a grievance if deemed appropriate. Texas State University has established grievance procedures for the prompt and equitable resolution of complaints related to accommodations associated with a disability and illegal discrimination on the basis of disability, which are outlined respectively in the ODS Dispute Resolution Procedure and UPPS No. 04.04.46 (<http://www.txstate.edu/effective/UPPS/UPPS-04-04-46.HTML>), "Prohibition of Discrimination". Students who have concerns or complaints should contact the ODS Director at 512-245-3451 or [ods@txstate.edu](mailto:ods@txstate.edu).

J.C. Kellam Building Room 105  
www.va.txstate.edu (<http://www.va.txstate.edu>)  
Email: [veteransaffairs@txstate.edu](mailto:veteransaffairs@txstate.edu)  
Telephone: 512-245-2641

Students attending Texas State (TXST), while receiving educational assistance under one of the public laws for veterans and/or their dependents, must utilize the VA Portal provided at [www.va.txst.edu](http://www.va.txst.edu) (<https://www.va.txst.edu/>) to submit a Certification Request and upload the required forms.

All students applying for GI Bill® or Hazlewood benefits must provide digital copies of required documents for their specific benefit type to our online certification request system. Required documents are listed here: <https://www.va.txstate.edu/required-documents.html>. (<https://www.va.txstate.edu/required-documents.html.html>) Do not email, fax, or mail documents to the office as they will be deleted, shredded, or returned via US Post. Requests for benefit processing are completed online each semester.

All students must follow their degree requirements to receive the maximum benefit payout. Students who are eligible for Hazlewood are subject to Academic Progress for Waivers and Exemptions (APWE) policies. For more information, go to <https://www.sbs.txstate.edu/students/waivers-exemptions.html>.

It is the student's responsibility to notify the Office of Veterans Affairs of any adds, drops, course, or program changes.

No benefit pays the university directly for living or meal expenses, which are due prior to the start of each semester. GI Bill® benefit payments are made in arrears.

## Pending Payment Compliance

In accordance with Title 38 US Code 3679(e), Texas State University adopts the following additional provisions for any students using U.S. Department of Veterans Affairs (VA) Post-9/11 G.I. Bill® (Ch. 33), or Vocational Rehabilitation & Employment (Ch. 31) benefits, once confirmed to be eligible and while payment to the institution is pending from VA. Texas State University will not:

- Prevent the student's enrollment;
- Assess a late penalty fee to the student;
- Require the student to secure alternative or additional funding;
- Deny the student access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students are required to:

- Produce the VA Certificate of Eligibility (COE) by the first day of class;
- Complete the online request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA).

302 Academic Services Building North  
[www.distancelearning.txst.edu/](http://www.distancelearning.txst.edu/) (<http://www.distancelearning.txst.edu/>)  
 Telephone: 512-245-2322 Fax: 512-245-8934  
 Toll-free: 800-511-8656

The Office of Distance and Extended Learning, in addition to administering the self-paced correspondence, extension, and continuing education programs, provides information on Texas State's distance learning programs, courses, initiatives, and resources.

## Mission Statement

The Office of Distance and Extended Learning expands access to academic credit learning experiences and lifelong learning opportunities for students through distance learning, extended studies, and continuing education.

## Core Values

The Office of Distance and Extended Learning achieves its mission through strong collaboration among our team and other departments on campus; mutual respect for faculty, staff, and students; effective and accurate communication; and conscientious action in our daily operations.

## Distance Learning Programs

At Texas State, online learning reflects our passion for teaching and learning, the courage and discipline to prioritize, a deep commitment to core values, and the allocation of resources where we can deliver superior performance and distinctive impact. Texas State offers both undergraduate and graduate degrees via online learning, all of which are developed and taught by our university faculty. These degree programs require formal admission to the university, and applicants must meet Texas State's general admission requirements, as well as those specified by the individual degree program. A list of fully online distance learning programs is available at <https://online.txst.edu>. Additional information about online programs is also available at [www.distancelearning.txst.edu](https://www.distancelearning.txst.edu) (<https://www.distancelearning.txst.edu/>).

The university offers many courses and programs via distance learning and extended hours on evenings and weekends at the San Marcos and Round Rock campuses.

All graduate courses and programs offered to distance learners carry the same course number, title, and description as those offered at the San Marcos and Round Rock campuses.

For F-1 international students, no more than the equivalent of one class or three credits per term may be counted toward the full course of study requirement if the class is taken online or through distance education and does not require the student's physical attendance for classes, examination, or other purposes integral to completion of the class.

Courses offered at a distance are identified each term in the Texas State Schedule of Classes and on CatsWeb. For more

information on distance and extended learning at Texas State, visit <http://www.distancelearning.txstate.edu> (<http://www.distancelearning.txstate.edu/>).

With a wide range of learning opportunities, the Office of Distance and Extended Learning offers Continuing Education opportunities that extend the resources of Texas State and contribute to the professional and economic development of Texas. Enrollment is open to all interested persons on a non-credit-hour basis; therefore, the courses are not offered through The Graduate College and do not apply toward a graduate degree, nor are they considered for regular admission. For information about continuing education programs, go to <http://www.txstate.edu/continuinged/>.

The Office of Distance and Extended Learning offers many college courses not normally offered through the academic departments/schools. Extension courses may be offered on campus, online, hybrid/blended, or as part of a faculty-led Study-in-America or Off-Campus program. The times and locations for such courses depend on student need, faculty availability, and demand. Enrollment for an extension class is completed through the Office of Distance and Extended Learning and does not constitute acceptance as a regular student at Texas State.

## Degree Credit for Extension Course Work

The department chair and the dean of The Graduate College must approve extension work for it to be credited toward a graduate degree. Students must meet the admission requirements as identified under the "Master's and Doctoral Degree-Seeking Applicants" section and be accepted in a degree program before extension work can receive degree credit. **Extension course work cannot be used toward a doctoral degree at Texas State.**

A maximum of 12 semester hours of graduate credit may be earned in extension courses offered by Texas State.

## Extension Transfer Credit

Up to three semester hours of the total allowable six hours of transfer credit for a degree may be earned through extension courses from another accredited institution. Students admitted on "Conditional Admission" or students on "Probation/Suspension" will not receive credit for transfer work taken under the aforementioned status.

For more information on Extension Studies at Texas State, visit <http://www.extension.txstate.edu/>.

[www.txst.edu/cpm/](http://www.txst.edu/cpm/) (<https://www.txst.edu/cpm/>)  
 Telephone: 512-245-3453 Fax: 512-331-7293

Texas State has been officially designated by the National Consortium of Certified Public Managers (CPM) to offer the CPM Program. The CPM Program offers a systematic training program to enhance the quality and efficiency of management in government and to improve professionalism and effectiveness of government managers. Individuals may enroll at any time during the year; programs are held approximately every two to three months depending on location. Admission to Texas State is not required. Courses may be completed for academic credit.

The CPM Program is a nationally accredited comprehensive statewide management development program specifically for managers in federal, state, and local government and for managers in the not-for-profit-sector. The program's primary goal is to improve the performance of public and not-for-profit sector managers and the organizational performance of

state, local, and federal government. The program is a comprehensive course of study by which public managers can acquire and apply the best practices and theory to their management behaviors and strategies using prescribed sets of professional standards. The curriculum uses theory as the foundation and applies it to practical problems facing the participant's agency/department, and the citizens. Those who complete the program earn a national trademark designation of CPM (Certified Public Manager®).

The Texas CPM Program, a 7-course sequence which leads to a nationally accredited public manager certification, is offered by Texas State University's William P. Hobby Center for Public Service.

Thornton International House  
344 W. Woods Street  
www.international.txstate.edu (<http://www.international.txstate.edu>)  
Telephone: 512-245-7966 Fax: 512-245-8264

## Our Mission

### Vision

ISSS will be nationally recognized as a leader in campus internationalization and excellence in international student services.

### Mission

ISSS advances campus internationalization at Texas State University by offering intentional, holistic, and inclusive immigration and integration services for international students, faculty, and staff.

### Goals

- To support Texas State international students by providing immigration, integration, and intercultural expertise to the University community.
- To advance Texas State's efforts to increase and retain international students.
- To deliver meaningful and informed programming initiatives that support international student success at Texas State and post-graduation.

### Who is an international student?

An international student is a student enrolled in a U.S. academic program in a non-immigrant visa classification.

- Common non-immigrant visa classifications are: A-1, A-2, B-1, B-2, E-1, E-2, F-1, F-2, H-1, H-4, J-1, J-2, K-1, L-1, L-2, M-1, R-1, R-2, TN, and TD.
- F-1 Student is the most common non-immigrant visa classification at Texas State with over 90 percent of international students in F-1 status.
- A student who has applied for or received an immigrant classification such as permanent residency or refugee or asylum status, or who is undocumented is not categorized as an international student.

### General Regulations

The following regulations govern F-1 and J-1 international students enrolled at Texas State:

International students are required to:

- attend a mandatory F-1 Student Immigration Check-in session or J-1 Orientation.

- enroll in a full course of study every fall and spring semesters. Summer is an authorized break period, however, full-time enrollment is required in summer for students whose first semester begins in summer;
- obtain permission from International Student and Scholar Services (ISSS) before dropping below a full course of study for any reason. (See Reduced Course Load (<https://www.international.txstate.edu/current/Reduced-Course-Load-RCL-.html>));
- obtain permission from International Student and Scholar Services before engaging in off-campus employment. (see Curricular Practical Training (CPT) (<https://www.international.txst.edu/work-authorization/curricular-practical-training-cpt.html>) or Optional Practical Training (OPT) (<https://www.international.txst.edu/work-authorization/optional-practical-training-opt.html>));
- not work more than 20 hours per week while participating in on-campus employment in the fall and spring semesters. Students may work more than 20 hours per week during the summer and authorized break periods (see On-campus Employment (<https://www.international.txstate.edu/Work-Authorization/oncampus.html>));
- report address changes or personal information to International Student and Scholar Services within 10 days of the change. (see Change of Address Update (<https://tim.txstate.edu/internationalofficeaddresschange/Login/?returnurl=%2finternationalofficeaddresschange%2f>));
- report any changes in program of study (change of major, adding a minor/concentration, etc.) to International Student and Scholar Services;
- apply for a program extension from International Student and Scholar Services prior to the end date on the I-20;
- apply for concurrent or transient enrollment approval when taking courses at an institution other than Texas State University (see Concurrent Enrollment);
- obtain a travel signature from International Student and Scholar Services for all international travel;
- request a transfer of their SEVIS record from International Student and Scholar Services to transfer to a new SEVIS-certified institution (see SEVIS Transfer-out (<https://www.international.txstate.edu/current/TransferOut.html>));
- notify International Student and Scholar Services upon approval of a change of non-immigration status, or an adjustment of status to permanent residency; and
- maintain continuous health insurance coverage from the time of enrollment to the time of completion of the degree program or until otherwise cease to be a student at Texas State by obtaining coverage under the designated international student health insurance policy, or apply for a waiver and present acceptable proof of other comparable and adequate health insurance coverage (see Health Insurance (<https://www.international.txstate.edu/current/Health-insurance-.html>)).

### An Overview of Our Services:

- Assist international students and academic departments with immigration processes and issues related to non-immigrant F-1 and J-1 students;
- Assist international faculty and staff and hiring departments with employment authorization issues;
- Provide mandatory F-1 Student Check-in and host International Student Resource Fair;
- Advise and advocate for international students and scholars;



- Plan and host programs for international students and scholars;
- Provide statistical reports
- For the complete list, click here ([https://www.international.txstate.edu/about/about\\_us/Services.html](https://www.international.txstate.edu/about/about_us/Services.html)).

Dr. Julie Lessiter  
Vice President, TXST Round Rock  
Round Rock Campus Administration Office

1555 University Blvd.  
Round Rock, TX 78665-8017  
[www.rrc.txstate.edu](http://www.rrc.txstate.edu) (<http://www.rrc.txstate.edu/>)  
T: 512-716-4001

In the face of Williamson County's substantial annual growth, with a population now almost 700,000, the Round Rock Campus is strategically positioned to continue meeting the evolving needs of the area. The campus proudly presents a diverse array of programs, encompassing 27 undergraduate and 11 graduate options in critical areas such as healthcare, business, computer science and technology, education, psychology and social work, as well as communications. Whether students are incoming freshmen, transfer students, or graduate students, Texas State Round Rock Campus offers academic options to suit all needs.

Texas State Round Rock Campus is committed to delivering affordable, hands-on learning experiences that equip students for successful careers. Emphasizing flexible class times, the educational experience extends beyond conventional boundaries, offering a dynamic mix of face-to-face and online classes. Beyond traditional academic programs, the Professional Studies division enriches the campus offerings by providing a range of certifications and upskilling programs, allowing individuals to enhance their knowledge and skills to navigate today's digital and rapidly changing economy.

For those seeking more information, prospective students can explore Texas State Round Rock Campus or peruse the academic program offerings at [www.rrc.txst.edu](http://www.rrc.txst.edu) (<http://www.rrc.txst.edu/>). Alternatively, they can reach out to the admissions office or the graduate college. Texas State Round Rock Campus stands as the intersection where excellence meets opportunity, encouraging students to ignite their potential.

Thornton International House  
344 W. Woods Street  
[www.educationabroad.txstate.edu](http://www.educationabroad.txstate.edu) (<https://www.educationabroad.txstate.edu/>)  
Telephone: 512-245-1967  
Email: [educationabroad@txstate.edu](mailto:educationabroad@txstate.edu)

An education abroad experience expands students' intellectual and personal development as they become immersed in other cultures. Students gain a critical self-awareness, an appreciation for a multicultural world, and a clearer understanding of their own culture. Education abroad prepares students to assume their role as responsible world citizens and to succeed professionally in today's global environment. Education Abroad offers unique experiential learning opportunities in professional and community settings that enables students to apply knowledge, acquire marketable skills, and develop career readiness.

The Education Abroad office offers students the opportunity to participate in a variety of education abroad programs in hundreds of locations around the world. The academic credit students earn may be

applied toward a degree at Texas State. Some of these programs involve direct enrollment in an overseas institution, while other programs are led by Texas State faculty.

Through Texas State Education Abroad programs, students can spend from one week to a full academic year in another country either learning another language, concentrating their studies related to a specific topic in their field of study, or participating in an internship. Texas State Education Abroad programs include a variety of activities that allow students to learn and experience the culture of the host country. In some of these programs, students may take the opportunity to live with a host family and become fully immersed in the culture of the host country for a more comprehensive learning experience.

Program locations vary from year to year. Students may learn more about these programs from current information located on the Education Abroad website.

The Education Abroad Fair, as well as many other events and presentations, are held throughout the year to provide information to students interested in studying, teaching, interning, volunteering, working, and/or researching abroad.

## Financial Assistance for Education Abroad Programs

Most of the financial aid that students would normally receive for studying at Texas State may be applied toward Texas State Education Abroad programs. Additionally, there are colleges and education abroad providers that offer financial support for participating in their programs. If a student is receiving federal or state financial aid, it is recommended that the student speak with a representative of the Texas State Office of Financial Aid and Scholarships to determine the application of such aid to any Education Abroad program and the possible adjustment to meet the student's needs.

Education Abroad also has information on internal and external scholarships that are available to students who plan to participate in an education abroad program. The International Education Fee Scholarship (IEFS) is funded through the student service fee account and distributed in a competition open to all undergraduate and graduate Texas State students who meet the established eligibility requirements.

Financial Aid and Scholarships  
JC Kellam Suite 240  
<http://www.financialaid.txstate.edu/> (<http://www.financialaid.txstate.edu/>)  
TXST One Stop Inquiry Form ([https://forms.office.com/pages/responsepage.aspx?id=ShOcsckUTE2vZcQg-UyMu461gVjqm\\_pKk2Dfusm2th5UMjIGMTNLOUFCNIU4WENEOvc2NVE0N0ZCSS4u](https://forms.office.com/pages/responsepage.aspx?id=ShOcsckUTE2vZcQg-UyMu461gVjqm_pKk2Dfusm2th5UMjIGMTNLOUFCNIU4WENEOvc2NVE0N0ZCSS4u))

T: 512.245.8978

Texas State makes every effort to help students who need assistance in paying for the cost of their education. Various financial aid programs are available. Interested students should contact Financial Aid and Scholarships or visit the office's website to view the types of assistance that are available.



## Federal and State Aid Programs

Texas State participates in both federal and state financial aid programs. Financial Aid and Scholarships offers grants, work study, student loans, and other types of aid.

## Applying for Financial Aid

To apply for financial aid, a student must complete and submit the Free Application for Federal Student Aid (FAFSA) online at <https://fafsa.ed.gov> and include the Texas State University school code – 003615.

### Deadlines

- March 15 is the priority date for filing a FAFSA for the upcoming academic year (fall and spring). If the deadline is missed, a student may still apply and receive some types of assistance such as student loans.
- March 1 is the priority deadline for filing the separate summer financial aid application prior to the upcoming summer semester. This separate summer application, which can be found online at <http://www.financialaid.txstate.edu/>, is in addition to filing the appropriate year's FAFSA.

## Satisfactory Academic Progress Requirements

Federal regulations require students to meet certain minimum academic standards in order to remain eligible for financial assistance. The requirements are that a student:

1. maintain a minimum cumulative Texas State GPA;
2. complete at least 67% of all course work; and
3. not exceed a maximum limit of attempted hours toward their degree.

Additional program-specific requirements also exist. View these SAP criteria in more detail at <http://www.financialaid.txstate.edu/> by selecting *Graduate Aid* from the dropdown menu and then *Maintain My Eligibility*.

## Courses Counting

The federal government requires that a student's aid eligibility only be based on those courses that count toward the completions of the student's degree. So to be considered a full-time student for financial aid purposes, a student would want to enroll in 12 credit hours as an undergraduate (or 6 credit hours as a graduate) **that count toward their degree**. Remember, to be eligible for most financial aid, a student only needs to be enrolled at least half-time (6 hours for undergraduates and 3 hours for master's and 5 hours for doctoral students). For more details, visit [www.finaid.txst.edu](http://www.finaid.txst.edu) (<https://www.finaid.txst.edu/>), select *Financial Aid* from the menu and then *Receive My Aid*.

## Alternative Loan Resources

For information on alternative loans, visit <http://www.financialaid.txstate.edu/>, select *Graduate Aid* from the dropdown menu and then *Types of Aid*.

## Official Withdrawals and Financial Aid

If a student withdraws or is expelled from the university on or prior to the 60-percent point of the semester, the student is required to repay any unearned portion of their federal Title IV aid. For more details, visit <http://www.financialaid.txstate.edu/>, select *Graduate Aid* from the dropdown menu and then *Withdrawing, Non-Passing Grades and Attendance*.

[www.financialaid.txstate.edu/](http://www.financialaid.txstate.edu/), select *Graduate Aid* from the dropdown menu and then *Withdrawing, Non-Passing Grades and Attendance*.

## Unofficial Withdrawals and Financial Aid

If the student fails to earn a passing grade in at least one of their courses (i.e., all U's, all I's or a combination of all U's, W's or I's) during a semester, the student is considered to have, for purposes of federal Title IV funds, unofficially withdrawn from the university. As a result, a federal withdrawal calculation must be performed to determine the amount of Title IV funds the student must repay. For more details, visit <http://www.financialaid.txstate.edu/>, select *Graduate Aid* from the dropdown menu and then *Withdrawing, Non-Passing Grades and Attendance*.

## Non-Attendance and Financial Aid

If the student is a Pell Grant, Iraq-Afghanistan Service Grant (IASG) or TEACH Grant recipient, federal regulations require the student to have begun attending the courses for which the student is enrolled and receiving these grants. If on the census date roster (e.g., 12<sup>th</sup> day of each fall and spring semester) the student is reflected as not attending a course, the student is assumed (for financial aid purposes) not to have begun attendance for that course. The student's grant will then be adjusted or cancelled based on the courses the student has actually begun attending. For more details, visit <http://www.financialaid.txstate.edu/>, select *Graduate Aid* from the dropdown menu and then *Withdrawing, Non-Passing Grades and Attendance*.

## To Withdraw

The student must complete the form entitled "Texas State Official Withdrawal Request" from the University Registrar's Office. Financial aid recipients should speak with a Financial Aid and Scholarships representative before the withdrawal is processed. The withdrawal date is defined as the date on which a student first indicates his or her intent to withdraw.

The scholarships listed below are competitively based and are available to qualified students who are regularly admitted through The Graduate College. Students who are not Texas residents and receive a Texas State competitive scholarship of at least \$1,000 may be eligible to pay resident tuition. More information regarding eligibility criteria, the application procedures and deadlines for each of the scholarships and fellowships listed below is available on our funding page.

Information about additional scholarships, as well as teaching and research assistantships, may be available through individual academic colleges and departments, as well as the BOSS scholarship system.

## Graduate College Scholarships

The Graduate College provides these scholarships (<https://www.gradcollege.txst.edu/funding/scholarships/gc-scholarship.html>) to encourage students with intellectual, creative, and leadership promise to complete a master's or doctoral degree at Texas State University. These scholarships are available for newly admitted and continuing students.

## Graduate College Doctoral Research Support Fellowships

The Graduate College provides Doctoral Research Support Fellowships (<https://www.gradcollege.txst.edu/funding/scholarships/doctoral-research.html>) to support graduate student research at the doctoral level. Each award of up to \$5,000 is to be used to cover expenses directly

related to conducting dissertation research. There are two rounds of funding applications each year.

## Graduate College Thesis Research Support Fellowships

The Graduate College provides Thesis Research Support Fellowships (<https://www.gradcollege.txst.edu/funding/scholarships/thesis-research.html>) to support graduate student research at the master's level. Each award of up to \$2,000 is to be used to cover expenses directly related to conducting thesis research. There are two rounds of funding applications each year.

## Texas State Merit Fellowships

The Graduate College's *Texas State Merit* fellowships are intended for use in recruiting doctoral and master's students of the highest quality to Texas State University. The fellowship provides a percentage of the student's tuition for their first academic year of study (paid in early September, January, and June). These fellowships can be combined with graduate assistantships or departmental scholarships to create an attractive financial aid package for top-quality applicants. Doctoral program directors are encouraged to identify and nominate eligible applicants. Admitted students in eligible programs will be automatically considered, no application or nomination is required.

## External Funding

The Graduate College provides resources to assist students seeking or applying for external funding (<https://www.gradcollege.txst.edu/funding/external.html>). The Graduate Funding Opportunities Database (<https://www.gradcollege.txst.edu/funding/external/databases.html>) houses grants, scholarships, fellowships, internships and other awards/prizes specific to Texas State graduate students. Through the Shop Talks (<https://www.gradcollege.txst.edu/events/shoptalks.html>) professional development series, funding experts present general information about external funding as well as details about specific opportunities. The Graduate College also employs in-house external funding coordinators to advise students with funding applications and grant proposals.

## Admission Requirements

The requirements set forth on each individual program page (detailed both in the *Graduate Catalog* and on The Graduate College website) are the minimum standards for admission to enter a graduate program at Texas State. Some programs also recommend that applicants arrange a personal interview with the appropriate graduate faculty. Meeting the stated requirements does not necessarily ensure acceptance into a graduate program.

Applicants who are currently on probation or suspension at other colleges or universities are not eligible for admission consideration by The Graduate College. The dean of The Graduate College may refuse admission to any applicant, regardless of whether or not the applicant meets the admission requirements, if the dean of The Graduate College judges that such action is in the individual's or the University's best interest. The University reserves the right to deny admission to any prospective or former student who has a criminal record including any conviction of a felony, offenses involving moral turpitude, or other offenses of a serious nature.

## Start Term

Applications are for specific terms. Applicants wishing to change their application to a future term or apply to another program will be required to submit a new application and pay the application fee.

## Communication

The Graduate College will email applicants important information pertaining to their admissions application and application decision; therefore, it is imperative that applicants provide a working email address on their application that will remain active throughout the entire application process. It is the responsibility of the applicant to confirm that they are receiving emails from The Graduate College, to check their email accounts often, and to read all communication sent from admissions.

## Decision Process

Applicants are encouraged to check the status of their application online in order to expedite the process of completing the application. After all admission requirements have been received, the grade point average will be calculated and the departmental graduate admission committee will make an admission recommendation. Final admission decisions are made by the dean of The Graduate College, and The Graduate College will notify the applicant of the admission decision. Applicants will receive an email notification when admitted to a program. Students who have been admitted into a degree program and do not enroll for the term of acceptance are not guaranteed acceptance for future terms.

## Decision Timeline

Admission decisions for programs admitting on a "rolling" basis will follow within 4-6 weeks from the time all application materials have been received. If the program has a firm deadline, the admissions committee may wait until after the program deadline has passed to review eligible applications. The number of applicants for a particular program influences the response time.

## Admissions Appeal

Applicants may submit an admission appeal to the dean of The Graduate College for a denial decision within three weeks of the date of the decision. An admission decision appeal form for the graduate dean is available on The Graduate College's website. (<https://www.gradcollege.txst.edu/>) The written appeal should include additional supporting documentation. Admission appeals will be answered via email within three weeks of receipt of the applicant's appeal.

Deadlines represent the last date an application will be guaranteed to be considered for admission. Many programs strictly enforce the published deadlines, and applications received after the deadline will not be considered for admission. However, other programs will review applications for domestic applicants received after the published deadline dates on a space-available basis only. For more information about specific program deadline types and dates, visit the program's admissions page on our website.

All required application materials should be submitted to through the admission portal no later than the following standard deadline dates (though some programs may have earlier deadlines and others may continue to receive applications after these deadlines) to ensure admission consideration for the desired term:

## U.S. Citizen Deadlines

Semester	Deadline
Fall	June 15
Spring	October 15
Summer I	April 15
Summer II	June 1

## International Student Deadlines

No international student applications will be processed after the published deadlines.

Semester	Deadline
Fall	June 1
Spring	October 1
Summer I	March 15
Summer II	No admission

## Admission Requirements for U.S. Citizens and applicants with Permanent Resident status

Each program's catalog or web page details the specific admission requirements for applicable semester of entry during the current academic year. Submission instruction, additional details, and changes to admission requirements for semester other than the current academic year can be found on The Graduate College's website. (<http://www.gradcollege.txst.edu/>)

## Admission Requirements for International Applicants

Texas State defines an international student as anyone who is in a non-immigrant visa status including H1-B visa holders. If you are not a U.S. Citizen, permanent resident, refugee, or asylee, you would be classified as an international student. Students who are not on a visa and are graduating from a Texas high school after three years in residence in Texas (please review Senate Bill 1528) are considered domestic applicants.

In addition to meeting the application requirements found on each program's catalog or web page, international applicants or applicants with international credentials must submit:

- \$90 non-refundable application fee.
- official transcripts (and marksheets if applicable) from every institution attended: one in the native language of the country where the university is located and one certified English translation (if transcripts are issued in a language other than English)
- two copies of the graduation/degree certificate (diploma) showing the type of degree and the date in which the degree was earned, one in the native language of the country where the university is located and one certified English translation.
- official English proficiency exams scores

Refer to the International Admission Documents section of this catalog or The Graduate College for more information about these requirements.

## F-1 Visa Enrollment Requirements

A student under an F-1 international student visa must be enrolled full-time (nine hours) in the fall and spring terms. The only exception to this rule is if you are currently under a Post-Completion OPT period and in good F-1 status. An F-1 student does not have to enroll during the summer if the student is eligible and intends to register for the next term. A new initial F-1 student who recently gained admission into the U.S. with a program start date set to begin in the summer session must enroll full-time for that summer session. Also, F-1 international students not holding an assistantship can be enrolled in fewer than 9 hours and be considered full-time under two conditions: a) if they have completed all course work and are completing an internship integral to their degree program (student must apply for Curricular Practical Training to work off-campus), b) if they have completed all course requirements and are working on their thesis/dissertation only. The exception under a) can be granted for one semester only. The exception under b) can be granted for multiple semesters provided the student makes progress on the thesis/dissertation. A student enrolling less than full-time must apply for a reduced course load prior to enrolling or dropping a course that results in less than full-time enrollment. For more information or to submit your Reduced Course Load (RCL) request go to ISSS RCL (<https://www.international.txst.edu/current/reduced-course-load-rcl.html>) or contact International Student and Scholar Services (<https://www.international.txst.edu/>) at 512-245-7966 for more information.

For F-1 international students only one (1) distance learning class/online course per semester may be counted toward the full-time status requirement.

The chart below shows the minimum face-to-face credit hours needed for the fulfillment of full-time status. The online hours are the maximum number of online or distance learning courses that can count towards the full-time status requirement. contact International Student and Scholar Serv (https://www.international.txst.edu/es) (https://www.international.txst.edu/) at 512-245-7966 for more information.

Online	Face-to-Face
3 hours	6 hours

## Regular Admission Requirements

Regular degree-seeking admission, for most programs, may be granted if applicants:

1. have a minimum\* grade-point average (GPA) of 2.75 overall or a 2.75 on a 4.0 scale calculated on:
  - a. undergraduate work before the bachelor's degree at an accredited four-year institution,
  - b. undergraduate work before the bachelor's degree taken at an accredited four-year institution plus any completed graduate course work taken at an accredited institution, or,
  - c. undergraduate work, including those on a second baccalaureate degree. (This is the only circumstance in which undergraduate credit hours taken beyond the first baccalaureate degree are used in admission evaluation.)
2. **and** meet program specific requirements as designated on the program's catalog or web page.

Only courses with letter grades or numerical equivalents will be used in calculating the grade-point average.

\* Some graduate programs have higher GPA requirements and/or subject-specific GPA requirements. These requirements are detailed on each program's catalog or web page.

## Conditional Admission Status

The graduate advisor may recommend to the dean of The Graduate College that applicants be conditionally admitted even though they may not meet the minimum requirements for admission. This recommendation is based on evidence that an applicant can successfully pursue graduate study and governed by the stated admission policies in the prospective program. Conditional admission is not available for all programs and also not for applicants who require an "F" or "J" Visa.

When applicants are conditionally admitted to a graduate degree program, the graduate advisor, with the approval of the dean of The Graduate College, will impose certain requirements, or "conditions of admission". Each term, The Graduate College and the graduate advisor will review the progress of students admitted conditionally. When students meet the conditions of their admission, they will be eligible for regular admission to the program. When students do not satisfy the conditions of their admission, they will be dismissed from the program. Appeals may be submitted to the dean of The Graduate College and are reviewed by both the departmental graduate admission committee and dean of The Graduate College. Decisions made by the dean of The Graduate College are considered final.

## Graduating Senior Admission Requirements

Undergraduate students at Texas State who have superior academic records and lack 12 or fewer semester hours toward graduation may apply for graduate admission to a degree-seeking program to begin taking graduate course(s) during the final term of undergraduate study. Graduate course(s) taken under this status will be applied to the student's prospective master's degree. The following requirements must be met:

1. The student must be admitted with regular admission status.
2. The graduate advisor in the student's proposed major program must submit a recommendation to the dean of The Graduate College requesting that the student be admitted into the proposed major program of study as a graduating senior.

Since concurrent registration in an undergraduate and graduate program may affect financial aid awards, students should contact a financial aid officer prior to seeking graduating senior status ([www.finaid.txst.edu/fin-aid/eligibility.html](http://www.finaid.txst.edu/fin-aid/eligibility.html) (<https://www.finaid.txst.edu/fin-aid/eligibility.html>)).

Applicants who would like to take graduate courses for personal enrichment or to fulfill prerequisites for another program can take course(s) as a non-degree-seeking student. Non-degree-seeking students are not pursuing any of The Graduate College's degree programs.

## Admission Requirements for U.S. Citizens and applicants with Permanent Resident status

The items listed below are required for admission consideration:

- completed online application
- \$20 nonrefundable application fee

OR

- \$60 nonrefundable application fee for applicants with international credentials
- a baccalaureate degree from a regionally accredited university
- official transcripts (and marksheets if applicable) from the institution that shows the highest degree earned
- completed non-degree-seeking student form for each semester for which enrollment is sought

## Admission Requirements for International Applicants

Texas State defines an international student as anyone who is in a non-immigrant visa status including H1-B visa holders. If you are not a U.S. Citizen, permanent resident, refugee, or asylee, you would be classified as an international student. Students who are not on a visa and are graduating from a Texas high school after three years in residence in Texas (please review Senate Bill 1528) are considered domestic applicants

The following items, in addition to those listed for U.S. citizens, are required for admission consideration.

- official transcripts from every institution attended: one in the native language of the country where the university is located and one certified English translation (if transcripts are issued in a language other than English).
- two copies of the graduation/degree certificate (diploma) showing the type of degree and the date in which the degree was earned, one in the native language of the country where the university is located and one certified English translation.
- official English proficiency exams scores

Refer to the International Admission Documents section of this catalog or The Graduate College's website for more information about these requirements.

## F-1 Visa Enrollment Requirements

A student under F-1 international student visa status must be enrolled full-time (nine hours) in the fall and spring terms. The only exception to this rule is if you are currently under a Post-Completion OPT period and in good F-1 status. An F-1 student does not have to enroll during the summer if the student is eligible and intends to register for the next term. A new initial F-1 student who recently gained admission into the U.S. with a program start date set to begin in the summer session must enroll full-time for that summer session. Please contact the International Student and Scholar Services at 512-245-7966 or [international@txstate.edu](mailto:international@txstate.edu) for more information.

Students currently pursuing graduate degrees at another institution may enroll in graduate courses at Texas State with the permission of the dean of The Graduate College and the graduate advisor of the Texas State academic program, and the student's primary institution. Visiting students are taking courses at Texas State to transfer credit back to their graduate-degree-granting institution and are not eligible for financial aid or certain veteran benefits.



## Admission Requirements for U.S. Citizens or applicants with Permanent Resident status

The items listed below are required for admission consideration:

- completed online application
- \$20 nonrefundable application fee
- OR
- \$60 nonrefundable application fee for applications with international credentials
- visiting student form requiring:
  - approval to take the course from the primary institution, or the institution granting the degree
  - approval from the graduate advisor or department chair in the program/department offering the course at Texas State

Visiting students should return the form signed by all appropriate parties for the dean of The Graduate College to approve at least two weeks prior to registration. The form must be completed prior to enrollment each term students wish to enroll as visiting students.

## Admission Requirements for International Applicants

Texas State defines an international student as anyone who is in a non-immigrant visa status including H1-B visa holders. If you are not a U.S. Citizen, permanent resident, refugee, or asylee, you would be classified as an international student. Students who are not on a visa and are graduating from a Texas high school after three years in residence in Texas (please review Senate Bill 1528) are considered domestic applicants.

The following items, in addition to those listed for U.S. citizens, are required for admission consideration for international applicants or applicants with international credentials:

### International Visiting Applicants

- official English proficiency exams scores

### International Exchange Students

- the application fee is waived
- official English proficiency exams scores **or** the completed English Proficiency Waiver Form for Graduate Exchange Students

Refer to the International Admission Documents section of this catalog or the international applicant webpages for more information about these requirements. All immigration-related documents will be collected by the International Student and Scholar Services. Students seeking to attend Texas State under the F-1 status will receive an email with the next steps to request their I-20 document after they have been admitted. Visit the International Student and Scholar Services (ISSS) web site ([international.txst.edu](https://www.international.txst.edu) (<https://www.international.txst.edu/>)) for more information on the next actions to take as a prospective international student. For further information, students should contact ISSS directly via 512-245-7966 or by email at [international@txstate.edu](mailto:international@txstate.edu).

Texas State offers several certificate programs. Applicants who hold baccalaureate degrees from regionally accredited institutions must

apply through The Graduate College. All certificate course work must be completed within four years of initial enrollment.

## Admission Requirements for U.S. Citizens and applicants with Permanent Resident status

Each certificate program's catalog or web page details the specific admission requirements. Minimally, the following are required:

- completed online application
- \$20 nonrefundable application fee
- OR
- \$60 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university
- official transcripts (and marksheets if applicable) from **each institution** where course credit was granted

## Admission Requirements for International Applicants

Texas State defines an international student as anyone who is in a non-immigrant visa status including H1-B visa holders. If you are not a U.S. Citizen, permanent resident, refugee, or asylee, you would be classified as an international student. Students who are not on a visa and are graduating from a Texas high school after three years in residence in Texas (please review Senate Bill 1528) are considered domestic applicants.

**In addition** to meeting the application requirements found on each certificate's catalog or web page, international applicants or applicants with international credentials must submit:

- official transcripts from every institution attended: one in the native language of the country where the university is located and one certified English translation (if transcripts are issued in a language other than English).
- two copies of the graduation/degree certificate (diploma) showing the type of degree and the date in which the degree was earned, one in the native language of the country where the university is located and one certified English translation.
- official English proficiency exams scores

Refer to the International Admission Documents section of this catalog or The Graduate College for more information about these requirements.

## F-1 Visa Enrollment Requirements

A student under an F-1 student visa must be enrolled full-time (9 hours) in the fall and spring terms. The only exception to this rule is if you are currently under a Post-Completion OPT period and in good F-1 status. An F-1 student does not have to enroll during the summer if the student is eligible and intends to register for the next term. A new initial F-1 student who has recently gained admission into the U.S. with a program start date to begin in the summer session must enroll full-time for that summer session. For more information go to [international.txst.edu](https://www.international.txst.edu) (<https://www.international.txst.edu/>) or contact International Student and Scholar Services at 512.245.7966 or [international@txstate.edu](mailto:international@txstate.edu).



## Certificate Course Work

Students must maintain a minimum GPA of 3.0 in order to receive a certificate of completion for the program. A final course grade of "C" or higher is required for any graduate course that may be applied towards a graduate certificate at Texas State. All certificate course work must be completed within four years of initial enrollment.

Students who are later admitted to a degree program can petition up to six hours of certificate course work to count toward the degree as long as the course work is graduate-level and completed with a grade of "B" or higher.

## Completion of Texas State Certificate

In order for students to receive their certificates, they must submit the graduation application (even though they are technically not "graduating" and are not eligible to participate in commencement) in the semester in which they plan to complete their certificate course requirements. Students in both a degree program and a certificate program who wish to apply for both programs at once must select both at the time the graduation application is submitted. Students who finish their certificate course requirements prior to their degrees can apply for the completion of a Texas State Certificate before they finish the graduate degree. Incomplete grades should be cleared through the University Registrar's Office at least ten days before the commencement date for which the certificate is to be awarded.

It is the student's responsibility to ensure completion of all certificate requirements as listed on the degree audit and required by the certificate program. It is also the student's responsibility to apply for completion of the certificate by the published deadline. Students who miss the application deadline must contact [gcdegspcl@txstate.edu](mailto:gcdegspcl@txstate.edu) for assistance.

The Educator Preparation Program (EPP) prepares candidates for numerous initial teacher certificates. The program produces teachers who are certified to teach in Texas public, charter, and private EC - 12 schools.

Post-baccalaureate students can earn initial teacher certification through the following options:

- alternative certification
- master's degree + certification
- second bachelor's degree program with teacher certification (see undergraduate catalog for admission and program requirements)

## Admission Requirements for U.S. Citizens Alternative Teacher Certification

The items listed below are required for admission consideration:

- completed online application
- \$20 nonrefundable application fee
- OR
- \$60 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university
- official transcript (and marksheets if applicable) from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA on your last 60 hours of course work toward a degree

- Requisite baccalaureate coursework. Details vary according to the specific certificate chosen. Visit the program's web page for more information.

## Master's Degree + Certification Programs

Master's Program	Certification Program
Elementary Education	<b>4 - 8 English Language Arts/Reading/Social Studies</b>
Elementary Education	<b>4 - 8 Science</b>
Elementary Education	<b>4 - 8 Math</b>
Elementary Education	<b>4 - 8 Generalist</b>
Elementary Education	<b>EC - 6 Core Subjects ESL</b>
Elementary Education	<b>EC - 6 Core Subjects Bilingual</b>
Secondary Education	<b>See list of Secondary and All Level certificates</b>
Secondary Education - Teacher Recruitment Program (TRP)	<b>Contact TRP for available Secondary and All Level certificates</b>
Special Education	<b>EC - 12 Special Education</b>

## Admission Requirements for International Applicants

Texas State defines an international student as anyone who is in a non-immigrant visa status including H1-B visa holders. If you are not a U.S. Citizen, permanent resident, refugee, or asylee, you would be classified as an international student. Students who are not on a visa and are graduating from a Texas high school after three years in residence in Texas (please review Senate Bill 1528) are considered domestic applicants.

The following items, in addition to those listed for U.S. citizens, are required for admission consideration. **These items apply to both alternative certifications and master's degree + certification programs.**

- official transcripts (and marksheets if applicable) from every institution attended: one in the native language of the country where the university is located and one certified English translation (if transcripts are issued in a language other than English)
- two copies of the graduation/degree certificate (diploma) showing the type of degree and the date in which the degree was earned, one in the native language of the country where the university is located and one certified English translation.
- official (iBT) TOEFL scores with a minimum of 24 on the speaking, 22 for listening, 22 for reading, and 21 for writing. The Texas Education Agency (TEA) does not accept any other English proficiency exams.

Refer to the International Admission Documents section of this catalog or The Graduate College's website (<http://www.gradcollege.txst.edu/>) for more information about these requirements.

## F-1 Visa Enrollment Requirements

A student under F-1 international student visa must enroll full-time (nine hours) in the fall and spring terms. The only exception to this rule is if you are currently under a Post-Completion OPT period and in good F-1 status. An F-1 student does not have to enroll during the summer if the student is eligible and intends to register for the next term. A new initial F-1 student who recently gained admission into the U.S. with a program start date set to begin in the summer session must enroll full-time for that summer session. For more information go to [international.txst.edu](http://international.txst.edu)

(<https://www.international.txst.edu/>) or contact International Student and Scholar Services at 512.245.7966 or [international@txstate.edu](mailto:international@txstate.edu).

## Admission Requirements for the Educator Preparation Program (EPP)

In addition to the above requirements, the State Board for Educator Certification (SBEC) and Texas State University require the following items:

- completed application to the Educator Preparation Program
- accepted offer of admission and nonrefundable \$35 fee
- completed application for a Certification Plan and nonrefundable \$75 fee

Admission requirements are subject to change in response to state law and university policy and do not adhere to a particular catalog year. Review the Office of Educator Preparation website (<http://www.education.txst.edu/oep/>) for current admittance information and processes.

## Teacher Certification Requirements\*

Successful teaching requires a combination of both academic and interpersonal skills. Behaviors, skills, abilities, and dispositions which are required for successful teaching as well as the candidate's general level of readiness for teaching in EC - 12 classrooms are regularly assessed.

All candidates requesting placement in EC - 12 schools must complete a criminal background check. Each school district has its own background check process and requirements that must be met before the school district will approve a candidate's placement.

### Course Work Requirements

Once admitted to the program, candidates must apply for a certification plan and pay a fee. Each certification has different course requirements that may vary according to a candidate's academic background.

### Field Experience

A minimum of 30 clock hours of field experience observation is required; students must complete this requirement before student teaching either in a field block experience or as a stand-alone placement embedded in specific course work. Candidates must consult OEP and/or a program advisor before deciding how to fulfill this requirement.

### Student Teaching and Internship

Candidates with bachelor's degrees have two options for state-required culminating experience of the teacher certification process. Clinical teaching (student teaching) is a one-semester (six credit hours), usually unpaid, full-time experience in a local public school classroom. All course work from the certification plan must be completed prior to the student teaching semester. Students may also be approved pursue a year-long, paid internship. All course work from the certification plan and testing requirements must be completed prior to yearlong paid teaching internship.

### Teacher Certification Exams

The Texas Examination of Educational Standards (TEXES) is the state required teacher examination for all Texas Educators. A candidate's certification area and level will determine which TEXES tests are required.

Candidates are allowed five attempts for each certification test and must request approval from the OEP for each attempt. Review the OEP website for the test approval process. Candidates are eligible for test approval up to 2 years after completing the program.

### Certification Recommendation

The certification officer will recommend candidates to the state for issuance of a teaching certification, after all the following have been completed:

- passing scores on all the required certification exams
- credit for student teaching or internship posted to the transcript
- bachelor's degree on file with the university
- completed application for certification through TEA

\* Program requirements are subject to change in response to state law and university policy and do not adhere to a particular catalog year. Review the Office of Educator Preparation website (<https://www.education.txst.edu/oep/>) for current program requirements and processes.

## Holders of Valid Out-of-State Certificates

The State Board for Educator Certification (SBEC) reviews out-of-state teacher certificates. Contact the SBEC at 888-863-5880.

Professional and specialist teacher certifications are available for principal, counselor, superintendent, and reading specialist. These programs are offered as stand-alone certifications (for those who already have a master's degree) or as part of a master's degree program (master's degree + certification). Refer to each individual departmental section of this catalog for specific information or visit The Graduate College's website. (<http://www.gradcollege.txst.edu/>)

## Admission Requirements for U.S. Citizens Stand-Alone Certifications (Principal, Superintendent)

The items listed below are required for admission consideration:

- completed online application
- \$20 nonrefundable application fee
  - or
- \$60 nonrefundable application fee for applicants with international credentials
- baccalaureate degree from a regionally accredited university
- master's degree from a regionally accredited university
- official transcripts (and marksheets if applicable) from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA on the last 60 hours of undergraduate course work toward a degree
- copy of official teaching certificate documenting initial teaching certification (Principal, Superintendent, and Reading Specialist only)
- copy of official teaching service record documenting at least one year's teaching experience in public or accredited private school (Principal, Superintendent, and Reading Specialist only)
- copy of official principal certificate\* (for superintendent certification applicants only)

\* The program will also accept the equivalent of a principal certificate issued by another state or country or the completion of the

superintendent certificate application and approval from the Texas Education Agency (TEA) to substitute three years' managerial experience in lieu of a principal certificate.

Master's Degree + Certification Programs

Master's Program	Certification Program
Educational Leadership	Principal
Reading Education	Reading Specialist
Professional Counseling	School Counseling

Admission Requirements for International Applicants

Texas State defines an international student as anyone who is in a non-immigrant visa status including H1-B visa holders. If you are not a U.S. Citizen, permanent resident, refugee, or asylee, you would be classified as an international student. Students who are not on a visa and are graduating from a Texas high school after three years in residence in Texas (please review Senate Bill 1528) are considered domestic applicants. The following items, in addition to those listed for U.S. citizens, are required for admission consideration.

- official transcripts (and marksheets if applicable) from every institution attended: one in the native language of the country where the university is located and one certified English translation (if transcripts are issued in a language other than English)
- two copies of the graduation/degree certificate (diploma) showing the type of degree and the date in which the degree was earned, one in the native language of the country where the university is located and one certified English translation.
- official (iBT) TOEFL scores of 78 or higher, with a minimum of 26 on the speaking section and a minimum of 19 in all other sections. The Texas Education Agency (TEA) does not accept any other English proficiency exams.

Refer to the International Admission Documents section of this catalog or The Graduate College's website (<https://www.gradcollege.txst.edu/>) for more information about these requirements.

F-1 Visa Enrollment Requirements

A student under F-1 international student visa status must be enrolled full-time (nine hours) in the fall and spring terms. The only exception to this rule is if you are currently under a Post-Completion OPT period and in good F-1 status. An F-1 student does not have to enroll during the summer if the student is eligible and intends to register for the next term. A new initial F-1 student who recently gained admission into the U.S. with a program start date set to begin in the summer session must enroll full-time for that summer session. For more information go to [international.txst.edu](https://international.txst.edu) (<https://www.international.txst.edu/>) or contact International Student and Scholar Services at 512.245.7966 or [international@txstate.edu](mailto:international@txstate.edu).

[www.txst.edu/cpm/](https://www.txst.edu/cpm/) (<https://www.txst.edu/cpm/>)  
Telephone: 512-245-3453 Fax: 512-331-7293

Texas State has been officially designated by the National Consortium of Certified Public Managers (CPM) to offer the CPM Program. The CPM Program offers a systematic training program to enhance the quality and efficiency of management in government and to improve professionalism and effectiveness of government managers. Individuals may enroll at any

time during the year; programs are held approximately every two to three months depending on location. Admission to Texas State is not required. Courses may be completed for academic credit.

The CPM Program is a nationally accredited comprehensive statewide management development program specifically for managers in federal, state, and local government and for managers in the not-for-profit-sector. The program's primary goal is to improve the performance of public and not-for-profit sector managers and the organizational performance of state, local, and federal government. The program is a comprehensive course of study by which public managers can acquire and apply the best practices and theory to their management behaviors and strategies using prescribed sets of professional standards. The curriculum uses theory as the foundation and applies it to practical problems facing the participant's agency/department, and the citizens. Those who complete the program earn a national trademark designation of CPM (Certified Public Manager®).

The Texas CPM Program, a 7-course sequence which leads to a nationally accredited public manager certification, is offered by Texas State University's William P. Hobby Center for Public Service.

Applicants

Applicants wishing to change their application to a different term will be required to submit a new application and pay the non-refundable application fee.

Admitted Students

Students who are accepted into a degree program and fail to enroll for the term of acceptance are not guaranteed acceptance for future terms. In some programs, students may contact admissions about the possibility of a deferral for a maximum of two full terms.

Once admitted, students are expected to enroll each fall and spring term (summer is optional for most programs).

Previously enrolled students must submit the update enrollment form (<http://www.gradcollege.txstate.edu/forms/update.html>) in order to enroll if it has been less than a year since their last enrollment.

Previously enrolled students who fail to enroll within a one-year period will be required to submit a new admission application and non-refundable application fee. Other application documents may be required in certain circumstances. Students should review additional enrollment requirements and policies that relate to their program of study. Please see the leave of absence policy in the Academic and Grading Policies section of this catalog for more information.

Students who wish to pursue a second simultaneous or subsequent graduate degree or change a major must submit an application for admission and all required admission documents as indicated on the program's catalog or web page. This procedure must be completed in ample time to meet the admission deadlines.

Admission to one program does not guarantee admission to another program. No courses applied toward one graduate degree may be simultaneously applied toward another graduate degree. Students changing majors and admitted to a new graduate degree program may be permitted to count some or all of the graduate-level courses taken in their previous program toward their new graduate program. At the recommendation of the graduate program advisor, graduate-level courses from another program may be petitioned to the dean of The

Graduate College for degree credit provided a degree was not awarded for the previous program. No credit will be applied toward the master's degree for work completed more than six years before the date on which a student's degree is to be conferred unless an exception has been approved by the graduate advisor and dean of The Graduate College.

Students on probation or suspension (p. 814) may not change programs without a recommendation and request from the prospective department. The dean of The Graduate College will review the request and make the final decision.

If a student was previously granted admission as a post-baccalaureate/post-graduate student and wishes to apply for admission to a degree program, the student must submit an application for admission as well as the required admission documents as indicated on The Graduate College's website (<https://www.gradcollege.txst.edu/>). This procedure must be completed in ample time to meet the admission deadlines.

After students are regularly admitted to a graduate degree program, they may be permitted to count some of the graduate-level courses taken under the post-baccalaureate or post-graduate status toward their graduate degrees. At the recommendation of the student's graduate advisor, up to six hours of graduate-level courses taken under the post-baccalaureate or post-graduate status with a grade of "B" or better may be petitioned to the dean of The Graduate College for degree credit.

Thornton International House  
<https://www.tsie.txst.edu/>  
T: 512-245-7966

The Texas State Intensive English (TSIE) Program offers non-credit intensive English-as-a-Second-Language (ESL) courses for students who:

- want to improve their command of the English language prior to beginning /or during college or university-level programs of study;
- would like to polish their English language abilities for academic readiness, test preparation, self-improvement, and/or cultural integration.

Classes emphasizing academic reading, writing, listening, and speaking are offered during the fall, spring, and summer sessions in a face-to-face format. International students on F-1 visas are required to enroll in a full course of study every fall and spring semester. When registering for TSIE classes, these students should consult International Student and Scholar Services for instructions on maintaining visa status.

All admission materials must be submitted to The Graduate College through the appropriate channel and in the requested format. Materials submitted become the property of the university and cannot be released, except in accordance with the Federal Family Educational Rights and Privacy Act or the Texas Public Information Act. Non-required admission materials mailed or emailed will not be retained, nor will documents submitted without the officially designated admission application. Submission instructions and information can be found on our website.

## Submission Instructions

Additional details for the items below are located on The Graduate College's submission information web page.

## Application

Applications for admission to The Graduate College must be submitted online through the admission application portal. Applications are for specific programs and specific semesters. Applicants wishing to change their application to a different semester or program will be required to submit a new application and pay the non-refundable application fee.

## Application Fees

A non-refundable application fee of \$55 is required for all degree-seeking applicants. Degree seeking applications with international credentials will incur a \$90 application fee. A \$20 non-refundable application fee is required for applicants seeking certification, certificate, non-degree, or visiting student status. Non degree-seeking applications with international credentials will incur a \$60 application fee. In addition to the \$55 application fee, a \$25 non-refundable application fee is required for applicants to the doctor of physical therapy program. No application will be processed until the necessary fees are paid. Please note that a \$30 returned item fee will be charged if the payment is returned for Insufficient Funds, Account Closed, or a Stop Pay has been put on the payment.

## Official Transcripts

Applicants must submit official transcripts from each institution attended to admissions prior to registration. Applicants may upload copies of all official transcripts directly to the application portal for application review purposes.

Applicants must hold a four-year baccalaureate degree from a regionally accredited institution at minimum. The requirements for international transcripts can be found in the International Admission Documents section of the catalog.

Transcripts must be sent directly from the university or college attended, via USPS or secure electronic delivery, or submitted in a sealed university envelope with the University Registrar's signature on the back of the envelope in order to be considered "official". The transcript must reflect all college work attempted and any degree(s) conferred. Scanned or faxed copies of transcripts will not be considered official. Texas State students are not required to supply transcripts for course work completed at Texas State or transfer work found on their Texas State transcript.

## Departmental Requirements

Additional admission requirements vary per program and are detailed on each program's catalog or web page.

## Test Scores

### Graduate Record Examination (GRE)

Some programs require official GRE scores to be on file prior to admission consideration. Official GRE scores may be required by other programs if the GPA is below the minimum. Additional information can be found on each program's catalog or web page.

Applicants who must submit official GRE scores should take the general portion (verbal and quantitative sections) of the exam. The writing section is also required for some programs. Subject examinations are neither required nor accepted.

The GRE score is valid for five years after the exam date and must be sent directly from the testing center. Scores requested by the student



before the deadline, but received by admissions after the deadline, will be considered late.

## Graduate Management Admission Test (GMAT)

The GMAT is required to be on file with prior to admission consideration for some programs. Additional information can be found on each program's catalog or web page.

The GMAT score is valid for five years after the exam date and must be sent directly from the testing center. Scores requested by the student before the deadline, but received by admissions after the deadline, will be considered late.

## English Proficiency Exam Scores

The Requirements for the Test of English as a Foreign Language (TOEFL), Pearson Academic English Language Test (PTE Academic), International English Language Testing System (IELTS), Duolingo (DET), or TOEFL Essentials can be found in the International Admission Documents section of this catalog.

## Documentation of Meningitis Immunization

Universities in Texas are required by state law to collect proof of bacterial meningitis vaccination, or proof of an exemption, for incoming students under the age of 22. For more information on this requirement, please visit the admissions webpage at <https://www.admissions.txst.edu/admitted-students/meningitis-vaccination.html>.

In addition to all general admission requirements, applicants with international credentials (including any study abroad or exchange course work) or English proficiency exam scores, may be required to submit the following requirements for admission consideration.

## Application Fee for Applications with International Credentials

Applicants who require a visa and those with documents that require the review of any non-U.S. credentials or English proficiency exam scores must submit a nonrefundable application fee of \$90. No application will be considered until the necessary fees have been paid.

## Official Transcripts/Marks Sheets

The Graduate College requires two official, university-sealed transcripts (and marksheets if applicable) from every university attended: one in the native language of the country where the university is located and one certified translation into English. If the native language of the country where the university is located is English, only one official transcript is required. Transcript evaluations are not required. Academic records (transcripts and mark sheets) must be submitted directly to The Graduate College by post in an envelope sealed by the university recognized by the appropriate bodies of that country and must include official stamps, seals, and/or signatures from the university's Registrar or Controller of Examinations. These documents must be printed on university letterhead in order to be considered official. Copies of official transcripts and mark sheets may be uploaded to the application portal for application review purposes.

## Graduation/Degree Certificate (Diploma)

The Graduate College requires two copies of official diplomas or degree certificates: one in the native language of the country where

university is located and one certified translation into English. Certificates must include the type of degree earned and the date the degree was awarded, as well as all official stamps, seals, and/or signatures from the university's Registrar or Controller of Examinations Office.

## Official English Proficiency Exam Scores

Fluency in English is expected of all accepted students, specifically in the areas of listening, reading, speaking, and writing; therefore, English proficiency exam scores through the Test of English as a Foreign Language (TOEFL), Pearson Test of Academic English (PTE), International English Language Testing System (IELTS), Duolingo (DET), or TOEFL Essentials are required of all applicants.

ALL TOEFL, PTE, IELTS, DET, or TOEFL Essentials scores submitted for admission consideration must be less than two years old as the testing service sites will not maintain or release official score records beyond this time. ALL TOEFL, PTE, DET, or TOEFL Essentials scores must be submitted to The Graduate College directly by the testing organization. IELTS scores may be reported by the applicant by completing the TRF Verification Form on the applicant's application portal. The applicant's IELTS scores will be confirmed with IELTS by the Graduate College; score reports bearing the designation of "applicant copy" or "institutional scores" will not be considered official for admission purposes. Scores requested by the student before the deadline, but received by The Graduate College after the deadline, will be considered late.

## English-Proficiency Admission Requirements

Applicants must submit a TOEFL internet-based test (iBT) score of at least 78 overall, a PTE score of 52 overall, or an IELTS (academic) test score of at least 6.5 overall with 6.0 in each individual module scores, a DET score of 110 overall, or TOEFL Essentials score of 8.5 overall in order to be considered for regular admission based on English proficiency\*. Some programs may require a higher overall score or specific minimum individual iBT section scores in order to be considered for regular admission. Additionally, some programs may require that applicants submit scores for one specific type of test. These requirements are listed on each program's catalog or web page.

\* Regular admission based on English proficiency does not guarantee regular academic admission.

All immigration-related documents will be collected by the International Student and Scholar Services. Students seeking to attend Texas State under the F-1 status will receive an email with the next steps to request their I-20 document after they have been admitted. Visit the International Student and Scholar Services (ISSS) web site ([international.txst.edu](http://international.txst.edu)) (<https://www.international.txst.edu/>) for more information on the next actions to take as a prospective international student. For further information, students should contact ISSS directly via 512-245-7966 or by email at [international@txstate.edu](mailto:international@txstate.edu).

## Registration and Course Credit

Since applications are for specific semester or terms, applicants should notify The Graduate College as soon as possible if they will not be enrolling for the semester of admission.

If you are an international student with an issued I-20 from Texas State, and are planning on deferring your attendance, you should also notify International Student and Scholar Services (ISSS) by filling out the



deferral form (<https://www.international.txst.edu/prospective/deferral-i20request.html>).

Texas State uses an online registration system referred to as Texas State Self-Service which requires admission to the university and an associated NetID and password. Texas State Self-Service can be accessed through CatsWeb (<http://www.catsweb.txstate.edu/>). For more information, students should access the Office of the University Registrar's website at <http://www.registrar.txstate.edu>.

## Registration Termination

Registration in The Graduate College beyond the first term depends on satisfactory progress in fulfilling any admission conditions that may have been imposed and making satisfactory progress.

The dean of The Graduate College may terminate the registration of any student who fails to comply with Graduate College and/or other appropriate university regulations.

## Course Load and Overloads

### Course Load

A master's level student under F-1 international student visa status must be enrolled full-time (six semester hours) in the fall and spring terms. A doctoral level student under F-1 international student visa status must be enrolled full-time (nine semester hours) in the fall and spring terms. An F-1 student does not have to enroll during the summer if the student is eligible and intends to register for the next term. A new initial F-1 student who recently gain admission into the U.S. with a program start date set to begin in the summer session must enroll full-time for that summer session. Also, an F-1 international student not holding an assistantship can be enrolled in fewer than above outlined hour minimum and be considered full-time under two conditions: a) if they have completed all course work and are completing an internship integral to their degree program (student must apply for Curricular Practical Training to work off-campus), b) if they have completed all course requirements and are working on their thesis/dissertation only. The exception under a) can be granted for one semester only, the exception under b) can be granted for multiple semesters provided the student makes progress on the thesis/dissertation. A student enrolling less than full-time must apply for a reduced course load prior to enrolling or dropping a course that results in less than full-time enrollment. For more information or to submit your Reduced Course Load (RCL) go to ISSS RCL (<https://www.international.txst.edu/current-f1-students/reduced-course-load-rcl.html>) or contact International Student and Scholar Services (<https://www.international.txst.edu/>) at 512-245-7966 for more information.

For F-1 international students only one (1) distance learning class/online course per semester may be counted toward the full-time status requirement.

The chart below shows the minimum face-to-face credit hours needed for the fulfillment of full-time status. The online hours are the maximum number of online or distance learning courses that can count towards the full-time status requirement. contact International Student and Scholar Services (<https://www.international.txst.edu/>) at 512-245-7966 for more information.

Online	Face-to-Face
Masters 3 hours	Masters 6 hours
Doctoral 3 hours	Doctoral 6 hours

The department or operating unit will determine the permissible course load of employees of the university under their supervision. Graduate assistants should refer to the *Salaried Graduate Student Employment Procedures* outlined in UPPS 07.07.06.

A student receiving Veterans Affairs (VA) benefits must check with the VA office (512-245-2641) for enrollment requirements.

### Overloads

Course loads of 16 hours or more require written approval from the dean of The Graduate College. To request an overload, the student must make a request to the major department advisor who must submit a written request to the dean of The Graduate College at least three days before registration. Note that different limits apply to students holding graduate assistantships as described in <https://policies.txst.edu/university-policies/07-07-06.html>.

### Credit Hour

For purposes of this catalog and in accord with federal regulations regarding the definition and assignment of credit hours under section 600.0 and 600.24(f) of the Higher Education Opportunity Act, a credit hour is an amount of work that reasonably approximates:

- not less than one hour of classroom or direct faculty instruction and a minimum of two hours out of class student work each week for approximately 15 weeks for one semester or trimester hour of credit, or 10 to 12 weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time;
- at least an equivalent amount of work as outlined in the item above for other academic activities as established by the institution including laboratory work, internships, practicum, studio work, and other academic work leading to the award of credit hours.

A semester credit hour is defined by the Texas Higher Education Coordinating Board as a unit of measure of instruction consisting of 60 minutes, of which 50 minutes must be direct instruction over a 15-week period in a semester system. Credit hours must be presented in whole numbers. Academic administrative units are responsible for ensuring that credit hours are awarded only for work that meets this requirement. Students should expect to invest a minimum of two hours of additional work for each hour of classroom or faculty instruction per week.

## Adds and Drops/Schedule Changes

Information regarding schedule changes can be found on the Office of the University Registrar's website at <http://www.registrar.txstate.edu/>. Schedule changes and withdrawal dates are published each term in the official university calendar that can be found at: <http://www.registrar.txstate.edu/persistent-links/academic-calendar.html>.

For assistance, contact the Office of the University Registrar.

## Auditing a Course

To audit a course, a student must be admitted to The Graduate College. After the student has registered on *CatsWeb*, he or she must contact the Office of the University Registrar in person by the 4<sup>th</sup> class day in the summer or by the 12<sup>th</sup> class day in the fall or spring. Check the University Academic Calendar for the exact date. A student will pay the same fees as if the course were taken for credit and the course will be entered on his or her transcript record, but the student will not receive credit for the course.

Senior citizens, 65 or older, may audit courses without payment of a fee if space is available. Registration is permitted just prior to the start of the term, with reductions made by the tuition adjustment clerk, in Student Business Services (JC Kellam Administration Building 188), after registering.

## Course Numbers

Texas State follows a four-digit numbering system. The first digit indicates the level of the course: 1-freshman, 2-sophomore, 3-junior, 4-senior, 5- and 6-graduate and post-graduate, and 7-doctoral. Courses numbered 5000-6000 are open to all graduate students. Courses numbered 7000 are designed for doctoral students but may be open to other graduate students. The second digit of the course number indicates the semester credit hours the course carries. For example, a course numbered 5300 would carry three semester hours of graduate-level credit. The last two digits usually indicate the location of the course in the department's curriculum. The letter (A, B, C, etc.) at the end of a course number usually indicates a topics course whose content may vary from semester to semester. Numbers in parentheses (3-4) following a course title indicate the clock hours per week spent in lecture and laboratory, respectively.

## Dropping a Class

Dropping a class is an official action whereby a student drops one or more courses, yet remains enrolled in at least one hour. Refer to the registration instructions at <http://www.registrar.txstate.edu> for details on dropping a class.

1. The drop deadline is the first 60 percent of the term. Please refer to the academic calendar on the Office of the University Registrar's website for the most current dates.
2. A "W" grade will be assigned automatically when a student drops one or more classes by the automatic "W" deadline, the first 60 percent of the term.

## Withdrawal from all classes

Withdrawing from the university (dropping all classes) is an official action whereby a student completes the online withdrawal form that goes to the Office of the University Registrar. The deadline to withdraw (go to zero hours) from Texas State is two weeks preceding final examinations during the fall and spring semesters and one week preceding final examinations during the two parts of summer term.

1. The deadline to receive an automatic "W" is the first 60 percent of the term. Refer to the academic calendar on the Office of the University Registrar's website for the most current dates.
2. After the automatic "W" period, faculty assign grades to students who officially withdraw from the university. Faculty assign a "W" grade only to those students who have a passing average at the time the withdrawal action is officially completed. Otherwise, faculty assigns a "U" grade.
3. Please refer to the academic calendar on the Office of the University Registrar's website for the withdrawal deadline.

Visit the Office of the University Registrar's website at <http://www.registrar.txstate.edu/> or contact the Office of the University Registrar at 512.245.2367 for the proper procedures. Students living in university residence halls must also contact the Department of Housing and Residential Life in person, by letter, or by fax.

## Course Credit and Level

A student must be in attendance in class, fulfill the course requirements, and be evaluated by the course instructor in order to receive course credit for that class. The attendance requirement to receive class credit does not affect enrollment for thesis, dissertation or independent study.

A student must be enrolled in the course during the term or summer session in which they receive credit for that class. A student may not enroll in a class to:

1. Receive credit for course work performed in a preceding term or summer session.
2. Receive credit for work performed at another college or university.

## Course Level

All courses required for the graduate degrees offered at Texas State are at the 5000-level or above. Courses required for the doctoral level are at the 7000-level.

## Repeating Courses

A student may repeat a course but cannot receive credit for the course more than once unless the course description in the catalog specifically provides that the course may be repeated for credit. When a course is taken more than once, the second grade (first repeat) and all subsequent grades (repeats) are included in computing the Texas State hours attempted, grade points earned, and GPA. "W", "PR", and "I" grades are excluded. If a course taken at Texas State University is to be repeated, it must be retaken at Texas State University.

## Post-Graduate Credit

After a student is regularly admitted to a graduate degree program, they may be permitted to utilize some of the courses taken as a post-graduate, teacher certification, non-degree, or certificate student toward their graduate degree. At the recommendation of the student's graduate advisor and with approval of the dean of The Graduate College, up to six hours of graduate-level courses taken under the post-graduate status with a grade of "B" or better may be petitioned for degree credit.

## Transfer Credit

After a student is regularly admitted to a graduate degree program, they may be permitted to utilize some graduate level courses taken at another institution toward their graduate degree program. Acceptable transfer credit may be applied to a graduate degree program as follows:

- up to 6 hours for degree programs with 30-35 credit hours,
- up to 9 hours for degree programs with 36-41 credit hours, and
- up to 12 hours for degree programs with 42+ hours.

(Note that the total approved course transfer credit and prior learning assessment (PLA) credit approved together must not exceed those amounts.)

An exception to the standard maximums is the mathematics education doctoral program (p. 3256). Transfer credit will be accepted and applied upon confirmation of the following requirements:

1. The credit was earned in graduate courses completed in residence at a regionally accredited institution.
2. The courses are at the appropriate level and applicable to the student's degree program at Texas State.

3. Courses have not been, and will not be, used for credit toward another degree program.
4. If the credits were earned **prior** to the student's admission to his or her degree program within The Graduate College, the student must have his or her program graduate advisor submit a written request to the dean of The Graduate College asking for acceptance of the transfer work toward the student's Texas State degree program.
5. If the credits are to be earned **after** the student is admitted to The Graduate College or enrolled in a graduate degree program, the student must initiate a request for a letter of good standing well in advance of the time of anticipated enrollment at another university. Transfer credit **cannot** be permitted if the student fails to obtain a letter of good standing from the dean of The Graduate College prior to enrollment in the course(s) to be transferred. In order to obtain a letter of good standing, the student will need to:
  - a. Receive permission from the departmental graduate advisor to take a course elsewhere.
  - b. Have the graduate advisor submit a written request to the dean of The Graduate College so that the dean can issue an official letter of good standing. The request from the advisor should identify the course(s) by name and number and should state what term(s) and where the course(s) will be taken. If the dean of The Graduate College approves the request, a letter of good standing will be sent by the dean of The Graduate College to the university where the student will enroll.
  - c. Have an official transcript of the work forwarded to The Graduate College at Texas State as soon as the grade(s) posts to the transcript at the other institution.

**Transfer work will be accepted only** if it bears a letter grade of "B" or higher, or a numerical equivalent. A grade of "Credit," "Pass," "Satisfactory," etc., is unacceptable. Transfer work will not be accepted for graduate degree credit from another institution if such courses are designated as non-degree, background, preparatory, etc. No credit will be awarded until an official transcript showing the course work to be transferred is on file in The Graduate College. The student may also be requested to provide a catalog from the transferring university that gives course descriptions for any transfer work requested. Students admitted on "Conditional Admission" or students on "Probation/Suspension" will not receive credit for transfer work taken under the aforementioned status. The dean of The Graduate College determines the applicability of transferred credit toward a graduate degree program at Texas State based on the recommendation of the program's graduate advisor. Applicability of transferred credit is made on a course-by-course basis. Students may appeal courses deemed non-transferrable. The dean of The Graduate College, or designee, and graduate advisor review student appeals for re-evaluation of transferred credit.

## Transcripts for Transfer Work

Texas State transcripts will separate transfer course work from Texas State course work. On the transcript, transfer work will be listed first, followed by Texas State course work. In each section, course work will be listed chronologically. The transcript will show the number of hours transferred, Texas State hours attempted, Texas State hours passed, Texas State grade points, and Texas State GPA.

Credits transferred are included in the total hours the student has earned, but the grades and quality points do not affect the student's Texas State GPA. However, transfer grades and quality points do calculate into an overall GPA.

## Prior Learning Assessment

Prior Learning Assessment (PLA) is the process for awarding course credit for specific knowledge and skills the student has acquired outside of an institution of higher education, prior to beginning the student's program of study at Texas State University. PLA must always be tied to official student learning outcomes of a specific course at Texas State and that course requirement is then waived for the student.

There are a limited number of credits that can be waived through PLA, which depend on the number of credits in the degree program. Approved PLA credit may be applied to a graduate degree program as follows:

- up to 6 hours for degree programs with 30-35 credit hours,
- up to 9 hours for degree programs with 36-41 credit hours, and
- up to 12 hours for degree programs with 42+ hours.

(Note that the total approved PLA credit and approved course transfer credit together must not exceed those amounts.)

PLA is program-specific, not all programs have approved PLA processes, and requirements may differ from program to program. If a program allows PLA credit, specific requirements are described on the overview section of that program's catalog entry.

## Continuing Education

With a wide range of learning opportunities, Texas State Global offers Continuing Education opportunities that extend the resources of Texas State and contribute to the professional and economic development of Texas. Enrollment is open to all interested persons on a non-credit-hour basis; therefore, the courses are not offered through The Graduate College and do not apply toward a graduate degree, nor are they considered for regular admission. For information about continuing education programs, go to <http://www.txstate.edu/continuinged/>.

## Distance and Extended Programs

The university offers many courses and programs via distance learning and extended hours on evenings and weekends at the San Marcos and Round Rock campuses.

All graduate courses and programs offered to distance learners carry the same course number, title, and description as those offered at the San Marcos and Round Rock campuses.

Courses offered at a distance are identified each term in the Texas State Schedule of Classes and on CatsWeb. For more information on distance and extended learning at Texas State, visit <http://www.distancelearning.txstate.edu> (<http://www.distancelearning.txstate.edu/>).

For F-1 international students only one (1) distance learning class/online course per semester may be counted toward the full-time status requirement.

The chart below shows the minimum face-to-face credit hours needed for the fulfillment of full-time status. The online hours are the maximum number of online or distance learning courses that can count towards the full-time status requirement.

For more information contact International Student and Scholar Services at [international@txstate.edu](mailto:international@txstate.edu) or 512-245-7966.

## Extension Courses

The Distance and Extended Programs department offers many college courses not normally offered through the academic departments/schools. Extension courses may be offered on campus, online, hybrid/blended, or as part of a faculty-led Study-in-America or Off-Campus program. The times and locations for such courses depend on student need, faculty availability, and demand. Enrollment for an extension class is completed through the Office of Distance and Extended Programs department and does not constitute acceptance as a regular student at Texas State.

For F-1 international students the same requirements apply as in the distance or extended courses. For more information contact International Student and Scholar Services at [international@txstate.edu](mailto:international@txstate.edu) or 512-245-7966.

### Degree Credit for Extension Course Work

The department chair and the dean of The Graduate College must approve extension work for it to be credited toward a graduate degree. Students must meet the admission requirements as identified under the "Master's and Doctoral Degree-Seeking Applicants" section and be accepted in a degree program before extension work can receive degree credit. **Extension course work cannot be used toward a doctoral degree at Texas State.**

A maximum of 12 semester hours of graduate credit may be earned in extension courses offered by Texas State.

### Extension Transfer Credit

Up to three semester hours of the total allowable six hours of transfer credit for a degree may be earned through extension courses from another accredited institution. Students admitted on "Conditional Admission" or students on "Probation/Suspension" will not receive credit for transfer work taken under the aforementioned status.

For more information on Distance and Extended Programs at Texas State please visit the Distance and Extended Learning page (p. 794).

## Class Attendance

Texas State expects students to attend every scheduled class meeting. General requirements for class attendance are as follows:

1. Faculty are encouraged to establish mandatory attendance requirements in each course.
2. Each faculty member will inform students of the course attendance policy at the initial class meeting.
3. Students are responsible for understanding the attendance policy for each course in which they enroll and for meeting the attendance requirements.
4. Failure to meet the attendance requirements in a course may lower a grade.
5. Students who do not begin attendance will be administratively dropped from the course during the roster certification period.

### Religious Holy Days

"Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, Tax Code. In accordance with Texas Education Code Section 51.911, if a student notifies the instructor(s) of each class from which they will be absent due to the observance of a religious holy day, the student

will be allowed to take an examination or complete an assignment scheduled for that absent day within a reasonable time after the absence. The Education Code includes excused absences for travel to and from the religious holy day observance. The student may make up class assignments or examinations without penalty within a reasonable time after the absence. A student who is excused under this section shall not be penalized for the absence, but the instructor may appropriately respond if the student fails to satisfactorily complete the assignment or examination within a reasonable time. Each instructor may establish additional procedures to accommodate the needs of students who are absent from classes to observe a religious holy day. These procedures must not conflict with the state law.

Coordinating Board rules provide for an appeal of a disagreement between the student and a faculty member over an absence related to a religious holy day. If a student and an instructor disagree about the nature of the absence being for the observance of a religious holy day, or if there is a disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the president or the president's designee. The president or the president's designee must consider the legislative intent of Education Code Section 51.911. The student and instructor shall abide by the decision of the president or the president's designee. The academic dean of each college serves as the president's designee to hear requests for decisions on these matters from either the faculty member or the student. Any questions concerning this policy should be directed to the Dean of Students Office.

## Course Grades

### Grade Symbols

Texas State grades are assigned as follows "A," excellent; "B," good; "C," passing (**not at the doctoral level**); "D," passing (**not at the graduate level**); "F," failure; "I," incomplete; "U," unearned "F" (student was not academically engaged until end of term) or withdrawn failing; "DA" (Dropped administratively due to never attended); and "W," withdrawn passing. A grade of "PR," in most instances may be temporary and non-punitive, but may be assigned in selected courses where the required clock hours needed to complete requirements extend beyond the regular term or summer session. A grade of "CR" is assigned when credit only is given for a course, as, for example, in a thesis course after completion of the thesis. A grade of EP (emergency passing) may be used during significant disruptions to academic operations credited by health pandemics or natural disasters. The EP grades indicates passing credit given and counts toward attempted hours, excess hours and repeat calculations. The EP grade does not count in GPA calculations. For a complete list of grades currently and previously used at Texas State visit the Office of the University Registrar's website at <http://www.registrar.txstate.edu/our-services/grades.html>

### Incomplete Grade (<http://www.registrar.txstate.edu/our-services/grades.html>)

The "I" grade may be assigned when a student, for non-academic reasons beyond their control, has not completed a portion of the course. If a student needs to repeat a course or a significant portion of a course, a "W", "F", or "U" grade should be assigned according to regulations governing the assignments of such grades. An "I" grade from Texas State will not count as hours completed until another grade is assigned.

One year from the semester in which a Texas State "I" grade is assigned, or a time period specified by the instructor, whichever is shorter, the I



grade will automatically be changed to an "F" if the coursework has not been completed. The grade of "I" may be changed only to another letter grade and may not be extended beyond one year from term in which the original grade was assigned. A grade of "I", once changed to an "F" or another letter grade, may not be changed back to a grade of "I".

Once the grade of "I" has been changed to another letter grade, it will be computed in the student's grade point average (GPA). An "I" grade transferred from another institution remains as "I" on the Texas State record until an updated transcript is received from the other institution.

A graduate student cannot graduate with an "I" grade on their record. If the student wishes to graduate and if the course is not needed for the degree requirement, the "I" grade will have to be converted to an "F" regardless of whether the one-year time period has passed or not. A grade change request may be submitted by no later than the end of the final examination period before the student's graduation. If no grade change request is received, the grade of "I" will convert to an "F" and will be computed in the student's overall GPA.

## Withdrawal Grade

A "W" grade cannot be assigned if the student has not officially dropped the course within the semester deadline. A grade of "W" is assigned if a student drops a course by the Automatic "W" Drop/Withdrawal Deadline (see University Calendar in this catalog). After the Automatic "W" Drop/Withdrawal Deadline, a "U" or "W" will be assigned depending on whether the student is passing ("W") or failing ("U") the course at the time the drop/withdrawal action is officially completed. For a complete list of grades currently and previously used at Texas State visit the Office of the University Registrar's website at [www.registrar.txst.edu/our-services/grades.html](http://www.registrar.txst.edu/our-services/grades.html) (<https://www.registrar.txst.edu/our-services/grades.html>).

## Change of Grade

An individual course grade may be changed when the involved faculty member certifies to the Office of the University Registrar that an error was made in computing the original grade. The grade change must be approved by the department chair/school director and the appropriate college dean. Students who wish to protest a grade earned in a course should first discuss the grade with the instructor. If no resolution is reached, the student may appeal the grade to the department chair. If no satisfactory conclusion can be reached at this level, the student may appeal to the college dean in which the course is offered, whose decision is final. In accordance with Texas State's records retention policies, a student appeal for a change of grade must be filed no later than two years after the grade is issued.

## Grade Point Average (GPA)

Texas State utilizes the four-point system. The GPA is the total number of grade points earned divided by the number of semester hours attempted. Semester grade symbols have the following values: "A" = 4 points; "B" = 3 points; "C" = 2 points; "D" = 1 point; "F" and "U" = 0 points. Neither hours nor grades are calculated for "I", "CR", "PR", "NC", or "W".

## Student Indebtedness

All University property in a student's possession must be returned and all debts to Texas State, including past due indebtedness to loan funds, must be satisfactorily adjusted before the student is eligible to receive a statement of good standing, an official transcript of credit, graduation, or re-admission to Texas State. Moreover, continued failure to adjust such debt may result in the student's losing the privilege of attending class.

## To Whom the Policy Applies

Doctoral students who have achieved candidacy, and thus have a continuous enrollment requirement during long (fall and spring) semesters, may take an approved Leave of Absence during graduate study under certain conditions and for certain periods of time. A Leave of Absence must be approved by both the student's graduate advisor and the dean of The Graduate College. A Leave of Absence cannot be approved retroactively for a previous semester and must be submitted no later than the 12th class day of the semester for which the leave is being requested.

Pre-candidacy doctoral students and master's students are not required to complete Leave of Absence paperwork if stopping out; however, it is recommended that they do so as the process provides a vehicle for more easily resuming their studies. Leave of Absence forms are located here (<https://www.gradcollege.txst.edu/forms.html>).

## Purpose and Limitations

Students may need to discontinue their studies ("stop out") for a short period of time for reasons of personal or family exigency. Students who do not receive an approved Leave of Absence may be denied readmission to their program when attempting to reenter the program. Students who do not receive an approved Leave of Absence but are still readmitted may experience delays in registration and/or face additional fees. An approved Leave of Absence preserves the student's status in their degree program. Leaves of Absence may not be granted for the student to avoid exceeding the state doctoral hour limit, to avoid paying tuition, to avoid the regulation on continuous enrollment of doctoral students, or to avoid the full-time requirement for international students.

## Access to University Resources During a Leave of Absence

Because the Leave of Absence is intended to be taken for reasons of personal or other exigency as opposed to degree progress, there is no support — whether faculty or university resources (library, office space, etc.) — provided to the student during the Leave of Absence period; students must register if making use of university resources or faculty time. A Leave of Absence does not extend a student's time-to-degree requirement. Discontinuing studies for a semester or more, with or without a Leave of Absence, may affect the student's eligibility for other university areas beyond The Graduate College's domain (such as financial aid, health insurance, etc.), and the student is responsible for consulting with those offices about the impact of not maintaining enrollment in the degree program.

## Length Limitations of a Leave of Absence

A Leave of Absence can be granted for no more than three long semesters (fall and spring) total. The exact length of the Leave must be made explicit in the Leave of Absence request. Rationale for the Leave must be documented by the applicant.

## Process for Requesting a Leave of Absence

Doctoral students who have advanced to candidacy must fill out the Doctoral Candidate Leave of Absence form ([https://www.gradcollege.txst.edu/docs/Leave\\_of\\_Absence\\_Form\\_for\\_Doctoral\\_Degree\\_Candidates.pdf](https://www.gradcollege.txst.edu/docs/Leave_of_Absence_Form_for_Doctoral_Degree_Candidates.pdf)), which will require justification from the appropriate graduate advisor. The form



must be submitted to The Graduate College for the dean's review and approval.

## Process for Returning to the University after an Approved Leave of Absence

Upon resuming graduate studies after a semester of non-enrollment, all students must submit reentry paperwork, regardless of whether or not an approved Leave of Absence form is on file. If the student is returning after an absence of less than one calendar year, only the Update Enrollment form is required. If the student is returning to studies after an absence of over a calendar year, it is necessary to reapply to the program.

Depending on the length of time the student is away from the university, a new graduate catalog and/or program degree requirements may be in effect. With an approved Leave of Absence, the student may opt to complete their degree under the previous degree requirements or the new requirements with the approval of the graduate advisor; if the student was away from the university for a semester or more without an approved Leave of Absence on file, the student must complete their degree under the new degree requirements.

The university has a continuous enrollment policy for one category of graduate students, namely doctoral students who have achieved candidacy. For other categories of graduate students – pre-candidacy doctoral students, specialist degree students, and master's degree students – while there is an expectation of enrollment each semester in order to make progress toward the degree, there is no specific continuous enrollment requirement. For that reason, The Graduate College does not require notification if a student decides not to enroll in a given semester. However, students may want to inform their program that they are stopping out for a period of time, and programs may find that information useful in tracking student progress. In those cases, students may complete the *Leave of Absence Form for Master's Degree, Specialist Degree, and Pre-Candidacy Doctoral Students* form and provide it to their program. The program should then provide the form to The Graduate College to expedite processing readmit applications.

Leave of Absence is a separate process from withdrawing. Withdrawing from the university (dropping all classes) is an official action whereby a student informs Texas State that they will cease to attend all classes in which they are enrolled. The deadline to withdraw (go to zero hours) from Texas State is two weeks preceding final examinations during the fall and spring semesters and one week preceding final examinations during the two parts of the summer term. Visit the registrar's office website at [www.registrar.txst.edu](http://www.registrar.txst.edu) (<https://www.registrar.txst.edu/>) or contact the registrar's office at 512.245.2367 for the proper procedures.

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Upon resuming graduate studies after a semester of non-enrollment, all students must submit reentry paperwork, regardless of whether or not a Leave of Absence form is on file. If the student is returning after an absence of less than one calendar year, only the Update Enrollment form is required. If the student is returning to studies after an absence of over a calendar year, it is necessary to submit a readmit application to the program through the admission portal.

As members of a community dedicated to learning, inquiry, and creation, the students, faculty, and administration of our university live by the

principles in this Honor Code. These principles require all members of this community to be conscientious, respectful, and honest.

## We are Conscientious

We complete our work on time and make every effort to do it right. We come to class and meetings prepared and are willing to demonstrate it. We hold ourselves to doing what is required, embrace rigor, and shun mediocrity, special requests, and excuses.

## We are Respectful

We act civilly toward one another and we cooperate with each other. We will strive to create an environment in which people respect and listen to one another, speaking when appropriate, and permitting other people to participate and express their views.

## We are Honest

We do our own work and are honest with one another in all matters. We understand how various acts of dishonesty, like plagiarizing, falsifying data, and giving or receiving assistance to which one is not entitled, conflict as much with academic achievement as with the values of honesty and integrity.

## The Pledge for Students

Students at our university recognize that, to ensure honest conduct, more is needed than an expectation of academic honesty, and we therefore adopt the practice of affixing the following pledge of honesty to the work we submit for evaluation:

"I pledge to uphold the principles of honesty and responsibility at our university."

## The Pledge for Faculty and Administration

Faculty at our university recognize that the students have rights when accused of academic dishonesty and will inform the accused of their rights of appeal laid out in the student handbook and inform them of the process that will take place:

"I recognize students' rights and pledge to uphold the principles of honesty and responsibility at our university."

## Addressing Acts of Dishonesty

Students accused of dishonest conduct may have their cases heard by the faculty member. The student may also appeal the faculty member's decision to the Honor Code Council. Students and faculty will have the option of having an advocate present to ensure their rights. Possible actions that may be taken range from exoneration to expulsion. Information about the Honor Code Council and its policies and procedures may be found at <http://www.txstate.edu/honorcodecouncil/>.

A prospective graduate/doctoral assistant must be enrolled as a regular, degree-seeking student in The Graduate College. Graduate/doctoral assistants may be employed as teaching assistants, instructional assistants, research assistants, or graduate assistants. The information below can also be found in UPPS 07.07.06. Salaried Graduate Student Employment.

## Types of Graduate Assistantships

- **Graduate Teaching Assistants and Doctoral Teaching Assistants (GTA/DTA)** are currently enrolled students employed by an

academic department, paid from faculty salaries and reported as the “teacher of record” for an organized undergraduate class. Graduate teaching assistants and doctoral teaching assistants receive a faculty contract for a semester or the academic year, are paid on a monthly basis, and are exempt from The Fair Labor Standards Act (FLSA). The student must hold a master’s degree in the teaching discipline or have completed eighteen graduate semester hours in the teaching discipline. (Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) Principles of Accreditation.)

Graduate teaching assistants and doctoral teaching assistants must submit a complete faculty applicant packet that consist of a faculty employment application, official transcripts from all degree-granting institutions, a current vita or resume, a Criminal Background Check Consent Form and an English Proficiency Form.

- **Graduate Instructional Assistants and Doctoral Instructional Assistants (GIA/DIA)** are currently enrolled students employed by an academic department, paid from faculty salaries, but are not reported as the “teacher of record.” Graduate instructional assistants and doctoral instructional assistants are responsible for a specific group of students (typically undergraduate students) and assign some portion of these same students’ grades. If graduate students are assigned as instructional assistants in graduate courses, they cannot grade other students’ work nor have access to their grades. The dean of The Graduate College will allow an exception for doctoral instructional assistants assigned to master’s level classes, provided there is no conflict of interest. Prior to making the appointment, programs should consult with the graduate dean. The academic department may pay graduate instructional assistants’ salaries for those assisting in the operation of a lab or an activity or recitation group from course fees collected for this purpose. Graduate instructional assistants and doctoral instructional assistants are appointed for a semester or the academic year, paid on a monthly basis, and are exempt from the FLSA.
- **Graduate Research Assistants and Doctoral Research Assistants (GRA/DRA)** are currently enrolled students employed by a department or university office and may receive pay from grants or sponsored programs, indirect cost recovery, designated lines in faculty start-up accounts approved by the Division of Research, restricted accounts if the funding source allows, or other accounts approved by the Provost.. Chapter 10 of the US Department of Labor’s Field Operation Handbook defines research assistants as students “engaged in research in the course of obtaining an advanced degree and the research is performed under the supervision of a member of the faculty in a research environment provided by the institution under a grant or contract.” If employed on a grant, the work performed must directly relate to the objectives of the grant. Graduate research assistants and doctoral research assistants can be appointed for a semester, the academic year, or the duration of a research project or any portion thereof, and paid on a monthly basis. They are classified as exempt under FLSA.
- **Graduate Assistants and Doctoral Assistants (GA/DA)** are currently enrolled students employed by a department or university office and may receive pay from grant or university funds. Responsibilities may include research (not under the supervision of a faculty member), technical assistance, and institutional support. To avoid conflicts of interests, graduate and doctoral assistants cannot have access to records of graduate students of their degree-granting department. Graduate assistants and doctoral assistants who have access to records must be Family Educational Rights and Privacy Act (FERPA) trained and sign a confidentiality agreement. Graduate and doctoral

assistant positions are non-exempt and are subject to the minimum wage and overtime provision of the FLSA. Students employed in these positions must enter all hours worked that deviate from their default schedule in the SAP Employee Self-Serve Portal. Time entry guidelines can be found on the Human Resources website (<http://www.hr.txstate.edu/benefits.html>). Students employed in these positions are not eligible for concurrent employment as a teaching, instructional, or research assistant.

## Academic Expectations

All assistants must have unconditional acceptance into a graduate degree program. All assistants must maintain a minimum 3.0 Texas State GPA in course work leading toward completion of a graduate degree.

## Course Load

The minimum course load required during a fall/spring term of employment as a graduate assistant is nine graduate semester hours. Students who enrolled in nine graduate semester hours during the prior spring and fall semesters (or with an approved exception on file) are not required to enroll during the summer; otherwise, enrollment in three graduate hours is required for the summer term. Assistants taking more than 12 graduate semester hours during the fall/spring terms must have approval from the dean of The Graduate College. Similarly, assistants taking more than six graduate semester hours per summer session must have approval from the dean of The Graduate College. If an international student starts their degree program in the summer they must be enrolled in 9 semester hours in the summer.

## Required Teaching Assistantship Courses

As a condition of employment, all GTAs, DTA, GIAs, and DIAs must complete a total of three hours of professional development course work. The course titles for the required in-service teaching courses vary by department. Some departments offer one three-hour course, some departments offer a two-hour and one-hour course for a combination of three hours, and other departments offer a one-hour course to be taken three times. Assistants enroll in the course offered by the department in which they are employed during their first term of employment and continue to enroll in subsequent terms until the three-hour requirement is met, as applicable. **Students may not enroll in this course work beyond the required three hours.** Up to a total of three semester hours may be used with other graduate courses to satisfy the minimum nine semester hours of enrollment required as a condition of employment. The University administration will cover the fees and tuition for the required teaching assistantship course (up to a total of three semester credit hours only). The hiring department must submit the Mandatory Graduate Assistantship Courses form, which requires the student’s signature, prior to census day. The form is located under University Approved Forms at [www.sbs.txst.edu/students/waivers-exemptions.html](http://www.sbs.txst.edu/students/waivers-exemptions.html) (<https://www.sbs.txst.edu/students/waivers-exemptions.html>).

## Allowable Work Hours

During the fall and spring terms, assistants may work up to 50% (20 hours per week) full time equivalent (FTE). During the summer term, assistants may be approved by the dean of The Graduate College for additional hours, up to a maximum of 75% FTE (30 hours per week) only if the entire position is externally grant-funded and up to a maximum of 100% FTE if the position is externally funded and the project is directly related to the student’s thesis or dissertation thesis/dissertation. An exception request with justification from the graduate advisor or department chair approved by the dean of The Graduate College must be on file with The Graduate College for employment requested over 50% FTE.

## Teaching Load for Graduate/Doctoral Teaching Assistants

The usual semester hour teaching load during the fall or spring term is six semester hours or two classes. The usual semester hour teaching load during a six-week or eight-week summer session is one course (up to a maximum of four hours). A twelve-week summer session carries a normal teaching load of six hours. The dean of The Graduate College must approve any exceptions to these teaching loads.

These policies are designed to protect the graduate/doctoral assistant from bearing an unfair employment and course load, which could impede the timely completion of the degree.

Refer to UPPS 07.07.06 (<http://www.txstate.edu/effective/UPPS/upps-07-07-06.html>), Salaried Graduate Assistant Employment Procedures, for more detailed information regarding salaried graduate student employment procedures.

### Assistantship Orientation

Most departments conduct one or more orientation sessions for new assistants. Newly-hired assistants should inquire about orientation attendance requirements with the department or university office at the time they apply for employment.

## Academic Eligibility Requirements

To see a detailed list of academic and enrollment requirements needed to be eligible for a specific assistantship position, please view The Graduate College's guide ([https://www.gradcollege.txstate.edu/docs/gapcr\\_checklist.pdf](https://www.gradcollege.txstate.edu/docs/gapcr_checklist.pdf)).

## How to Apply for a Graduate Assistantship

Applications for assistantships should be made directly to the department or university office following their application procedure. It is also possible to apply for certain assistantship positions online through Career Services at Handshake (<https://txstate.joinhandshake.com/login/>).

## Selection and Appointment

Offers of assistantships are contingent on available funds and admission of the applicant to a degree-seeking graduate program. Graduate assistantship appointments range from a four-and-one-half month period during a summer term to a nine-or-twelve-month period during the fall or spring term. The term of an appointment for a Research Assistant may be based on the period of available grant funding. Renewal is at the discretion of the department or university office for which the student is employed. In all cases, the account manager or the manager's designee will decide who is hired in accordance with the qualifications and standards required for the position.

## Supervision and Evaluation

Teaching assistants are the "teacher of record" for the course(s) assigned; however, they are under the direct supervision of a faculty member experienced in the teaching discipline. Instructional assistants are supervised by the Instructor of Record or Laboratory Coordinator of the courses assigned. Research assistants are usually supervised by the faculty member or office supervisor with whom they work. All assistantship positions undergo regular evaluation as required by the department in which they are employed.

## Salaries and Benefits

Assistants are paid in accordance with the University Pay Plan salary schedule which can be viewed at [www.hr.txst.edu/compensation/universitypayplan/studentemployees.html](http://www.hr.txst.edu/compensation/universitypayplan/studentemployees.html) (<https://www.hr.txst.edu/compensation/universitypayplan/studentemployees.html>).

## Eligibility for In-state Tuition

Graduate assistantship types may qualify for tuition waivers through the office of Student Business Services. For more details, please refer to the Tuition Waivers and Exemptions webpage here: <http://www.sbs.txstate.edu/students/waivers-exemptions.html>.

## Health Insurance

Graduate Assistants, employed at least half-time (50% FTE) for a minimum period of four and a half consecutive months, are eligible for employer group insurance plans administered by the Human Resources Benefit Office. Assistants may choose between the Student Insurance Plan administered by the Student Health Center and the Employer Group Insurance Program administered by the Human Resources Office. Also, some assistants may already be covered by insurance outside the university and, therefore, may choose not to enroll in a health insurance option offered by Texas State. Assistants should refer to the comparison summary on the Human Resources Office web site in order to make an educated decision. UPPS 07.09.04 International Student Health Insurance, requires all enrolled international students with non-immigrant F-1 and J-1 visa classifications to purchase coverage under the designated international student health insurance policy as a condition of enrollment. The premium will be automatically billed to the international student's account.

## Non-Discrimination

Texas State University's graduate student employment policy and procedures must comply with UPPS 04.04.46, Prohibition of Discrimination.

## Student Employee Termination, Separation, and Grievance Procedures

The policy and procedures for addressing unsatisfactory job performance and separation are outlined in UPPS 07.07.04. This policy also describes the available employment grievance procedures available to student employees.

A graduate or post-graduate student as defined in this catalog is required to maintain a 3.0 cumulative grade-point average (GPA) for all Texas State University 5000-, 6000-, and 7000-level courses (excluding required leveling courses) listed on a student's degree audit for a graduate degree. Cumulative GPAs are computed at the end of the fall term, the spring term, and the summer.

If a **graduate student's** cumulative GPA falls below 3.0 during any term of enrollment at Texas State, the student will be placed on academic probation. In the next term of enrollment, the student **must** raise his or her cumulative graduate GPA to 3.0 or above or be suspended from further graduate study at Texas State. When the student has achieved a cumulative GPA of at least 3.0 at the end of the term of probation, the student will be removed from probation status. In the event a student has enrollment with no punitive grades for the semester, such as W or I grades, the academic standing from the previous semester will remain. When a grade changes, then the academic standing rules apply and updates are made to the student's record.

## Readmission

A student on suspension may petition the graduate dean for permission to re-enroll in The Graduate College. An appeal form for the graduate dean is available on The Graduate College's website (<https://www.gradcollege.txst.edu/forms.html>). This written appeal should include additional supporting documentation. The appeal will be reviewed by the graduate advisor and subsequently by the dean of The Graduate College. Each readmission decision is made on an individual basis and the dean of The Graduate College's decision is final. If a reinstatement is approved, the date of the reinstatement depends on the timing of the appeal, program policies, and/or conditions of the reinstatement. If a student is readmitted after being suspended, the student must maintain a 3.0 cumulative GPA or be suspended again. Individual graduate programs may also impose additional cumulative GPA or course restrictions for their students.

## Change of Major

Graduate students on probation may not change programs or admission status without a recommendation and request from the prospective department. The dean of The Graduate College will review the request when making the final decision. If a suspended student wants to pursue a different program, the student must first submit an appeal to be reinstated to the dean of The Graduate College. The written appeal should include a justification. If the dean of The Graduate College grants permission to a student to pursue a different program, the student must submit an application for admission in the online application portal and comply with instructions as identified under the degree-seeking admission requirements section of the catalog. This procedure must be completed in ample time to meet the admission deadlines. Acceptance in one program does not guarantee acceptance in another program.

## Financial Aid

If a student is receiving financial aid, the student must also meet the satisfactory academic progress requirements for financial aid. See the Financial Aid section under General Information for further details.

## SACSCOC Accreditation

Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) accreditation is institutional in nature. Although many programs are accredited by other agencies, SACSCOC accredits the university as a whole, not specific degrees or programs.

## Degree Audit

On the admission application, a student must select from available choices: major, minor, cognate, no minor option, area of concentration, degree type (M.A., M.Ed., M.S., Ph.D., etc.), and, for the master's degree, thesis, or non-thesis track. After being admitted to a program, the student may access a degree audit from Texas State Self-Service (CatsWeb) using *Degree Works* software. The degree audit will guide the student in selecting courses for registration each term. The student should meet with their graduate advisor during the first term of admission to discuss options and review the degree program. Requests for changes to a student's degree audit must be submitted by the student's advisor to the dean of The Graduate College for approval.

Because graduate degree programs are individualized according to degree type and student goals, a student's particular degree program may exceed the number of hours identified for the program in this catalog.

## Background/Leveling Course Requirements

Students should refer to the appropriate departmental pages in this catalog for specific information about background/leveling requirements or contact the graduate advisor for their program of study.

Course work identified on a student's official degree audit as background/leveling is not awarded graduate degree credit and is not used in the computation of the graduate GPA. See the "General Graduation Requirements" section.

Graduate advisors may stipulate that one undergraduate course be taken as a background requirement. All other background course deficiencies must be satisfied by the student enrolling in graduate-level leveling courses.

## Degree Time Limit

A program leading to a master's or specialist degree must be completed within six years from the date of a student's initial enrollment in the program for which they were admitted. An exception to the standard six-year time limit is the nursing program. No credit will be applied toward the master's degree for work completed more than six years before the date on which a student's degree is to be conferred unless an exception has been approved by the graduate advisor and dean of The Graduate College. This time limit applies to credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions. Requests for time extensions must be submitted to a student's graduate advisor, who in turn submits a petition through the degree audit system to the dean of The Graduate College for final approval.

A program leading to a doctoral, Ph.D. or Ed.D. degree must be completed within ten years from the date of a student's initial enrollment in the program for which they were admitted. No credit will be applied toward the doctoral degree for course work completed more than ten years before the date on which a student's degree is to be conferred unless an exception has been approved by the program director and dean of The Graduate College. This time limit applies to credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions. Requests for time extensions must be submitted to a student's doctoral program director, who in turn submits a petition to the dean of The Graduate College for final approval. Doctoral students should refer to the appropriate departmental section of this catalog for specific time limit requirements regarding advancement to candidacy and dissertation completion.

## 99 Hour Rule

In accordance with Texas Education Code, Section 54.066, the university will incur a penalty once a doctoral student accumulates 100 or more doctoral semester credit hours. In response, the Texas State University System has a tuition structure (excessive hours fee) in which a doctoral student will be charged tuition at a rate equivalent to non-resident tuition for all doctoral semester credit hours exceeding 99. Courses taken by a doctoral student at the master's or undergraduate level will not count towards the 99 hours. If the student is admitted to a doctoral program from the bachelor's degree, the count begins after 30 hours of graduate course work. This tuition structure applies to Texas residents as well as out-of-state residents and international students who were eligible to be charged tuition at the resident rate as a result of scholarship and fellowship awards or employment as graduate assistants. Students



should contact their doctoral program directors regarding an available appeal process.

## Catalog

Students completing graduate programs within the degree time limits may graduate under the catalog in effect when they begin the graduate program. In certain programs, additional hours may be added to the degree for accreditation or additional research purposes. Should a program change occur and the student wish to graduate under the new program requirements, the student must submit a request to their graduate advisor, who in turn submits a petition in the degree audit system for final approval from the Graduate Dean. A student who has questions should contact either The Graduate College or their graduate advisor.

Academic advising for students is handled through the student's major department (or minor department if applicable) after the student has received formal acceptance to The Graduate College. This method of advisement ensures that students will receive sound academic advice from faculty in their chosen field of study. Students must adhere to program-specific policies and procedures listed in departmental handbooks and may wish to discuss these policies and procedures with their graduate program advisor.

## Applying for Graduation and Participation in Commencement

In order to graduate and participate in commencement activities, students must apply for graduation during the semester they plan to graduate. It is the responsibility of the student to ensure completion of all degree requirements as listed on the degree audit and required by the department. It is also the student's responsibility to apply for graduation by the published deadline posted on the University Academic Calendar. That date, as well as other deadline dates and instructions outlining how to apply for graduation, are posted on The Graduate College website each term and communicated via the *GradBulletin* and social media and the academic calendar. For further information, contact The Graduate College at 512-245-2581 or visit our website (<https://www.gradcollege.txst.edu/>).

## The Difference Between Participating in Commencement and Graduating

"Graduating [receiving a diploma]" and "participating [walking across the stage]" in the commencement ceremony are two distinctly different things. Candidates will be considered "graduated" when they have officially met all of the following:

1. have applied for graduation online by the posted semester deadline
2. have had their application approved by The Graduate College
3. have completed all degree requirements
4. have had final semester grades posted to their Texas State transcript
5. have paid any outstanding fees owed to the University
6. Graduate College Dean, has certified candidates as graduates

Participating in the ceremony does not mean that a candidate has completed the requirements for graduation. "Walking/participating" at a commencement ceremony is not synonymous with "graduation;" yet the act of obtaining public recognition may provide a false impression that a

candidate has met all requirements and has therefore "graduated" with a diploma in hand.

Ultimately, the final awarding of degrees, honors, and mailing of the diplomas is contingent upon the satisfactory completion of the appropriate requirements by each candidate and the Graduate Dean's final certification.

### Letter of Completion

If students fail to apply for graduation by the published deadline date, a letter of completion may be requested. Students must submit a new graduation application by the published deadline on the University Academic Calendar, and the diploma will be mailed the following term.

### Reapplication for the Degree

If students fail to complete degree requirements in time for their planned graduation, they must then reapply for the next (or later) graduation within the period announced on the University Academic Calendar graduation.

## Comprehensive Examination

All candidates for graduate degrees must pass one or more comprehensive examinations, either written, oral, or both, covering at least the field of concentration and the thesis or dissertation if one is written. Students seeking more than one degree must take a comprehensive examination for each degree major. The examination for a master's degree may not be taken until the student has completed at least 18 semester hours of graduate degree credit and may not be taken before the final term if the student has a grade deficiency.

Students must be enrolled in at least one credit hour of coursework when taking the comprehensive examination. If a student has completed all required coursework in a previous semester but still needs to complete the comprehensive examination, the student should enroll in GC 5100: Comprehensive Examination Contingency. GC 5100 is a course designed for non-thesis master's degree students who have completed all program requirements except the comprehensive examination, and enrollment in GC 5100 is required each term in which the comprehensive examination is taken **only if no other courses are being taken that term**. GC 5100 does not generate a grade and does not count toward degree requirements.

F-1 non-immigrant international students must contact the International Office at 512-245-7966 to verify that they are in lawful F-1 status, especially if the comprehensive examination is the final requirement remaining.

Arrangements for the examination may be made with the student's graduate advisor or the department chair. The Master's Comprehensive Examination form should be filed in The Graduate College by the last day of the term as published on the academic calendar. The department is responsible for submitting the report to The Graduate College.

## GPA Requirements for Graduation

To be eligible for graduation, a student must have a GPA of at least 3.0 for each major and minor/cognate listed on the degree audit. A final course grade of "C" or higher is required for any graduate course that could be applied towards a graduate degree at Texas State. Some degree programs may call for higher minimum GPA and/or course grade requirements. In addition, no grade earned below "B" on any graduate course may apply toward a doctoral degree at Texas State with the exception of the Doctor of Physical Therapy program.



## Background/Leveling Work

Background/leveling work is not computed in the graduation GPA requirement, nor is graduate-degree credit granted for background work for the degree to be earned.

## Incomplete Grades

Incomplete grades should be cleared through the University Registrar's Office **at least ten days before the commencement for which the degree is to be conferred.**

## Hours Requirements

Graduate degree programs range from 30-99 hours of coursework. Master's degree programs require a minimum of 30 semester credit hours with a maximum of 69. Students obtaining certification may be required to complete additional hours.

Doctoral students should refer to the appropriate departmental section of this catalog for specific credit hours to satisfy degree requirements. Doctoral degree programs range from 46-99 semester credit hours.

## Residency Requirement

Texas State University has specific guidelines regarding the number of hours that can be transferred in (see the section of this catalog on transfer credit (<http://mycatalog.txstate.edu/graduate/regISTRATION-course-credit/course-credit/>)). With appropriate justifications, exceptions can be granted by the dean of The Graduate College. However, at least one-third of credit hours required for a graduate or a post-baccalaureate professional degree must be earned through instruction at Texas State. In addition, doctoral students must satisfy a one-year residency requirement: This means that doctoral students, as part of their required hours of coursework, must take at least 18 graduate credit hours offered by Texas State during consecutive fall, spring, and summer terms. These courses can be offered in any format (face-to-face, online, hybrid). In other academic years, doctoral students can be enrolled in fewer hours. This is to ensure a substantial engagement with the subject area, ideally at the beginning of their studies.

## Recommendation for the Degree

The dean of The Graduate College certifies candidates for graduation after the completion of all requirements for the appropriate graduate degree and with the approval of the departments concerned. Degrees are conferred publicly at the close of the fall term, the spring term, and the summer term.

If a student is admitted to a master's degree program with a thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must conform to the Thesis & Dissertation Resource Guides (<https://www.gradcollege.txst.edu/students/thesis-dissertation/resources.html>).

## Thesis Proposal

The student must submit an official Thesis Proposal Form (<https://www.gradcollege.txst.edu/docs/thesis-proposal.pdf>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for

approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members. The committee must have a majority of members from the student's current program at Texas State.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student registers for thesis course number 5399A. After that, the student will enroll in thesis B courses in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor does not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B. Thesis hours are not permitted to count as elective credit.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. Thesis hours are not permitted to count as elective credit in non-thesis track degrees. The thesis credit remains on the transcript as a PR grade and in the open electives block of Degree Works. Thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered in at least one hour of thesis course credit each fall and spring semester (and summer, if receiving thesis supervision and/or using university resources) until the thesis has been completed, defended, submitted, and approved by The Graduate College.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." Students must consult with their committee chair to determine the date by which the thesis must be submitted to their thesis committee chair and thesis committee, prior to the defense date. Some students will have additional revisions to complete after the thesis defense. Once the final version of the thesis is approved by the committee, the student must submit the correctly-formatted thesis to Vireo on or before the deadlines listed on The Graduate College website. No edits are permitted under any circumstances after the thesis is approved by The Graduate College. Theses submitted after the Vireo submission deadline will not be reviewed for formatting or approved until the following semester. Students must be enrolled in the semester they graduate.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the thesis is approved by The Graduate College, revisions to the document are no longer allowed and Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). Students should discuss the appropriate embargo selection before submitting the thesis to Vireo. Students have the following options for the embargo:

1. No embargo
2. One or two-year embargo
3. Five-year embargo
4. Specials request embargo (inventions, discoveries, patents, privacy hold)

All forms must have all appropriate signatures. In addition to original (wet) signatures, the following methods of signing are acceptable:

- printing, signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- downloading and digitally signing the form per our instructions using the university's licensed platform (which is currently Adobe Acrobat)\*

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

All theses and dissertations are submitted to the Library through Vireo, the electronic thesis and dissertation deposit platform. The Library harvests approved these and dissertations from this system for the online repository. The Library will retain a print copy of every student's thesis/dissertation for their circulating collection and a microfilm copy for the University Archives, regardless of the embargo selection. Supplementary files are excluded from this policy. The Library does not provide binding services. Some programs require the student to deposit a hard copy with the department, so students should check with their departments regarding bound copies of theses/dissertations.

The student is responsible for paying all binding fees for personal and departmental copies. Please contact Alkek Library for more information.

The dissertation must demonstrate the student's capability for original scholarly contributions to their field of study. The preparation of the dissertation must conform to Thesis & Dissertation Resource Guides. All forms referenced in this section can be found on The Graduate College website. Where indicated, forms must be completed and signed by the student, the committee members, the committee chair, the doctoral program director, and the department chair and then forwarded to The Graduate College for review and approval by the dean of The Graduate College. The preparation of the dissertation must conform to Thesis & Dissertation Resource Guides (<https://www.gradcollege.txst.edu/students/research-thesis-dissertation/thesis-dissertation.html>).

## Dissertation Committee

The dissertation committee must be composed of approved doctoral graduate faculty members. The minimum number of committee members varies by doctoral program. The majority of the committee members must be from the student's current program at Texas State. The student should consult with the doctoral program director regarding the composition of the committee. To form the dissertation committee, the Dissertation Committee Request Form ([https://www.gradcollege.txst.edu/docs/Dissertation\\_Committee\\_Request\\_Form.pdf](https://www.gradcollege.txst.edu/docs/Dissertation_Committee_Request_Form.pdf)) must be completed and signed as indicated on the form.

## Dissertation Proposal and Defense

The student must submit the dissertation proposal and an official Dissertation Proposal and Proposal Defense Form ([https://www.gradcollege.txst.edu/docs/Dissertation\\_Proposal\\_and\\_Proposal\\_Defense\\_Form.pdf](https://www.gradcollege.txst.edu/docs/Dissertation_Proposal_and_Proposal_Defense_Form.pdf)) to his or her dissertation committee. If the dissertation research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board (IRB) prior to submitting the proposal form to The Graduate College. The IRB approval letter must be included with the proposal form. If the dissertation research involves vertebrate animals, the Dissertation Proposal and Proposal Defense Form must include the Texas State IACUC approval code. Each Ph.D./Ed.D. program prepares its own procedures for the dissertation proposal defense. The procedures may be obtained from the doctoral program director. Following the dissertation proposal defense, members of the dissertation committee, the doctoral program director and the department chair sign the Dissertation Proposal and Proposal Defense Form. The signed form and one copy of the proposal are then submitted to the dean of The Graduate College for approval before the student proceeds with research on the dissertation.

## Dissertation Enrollment and Credit

A Ph.D./Ed.D. student may typically begin enrolling in a dissertation course during the term following completion of required course work as specified by the Ph.D./Ed.D. program. The number of dissertation credit hours students enroll in must reflect the amount of work accomplished on the dissertation that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the dissertation process. **Once the student advances to candidacy, the student must continue to enroll in at least one hour of dissertation course credit each fall and spring semester (and summer, if receiving dissertation supervision and/or using university resources) until the dissertation has been completed,**

**defended, submitted, and approved by The Graduate College.** The minimum number of hours of required dissertation credit varies by Ph.D./Ed.D. program. Dissertation projects are by definition original and individualized projects. Thus, depending on the topic, methodology, and other factors, some projects may take longer than others to complete.

If the dissertation requires work beyond the minimum number of dissertation credits needed for the degree, the student may enroll in additional dissertation credits at the committee chair's discretion.

The only grades assigned for dissertation courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a dissertation course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the dissertation is completed. Dissertation credit ("CR") will be awarded only after the dissertation has been approved by The Graduate College and released to Alkek Library.

A student must be registered for a dissertation course during the term in which the degree will be conferred. For summer graduation, student must be registered for dissertation course in Summer I (during the summer, the dissertation course runs ten weeks for both sessions)..

## Dissertation Deadlines and Approval Process

Dissertation deadlines are posted on The Graduate College (<https://www.gradcollege.txst.edu/>) website under "Current Students." Students must consult with their committee chair to determine the date by which the dissertation must be submitted to their dissertation committee chair and dissertation committee, prior to the defense date. Some students will have additional revisions to complete after the defense. Once the final version of the dissertation is approved by the committee, the student must submit the correctly formatted dissertation to Vireo on or before the deadlines listed on The Graduate College website. No edits are permitted under any circumstances after the dissertation is approved by The Graduate College. Dissertations submitted after the Vireo submission deadline will not be reviewed for formatting or approved until the following semester. Students must be enrolled in the semester they graduate.

The following must be submitted to The Graduate College by the dissertation deadline listed on The Graduate College website:

1. The Dissertation Submission Approval Form, bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the dissertation in final form, approved by all committee members, uploaded in the online Vireo submission system. Some doctoral programs may require additional copies; the student should check with the doctoral program director regarding additional program requirements.

After the dissertation is approved by The Graduate College, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). Ph.D./Ed.D. students must submit the completed Survey for Earned Doctorates (SED) online by The Graduate College dissertation approval deadline which is available on The Graduate College website. It is recommended that students discuss the appropriate embargo selection before submitting the dissertation to Vireo. Students have the following options for the embargo:

1. No Embargo
2. One or two-year embargo
3. Five-year embargo
4. Special request embargo (inventions, discoveries, patents, privacy hold)

All forms must have all appropriate signatures. In addition to original (wet) signatures, the following methods of signing are acceptable:

- printing, signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- downloading and digitally signing the form per our instructions using the university's licensed platform (which is currently Adobe Acrobat)\*

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

All theses and dissertations are submitted to the Library through Vireo, the electronic thesis and dissertation deposit platform. The Library harvests approved theses and dissertations from this system for the online repository. The Library will retain a print copy of every student's thesis/dissertation for their circulating collection and a microfilm copy for the University Archives, regardless of the embargo selection. Supplementary files are excluded from this policy. The Library does not provide binding services. Some programs require the student to deposit a hard copy with the department, so students should check with their departments regarding bound copies of theses/dissertations. The student is responsible for paying all binding fees for personal and department copies. Please contact Alkek Library for more information.

Doctor of Philosophy (Ph.D.)  
 Doctor of Education (Ed.D.)  
 Doctor of Physical Therapy (D.P.T.)  
 Specialist in School Psychology (S.S.P.)  
 Master of Accountancy (M.Acy.)  
 Master of Applied Geography (M.A.Geo.)  
 Master of Arts (M.A.)  
 Master of Arts in Interdisciplinary Studies (M.A.I.S.)  
 Master of Business Administration (M.B.A.)  
 Master of Education (M.Ed.)  
 Master of Fine Arts (M.F.A.)  
 Master of Health Information Management (M.H.I.M.)  
 Master of Healthcare Administration (M.H.A.)  
 Master of Music (M.M.)  
 Master of Public Administration (M.P.A.)  
 Master of Science (M.S.)  
 Master of Science in Communication Disorders (M.S.C.D.)  
 Master of Science in Criminal Justice (M.S.C.J.)  
 Master of Science in Interdisciplinary Studies (M.S.I.S.)  
 Master of Science in Nursing (M.S.N.)  
 Master of Science in Recreation and Leisure Services (M.S.R.L.S.)  
 Master of Science in Respiratory Care (M.S.R.C.)  
 Master of Social Work (M.S.W.)

**Certificate and degree programs are approved in accordance with guidelines provided by the Southern Association of Colleges and Schools Commission on Colleges, the Texas Higher Education Coordinating Board and The Texas State University System Board of Regents.**

The table below lists all graduate majors and degrees as they appear on a diploma and a transcript. Please note that a number of these programs have additional options or concentrations available. Program hours depend on degree options selected. Consult the program page inside this catalog for more detailed information.

Major	Degree	Thesis	Program Hours
Accounting (p. 1076)	M.Acy.	None	30
Accounting (Integrated) (p. 1084)	B.B.A./M.Acy.	None	150
Accounting and Information Technology (http://mycatalog.txstate.edu/graduate/mccoy-business-administration/computer-information-systems-quantitative-methods/ms/#requirementstext)	M.S.	None	36
Adult, Professional, and Community Education (p. 1158)	M.A.	Optional	36-39
Adult, Professional, and Community Education (p. 1131)	Ph.D.	Dissertation	63
Advanced Practice Leadership (p. 897)	M.S.W.	None	36-62
Anthropology (p. 2368)	M.A.	Required	36
Applied Anthropology (p. 2360)	Ph.D.	Dissertation	54
Applied Philosophy and Ethics (p. 2585)	M.A.	Optional	30-33
Applied Sociology (p. 2663)	M.S.	None	36
Aquatic Resources (p. 2799)	M.S.	Required	30
Aquatic Resources and Integrative Biology (p. 2759)	Ph.D.	Dissertation	61-91

Athletic Training (p. 1934)	M.S.	None	55
Biochemistry (p. 2886)	M.S.	Required	30
Biochemistry (early-entry) (p. 2896)	B.S./M.S.	Required	150
Biology (p. )	M.A.	Required	30
Biology (p. 2819)	M.S.	Optional	30-45
Business Administration (p. 1013)	M.B.A.	Optional	36-39
Chemistry (p. 2882)	M.A.	None	30
Chemistry (p. 2891)	M.S.	Required	30
Chemistry (early-entry) (p. 2896)	B.S./M.S.	Required	150
Communication Design (p. 2012)	M.F.A.	Required	60
Communication Disorders (p. 2241)	M.A.	Required	39
Communication Disorders (p. 2277)	M.S.C.D.	None	36
Communication Studies (p. 2018)	M.A.	Optional	30-36
Computer Science (p. 2928)	M.A.	Optional	30-36
Computer Science (p. 2952)	M.S.	Optional	30-36
Computer Science (p. 2897)	Ph.D.	Dissertation	54-78
Construction Management (p. 3136)	M.S.	Optional	30
Creative Writing (p. 2442)	M.F.A.	Required	48
Criminal Justice (p. 840)	M.S.C.J.	Optional	30-36
Criminal Justice (p. 830)	Ph.D.	Dissertation	51
Data Analytics and Information Systems (p. 1097)	M.S.	Optional	30
Dementia and Aging Studies (p. 2675)	M.S.	Optional	33-36
Developmental Education (p. 1314)	M.A.	None	36

Developmental Education (p. 1266)	Ed.D.	Dissertation	66
Developmental Education (p. 1217)	Ph.D.	Dissertation	66
Educational and Community Leadership (p. 1143)	Ph.D.	Dissertation	60
Educational Leadership (p. 1173)	M.A.	None	36
Educational Leadership (p. 1208)	M.Ed.	None	36
Educational Technology (p. 1465)	M.Ed.	None	36
Elementary Education (p. 1360)	M.A.	Required	30
Elementary Education (p. 1479)	M.Ed.	None	30-36
Elementary Education Bilingual/Bicultural (p. 1412)	M.A.	Required	30
Elementary Education Bilingual/Bicultural (p. 1698)	M.Ed.	None	36
Engineering (p. 3066)	M.S.	Optional	31
Engineering Management (p. 3142)	M.S.	Optional	30
Exercise Science (p. 1959)	M.S.	Optional	36
Family Nurse Practitioner (p. 2320)	M.S.N.	None	48
Geographic Education (p. 2456)	Ph.D.	Dissertation	46
Geographic Information Science (p. 2465)	Ph.D.	Dissertation	46
Geographic Information Science (p. 2483)	M.A.Geo.	None	33
Geography (p. 2490)	M.A.Geo.	None	33

Geography (p. 2513)	M.S.	Required	30
Geography (p. 2474)	Ph.D.	Dissertation	46
Geography Resource and Environmental Studies (p. 2505)	M.A.Geo.	None	33
Healthcare Administration (p. 2284)	M.H.A.	Optional	49
Health Information Management (p. 2300)	M.H.I.M.	Optional	36
History (p. 2531)	M.A.	Optional	33-39
Human Development and Family Sciences (p. 850)	M.S.	Optional	37
Human Nutrition (p. 872)	M.S.	Optional	33-39
Human Resource Management (p. 1116)	M.S.	None	30
Integrated Agricultural Sciences (p. 2750)	M.S.	Optional	36
Interdisciplinary Studies (p. 884)	M.A.I.S.	None	39
Interdisciplinary Studies (p. 888)	M.S.I.S.	None	39
International Studies (p. 2577)	M.A.	Optional	30-36
Leadership and Administration in Nursing (p. 2328)	M.S.N.	None	30
Leadership and Administration in Nursing (B.S.N. to M.S.N.) (p. 2308)	B.S.N./M.S.N.	None	156
Legal Studies (p. 2598)	M.A.	None	36
Literature (p. 2393)	M.A.	Optional	30-36
Management of Technical Education (p. 892)	M.Ed.	None	36



Marketing Research and Analysis (p. 1120)	M.S.	Optional	30	Psychological Research (p. 2631)	M.A.	Optional	38
Mass Communication (p. 2036)	M.A.	Optional	33-36	Public Administration (p. 2614)	M.P.A.	None	39
Materials Science, Engineering, and Commercialization (p. 2742)	Ph.D.	Dissertation	55	Public Health (p. 1938)	M.P.H.	None	42
Mathematics (p. 3292)	M.S.	Optional	30-36	Public Health Education and Promotion (p. 1984)	M.S.	Optional	36
Mathematics (p. 3273)	M.Ed.	None	36	Quantitative Finance and Economics (p. 1111)	M.S.	Optional	30
Mathematics (Applied Mathematics Concentration) (p. 3167)	Ph.D.	Dissertation	72	Reading Education (p. 1714)	M.Ed.	None	30
Mathematics (General Mathematics Concentration) (p. 3196)	Ph.D.	Dissertation	72	Recreation Management (p. 1993)	M.S.R.L.S.	Optional	30-36
Mathematics (Statistics Concentration) (p. 3226)	Ph.D.	Dissertation	72	Respiratory Care (p. 2352)	M.S.R.C.	None	36-48
Mathematics Education (p. 3257)	Ph.D.	Dissertation	78	Rhetoric and Composition (p. 2405)	M.A.	Optional	33
Merchandising and Consumer Studies (p. 879)	M.S.	Optional	36-39	School Psychology (p. 1154)	S.S.P.	None	69
Music (p. 2051)	M.M.	Optional	36	Secondary Education (p. 1430)	M.A.	Optional	30
Music Education (p. )	M.M.	None	36	Secondary Education (p. 1748)	M.Ed.	None	30-39
Physical Therapy (p. 2347)	D.P.T.	None	99	Sociology (p. 2642)	M.A.	Required	36
Physics (p. 3338)	M.S.	Optional	30-36	Spanish (p. 2718)	M.A.	Optional	33-36
Political Science (p. 2601)	M.A.	Optional	33-36	Special Education (p. 1847)	M.Ed.	None	36
Population and Conservation Biology (p. 2856)	M.S.	Required	30	Student Affairs in Higher Education (p. 1211)	M.Ed.	None	42
Professional Counseling (p. 1177)	M.A.	Optional	48-66	Sustainability Studies (p. 2649)	M.A.	Optional	36
Psychiatric Mental Health Nurse Practitioner (p. 2335)	M.S.N.	None	40	Sustainability Studies (p. 2698)	M.S.	Optional	36
				Technical Communication (p. 2417)	M.A.	Optional	30
				Theatre (p. 2206)	M.A.	Optional	30-36

Theatre (p. 2220)	M.F.A.	None	60
Therapeutic Recreation (p. 2001)	M.S.R.L.S.	Optional	30-36
Wildlife Ecology (p. 2866)	M.S.	Required	30

**Certificate and degree programs are approved in accordance with guidelines provided by the Southern Association of Colleges and Schools Commission on Colleges, the Texas Higher Education Coordinating Board and the Texas State University System Board of Regents.**

Minor hours required are in addition to the hours required for the student's chosen major. If you select a minor that has more hours than your degree plan requires, your total degree hours will increase by the number of excess hours in the minor. If you select a minor with fewer hours your degree plan requires, you must still meet the minimum hours required toward the degree. To change your minor please complete the change of minor/concentration form ([https://www.gradcollege.txst.edu/docs/Change\\_of\\_Minor\\_or\\_Concentration\\_Form.pdf](https://www.gradcollege.txst.edu/docs/Change_of_Minor_or_Concentration_Form.pdf)).

Click the name of the minor to find the course requirements and other requirements that may apply such as admission, GPA, etc.

Minor	Hours Required
Adult Education (p. 1215)	9
Anthropology (p. 2390)	9
Aquatic Resources (p. 2875)	6
Biochemistry (p. 2896)	9
Biology (p. 2875)	15
Chemistry (p. 2896)	6
Communication Studies (p. 2034)	12
Computer Science (p. 2986)	6-9
Creativity Studies in Education (p. 1930)	6-12
Criminal Justice (p. 850)	9
Developmental Education (p. 1930)	9
Diversity Studies (p. 2391)	9
Educational Leadership (p. 1215)	12
Elementary Education (p. 1930)	12
Elementary Education Bilingual/Bicultural (p. 1931)	9
Exercise Science (p. 2010)	12
Geography (p. 2521)	9
Gifted and Talented Education (p. 1931)	6
Healthcare Administration (p. 2290)	15
History (p. 2575)	12
Industrial Technology (p. 3166)	15
Legal Studies (p. 2628)	9-12
Literature (p. 2454)	6
Materials Physics (p. 3361)	9
Mathematics (p. 3332)	15
Methods and Materials (p. 1931)	6-15
Music (p. 2204)	12
Music Education (p. 2204)	12
Philosophy (p. 2596)	6
Political Science (p. 2628)	9

Psychology (p. 2640)	12
Public Health Education and Promotion (p. 2010)	9
Reading Education (p. 1932)	12
Recreation and Leisure Services (p. 2010)	12
Secondary Education (p. 1932)	15
Sociology (p. 2713)	9
Software Engineering (p. 2986)	6-9
Spanish (p. 2740)	6
Special Education (p. 1932)	15
Theatre (p. 2239)	6
Women's, Gender, and Sexuality Studies (p. 2391)	9-15

Click the name of the certificate to find the course requirements.

Certificate Program	Department/School	Comments
Adult English as a Second/Foreign Language (p. 1215)	Counseling, Leadership, Adult Education, and School Psychology	18 hours for completion
Autism (p. 1932)	Curriculum and Instruction	24 hours for completion. This certificate is only available for graduate students who are also seeking a Master of Education (M.Ed.) Major in Special Education (Autism/Applied Behavior Analysis Concentration).
Behavioral Disorders/Positive Behavioral Support (p. 1932)	Curriculum and Instruction	21 hours for completion. This certificate is only available for graduate students who are also seeking a Master of Education (M.Ed.) Major in Special Education (Behavioral Disorders/Positive Behavior Concentration).
Corporate Communication and Training (p. 2034)	Communication Studies	9 hours for completion
Environmental Leadership, Engagement, and Ethics ( <a href="http://mycatalog.txstate.edu/graduate/liberal-arts/philosophy/environmental-leadership-engagement-ethics-certificate/">http://mycatalog.txstate.edu/graduate/liberal-arts/philosophy/environmental-leadership-engagement-ethics-certificate/</a> )	Philosophy	12

Ethics and Digital Technologies ( <a href="http://mycatalog.txstate.edu/graduate/liberal-arts/philosophy/ethics-digital-technologies-certificate/">http://mycatalog.txstate.edu/graduate/liberal-arts/philosophy/ethics-digital-technologies-certificate/</a> )	Philosophy	12
Learning Disabilities/Inclusion (p. 1933)	Curriculum and Instruction	18 hours for completion. This certificate is only available for graduate students who are also seeking a Master of Education (M.Ed.) Major in Special Education (Learning Disabilities/Inclusion Concentration).
Long Term Care Administration (p. 2291)	Health Administration	15 hours for completion
Music Performance (p. 2204)	Music	15 hours for completion. No grade less than "B" on required courses.
Paralegal Studies (p. 2628)	Political Science	24 hours for completion. This certificate is only available for graduate students who are also seeking a Master of Arts (M.A.) Major in Legal Studies.
Professional Ethics (p. 2597)	Philosophy	12 hours for completion
Professional Spanish ( <a href="http://mycatalog.txstate.edu/graduate/liberal-arts/world-languages-literatures/professional-spanish-certificate/">http://mycatalog.txstate.edu/graduate/liberal-arts/world-languages-literatures/professional-spanish-certificate/</a> )	World Languages & Literatures	9
Psychiatric Mental Health Nurse Practitioner (p. 2343)	St. David's School of Nursing	29 hours for completion

## Texas State Certificate Program Application of Completion

Students in the certificate programs must maintain a minimum GPA of 3.0 in order to receive a certificate of completion for the program. See the table above for the specific GPA and course grade requirements per certificate program. A final course grade of "C" or higher is required for any graduate course that may be applied towards a graduate certificate at Texas State. All certificate course work must be completed within four years of initial enrollment.

In order to receive the certificate, a student must apply for graduation in the semester in which they plan to complete the certificate; although they

are not eligible to participate in commencement ceremonies unless they are also earning a degree simultaneously. Late applications will not be accepted. It is the responsibility of the student to ensure completion of all certificate requirements as listed on the degree audit and required by the department. It is also the student's responsibility to apply for graduation by the published deadline posted on the University Academic Calendar. That date, as well as other deadline dates, and instructions outlining how to apply for graduation are posted on The Graduate College website each term. Deadlines are also communicated via the GradBulletin. Students who have missed the application deadline will have to apply for graduation during the next semester. For further information regarding the graduation application deadline, contact The Graduate College at 512.245.2581 or visit our website at: <http://gradcollege.txstate.edu/students/deadlines.html>. (<http://www.gradcollege.txstate.edu/students/deadlines.html>)

**Certificate and degree programs are approved in accordance with guidelines provided by the Southern Association of Colleges and Schools Commission on Colleges, the Texas Higher Education Coordinating Board and the Texas State University System Board of Regents.**

The tuition and fees rates are available on the TXST One Stop (<https://onestop.txst.edu/cost-payments/cost-attendance/tuition-rates.html>) website.

The University reserves the right to change fees in keeping with the acts of the Texas Legislature and the Board of Regents of the Texas State University System.

### Tuition

#### Doctoral Excess Hours (99-hour Rule)

In accordance with Texas Education Code §54.012 (<http://www.statutes.legis.state.tx.us/Docs/ED/htm/ED.54.htm#54012>), the university will incur a penalty once a doctoral student accumulates 100 or more doctoral semester credit hours. In response, the Texas State University System has a tuition structure (excessive hours fee) in which a doctoral student will be charged tuition at a rate equivalent to non-resident tuition for all doctoral semester credit hours exceeding 99. Courses taken by a doctoral student at the master's or undergraduate level will not count towards the 99 hours. If the student is admitted to a doctoral program from the bachelor's degree, the count begins after 30 hours of graduate coursework. This tuition structure applies to Texas residents as well as out-of-state residents and international students who were eligible to be charged tuition at the resident rate as a result of scholarship and fellowship awards or employment as Graduate Assistants. Students should contact the Ph.D. Program Director regarding this appeal process.

## Special Fees and Charges

Admission Application Fee (mandatory & non-refundable)	\$75.00
Admissions Application & Evaluation Fee for International Applicants (mandatory & non-refundable)	\$90.00
Athletic Training Fee (to sophomores who have earned competitive admission to the undergraduate athletic training education program)	\$100.00

Auditing Fee	same as if course were taken for credit
Certificate Fee (payable when applying for teacher certification)	
Texas Standard Certificate	\$77.00
Deficiency Plan Fees (for students seeking teacher certification)	
First Plan	\$75.00
Additional Plans (each)	\$25.00
Late Payment Fee	\$65.00
Electronic Course Fee	\$50.00/semester credit hour
Evaluation of Foreign Credentials (for domestic applicants)	\$15.00
Payment Plan Enrollment Fee (for handling & other processing)	\$30.00
Late Registration Fee	
Prior to initial payment deadline	\$25.00
1st 7 class days - fall/spring	\$100.00
1st 2 class days - summer	\$25.00
8th-12th class day - fall/spring	\$200.00
3rd-4th class days - summer	\$25.00
Off-Campus Course Fee	\$30.00/semester credit hour
Transfer, International, and Other Types Orientation Fee	\$60.00
Physical Therapy Application Fee	\$50.00
Post-Baccalaureate Teaching Intern Application Fee	\$500.00
Returned Item Fee (for handling and other processing)	\$30.00
Transcript Fee (official copy)	\$10.00

## Auditing Fees

Where auditing of a course is permitted, all fees will be the same as if the course were taken for credit. Eligible senior citizens, 65 or older, may audit courses without payment of a fee if space is available. For additional information, please visit the Auditing a Course (<https://www.registrar.txst.edu/registration/reg-home/audit.html>) page.

## Campus Parking/Vehicle Registration

Every student, faculty, and staff person who operates or parks a vehicle on campus must:

1. register the vehicle with Parking Services;
2. purchase a permit;
3. properly display a Texas State physical or virtual parking permit any time the vehicle is parked on campus; and
4. become familiar with and abide by the Traffic and Parking Rules.

The rules are enforced at all times throughout the year. The purchase of a permit and registration of the vehicle do not guarantee a parking space. Information on parking options can be found on the parking Services webpage. The online vehicle registration process can be accessed through the Parking Services portal at [txstate.aimsparking.com](http://txstate.aimsparking.com) or via CatsWeb.

Fees for vehicle registration will be published each year in the official rules and regulations and on the Parking Services website. Additional

information concerning the purchase and issuance of parking permits may be obtained by contacting Parking Services at 512.245.2887.

## International Student Health Insurance Fee

All International students on non-immigrant F-1 and J-1 visas are required by university policy to have health insurance coverage while a student at Texas State University. The international student health insurance premium will be billed to an F-1 and J-1 international student's university account during the time of registration for classes. A student can submit a waiver to opt out of the insurance charge if the student has existing health insurance that meets one of the following criteria:

- Student is covered by a U.S. employer health insurance plan or by a parent/spouse's U.S. employer health insurance plan that is compliant with the Affordable Care Act (ACA).
- Student's sponsored plan (US Government or Foreign Government) is recognized by the U.S., and the sponsor guarantees payment of all healthcare expenses, including medical evacuation and repatriation, and are in compliant with the Affordable Care Act (ACA).

Detailed information on the health insurance or how to request an insurance waiver will be sent to international students by the International Student and Scholar Services. This information is available on the International Student and Scholar Services website: [www.international.txstate.edu/current/Health-insurance-.html](http://www.international.txstate.edu/current/Health-insurance-.html) (<http://www.international.txstate.edu/current/Health-insurance-.html>).

Should you have any questions about the international student health insurance requirement, you may contact International Student and Scholar Services at [intlhealth@txstate.edu](mailto:intlhealth@txstate.edu).

**IMPORTANT:** Students will receive notices about the health insurance requirement through their Bobcat mail account.

## International Students Operations Fee

All international students with an immigration status of "F" or "J" will be charged \$85.00 per semester for the maintenance of records, compliance with government regulations, and other services.

## Laboratory Fees

The amount of lab fees varies on a per course basis. See the Schedule of Classes for current lab fees.

## Testing Fees

Administration fees will be charged for Proctoring Exam Services for Texas State Students and Non-Texas State students who wish to take a course exam at the Testing, Evaluation, and Measurement Center (TEMC) in San Marcos, or the Round Rock Campus Testing Center. The charge is \$40.00 per test for exams two hours or less. The fee amount will vary with longer time limits. This fee also applies to students who wish to take a course exam through the TEMC rather than at the times offered as part of distance education courses. Students who request make-up exams allowed by Texas State faculty will also be charged \$40.00 per test for exams two hours or less.

Varying fees will also be charged for:

- Exams for credit
  - CLEP
  - Departmental
  - ACTFL-OPI
- Placement and college readiness tests
  - Accuplacer/Texas Success Initiative Assessment (TSIA)
  - Texas Higher Education Assessment (THEA)
- Upper-level barrier exams
  - ATI TEAS BSN
  - Punctuation, Usage, and Grammar (PUG)

Visit [www.txstate.edu/temc](http://www.txstate.edu/temc) (<https://www.txstate.edu/temc/>) for specific fees, additional services, and information.

## Students' Financial Obligations

Tuition and fees are to be paid in full before the beginning of the semester or paid under an installment plan with an initial payment due before the beginning of the semester. Students are expected to meet their financial obligations to Texas State within the designated time allowed. For additional information, please visit the TXST One Stop (<https://onestop.txst.edu/cost-payments.html>) website.

As consequences for the student's failure to meet financial obligations, the university may:

1. withhold official transcripts;
2. deny registration and payment confirmation of subsequent semesters;
3. assess additional fees for delinquent payments and returned items as detailed on the Student Business Services (<http://www.sbs.txstate.edu/>) website;
4. report unpaid university obligations to credit agencies;
5. cease university-provided services; and
6. place warrant holds with the State Comptroller's Office stopping state payment to the individual owing the debt.

## Payment of Fees

Please visit the Payment Options (<https://onestop.txst.edu/cost-payments/make-payment.html>) and Payment Methods (<https://onestop.txst.edu/cost-payments/payment-methods.html>) pages of the TXST One Stop website for information regarding payment of tuition, fees, room and board.

### Please note the following:

- A 2.95% convenience fee with a minimum \$3 per transaction fee is applied to credit/debit card payments (effective 5/2023). The convenience fee is not collected by the university and is therefore non-refundable.
- Mailed payments must be **RECEIVED**, not postmarked, **BY THE DUE DATE**. You must make allowances for any postal delays. Please include the student ID number.

### Financial Aid and Tuition Adjustment Recipients:

Students receiving financial aid and/or a tuition adjustment, should check their student account by logging in to the Payment Portal on the TXST One Stop (<https://onestop.txst.edu/cost-payments/make-payment.html>) website to ensure that credit was applied.

- Approved tuition adjustments will apply to the student account once received and processed. The Billing and Payment site does take 24 hours to update with this information.
- Students with a financial aid credit or tuition adjustment that covers 100% tuition, fees, and room and board do not need to take action.
- If the financial aid or tuition adjustment is not sufficient to cover 100% of the charges, the student must pay the total balance due or enroll in a payment plan to avoid course cancellation.

## Installment Payments

Students are responsible for making their installment payments by the due date. The installment due dates are listed on the Important Dates (<https://onestop.txst.edu/important-dates.html>) page of the TXST One Stop website. Students can check their balance, installment amounts, and make payments online by visiting the Student Business Services (<https://www.sbs.txstate.edu/>) website.

## Late Payment Fee

A delinquent charge of \$65 will be assessed the first business day after the final payment due date of the semester. Under Texas Education Code §54.007, a student who fails to make full payment of tuition and fees, including any incidental fees, by the due date may be prohibited from registering for classes until full payment is made. A student who fails to make full payment prior to the end of the semester or term may be denied credit for the work done that semester or term. See the Students' Financial Obligation section for more details.

## Returned Checks

If a check or EFT is returned unpaid for any reason other than the admitted error of the bank, the student must pay for the returned check with cashier's check, money order or credit card (MasterCard, VISA, Discover, Diners Club or American Express) immediately. A \$30.00 service fee is assessed for each returned check. Until the check is paid, the student will be on "Cash Only" status. Cash Only status is a denial of check cashing privileges on campus. A hold may also be placed on the student account.

Individuals who have three returned checks or EFT within a 12-month period will be placed on Cash Only status.

Stopping payment on a check for fees or allowing the check to be returned unpaid by the bank for any reason does not constitute official withdrawal. Failure to follow procedures for withdrawing from Texas State may result in financial penalties and delays with future enrollment at the University.

## Residency for Tuition Purposes

The determination of residency classification for tuition purposes is governed by statutes enacted by the Texas Legislature and rules and regulations promulgated by the Texas Higher Education Coordinating Board. A student or applicant is classified either as a resident of Texas, a non-resident, or a foreign student for tuition purposes. An individual's residency classification is based on information from his or her admission application. If an applicant or student is classified as a non-resident and wishes to be considered for reclassification as a resident, it is necessary to submit the Residency Core Questions available from the Office of Undergraduate Admission. Documentation may be requested by the institution to resolve issues raised by the information provided in response to the Core Residency Questions.



Chapter 21 of the Texas Higher Education Coordinating Board Rules includes the following provisions covering some of the more common residency situations. They are neither exhaustive nor complete and should not be interpreted as such. Full regulations are available in the Coordinating Board publication *Rules and Regulations for Determining Residency Status* available at [www.collegeforalltexans.com/](http://www.collegeforalltexans.com/) (<http://www.collegeforalltexans.com/>) (Search: Residency).

## Determination of Residence Status

1. The following persons shall be classified as Texas residents and entitled to pay resident tuition:
  - a. a person who graduated from a public or accredited private high school in this state or received the equivalent of a high school diploma in this state, and maintained a residence continuously in this state for the thirty-six months immediately preceding the date of graduation or receipt of the diploma equivalent, as applicable; and the 12 months preceding the census date of the academic term in which the person enrolls in an institution.
  - b. a person who established a domicile in this state not less than 12 months before the census date of the academic term in which the person enrolls in an institution; and maintained a residence continuously in the state for the 12 months immediately preceding the census date of the academic term in which the person enrolls in an institution.
  - c. a dependent whose parent established a domicile in this state not less than 12 months before the census date of the academic term in which the person enrolls in an institution; and maintained a residence continuously in the state for the 12 months immediately preceding the census date of the academic term in which the person enrolls in an institution.
2. The following non-U.S. citizens may establish a domicile in this state for the purposes of subsection (a) (2) or (3) of this section:
  - a. a Permanent Resident;
  - b. a person who is eligible for permanent resident status;
  - c. an eligible nonimmigrant that holds one of the approved types of visas. A complete list is available on the Coordinating Board website at [www.thecb.state.tx.us/Rules](http://www.thecb.state.tx.us/Rules) (<http://www.thecb.state.tx.us/Rules/>);
  - d. a person classified by the USCIS as a Refugee, Asylee, Parolee, Conditional Permanent Resident, or Temporary Resident;
  - e. a person holding Temporary Protected Status, and Spouses and Children with approved petitions under the Violence Against Women Act (VAWA), an applicant with an approved USCIS I-360, Special Agricultural Worker, and a person granted deferred action status by USCIS;
  - f. a person who has filed an application for Cancellation of Removal and Adjustment of Status under Immigration Nationality Act 240A (b) or a Cancellation of Removal and Adjustment of Status under the Nicaraguan and Central American Relief Act (NACARA), Haitian Refugee Immigrant Fairness Act (HRIFA), or the Cuban Adjustment Act, and who has been issued a fee/filing receipt or Notice of Action by USCIS; and
  - g. a person who has filed for adjustment of status to that of a person admitted as a Permanent Resident under 8 United States Code 1255, or under the "registry" program (8 United States Code 1259), or the Special Immigrant Juvenile Program (8 USC 1101(a) (27) (J)) and has been issued a fee/filing receipt or Notice of Action by USCIS.

3. The domicile of a dependent's parent is presumed to be the domicile of the dependent unless the dependent establishes eligibility for resident tuition under subsection (a) (1) of this section.
4. A domicile in Texas is presumed if, at least 12 months prior to the census date of the term in which he or she is to enroll, the person owns real property in Texas, owns a business in Texas, or is married to a person who has established a domicile in Texas. Gainful employment other than work-study and other such student employment can also be a basis for establishing a domicile.
5. The temporary absence of a person or a dependent's parent from the state for the purpose of service in the U.S. Armed Forces, Public Health Service, Department of Defense, U.S. Department of State, as a result of an employment assignment, or for educational purposes, shall not affect a person's ability to continue to claim that he or she is a domiciliary of this state. The person or the dependent's parent shall provide documentation of the reason for the temporary absence.
6. The temporary presence of a person or a dependent's parent in Texas for the purpose of service in the U.S. Armed Forces, Public Health Service, Department of Defense, or service with the U.S. Department of State, or as a result of any other type of employment assignment does not preclude the person or parent from establishing a domicile in Texas.

## Exceptions

A non-resident or foreign student may qualify to pay in-state tuition. Students should direct questions and documentation for these waivers to Student Business Services.

1. The student or student's spouse or parent is a member of the Armed Forces or a commissioned officer of the Public Health Service and is stationed in Texas. (Military and Public Health Service personnel who maintain their official home of record as Texas or who meet the criteria for establishing a domicile in Texas are considered Texas residents.)
2. The student or student's spouse or parent is employed at least half-time as a teaching or research assistant in a position related to the assistant's degree program at a Texas public institution of higher education.
3. The student or student's spouse or parent is employed at least half-time on a regular monthly salaried basis as a teacher or professor at a Texas public institution of higher education.
4. The student holds an approved competitive scholarship from Texas State of at least \$1000 for the academic year or summer awarded by an official Texas State scholarship committee.
5. The student or student's spouse or parent has located in Texas as an employee of a business or organization that became established in this state as part of the state economic development and diversification program. (Note: Go to [www.thecb.state.tx.us/Rules](http://www.thecb.state.tx.us/Rules) (<http://www.thecb.state.tx.us/Rules/>) Chapter 21, Sub Chapter X for a list of qualified employers.)
6. The student is a New Mexico resident who resides in a county bordering Texas.
7. The student is a Louisiana resident who resides in a parish bordering Texas.
8. The student is a resident of Mexico who has demonstrated a financial need as determined by the financial aid office.

Refer to the Refund Information (<https://onestop.txst.edu/cost-payments/refund.html>) page of the TXST One Stop website for detailed information of the University's refund policy. **Please note:** Withdrawing

and dropping a class are **two different actions** and are defined below. ***These actions have separate refund policies.***

- **Withdrawal:** Reducing semester credit hours to zero is considered a withdrawal. You MUST do this through the Office of the University Registrar.
- **Dropping a class:** Removing one or more classes from your schedule, while remaining enrolled in at least one course.

Any refund due will be applied to any unpaid financial obligation with Texas State. If the refund exceeds any unpaid balance, a refund will be processed within 30 days. Payments made by credit card are refunded back to the card. Other payment types will be deposited to the student's bank account if they have signed up for direct deposit (eRefund) or issued as a check and mailed to the appropriate address on file. Mailing addresses for refunds are selected in the following priority: (1) Mailing (2) Local (3) Permanent. Students may update their addresses as needed on Catsweb.

### Drops

IMPORTANT: Dropping credit hours or withdrawing from the semester may affect your financial aid award. Students receiving financial aid should contact the Financial Aid Office before dropping or withdrawing. If you have dropped hours or withdrawn from the University, the term balance may not reflect the necessary adjustments. Please allow a minimum 10 business day waiting period for award adjustments to be processed.

Dropping a course or courses means that there is at least one other course left in the registered schedule for a semester/term. Refer to the Academic Calendar or the Refund Information page of the TXST One Stop website for semester/term specific deadlines for drop refunds.

\*Please note: Summer semesters have several different terms within the semester. Please contact TXST One Stop if you have questions regarding drop dates for summer.

### Withdrawals

Withdrawing means a student will no longer be attending any course for the semester/term. Students must withdraw from ALL courses to be considered as withdrawn for the semester. Withdrawals are initiated in the Office of the University Registrar. Please refer to the Academic Calendar or Refund Information page of the TXST One Stop website for semester/term specific deadlines for withdrawal refunds. Withdrawal Information is available on the Office of the University Registrar website.

\*Please note: Summer semester have several different terms within the semester. Please contact TXST One Stop for specific withdrawal dates for summer. Additionally, during the summer, please allow a minimum of 10 business days waiting period for billing account adjustments to be processed.

### Interim Dean

Angela R. Ausbrooks, Ph.D.  
Agriculture Building Room 300  
Telephone: 512.245.3333  
[www.appliedarts.txstate.edu/](http://www.appliedarts.txstate.edu/) (<http://www.appliedarts.txstate.edu/>)

### Associate Dean

Douglas G. Morrish, Ph.D.

### Assistant Dean

Bob E. Vasquez, Ph.D.

### Department Chairs/School Directors

Aerospace Studies—Lt. Col. Brenton J. Ekren, M.A.  
Criminal Justice and Criminology—Jeffrey Bumgarner, Ph.D.  
Family and Consumer Sciences—Amy Weimer, Ph.D.  
Military Science—LTC Jennifer Dembeck  
Organization, Workforce, and Leadership Studies—Shetay N. Ashford-Hanserd, Ph.D.  
Social Work—Katherine Selber, Ph.D. (Interim Director)

The College of Applied Arts' mission is to prepare undergraduate and graduate students for careers through programs of high quality in academic, professional, and technical areas; to further faculty excellence in teaching supported by quality scholarship; and to enhance our involvement with local, state, national, and international constituencies.

Hines Academic Center Room 108  
Telephone: 512-245-2174 Fax: 512-245-8063  
<http://www.cj.txstate.edu/>

Located in the Hines Academic Center, the School of Criminal Justice and Criminology offers master's- and doctoral-level programs that address a wide range of social issues and research opportunities.

The School of Criminal Justice and Criminology is a vibrant academic unit, with approximately 60 students pursuing the M.S. or Ph.D. in criminal justice. Full-time faculty members are involved in educating students as well as engaging in a wide range of research endeavors. The School also administers a number of institutes and centers, such as the Center for Geospatial Intelligence and Investigation and the Texas Justice Court Training Center. Further, the School maintains close working relationships with the Advanced Law Enforcement Rapid Response Training (ALERRT) Center and the Texas School Safety Center.

There are multiple tracks of the M.S. program, which prepares students for entry level and leadership positions in criminal justice agencies, as well as laying the groundwork necessary for success in a doctoral program.

The Ph.D. in criminal justice equips students with the skillsets and experience necessary for careers as researchers, policy analysts, and academicians. Students may pursue the degree either full-time or part-time. Full-time students are eligible for funding, such as through teaching or research assistantships.

## Doctor of Philosophy (Ph.D.)

- Major in Criminal Justice (p. 829)

## Master of Science in Criminal Justice (M.S.C.J.)

- Major in Criminal Justice (Executive Concentration) (p. 840)
- Major in Criminal Justice (Non-thesis Option) (p. 835)
- Major in Criminal Justice (Research Concentration) (p. 844)

## Minor

- Criminal Justice (p. 850)

## Program Overview

The School of Criminal Justice and Criminology at Texas State offers a doctoral program for:

1. criminal justice professionals who seek advanced education and
2. students who will pursue academic appointments at colleges and universities in Texas and around the nation.

Texas State is located in the heart of the central Texas corridor, near 16 state criminal justice offices and 13 Texas counties, including Travis (Austin) and Bexar (San Antonio). The university's geographic proximity to state criminal justice agency headquarters for law enforcement, criminal courts, and corrections, and to managers and executives in these agencies, makes it an ideal location for offering a doctoral-degree program.

The doctoral program is part of a vibrant school, with approximately 1000 bachelor's students and 30 master's students. Twenty-three full-time faculty members are involved in a wide range of research. A list of faculty and their research interests is available at <http://www.cj.txstate.edu/people/faculty> (<http://www.cj.txstate.edu/people/faculty/>). The School of Criminal Justice and Criminology also administers a number of institutes and centers, including the Center for Geospatial Intelligence and Investigation and the Advanced Law Enforcement Rapid Response Training Center (ALERRT).

Courses are offered in the evenings for the convenience of working professionals. Students are classified as either full-time (nine hours per term) or part-time. All students will be given the opportunity to initiate, complete, present, and publish original research. Each student develops an appropriate degree plan to meet their career and academic goals. The degree plan will include a mix of theoretical, analytical, and elective courses that will prepare students to work independently and in multidisciplinary teams.

It is expected that students will pursue their courses and research activities in an efficient and timely manner. If it is determined that a student is not making adequate progress toward completion of the doctoral degree requirements, consultations will be undertaken between the student, the student's dissertation chair (when applicable), the program director, and the School's doctoral executive council to develop a remediation plan, which may include revising a student's program of study or research. Failure to successfully remedy documented deviancies will result in termination of the student's enrollment in the doctoral program at the discretion of the doctoral executive council. Students removed from the doctoral program in this manner may appeal to the dean of The Graduate College for reinstatement in the program.

## Educational Goal

The central educational goal of the Ph.D. program in criminal justice at Texas State is to prepare doctoral students to assume leadership roles in academic, public policy, and administrative positions within a rapidly changing criminal justice system. The Ph.D. program produces outstanding researchers who are qualified for academic positions and prepares practitioners to conduct research in criminal justice agencies. The school has developed a programmatic perspective that is sensitive to the importance of research skills, balanced with theoretically informed policy analysis, so that students can more effectively address the challenges in criminal justice in Texas and across the nation. Students gain expertise to apply statistically advanced research methodologies to

conduct empirical studies in crime, law, public policy, and administration of the criminal justice system.

Other educational goals and objectives are to:

- Identify the theoretical perspectives and foundations of current research in the study of crime, law, and public policy decision-making undertaken by criminal justice agencies to assist law enforcement, court personnel, and corrections staff to plan, develop, and implement timely, efficient, and sound responses to crime.
- Apply precise, empirically validated, and tested research methods to investigate, analyze, and improve theory and policy to provide policy makers with the most current research and applicable technology to address emergent public safety growth areas.
- Communicate effectively to educate and inform professional managers and administrators of criminal justice agencies, their service personnel (e.g., police) and the community at-large about the 'best practices' for addressing the control of crime at the neighborhood, community, state, and national levels.
- Recognize ethical dilemmas and make ethically sound decisions to ensure that recommended criminal justice policy becomes a useful guide, if not benchmark procedure, for executives and heads of criminal justice agencies as they develop their strategic plans to address crime and public safety at the local, state, and national levels.

Apply a broad understanding of the legal and empirical elements of criminal justice administration in leadership positions to encourage current and future working professionals and executives in criminal justice agencies to incorporate more comprehensive training using the 'best practices' in leadership and management theory when developing, planning, and implementing policies that effect their own agencies and the surrounding communities they serve.

## Financial Assistance

Assistantships and scholarships are available to qualified applicants. The School of Criminal Justice and Criminology offers doctoral instructional assistantships and teaching assistantships on a competitive basis to full-time students enrolled in the criminal justice Ph.D. program. An offer of financial support will normally be made at the time that a student is accepted into the program. The Graduate College can provide further information regarding scholarships.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's

- degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- master’s degree in criminal justice or a related field from a regionally accredited university
  - official transcripts from **each institution** where course credit was granted
  - minimum 3.5 GPA in all completed graduate course work
  - official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
  - statement of purpose describing the student’s personal history and life goals that are relevant to obtaining a doctoral degree
  - three letters of recommendation indicating the student’s skills and capacity to be successful in the Ph.D. program

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waveir>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Criminal Justice requires 51 semester credit hours. No grade earned below “B” on any course work may apply toward a Ph.D. degree in criminal justice at Texas State.

All doctoral students are required to enroll in CJ 7309 Proseminar during their second or third year to learn about the criminal justice discipline, teaching, publishing, grants and fellowships, writing dissertations, and post-doctoral employment. Doctoral students selected for teaching assistantships will be required to enroll in CJ 7301 Instructional Assistant Supervision during the first semester they teach.

Course Requirements

Code	Title	Hours
First-Year Required Courses		
CJ 7311	Advanced Criminological Theory	3
CJ 7320	Quantitative Research Methods	3
CJ 7321	Linear Regression for Criminal Justice Research	3
CJ 7323	Applied Statistics and Quantitative Data Analysis	3
Required Course		
CJ 7309	Proseminar	3
Area Electives		
Criminal Justice System (Choose 3 hours from the following)		3
CJ 7310	Philosophy of Law, Justice, and Social Control	

CJ 7314	Policing	
CJ 7315	Corrections	
Advanced Statistics (Choose 3 hours from the following)		3
CJ 7350A	Forecasting, Trend Analysis, and Data Interpretation	
CJ 7350E	Discrete Multivariate Models	
CJ 7350I	Introduction to Structural Equation Modeling	
Advanced Research Methods (Choose 3 hours from the following)		3
CJ 7322	Advanced Research for Planning and Evaluation	
CJ 7330	Qualitative Research Methods	
CJ 7336	Survey Research Methods for Criminal Justice	
Nature and Causes of Crime (Choose 3 hours from the following)		3
CJ 7313	Race and Ethnicity in Crime and Criminal Justice	
CJ 7350F	Environmental Criminology	
CJ 7350G	Seminar in Macro Criminology	
CJ 7350L	Sex Offenders: Theory, Research & Policy	
Prescribed Electives		
Choose 12 hours from the following or from courses not taken in the Area Electives:		12
CJ 7331	Law and Behavioral Science	
CJ 7350B	Academic Scholarship and Communication	
CJ 7350C	Qualitative Data Collection, Coding and Analysis	
CJ 7350K	Criminal Justice Forecasting and Policy Analysis	
CJ 7360	Independent Study	
May choose advisor-approved electives from outside the school		
Dissertation		
Choose a minimum of 12 hours from the following:		12
CJ 7199	Dissertation	
CJ 7299	Dissertation	
CJ 7399	Dissertation	
CJ 7599	Dissertation	
CJ 7699	Dissertation	
CJ 7999	Dissertation	
Total Hours		51

Qualifying Examination

All students take a qualifying examination one to two weeks after completion of their first year in the program. The qualifying examination integrates criminological theory, quantitative methods, and regression. The examination is graded by those professors who taught the first-year required courses or those in a pool who have previously taught the courses. One re-examination is offered at midsummer for those who fail. Students who fail the re-examination will be dismissed from the program.

Comprehensive Examination Requirements

All candidates for graduate degrees must pass one or more comprehensive examinations.

Advancement to Candidacy Application for Advancement to Candidacy

Students can download the “Application for Advancement to Candidacy form” from The Graduate College website. The student should complete



and sign the upper portion of the form and return it to the program director. When all requirements for admission to candidacy have been met (completion of course-work, a passing grade on the comprehensive examination, approval of dissertation chair and committee, and submission of an approved dissertation proposal), the program director will forward the Application for Advancement to Candidacy form to the dean of The Graduate College for review and approval.

The dean of The Graduate College approves advancement to candidacy once all requirements are met and at the recommendation of the program director.

In addition, before advancement to candidacy, students are required to complete the following:

1. Completion of all courses toward the doctoral degree with a GPA of 3.0 or higher on a 4.0 scale.
2. Passing grade on the comprehensive examination. "Pass" is the only satisfactory grade.
3. The student must select a dissertation chair, and that chair must be approved by the doctoral executive council. The student also must select a dissertation committee comprised of three additional members of the doctoral faculty, one of whom must be an external member from outside the School of Criminal Justice of Texas State University.
4. The student must choose a topic with the approval of the student's dissertation advisor and committee.
5. The student will submit a title and a written proposal for the dissertation to the student's dissertation committee and successfully defend the proposal in an oral presentation with the dissertation committee. The proposal will include a statement of the problem to be studied, a discussion of the relevant literature, and the research method of the proposed dissertation topic.
6. The program director will make a recommendation to the graduate dean who makes the final decision on the student's advancement to candidacy. The Graduate College will notify the student once the decision has been made.

## Advancement to Candidacy Time Limit

Full-time, traditional students should be advanced to candidacy within five years of initiating Ph.D. course-work applied toward the degree. Non-traditional, part-time students may request extensions from the Doctoral Executive Council as long as they maintain a GPA of 3.0 and are making consistent progress toward fulfilling their degree requirements. The Doctoral Executive Council will review part-time students' requests for extensions on an individual, case-by-case basis.

No credit will be applied toward a student's doctoral degree for course-work completed more than five years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at Texas State, as well as course credit transferred to Texas State from other accredited institutions.

## Grade-Point Requirements for Advancement to Candidacy

A minimum GPA of 3.0 on all course work undertaken as a doctoral student in the criminal justice program is required for admission to candidacy. No grade earned below "B" on any course work may apply toward a Ph.D. degree in criminal justice at Texas State.

Incomplete grades must be cleared through The Graduate College at least ten days before approval for advancement to candidacy will be granted.

## Dissertation Proposal

A dissertation proposal prepared by the student and approved by the student's dissertation chair and a majority of the other members of the dissertation committee is a requirement for Advancement to Candidacy status. The proposal must outline the substance and scope of the dissertation research, present the methodology to be used, and survey the relevant literature. The student's dissertation chair and other dissertation committee members must indicate approval of the dissertation proposal on the "Dissertation Proposal and Proposal Defense" form. This form can be downloaded from The Graduate College website. A final copy of the dissertation proposal, accompanied by the signed approval form, must be turned in to the program director, who will forward it to the dean of The Graduate College for review and final approval.

## Advancement to Candidacy Comprehensive Examination

The comprehensive exam involves completion of an empirical research project (with data analysis) and a single-authored article about it (not to exceed 6,000 words, excluding references) that, in the examination committee's view, is suitable for publication in a refereed journal. The purpose of the comprehensive exam is to assess a student's ability to critically assess previous research on a topic, develop a research question on it, and complete independent research to address the question. Students need to disclose to the examining committee if the article originated in a class or if there are other potential conflicts with it.

The examining committee is comprised of a chair and two other members. All must be members of the doctoral faculty, and the chair must be a member of the Core Doctoral Faculty. The chair is chosen by the student, and the other two committee members are chosen at random by the Doctoral Program Director from a list of doctoral faculty members. A form with the committee's composition must be filed with Doctoral Program Director when the committee is constituted. The committee must be constituted no later than when a student has completed 27 hours of doctoral coursework. The committee must approve the topic for a student's article, and a written description of the topic will be distributed to all members of the doctoral faculty. The examining committee's assessment of the student's article will be based on: (1) the quality of the research question, (2) the appropriateness of the methods and data analysis, (3) the adequacy of the articles connection to previous research, (4) the appropriateness of the interpretations of the data analysis, and (5) the quality of writing. A simple majority vote (2 of 3) is sufficient for deciding a grade. After completing 27 hours of coursework, a student can submit an article to their committee for grading. A student has until the semester after, they have completed 39 hours of doctoral coursework to receive a passing grade on an article. If a passing grade is not achieved by this point, the student will be dismissed from the program. Articles can be submitted for grading to the examining committees during the first three weeks of the fall semester or the first three weeks of spring semester.

The examining committee will have graded a submitted article within three weeks of receiving it. The grade options are "pass", "fail", and "revise and resubmit." If a student's article is assigned a "revise and resubmit," the student will have one semester to submit a revised version in order to receive a passing grade. The chair of the student's committee will summarize in writing what changes need to be considered in the revision for a "pass." If a student's article is assigned a "fail," the student will have one semester to submit an article on a new topic and receive a



passing grade for it. The chair of the student's committee will explain in writing reasons for the failure. The same three graders will be used for an article that is assigned a "revise and resubmit." A student can select a new committee chair for a "failed" article, and two new committee members will be assigned by the Doctoral Program Director. In the event that a student's second resubmission of an article is assigned a "fail," the student will be dismissed from the program.

Full-time, traditional students are expected to pass their comprehensive examination by the end of their third year. For non-traditional, part-time students, the three years can be extended on an individual, case-by-case basis. However, extensions will require the approval of the doctoral council.

### Recommendation for Advancement to Candidacy

The program director recommends the applicant for Advancement to Candidacy. Students must submit an official "Application for Advancement to Candidacy" form when all requirements are met (completion of coursework, a passing grade on the comprehensive examination, approval of dissertation chair/committee, and submission of an approved dissertation proposal). This form can be downloaded from the Graduate College website. The results of the comprehensive examination and the completed Application for Advancement to Candidacy form must be filed in the Graduate College before the dean of The Graduate College gives final approval to candidacy. The Program director is responsible for submitting these forms to The Graduate College.

## Dissertation Research and Writing

All doctoral students are required to complete a dissertation. The dissertation must present a systematic inquiry into a relevant research question, be informed by prior research, and add to the body of knowledge in the field. In most cases, the research will be quantitative in nature, although qualitative or legal research may be utilized in some cases. It is expected that the dissertation will provide the content for one or more publishable articles in academic journals.

Students are required to complete the following dissertation requirements:

1. The student will complete the dissertation, which must be an original contribution to scholarship and the result of independent research in a significant area of criminal justice. The student is expected to write the dissertation and orally defend it in an announced public presentation within three years of the official date of being advanced to candidacy. Questions posed to the student are initially limited to the dissertation committee membership. However, at the discretion of the presiding chair and when time permits, questions will also be solicited from the attending public audience. The approval of the dissertation requires the approval of the dissertation chair and the approval of a majority of the other members of the committee. A written notice of the dissertation committee's approval will be forwarded to the program director and then to the graduate dean.
2. If the dissertation committee decides not to approve the candidate's dissertation, the dissertation chair will prepare a written response to the doctoral executive council, accounting for the decision and outlining the steps required for approval. These steps will also be communicated to the candidate.
3. The student will submit the final, approved dissertation to The Graduate College in the prescribed format.

4. The program director will conduct a final review of the coursework and recommendation from the student's dissertation committee before making a recommendation to the graduate dean that the student be awarded the Ph.D. degree with a major in criminal justice. The graduate dean will certify that the student has met all of the requirements and can be awarded the degree.

## Dissertation Enrollment Requirements

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each term until the defense of their dissertation. If a student is receiving supervision on the dissertation during the summer or the student is graduating during the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the semester in which the degree is to be conferred. Students must complete a minimum of 12 semester hours of dissertation credit.

## Dissertation Time Limit

It is expected that the dissertation will, in most cases, be completed in two terms of concentrated effort and in no more than six terms. Students must appeal to the doctoral executive council for an extension beyond six terms. The student must pass an oral defense of their dissertation before final completion of the doctoral program.

## Dissertation Committee

The dissertation committee will oversee the research progress of a doctoral student and the writing of the student's dissertation. The committee will consist of at least four members, including the student's dissertation chair and three additional members of the doctoral faculty, one of whom must be an external member from outside the School of Criminal Justice of Texas State University. The student's dissertation chair will be a member of the core doctoral faculty in the School of Criminal Justice. The student, program director, school director, and the dean of The Graduate College will approve the composition of dissertation committee. The student is responsible for obtaining committee members' signatures on the "Dissertation/Research Advisor Assignment form: and the "Dissertation Committee Request form" which can be downloaded from the Graduate College website.

## Dissertation Defense

The dissertation defense may not be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least 65 days before the date of commencement during the term in which the student intends to graduate. After committee members have reviewed the draft with the student and provided comments, the student, in consultation with the dissertation chair, will incorporate the recommended changes into a second draft of the dissertation. When each committee member is satisfied that the draft dissertation is defensible, the dissertation defense may be scheduled.

The student is expected to orally defend the dissertation in an announced public presentation within three years of the official date of being advanced to candidacy. Questions posed to the student are initially limited to the dissertation committee. However, at the discretion of the dissertation chair and when time permits, questions will also be solicited from the attending public audience. The approval of the dissertation requires the approval of the dissertation chair and the approval of a majority of the other members of the committee. A written notice of the dissertation committee's approval will be forwarded to the

program director, and then to the dean of The Graduate College. Specific information on the examination procedure can be found in the School of Criminal Justice Ph.D. Handbook or obtained from the doctoral director.

## Approval and Submission of the Dissertation

Following approval of the dissertation by the members of the dissertation committee, the student must submit one copy of the dissertation and a signed "Thesis/Dissertation Committee Approval form" to the office of The Graduate College for final approval. Specific guidelines for approval and submission of the dissertation can be obtained from The Graduate College.

Doctoral level courses in Criminal Justice: CJ

## Courses Offered Criminal Justice (CJ)

### CJ 7199. Dissertation.

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### CJ 7299. Dissertation.

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### CJ 7301. Instructional Assistant Supervision.

This course prepares doctoral students employed as research or teaching assistants to perform effectively in diverse instructional settings. The course provides for regular and planned opportunities for continuing evaluation of students. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### CJ 7309. Proseminar.

This course introduces students to information that is useful to their success as Ph.D. students and after graduation. Topics include the criminal justice discipline, teaching, publishing, grants and fellowships, writing dissertations, and post-doctoral employment. Emphasis is placed on identifying and coordinating opportunities for research and scholarship among faculty and students. Must have completed 12 hours of doctoral credit in Criminal Justice to enroll in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CJ 7310. Philosophy of Law, Justice, and Social Control.

A current, thorough, and comprehensive review of the criminal justice system focused on how the system functions, and its current needs and future trends. Students submit extensive critiques and participate in panel discussions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CJ 7311. Advanced Criminological Theory.

An overview of the major criminological paradigms is presented focusing on the causes of crime and deviant behavior. The course includes a discussion of criminological theories from a philosophy of science perspective focusing on such issues as theory construction, theoretical integration, and the formal evaluation of theory and policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CJ 7313. Race and Ethnicity in Crime and Criminal Justice.

An exploration of how issues related to racial and ethnic minorities and criminal behaviors impact criminal justice reactions. Topics include racial disparities related to law enforcement and sentencing, and policy implications related to policing, probation, pre-sentencing and post-release issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### CJ 7314. Policing.

This course examines current problems in American policing and the role of research in their examination and solution. Official crime and victimization statistics and measure of police performance are explained, with a focus on their collection, development, limitations, and utility. Methods and issues in policing research are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CJ 7315. Corrections.

This course examines the history, forms, and functions of correctional institutions, their programs and policies, as well as theories of punishment. Topics include the structure and functions of prisons and jails, community corrections, intermediate sanctions, reentry, supermax prisons, and the death penalty.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CJ 7320. Quantitative Research Methods.

A course that demonstrates the practical aspects of conducting criminal justice research that uses quantitative methodologies and design. Topics include the philosophy of science; research ethics; methodological designs in establishing causation; nonexperimental/descriptive research; sampling techniques; secondary data sources and data gathering techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7321. Linear Regression for Criminal Justice Research.**

Instruction on the use of advanced linear modeling techniques in criminal justice research is addressed. After completing this course, students should be able to evaluate quantitative research articles in the major criminal justice journals and be prepared to complete a major quantitative research project of their own.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7322. Advanced Research for Planning and Evaluation.**

An introduction to evaluation and research design methodologies, assessment techniques including modeling and case studies, agency management issues, and on-going policy implications. Course gives students an understanding of the principles and techniques commonly used to evaluate the effectiveness and efficiency of criminal justice interventions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7323. Applied Statistics and Quantitative Data Analysis.**

This is a course in statistics and data analysis for the purposes of original quantitative research. Topics include descriptive statistics, statistical inference for single and multivariable analysis, and principles underlying the techniques. This course makes extensive use of statistics software and data preparation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7330. Qualitative Research Methods.**

A discussion of the methods and techniques used for achieving interpretable qualitative results in social research. Topics covered include ethnography, focus groups, in-depth interviewing and case studies. Students will be trained in inductive reasoning and coordinating qualitative with quantitative methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7331. Law and Behavioral Science.**

A review of the issues addressed in the application of the behavioral sciences to the criminal law system. Topics include criminal sanctions and diminished responsibility, civil commitment, victimology, psychology in the courtroom, the role of media, drugs, and alcohol to violence, and how the justice system reacts to violent offenders.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7336. Survey Research Methods for Criminal Justice.**

This course addresses the procedures and techniques used to create social surveys including question formulation, metrics, and question scaling. Students learn how to prepare face-to-face, telephone, and mail surveys, and are trained in sampling procedures related to survey administration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7350A. Forecasting, Trend Analysis, and Data Interpretation.**

A review of quantitative approaches to public policy analysis, the diverse conceptions of the goals and objectives that should be served by policy, and the appropriate role of the policy analyst. Policy consequences are traced to indirect and subtle incentives and disincentives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350B. Academic Scholarship and Communication.**

A course on conducting academic research, interpreting results and how to prepare manuscripts for publication in refereed journals. Included is a survey of the audiences, topical focus, and submission requirements of the major criminal justice, criminology, and law publications, along with specialized knowledge on achieving success in the scholarship environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350C. Qualitative Data Collection, Coding and Analysis.**

This course takes a structured approach to understanding and implementing the various information collection methods used in qualitative research, including formatting the information for coding, coding schemes, and information interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350E. Discrete Multivariate Models.**

This course focuses on regression models for discrete outcome variables, sometimes called limited or categorical dependent variables. Topics include maximum likelihood estimation, binary and multinomial logistic models and negative binomial models. Prerequisite: CJ 7321 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350F. Environmental Criminology.**

Crime distributes unevenly in space/time. As such, the course examines such questions as (1) What places are dangerous? (2) Why do we study specific crime types? (3) Where do crime types concentrate? (4) Where do offenders go in their normal activities? (5) What are the temporal patterns for crime? Prerequisite: CJ 7311 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350G. Seminar in Macro Criminology.**

This course has a macro focus, examining criminological theory and research that takes cities, geographical regions, states, and nations as the units of comparison. The importance and relevance of macro criminology for understanding the causes of crime and key criminal justice issues, such as police resources, are explored in depth.

Prerequisite: CJ 7311 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350I. Introduction to Structural Equation Modeling.**

The course provides an introduction to structural equation modeling, which is sometimes called mean and covariance structure analysis or latent variable analysis. Topics include recursive and non-recursive models, path analysis, measurement models, and factor analysis.

Prerequisite: CJ 7321 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350K. Criminal Justice Forecasting and Policy Analysis.**

This course examines the inputs and outputs of criminal justice programs. It covers forecasting methods using statistical bootstrapping techniques including line fitting methods, moving averages, cohort propagation matrixes, and systems simulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350L. Sex Offenders: Theory, Research & Policy.**

This course will focus on application of theory to explain sexual offenses, research design issues related to researching this salient population of offenders (e.g., ethical issues, gaining IRB approval, research design limitations, social desirability problems in self-report data, and examining available data sources), and examining policy related issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7360. Independent Study.**

Students will work closely with a particular doctoral faculty member and develop in-depth knowledge in a specific topic area of criminal justice.

Topics vary according to a student's program needs. Repeatable once for credit with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7399. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7599. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7699. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7999. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The School of Criminal Justice and Criminology offers a Master of Science in Criminal Justice (M.S.C.J.) degree with a major in Criminal Justice. The M.S.C.J. degree program has a 36-hour Non-thesis Option, a 30-hour Research Concentration Thesis Option, and a 30-hour Executive Concentration Non-thesis Option. The curriculum for the 36-hour Non-thesis Option provides for a broad overview of criminal justice research and practice, allowing students to develop further knowledge and skills at the graduate level. This program is suitable for those seeking additional training in criminal justice to prepare them for an array of careers within the field. The curriculum for the Research Concentration provides for the development of theoretical, methodological, and analytical skills in order to evaluate and conduct scientific inquiry into the criminological and criminal justice issues. This Research Concentration is a competitive program specifically designed for those seeking to eventually complete a doctoral program and/or careers in research-related fields. The curriculum for the Executive Concentration provides for the development of skills in criminal justice program planning, implementation, and evaluation to ensure a meaningful contribution to this important area of community and human services. This Executive Concentration is also



a competitive program targeted at full-time employed criminal justice professionals, and is completed part-time.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in criminal justice or related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose indicating career aspirations and reasons for pursuing the M.S.C.J. program
- two letters of recommendation from persons best able to assess your ability to succeed in graduate school
- curriculum vitae or resume

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science in Criminal Justice (M.S.C.J.) degree with a major in Criminal Justice (Non-thesis Option) requires 36 semester credit hours. Any student accepted into the M.S.C.J. program may be required to

take undergraduate course work in criminal justice as a prerequisite to graduate course work.

Code	Title	Hours
<b>Required Courses</b>		
CJ 5310	Administration of Justice	3
CJ 5315	Advanced Research Methods in Criminal Justice	3
CJ 5325	Statistics for Criminal Justice	3
CJ 5330	Management Principles in Criminal Justice	3
CJ 5335	Advanced Crime Theory	3
<b>Prescribed Electives</b>		
Choose 21 hours of advisor-approved electives from the following:		21
CJ 5316	Quantitative Data Analysis	
CJ 5319	Crime Analysis	
CJ 5320	History and Philosophy of Justice	
CJ 5321	Current Legal Issues in Criminal Justice	
CJ 5322	Police in Society	
CJ 5323	Special Operation Units	
CJ 5324	Investigations	
CJ 5333	Race, Class, and Crime	
CJ 5334	Sex Offenders and the Criminal Justice System	
CJ 5340	Personnel Practices in Criminal Justice	
CJ 5350	Current Issues in Criminal Justice	
CJ 5355	Intelligence Gathering and Operational Issues As Applied to Terrorism and Counterterrorism Operation	
CJ 5360	Independent Studies in Criminal Justice	
CJ 5380A	Ethics and the Criminal Justice System	
CJ 5380C	Drugs in Society	
CJ 5380L	Geospatial Intelligence and Geographic Profiling	
CJ 5380N	Applied Research Practicum	
CJ 5380Q	Qualitative Research Methods and Data Analysis	
CJ 5380R	Criminal Justice Policy	
CJ 5380S	Criminal Justice Leadership	
CJ 5380T	Crime, Criminal Justice and the Media	
CJ 5390	Criminal Justice and Security Internship	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

All students must pass a comprehensive examination with both a written and an oral component. The purpose of this examination is to provide a structured situation in which the candidate can demonstrate proficiency in the core concepts covered in the program. Students must see the graduate advisor for a detailed description of the comprehensive examination procedures. If a student fails the comprehensive examination, they will be allowed to retake it at the next regularly scheduled examination date. If a student fails a second time, they may petition the MSCJ Steering Committee for permission to take the examination a third time. Students will not be allowed to take an examination more than three times.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.



## Courses Offered

### Criminal Justice (CJ)

#### **CJ 5101. Graduate Assistant Supervision.**

Prepares graduate student teaching and instructional assistants to perform effectively in diverse instructional settings and in their assigned instructional support roles. The course provides for regular and planned opportunities for continuing evaluation of instructional and assistive responsibilities. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **CJ 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **CJ 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **CJ 5301. Graduate Instructional Assistant Training.**

This course prepares graduate instructional assistants (GIAs) to perform effectively in diverse instructional settings and in their assigned instructional support roles. In addition to familiarizing themselves with essential Texas State University policies and procedures, GIAs will learn about teaching strategies, ethical classroom behavior, and effective communication. This course is required as a condition of employment for GIAs at the School of Criminal Justice and Criminology, and does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **CJ 5310. Administration of Justice.**

Introduction to the study of crime; explanations of criminal behavior; typologies of criminal behavior; the criminal justice system; and social reaction to crime and the criminal justice system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CJ 5315. Advanced Research Methods in Criminal Justice.**

The study of scientific research methods as used in the criminal justice system to include a review and critique of research on crime causation, law enforcement, courts, and corrections.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CJ 5316. Quantitative Data Analysis.**

This course provides an introduction to quantitative data analysis in criminal justice and makes extensive use of statistical software via command line interface. For the purposes of research and exploratory data analysis in criminal justice, topics include data construction and cleaning, variable coding, descriptive and inferential statistics, summary measures, and visual presentations of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CJ 5319. Crime Analysis.**

This course focuses on the evaluation, synthesis and dissemination of crime data to multiple audiences. Topics include the identification of local crime trends, the development of usable crime maps, and the assessment of practical police responses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CJ 5320. History and Philosophy of Justice.**

An exploration of historical approaches to social control of nonconforming behavior. The principal contributions of architects and theorists of systems of social justice are examined with emphasis on major Western European schools of thought. Special emphasis given to the development of the scientific method and its role in the contemporary system of justice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CJ 5321. Current Legal Issues in Criminal Justice.**

Case law and legislation, both state and federal, which have contemporary impact on practices and policies of criminal justice agencies will be examined in this course. Topics may vary to include such matters as civil rights liability, substance abuse and the law, juvenile crime, organized crime, tactics of enforcement, unionization, and other legal issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CJ 5322. Police in Society.**

This course provides an in-depth assessment of policing and the various types of community crime control. Core topics include the history of police, organizational and individual police discretion, police culture, use of force, minorities and the police, community oriented policing, and police problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5323. Special Operation Units.**

A course designed to acquaint students with basic principles of Special Operation Units (SOUs) within law enforcement, including the necessity for such units in the changing nature of policing communities. The principles of crisis management, the development of SOUs, selection/training/operationalizing of personnel and other strategic planning issues are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5324. Investigations.**

This course explores issues related to investigations. Topics covered include the history and state of investigations, investigative theory, interviewing, interrogation, polygraph, geographic profiling, serial crimes, and investigative failures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5325. Statistics for Criminal Justice.**

The study of basic and advanced descriptive and inferential statistics, with an emphasis on applications in the criminal justice system will be taught. Focus will be given to various multivariate statistical procedures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5330. Management Principles in Criminal Justice.**

The study of behavior in complex bureaucratic or administrative organizations with an emphasis on organizational behavior, group processes, and the managerial function. Concepts and practices of managing criminal justice agencies within the United States will be stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5333. Race, Class, and Crime.**

This course addresses issues related to racial/ethnic minorities, socioeconomic status, crime trends, perceptions of crime and criminal behaviors. The social/historical constructions of race and class are covered as well as their intersectionality within the criminal justice system. Topics include racial/ethnic and socioeconomic disparities in offending, victimization, law enforcement and sentencing. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CJ 5334. Sex Offenders and the Criminal Justice System.**

This course explores sex offenders and the criminal justice system, and the issues faced by criminal justice professionals. Recent trends in assessment tools, sex offender treatment approaches, and legal responses to sex offenders are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5335. Advanced Crime Theory.**

This course will develop and apply analytical skills surrounding a wide range of theoretical concepts, assumptions, propositions, and variables aimed at explaining crime-related outcomes. In the process, students will learn how social scientists empirically (i.e., quantitatively and qualitatively) access theory and how theory influences public policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5340. Personnel Practices in Criminal Justice.**

The study of personnel decisionmaking within the criminal justice agency. Topics emphasized will include recruitment and selection, promotion, training, performance evaluation, and human resource allocation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5350. Current Issues in Criminal Justice.**

An in-depth presentation and discussion of vital contemporary issues in criminal justice, including research, process, procedure, and substance. General issues addressed remain constant and specific emphasis will vary depending on changes in contemporary issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5355. Intelligence Gathering and Operational Issues As Applied to Terrorism and Counterterrorism Operation.**

This course provides an overview of the importance of intelligence gathering in the global and domestic war of terrorism, and critically examines issues involved with the gathering of intelligence, techniques for the gathering of intelligence, methods of collecting, collating, analyzing and disseminating intelligence, and a review of current terrorist threats.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5360. Independent Studies in Criminal Justice.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of Criminal Justice. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 5370. Professional Paper.**

Students in the non-thesis option will complete their professional paper while enrolled in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5380A. Ethics and the Criminal Justice System.**

This special topics course will explore ethical issues that are faced by criminal justice professionals, basic ethical systems, and applications to dilemmas of criminal justice professionals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380C. Drugs in Society.**

This special topics course will explore issues related to the "War on Drugs." Topics covered include theories of addiction, legal and philosophical issues of government response to drug use, and treatment strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380F. Police Problem-Solving Practicum.**

This course applies contemporary police problem-solving tools and techniques (including SARA, COMPSTAT, crime mapping, intelligence led policing and computer enhanced problem solving) to real world problems with practicum problems derived from situations commonly facing police practitioners such as common law enforcement "problems" such as noise abatement, property offenses and traffic violations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380H. Police Problem Solving Methodologies.**

This course addresses police problem solving methodologies. The course covers the history, state, and theory of police problem solving. Emphasis is placed on using problem solving methodologies to address real issues facing the community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380L. Geospatial Intelligence and Geographic Profiling.**

This course addresses the use of geospatial intelligence and geographic profiling in the military and intelligence environments. The course covers the theory, concepts, methods, and analysis of human geographic information. Emphasis is placed on understanding how geospatial knowledge can inform decision making and action plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380N. Applied Research Practicum.**

This course provides structured assistance to students who are preparing for significant independent research projects (i.e. Thesis, Professional Paper) by exposing them to the organizational tools, processes and techniques used by productive scholars. Ideally, students should expect to complete a viable research prospectus by the end of the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CJ 5380Q. Qualitative Research Methods and Data Analysis.**

This course provides students with a detailed and participatory introduction to the principles and use of common qualitative methods and data analysis used in social science research with a particular focus on the field of criminal justice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380R. Criminal Justice Policy.**

This course covers contemporary public policies designed to prevent and reduce crime and criminal offending. There is also an emphasis on different levels of evaluation that should be used to address specific criminal justice issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380S. Criminal Justice Leadership.**

This course provides an examination and critical analysis of the important theories, concepts, and current issues relevant to the field of public leadership in general, and criminal justice agency leadership in particular.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380T. Crime, Criminal Justice and the Media.**

This course focuses on the relationship between crime, the criminal justice system (CJS), and the media. The role of the media in shaping knowledge about crime- and CJS-related issues is explored in depth, using examples from current events.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5390. Criminal Justice and Security Internship.**

This course provides students with experiential learning opportunities with selected public and private external employers in the fields of criminal justice and security. The internship promotes the integration of academic and professional experience and provides a deeper knowledge of the issues faced by criminal justice agencies, security firms, and other organizations/companies that respond to crime problems. Prerequisite: CJ 5315 and CJ 5325 and CJ 5335 all with grades of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CJ 5399A. Thesis.**

This course represents a student's initial thesis enrollment. Credit is not awarded until student has completed the thesis in Criminal Justice 5399B.

**3 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CJ 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The School of Criminal Justice and Criminology offers a Master of Science in Criminal Justice (M.S.C.J.) degree with a major in Criminal Justice. The M.S.C.J. degree has two concentrations, Research and Executive. Each concentration requires 30 hours; the Research Concentration has a thesis option and a non-thesis option, while the Executive Concentration has a non-thesis option only. The curriculum for the Research Concentration provides for the development of theoretical, methodological, and analytical skills in order to evaluate and conduct scientific inquiry into terminological and criminal justice issues. The curriculum for the Executive Concentration provides for the development of skills in criminal justice program planning, implementation, and

evaluation to ensure a meaningful contribution to this important area of community and human services.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in criminal justice or related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV
- statement of purpose indicating career aspirations and reasons for pursuing the M.S.C.J. program

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science in Criminal Justice (M.S.C.J.) degree with a major in Criminal Justice (Executive Concentration) requires 30 semester credit hours. Any student accepted into the M.S.C.J. program may be required to take undergraduate course work in criminal justice as a prerequisite to graduate course work.

Students will be required to complete a professional quality paper. A committee composed of three graduate faculty members must approve this paper.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CJ 5310	Administration of Justice	3
CJ 5315	Advanced Research Methods in Criminal Justice	3
CJ 5325	Statistics for Criminal Justice	3
CJ 5330	Management Principles in Criminal Justice	3
CJ 5340	Personnel Practices in Criminal Justice	3
<b>Capstone Requirement</b>		
CJ 5370	Professional Paper	3
<b>Prescribed Electives</b>		
Choose 12 hours of advisor-approved electives from the following:		12
CJ 5316	Quantitative Data Analysis	
CJ 5319	Crime Analysis	
CJ 5320	History and Philosophy of Justice	
CJ 5321	Current Legal Issues in Criminal Justice	
CJ 5322	Police in Society	
CJ 5323	Special Operation Units	
CJ 5324	Investigations	
CJ 5333	Race, Class, and Crime	
CJ 5334	Sex Offenders and the Criminal Justice System	
CJ 5335	Advanced Crime Theory	
CJ 5350	Current Issues in Criminal Justice	
CJ 5355	Intelligence Gathering and Operational Issues As Applied to Terrorism and Counterterrorism Operation	
CJ 5360	Independent Studies in Criminal Justice	
CJ 5380A	Ethics and the Criminal Justice System	
CJ 5380C	Drugs in Society	
CJ 5380F	Police Problem-Solving Practicum	
CJ 5380H	Police Problem Solving Methodologies	
CJ 5380L	Geospatial Intelligence and Geographic Profiling	
CJ 5380N	Applied Research Practicum	
CJ 5380Q	Qualitative Research Methods and Data Analysis	
CJ 5380R	Criminal Justice Policy	
CJ 5380S	Criminal Justice Leadership	
CJ 5380T	Crime, Criminal Justice and the Media	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

All students must pass an oral comprehensive examination. The purpose of this examination is to provide a structured situation in which the candidate can demonstrate proficiency in various areas of study. A student must see the graduate advisor for a detailed description of the comprehensive examination procedures. If a student fails the comprehensive examination, they will be allowed to retake it at the next regularly scheduled examination date. If a student fails a second time, they may petition the MSCJ Steering Committee for permission to take the examination a third time. Students will not be allowed to take an examination more than three times.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Criminal Justice: CJ

## Courses Offered

### CJ 5101. Graduate Assistant Supervision.

Prepares graduate student teaching and instructional assistants to perform effectively in diverse instructional settings and in their assigned instructional support roles. The course provides for regular and planned opportunities for continuing evaluation of instructional and assistive responsibilities. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### CJ 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### CJ 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### CJ 5301. Graduate Instructional Assistant Training.

This course prepares graduate instructional assistants (GIAs) to perform effectively in diverse instructional settings and in their assigned instructional support roles. In addition to familiarizing themselves with essential Texas State University policies and procedures, GIAs will learn about teaching strategies, ethical classroom behavior, and effective communication. This course is required as a condition of employment for GIAs at the School of Criminal Justice and Criminology, and does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### CJ 5310. Administration of Justice.

Introduction to the study of crime; explanations of criminal behavior; typologies of criminal behavior; the criminal justice system; and social reaction to crime and the criminal justice system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CJ 5315. Advanced Research Methods in Criminal Justice.**

The study of scientific research methods as used in the criminal justice system to include a review and critique of research on crime causation, law enforcement, courts, and corrections.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5316. Quantitative Data Analysis.**

This course provides an introduction to quantitative data analysis in criminal justice and makes extensive use of statistical software via command line interface. For the purposes of research and exploratory data analysis in criminal justice, topics include data construction and cleaning, variable coding, descriptive and inferential statistics, summary measures, and visual presentations of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5319. Crime Analysis.**

This course focuses on the evaluation, synthesis and dissemination of crime data to multiple audiences. Topics include the identification of local crime trends, the development of usable crime maps, and the assessment of practical police responses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5320. History and Philosophy of Justice.**

An exploration of historical approaches to social control of nonconforming behavior. The principal contributions of architects and theorists of systems of social justice are examined with emphasis on major Western European schools of thought. Special emphasis given to the development of the scientific method and its role in the contemporary system of justice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5321. Current Legal Issues in Criminal Justice.**

Case law and legislation, both state and federal, which have contemporary impact on practices and policies of criminal justice agencies will be examined in this course. Topics may vary to include such matters as civil rights liability, substance abuse and the law, juvenile crime, organized crime, tactics of enforcement, unionization, and other legal issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5322. Police in Society.**

This course provides an in-depth assessment of policing and the various types of community crime control. Core topics include the history of police, organizational and individual police discretion, police culture, use of force, minorities and the police, community oriented policing, and police problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5323. Special Operation Units.**

A course designed to acquaint students with basic principles of Special Operation Units (SOU) within law enforcement, including the necessity for such units in the changing nature of policing communities. The principles of crisis management, the development of SOUs, selection/training/operationalizing of personnel and other strategic planning issues are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5324. Investigations.**

This course explores issues related to investigations. Topics covered include the history and state of investigations, investigative theory, interviewing, interrogation, polygraph, geographic profiling, serial crimes, and investigative failures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5325. Statistics for Criminal Justice.**

The study of basic and advanced descriptive and inferential statistics, with an emphasis on applications in the criminal justice system will be taught. Focus will be given to various multivariate statistical procedures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5330. Management Principles in Criminal Justice.**

The study of behavior in complex bureaucratic or administrative organizations with an emphasis on organizational behavior, group processes, and the managerial function. Concepts and practices of managing criminal justice agencies within the United States will be stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5333. Race, Class, and Crime.**

This course addresses issues related to racial/ethnic minorities, socioeconomic status, crime trends, perceptions of crime and criminal behaviors. The social/historical constructions of race and class are covered as well as their intersectionality within the criminal justice system. Topics include racial/ethnic and socioeconomic disparities in offending, victimization, law enforcement and sentencing. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CJ 5334. Sex Offenders and the Criminal Justice System.**

This course explores sex offenders and the criminal justice system, and the issues faced by criminal justice professionals. Recent trends in assessment tools, sex offender treatment approaches, and legal responses to sex offenders are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5335. Advanced Crime Theory.**

This course will develop and apply analytical skills surrounding a wide range of theoretical concepts, assumptions, propositions, and variables aimed at explaining crime-related outcomes. In the process, students will learn how social scientists empirically (i.e., quantitatively and qualitatively) access theory and how theory influences public policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5340. Personnel Practices in Criminal Justice.**

The study of personnel decisionmaking within the criminal justice agency. Topics emphasized will include recruitment and selection, promotion, training, performance evaluation, and human resource allocation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5350. Current Issues in Criminal Justice.**

An in-depth presentation and discussion of vital contemporary issues in criminal justice, including research, process, procedure, and substance. General issues addressed remain constant and specific emphasis will vary depending on changes in contemporary issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5355. Intelligence Gathering and Operational Issues As Applied to Terrorism and Counterterrorism Operation.**

This course provides an overview of the importance of intelligence gathering in the global and domestic war of terrorism, and critically examines issues involved with the gathering of intelligence, techniques for the gathering of intelligence, methods of collecting, collating, analyzing and disseminating intelligence, and a review of current terrorist threats.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5360. Independent Studies in Criminal Justice.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of Criminal Justice. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 5370. Professional Paper.**

Students in the non-thesis option will complete their professional paper while enrolled in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5380A. Ethics and the Criminal Justice System.**

This special topics course will explore ethical issues that are faced by criminal justice professionals, basic ethical systems, and applications to dilemmas of criminal justice professionals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380C. Drugs in Society.**

This special topics course will explore issues related to the "War on Drugs." Topics covered include theories of addiction, legal and philosophical issues of government response to drug use, and treatment strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380F. Police Problem-Solving Practicum.**

This course applies contemporary police problem-solving tools and techniques (including SARA, COMPSTAT, crime mapping, intelligence led policing and computer enhanced problem solving) to real world problems with practicum problems derived from situations commonly facing police practitioners such as common law enforcement "problems" such as noise abatement, property offenses and traffic violations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380H. Police Problem Solving Methodologies.**

This course addresses police problem solving methodologies. The course covers the history, state, and theory of police problem solving. Emphasis is placed on using problem solving methodologies to address real issues facing the community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380L. Geospatial Intelligence and Geographic Profiling.**

This course addresses the use of geospatial intelligence and geographic profiling in the military and intelligence environments. The course covers the theory, concepts, methods, and analysis of human geographic information. Emphasis is placed on understanding how geospatial knowledge can inform decision making and action plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380N. Applied Research Practicum.**

This course provides structured assistance to students who are preparing for significant independent research projects (i.e. Thesis, Professional Paper) by exposing them to the organizational tools, processes and techniques used by productive scholars. Ideally, students should expect to complete a viable research prospectus by the end of the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CJ 5380Q. Qualitative Research Methods and Data Analysis.**

This course provides students with a detailed and participatory introduction to the principles and use of common qualitative methods and data analysis used in social science research with a particular focus on the field of criminal justice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380R. Criminal Justice Policy.**

This course covers contemporary public policies designed to prevent and reduce crime and criminal offending. There is also an emphasis on different levels of evaluation that should be used to address specific criminal justice issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380S. Criminal Justice Leadership.**

This course provides an examination and critical analysis of the important theories, concepts, and current issues relevant to the field of public leadership in general, and criminal justice agency leadership in particular.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380T. Crime, Criminal Justice and the Media.**

This course focuses on the relationship between crime, the criminal justice system (CJS), and the media. The role of the media in shaping knowledge about crime- and CJS-related issues is explored in depth, using examples from current events.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5390. Criminal Justice and Security Internship.**

This course provides students with experiential learning opportunities with selected public and private external employers in the fields of criminal justice and security. The internship promotes the integration of academic and professional experience and provides a deeper knowledge of the issues faced by criminal justice agencies, security firms, and other organizations/companies that respond to crime problems. Prerequisite: CJ 5315 and CJ 5325 and CJ 5335 all with grades of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CJ 5399A. Thesis.**

This course represents a student's initial thesis enrollment. Credit is not awarded until student has completed the thesis in Criminal Justice 5399B.

**3 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CJ 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The School of Criminal Justice and Criminology offers a Master of Science in Criminal Justice (M.S.C.J.) degree with a major in Criminal Justice. The curriculum provides for the development of skills in criminal justice program planning, implementation, and evaluation to ensure a meaningful contribution to this important area of community and human services.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes

to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in criminal justice or related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose indicating research interests and career aspirations
- two letters of recommendation from persons best able to assess your ability to succeed in graduate school
- curriculum vitae or resume

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science in Criminal Justice (M.S.C.J.) degree with a major in Criminal Justice (Research Concentration) requires 30 semester credit hours, including a thesis. Any student accepted into the M.S.C.J. program may be required to take undergraduate course work in criminal justice as a prerequisite to graduate course work.

Students will be required to complete a thesis; a committee composed of three graduate faculty must approve the thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CJ 5310	Administration of Justice	3
CJ 5315	Advanced Research Methods in Criminal Justice	3
CJ 5316	Quantitative Data Analysis	3
CJ 5325	Statistics for Criminal Justice	3
CJ 5335	Advanced Crime Theory	3
<b>Prescribed Electives</b>		
Choose 9 hours of advisor-approved electives from the following:		9
CJ 5319	Crime Analysis	
CJ 5320	History and Philosophy of Justice	
CJ 5321	Current Legal Issues in Criminal Justice	
CJ 5322	Police in Society	
CJ 5323	Special Operation Units	
CJ 5324	Investigations	
CJ 5330	Management Principles in Criminal Justice	
CJ 5333	Race, Class, and Crime	
CJ 5334	Sex Offenders and the Criminal Justice System	
CJ 5340	Personnel Practices in Criminal Justice	
CJ 5355	Intelligence Gathering and Operational Issues As Applied to Terrorism and Counterterrorism Operation	
CJ 5350	Current Issues in Criminal Justice	
CJ 5360	Independent Studies in Criminal Justice	
CJ 5380A	Ethics and the Criminal Justice System	
CJ 5380C	Drugs in Society	
CJ 5380L	Geospatial Intelligence and Geographic Profiling	
CJ 5380N	Applied Research Practicum	
CJ 5380Q	Qualitative Research Methods and Data Analysis	
CJ 5380R	Criminal Justice Policy	
CJ 5380S	Criminal Justice Leadership	
CJ 5380T	Crime, Criminal Justice and the Media	
CJ 5390	Criminal Justice and Security Internship	
<b>Thesis</b>		
CJ 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
CJ 5199B	Thesis	
CJ 5299B	Thesis	
CJ 5399B	Thesis	
CJ 5599B	Thesis	
CJ 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

All students must pass an oral comprehensive [examination](#) to show they have mastered the main concepts covered in the program. Immediately following their thesis oral defense, MSCJ Research Concentration students will undertake an oral examination where they will be asked to discuss basic concepts relating to research methods and the administration of justice. [Students](#) must see the graduate advisor for a detailed description of the comprehensive examination procedures. If a student fails the comprehensive examination, they will be allowed to

retake it at the next regularly scheduled examination date. If a student fails a second time, they may petition the MSCJ Steering Committee for permission to take the examination a third time. Students will not be allowed to take an examination more than three times.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B

course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival



quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Criminal Justice: CJ

## Courses Offered

### **CJ 5101. Graduate Assistant Supervision.**

Prepares graduate student teaching and instructional assistants to perform effectively in diverse instructional settings and in their assigned instructional support roles. The course provides for regular and planned opportunities for continuing evaluation of instructional and assistive responsibilities. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### **CJ 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **CJ 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **CJ 5301. Graduate Instructional Assistant Training.**

This course prepares graduate instructional assistants (GIAs) to perform effectively in diverse instructional settings and in their assigned instructional support roles. In addition to familiarizing themselves with essential Texas State University policies and procedures, GIAs will learn about teaching strategies, ethical classroom behavior, and effective communication. This course is required as a condition of employment for GIAs at the School of Criminal Justice and Criminology, and does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### **CJ 5310. Administration of Justice.**

Introduction to the study of crime; explanations of criminal behavior; typologies of criminal behavior; the criminal justice system; and social reaction to crime and the criminal justice system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CJ 5315. Advanced Research Methods in Criminal Justice.**

The study of scientific research methods as used in the criminal justice system to include a review and critique of research on crime causation, law enforcement, courts, and corrections.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CJ 5316. Quantitative Data Analysis.**

This course provides an introduction to quantitative data analysis in criminal justice and makes extensive use of statistical software via command line interface. For the purposes of research and exploratory data analysis in criminal justice, topics include data construction and cleaning, variable coding, descriptive and inferential statistics, summary measures, and visual presentations of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CJ 5319. Crime Analysis.**

This course focuses on the evaluation, synthesis and dissemination of crime data to multiple audiences. Topics include the identification of local crime trends, the development of usable crime maps, and the assessment of practical police responses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CJ 5320. History and Philosophy of Justice.**

An exploration of historical approaches to social control of nonconforming behavior. The principal contributions of architects and theorists of systems of social justice are examined with emphasis on major Western European schools of thought. Special emphasis given to the development of the scientific method and its role in the contemporary system of justice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CJ 5321. Current Legal Issues in Criminal Justice.**

Case law and legislation, both state and federal, which have contemporary impact on practices and policies of criminal justice agencies will be examined in this course. Topics may vary to include such matters as civil rights liability, substance abuse and the law, juvenile crime, organized crime, tactics of enforcement, unionization, and other legal issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CJ 5322. Police in Society.**

This course provides an in-depth assessment of policing and the various types of community crime control. Core topics include the history of police, organizational and individual police discretion, police culture, use of force, minorities and the police, community oriented policing, and police problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5323. Special Operation Units.**

A course designed to acquaint students with basic principles of Special Operation Units (SOUs) within law enforcement, including the necessity for such units in the changing nature of policing communities. The principles of crisis management, the development of SOUs, selection/training/operationalizing of personnel and other strategic planning issues are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5324. Investigations.**

This course explores issues related to investigations. Topics covered include the history and state of investigations, investigative theory, interviewing, interrogation, polygraph, geographic profiling, serial crimes, and investigative failures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5325. Statistics for Criminal Justice.**

The study of basic and advanced descriptive and inferential statistics, with an emphasis on applications in the criminal justice system will be taught. Focus will be given to various multivariate statistical procedures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5330. Management Principles in Criminal Justice.**

The study of behavior in complex bureaucratic or administrative organizations with an emphasis on organizational behavior, group processes, and the managerial function. Concepts and practices of managing criminal justice agencies within the United States will be stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5333. Race, Class, and Crime.**

This course addresses issues related to racial/ethnic minorities, socioeconomic status, crime trends, perceptions of crime and criminal behaviors. The social/historical constructions of race and class are covered as well as their intersectionality within the criminal justice system. Topics include racial/ethnic and socioeconomic disparities in offending, victimization, law enforcement and sentencing. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CJ 5334. Sex Offenders and the Criminal Justice System.**

This course explores sex offenders and the criminal justice system, and the issues faced by criminal justice professionals. Recent trends in assessment tools, sex offender treatment approaches, and legal responses to sex offenders are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5335. Advanced Crime Theory.**

This course will develop and apply analytical skills surrounding a wide range of theoretical concepts, assumptions, propositions, and variables aimed at explaining crime-related outcomes. In the process, students will learn how social scientists empirically (i.e., quantitatively and qualitatively) access theory and how theory influences public policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5340. Personnel Practices in Criminal Justice.**

The study of personnel decisionmaking within the criminal justice agency. Topics emphasized will include recruitment and selection, promotion, training, performance evaluation, and human resource allocation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5350. Current Issues in Criminal Justice.**

An in-depth presentation and discussion of vital contemporary issues in criminal justice, including research, process, procedure, and substance. General issues addressed remain constant and specific emphasis will vary depending on changes in contemporary issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5355. Intelligence Gathering and Operational Issues As Applied to Terrorism and Counterterrorism Operation.**

This course provides an overview of the importance of intelligence gathering in the global and domestic war of terrorism, and critically examines issues involved with the gathering of intelligence, techniques for the gathering of intelligence, methods of collecting, collating, analyzing and disseminating intelligence, and a review of current terrorist threats.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5360. Independent Studies in Criminal Justice.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of Criminal Justice. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 5370. Professional Paper.**

Students in the non-thesis option will complete their professional paper while enrolled in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5380A. Ethics and the Criminal Justice System.**

This special topics course will explore ethical issues that are faced by criminal justice professionals, basic ethical systems, and applications to dilemmas of criminal justice professionals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380C. Drugs in Society.**

This special topics course will explore issues related to the "War on Drugs." Topics covered include theories of addiction, legal and philosophical issues of government response to drug use, and treatment strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380F. Police Problem-Solving Practicum.**

This course applies contemporary police problem-solving tools and techniques (including SARA, COMPSTAT, crime mapping, intelligence led policing and computer enhanced problem solving) to real world problems with practicum problems derived from situations commonly facing police practitioners such as common law enforcement "problems" such as noise abatement, property offenses and traffic violations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380H. Police Problem Solving Methodologies.**

This course addresses police problem solving methodologies. The course covers the history, state, and theory of police problem solving. Emphasis is placed on using problem solving methodologies to address real issues facing the community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380L. Geospatial Intelligence and Geographic Profiling.**

This course addresses the use of geospatial intelligence and geographic profiling in the military and intelligence environments. The course covers the theory, concepts, methods, and analysis of human geographic information. Emphasis is placed on understanding how geospatial knowledge can inform decision making and action plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380N. Applied Research Practicum.**

This course provides structured assistance to students who are preparing for significant independent research projects (i.e. Thesis, Professional Paper) by exposing them to the organizational tools, processes and techniques used by productive scholars. Ideally, students should expect to complete a viable research prospectus by the end of the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CJ 5380Q. Qualitative Research Methods and Data Analysis.**

This course provides students with a detailed and participatory introduction to the principles and use of common qualitative methods and data analysis used in social science research with a particular focus on the field of criminal justice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380R. Criminal Justice Policy.**

This course covers contemporary public policies designed to prevent and reduce crime and criminal offending. There is also an emphasis on different levels of evaluation that should be used to address specific criminal justice issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380S. Criminal Justice Leadership.**

This course provides an examination and critical analysis of the important theories, concepts, and current issues relevant to the field of public leadership in general, and criminal justice agency leadership in particular.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380T. Crime, Criminal Justice and the Media.**

This course focuses on the relationship between crime, the criminal justice system (CJS), and the media. The role of the media in shaping knowledge about crime- and CJS-related issues is explored in depth, using examples from current events.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5390. Criminal Justice and Security Internship.**

This course provides students with experiential learning opportunities with selected public and private external employers in the fields of criminal justice and security. The internship promotes the integration of academic and professional experience and provides a deeper knowledge of the issues faced by criminal justice agencies, security firms, and other organizations/companies that respond to crime problems. Prerequisite: CJ 5315 and CJ 5325 and CJ 5335 all with grades of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CJ 5399A. Thesis.**

This course represents a student's initial thesis enrollment. Credit is not awarded until student has completed the thesis in Criminal Justice 5399B.

**3 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CJ 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

The graduate minor in Criminal Justice requires 9 semester credit hours.

Code	Title	Hours
<b>Required Course</b>		
CJ 5310	Administration of Justice	3
<b>Elective</b>		
Choose 6 hours of advisor-approved electives		6
<b>Total Hours</b>		<b>9</b>

Family and Consumer Sciences Building Room 101  
Telephone: 512-245-2155 Fax: 512-245-3829  
<http://www.fcs.txstate.edu/>

## Mission

Inspire, create, and educate to strengthen communities and elevate the human condition.

The School of Family and Consumer Sciences includes three master's degree programs: M.S. in Human Development and Family Sciences, M. S. in Human Nutrition, and M. S. in Merchandising and Consumer Studies.

The **Human Development and Family Sciences program** offers a flexible model of graduate experiences that allows students to develop individualized degree plans based on career goals. Faculty mentors provide students opportunities to engage in research and career-enhancing projects in support students' academic and career development. Students receive advanced education experiences in the content areas of human and family development, cultural diversity, program administration and evaluation, research methodology, statistics, theories, and current issues impacting families and children. The Child Life concentration also provides advanced educational experiences relevant to becoming a Certified Child Life Specialist.

The **Human Nutrition program** is student-centered and research focused. The program provides a challenging and current curriculum that spans from molecular to community-based nutrition. Nutrition faculty, engaged in cutting-edge research, encourage students to participate in research through a variety of avenues, ranging from volunteering on projects to completing thesis work. While addressing foundational nutrition knowledge, courses also include experiential and service learning opportunities that allow students to gain real-world and relevant nutrition and dietetics competencies. Eligible students can apply to complete their Dietetic Internship as part of the program, making this option both time and cost efficient.

## Master of Science (M.S.)

- Major in Human Development and Family Sciences (Child Life Specialist Concentration Non-thesis Option) (p. 850)
- Major in Human Development and Family Sciences (Child Life Specialist Concentration Thesis Option) (p. 855)
- Major in Human Development and Family Sciences (Non-Thesis Option) (p. 861)
- Major in Human Development and Family Sciences (Thesis Option) (p. 865)
- Major in Human Nutrition (Non-thesis Option) (p. 871)
- Major in Human Nutrition (Thesis Option) (p. 874)
- Major in Merchandising and Consumer Studies (Non-thesis Option) (p. 878)
- Major in Merchandising and Consumer Studies (Thesis Option) (p. 880)

## Program Overview

The graduate program provides students with the knowledge and expertise to attain professional positions and advancement opportunities in programs serving families and children.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://>

www.gradcollege.txstate.edu). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work
- official GRE (general test only) required with competitive scores in the verbal reasoning and quantitative reasoning sections
- resume/CV
- statement of purpose (approximately 500 words)
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Human Development and Family Sciences concentration in Child Life Specialist requires 37 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
HDFS 5100	Introduction to Human Development and Family Sciences	1
HDFS 5341	Advanced Child Development	3
HDFS 5350	Research Design and Methods in Human Development and Family Sciences	3

HDFS 5351	Advanced Theory in Human Development and Family Sciences	3
HDFS 5352	Issues in Human Development and Family Sciences	3
<b>Concentration</b>		
HDFS 5305	Foundations of Play	3
HDFS 5343	Child Life Specialist	3
HDFS 5659	Internship in Child Life <sup>1</sup>	6
<b>Prescribed Electives</b>		
Choose 12 hours from the following:		12
HDFS 5340	Advanced Cultural Diversity of Families	
HDFS 5347	Grief and Bereavement in Children, Adolescents, and Parents	
HDFS 5348	Pain and Anxiety Management for Children	
HDFS 5353	Program Evaluation in Human Development and Family Sciences	
HDFS 5356	Advanced Program Administration	
HDFS 5357	Comparative Studies in Child Development	
HDFS 5358	Practicum in Human Development and Family Sciences I	
SOCI 5323	Grant Writing for the Social Sciences	
SOCI 5363	Seminar in Medical Sociology	
SOWK 5323	Advanced Social Work Research	
<b>Total Hours</b>		<b>37</b>

<sup>1</sup> The child life internship is a full-time, non-paid internship required by the Child Life Council. It should be completed in the final year of the master's program. Child life internships are extremely competitive in nature and interns are selected by the individual hospitals. Therefore, internships are not guaranteed. Also, due to the competitive nature of internships, it might be necessary to apply to hospitals outside of the Central Texas area.

## Comprehensive Examination Requirement

Students pursuing the non-thesis option will be required to complete a written exam consisting of objective and essay questions that cover the core content areas required for their particular track. As a result, the comprehensive exam should be taken after the student has completed 18 hours of graduate degree credit AND his/her core coursework over which the student will be examined (with a GPA of at least 3.0 and earn a B or better in the core course work). Students must sit for all four exams on their first attempt. After the first attempt students will only be required to sit for the exams which they have not passed.

The comprehensive exam will be held on the first Friday of March, June, and September on campus at a time and location to be determined. Students planning to take the exam must sign up online through the google link located on the "Current students" page. Students will be given one hour to complete each section. There are a total of four sections.

Comprehensive exam questions are evaluated on both the quality and content of the response. Two faculty members evaluate the student's response to each comprehensive exam question. If there is disagreement regarding whether a response is acceptable, a third reader will read the response and make a final evaluation decision. The evaluation decision



for each section is made independently of the other sections and can be as follows:

• P=Pass all components of the exam.

• CP=Conditional pass (At the discretion of the graduate faculty, the student must write a paper related to the content area that received a CP and/or orally defend his/her response; faculty determine whether the student writes a paper or orally defends his/her response).

• F=Fail (student who fails three or more sections of the exam must retake all four sections of the exam the following semester). Students can "retake" the exam only twice for a total of three attempts. If the student does not pass one or more sections on the third attempt, the student must re-take relevant coursework and pass with a B or better. The student must then petition the program graduate faculty and request to take an oral exam for the final attempt. It is at the discretion of the graduate faculty whether the petition will be granted. If the petition is granted, the oral exam will take place with a format as well as at a time and place to be determined. The student can only pass or fail the oral comprehensive exam. Students will not graduate from the program without passing all sections of the comprehensive exam.

Students must complete the comprehensive exam within five years of beginning the graduate program.

Master's level courses in Family and Child Studies: FCS (p. 852), HDFS (p. 853)

## Family and Child Studies (FCS)

### FCS 5101. Graduate Assistant Development.

This course is required as a condition of employment for graduate teaching and instructional assistants. This course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable up to 3 times.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### FCS 5301. Graduate Assistant Development.

This course is required as a condition of employment for graduate teaching and instructional assistants. It provides information about the educational needs of Texas State University's diverse student body. It also identifies educational strategies and campus resources that support the learning of undergraduate students. This course does not earn graduate degree credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA|Multicultural Content

**Grade Mode:** Leveling/Assistantships

### FCS 5302H. Sustainable Consumer Economy.

This course is a in-depth study of the role of consumption in the development of sustainable systems including the family, natural resources and economics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

### FCS 5302J. Statistics and Data Analysis for Family and Consumer Sciences.

This is a graduate level course covering statistical techniques commonly used in the field of family and consumer sciences. Topics include descriptive statistics, Chi-Square analysis, analysis of variance and covariance, simple and multiple linear regression, logistic regression, and use of statistical software. Data analysis to support decision-making is emphasized. Restricted to students in one of the graduate FCS programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

### FCS 5302S. Sustainable Textiles.

This course is an in-depth study of the relationship of fibers, fabrics, finishes and textile products end-uses with a particular focus on their impact on sustainability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

### FCS 5305. Sustainable Housing.

This course is an in-depth study of the relationship between housing and sustainability with a particular focus on the role of materials, technology, policy and human factors in fostering healthy social, economic and natural systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### FCS 5307. Sustainable Lighting.

This course focuses on understanding the elements and principles of sustainable lighting and explains how it meets the qualitative needs of the visual environment with the least impact on the natural environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### FCS 5310. Research Methods in FCS.

This course will cover the evaluation of concepts, methods, and strategies for research in the disciplines of family and consumer sciences. The course will focus on the nature and ethics of scientific research, including design, sampling, measurement, and data collection. Restricted to graduate level majors in the School of Family and Consumer Sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5311. Statistics and Data Analysis for Family and Consumer Sciences.**

This is a graduate level course covering statistical techniques commonly used in the field of family and consumer sciences. Topics include descriptive statistics, chi-square analysis, analysis of variance and covariance, simple and multiple linear regression, logistic regression, and use of statistical software. Data analysis to support decision-making is emphasized. Restricted to graduate students in FCS.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5340. International Study in Family and Consumer Sciences.**

Study of Family and Consumer Sciences topics in international settings. Emphasis will be placed on an analysis of cultural differences and similarities and their application within FCS professions. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**Human Development and Family Sciences (HDFS)****HDFS 5100. Introduction to Human Development and Family Sciences.**

This course focuses on gaining information and competencies important to graduate study success. It includes academic expectations for graduate students, as well as information related to the Human Development and Family Sciences graduate program.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5302A. Social Cognitive Development in Childhood and Adolescence.**

This course addresses foundations and theories of social cognitive development of children and adolescence. Current research on social cognitive development is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 5302B. Advanced Adolescent Development.**

This course focuses on theoretical analysis and current research of adolescent development. Topics may include developmental transitions, contexts, and issues in diverse adolescents in the contemporary society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 5302C. Administration and Evaluation of Family and Child Service Programs.**

This course focuses on the management and effectiveness of diverse family and child service programs. This course will include the following topics: management strategies, leadership skills, cultural responsiveness, program evaluation strategies and methods, fiscal management, and ethics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 5305. Foundations of Play.**

This course analyzes foundations and theories of play as it relates to the development of children. Course content includes medical play, play therapy, music therapy, art therapy, and animal therapy as they are applied in professional settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5340. Advanced Cultural Diversity of Families.**

This course focuses on cultural diversity with an emphasis on contemporary, culturally relevant responses to societal trends. Topics include a critical analysis of cultural competency, multiculturalism, and the strategies implemented to successfully engage in meaningful interactions at the community level. The course incorporates family science research methods to explore topics including family structure and function, family life patterns, multicultural groups, and agents of acculturation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Co-requisite(s):** MULT 5340

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HDFS 5341. Advanced Child Development.**

This course focuses on the developmental processes and influences from conception through adolescence and emphasizes the interactive relationship of biological and environmental factors in the total development of the child.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5343. Child Life Specialist.**

This course introduces students to the scope of Child Life practice, the impact of illness and injury on children and families, patient experience, family centered care, therapeutic play and psychological preparation for treatment and healthcare interventions. The course focuses on theoretical and evidence-based practices used in Child Life practice when interacting with children and families in a variety of healthcare settings.

This courses includes content necessary for pursuing application to Child Life Internships and the National Child Life Certification Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5344. Infant and Early Childhood Mental Health.**

This course provides an interdisciplinary understanding of the social and emotional development of infants and young children within the context of the family. Focus is on the role of the infant mental health specialist in strengthening the development of young children and the parent-child relationship.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5347. Grief and Bereavement in Children, Adolescents, and Parents.**

This course focuses on grief and bereavement throughout the life cycle. Topics include a historical overview of the theoretical models on grief and bereavement, influences on grief and bereavement responses, and current perspectives on helping the bereaved cope. Students analyze grief and bereavement implications for child life specialists.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5348. Pain and Anxiety Management for Children.**

This course provides child life students with theoretical foundations and applied non-pharmacological strategies for assessing children's pain and anxiety and assisting them with alleviation during healthcare experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5350. Research Design and Methods in Human Development and Family Sciences.**

This course includes evaluation of research concepts, methods, and strategies in human development and family sciences. The topics focus on the nature of scientific research, sampling, measurement, data collection, types of socio-behavioral research, data analysis, and evaluation of research reports.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5351. Advanced Theory in Human Development and Family Sciences.**

This course includes a critical evaluation of theoretical concepts and current research in human development and family sciences. Recent trends in family and developmental theories are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5352. Issues in Human Development and Family Sciences.**

This course examines current issues in human development and family sciences from conceptual, methodological, and multi-disciplinary perspectives. Emphasis is on current research and theories, and their application.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HDFS 5353. Program Evaluation in Human Development and Family Sciences.**

This course focuses on the diversity and effectiveness of family and child services programs at the federal, state, and community levels. Program evaluation strategies and measures, fiscal management, and grant writing are included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5355. Advanced Independent Study.**

This course provides opportunity for individual work on problems related to student's primary area of specialization. Work consists of empirical research or critical reviews and integration of existing literature. Course may be repeated once for credit when topics vary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HDFS 5356. Advanced Program Administration.**

This course focuses on human services organizations. Management theory and strategies, strategic planning, program development and implementation, personnel management, and public policy are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5357. Comparative Studies in Child Development.**

This course focuses on the study of cultural values and beliefs and the reflection of these in child development practices. The interactive influence of culture and global policies is addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5358. Practicum in Human Development and Family Sciences I.**

This course provides opportunity for structured practical experience in human development and family sciences programs. Supervision is provided by a member of the graduate faculty and a designated individual at the work site. Focus is on experiential learning.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5359. Practicum in Human Development and Family Sciences II.**

This course provides a continued practical experience in human development and family sciences programs. Supervision is provided by a member of the graduate faculty and a designated individual at the work site. A research report is integrated with practical application.

Prerequisite: FCD 5358 or HDFS 5358 either with a grade of "CR".

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. Focus is on identification of thesis topic, review of literature, and research design. No thesis credit is awarded until a student has completed the thesis in Human Development and Family Sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5659. Internship in Child Life.**

This course is a structured hospital experience for individuals who plan to pursue a career in child life. Students are provided the opportunity to work in a hospital setting under the direction of a certified child life specialist. Successful completion of this course is required for all applicants pursuing application to Child Life Internships and the National Child Life Certification Exam.

**6 Credit Hours. 0 Lecture Contact Hours. 38 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5660. Advanced Practicum.**

This course is a structured field experience for individuals who plan to pursue a career in the field of human development and family sciences. Students are provided the opportunity to work in a community setting such as a nonprofit organization, government agency, or healthcare setting. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The graduate program provides students with the knowledge and expertise to attain professional positions and advancement opportunities in programs serving families and children.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work
- official GRE (general test only) required with competitive scores in the verbal reasoning and quantitative reasoning sections
- resume/CV
- statement of purpose (approximately 500 words)
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Human Development and Family Sciences concentration in Child Life Specialist requires 37 semester credit hours, including a thesis. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
FCS 5311	Statistics and Data Analysis for Family and Consumer Sciences	3
HDFS 5100	Introduction to Human Development and Family Sciences	1
HDFS 5341	Advanced Child Development	3
HDFS 5350	Research Design and Methods in Human Development and Family Sciences	3
HDFS 5351	Advanced Theory in Human Development and Family Sciences	3
HDFS 5352	Issues in Human Development and Family Sciences	3
<b>Concentration</b>		
HDFS 5305	Foundations of Play	3
HDFS 5343	Child Life Specialist	3
HDFS 5659	Internship in Child Life <sup>1</sup>	6
<b>Prescribed Electives</b>		
Choose 3 hours from the following:		3
HDFS 5340	Advanced Cultural Diversity of Families	

HDFS 5347	Grief and Bereavement in Children, Adolescents, and Parents	
HDFS 5348	Pain and Anxiety Management for Children	
HDFS 5353	Program Evaluation in Human Development and Family Sciences	
HDFS 5355	Advanced Independent Study	
HDFS 5356	Advanced Program Administration	
HDFS 5357	Comparative Studies in Child Development	
HDFS 5358	Practicum in Human Development and Family Sciences I	
SOCI 5323	Grant Writing for the Social Sciences	
SOCI 5363	Seminar in Medical Sociology	
SOWK 5323	Advanced Social Work Research	
<b>Thesis</b>		
HDFS 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
HDFS 5199B	Thesis	
HDFS 5299B	Thesis	
HDFS 5399B	Thesis	
HDFS 5599B	Thesis	
HDFS 5999B	Thesis	
<b>Total Hours</b>		<b>37</b>

<sup>1</sup> The child life internship is a full-time, non-paid internship required by the Child Life Council. It should be completed in the final year of the master's program. Child life internships are extremely competitive in nature and interns are selected by the individual hospitals. Therefore, internships are not guaranteed. Also, due to the competitive nature of internships, it might be necessary to apply to hospitals outside of the Central Texas area.

## Comprehensive Examination Requirement

Students pursuing the thesis option will write and defend their thesis. Students who do not successfully defend their thesis will have two additional opportunities to defend.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis



Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The

completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Family and Child Studies: FCS (p. 857), HDFS (p. 858)

### Family and Child Studies (FCS)

#### **FCS 5101. Graduate Assistant Development.**

This course is required as a condition of employment for graduate teaching and instructional assistants. This course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable up to 3 times.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

**FCS 5301. Graduate Assistant Development.**

This course is required as a condition of employment for graduate teaching and instructional assistants. It provides information about the educational needs of Texas State University's diverse student body. It also identifies educational strategies and campus resources that support the learning of undergraduate students. This course does not earn graduate degree credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA|Multicultural Content

**Grade Mode:** Leveling/Assistantships

**FCS 5302H. Sustainable Consumer Economy.**

This course is a in-depth study of the role of consumption in the development of sustainable systems including the family, natural resources and economics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FCS 5302J. Statistics and Data Analysis for Family and Consumer Sciences.**

This is a graduate level course covering statistical techniques commonly used in the field of family and consumer sciences. Topics include descriptive statistics, Chi-Square analysis, analysis of variance and covariance, simple and multiple linear regression, logistic regression, and use of statistical software. Data analysis to support decision-making is emphasized. Restricted to students in one of the graduate FCS programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FCS 5302S. Sustainable Textiles.**

This course is an in-depth study of the relationship of fibers, fabrics, finishes and textile products end-uses with a particular focus on their impact on sustainability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FCS 5305. Sustainable Housing.**

This course is an in-depth study of the relationship between housing and sustainability with a particular focus on the role of materials, technology, policy and human factors in fostering healthy social, economic and natural systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5307. Sustainable Lighting.**

This course focuses on understanding the elements and principles of sustainable lighting and explains how it meets the qualitative needs of the visual environment with the least impact on the natural environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5310. Research Methods in FCS.**

This course will cover the evaluation of concepts, methods, and strategies for research in the disciplines of family and consumer sciences. The course will focus on the nature and ethics of scientific research, including design, sampling, measurement, and data collection. Restricted to graduate level majors in the School of Family and Consumer Sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5311. Statistics and Data Analysis for Family and Consumer Sciences.**

This is a graduate level course covering statistical techniques commonly used in the field of family and consumer sciences. Topics include descriptive statistics, chi-square analysis, analysis of variance and covariance, simple and multiple linear regression, logistic regression, and use of statistical software. Data analysis to support decision-making is emphasized. Restricted to graduate students in FCS.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5340. International Study in Family and Consumer Sciences.**

Study of Family and Consumer Sciences topics in international settings. Emphasis will be placed on an analysis of cultural differences and similarities and their application within FCS professions. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**Human Development and Family Sciences (HDFS)****HDFS 5100. Introduction to Human Development and Family Sciences.**

This course focuses on gaining information and competencies important to graduate study success. It includes academic expectations for graduate students, as well as information related to the Human Development and Family Sciences graduate program.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5302A. Social Cognitive Development in Childhood and Adolescence.**

This course addresses foundations and theories of social cognitive development of children and adolescence. Current research on social cognitive development is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 5302B. Advanced Adolescent Development.**

This course focuses on theoretical analysis and current research of adolescent development. Topics may include developmental transitions, contexts, and issues in diverse adolescents in the contemporary society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 5302C. Administration and Evaluation of Family and Child Service Programs.**

This course focuses on the management and effectiveness of diverse family and child service programs. This course will include the following topics: management strategies, leadership skills, cultural responsiveness, program evaluation strategies and methods, fiscal management, and ethics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 5305. Foundations of Play.**

This course analyzes foundations and theories of play as it relates to the development of children. Course content includes medical play, play therapy, music therapy, art therapy, and animal therapy as they are applied in professional settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5340. Advanced Cultural Diversity of Families.**

This course focuses on cultural diversity with an emphasis on contemporary, culturally relevant responses to societal trends. Topics include a critical analysis of cultural competency, multiculturalism, and the strategies implemented to successfully engage in meaningful interactions at the community level. The course incorporates family science research methods to explore topics including family structure and function, family life patterns, multicultural groups, and agents of acculturation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Co-requisite(s):** MULT 5340

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HDFS 5341. Advanced Child Development.**

This course focuses on the developmental processes and influences from conception through adolescence and emphasizes the interactive relationship of biological and environmental factors in the total development of the child.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5343. Child Life Specialist.**

This course introduces students to the scope of Child Life practice, the impact of illness and injury on children and families, patient experience, family centered care, therapeutic play and psychological preparation for treatment and healthcare interventions. The course focuses on theoretical and evidence-based practices used in Child Life practice when interacting with children and families in a variety of healthcare settings. This course includes content necessary for pursuing application to Child Life Internships and the National Child Life Certification Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5344. Infant and Early Childhood Mental Health.**

This course provides an interdisciplinary understanding of the social and emotional development of infants and young children within the context of the family. Focus is on the role of the infant mental health specialist in strengthening the development of young children and the parent-child relationship.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5347. Grief and Bereavement in Children, Adolescents, and Parents.**

This course focuses on grief and bereavement throughout the life cycle. Topics include a historical overview of the theoretical models on grief and bereavement, influences on grief and bereavement responses, and current perspectives on helping the bereaved cope. Students analyze grief and bereavement implications for child life specialists.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5348. Pain and Anxiety Management for Children.**

This course provides child life students with theoretical foundations and applied non-pharmacological strategies for assessing children's pain and anxiety and assisting them with alleviation during healthcare experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5350. Research Design and Methods in Human Development and Family Sciences.**

This course includes evaluation of research concepts, methods, and strategies in human development and family sciences. The topics focus on the nature of scientific research, sampling, measurement, data collection, types of socio-behavioral research, data analysis, and evaluation of research reports.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5351. Advanced Theory in Human Development and Family Sciences.**

This course includes a critical evaluation of theoretical concepts and current research in human development and family sciences. Recent trends in family and developmental theories are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5352. Issues in Human Development and Family Sciences.**

This course examines current issues in human development and family sciences from conceptual, methodological, and multi-disciplinary perspectives. Emphasis is on current research and theories, and their application.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HDFS 5353. Program Evaluation in Human Development and Family Sciences.**

This course focuses on the diversity and effectiveness of family and child services programs at the federal, state, and community levels. Program evaluation strategies and measures, fiscal management, and grant writing are included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5355. Advanced Independent Study.**

This course provides opportunity for individual work on problems related to student's primary area of specialization. Work consists of empirical research or critical reviews and integration of existing literature. Course may be repeated once for credit when topics vary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HDFS 5356. Advanced Program Administration.**

This course focuses on human services organizations. Management theory and strategies, strategic planning, program development and implementation, personnel management, and public policy are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5357. Comparative Studies in Child Development.**

This course focuses on the study of cultural values and beliefs and the reflection of these in child development practices. The interactive influence of culture and global policies is addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5358. Practicum in Human Development and Family Sciences I.**

This course provides opportunity for structured practical experience in human development and family sciences programs. Supervision is provided by a member of the graduate faculty and a designated individual at the work site. Focus is on experiential learning.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5359. Practicum in Human Development and Family Sciences II.**

This course provides a continued practical experience in human development and family sciences programs. Supervision is provided by a member of the graduate faculty and a designated individual at the work site. A research report is integrated with practical application. Prerequisite: FCD 5358 or HDFS 5358 either with a grade of "CR".

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. Focus is on identification of thesis topic, review of literature, and research design. No thesis credit is awarded until a student has completed the thesis in Human Development and Family Sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5599B. Thesis.**

This course represents a student’s continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5659. Internship in Child Life.**

This course is a structured hospital experience for individuals who plan to pursue a career in child life. Students are provided the opportunity to work in a hospital setting under the direction of a certified child life specialist. Successful completion of this course is required for all applicants pursuing application to Child Life Internships and the National Child Life Certification Exam.

**6 Credit Hours. 0 Lecture Contact Hours. 38 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5660. Advanced Practicum.**

This course is a structured field experience for individuals who plan to pursue a career in the field of human development and family sciences. Students are provided the opportunity to work in a community setting such as a nonprofit organization, government agency, or healthcare setting. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5999B. Thesis.**

This course represents a student’s continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Program Overview**

The graduate program provides students with the knowledge and expertise to attain professional positions and advancement opportunities in programs serving families and children.

**Application Requirements**

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College’s website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor’s degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work
- official GRE (general test only) required with competitive scores in the verbal reasoning and quantitative reasoning sections
- resume/CV
- statement of purpose (approximately 500 words)
- three letters of recommendation

**Approved English Proficiency Exam Scores**

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

**Degree Requirements**

The Master of Science (M.S.) degree with a major in Human Development and Family Sciences (Non-thesis Option) requires 37 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

**Course Requirements**

Code	Title	Hours
<b>Required Courses</b>		
HDFS 5100	Introduction to Human Development and Family Sciences	1
HDFS 5341	Advanced Child Development	3
HDFS 5350	Research Design and Methods in Human Development and Family Sciences	3
HDFS 5351	Advanced Theory in Human Development and Family Sciences	3
HDFS 5352	Issues in Human Development and Family Sciences	3
HDFS 5358	Practicum in Human Development and Family Sciences I	3



**Prescribed Electives**

Choose 21 hours from the following: 21

HDFS 5305	Foundations of Play
HDFS 5340	Advanced Cultural Diversity of Families
HDFS 5343	Child Life Specialist
HDFS 5347	Grief and Bereavement in Children, Adolescents, and Parents
HDFS 5353	Program Evaluation in Human Development and Family Sciences
HDFS 5355	Advanced Independent Study
HDFS 5356	Advanced Program Administration
HDFS 5357	Comparative Studies in Child Development
HDFS 5359	Practicum in Human Development and Family Sciences II
HDFS 5660	Advanced Practicum
SOCI 5323	Grant Writing for the Social Sciences
SOCI 5370	Seminar in Sociology of Racial and Ethnic Relations
SOWK 5323	Advanced Social Work Research

**Total Hours** 37

## Comprehensive Examination Requirement

Students pursuing the non-thesis option will be required to complete a written exam consisting of objective and essay questions that cover the core content areas required for their particular track. As a result, the comprehensive exam should be taken after the student has completed 18 hours of graduate degree credit AND his/her core course work over which the student will be examined (with a GPA of at least 3.0 and earn a B or better in the core course work). Students must sit for all four exams on their first attempt. After the first attempt students will only be required to sit for the exams which they have not passed.

The comprehensive exam will be held on the first Friday of March, June, and September on campus at a time and location to be determined. Students planning to take the exam must sign up online through the google link located on the "Current students" page. Students will be given one hour to complete each section. There are a total of four sections.

Comprehensive exam questions are evaluated on both the quality and content of the response. Two faculty members evaluate the student's response to each comprehensive exam question. If there is disagreement regarding whether a response is acceptable, a third reader will read the response and make a final evaluation decision. The evaluation decision for each section is made independently of the other sections and can be as follows:

- P=Pass all components of the exam.
- CP=Conditional pass (At the discretion of the graduate faculty, the student must write a paper related to the content area that received a CP and/or orally defend his/her response; faculty determine whether the student writes a paper or orally defends his/her response).
- F=Fail (student who fails three or more sections of the exam must retake all four sections of the exam the following semester). Students can "retake" the exam only twice for a total of three attempts. If the student does not pass one or more sections on the third attempt, the student must re-take relevant coursework and pass with a B or better. The student must then petition the program graduate faculty and request to take an oral exam for the final attempt. It is at the discretion of the

graduate faculty whether the petition will be granted. If the petition is granted, the oral exam will take place with a format as well as at a time and place to be determined. The student can only pass or fail the oral comprehensive exam. Students will not graduate from the program without passing all sections of the comprehensive exam.

Students must complete the comprehensive exam within five years of beginning the graduate program.

Master's level courses in Family and Child Studies: FCS (p. 862), HD#HDFS (p. 863)FS

## Family and Child Studies (FCS)

### FCS 5101. Graduate Assistant Development.

This course is required as a condition of employment for graduate teaching and instructional assistants. This course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable up to 3 times.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

### FCS 5301. Graduate Assistant Development.

This course is required as a condition of employment for graduate teaching and instructional assistants. It provides information about the educational needs of Texas State University's diverse student body. It also identifies educational strategies and campus resources that support the learning of undergraduate students. This course does not earn graduate degree credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA| Multicultural Content  
**Grade Mode:** Leveling/Assistantships

### FCS 5302H. Sustainable Consumer Economy.

This course is a in-depth study of the role of consumption in the development of sustainable systems including the family, natural resources and economics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics  
**Grade Mode:** Standard Letter

### FCS 5302J. Statistics and Data Analysis for Family and Consumer Sciences.

This is a graduate level course covering statistical techniques commonly used in the field of family and consumer sciences. Topics include descriptive statistics, Chi-Square analysis, analysis of variance and covariance, simple and multiple linear regression, logistic regression, and use of statistical software. Data analysis to support decision-making is emphasized. Restricted to students in one of the graduate FCS programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

**FCS 5302S. Sustainable Textiles.**

This course is an in-depth study of the relationship of fibers, fabrics, finishes and textile products end-uses with a particular focus on their impact on sustainability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FCS 5305. Sustainable Housing.**

This course is an in-depth study of the relationship between housing and sustainability with a particular focus on the role of materials, technology, policy and human factors in fostering healthy social, economic and natural systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5307. Sustainable Lighting.**

This course focuses on understanding the elements and principles of sustainable lighting and explains how it meets the qualitative needs of the visual environment with the least impact on the natural environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5310. Research Methods in FCS.**

This course will cover the evaluation of concepts, methods, and strategies for research in the disciplines of family and consumer sciences. The course will focus on the nature and ethics of scientific research, including design, sampling, measurement, and data collection. Restricted to graduate level majors in the School of Family and Consumer Sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5311. Statistics and Data Analysis for Family and Consumer Sciences.**

This is a graduate level course covering statistical techniques commonly used in the field of family and consumer sciences. Topics include descriptive statistics, chi-square analysis, analysis of variance and covariance, simple and multiple linear regression, logistic regression, and use of statistical software. Data analysis to support decision-making is emphasized. Restricted to graduate students in FCS.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5340. International Study in Family and Consumer Sciences.**

Study of Family and Consumer Sciences topics in international settings. Emphasis will be placed on an analysis of cultural differences and similarities and their application within FCS professions. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**Human Development and Family Sciences (HDFS)****HDFS 5100. Introduction to Human Development and Family Sciences.**

This course focuses on gaining information and competencies important to graduate study success. It includes academic expectations for graduate students, as well as information related to the Human Development and Family Sciences graduate program.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5302A. Social Cognitive Development in Childhood and Adolescence.**

This course addresses foundations and theories of social cognitive development of children and adolescence. Current research on social cognitive development is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 5302B. Advanced Adolescent Development.**

This course focuses on theoretical analysis and current research of adolescent development. Topics may include developmental transitions, contexts, and issues in diverse adolescents in the contemporary society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 5302C. Administration and Evaluation of Family and Child Service Programs.**

This course focuses on the management and effectiveness of diverse family and child service programs. This course will include the following topics: management strategies, leadership skills, cultural responsiveness, program evaluation strategies and methods, fiscal management, and ethics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 5305. Foundations of Play.**

This course analyzes foundations and theories of play as it relates to the development of children. Course content includes medical play, play therapy, music therapy, art therapy, and animal therapy as they are applied in professional settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5340. Advanced Cultural Diversity of Families.**

This course focuses on cultural diversity with an emphasis on contemporary, culturally relevant responses to societal trends. Topics include a critical analysis of cultural competency, multiculturalism, and the strategies implemented to successfully engage in meaningful interactions at the community level. The course incorporates family science research methods to explore topics including family structure and function, family life patterns, multicultural groups, and agents of acculturation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Co-requisite(s):** MULT 5340

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HDFS 5341. Advanced Child Development.**

This course focuses on the developmental processes and influences from conception through adolescence and emphasizes the interactive relationship of biological and environmental factors in the total development of the child.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5343. Child Life Specialist.**

This course introduces students to the scope of Child Life practice, the impact of illness and injury on children and families, patient experience, family centered care, therapeutic play and psychological preparation for treatment and healthcare interventions. The course focuses on theoretical and evidence-based practices used in Child Life practice when interacting with children and families in a variety of healthcare settings. This course includes content necessary for pursuing application to Child Life Internships and the National Child Life Certification Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5344. Infant and Early Childhood Mental Health.**

This course provides an interdisciplinary understanding of the social and emotional development of infants and young children within the context of the family. Focus is on the role of the infant mental health specialist in strengthening the development of young children and the parent-child relationship.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5347. Grief and Bereavement in Children, Adolescents, and Parents.**

This course focuses on grief and bereavement throughout the life cycle. Topics include a historical overview of the theoretical models on grief and bereavement, influences on grief and bereavement responses, and current perspectives on helping the bereaved cope. Students analyze grief and bereavement implications for child life specialists.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5348. Pain and Anxiety Management for Children.**

This course provides child life students with theoretical foundations and applied non-pharmacological strategies for assessing children's pain and anxiety and assisting them with alleviation during healthcare experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5350. Research Design and Methods in Human Development and Family Sciences.**

This course includes evaluation of research concepts, methods, and strategies in human development and family sciences. The topics focus on the nature of scientific research, sampling, measurement, data collection, types of socio-behavioral research, data analysis, and evaluation of research reports.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5351. Advanced Theory in Human Development and Family Sciences.**

This course includes a critical evaluation of theoretical concepts and current research in human development and family sciences. Recent trends in family and developmental theories are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5352. Issues in Human Development and Family Sciences.**

This course examines current issues in human development and family sciences from conceptual, methodological, and multi-disciplinary perspectives. Emphasis is on current research and theories, and their application.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HDFS 5353. Program Evaluation in Human Development and Family Sciences.**

This course focuses on the diversity and effectiveness of family and child services programs at the federal, state, and community levels. Program evaluation strategies and measures, fiscal management, and grant writing are included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5355. Advanced Independent Study.**

This course provides opportunity for individual work on problems related to student's primary area of specialization. Work consists of empirical research or critical reviews and integration of existing literature. Course may be repeated once for credit when topics vary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HDFS 5356. Advanced Program Administration.**

This course focuses on human services organizations. Management theory and strategies, strategic planning, program development and implementation, personnel management, and public policy are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5357. Comparative Studies in Child Development.**

This course focuses on the study of cultural values and beliefs and the reflection of these in child development practices. The interactive influence of culture and global policies is addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5358. Practicum in Human Development and Family Sciences I.**

This course provides opportunity for structured practical experience in human development and family sciences programs. Supervision is provided by a member of the graduate faculty and a designated individual at the work site. Focus is on experiential learning.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5359. Practicum in Human Development and Family Sciences II.**

This course provides a continued practical experience in human development and family sciences programs. Supervision is provided by a member of the graduate faculty and a designated individual at the work site. A research report is integrated with practical application.

**Prerequisite:** FCD 5358 or HDFS 5358 either with a grade of "CR".

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. Focus is on identification of thesis topic, review of literature, and research design. No thesis credit is awarded until a student has completed the thesis in Human Development and Family Sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5659. Internship in Child Life.**

This course is a structured hospital experience for individuals who plan to pursue a career in child life. Students are provided the opportunity to work in a hospital setting under the direction of a certified child life specialist. Successful completion of this course is required for all applicants pursuing application to Child Life Internships and the National Child Life Certification Exam.

**6 Credit Hours. 0 Lecture Contact Hours. 38 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5660. Advanced Practicum.**

This course is a structured field experience for individuals who plan to pursue a career in the field of human development and family sciences. Students are provided the opportunity to work in a community setting such as a nonprofit organization, government agency, or healthcare setting. **Prerequisite:** Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The graduate program provides students with the knowledge and expertise to attain professional positions and advancement opportunities in programs serving families and children.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic

year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work
- official GRE (general test only) required with competitive scores in the verbal reasoning and quantitative reasoning sections
- resume/CV
- statement of purpose (approximately 500 words)
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Human Development and Family Sciences (Thesis Option) requires 37 semester credit hours, including a thesis. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
FCS 5311	Statistics and Data Analysis for Family and Consumer Sciences	3

HDFS 5100	Introduction to Human Development and Family Sciences	1
HDFS 5341	Advanced Child Development	3
HDFS 5350	Research Design and Methods in Human Development and Family Sciences	3
HDFS 5351	Advanced Theory in Human Development and Family Sciences	3
HDFS 5352	Issues in Human Development and Family Sciences	3
HDFS 5355	Advanced Independent Study	3

### Prescribed Electives

Choose 12 hours from the following:		12
HDFS 5305	Foundations of Play	
HDFS 5340	Advanced Cultural Diversity of Families	
HDFS 5343	Child Life Specialist	
HDFS 5347	Grief and Bereavement in Children, Adolescents, and Parents	
HDFS 5353	Program Evaluation in Human Development and Family Sciences	
HDFS 5356	Advanced Program Administration	
HDFS 5357	Comparative Studies in Child Development	
HDFS 5358	Practicum in Human Development and Family Sciences I	
SOCI 5323	Grant Writing for the Social Sciences	
SOWK 5323	Advanced Social Work Research	
SOWK 5370	Advanced Program Planning and Grant-Based Resource Development	

### Thesis

HDFS 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
HDFS 5199B	Thesis	
HDFS 5299B	Thesis	
HDFS 5399B	Thesis	
HDFS 5599B	Thesis	
HDFS 5999B	Thesis	

**Total Hours** **37**

## Comprehensive Examination Requirement

Students pursuing the thesis option will write and defend their thesis. Students who do not successfully defend their thesis will have two additional opportunities to defend.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.



## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until

the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Family and Child Studies: FCS (p. 868), HDFS (p. 868)

## Family and Child Studies (FCS)

### FCS 5101. Graduate Assistant Development.

This course is required as a condition of employment for graduate teaching and instructional assistants. This course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable up to 3 times.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### FCS 5301. Graduate Assistant Development.

This course is required as a condition of employment for graduate teaching and instructional assistants. It provides information about the educational needs of Texas State University's diverse student body. It also identifies educational strategies and campus resources that support the learning of undergraduate students. This course does not earn graduate degree credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA|Multicultural Content

**Grade Mode:** Leveling/Assistantships

### FCS 5302H. Sustainable Consumer Economy.

This course is a in-depth study of the role of consumption in the development of sustainable systems including the family, natural resources and economics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

### FCS 5302J. Statistics and Data Analysis for Family and Consumer Sciences.

This is a graduate level course covering statistical techniques commonly used in the field of family and consumer sciences. Topics include descriptive statistics, Chi-Square analysis, analysis of variance and covariance, simple and multiple linear regression, logistic regression, and use of statistical software. Data analysis to support decision-making is emphasized. Restricted to students in one of the graduate FCS programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

### FCS 5302S. Sustainable Textiles.

This course is an in-depth study of the relationship of fibers, fabrics, finishes and textile products end-uses with a particular focus on their impact on sustainability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

### FCS 5305. Sustainable Housing.

This course is an in-depth study of the relationship between housing and sustainability with a particular focus on the role of materials, technology, policy and human factors in fostering healthy social, economic and natural systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### FCS 5307. Sustainable Lighting.

This course focuses on understanding the elements and principles of sustainable lighting and explains how it meets the qualitative needs of the visual environment with the least impact on the natural environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### FCS 5310. Research Methods in FCS.

This course will cover the evaluation of concepts, methods, and strategies for research in the disciplines of family and consumer sciences. The course will focus on the nature and ethics of scientific research, including design, sampling, measurement, and data collection. Restricted to graduate level majors in the School of Family and Consumer Sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### FCS 5311. Statistics and Data Analysis for Family and Consumer Sciences.

This is a graduate level course covering statistical techniques commonly used in the field of family and consumer sciences. Topics include descriptive statistics, chi-square analysis, analysis of variance and covariance, simple and multiple linear regression, logistic regression, and use of statistical software. Data analysis to support decision-making is emphasized. Restricted to graduate students in FCS.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### FCS 5340. International Study in Family and Consumer Sciences.

Study of Family and Consumer Sciences topics in international settings. Emphasis will be placed on an analysis of cultural differences and similarities and their application within FCS professions. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

## Human Development and Family Sciences (HDFS)

### HDFS 5100. Introduction to Human Development and Family Sciences.

This course focuses on gaining information and competencies important to graduate study success. It includes academic expectations for graduate students, as well as information related to the Human Development and Family Sciences graduate program.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5302A. Social Cognitive Development in Childhood and Adolescence.**

This course addresses foundations and theories of social cognitive development of children and adolescence. Current research on social cognitive development is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 5302B. Advanced Adolescent Development.**

This course focuses on theoretical analysis and current research of adolescent development. Topics may include developmental transitions, contexts, and issues in diverse adolescents in the contemporary society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 5302C. Administration and Evaluation of Family and Child Service Programs.**

This course focuses on the management and effectiveness of diverse family and child service programs. This course will include the following topics: management strategies, leadership skills, cultural responsiveness, program evaluation strategies and methods, fiscal management, and ethics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 5305. Foundations of Play.**

This course analyzes foundations and theories of play as it relates to the development of children. Course content includes medical play, play therapy, music therapy, art therapy, and animal therapy as they are applied in professional settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5340. Advanced Cultural Diversity of Families.**

This course focuses on cultural diversity with an emphasis on contemporary, culturally relevant responses to societal trends. Topics include a critical analysis of cultural competency, multiculturalism, and the strategies implemented to successfully engage in meaningful interactions at the community level. The course incorporates family science research methods to explore topics including family structure and function, family life patterns, multicultural groups, and agents of acculturation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Co-requisite(s):** MULT 5340

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HDFS 5341. Advanced Child Development.**

This course focuses on the developmental processes and influences from conception through adolescence and emphasizes the interactive relationship of biological and environmental factors in the total development of the child.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5343. Child Life Specialist.**

This course introduces students to the scope of Child Life practice, the impact of illness and injury on children and families, patient experience, family centered care, therapeutic play and psychological preparation for treatment and healthcare interventions. The course focuses on theoretical and evidence-based practices used in Child Life practice when interacting with children and families in a variety of healthcare settings. This course includes content necessary for pursuing application to Child Life Internships and the National Child Life Certification Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5344. Infant and Early Childhood Mental Health.**

This course provides an interdisciplinary understanding of the social and emotional development of infants and young children within the context of the family. Focus is on the role of the infant mental health specialist in strengthening the development of young children and the parent-child relationship.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5347. Grief and Bereavement in Children, Adolescents, and Parents.**

This course focuses on grief and bereavement throughout the life cycle. Topics include a historical overview of the theoretical models on grief and bereavement, influences on grief and bereavement responses, and current perspectives on helping the bereaved cope. Students analyze grief and bereavement implications for child life specialists.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5348. Pain and Anxiety Management for Children.**

This course provides child life students with theoretical foundations and applied non-pharmacological strategies for assessing children's pain and anxiety and assisting them with alleviation during healthcare experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5350. Research Design and Methods in Human Development and Family Sciences.**

This course includes evaluation of research concepts, methods, and strategies in human development and family sciences. The topics focus on the nature of scientific research, sampling, measurement, data collection, types of socio-behavioral research, data analysis, and evaluation of research reports.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5351. Advanced Theory in Human Development and Family Sciences.**

This course includes a critical evaluation of theoretical concepts and current research in human development and family sciences. Recent trends in family and developmental theories are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5352. Issues in Human Development and Family Sciences.**

This course examines current issues in human development and family sciences from conceptual, methodological, and multi-disciplinary perspectives. Emphasis is on current research and theories, and their application.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HDFS 5353. Program Evaluation in Human Development and Family Sciences.**

This course focuses on the diversity and effectiveness of family and child services programs at the federal, state, and community levels. Program evaluation strategies and measures, fiscal management, and grant writing are included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5355. Advanced Independent Study.**

This course provides opportunity for individual work on problems related to student's primary area of specialization. Work consists of empirical research or critical reviews and integration of existing literature. Course may be repeated once for credit when topics vary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HDFS 5356. Advanced Program Administration.**

This course focuses on human services organizations. Management theory and strategies, strategic planning, program development and implementation, personnel management, and public policy are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5357. Comparative Studies in Child Development.**

This course focuses on the study of cultural values and beliefs and the reflection of these in child development practices. The interactive influence of culture and global policies is addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5358. Practicum in Human Development and Family Sciences I.**

This course provides opportunity for structured practical experience in human development and family sciences programs. Supervision is provided by a member of the graduate faculty and a designated individual at the work site. Focus is on experiential learning.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5359. Practicum in Human Development and Family Sciences II.**

This course provides a continued practical experience in human development and family sciences programs. Supervision is provided by a member of the graduate faculty and a designated individual at the work site. A research report is integrated with practical application. Prerequisite: FCD 5358 or HDFS 5358 either with a grade of "CR".

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. Focus is on identification of thesis topic, review of literature, and research design. No thesis credit is awarded until a student has completed the thesis in Human Development and Family Sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5659. Internship in Child Life.**

This course is a structured hospital experience for individuals who plan to pursue a career in child life. Students are provided the opportunity to work in a hospital setting under the direction of a certified child life specialist. Successful completion of this course is required for all applicants pursuing application to Child Life Internships and the National Child Life Certification Exam.

**6 Credit Hours. 0 Lecture Contact Hours. 38 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5660. Advanced Practicum.**

This course is a structured field experience for individuals who plan to pursue a career in the field of human development and family sciences. Students are provided the opportunity to work in a community setting such as a nonprofit organization, government agency, or healthcare setting. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Graduate program in Human Nutrition promotes the study of human nutrition, food science, and biotechnology with emphasis on promoting health and preventing disease. Graduate instruction is based on a variety of learning strategies, including lecture, seminar-style discussion, participation in research, and practical laboratory work using state of the art equipment and techniques. Graduates achieve the technical skills, scientific knowledge, and local, national, and global perspectives to integrate the fields of nutrition, food science and food biotechnology to address human health concerns of the 21st century.

## Dietetic Internship Concurrent Enrollment

Students enrolled in the M.S. program who are interested in obtaining the registered dietitian (RD) credential are encouraged to apply for admission to the Texas State dietetic internship (DI) after they have completed at least one term. While up to nine hours of courses taken as part of the DI may count towards the M.S. degree, completion of both the M.S. and DI may require more course work than needed to complete the M.S. alone.

Students interested in this dual option are required to meet with the graduate coordinator to determine courses required to complete both programs. It is important to note that admission to the M.S. does not guarantee acceptance into the Texas State DI.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree (preferably in nutrition, food science or a related field) from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GP or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in:
  - Introductory Biology
  - Introductory Nutrition
  - Microbiology
  - Anatomy and Physiology
  - Introductory Chemistry (at least two semesters)
  - Organic Chemistry (at least one course)
  - Biochemistry
  - Nutrition in the Lifespan
  - Biochemical Nutrition
- GRE not required
- resume/CV
- statement of purpose describing professional aspirations and rationale for pursuing graduate study
- three letters of recommendation from professionals or academics competent to assess the student's interest in pursuing a career in nutrition
- interview will include oral and written responses

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).



- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Human Nutrition requires 39 semester credit hours. Students who do not have the appropriate background course work may be required to complete a leveling course.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
NUTR 5305	Seminar in Nutrition and Disease	3
NUTR 5306	Seminar in Nutrition in the Lifespan	3
NUTR 5350	Research Methods in Nutrition and Food Science	3
NUTR 5364	The Science of Nutrition and Exercise	3
NUTR 5366	Macronutrient Metabolism	3
NUTR 5367	Micronutrient Metabolism	3
NUTR 5372	Advances in Nutrition Policy and Ethics	3
<b>Prescribed Electives</b>		
Choose 18 hours from the following courses:		18
AG 5370	Special Problems in Technical Agriculture	
FCS 5311	Statistics and Data Analysis for Family and Consumer Sciences	
NUTR 5302F	Nutritional Supplements	
NUTR 5302G	Pediatric Obesity	
NUTR 5320	Diet Therapy and Pathophysiology	
NUTR 5355	Advanced Independent Study in Nutrition	
NUTR 5360	Practicum for Dietetic Internship	
NUTR 5361	Advanced Food Systems Administration	
NUTR 5362	Advanced Medical Nutrition Therapy	
NUTR 5363	Advanced Community Nutrition	
NUTR 5371	Externship in Human Nutrition	
NUTR 5374	Advanced Nutrition and Genetics	
SPAN 5322	Spanish for the Professions	
<b>Total Hours</b>		<b>39</b>

## Comprehensive Examination Requirement

Comprehensive exams for the M.S. in Human Nutrition are written and take place each fall and spring semester. Students are given three questions per core NUTR graduate course one month prior to the exam. On the day of the exam, they are given two questions per course and must answer one per course without external aids. Students must earn a 5 or greater on each question and an average of 70% to pass their exams. If a student fails to pass the exam, they may repeat the questions they failed the following time the exam is offered.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Human Nutrition: NUTR

## Courses Offered

### Nutrition and Foods (NUTR)

#### NUTR 5199B. Thesis.

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### NUTR 5299B. Thesis.

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### NUTR 5300. Foundation Studies in Human Nutrition.

This course is designed for students who do not have a sufficient background in the foundations of nutrition and food science to be successful in graduate level courses. This course does not earn graduate degree credit. Course is repeatable. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### NUTR 5302F. Nutritional Supplements.

An advanced study of the efficacy of dietary supplements. Both nutrient and non-nutrient supplement components will be discussed. Clinical trials, epidemiological data and molecular mechanisms of action of dietary supplements will be compared to manufacturer's claimed action. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### NUTR 5302G. Pediatric Obesity.

An advanced study of pediatric obesity, including causes, economic and health related consequences, evidence-based treatment and prevention strategies. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**NUTR 5305. Seminar in Nutrition and Disease.**

An advanced study of a selected topic in nutrition concerning nutrients and functional foods and their role in disease prevention or treatment. Class topics will enter on clinical trials, epidemiological data and molecular mechanisms of action concerning the ability of nutrients to prevent or treat disease. Repeatable for credit when topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**NUTR 5306. Seminar in Nutrition in the Lifespan.**

An advanced study of a selected topic in nutrition and the lifespan from a multidisciplinary perspective, including review of scientific literature in nutrition, physiology, biochemistry, sociology, exercise sports science, epidemiology, endocrinology and genetics. Repeatable for credit when topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5320. Diet Therapy and Pathophysiology.**

This course will study the physiological and biochemical abnormalities of certain disease states as they relate to the human body's systems placing emphasis on diet modification as a therapeutic measure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5350. Research Methods in Nutrition and Food Science.**

Evaluation of research concepts, methods, and strategies used in nutrition and food science research. Topics include the nature of scientific research, sampling, measurement, data collection, types of research methodology, use of data analysis and management software, and evaluation of research reports.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5355. Advanced Independent Study in Nutrition.**

Individual work with specific guidance from graduate nutrition faculty. Work may include participation in research, professional practice, and/or critical review of the scientific literature. Course may be repeated once for credit when topics vary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5360. Practicum for Dietetic Internship.**

Students observe and engage in the practice of dietetics under the supervision of practitioners in facilities for health care, public health, and food systems. Repeated twice to meet requirements to complete the dietetic internship program. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**NUTR 5361. Advanced Food Systems Administration.**

Techniques and procedures for management, service, and marketing of meals in commercial and noncommercial food service facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5362. Advanced Medical Nutrition Therapy.**

Advanced study of medical nutrition therapy with emphasis on application of principles and techniques of nutritional assessment emphasizing current clinical nutrition practices. Current scientific literature will be used extensively to discuss most recent advances in the area of medical nutrition therapy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5363. Advanced Community Nutrition.**

Assessment of the nutritional needs of the community and of programs that serve the needs. Experiences include survey techniques, nutritional education, and management of programs to meet specific nutritional needs through community agencies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5364. The Science of Nutrition and Exercise.**

An advanced course focusing on the physiological and biochemical impact of nutrient intake on physical performance, health and fitness. Special emphasis will be placed on the investigation of a variety of dietary supplements, including purported ergogenic aids. The course requires significant reading and interpreting of the scientific literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5366. Macronutrient Metabolism.**

An advanced study of the biochemical and physiological foundations of nutrition and metabolism and its relevance to health and wellness. Scientific literature pertaining to biochemical structure, metabolism and physiological regulation of macronutrients and water-soluble vitamins.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5367. Micronutrient Metabolism.**

An advanced study of the biochemical and physiological foundations of nutrition with emphasis on fat-soluble vitamins and minerals. Current scientific information pertaining to structure, metabolism and physiological regulation of these micronutrients.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5371. Externship in Human Nutrition.**

Structured practical experience in human nutrition, food science, food biotechnology. Supervision provided by a member of the graduate faculty and a designated individual at the work site. Requires a minimum of 150 hours of supervised experience. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**NUTR 5372. Advances in Nutrition Policy and Ethics.**

This course considers the disparate influences on the US food supply, on federal and state nutrition and food-related policies, and ultimately, on individual dietary intake. Potential influences, including current state and federal policies, industry, interest groups, and the media, driven by economics and ethical consideration, will be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5374. Advanced Nutrition and Genetics.**

This course will examine the specific processes in intermediary nutrient metabolism and their genetic regulation. The effects of nutrients on gene expression, cell signaling, cell physiology, and disease processes will also be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5375. Advances in Life Span Nutrition.**

An advanced study of the nutritional requirements throughout the life span involving a multidisciplinary approach including, biochemistry, endocrinology and genetics, and perspectives of human psychological and social development. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5399A. Thesis.**

Initial thesis enrollment. Focus is on identification of thesis topic, review of literature, research design and preparation of thesis proposal. No thesis credit is awarded until completion of NUTR 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**NUTR 5399B. Thesis.**

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**NUTR 5599B. Thesis.**

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**NUTR 5999B. Thesis.**

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

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Students enrolled in the M.S. program who are interested in obtaining the registered dietitian (RD) credential are encouraged to apply for admission to the Texas State dietetic internship (DI) after they have completed at least one term. While up to nine hours of courses taken as part of the DI may count towards the M.S. degree, completion of both the M.S. and DI may require more course work than needed to complete the M.S. alone. Students interested in this dual option are required to meet with the graduate coordinator to determine courses required to complete both programs. It is important to note that admission to the M.S. does not guarantee acceptance into the Texas State DI.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials

- baccalaureate degree (preferably in nutrition, food science or a related field) from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GP or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in:
  - Introductory Biology
  - Introductory Nutrition
  - Microbiology
  - Anatomy and Physiology
  - Introductory Chemistry (at least two semesters)
  - Organic Chemistry (at least one course)
  - Biochemistry
  - Nutrition in the Lifespan
  - Biochemical Nutrition
- GRE not required
- resume/CV
- statement of purpose describing professional aspirations and rationale for pursuing graduate study
- three letters of recommendation from professionals or academics competent to assess the student's interest in pursuing a career in nutrition
- interview will include oral and written responses

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Human Nutrition requires 33 semester credit hours, including a thesis. Students who do not have the appropriate background course work may be required to complete a leveling course.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
FCS 5311	Statistics and Data Analysis for Family and Consumer Sciences	3

NUTR 5305	Seminar in Nutrition and Disease	3
NUTR 5306	Seminar in Nutrition in the Lifespan	3
NUTR 5350	Research Methods in Nutrition and Food Science	3
NUTR 5364	The Science of Nutrition and Exercise	3
NUTR 5366	Macronutrient Metabolism	3
NUTR 5367	Micronutrient Metabolism	3
NUTR 5372	Advances in Nutrition Policy and Ethics	3

### Prescribed Elective

Choose 3 hours from the following:		3
AG 5370	Special Problems in Technical Agriculture	
ESS 5317	Exercise Physiology	
NUTR 5302F	Nutritional Supplements	
NUTR 5302G	Pediatric Obesity	
NUTR 5320	Diet Therapy and Pathophysiology	
NUTR 5355	Advanced Independent Study in Nutrition	
NUTR 5360	Practicum for Dietetic Internship	
NUTR 5361	Advanced Food Systems Administration	
NUTR 5362	Advanced Medical Nutrition Therapy	
NUTR 5363	Advanced Community Nutrition	
NUTR 5371	Externship in Human Nutrition	
NUTR 5374	Advanced Nutrition and Genetics	
SPAN 5322	Spanish for the Professions	

### Thesis

NUTR 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
NUTR 5199B	Thesis	
NUTR 5299B	Thesis	
NUTR 5399B	Thesis	
NUTR 5599B	Thesis	
NUTR 5999B	Thesis	

**Total Hours** **33**

## Comprehensive Examination Requirement

Students pursuing the thesis option will write and defend their thesis for the comprehensive exam. Students who do not successfully defend their thesis will have two additional opportunities to defend.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements.

After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Human Nutrition: NUTR

## Courses Offered

### Nutrition and Foods (NUTR)

**NUTR 5199B. Thesis.**

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**NUTR 5299B. Thesis.**

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**NUTR 5300. Foundation Studies in Human Nutrition.**

This course is designed for students who do not have a sufficient background in the foundations of nutrition and food science to be successful in graduate level courses. This course does not earn graduate degree credit. Course is repeatable. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**NUTR 5302F. Nutritional Supplements.**

An advanced study of the efficacy of dietary supplements. Both nutrient and non-nutrient supplement components will be discussed. Clinical trials, epidemiological data and molecular mechanisms of action of dietary supplements will be compared to manufacturer's claimed action. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**NUTR 5302G. Pediatric Obesity.**

An advanced study of pediatric obesity, including causes, economic and health related consequences, evidence-based treatment and prevention strategies. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**NUTR 5305. Seminar in Nutrition and Disease.**

An advanced study of a selected topic in nutrition concerning nutrients and functional foods and their role in disease prevention or treatment. Class topics will enter on clinical trials, epidemiological data and molecular mechanisms of action concerning the ability of nutrients to prevent or treat disease. Repeatable for credit when topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**NUTR 5306. Seminar in Nutrition in the Lifespan.**

An advanced study of a selected topic in nutrition and the lifespan from a multidisciplinary perspective, including review of scientific literature in nutrition, physiology, biochemistry, sociology, exercise sports science, epidemiology, endocrinology and genetics. Repeatable for credit when topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5320. Diet Therapy and Pathophysiology.**

This course will study the physiological and biochemical abnormalities of certain disease states as they relate to the human body's systems placing emphasis on diet modification as a therapeutic measure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5350. Research Methods in Nutrition and Food Science.**

Evaluation of research concepts, methods, and strategies used in nutrition and food science research. Topics include the nature of scientific research, sampling, measurement, data collection, types of research methodology, use of data analysis and management software, and evaluation of research reports.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5355. Advanced Independent Study in Nutrition.**

Individual work with specific guidance from graduate nutrition faculty. Work may include participation in research, professional practice, and/or critical review of the scientific literature. Course may be repeated once for credit when topics vary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5360. Practicum for Dietetic Internship.**

Students observe and engage in the practice of dietetics under the supervision of practitioners in facilities for health care, public health, and food systems. Repeated twice to meet requirements to complete the dietetic internship program. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**NUTR 5361. Advanced Food Systems Administration.**

Techniques and procedures for management, service, and marketing of meals in commercial and noncommercial food service facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5362. Advanced Medical Nutrition Therapy.**

Advanced study of medical nutrition therapy with emphasis on application of principles and techniques of nutritional assessment emphasizing current clinical nutrition practices. Current scientific literature will be used extensively to discuss most recent advances in the area of medical nutrition therapy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5363. Advanced Community Nutrition.**

Assessment of the nutritional needs of the community and of programs that serve the needs. Experiences include survey techniques, nutritional education, and management of programs to meet specific nutritional needs through community agencies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5364. The Science of Nutrition and Exercise.**

An advanced course focusing on the physiological and biochemical impact of nutrient intake on physical performance, health and fitness. Special emphasis will be placed on the investigation of a variety of dietary supplements, including purported ergogenic aids. The course requires significant reading and interpreting of the scientific literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5366. Macronutrient Metabolism.**

An advanced study of the biochemical and physiological foundations of nutrition and metabolism and its relevance to health and wellness. Scientific literature pertaining to biochemical structure, metabolism and physiological regulation of macronutrients and water-soluble vitamins.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5367. Micronutrient Metabolism.**

An advanced study of the biochemical and physiological foundations of nutrition with emphasis on fat-soluble vitamins and minerals. Current scientific information pertaining to structure, metabolism and physiological regulation of these micronutrients.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5371. Externship in Human Nutrition.**

Structured practical experience in human nutrition, food science, food biotechnology. Supervision provided by a member of the graduate faculty and a designated individual at the work site. Requires a minimum of 150 hours of supervised experience. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**NUTR 5372. Advances in Nutrition Policy and Ethics.**

This course considers the disparate influences on the US food supply, on federal and state nutrition and food-related policies, and ultimately, on individual dietary intake. Potential influences, including current state and federal policies, industry, interest groups, and the media, driven by economics and ethical consideration, will be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5374. Advanced Nutrition and Genetics.**

This course will examine the specific processes in intermediary nutrient metabolism and their genetic regulation. The effects of nutrients on gene expression, cell signaling, cell physiology, and disease processes will also be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5375. Advances in Life Span Nutrition.**

An advanced study of the nutritional requirements throughout the life span involving a multidisciplinary approach including, biochemistry, endocrinology and genetics, and perspectives of human psychological and social development. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5399A. Thesis.**

Initial thesis enrollment. Focus is on identification of thesis topic, review of literature, research design and preparation of thesis proposal. No thesis credit is awarded until completion of NUTR 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**NUTR 5399B. Thesis.**

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**NUTR 5599B. Thesis.**

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**NUTR 5999B. Thesis.**

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) major in Merchandising and Consumer Studies will educate the next generation of product developers, retail and merchandising managers, as well as consumer studies professionals, who will make pivotal and transformative decisions vital to intelligent economic, social, and environmental resource management. Our goal is to prepare students with competencies that address current and

future consumer-related employment needs of Texas. Building on the undergraduate foundation, the master's level curriculum engages students in the analysis, critical thinking, and holistic problem solving needed to respond to the complexity and growth of consumer-centric systems.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university
- official transcripts from **each institution** where course credit was granted
- minimum 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections or official GMAT with competitive scores
- resume/CV
- statement of purpose describing professional goals and rationale for pursuing graduate study
- two letters of recommendation

### TOEFL or IELTS Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall
- official IELTS (academic) scores required with a 6.5 overall and
  - minimum individual module scores of 6.0

The student may qualify for English-based conditional admission the minimum scores below are met:

- official TOEFL iBT scores required with a 59 overall
- official IELTS (academic) scores required with a 5.5 overall and
  - minimum individual module scores of 5.5

## Degree Requirements

The Master of Science (M.S.) degree with a major in Merchandising and Consumer Studies requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
FCS 5310	Research Methods in FCS	3

FCS 5311	Statistics and Data Analysis for Family and Consumer Sciences	3
MCS 5391	Seminar in Merchandising and Consumer Studies	3
MCS 5398	Directed Study in Merchandising and Consumer Studies	3

Prescribed Electives		
Choose 18 hours from the following:		18
MCS 5302A	Merchandising in the Experience Economy	
MCS 5302B	Merchandising Strategies in Domestic and International Markets	
MCS 5302C	Buying, Planning and Allocation	
MCS 5303	Sustainable Textiles	
MCS 5330	Merchandising and Consumer Theory and Research	
MCS 5331	Strategic Merchandise Planning	
MCS 5332	Innovation in the Global Market	
MCS 5333	Global Sourcing and Distribution	
MCS 5336	Culture, Society, and Dress	
MCS 5341	Ethics in Merchandising and Consumption	
MCS 5342	Sustainable Consumer Economy	
MCS 5390	Merchandising and Consumer Studies Practicum	
PHIL 5301	Applied Philosophy	
PHIL 5322	Professional Ethics	
SUST 5301	Seminar in Sustainability	

Electives		
Choose 6 hours of advisor-approved electives		6
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirements

All candidates for graduate degrees must pass one or more comprehensive examinations.

Master's level courses in Family and Consumer Sciences: FCS

## Courses Offered

### Family and Consumer Sciences (FCS)

#### FCS 5101. Graduate Assistant Development.

This course is required as a condition of employment for graduate teaching and instructional assistants. This course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable up to 3 times.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**FCS 5301. Graduate Assistant Development.**

This course is required as a condition of employment for graduate teaching and instructional assistants. It provides information about the educational needs of Texas State University's diverse student body. It also identifies educational strategies and campus resources that support the learning of undergraduate students. This course does not earn graduate degree credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA|Multicultural Content

**Grade Mode:** Leveling/Assistantships

**FCS 5302H. Sustainable Consumer Economy.**

This course is a in-depth study of the role of consumption in the development of sustainable systems including the family, natural resources and economics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FCS 5302J. Statistics and Data Analysis for Family and Consumer Sciences.**

This is a graduate level course covering statistical techniques commonly used in the field of family and consumer sciences. Topics include descriptive statistics, Chi-Square analysis, analysis of variance and covariance, simple and multiple linear regression, logistic regression, and use of statistical software. Data analysis to support decision-making is emphasized. Restricted to students in one of the graduate FCS programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FCS 5302S. Sustainable Textiles.**

This course is an in-depth study of the relationship of fibers, fabrics, finishes and textile products end-uses with a particular focus on their impact on sustainability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FCS 5305. Sustainable Housing.**

This course is an in-depth study of the relationship between housing and sustainability with a particular focus on the role of materials, technology, policy and human factors in fostering healthy social, economic and natural systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5307. Sustainable Lighting.**

This course focuses on understanding the elements and principles of sustainable lighting and explains how it meets the qualitative needs of the visual environment with the least impact on the natural environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5310. Research Methods in FCS.**

This course will cover the evaluation of concepts, methods, and strategies for research in the disciplines of family and consumer sciences. The course will focus on the nature and ethics of scientific research, including design, sampling, measurement, and data collection. Restricted to graduate level majors in the School of Family and Consumer Sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5311. Statistics and Data Analysis for Family and Consumer Sciences.**

This is a graduate level course covering statistical techniques commonly used in the field of family and consumer sciences. Topics include descriptive statistics, chi-square analysis, analysis of variance and covariance, simple and multiple linear regression, logistic regression, and use of statistical software. Data analysis to support decision-making is emphasized. Restricted to graduate students in FCS.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5340. International Study in Family and Consumer Sciences.**

Study of Family and Consumer Sciences topics in international settings. Emphasis will be placed on an analysis of cultural differences and similarities and their application within FCS professions. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

## Program Overview

The Master of Science (M.S.) major in Merchandising and Consumer Studies will educate the next generation of product developers, retail and merchandising managers, as well as consumer studies professionals, who will make pivotal and transformative decisions vital to intelligent economic, social, and environmental resource management. Our goal is to prepare students with competencies that address current and future consumer-related employment needs of Texas. Building on the undergraduate foundation, the master's level curriculum engages students in the analysis, critical thinking, and holistic problem solving needed to respond to the complexity and growth of consumer-centric systems.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university
- official transcripts from **each institution** where course credit was granted
- minimum 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections or official GMAT with competitive scores
- resume/CV
- statement of purpose describing professional goals and rationale for pursuing graduate study
- two letters of recommendation

### TOEFL or IELTS Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall
- official IELTS (academic) scores required with a 6.5 overall and
  - minimum individual module scores of 6.0

The student may qualify for English-based conditional admission if the minimum scores below are met:

- official TOEFL iBT scores required with a 59 overall
- official IELTS (academic) scores required with a 5.5 overall and
  - minimum individual module scores of 5.5

## Degree Requirements

The Master of Science (M.S.) degree with a major in Merchandising and Consumer Studies requires 30 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
FCS 5310	Research Methods in FCS	3
FCS 5311	Statistics and Data Analysis for Family and Consumer Sciences	3
MCS 5330	Merchandising and Consumer Theory and Research	3
MCS 5391	Seminar in Merchandising and Consumer Studies	3
<b>Prescribed Electives</b>		
Choose 9 hours from the following:		9
MCS 5302A	Merchandising in the Experience Economy	
MCS 5302B	Merchandising Strategies in Domestic and International Markets	
MCS 5302C	Buying, Planning and Allocation	
MCS 5303	Sustainable Textiles	
MCS 5331	Strategic Merchandise Planning	
MCS 5332	Innovation in the Global Market	
MCS 5333	Global Sourcing and Distribution	
MCS 5336	Culture, Society, and Dress	
MCS 5341	Ethics in Merchandising and Consumption	

MCS 5342	Sustainable Consumer Economy	
MCS 5390	Merchandising and Consumer Studies Practicum	
MCS 5398	Directed Study in Merchandising and Consumer Studies	
PHIL 5301	Applied Philosophy	
PHIL 5322	Professional Ethics	
SUST 5301	Seminar in Sustainability	
<b>Electives</b>		
Choose 3 hours of advisor-approved electives		3
<b>Thesis</b>		
MCS 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
MCS 5199B	Thesis	
MCS 5299B	Thesis	
MCS 5399B	Thesis	
MCS 5599B	Thesis	
MCS 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirements

All candidates for graduate degrees must pass one or more comprehensive examinations.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.



## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Family and Consumer Sciences: FCS

## Courses Offered

### Family and Consumer Sciences (FCS)

#### FCS 5101. Graduate Assistant Development.

This course is required as a condition of employment for graduate teaching and instructional assistants. This course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable up to 3 times.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

#### FCS 5301. Graduate Assistant Development.

This course is required as a condition of employment for graduate teaching and instructional assistants. It provides information about the educational needs of Texas State University's diverse student body. It also identifies educational strategies and campus resources that support the learning of undergraduate students. This course does not earn graduate degree credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA|Multicultural Content  
**Grade Mode:** Leveling/Assistantships

**FCS 5302H. Sustainable Consumer Economy.**

This course is a in-depth study of the role of consumption in the development of sustainable systems including the family, natural resources and economics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FCS 5302J. Statistics and Data Analysis for Family and Consumer Sciences.**

This is a graduate level course covering statistical techniques commonly used in the field of family and consumer sciences. Topics include descriptive statistics, Chi-Square analysis, analysis of variance and covariance, simple and multiple linear regression, logistic regression, and use of statistical software. Data analysis to support decision-making is emphasized. Restricted to students in one of the graduate FCS programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FCS 5302S. Sustainable Textiles.**

This course is an in-depth study of the relationship of fibers, fabrics, finishes and textile products end-uses with a particular focus on their impact on sustainability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FCS 5305. Sustainable Housing.**

This course is an in-depth study of the relationship between housing and sustainability with a particular focus on the role of materials, technology, policy and human factors in fostering healthy social, economic and natural systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5307. Sustainable Lighting.**

This course focuses on understanding the elements and principles of sustainable lighting and explains how it meets the qualitative needs of the visual environment with the least impact on the natural environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5310. Research Methods in FCS.**

This course will cover the evaluation of concepts, methods, and strategies for research in the disciplines of family and consumer sciences. The course will focus on the nature and ethics of scientific research, including design, sampling, measurement, and data collection. Restricted to graduate level majors in the School of Family and Consumer Sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5311. Statistics and Data Analysis for Family and Consumer Sciences.**

This is a graduate level course covering statistical techniques commonly used in the field of family and consumer sciences. Topics include descriptive statistics, chi-square analysis, analysis of variance and covariance, simple and multiple linear regression, logistic regression, and use of statistical software. Data analysis to support decision-making is emphasized. Restricted to graduate students in FCS.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5340. International Study in Family and Consumer Sciences.**

Study of Family and Consumer Sciences topics in international settings. Emphasis will be placed on an analysis of cultural differences and similarities and their application within FCS professions. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

Pedernales Building

Telephone: 512-245-2115 Fax: 512-245-3047

<http://www.owls.txstate.edu> (<http://www.owls.txstate.edu/>)

The Department of Organization, Workforce, and Leadership Studies offers two distinct master's degrees designed for professionals focused on career success in organizational and technical education settings.

The Interdisciplinary Studies program with a concentration in Organization, Workforce, and Leadership Studies offers a Master of Science in Interdisciplinary Studies (MSIS) or Master of Arts in Interdisciplinary Studies (MAIS). The purpose of both degrees is to engage students in different disciplines to understand certain topics or problems. Each of the degree offerings had the same rules about course choice and requirements, so potential students may choose either based on the degree they would like to receive. Each degree is 39 credit hours.

The Master of Education (M.Ed.) in Management of Technical Education degree is a degree built for the specific audience of educators and trainers with Career and Technical Education and training in mind. Students can hone their technical education and administrative skills through courses in career and technical education. These courses include methods of teaching and training, the professions of teaching and training, and human relations. The Management of Technical Education degree is a 36-hour degree.

Both degree programs are offered in a fully online or hybrid format to meet the needs of today's career-minded students. All students work with a faculty advisor to coordinate their degree choices based on their professional goals and aspirations. Faculty with expertise in adult learning, online and technical education create robust online learning environments to promote student success.

Our programs are designed for part-time study while working and may be completed from most any location. We offer flexible course scheduling, including accelerated courses on 8-week half-semester terms or 5-week summer terms, to allow students to move quickly through the program. We offer advising and support in San Marcos, Round Rock, and online. You may visit our website for additional information on our programs and to contact a faculty advisor for an individualized appointment.

Your advisor and departmental faculty can assist you in outlining and supporting your career goals with a relevant degree, whether you have or are seeking a career in the following:

- training and development,
- career and technical education,
- organization development,
- management of training and curriculum environments,
- public service,
- personnel development and management, and many related fields.

## Master of Arts in Interdisciplinary Studies (M.A.I.S.)

- Major in Interdisciplinary Studies (p. 884)

## Master of Science in Interdisciplinary Studies (M.S.I.S.)

- Major in Interdisciplinary Studies (p. 888)

## Master of Education (M.Ed.)

- Major in Management of Technical Education (p. 892)

## Program Overview

The Master of Arts in Interdisciplinary Studies (M.A.I.S.) degree with a major in Interdisciplinary Studies is coordinated through the Department of Organization, Workforce, and Leadership Studies (OWLS). The interdisciplinary studies degree program utilizes courses from other departments offering graduate-level work. The interdisciplinary studies degree is highly individualized and is designed to provide the adult with various course options. Further information may be obtained by contacting the program chair of the OWLS Department, referencing the "Interdisciplinary Studies" section of this catalog, or the OWLS Department website at <http://www.owls.txstate.edu/> (<http://www.owed.txstate.edu/>).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose outlining future direction

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met. Conditional admission is not available to applicants who require "F" or "J" visas.

## Degree Requirements

The Master of Arts in Interdisciplinary Studies (M.A.I.S.) degree with a major in Interdisciplinary Studies requires 39 semester credit hours, including:

1. Four or more departments represented in coursework (represented by prefixes, so CTE/OCED represent two departments)
2. Three or more colleges must be represented in coursework
3. Three or more departments (course prefixes) must have six or more hours in the departments.
4. No more than 15 hours in any department
5. No more than 12 hours by extension/correspondence (for students intending to do the Certified Public Manager program).

## Course Requirements

Code	Title	Hours
<b>Foundation Courses</b> <sup>1</sup>		
CTE 5303	Interdisciplinary Studies in Occupational, Workforce, and Leadership Studies	3
CTE 5360	Organization Development in the Workplace	3
OCED 5360D		3
OCED 5310	Human Problems in the Workplace	3
or OCED 5361	Human Systems in the Workplace	
or CTE 5313L	Emergent Workplace Perspectives	
or CTE 5324	Human Performance in the Workplace	
or CTE 5315	Leadership and Professional Development	

**Ethics Module <sup>1</sup>**

PHIL 5322	Professional Ethics	3
PHIL 5301	Applied Philosophy	3
or PHIL 5302	Dialogue	
or PHIL 5303	Philosophy of Technology	
or PHIL 5351	Philosophy of Education	
or PHIL 5388	Problems in Philosophy	

**Interdisciplinary Academic Module**

Choose 12 hours of advisor-approved courses	12
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**Exit Module (Students should choose from either the Practicum Based Exit Sequence, or the Research Based Exit Sequence) <sup>2</sup>**

OCED 5300	Interdisciplinary Research Methods	3
or CTE 5330	Overview of Interdisciplinary Research	
OCED 5301	Applied Interdisciplinary Research Part 1	3
or OCED 5303	Reflective and Experiential Learning Techniques	
OCED 5302	Applied Interdisciplinary Research Part 2	3
or OCED 5304	Professional Practicum	

<b>Total Hours</b>	<b>39</b>
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<sup>1</sup> The courses in the ethics module may be utilized towards the Graduate Certificate in Professional Ethics. However, separate admission to the Graduate Certificate in Professional Ethics is needed.

<sup>2</sup> The courses in the Exit Module are sequential. OCED 5300 may only be offered during fall semesters. You may take Exit Module courses while taking other courses. Courses in exit module are sequential, and the prior course in the exit module must be completed before moving on to the next course in the exit module.

## Comprehensive Examination Requirement

The OWLS department requires both written responses and an oral defense to fulfill comprehensive examination requirements. If the committee is not satisfied with either the written or oral responses, they will specify areas for correction and the student will be given the opportunity to resolve the deficiencies in a timely manner. If necessary, a second oral defense will be held to satisfy committee requirements.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Organization, Workforce, and Leadership Studies: CTE (p. 885), OCED (p. 887)

## Courses Offered

### Career and Technical Education (CTE)

#### CTE 5301. Technology of Teaching.

This course presents the research and theory related to the technology of teaching. Topics include learning theories, effective teaching techniques, motivation and performance, evaluation, and classroom dynamics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CTE 5303. Interdisciplinary Studies in Occupational, Workforce, and Leadership Studies.

This course provides an overview of interdisciplinary studies' frameworks in the fields related to occupational, workforce, and leadership studies. Students investigate career options, develop plans of study, integrate interdisciplinary academic material, and refine interdisciplinary writing skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CTE 5306. Instructional Materials Development Technology.

This course provides students opportunities to develop knowledge, skills, and abilities relevant to assessing instructional materials in education and training, within the context of real-world settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CTE 5308. Problems in Cooperative Training.

This course provides a review of basic standards for cooperative education, underlying reasons for standards, and current issues/problems in cooperative education programs. Students will discuss and provide solutions to current dilemmas of cooperative education, through the use of organizational research techniques and organizational problem solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CTE 5312. Development, Organization, and Use of Instructional Material.

This course involves the selection of lesson content, lesson planning, and instructional material development. The emphasis is on the effective development and evaluation of instructional materials. A variety of methods will be taught to gather and utilize instructional materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CTE 5313C. Teaching Entrepreneurship in Career and Technical Education.

This course includes a study and analysis of ownership, marketing strategies, location, financing, regulations, managing, and protecting a business. Students will analyze current research and techniques in teaching entrepreneurship in CTE settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**CTE 5313L. Emergent Workplace Perspectives.**

This course examines the emergent and evolving nature of the modern workplace. Students will explore topics related to interdisciplinary perspectives in the workplace such as inequality related to gender and race, workers' rights, knowledge, control, the role of technology, and globalization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 5313M. Program Evaluation in Career and Technical Education.**

Students will gain an in-depth understanding of terminology and program evaluation, guiding principles, approaches and models, and professional standards utilized while conducting program evaluations of career and technical education (CTE) programs. Students will apply these concepts to design a program evaluation proposal for an existing or proposed CTE program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 5314. Human Relations for Career and Technical Education Teachers.**

This course includes a study of methods of establishing and maintaining effective relationships with students, co-workers, families, business and industry, and community members. Strategies for teaching students and mentoring employees on the dynamics of human relations are highlighted.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5315. Leadership and Professional Development.**

This course provides an overview of leadership approaches used in various educational, training, and workplace settings. Students will explore current research on leadership and engage in activities geared toward building leadership skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5320. Effective Methods of Teaching and Training.**

This fundamental course is for trade and industrial educators seeking certification and technical trainers who are not seeking certification. It is designed to prepare them to apply effective teaching principles and techniques. Lesson plans will be prepared, classrooms managed, and practice teaching included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5321. Work-based Learning in Career and Technical Education.**

This course is intended for teacher coordinators of work-based programs in trades and industrial cooperative education. There is an emphasis on selection of occupations and training stations, student recruitment, instructional coordination in numerous on-the-job experiences, state and local reports, and recordkeeping requirements. Research is conducted on local districts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5322. Teaching and Training as Professions.**

This course emphasizes the professional requirements of teaching and training in a variety of settings. Professional topics include licensure and preparation for the profession, organizations, philosophical foundations of teaching and training, and the socio-political landscape of teaching and training. Research is conducted on reform efforts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5323. Technology Applications.**

This course covers the use of computers in the classroom or office. Topics include history of computers, philosophies of computer integration, research in computer use, overview of common computer programs, and history and use of the Internet.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5324. Human Performance in the Workplace.**

The course provides an overview of current quality improvement strategies utilized in business and industry settings. Topics include the teaching of Human Performance Technology (HPT), organizational culture, teamwork, leadership, measuring improvement, statistical process control, and restructuring of work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5330. Overview of Interdisciplinary Research.**

Students will become familiar with various interdisciplinary research methods, learn concepts related to research, and conduct reviews and critiques of academic research articles. The application of academic research to practical problems will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5355. Career Education and Occupational Information in Career and Technical Education Guidance.**

This course deals with the collection, evaluation, and interpretation of common occupational, career, and personal information. It includes an overview of current theory and research in occupational selection techniques, psychological and sociological factors in career selection, and job analysis. The emphasis is on the practical application in CTE settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CTE 5360. Organization Development in the Workplace.**

This course introduces theories and practices related to organizational development (OD), including strategies to improve organizational, group, and individual performance. Topics include major theories, concepts, skills, and techniques for the practice of OD and the interventions used to lead and manage organization change in various contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5390. Independent Study in Career and Technical Education.**

This is an independent study course involving the study of important and timely topics in CTE. Students complete the study at the direction of the faculty member. This course may be repeated with different topics with departmental permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**Occupational Education (OCED)****OCED 5101. Instructional Skill Development.**

Graduate assistants are required to enroll in this course to be prepared to instruct/assist with classes in Occupational/Career and Technology Education. Topics covered are essential teaching strategies, techniques, evaluation design, online instruction, and effective instructional, motivational techniques. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**OCED 5300. Interdisciplinary Research Methods.**

Basic and advanced concepts related to interdisciplinary research. Special emphasis will be placed on technical writing skills, electronic analysis of databases, appropriate statistical treatment of data, development and validation of instruments, and interdisciplinary research design and procedures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5301. Applied Interdisciplinary Research Part 1.**

The instructional intent is to provide the graduate students with an opportunity to apply their research skills. Students are carefully monitored and mentored in initiating, performing, and documenting their individualized research project. Prerequisite: OCED 5300 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5302. Applied Interdisciplinary Research Part 2.**

This course is the final course in the interdisciplinary research series. It requires the development of a comprehensive final research report including extensive tables and graphs. Students must also be prepared to present the findings of the research to the Occupational Education faculty and students at the Graduate Research Forum. Prerequisite: OCED 5301 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5303. Reflective and Experiential Learning Techniques.**

This course prepares graduate students for a field-based practicum. Students learn reflection and experiential learning techniques useful in the domain of careers, workplace, and leadership. They also locate, develop, and propose a professional practicum experience. Corequisite: CTE 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5304. Professional Practicum.**

This course engages students in a field based experience designed in OCED 5360C, the previous course in the sequence. Students implement their practicum of approximately 120 hours in a work-based setting and concurrently collect ongoing reflections of their experience.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5310. Human Problems in the Workplace.**

Overview of problems that supervisors, teachers, and co-workers encounter in business/industry, social service, military, or education. This range of problems interferes with communication, performance, and development of proficiency in school/work. Perspectives and reports on the incidence of these problems will be presented, as well as actions for these human problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5311. Technology, Change, and Innovation in Organizations.**

This course provides students with opportunities to discover and apply theoretical perspectives on managing innovations within various organizational settings, such as work teams, departments, non-profits, governmental, businesses, and educational institutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5315. The Principles of Extramural Funding.**

This course explores competencies of locating external agency funding for occupational, workforce, and leadership research, teaching and extension. The principles of producing a competitive proposal that includes multi-, cross- and inter-disciplinary collaborations are also discussed. The development of the grant proposal, implementation, budget, and evaluation plan will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5360B. Critical Thinking in the Workplace.**

This course provides students with an opportunity to examine workplace decision making in terms of critical thinking. Current occupational approaches to critical thinking will be emphasized. Students will participate in simulations and case studies of critical thinking for the workplace.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**OCED 5360F. The Basics of Extramural Funding.**

Emphasizing professional relationships of mutuality, collaboration, and respect for the client system, this course helps students develop knowledge and skills to enhance organizational resources, particularly in developing programs, raising funds, writing grant proposals, and marketing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**OCED 5361. Human Systems in the Workplace.**

This course provides an overview of complexity science and systems theory. Students will explore how systematic inquiries are conducted within organizations, examine topics related to organizational dynamics, and apply systems theory to practical problems in organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5362. Leadership Development.**

This course examines leadership within the contexts of organization and workforce settings. Students will explore interdisciplinary approaches to leadership roles, topics related to leadership in organizations and the workplace, and practical application of leadership theories in real-life situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Master of Science in Interdisciplinary Studies (M.S.I.S.) degree with a major in Interdisciplinary Studies is coordinated through the Department of Organization, Workforce, and Leadership Studies (OWLS). The interdisciplinary studies degree program draws courses from other departments offering graduate-level work. The interdisciplinary studies degree is highly individualized and is designed to provide the adult with various course options. Further information may be obtained by contacting the program chair of the OWLS Department, referencing the "interdisciplinary studies" section of this catalog, or the OWLS Department website at <http://www.owls.txstate.edu/> (<http://www.oced.txstate.edu/>).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current

academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university
- official transcripts from **each institution** where course credit was granted
- minimum 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose outlining future direction

### TOEFL, PTE, or IELTS Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

This program does **not** offer admission if the scores above are not met. Conditional admission is not available to applicants who require "F" or "J" visas.

## Degree Requirements

The Master of Science in Interdisciplinary Studies (M.S.I.S.) degree with a major in Interdisciplinary Studies requires 39 semester credit hours, including:

1. Four or more departments represented in course work (represented by prefixes, so CTE/OCED represent two departments)
2. Three or more colleges must be represented in course work
3. Three or more departments (course prefixes) must have six or more hours in the departments.
4. No more than 15 hours in any department
5. No more than 12 hours by extension/correspondence (for students intending to do the Certified Public Manager program).

## Course Requirements

Code	Title	Hours
<b>Foundation Courses</b>		
CTE 5303	Interdisciplinary Studies in Occupational, Workforce, and Leadership Studies	3
CTE 5360	Organization Development in the Workplace	3

OCED 5360D		3
OCED 5310	Human Problems in the Workplace	3
or OCED 5361	Human Systems in the Workplace	
or CTE 5313L	Emergent Workplace Perspectives	
or CTE 5324	Human Performance in the Workplace	
or CTE 5315	Leadership and Professional Development	
<b>Ethics Module</b>		
PHIL 5322	Professional Ethics	3
PHIL 5301	Applied Philosophy	3
or PHIL 5302	Dialogue	
or PHIL 5303	Philosophy of Technology	
or PHIL 5351	Philosophy of Education	
or PHIL 5388	Problems in Philosophy	
<b>Interdisciplinary Academic Module</b>		
Choose 12 hours of advisor-approved electives		12
<b>Exit Module (Students Will Choose Between the Research Based Exit Module or the Practicum Sequence) <sup>2</sup></b>		
OCED 5300	Interdisciplinary Research Methods	3
or CTE 5330	Overview of Interdisciplinary Research	
OCED 5301	Applied Interdisciplinary Research Part 1	3
or OCED 5303	Reflective and Experiential Learning Techniques	
OCED 5302	Applied Interdisciplinary Research Part 2	3
or OCED 5304	Professional Practicum	
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> The courses in the ethics module may be utilized towards the Graduate Certificate in Professional Ethics. However, separate admission to the Graduate Certificate in Professional Ethics is needed.

<sup>2</sup> The courses in the Exit Module are sequential. OCED 5300 may only be offered during fall semesters. You may take Exit Module courses while also taking other courses. Courses in exit module are sequential, and the prior course in the exit module must be completed before moving on to the next course in the exit module.

## Comprehensive Examination Requirement

The OWLS department requires both written responses and an oral defense to fulfill comprehensive examination requirements. If the committee is not satisfied with either the written or oral responses, they will specify areas for correction and the student will be given the opportunity to resolve the deficiencies in a timely manner. If necessary, a second oral defense will be held to satisfy committee requirements.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Organization, Workforce, and Leadership Studies: CTE (p. 889), OCED (p. 891)

## Courses Offered

### Career and Technical Education (CTE)

#### CTE 5301. Technology of Teaching.

This course presents the research and theory related to the technology of teaching. Topics include learning theories, effective teaching techniques, motivation and performance, evaluation, and classroom dynamics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CTE 5303. Interdisciplinary Studies in Occupational, Workforce, and Leadership Studies.

This course provides an overview of interdisciplinary studies' frameworks in the fields related to occupational, workforce, and leadership studies. Students investigate career options, develop plans of study, integrate interdisciplinary academic material, and refine interdisciplinary writing skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CTE 5306. Instructional Materials Development Technology.

This course provides students opportunities to develop knowledge, skills, and abilities relevant to assessing instructional materials in education and training, within the context of real-world settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CTE 5308. Problems in Cooperative Training.

This course provides a review of basic standards for cooperative education, underlying reasons for standards, and current issues/problems in cooperative education programs. Students will discuss and provide solutions to current dilemmas of cooperative education, through the use of organizational research techniques and organizational problem solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CTE 5312. Development, Organization, and Use of Instructional Material.

This course involves the selection of lesson content, lesson planning, and instructional material development. The emphasis is on the effective development and evaluation of instructional materials. A variety of methods will be taught to gather and utilize instructional materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5313C. Teaching Entrepreneurship in Career and Technical Education.**

This course includes a study and analysis of ownership, marketing strategies, location, financing, regulations, managing, and protecting a business. Students will analyze current research and techniques in teaching entrepreneurship in CTE settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**CTE 5313L. Emergent Workplace Perspectives.**

This course examines the emergent and evolving nature of the modern workplace. Students will explore topics related to interdisciplinary perspectives in the workplace such as inequality related to gender and race, workers' rights, knowledge, control, the role of technology, and globalization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 5313M. Program Evaluation in Career and Technical Education.**

Students will gain an in-depth understanding of terminology and program evaluation, guiding principles, approaches and models, and professional standards utilized while conducting program evaluations of career and technical education (CTE) programs. Students will apply these concepts to design a program evaluation proposal for an existing or proposed CTE program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 5314. Human Relations for Career and Technical Education Teachers.**

This course includes a study of methods of establishing and maintaining effective relationships with students, co-workers, families, business and industry, and community members. Strategies for teaching students and mentoring employees on the dynamics of human relations are highlighted.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5315. Leadership and Professional Development.**

This course provides an overview of leadership approaches used in various educational, training, and workplace settings. Students will explore current research on leadership and engage in activities geared toward building leadership skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5320. Effective Methods of Teaching and Training.**

This fundamental course is for trade and industrial educators seeking certification and technical trainers who are not seeking certification. It is designed to prepare them to apply effective teaching principles and techniques. Lesson plans will be prepared, classrooms managed, and practice teaching included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5321. Work-based Learning in Career and Technical Education.**

This course is intended for teacher coordinators of work-based programs in trades and industrial cooperative education. There is an emphasis on selection of occupations and training stations, student recruitment, instructional coordination in numerous on-the-job experiences, state and local reports, and recordkeeping requirements. Research is conducted on local districts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5322. Teaching and Training as Professions.**

This course emphasizes the professional requirements of teaching and training in a variety of settings. Professional topics include licensure and preparation for the profession, organizations, philosophical foundations of teaching and training, and the socio-political landscape of teaching and training. Research is conducted on reform efforts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5323. Technology Applications.**

This course covers the use of computers in the classroom or office. Topics include history of computers, philosophies of computer integration, research in computer use, overview of common computer programs, and history and use of the Internet.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5324. Human Performance in the Workplace.**

The course provides an overview of current quality improvement strategies utilized in business and industry settings. Topics include the teaching of Human Performance Technology (HPT), organizational culture, teamwork, leadership, measuring improvement, statistical process control, and restructuring of work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5330. Overview of Interdisciplinary Research.**

Students will become familiar with various interdisciplinary research methods, learn concepts related to research, and conduct reviews and critiques of academic research articles. The application of academic research to practical problems will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5355. Career Education and Occupational Information in Career and Technical Education Guidance.**

This course deals with the collection, evaluation, and interpretation of common occupational, career, and personal information. It includes an overview of current theory and research in occupational selection techniques, psychological and sociological factors in career selection, and job analysis. The emphasis is on the practical application in CTE settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5360. Organization Development in the Workplace.**

This course introduces theories and practices related to organizational development (OD), including strategies to improve organizational, group, and individual performance. Topics include major theories, concepts, skills, and techniques for the practice of OD and the interventions used to lead and manage organization change in various contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5390. Independent Study in Career and Technical Education.**

This is an independent study course involving the study of important and timely topics in CTE. Students complete the study at the direction of the faculty member. This course may be repeated with different topics with departmental permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**Occupational Education (OCED)****OCED 5101. Instructional Skill Development.**

Graduate assistants are required to enroll in this course to be prepared to instruct/assist with classes in Occupational/Career and Technology Education. Topics covered are essential teaching strategies, techniques, evaluation design, online instruction, and effective instructional, motivational techniques. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**OCED 5300. Interdisciplinary Research Methods.**

Basic and advanced concepts related to interdisciplinary research. Special emphasis will be placed on technical writing skills, electronic analysis of databases, appropriate statistical treatment of data, development and validation of instruments, and interdisciplinary research design and procedures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5301. Applied Interdisciplinary Research Part 1.**

The instructional intent is to provide the graduate students with an opportunity to apply their research skills. Students are carefully monitored and mentored in initiating, performing, and documenting their individualized research project. Prerequisite: OCED 5300 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5302. Applied Interdisciplinary Research Part 2.**

This course is the final course in the interdisciplinary research series. It requires the development of a comprehensive final research report including extensive tables and graphs. Students must also be prepared to present the findings of the research to the Occupational Education faculty and students at the Graduate Research Forum. Prerequisite: OCED 5301 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5303. Reflective and Experiential Learning Techniques.**

This course prepares graduate students for a field-based practicum. Students learn reflection and experiential learning techniques useful in the domain of careers, workplace, and leadership. They also locate, develop, and propose a professional practicum experience. Corequisite: CTE 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5304. Professional Practicum.**

This course engages students in a field based experience designed in OCED 5360C, the previous course in the sequence. Students implement their practicum of approximately 120 hours in a work-based setting and concurrently collect ongoing reflections of their experience.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5310. Human Problems in the Workplace.**

Overview of problems that supervisors, teachers, and co-workers encounter in business/industry, social service, military, or education. This range of problems interferes with communication, performance, and development of proficiency in school/work. Perspectives and reports on the incidence of these problems will be presented, as well as actions for these human problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5311. Technology, Change, and Innovation in Organizations.**

This course provides students with opportunities to discover and apply theoretical perspectives on managing innovations within various organizational settings, such as work teams, departments, non-profits, governmental, businesses, and educational institutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**OCED 5315. The Principles of Extramural Funding.**

This course explores competencies of locating external agency funding for occupational, workforce, and leadership research, teaching and extension. The principles of producing a competitive proposal that includes multi-, cross- and inter-disciplinary collaborations are also discussed. The development of the grant proposal, implementation, budget, and evaluation plan will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5360B. Critical Thinking in the Workplace.**

This course provides students with an opportunity to examine workplace decision making in terms of critical thinking. Current occupational approaches to critical thinking will be emphasized. Students will participate in simulations and case studies of critical thinking for the workplace.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**OCED 5360F. The Basics of Extramural Funding.**

Emphasizing professional relationships of mutuality, collaboration, and respect for the client system, this course helps students develop knowledge and skills to enhance organizational resources, particularly in developing programs, raising funds, writing grant proposals, and marketing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**OCED 5361. Human Systems in the Workplace.**

This course provides an overview of complexity science and systems theory. Students will explore how systematic inquiries are conducted within organizations, examine topics related to organizational dynamics, and apply systems theory to practical problems in organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5362. Leadership Development.**

This course examines leadership within the contexts of organization and workforce settings. Students will explore interdisciplinary approaches to leadership roles, topics related to leadership in organizations and the workplace, and practical application of leadership theories in real-life situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Department of Organization, Workforce, and Leadership Studies also offers the Master of Education (M.Ed.) degree for those interested in supervision. The M.Ed. degree has a major in Management of Technical Education and is a highly specialized degree program. It is designed to assist an individual in learning skills that would enhance his or her performance in managing technical education in either an education or an industrial setting. The degree provides the broad skills necessary

for an educator or trainer to become a better instructor and manager of instruction. In this program, students develop instructional and managerial competencies through various courses in curriculum design and delivery, instructional improvement, human performance technology, class organization, management, teaching/learning styles, diversity, understanding organizations, and program evaluation. Course schedules are flexible to accommodate the needs of working professionals, and many courses are offered in online and hybrid formats. This option allows students to complete courses from home and study whenever and wherever is convenient. Hybrid courses meet three times each semester, and the remainder of the work is online. Contact the department chair of Department of Organization, Workforce, and Leadership Studies or go to <http://www.owls.txstate.edu/> (<http://www.oced.txstate.edu/>) for more information.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts required from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose (one page)

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52 overall

- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores with a 110 overall
- official TOEFL 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Management of Technical Education requires 36 semester credit hours. Please consult the advisor for timing of courses.

## Course Requirements

Code	Title	Hours
<b>Foundations Courses</b>		
CTE 5303	Interdisciplinary Studies in Occupational, Workforce, and Leadership Studies	3
CTE 5330	Overview of Interdisciplinary Research	3
<b>Level I Choose nine hours from the following:</b>		<b>9</b>
EDCL 5339	Understanding Self: Developing a Personal Vision of Leadership	
EDCL 5340	Shaping Organizations and Using Inquiry: Management and Leadership	
EDCL 5345	Understanding People: Professional Development	
EDCL 5347	Understanding Environments: Social, Political, Economic, Legal, and Technological	
EDCL 5348	Supervision of Instruction	
EDCL 6342	Curriculum Design	
EDCL 6344	Campus Leadership	
<b>Level II Choose 21 hours from the following:</b>		<b>21</b>
CTE 5301	Technology of Teaching	
CTE 5306	Instructional Materials Development Technology	
CTE 5314	Human Relations for Career and Technical Education Teachers	
CTE 5320	Effective Methods of Teaching and Training	
CTE 5321	Work-based Learning in Career and Technical Education	
CTE 5322	Teaching and Training as Professions	
CTE 5324	Human Performance in the Workplace	
CTE 5341		
CTE 5355	Career Education and Occupational Information in Career and Technical Education Guidance	
OCED 5310	Human Problems in the Workplace	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The OWLS department requires both written responses and an oral defense to fulfill Requirements. All candidates for graduate degrees must pass one or more comprehensive examination requirements. examinations. If the committee is not satisfied with either the written or oral responses, they will specify areas for correction and the student will be given the opportunity to resolve the deficiencies in a timely manner. If necessary, a second oral defense will be held to satisfy committee requirements.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Occupational, Workforce, and Leadership Studies: CTE (p. 893), OCED (p. 895)

## Courses Offered

### Career and Technical Education (CTE)

#### CTE 5301. Technology of Teaching.

This course presents the research and theory related to the technology of teaching. Topics include learning theories, effective teaching techniques, motivation and performance, evaluation, and classroom dynamics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CTE 5303. Interdisciplinary Studies in Occupational, Workforce, and Leadership Studies.

This course provides an overview of interdisciplinary studies' frameworks in the fields related to occupational, workforce, and leadership studies. Students investigate career options, develop plans of study, integrate interdisciplinary academic material, and refine interdisciplinary writing skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CTE 5306. Instructional Materials Development Technology.

This course provides students opportunities to develop knowledge, skills, and abilities relevant to assessing instructional materials in education and training, within the context of real-world settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CTE 5308. Problems in Cooperative Training.

This course provides a review of basic standards for cooperative education, underlying reasons for standards, and current issues/problems in cooperative education programs. Students will discuss and provide solutions to current dilemmas of cooperative education, through the use of organizational research techniques and organizational problem solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CTE 5312. Development, Organization, and Use of Instructional Material.

This course involves the selection of lesson content, lesson planning, and instructional material development. The emphasis is on the effective development and evaluation of instructional materials. A variety of methods will be taught to gather and utilize instructional materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5313C. Teaching Entrepreneurship in Career and Technical Education.**

This course includes a study and analysis of ownership, marketing strategies, location, financing, regulations, managing, and protecting a business. Students will analyze current research and techniques in teaching entrepreneurship in CTE settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**CTE 5313L. Emergent Workplace Perspectives.**

This course examines the emergent and evolving nature of the modern workplace. Students will explore topics related to interdisciplinary perspectives in the workplace such as inequality related to gender and race, workers' rights, knowledge, control, the role of technology, and globalization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 5313M. Program Evaluation in Career and Technical Education.**

Students will gain an in-depth understanding of terminology and program evaluation, guiding principles, approaches and models, and professional standards utilized while conducting program evaluations of career and technical education (CTE) programs. Students will apply these concepts to design a program evaluation proposal for an existing or proposed CTE program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 5314. Human Relations for Career and Technical Education Teachers.**

This course includes a study of methods of establishing and maintaining effective relationships with students, co-workers, families, business and industry, and community members. Strategies for teaching students and mentoring employees on the dynamics of human relations are highlighted.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5315. Leadership and Professional Development.**

This course provides an overview of leadership approaches used in various educational, training, and workplace settings. Students will explore current research on leadership and engage in activities geared toward building leadership skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5320. Effective Methods of Teaching and Training.**

This fundamental course is for trade and industrial educators seeking certification and technical trainers who are not seeking certification. It is designed to prepare them to apply effective teaching principles and techniques. Lesson plans will be prepared, classrooms managed, and practice teaching included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5321. Work-based Learning in Career and Technical Education.**

This course is intended for teacher coordinators of work-based programs in trades and industrial cooperative education. There is an emphasis on selection of occupations and training stations, student recruitment, instructional coordination in numerous on-the-job experiences, state and local reports, and recordkeeping requirements. Research is conducted on local districts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5322. Teaching and Training as Professions.**

This course emphasizes the professional requirements of teaching and training in a variety of settings. Professional topics include licensure and preparation for the profession, organizations, philosophical foundations of teaching and training, and the socio-political landscape of teaching and training. Research is conducted on reform efforts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5323. Technology Applications.**

This course covers the use of computers in the classroom or office. Topics include history of computers, philosophies of computer integration, research in computer use, overview of common computer programs, and history and use of the Internet.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5324. Human Performance in the Workplace.**

The course provides an overview of current quality improvement strategies utilized in business and industry settings. Topics include the teaching of Human Performance Technology (HPT), organizational culture, teamwork, leadership, measuring improvement, statistical process control, and restructuring of work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5330. Overview of Interdisciplinary Research.**

Students will become familiar with various interdisciplinary research methods, learn concepts related to research, and conduct reviews and critiques of academic research articles. The application of academic research to practical problems will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5355. Career Education and Occupational Information in Career and Technical Education Guidance.**

This course deals with the collection, evaluation, and interpretation of common occupational, career, and personal information. It includes an overview of current theory and research in occupational selection techniques, psychological and sociological factors in career selection, and job analysis. The emphasis is on the practical application in CTE settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5360. Organization Development in the Workplace.**

This course introduces theories and practices related to organizational development (OD), including strategies to improve organizational, group, and individual performance. Topics include major theories, concepts, skills, and techniques for the practice of OD and the interventions used to lead and manage organization change in various contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5390. Independent Study in Career and Technical Education.**

This is an independent study course involving the study of important and timely topics in CTE. Students complete the study at the direction of the faculty member. This course may be repeated with different topics with departmental permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**Occupational Education (OCED)****OCED 5101. Instructional Skill Development.**

Graduate assistants are required to enroll in this course to be prepared to instruct/assist with classes in Occupational/Career and Technology Education. Topics covered are essential teaching strategies, techniques, evaluation design, online instruction, and effective instructional, motivational techniques. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**OCED 5300. Interdisciplinary Research Methods.**

Basic and advanced concepts related to interdisciplinary research. Special emphasis will be placed on technical writing skills, electronic analysis of databases, appropriate statistical treatment of data, development and validation of instruments, and interdisciplinary research design and procedures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5301. Applied Interdisciplinary Research Part 1.**

The instructional intent is to provide the graduate students with an opportunity to apply their research skills. Students are carefully monitored and mentored in initiating, performing, and documenting their individualized research project. Prerequisite: OCED 5300 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5302. Applied Interdisciplinary Research Part 2.**

This course is the final course in the interdisciplinary research series. It requires the development of a comprehensive final research report including extensive tables and graphs. Students must also be prepared to present the findings of the research to the Occupational Education faculty and students at the Graduate Research Forum. Prerequisite: OCED 5301 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5303. Reflective and Experiential Learning Techniques.**

This course prepares graduate students for a field-based practicum. Students learn reflection and experiential learning techniques useful in the domain of careers, workplace, and leadership. They also locate, develop, and propose a professional practicum experience. Corequisite: CTE 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5304. Professional Practicum.**

This course engages students in a field based experience designed in OCED 5360C, the previous course in the sequence. Students implement their practicum of approximately 120 hours in a work-based setting and concurrently collect ongoing reflections of their experience.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5310. Human Problems in the Workplace.**

Overview of problems that supervisors, teachers, and co-workers encounter in business/industry, social service, military, or education. This range of problems interferes with communication, performance, and development of proficiency in school/work. Perspectives and reports on the incidence of these problems will be presented, as well as actions for these human problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5311. Technology, Change, and Innovation in Organizations.**

This course provides students with opportunities to discover and apply theoretical perspectives on managing innovations within various organizational settings, such as work teams, departments, non-profits, governmental, businesses, and educational institutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5315. The Principles of Extramural Funding.**

This course explores competencies of locating external agency funding for occupational, workforce, and leadership research, teaching and extension. The principles of producing a competitive proposal that includes multi-, cross- and inter-disciplinary collaborations are also discussed. The development of the grant proposal, implementation, budget, and evaluation plan will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5360B. Critical Thinking in the Workplace.**

This course provides students with an opportunity to examine workplace decision making in terms of critical thinking. Current occupational approaches to critical thinking will be emphasized. Students will participate in simulations and case studies of critical thinking for the workplace.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**OCED 5360F. The Basics of Extramural Funding.**

Emphasizing professional relationships of mutuality, collaboration, and respect for the client system, this course helps students develop knowledge and skills to enhance organizational resources, particularly in developing programs, raising funds, writing grant proposals, and marketing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**OCED 5361. Human Systems in the Workplace.**

This course provides an overview of complexity science and systems theory. Students will explore how systematic inquiries are conducted within organizations, examine topics related to organizational dynamics, and apply systems theory to practical problems in organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5362. Leadership Development.**

This course examines leadership within the contexts of organization and workforce settings. Students will explore interdisciplinary approaches to leadership roles, topics related to leadership in organizations and the workplace, and practical application of leadership theories in real-life situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

Encino Building Room 150

Telephone: 512-245-2592 Fax: 512-245-8097

<http://www.socialwork.txstate.edu/>

The School of Social Work is a vibrant branch of the College of Applied Arts. Its graduate program prepares students to engage in advanced-level practice, advocacy, and research skills within the social work profession.

The School of Social Work at Texas State has long been committed to developing social workers that can competently address diverse needs across the lifespan in a multicultural society. Graduates are prepared for direct practice in various settings, including but not limited to, health care, non-profit social services, education, criminal justice, veterans services, and public policy settings. Graduates develop the skills to work across these settings on behalf of individuals, families, and communities. Not only are graduates well-prepared to work effectively across populations, but they are also ready to collaborate on interdisciplinary teams among a wide range of professionals. A key component of students' readiness for social work practice is the School's extensive network of public and private agency partners. These rural and urban agency settings, in which students complete their field practicum/internship, integrate and apply all social work curricula, and help students solidify masters-level practice skills.

## Master of Social Work (M.S.W.)

- Major in Advanced Practice Leadership (On Campus Advanced BSW Holders Concentration) (p. 896)
- Major in Advanced Practice Leadership (On Campus Regular Non-BSW Holders Concentration) (p. 902)
- Major in Advanced Practice Leadership (Online Advanced BSW Holders Concentration) (p. 908)
- Major in Advanced Practice Leadership (Online Regular Non-BSW Holders Concentration) (p. 914)

## Program Overview

The School of Social Work offers the Master of Social Work (M.S.W.) degree with a major in Advanced Practice Leadership, which prepares students for advanced specialized practice. The degree is fully accredited by the Council on Social Work Education. Social work practice at the M.S.W. level shares a common core of knowledge, values, and skills. Throughout the curriculum, the School emphasizes social justice and professional ethics. The M.S.W. degree prepares graduates for a wide variety of positions in many diverse, interesting fields that address human needs.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in social work (B.S.W.) with regional and CSWE (Council on Social Work Education) accreditations, earned within the last ten years (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://>



[www.gradcollege.txst.edu/international/faqs.html](http://www.gradcollege.txst.edu/international/faqs.html)) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.9 overall GPA or 2.9 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 2.9 GPA in the last two full academic years of study
- minimum 2.9 GPA in all undergraduate social work courses
- GRE not required
- departmental application
- resume/CV (maximum two pages)
- statement of purpose addressing the following: motivation for pursuing a Master of Social Work degree including how academic history and experiences have prepared the student for graduate school, the responsibility a social work professional has to ethical standards, social justice, advocacy and cultural awareness, and how the student will contribute to the field of social work, either through evidence-based practice, research participation, or exploration of practice modalities and how the student's contribution in these areas will distinguish them from other applicants.
- interview

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Social Work (M.S.W.) degree with a major in Advanced Practice Leadership (On Campus Advanced BSW Holders Concentration) requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SOWK 5322	Advanced Social Policy and Social Justice	3
SOWK 5323	Advanced Social Work Research	3
SOWK 5370	Advanced Program Planning and Grant-Based Resource Development	3
SOWK 5371	Advanced Assessment, Leadership, and Supervision in Social Service Organizations	3
SOWK 5372	Advanced Diagnostic Assessment and Intervention with Individuals	3
SOWK 5373	Advanced Intervention with Families and Groups	3
SOWK 5378	Advanced Field Practicum I	3

SOWK 5979	Advanced Field Practicum II	9
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Prescribed Electives		
Choose 6 hours from the following:		
SOWK 5300E	Social Work and Health Care	
SOWK 5301	School Social Work	
SOWK 5302	Hip Hop and Social Justice for Individual and Community Change	
SOWK 5303	Spirituality in Social Work Practice	
SOWK 5304	Adventure Therapy: Theory, Research & Practice	
SOWK 5312	Social Work Intervention in Drug Addiction & Abuse	
SOWK 5315	Social Work Intervention in Child Abuse & Neglect	
SOWK 5328	Interdisciplinary Perspectives on Aging	
SOWK 5332	Helping Troops Transition Back to their Families and Communities: The Invisible Wounds of War	

<b>Total Hours</b>	<b>36</b>
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## Field Practicum

Field practicum (Internship) involves the student intern working in a social service agency under the intensive supervision of a licensed master social worker. All regular track students (full- and part-time) must complete a total of 20 semester credit hours of field practicum. Regular track students complete two internships: (1) foundation field is 30 contact hours in a field practicum and (2) advanced field is 540 contact hours in a different field practicum. MSW advanced track students complete the second practicum only (i.e., Advanced Field Practicum), consisting of 540 contact hours. Regular (Non BSW) track students complete their first practicum during the start of their second year during the Fall semester. Part-time Regular track students will take SOWK 5376 and SOWK 5111 and then complete SOWK 5411. Part-time students will take these three practicum courses over the Fall and Spring semesters, respectively. Full-time Regular track students completing Foundation field, take SOWK 5376 and SOWK 5577 concurrently in the same semester.

Full-time advanced track students complete the Advanced Field Practicum, SOWK 5378 and SOWK 5979, during their second year in the Fall semester. Part-time students will complete their practicums in two semesters. During the first semester students will complete SOWK 5378 and SOWK 5379. In the second and final semester, part-time students will complete SOWK 5679. This professionally supervised field experience supports the development of social work skills, while students are concurrently enrolled in integrative seminar classes.

## Comprehensive Examination Requirement

All candidates for graduate degrees at Texas State University must pass a comprehensive examination during their final semester in the degree program. Students within the School of Social Work must complete a Comprehensive Exam and have a minimum Texas State GPA of 3.0 in MSW courses to be eligible for graduation. The Comprehensive Exam will be completed in the final semester (during advanced field practicum/internship). If unsuccessful during the first attempt, students may take the exam a second time prior to the University established deadline for completion of the comprehensive exam during the given semester.

To be eligible for graduation, a student must complete all degree requirements, pass the MSW Comprehensive Exam, and have a minimum Texas State GPA of 3.0 in MSW courses. Students who do

not successfully complete the requirements for the degree within the timelines specified will not be eligible for graduation.

Master's level courses in Social Work: SOWK

## Courses Offered

### Social Work (SOWK)

#### SOWK 5111. Foundation Part-Time Field Practicum I.

This course is supervised internship/practicum for beginning generalist social work practice. Students apply knowledge gained in an online integrative seminar to their work with individuals, families, groups, and communities for a minimum of 180 contact hours at a human service agency. Prerequisite: SOWK 5313 and SOWK 5314 both with grades of "B" or better. Corequisite: SOWK 5376 with a grade of "B" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### SOWK 5300E. Social Work and Health Care.

This elective course provides a generalist view of social work practice in mental health and public health, considering the social problems that affect health care, and ethical and effective intervention strategies and service delivery systems. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300F. International Social Work.

This course covers advanced theoretical and practical approaches to empowerment, social and economic justice, and human rights. Particular cultures and specific global problems are examined in-depth to promote student acquisition of an international worldview for human global change based on social work values and research-informed practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300H. Comparative Social Work Ethics in Canterbury.

This course assists students in expanding an intermediate level of knowledge, values, and skills in the area of ethics in social work. The NASW Code of Ethics (US) and the National Codes of Ethics from the International Federation of Social Workers are used.

**3 Credit Hours. 12 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300I. Social Work and Social Services in Canterbury.

The purpose of this course is to assist the student in exploring social work processes, social service provision and services to special populations in Canterbury, England. Agency visits or primary research will guide learning.

**3 Credit Hours. 12 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300J. Introduction to Trauma Informed Care.

This advanced course focuses on culturally relevant knowledge and skills for theory-based, therapeutic assessment and intervention with diverse families and groups. The course emphasizes systemic, critical analysis of contemporary mental health practice using a psychosocial, strengths-based framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300K. Innovative Community Engagement with Vulnerable Populations.

This service-learning, Study-in-America course will require students to identify, examine, and critically analyze social service programs which provide services to vulnerable populations (persons experiencing poverty, homelessness, food insecurity, criminal justice issues, etc). Additional components of the course include travel to and participation in service-learning/volunteer activities in Louisiana.

**3 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300M. ADVANCED INTERVENTION WITH INTIMATE PARTNERSHIPS (COUPLES).

This advanced course focuses on culturally relevant knowledge and skills for theory based, therapeutic assessment and intervention with diverse intimate partnerships. The course emphasizes systemic, critical analysis of contemporary mental health practice using a psychosocial, strengths-based framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300N. Social Work Practice in the Criminal Justice System.

This graduate elective course explores an integrated approach to social work practice in the criminal justice system. It provides a comprehensive framework of knowledge, values, and skills for effective and ethical practice serving diverse and vulnerable clients and communities. It assumes an evidence-based and strengths-oriented social justice perspective to contemporary challenges and opportunities. It engages students in a process of self-reflection that assists them in developing an individualized professional model of potential practice in this critically relevant field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 53000. Modern Day Colonialism and Indigenous People Study in America.**

This course is a hybrid, service-learning, Study-in-America course. It requires students to identify, examine, and critically analyze the history of colonialism on the culture, allocation of resources, oppression, and contribution to on-going risks and strengths in Honolulu, Hawaii. Additional components of the course include required travel to various agencies, participation in online learning, and two pre-travel orientations, and active participation in service-learning/volunteer activities within a human service agency in Honolulu, Hawaii. Prerequisite: Minimum 3.0 TXST GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5301. School Social Work.**

This course explores the role of social workers in the school setting. Students learn about the unique challenges of providing social services within the educational environment. Interventions for working with children and youth in at risk situations are also introduced and practiced. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5302. Hip Hop and Social Justice for Individual and Community Change.**

Contemporary issues of equity and justice are investigated for potential influences on health and well-being. Students will compare professional application of Hip Hop integrated strategies within therapeutic, education, physical health, and afterschool and summer programs. Students will learn the interdisciplinary aspects of community-based strategies to promote equity and justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5303. Spirituality in Social Work Practice.**

This course provides an advanced-level framework of knowledge, values, and skills necessary for ethical and effective spiritually-relevant practice. It examines spirituality as an integral component of a strengths-based approach to social work practice with diverse and/or vulnerable clients. It integrates a contemporary global perspective with critical analysis and assessment. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5304. Adventure Therapy: Theory, Research & Practice.**

The course examines theory, practice and research in adventure therapy and engages the learner in hands on practice experience in outdoor, adventure therapy activities. The course guides students towards best practices in the use of adventure therapy as an innovative intervention that can be used in social work practice and other disciplines, with individuals, families and groups in a variety of settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5307. Ghana: Human Rights and Social Justice.**

This course focuses on human rights and applied social justice in a global context from an interdisciplinary standpoint. The course helps students develop the capacity to apply human rights and social justice knowledge and skills to interdisciplinary practice with individuals, communities, and families in a global context. This international-based service learning course intentionally integrates community service, academic learning, and civic learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5308. Human Behavior in Individual and Family Social Environments.**

This foundation graduate course presents individual and family dynamics across the life cycle, centering on human development, individual and group strengths, and the effects of cultural diversity. It enhances critical thinking and assessment skills about human behavior in social environments, and incorporates material on professional values, ethics, and social justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5309. Human Behavior in Local and Global Social Environments.**

This foundation graduate course explores human functioning in the environment by studying families, groups, communities, organizations, and societies in local and global contexts. Through learning content on diversity, populations at risk, and social and economic justice, students build critical thinking and assessment skills using developmental and eco-systems frameworks. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5310. Social Welfare Policy and Services.**

This foundation course studies the United States' social welfare system, emphasizing how social welfare policies affect diverse populations. Topics include social welfare history; and policy development, implementation, evaluation, and values.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5312. Social Work Intervention in Drug Addiction & Abuse.**

This course focuses on commonly used and abused drugs as well as the dynamics and treatment of addiction. It emphasizes social work intervention aimed at addiction prevention and treatment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5313. Foundation Social Work Practice I.**

This foundation course explores generalist social work theory and practice methodology in problem-solving with individuals, families, and groups, emphasizing data collection, assessment, intervention planning, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5314. Foundation Social Work Practice II.**

This foundation skill-development course emphasizes generalist social work practice with task groups, organizations, and communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5315. Social Work Intervention in Child Abuse & Neglect.**

This course considers child welfare services available to abused and neglected children in their own homes, in substitute care, and through the community, emphasizing social work intervention with children and their families.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5316. Foundation Social Work Practice III.**

This foundation course develops the student's interpersonal and communication skills with clients and other professionals. Students must demonstrate competence in interviewing, assessment, and planning skills. Students learn to collect data to support assessment, plan intervention, and evaluate practice. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5317. Social Work Research.**

This foundation course builds introductory scientific research skills in critical thinking and knowledge of program and practice evaluation. It prepares students to read, interpret, and critique research with skepticism and rigor and to perform various research and social work practice activities. Prerequisite: SOWK 5308 and SOWK 5313 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5319. Diagnostic Assessment.**

This advanced course examines how individuals, families, and groups interact with the social environment, emphasizing mental health and adaptive capacity, theories of the etiology and development of mental and emotional disorders, and how culture affects mental health.

Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5320. Advanced Administrative Leadership Practice I: Introduction to Management.**

This advanced skill-development course emphasizes social work practice in managing small and large organizations. Students develop knowledge and skills in social work management and supervision in non-profit and public organizations. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5322. Advanced Social Policy and Social Justice.**

This advanced course, a study of social legislation affecting disadvantaged persons, emphasizes policy analysis, values, and advocacy through studying social policy history; developing, implementing, and evaluating policy; and influencing social and economic justice. (MULT) Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5323. Advanced Social Work Research.**

This advanced course builds knowledge and skills for systematically evaluating programs and practice. It enhances effective and ethical social work practice by teaching skills necessary to design, implement, and empirically assess intervention with client and programs. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5324. Advanced Direct Practice with Families.**

This advanced course focuses on theories, research, and models of practice with families. It emphasizes a systems orientation to assessment and intervention, and integrates issues of self-awareness and human diversity. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5325. Advanced Administrative Leadership Practice III: Challenges and Innovations.**

This advanced course expands knowledge and skills by exploring how theories, supervision and management interventions, and social work values are applied to diverse organizational environments. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5326. MC/MP Advanced Direct Practice with Individuals.**

This advanced course examines intervention theories and builds specialized skills for effective, ethical practice with individuals. It examines how culture influences individuals, and discusses how to assess individuals from multiple perspectives. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5327. Advanced Direct Practice with Groups.**

This advanced course develops effective, ethical group practice skills, including assessment from multiple perspectives, facilitation of group process and intervention, evaluation, and addressing needs of diverse populations. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5328. Interdisciplinary Perspectives on Aging.**

This interdisciplinary course provides a graduate-level foundation in knowledge and skills used to address a wide range of needs among the aging population, their families, and support systems. Biophysical, psychosocial, and environmental perspectives will be integrated into development of culturally competent approaches to work with elders in many fields.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5329. Organizational Development.**

This advanced course examines organizational and inter-organizational social service delivery contexts; how funding, mandate, and organizational arrangements influence services; and factors to consider in modifying existing organizations. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5332. Helping Troops Transition Back to their Families and Communities: The Invisible Wounds of War.**

The course examines topics at the individual, family, group, organizational, and community levels related to troops who are returning from current combat operations and their families. It reviews the needs, community resources, and policies in place for helping them and their families make this transition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5339. Selected Topics in Social Work.**

Students study relevant social work topics in depth. Topics, such as social work in schools or in health care, are selected according to students' needs and professional trends. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 5360. Directed Study in Social Work.**

This one-semester course highlights individualized reading, independent study and projects, and guided instruction. It is offered by invitation of the professor and with the consent of the MSW Coordinator. It may not be repeated for credit. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5370. Advanced Program Planning and Grant-Based Resource Development.**

This advanced course emphasizes social work practice in building and developing non-profit and public human services organizations. Course topics include: determining organizational needs and priorities; identifying resources to address needs and priorities; and pursuing grant-funded resources to address organizational needs. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5371. Advanced Assessment, Leadership, and Supervision in Social Service Organizations.**

This advanced course focuses on observational and interview-based evaluations of organizational functioning related to change, diversity, ethical decision-making, budgeting, and implementation of action plans. The course also focuses on development of supervisory strategies to effectively lead and transform an organization. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5372. Advanced Diagnostic Assessment and Intervention with Individuals.**

This advanced course focuses on culturally relevant diagnostic assessment of and intervention with individuals based on current theory. The course emphasizes critical analysis of contemporary mental health practice using a psychosocial framework. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5373. Advanced Intervention with Families and Groups.**

This advanced course focuses on culturally-relevant knowledge and skills for theory-based, therapeutic assessment and intervention with diverse families and groups. The course emphasizes systemic, critical analysis of contemporary mental health practice using a psychosocial, strengths-based framework. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SOWK 5376. Foundation Field Integrative Seminar I.**

This course is an integrative seminar for generalist social work practice in social service agencies applying micro, mezzo, and macro level knowledge. The content of the course includes social work competencies, ethical values, professional development, and basic knowledge of social work practice and the profession overall. This seminar course is completed by students enrolled in full-time and part-time. Prerequisite: SOWK 5313 and SOWK 5314 both with grades of "B" or better. Corequisite: SOWK 5111 or SOWK 5577 either with a grade of "Credit".

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 5378. Advanced Field Practicum I.**

This course is the first part of the advanced MSW field practicum in which students participate in a field seminar course in conjunction with completing field practicum hours at an agency. Field seminar provides the opportunity for students to apply and critically analyze social work knowledge gained in core. Prerequisites: SOWK 5370 and SOWK 5371 and SOWK 5372 and SOWK 5373 all with grades of "B" or better and a minimum 3.0 Overall GPA. Corequisite: SOWK 5379 or SOWK 5979 either with a grade of "Credit".

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 5379. Advanced Part-Time Field Practicum I.**

This course is taken in conjunction with SOWK 5378 as Part I of the advanced/final field practicum courses for part-time students requiring completion of a minimum of 270 hours of internship in a social service agency. This course requires application of classroom knowledge to address complex level social justice issues. Prerequisite: SOWK 5370 and SOWK 5371 and SOWK 5372 and SOWK 5373 all with grades of "B" or better and a minimum 3.0 Overall GPA. Corequisite: SOWK 5378 with a grade of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5411. Foundation Part-Time Field Practicum II.**

This second foundation part-time course continues a supervised internship/practicum focused on generalist social work practice in agencies for a minimum of 180 clock hours, applying classroom knowledge to work with individuals, families, groups, and communities. Prerequisites: SOWK 5376 with a grade of "B" or better and SOWK 5111 with a grade of "credit".

**4 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5577. Foundation Full-Time Field Practicum II.**

This course provides experiential learning opportunities through application of complex micro, mezzo, and macro level knowledge in social service agencies. This is the second course of the foundation full-time field sequence, and requires completion of 360 hours. This course is completed by students enrolled full-time only. Prerequisite: SOWK 5313 and SOWK 5314 both with grades of "B" or better. Corequisite: SOWK 5376 with a grade of "B" or better.

**5 Credit Hours. 0 Lecture Contact Hours. 24 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5679. Advanced Part-Time Field Practicum II.**

This is the second part of the advanced practicum course sequence for part-time students requiring completion of a minimum of 270 hours in a social service agency. This course continues the experiential learning process initiated in SOWK 5379 including application of classroom knowledge to address complex level social justice issues. Prerequisite: SOWK 5378 with a grade of "B" or better and SOWK 5379 with a grade of "Credit" and a minimum 3.0 Overall GPA.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5979. Advanced Field Practicum II.**

This course is taken in conjunction with SOWK 5378 and is the advanced/final field practicum course in the final field course sequence for full-time students requiring completion of 540 hours of internship in a social service agency. This course requires application of classroom knowledge to address complex level social justice issues. Prerequisite: SOWK 5370 and SOWK 5371 and SOWK 5372 and SOWK 5373 all with grades of "B" or better and a minimum 3.0 Overall GPA. Corequisite: SOWK 5378 with a grade of "B" or better.

**9 Credit Hours. 0 Lecture Contact Hours. 35 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The School of Social Work offers the Master of Social Work (M.S.W.) degree with a major in Advanced Practice Leadership, which prepares students for advanced specialized practice. The degree is fully accredited by the Council on Social Work Education. Social work practice at the M.S.W. level shares a common core of knowledge, values, and skills. Throughout the curriculum, the School emphasizes social justice and professional ethics. The M.S.W. degree prepares graduates for a wide variety of positions in many diverse, interesting fields that address human needs.

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- completed online application

- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.9 overall GPA or 2.9 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- departmental application
- resume/CV (maximum two pages)
- statement of purpose addressing the following: motivation for pursuing a Master of Social Work degree including how academic history and experiences have prepared the student for graduate school, the responsibility a social work professional has to ethical standards, social justice, advocacy and cultural awareness, and how the student will contribute to the field of social work, either through evidence-based practice, research participation, or exploration of practice modalities and how the student's contribution in these areas will distinguish them from other applicants.
- interview

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Social Work (M.S.W.) degree with a major in Advanced Practice Leadership (On Campus Regular Non-BSW Holders Concentration) requires 62 semester credit hours. The first (foundation) year curriculum focuses on the generic foundation knowledge and skills necessary for general social work practice, while the second (advanced) year focuses on specialized practice.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SOWK 5308	Human Behavior in Individual and Family Social Environments	3

SOWK 5309	Human Behavior in Local and Global Social Environments	3
SOWK 5310	Social Welfare Policy and Services	3
SOWK 5313	Foundation Social Work Practice I	3
SOWK 5314	Foundation Social Work Practice II	3
SOWK 5316	Foundation Social Work Practice III	3
SOWK 5317	Social Work Research	3
SOWK 5322	Advanced Social Policy and Social Justice	3
SOWK 5323	Advanced Social Work Research	3
SOWK 5370	Advanced Program Planning and Grant-Based Resource Development	3
SOWK 5371	Advanced Assessment, Leadership, and Supervision in Social Service Organizations	3
SOWK 5372	Advanced Diagnostic Assessment and Intervention with Individuals	3
SOWK 5373	Advanced Intervention with Families and Groups	3
SOWK 5376	Foundation Field Integrative Seminar I	3
SOWK 5577	Foundation Full-Time Field Practicum II	5
SOWK 5378	Advanced Field Practicum I	3
SOWK 5979	Advanced Field Practicum II	9

### Prescribed Elective

Choose 3 hours from the following:		3
SOWK 5300E	Social Work and Health Care	
SOWK 5301	School Social Work	
SOWK 5302	Hip Hop and Social Justice for Individual and Community Change	
SOWK 5303	Spirituality in Social Work Practice	
SOWK 5304	Adventure Therapy: Theory, Research & Practice	
SOWK 5312	Social Work Intervention in Drug Addiction & Abuse	
SOWK 5315	Social Work Intervention in Child Abuse & Neglect	
SOWK 5328	Interdisciplinary Perspectives on Aging	
SOWK 5332	Helping Troops Transition Back to their Families and Communities: The Invisible Wounds of War	

**Total Hours** **62**

## Field Practicum

Field practicum (internship) involves the student intern working in a social service agency under the intensive supervision of a licensed master social worker. All regular track students (full- and part-time) must complete a total of 20 semester credit hours of field practicum. Regular track students complete two internships: (1) foundation field is 360 contact hours in a field practicum and (2) advanced field is 540 contact hours in a different field practicum. MSW advanced track students complete the second practicum only (i.e., Advanced Field Practicum), consisting of 540 contact hours. Regular (Non BSW) track students complete their first practicum during the start of their second year during the Fall semester. Part-time Regular students will take SOWK 5376 and SOWK 5111 and then complete SOWK 5411. Part-time students will take these three practicum courses over the Fall and Spring semesters respectively. Full-time Regular track students completing Foundation field, take SOWK 5376 and SOWK 5577 concurrently in the same semester.

Full-time advanced track students complete the Advanced Field Practicum, SOWK 5378 and SOWK 5979, during their second year in the fall semester. Part-time students will complete their practicums in two

semesters. During the first semester students will complete SOWK 5378 and SOWK 5379. In the second and final semester, part-time students will complete SOWK 5679. This professionally supervised field experience supports the development of social work skills, while students are concurrently enrolled in integrative seminar classes.

## Comprehensive Examination Requirement

All candidates for graduate degrees at Texas State University must pass a comprehensive examination during their final semester in the degree program. Students within the School of Social Work must complete a Comprehensive Exam and have a minimum Texas State GPA of 3.0 in MSW courses to be eligible for graduation. The Comprehensive Exam will be completed in the final semester (during advanced field practicum/internship). If unsuccessful during the first attempt, students may take the exam a second time prior to the University established deadline for completion of the comprehensive exam during the given semester.

To be eligible for graduation, a student must complete all degree requirements, pass the MSW Comprehensive Exam, and have a minimum Texas State GPA of 3.0 in MSW courses. Students who do not successfully complete the requirements for the degree within the timelines specified will not be eligible for graduation.

Master's level courses in Social Work: SOWK

## Courses Offered

### Social Work (SOWK)

#### SOWK 5111. Foundation Part-Time Field Practicum I.

This course is supervised internship/practicum for beginning generalist social work practice. Students apply knowledge gained in an online integrative seminar to their work with individuals, families, groups, and communities for a minimum of 180 contact hours at a human service agency. Prerequisite: SOWK 5313 and SOWK 5314 both with grades of "B" or better. Corequisite: SOWK 5376 with a grade of "B" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### SOWK 5300E. Social Work and Health Care.

This elective course provides a generalist view of social work practice in mental health and public health, considering the social problems that affect health care, and ethical and effective intervention strategies and service delivery systems. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300F. International Social Work.

This course covers advanced theoretical and practical approaches to empowerment, social and economic justice, and human rights. Particular cultures and specific global problems are examined in-depth to promote student acquisition of an international worldview for human global change based on social work values and research-informed practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300H. Comparative Social Work Ethics in Canterbury.

This course assists students in expanding an intermediate level of knowledge, values, and skills in the area of ethics in social work. The NASW Code of Ethics (US) and the National Codes of Ethics from the International Federation of Social Workers are used.

**3 Credit Hours. 12 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300I. Social Work and Social Services in Canterbury.

The purpose of this course is to assist the student in exploring social work processes, social service provision and services to special populations in Canterbury, England. Agency visits or primary research will guide learning.

**3 Credit Hours. 12 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300J. Introduction to Trauma Informed Care.

This advanced course focuses on culturally relevant knowledge and skills for theory-based, therapeutic assessment and intervention with diverse families and groups. The course emphasizes systemic, critical analysis of contemporary mental health practice using a psychosocial, strengths-based framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300K. Innovative Community Engagement with Vulnerable Populations.

This service-learning, Study-in-America course will require students to identify, examine, and critically analyze social service programs which provide services to vulnerable populations (persons experiencing poverty, homelessness, food insecurity, criminal justice issues, etc). Additional components of the course include travel to and participation in service-learning/volunteer activities in Louisiana.

**3 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300M. ADVANCED INTERVENTION WITH INTIMATE PARTNERSHIPS (COUPLES).

This advanced course focuses on culturally relevant knowledge and skills for theory based, therapeutic assessment and intervention with diverse intimate partnerships. The course emphasizes systemic, critical analysis of contemporary mental health practice using a psychosocial, strengths-based framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5300N. Social Work Practice in the Criminal Justice System.**

This graduate elective course explores an integrated approach to social work practice in the criminal justice system. It provides a comprehensive framework of knowledge, values, and skills for effective and ethical practice serving diverse and vulnerable clients and communities. It assumes an evidence-based and strengths-oriented social justice perspective to contemporary challenges and opportunities. It engages students in a process of self-reflection that assists them in developing an individualized professional model of potential practice in this critically relevant field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 53000. Modern Day Colonialism and Indigenous People Study in America.**

This course is a hybrid, service-learning, Study-in-America course. It requires students to identify, examine, and critically analyze the history of colonialism on the culture, allocation of resources, oppression, and contribution to on-going risks and strengths in Honolulu, Hawaii. Additional components of the course include required travel to various agencies, participation in online learning, and two pre-travel orientations, and active participation in service-learning/volunteer activities within a human service agency in Honolulu, Hawaii. Prerequisite: Minimum 3.0 TXST GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5301. School Social Work.**

This course explores the role of social workers in the school setting. Students learn about the unique challenges of providing social services within the educational environment. Interventions for working with children and youth in at risk situations are also introduced and practiced. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5302. Hip Hop and Social Justice for Individual and Community Change.**

Contemporary issues of equity and justice are investigated for potential influences on health and well-being. Students will compare professional application of Hip Hop integrated strategies within therapeutic, education, physical health, and afterschool and summer programs. Students will learn the interdisciplinary aspects of community-based strategies to promote equity and justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5303. Spirituality in Social Work Practice.**

This course provides an advanced-level framework of knowledge, values, and skills necessary for ethical and effective spiritually-relevant practice. It examines spirituality as an integral component of a strengths-based approach to social work practice with diverse and/or vulnerable clients. It integrates a contemporary global perspective with critical analysis and assessment. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5304. Adventure Therapy: Theory, Research & Practice.**

The course examines theory, practice and research in adventure therapy and engages the learner in hands on practice experience in outdoor, adventure therapy activities. The course guides students towards best practices in the use of adventure therapy as an innovative intervention that can be used in social work practice and other disciplines, with individuals, families and groups in a variety of settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5307. Ghana: Human Rights and Social Justice.**

This course focuses on human rights and applied social justice in a global context from an interdisciplinary standpoint. The course helps students develop the capacity to apply human rights and social justice knowledge and skills to interdisciplinary practice with individuals, communities, and families in a global context. This international-based service learning course intentionally integrates community service, academic learning, and civic learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5308. Human Behavior in Individual and Family Social Environments.**

This foundation graduate course presents individual and family dynamics across the life cycle, centering on human development, individual and group strengths, and the effects of cultural diversity. It enhances critical thinking and assessment skills about human behavior in social environments, and incorporates material on professional values, ethics, and social justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5309. Human Behavior in Local and Global Social Environments.**

This foundation graduate course explores human functioning in the environment by studying families, groups, communities, organizations, and societies in local and global contexts. Through learning content on diversity, populations at risk, and social and economic justice, students build critical thinking and assessment skills using developmental and eco-systems frameworks. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SOWK 5310. Social Welfare Policy and Services.**

This foundation course studies the United States' social welfare system, emphasizing how social welfare policies affect diverse populations.

Topics include social welfare history; and policy development, implementation, evaluation, and values.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5312. Social Work Intervention in Drug Addiction & Abuse.**

This course focuses on commonly used and abused drugs as well as the dynamics and treatment of addiction. It emphasizes social work intervention aimed at addiction prevention and treatment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5313. Foundation Social Work Practice I.**

This foundation course explores generalist social work theory and practice methodology in problem-solving with individuals, families, and groups, emphasizing data collection, assessment, intervention planning, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5314. Foundation Social Work Practice II.**

This foundation skill-development course emphasizes generalist social work practice with task groups, organizations, and communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5315. Social Work Intervention in Child Abuse & Neglect.**

This course considers child welfare services available to abused and neglected children in their own homes, in substitute care, and through the community, emphasizing social work intervention with children and their families.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5316. Foundation Social Work Practice III.**

This foundation course develops the student's interpersonal and communication skills with clients and other professionals. Students must demonstrate competence in interviewing, assessment, and planning skills. Students learn to collect data to support assessment, plan intervention, and evaluate practice. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5317. Social Work Research.**

This foundation course builds introductory scientific research skills in critical thinking and knowledge of program and practice evaluation. It prepares students to read, interpret, and critique research with skepticism and rigor and to perform various research and social work practice activities. Prerequisite: SOWK 5308 and SOWK 5313 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5319. Diagnostic Assessment.**

This advanced course examines how individuals, families, and groups interact with the social environment, emphasizing mental health and adaptive capacity, theories of the etiology and development of mental and emotional disorders, and how culture affects mental health.

Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5320. Advanced Administrative Leadership Practice I: Introduction to Management.**

This advanced skill-development course emphasizes social work practice in managing small and large organizations. Students develop knowledge and skills in social work management and supervision in non-profit and public organizations. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5322. Advanced Social Policy and Social Justice.**

This advanced course, a study of social legislation affecting disadvantaged persons, emphasizes policy analysis, values, and advocacy through studying social policy history; developing, implementing, and evaluating policy; and influencing social and economic justice. (MULT) Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5323. Advanced Social Work Research.**

This advanced course builds knowledge and skills for systematically evaluating programs and practice. It enhances effective and ethical social work practice by teaching skills necessary to design, implement, and empirically assess intervention with client and programs. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5324. Advanced Direct Practice with Families.**

This advanced course focuses on theories, research, and models of practice with families. It emphasizes a systems orientation to assessment and intervention, and integrates issues of self-awareness and human diversity. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**SOWK 5325. Advanced Administrative Leadership Practice III: Challenges and Innovations.**

This advanced course expands knowledge and skills by exploring how theories, supervision and management interventions, and social work values are applied to diverse organizational environments. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5326. MC/MP Advanced Direct Practice with Individuals.**

This advanced course examines intervention theories and builds specialized skills for effective, ethical practice with individuals. It examines how culture influences individuals, and discusses how to assess individuals from multiple perspectives. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5327. Advanced Direct Practice with Groups.**

This advanced course develops effective, ethical group practice skills, including assessment from multiple perspectives, facilitation of group process and intervention, evaluation, and addressing needs of diverse populations. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5328. Interdisciplinary Perspectives on Aging.**

This interdisciplinary course provides a graduate-level foundation in knowledge and skills used to address a wide range of needs among the aging population, their families, and support systems. Biophysical, psychosocial, and environmental perspectives will be integrated into development of culturally competent approaches to work with elders in many fields.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5329. Organizational Development.**

This advanced course examines organizational and inter-organizational social service delivery contexts; how funding, mandate, and organizational arrangements influence services; and factors to consider in modifying existing organizations. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5332. Helping Troops Transition Back to their Families and Communities: The Invisible Wounds of War.**

The course examines topics at the individual, family, group, organizational, and community levels related to troops who are returning from current combat operations and their families. It reviews the needs, community resources, and policies in place for helping them and their families make this transition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5339. Selected Topics in Social Work.**

Students study relevant social work topics in depth. Topics, such as social work in schools or in health care, are selected according to students' needs and professional trends. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 5360. Directed Study in Social Work.**

This one-semester course highlights individualized reading, independent study and projects, and guided instruction. It is offered by invitation of the professor and with the consent of the MSW Coordinator. It may not be repeated for credit. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5370. Advanced Program Planning and Grant-Based Resource Development.**

This advanced course emphasizes social work practice in building and developing non-profit and public human services organizations. Course topics include: determining organizational needs and priorities; identifying resources to address needs and priorities; and pursuing grant-funded resources to address organizational needs. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5371. Advanced Assessment, Leadership, and Supervision in Social Service Organizations.**

This advanced course focuses on observational and interview-based evaluations of organizational functioning related to change, diversity, ethical decision-making, budgeting, and implementation of action plans. The course also focuses on development of supervisory strategies to effectively lead and transform an organization. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5372. Advanced Diagnostic Assessment and Intervention with Individuals.**

This advanced course focuses on culturally relevant diagnostic assessment of and intervention with individuals based on current theory. The course emphasizes critical analysis of contemporary mental health practice using a psychosocial framework. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5373. Advanced Intervention with Families and Groups.**

This advanced course focuses on culturally-relevant knowledge and skills for theory-based, therapeutic assessment and intervention with diverse families and groups. The course emphasizes systemic, critical analysis of contemporary mental health practice using a psychosocial, strengths-based framework. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5376. Foundation Field Integrative Seminar I.**

This course is an integrative seminar for generalist social work practice in social service agencies applying micro, mezzo, and macro level knowledge. The content of the course includes social work competencies, ethical values, professional development, and basic knowledge of social work practice and the profession overall. This seminar course is completed by students enrolled in full-time and part-time. Prerequisite: SOWK 5313 and SOWK 5314 both with grades of "B" or better. Corequisite: SOWK 5111 or SOWK 5577 either with a grade of "Credit".

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 5378. Advanced Field Practicum I.**

This course is the first part of the advanced MSW field practicum in which students participate in a field seminar course in conjunction with completing field practicum hours at an agency. Field seminar provides the opportunity for students to apply and critically analyze social work knowledge gained in core. Prerequisites: SOWK 5370 and SOWK 5371 and SOWK 5372 and SOWK 5373 all with grades of "B" or better and a minimum 3.0 Overall GPA. Corequisite: SOWK 5379 or SOWK 5979 either with a grade of "Credit".

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 5379. Advanced Part-Time Field Practicum I.**

This course is taken in conjunction with SOWK 5378 as Part I of the advanced/final field practicum courses for part-time students requiring completion of a minimum of 270 hours of internship in a social service agency. This course requires application of classroom knowledge to address complex level social justice issues. Prerequisite: SOWK 5370 and SOWK 5371 and SOWK 5372 and SOWK 5373 all with grades of "B" or better and a minimum 3.0 Overall GPA. Corequisite: SOWK 5378 with a grade of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5411. Foundation Part-Time Field Practicum II.**

This second foundation part-time course continues a supervised internship/practicum focused on generalist social work practice in agencies for a minimum of 180 clock hours, applying classroom knowledge to work with individuals, families, groups, and communities. Prerequisites: SOWK 5376 with a grade of "B" or better and SOWK 5111 with a grade of "credit".

**4 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5577. Foundation Full-Time Field Practicum II.**

This course provides experiential learning opportunities through application of complex micro, mezzo, and macro level knowledge in social service agencies. This is the second course of the foundation full-time field sequence, and requires completion of 360 hours. This course is completed by students enrolled full-time only. Prerequisite: SOWK 5313 and SOWK 5314 both with grades of "B" or better. Corequisite: SOWK 5376 with a grade of "B" or better.

**5 Credit Hours. 0 Lecture Contact Hours. 24 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5679. Advanced Part-Time Field Practicum II.**

This is the second part of the advanced practicum course sequence for part-time students requiring completion of a minimum of 270 hours in a social service agency. This course continues the experiential learning process initiated in SOWK 5379 including application of classroom knowledge to address complex level social justice issues. Prerequisite: SOWK 5378 with a grade of "B" or better and SOWK 5379 with a grade of "Credit" and a minimum 3.0 Overall GPA.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5979. Advanced Field Practicum II.**

This course is taken in conjunction with SOWK 5378 and is the advanced/final field practicum course in the final field course sequence for full-time students requiring completion of 540 hours of internship in a social service agency. This course requires application of classroom knowledge to address complex level social justice issues. Prerequisite: SOWK 5370 and SOWK 5371 and SOWK 5372 and SOWK 5373 all with grades of "B" or better and a minimum 3.0 Overall GPA. Corequisite: SOWK 5378 with a grade of "B" or better.

**9 Credit Hours. 0 Lecture Contact Hours. 35 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The School of Social Work offers the Master of Social Work (M.S.W.) degree with a major in Advanced Practice Leadership, which prepares students for advanced specialized practice. The degree is fully accredited by the Council on Social Work Education. Social work practice at the M.S.W. level shares a common core of knowledge, values, and skills. Throughout the curriculum, the School emphasizes social justice and professional ethics. The M.S.W. degree prepares graduates for a wide variety of positions in many diverse, interesting fields that address human needs.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in social work (B.S.W.) with regional and CSWE (Council on Social Work Education) accreditations, earned within the last ten years (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.9 overall GPA or 2.9 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 2.9 GPA in the last two full academic years of study
- minimum 2.9 GPA in all undergraduate social work courses
- GRE not required
- departmental application
- resume/CV (maximum two pages)
- statement of purpose addressing the following: motivation for pursuing a Master of Social Work degree including how academic history and experiences have prepared the student for graduate school, the responsibility a social work professional has to ethical standards, social justice, advocacy and cultural awareness, and how the student will contribute to the field of social work, either through evidence-based practice, research participation, or exploration of practice modalities and how the student's contribution in these areas will distinguish them from other applicants.
- interview

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#walver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and
  - minimum individual module scores of 6.0

- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Social Work (M.S.W.) degree with a major in Advanced Practice Leadership (Online Advanced BSW Holders Concentration) requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SOWK 5322	Advanced Social Policy and Social Justice	3
SOWK 5323	Advanced Social Work Research	3
SOWK 5370	Advanced Program Planning and Grant-Based Resource Development	3
SOWK 5371	Advanced Assessment, Leadership, and Supervision in Social Service Organizations	3
SOWK 5372	Advanced Diagnostic Assessment and Intervention with Individuals	3
SOWK 5373	Advanced Intervention with Families and Groups	3
SOWK 5378	Advanced Field Practicum I	3
SOWK 5979	Advanced Field Practicum II	9
<b>Prescribed Electives</b>		
Choose 6 hours from the following:		6
SOWK 5301	School Social Work	
SOWK 5302	Hip Hop and Social Justice for Individual and Community Change	
SOWK 5303	Spirituality in Social Work Practice	
SOWK 5304	Adventure Therapy: Theory, Research & Practice	
SOWK 5312	Social Work Intervention in Drug Addiction & Abuse	
SOWK 5315	Social Work Intervention in Child Abuse & Neglect	
SOWK 5328	Interdisciplinary Perspectives on Aging	
SOWK 5332	Helping Troops Transition Back to their Families and Communities: The Invisible Wounds of War	
SOWK 5300E	Social Work and Health Care	
<b>Total Hours</b>		<b>36</b>

## Field Practicum

Field practicum (internship) involves the student intern working in a social service agency under the intensive supervision of a licensed master social worker. All regular track students (full- and part-time) must complete a total of 20 semester credit hours of field practicum. Regular track students complete two internships: (1) foundation field is 360 contact hours in a field practicum and (2) advanced field is 540 contact hours in a different field practicum. MSW advanced track students complete this one latter internship only; advanced field, consisting of 540 contact hours. Regular track students complete a first-year field practicum while concurrently enrolled in other classes. Part-time students will complete their field courses in two semesters. In the second year, full-time advanced standing students complete field practicum, SOWK 5378 and SOWK 5979, during the spring term. Part-time students will complete their field courses in two semesters. The first semester students will complete SOWK 5378 and SOWK 5379. In the second and final semester, part-time students will complete SOWK 5679.

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass one or more comprehensive examinations. Students seeking to be readmitted into the MSW program after being separated for three consecutive semesters must take a CLEP-type of exam to demonstrate mastery of the content already taken within the MSW program. If the student does not pass with a score of 70% they may be asked to review the material in the content area(s) of deficiency.

Students must take the MSW Foundation Competency Exam prior to enrollment in Advanced level MSW Courses. Students must also take the MSW Advanced Competency Exam and meet all Field Office requirements prior to enrollment in Advanced Practicum (Field Placement). To be eligible for graduation a student must complete all degree requirements, pass the MSW Competency Exam with a grade of 70%, and must have a minimum Texas State GPA of 3.0 in MSW courses.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Social Work: SOWK

## Courses Offered

### Social Work (SOWK)

#### SOWK 5111. Foundation Part-Time Field Practicum I.

This course is supervised internship/practicum for beginning generalist social work practice. Students apply knowledge gained in an online integrative seminar to their work with individuals, families, groups, and communities for a minimum of 180 contact hours at a human service agency. Prerequisite: SOWK 5313 and SOWK 5314 both with grades of "B" or better. Corequisite: SOWK 5376 with a grade of "B" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### SOWK 5300E. Social Work and Health Care.

This elective course provides a generalist view of social work practice in mental health and public health, considering the social problems that affect health care, and ethical and effective intervention strategies and service delivery systems. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300F. International Social Work.

This course covers advanced theoretical and practical approaches to empowerment, social and economic justice, and human rights. Particular cultures and specific global problems are examined in-depth to promote student acquisition of an international worldview for human global change based on social work values and research-informed practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300H. Comparative Social Work Ethics in Canterbury.

This course assists students in expanding an intermediate level of knowledge, values, and skills in the area of ethics in social work. The NASW Code of Ethics (US) and the National Codes of Ethics from the International Federation of Social Workers are used.

**3 Credit Hours. 12 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300I. Social Work and Social Services in Canterbury.

The purpose of this course is to assist the student in exploring social work processes, social service provision and services to special populations in Canterbury, England. Agency visits or primary research will guide learning.

**3 Credit Hours. 12 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300J. Introduction to Trauma Informed Care.

This advanced course focuses on culturally relevant knowledge and skills for theory-based, therapeutic assessment and intervention with diverse families and groups. The course emphasizes systemic, critical analysis of contemporary mental health practice using a psychosocial, strengths-based framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300K. Innovative Community Engagement with Vulnerable Populations.

This service-learning, Study-in-America course will require students to identify, examine, and critically analyze social service programs which provide services to vulnerable populations (persons experiencing poverty, homelessness, food insecurity, criminal justice issues, etc). Additional components of the course include travel to and participation in service-learning/volunteer activities in Louisiana.

**3 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300M. ADVANCED INTERVENTION WITH INTIMATE PARTNERSHIPS (COUPLES).

This advanced course focuses on culturally relevant knowledge and skills for theory based, therapeutic assessment and intervention with diverse intimate partnerships. The course emphasizes systemic, critical analysis of contemporary mental health practice using a psychosocial, strengths-based framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**SOWK 5300N. Social Work Practice in the Criminal Justice System.**

This graduate elective course explores an integrated approach to social work practice in the criminal justice system. It provides a comprehensive framework of knowledge, values, and skills for effective and ethical practice serving diverse and vulnerable clients and communities. It assumes an evidence-based and strengths-oriented social justice perspective to contemporary challenges and opportunities. It engages students in a process of self-reflection that assists them in developing an individualized professional model of potential practice in this critically relevant field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 53000. Modern Day Colonialism and Indigenous People Study in America.**

This course is a hybrid, service-learning, Study-in-America course. It requires students to identify, examine, and critically analyze the history of colonialism on the culture, allocation of resources, oppression, and contribution to on-going risks and strengths in Honolulu, Hawaii. Additional components of the course include required travel to various agencies, participation in online learning, and two pre-travel orientations, and active participation in service-learning/volunteer activities within a human service agency in Honolulu, Hawaii. Prerequisite: Minimum 3.0 TXST GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5301. School Social Work.**

This course explores the role of social workers in the school setting. Students learn about the unique challenges of providing social services within the educational environment. Interventions for working with children and youth in at risk situations are also introduced and practiced. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5302. Hip Hop and Social Justice for Individual and Community Change.**

Contemporary issues of equity and justice are investigated for potential influences on health and well-being. Students will compare professional application of Hip Hop integrated strategies within therapeutic, education, physical health, and afterschool and summer programs. Students will learn the interdisciplinary aspects of community-based strategies to promote equity and justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5303. Spirituality in Social Work Practice.**

This course provides an advanced-level framework of knowledge, values, and skills necessary for ethical and effective spiritually-relevant practice. It examines spirituality as an integral component of a strengths-based approach to social work practice with diverse and/or vulnerable clients. It integrates a contemporary global perspective with critical analysis and assessment. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5304. Adventure Therapy: Theory, Research & Practice.**

The course examines theory, practice and research in adventure therapy and engages the learner in hands on practice experience in outdoor, adventure therapy activities. The course guides students towards best practices in the use of adventure therapy as an innovative intervention that can be used in social work practice and other disciplines, with individuals, families and groups in a variety of settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5307. Ghana: Human Rights and Social Justice.**

This course focuses on human rights and applied social justice in a global context from an interdisciplinary standpoint. The course helps students develop the capacity to apply human rights and social justice knowledge and skills to interdisciplinary practice with individuals, communities, and families in a global context. This international-based service learning course intentionally integrates community service, academic learning, and civic learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5308. Human Behavior in Individual and Family Social Environments.**

This foundation graduate course presents individual and family dynamics across the life cycle, centering on human development, individual and group strengths, and the effects of cultural diversity. It enhances critical thinking and assessment skills about human behavior in social environments, and incorporates material on professional values, ethics, and social justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5309. Human Behavior in Local and Global Social Environments.**

This foundation graduate course explores human functioning in the environment by studying families, groups, communities, organizations, and societies in local and global contexts. Through learning content on diversity, populations at risk, and social and economic justice, students build critical thinking and assessment skills using developmental and eco-systems frameworks. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SOWK 5310. Social Welfare Policy and Services.**

This foundation course studies the United States' social welfare system, emphasizing how social welfare policies affect diverse populations.

Topics include social welfare history; and policy development, implementation, evaluation, and values.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5312. Social Work Intervention in Drug Addiction & Abuse.**

This course focuses on commonly used and abused drugs as well as the dynamics and treatment of addiction. It emphasizes social work intervention aimed at addiction prevention and treatment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5313. Foundation Social Work Practice I.**

This foundation course explores generalist social work theory and practice methodology in problem-solving with individuals, families, and groups, emphasizing data collection, assessment, intervention planning, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5314. Foundation Social Work Practice II.**

This foundation skill-development course emphasizes generalist social work practice with task groups, organizations, and communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5315. Social Work Intervention in Child Abuse & Neglect.**

This course considers child welfare services available to abused and neglected children in their own homes, in substitute care, and through the community, emphasizing social work intervention with children and their families.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5316. Foundation Social Work Practice III.**

This foundation course develops the student's interpersonal and communication skills with clients and other professionals. Students must demonstrate competence in interviewing, assessment, and planning skills. Students learn to collect data to support assessment, plan intervention, and evaluate practice. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5317. Social Work Research.**

This foundation course builds introductory scientific research skills in critical thinking and knowledge of program and practice evaluation. It prepares students to read, interpret, and critique research with skepticism and rigor and to perform various research and social work practice activities. Prerequisite: SOWK 5308 and SOWK 5313 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5319. Diagnostic Assessment.**

This advanced course examines how individuals, families, and groups interact with the social environment, emphasizing mental health and adaptive capacity, theories of the etiology and development of mental and emotional disorders, and how culture affects mental health.

Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5320. Advanced Administrative Leadership Practice I: Introduction to Management.**

This advanced skill-development course emphasizes social work practice in managing small and large organizations. Students develop knowledge and skills in social work management and supervision in non-profit and public organizations. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5322. Advanced Social Policy and Social Justice.**

This advanced course, a study of social legislation affecting disadvantaged persons, emphasizes policy analysis, values, and advocacy through studying social policy history; developing, implementing, and evaluating policy; and influencing social and economic justice. (MULT) Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5323. Advanced Social Work Research.**

This advanced course builds knowledge and skills for systematically evaluating programs and practice. It enhances effective and ethical social work practice by teaching skills necessary to design, implement, and empirically assess intervention with client and programs. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5324. Advanced Direct Practice with Families.**

This advanced course focuses on theories, research, and models of practice with families. It emphasizes a systems orientation to assessment and intervention, and integrates issues of self-awareness and human diversity. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5325. Advanced Administrative Leadership Practice III: Challenges and Innovations.**

This advanced course expands knowledge and skills by exploring how theories, supervision and management interventions, and social work values are applied to diverse organizational environments. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5326. MC/MP Advanced Direct Practice with Individuals.**

This advanced course examines intervention theories and builds specialized skills for effective, ethical practice with individuals. It examines how culture influences individuals, and discusses how to assess individuals from multiple perspectives. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5327. Advanced Direct Practice with Groups.**

This advanced course develops effective, ethical group practice skills, including assessment from multiple perspectives, facilitation of group process and intervention, evaluation, and addressing needs of diverse populations. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5328. Interdisciplinary Perspectives on Aging.**

This interdisciplinary course provides a graduate-level foundation in knowledge and skills used to address a wide range of needs among the aging population, their families, and support systems. Biophysical, psychosocial, and environmental perspectives will be integrated into development of culturally competent approaches to work with elders in many fields.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5329. Organizational Development.**

This advanced course examines organizational and inter-organizational social service delivery contexts; how funding, mandate, and organizational arrangements influence services; and factors to consider in modifying existing organizations. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5332. Helping Troops Transition Back to their Families and Communities: The Invisible Wounds of War.**

The course examines topics at the individual, family, group, organizational, and community levels related to troops who are returning from current combat operations and their families. It reviews the needs, community resources, and policies in place for helping them and their families make this transition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5339. Selected Topics in Social Work.**

Students study relevant social work topics in depth. Topics, such as social work in schools or in health care, are selected according to students' needs and professional trends. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 5360. Directed Study in Social Work.**

This one-semester course highlights individualized reading, independent study and projects, and guided instruction. It is offered by invitation of the professor and with the consent of the MSW Coordinator. It may not be repeated for credit. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5370. Advanced Program Planning and Grant-Based Resource Development.**

This advanced course emphasizes social work practice in building and developing non-profit and public human services organizations. Course topics include: determining organizational needs and priorities; identifying resources to address needs and priorities; and pursuing grant-funded resources to address organizational needs. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5371. Advanced Assessment, Leadership, and Supervision in Social Service Organizations.**

This advanced course focuses on observational and interview-based evaluations of organizational functioning related to change, diversity, ethical decision-making, budgeting, and implementation of action plans. The course also focuses on development of supervisory strategies to effectively lead and transform an organization. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5372. Advanced Diagnostic Assessment and Intervention with Individuals.**

This advanced course focuses on culturally relevant diagnostic assessment of and intervention with individuals based on current theory. The course emphasizes critical analysis of contemporary mental health practice using a psychosocial framework. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5373. Advanced Intervention with Families and Groups.**

This advanced course focuses on culturally-relevant knowledge and skills for theory-based, therapeutic assessment and intervention with diverse families and groups. The course emphasizes systemic, critical analysis of contemporary mental health practice using a psychosocial, strengths-based framework. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5376. Foundation Field Integrative Seminar I.**

This course is an integrative seminar for generalist social work practice in social service agencies applying micro, mezzo, and macro level knowledge. The content of the course includes social work competencies, ethical values, professional development, and basic knowledge of social work practice and the profession overall. This seminar course is completed by students enrolled in full-time and part-time. Prerequisite: SOWK 5313 and SOWK 5314 both with grades of "B" or better. Corequisite: SOWK 5111 or SOWK 5577 either with a grade of "Credit".

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 5378. Advanced Field Practicum I.**

This course is the first part of the advanced MSW field practicum in which students participate in a field seminar course in conjunction with completing field practicum hours at an agency. Field seminar provides the opportunity for students to apply and critically analyze social work knowledge gained in core. Prerequisites: SOWK 5370 and SOWK 5371 and SOWK 5372 and SOWK 5373 all with grades of "B" or better and a minimum 3.0 Overall GPA. Corequisite: SOWK 5379 or SOWK 5979 either with a grade of "Credit".

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 5379. Advanced Part-Time Field Practicum I.**

This course is taken in conjunction with SOWK 5378 as Part I of the advanced/final field practicum courses for part-time students requiring completion of a minimum of 270 hours of internship in a social service agency. This course requires application of classroom knowledge to address complex level social justice issues. Prerequisite: SOWK 5370 and SOWK 5371 and SOWK 5372 and SOWK 5373 all with grades of "B" or better and a minimum 3.0 Overall GPA. Corequisite: SOWK 5378 with a grade of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5411. Foundation Part-Time Field Practicum II.**

This second foundation part-time course continues a supervised internship/practicum focused on generalist social work practice in agencies for a minimum of 180 clock hours, applying classroom knowledge to work with individuals, families, groups, and communities. Prerequisites: SOWK 5376 with a grade of "B" or better and SOWK 5111 with a grade of "credit".

**4 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5577. Foundation Full-Time Field Practicum II.**

This course provides experiential learning opportunities through application of complex micro, mezzo, and macro level knowledge in social service agencies. This is the second course of the foundation full-time field sequence, and requires completion of 360 hours. This course is completed by students enrolled full-time only. Prerequisite: SOWK 5313 and SOWK 5314 both with grades of "B" or better. Corequisite: SOWK 5376 with a grade of "B" or better.

**5 Credit Hours. 0 Lecture Contact Hours. 24 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5679. Advanced Part-Time Field Practicum II.**

This is the second part of the advanced practicum course sequence for part-time students requiring completion of a minimum of 270 hours in a social service agency. This course continues the experiential learning process initiated in SOWK 5379 including application of classroom knowledge to address complex level social justice issues. Prerequisite: SOWK 5378 with a grade of "B" or better and SOWK 5379 with a grade of "Credit" and a minimum 3.0 Overall GPA.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5979. Advanced Field Practicum II.**

This course is taken in conjunction with SOWK 5378 and is the advanced/final field practicum course in the final field course sequence for full-time students requiring completion of 540 hours of internship in a social service agency. This course requires application of classroom knowledge to address complex level social justice issues. Prerequisite: SOWK 5370 and SOWK 5371 and SOWK 5372 and SOWK 5373 all with grades of "B" or better and a minimum 3.0 Overall GPA. Corequisite: SOWK 5378 with a grade of "B" or better.

**9 Credit Hours. 0 Lecture Contact Hours. 35 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The School of Social Work offers the Master of Social Work (M.S.W.) degree with a major in Advanced Practice Leadership, which prepares students for advanced specialized practice. The degree is fully accredited by the Council on Social Work Education. Social work practice at the M.S.W. level shares a common core of knowledge, values, and skills. Throughout the curriculum, the School emphasizes social justice and professional ethics. The M.S.W. degree prepares graduates for a wide variety of positions in many diverse, interesting fields that address human needs.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee  
or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.9 overall GPA or 2.9 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- departmental application
- resume/CV (maximum two pages)
- statement of purpose addressing the following: motivation for pursuing a Master of Social Work degree including how academic history and experiences have prepared the student for graduate school, the responsibility a social work professional has to ethical standards, social justice, advocacy and cultural awareness, and how the student will contribute to the field of social work, either through evidence-based practice, research participation, or exploration of practice modalities and how the student's contribution in these areas will distinguish them from other applicants.
- interview

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and
  - minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Social Work (M.S.W.) degree with a major in Advanced Practice Leadership (Online Regular Non-BSW Holders Concentration) requires 62 semester credit hours. The first (foundation) year curriculum focuses on the generic foundation knowledge and skills necessary for general social work practice, while the second (advanced) year focuses on specialized practice.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SOWK 5308	Human Behavior in Individual and Family Social Environments	3
SOWK 5309	Human Behavior in Local and Global Social Environments	3
SOWK 5310	Social Welfare Policy and Services	3
SOWK 5313	Foundation Social Work Practice I	3
SOWK 5314	Foundation Social Work Practice II	3
SOWK 5316	Foundation Social Work Practice III	3
SOWK 5317	Social Work Research	3
SOWK 5322	Advanced Social Policy and Social Justice	3
SOWK 5323	Advanced Social Work Research	3
SOWK 5370	Advanced Program Planning and Grant-Based Resource Development	3
SOWK 5371	Advanced Assessment, Leadership, and Supervision in Social Service Organizations	3
SOWK 5372	Advanced Diagnostic Assessment and Intervention with Individuals	3
SOWK 5373	Advanced Intervention with Families and Groups	3
SOWK 5410		4
SOWK 5411	Foundation Part-Time Field Practicum II	4
SOWK 5378	Advanced Field Practicum I	3
SOWK 5979	Advanced Field Practicum II	9
<b>Prescribed Elective</b>		
Choose 3 hours from the following:		3
SOWK 5300E	Social Work and Health Care	
SOWK 5301	School Social Work	
SOWK 5302	Hip Hop and Social Justice for Individual and Community Change	
SOWK 5303	Spirituality in Social Work Practice	
SOWK 5304	Adventure Therapy: Theory, Research & Practice	
SOWK 5307	Ghana: Human Rights and Social Justice	
SOWK 5312	Social Work Intervention in Drug Addiction & Abuse	
SOWK 5315	Social Work Intervention in Child Abuse & Neglect	
SOWK 5328	Interdisciplinary Perspectives on Aging	
SOWK 5332	Helping Troops Transition Back to their Families and Communities: The Invisible Wounds of War	
<b>Total Hours</b>		<b>62</b>

## Field Practicum

Field practicum (internship) involves the student intern working in a social service agency under the intensive supervision of a licensed master social worker. All regular track students (full- and part-time) must complete a total of 20 semester credit hours of field practicum. Regular

track students complete two internships: (1) foundation field is 360 contact hours in a field practicum and (2) advanced field is 540 contact hours in a different field practicum. MSW advanced track students complete this one latter internship only; advanced field, consisting of 540 contact hours. Regular track students complete a first-year field practicum while concurrently enrolled in other classes. Part-time students will complete their field courses in two semesters. In the second year, full-time advanced standing students complete field practicum, SOWK 5378 and SOWK 5979, during the spring term. Part-time students will complete their field courses in two semesters. The first semester students will complete SOWK 5378 and SOWK 5379. In the second and final semester, part-time students will complete SOWK 5679.

## Comprehensive Examination Requirement

All candidates for graduate degrees at Texas State University must pass one or more comprehensive examinations. Students within the School of Social Work must complete and pass a Comprehensive Exam with a grade of 70%, and must have a minimum Texas State GPA of 3.0 in MSW courses to be eligible for graduation. The Comprehensive Exam will be completed in the final semester prior to the conclusion of the Field internship/practicum. Students will be encouraged to take a practice/pre-test exam at the start of the final semester.

Students seeking to be readmitted into the MSW program after being separated for three consecutive semesters may be asked to take an exam that includes questions associated with the Comprehensive Exam to demonstrate mastery of the content already taken within the MSW program. Students seeking to be readmitted into the MSW program with only Field internship/practicum requirements remaining will be asked to take an exam that includes questions from all classes taken in the program. If the student does not pass with a score of 70% they will be asked to review material in the content area(s) of deficiency and must develop a plan that is approved by the MSW and Field Director in order to proceed into their Field internship/practicum.

To be eligible for graduation a student must complete all degree requirements, pass the MSW Comprehensive Exam with a grade of 70%, and must have a minimum Texas State GPA of 3.0 in MSW courses. Students who do not successfully complete the requirements for the degree within the timelines specified will not be eligible for graduation.

Master's level courses in Social Work: SOWK

## Courses Offered

### Social Work (SOWK)

#### SOWK 5111. Foundation Part-Time Field Practicum I.

This course is supervised internship/practicum for beginning generalist social work practice. Students apply knowledge gained in an online integrative seminar to their work with individuals, families, groups, and communities for a minimum of 180 contact hours at a human service agency. Prerequisite: SOWK 5313 and SOWK 5314 both with grades of "B" or better. Corequisite: SOWK 5376 with a grade of "B" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### SOWK 5300E. Social Work and Health Care.

This elective course provides a generalist view of social work practice in mental health and public health, considering the social problems that affect health care, and ethical and effective intervention strategies and service delivery systems. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300F. International Social Work.

This course covers advanced theoretical and practical approaches to empowerment, social and economic justice, and human rights. Particular cultures and specific global problems are examined in-depth to promote student acquisition of an international worldview for human global change based on social work values and research-informed practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300H. Comparative Social Work Ethics in Canterbury.

This course assists students in expanding an intermediate level of knowledge, values, and skills in the area of ethics in social work. The NASW Code of Ethics (US) and the National Codes of Ethics from the International Federation of Social Workers are used.

**3 Credit Hours. 12 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300I. Social Work and Social Services in Canterbury.

The purpose of this course is to assist the student in exploring social work processes, social service provision and services to special populations in Canterbury, England. Agency visits or primary research will guide learning.

**3 Credit Hours. 12 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SOWK 5300J. Introduction to Trauma Informed Care.

This advanced course focuses on culturally relevant knowledge and skills for theory-based, therapeutic assessment and intervention with diverse families and groups. The course emphasizes systemic, critical analysis of contemporary mental health practice using a psychosocial, strengths-based framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**SOWK 5300K. Innovative Community Engagement with Vulnerable Populations.**

This service-learning, Study-in-America course will require students to identify, examine, and critically analyze social service programs which provide services to vulnerable populations (persons experiencing poverty, homelessness, food insecurity, criminal justice issues, etc). Additional components of the course include travel to and participation in service-learning/volunteer activities in Louisiana.

**3 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5300M. ADVANCED INTERVENTION WITH INTIMATE PARTNERSHIPS (COUPLES).**

This advanced course focuses on culturally relevant knowledge and skills for theory based, therapeutic assessment and intervention with diverse intimate partnerships. The course emphasizes systemic, critical analysis of contemporary mental health practice using a psychosocial, strengths-based framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5300N. Social Work Practice in the Criminal Justice System.**

This graduate elective course explores an integrated approach to social work practice in the criminal justice system. It provides a comprehensive framework of knowledge, values, and skills for effective and ethical practice serving diverse and vulnerable clients and communities. It assumes an evidence-based and strengths-oriented social justice perspective to contemporary challenges and opportunities. It engages students in a process of self-reflection that assists them in developing an individualized professional model of potential practice in this critically relevant field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5300O. Modern Day Colonialism and Indigenous People Study in America.**

This course is a hybrid, service-learning, Study-in-America course. It requires students to identify, examine, and critically analyze the history of colonialism on the culture, allocation of resources, oppression, and contribution to on-going risks and strengths in Honolulu, Hawaii. Additional components of the course include required travel to various agencies, participation in online learning, and two pre-travel orientations, and active participation in service-learning/volunteer activities within a human service agency in Honolulu, Hawaii. Prerequisite: Minimum 3.0 TXST GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5301. School Social Work.**

This course explores the role of social workers in the school setting. Students learn about the unique challenges of providing social services within the educational environment. Interventions for working with children and youth in at risk situations are also introduced and practiced. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5302. Hip Hop and Social Justice for Individual and Community Change.**

Contemporary issues of equity and justice are investigated for potential influences on health and well-being. Students will compare professional application of Hip Hop integrated strategies within therapeutic, education, physical health, and afterschool and summer programs. Students will learn the interdisciplinary aspects of community-based strategies to promote equity and justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5303. Spirituality in Social Work Practice.**

This course provides an advanced-level framework of knowledge, values, and skills necessary for ethical and effective spiritually-relevant practice. It examines spirituality as an integral component of a strengths-based approach to social work practice with diverse and/or vulnerable clients. It integrates a contemporary global perspective with critical analysis and assessment. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5304. Adventure Therapy: Theory, Research & Practice.**

The course examines theory, practice and research in adventure therapy and engages the learner in hands on practice experience in outdoor, adventure therapy activities. The course guides students towards best practices in the use of adventure therapy as an innovative intervention that can be used in social work practice and other disciplines, with individuals, families and groups in a variety of settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5307. Ghana: Human Rights and Social Justice.**

This course focuses on human rights and applied social justice in a global context from an interdisciplinary standpoint. The course helps students develop the capacity to apply human rights and social justice knowledge and skills to interdisciplinary practice with individuals, communities, and families in a global context. This international-based service learning course intentionally integrates community service, academic learning, and civic learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5308. Human Behavior in Individual and Family Social Environments.**

This foundation graduate course presents individual and family dynamics across the life cycle, centering on human development, individual and group strengths, and the effects of cultural diversity. It enhances critical thinking and assessment skills about human behavior in social environments, and incorporates material on professional values, ethics, and social justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5309. Human Behavior in Local and Global Social Environments.**

This foundation graduate course explores human functioning in the environment by studying families, groups, communities, organizations, and societies in local and global contexts. Through learning content on diversity, populations at risk, and social and economic justice, students build critical thinking and assessment skills using developmental and eco-systems frameworks. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5310. Social Welfare Policy and Services.**

This foundation course studies the United States' social welfare system, emphasizing how social welfare policies affect diverse populations.

Topics include social welfare history; and policy development, implementation, evaluation, and values.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5312. Social Work Intervention in Drug Addiction & Abuse.**

This course focuses on commonly used and abused drugs as well as the dynamics and treatment of addiction. It emphasizes social work intervention aimed at addiction prevention and treatment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5313. Foundation Social Work Practice I.**

This foundation course explores generalist social work theory and practice methodology in problem-solving with individuals, families, and groups, emphasizing data collection, assessment, intervention planning, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5314. Foundation Social Work Practice II.**

This foundation skill-development course emphasizes generalist social work practice with task groups, organizations, and communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5315. Social Work Intervention in Child Abuse & Neglect.**

This course considers child welfare services available to abused and neglected children in their own homes, in substitute care, and through the community, emphasizing social work intervention with children and their families.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5316. Foundation Social Work Practice III.**

This foundation course develops the student's interpersonal and communication skills with clients and other professionals. Students must demonstrate competence in interviewing, assessment, and planning skills. Students learn to collect data to support assessment, plan intervention, and evaluate practice. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5317. Social Work Research.**

This foundation course builds introductory scientific research skills in critical thinking and knowledge of program and practice evaluation. It prepares students to read, interpret, and critique research with skepticism and rigor and to perform various research and social work practice activities. Prerequisite: SOWK 5308 and SOWK 5313 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5319. Diagnostic Assessment.**

This advanced course examines how individuals, families, and groups interact with the social environment, emphasizing mental health and adaptive capacity, theories of the etiology and development of mental and emotional disorders, and how culture affects mental health.

Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5320. Advanced Administrative Leadership Practice I: Introduction to Management.**

This advanced skill-development course emphasizes social work practice in managing small and large organizations. Students develop knowledge and skills in social work management and supervision in non-profit and public organizations. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5322. Advanced Social Policy and Social Justice.**

This advanced course, a study of social legislation affecting disadvantaged persons, emphasizes policy analysis, values, and advocacy through studying social policy history; developing, implementing, and evaluating policy; and influencing social and economic justice. (MULT) Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5323. Advanced Social Work Research.**

This advanced course builds knowledge and skills for systematically evaluating programs and practice. It enhances effective and ethical social work practice by teaching skills necessary to design, implement, and empirically assess intervention with client and programs. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5324. Advanced Direct Practice with Families.**

This advanced course focuses on theories, research, and models of practice with families. It emphasizes a systems orientation to assessment and intervention, and integrates issues of self-awareness and human diversity. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5325. Advanced Administrative Leadership Practice III: Challenges and Innovations.**

This advanced course expands knowledge and skills by exploring how theories, supervision and management interventions, and social work values are applied to diverse organizational environments. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5326. MC/MP Advanced Direct Practice with Individuals.**

This advanced course examines intervention theories and builds specialized skills for effective, ethical practice with individuals. It examines how culture influences individuals, and discusses how to assess individuals from multiple perspectives. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5327. Advanced Direct Practice with Groups.**

This advanced course develops effective, ethical group practice skills, including assessment from multiple perspectives, facilitation of group process and intervention, evaluation, and addressing needs of diverse populations. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5328. Interdisciplinary Perspectives on Aging.**

This interdisciplinary course provides a graduate-level foundation in knowledge and skills used to address a wide range of needs among the aging population, their families, and support systems. Biophysical, psychosocial, and environmental perspectives will be integrated into development of culturally competent approaches to work with elders in many fields.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5329. Organizational Development.**

This advanced course examines organizational and inter-organizational social service delivery contexts; how funding, mandate, and organizational arrangements influence services; and factors to consider in modifying existing organizations. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5332. Helping Troops Transition Back to their Families and Communities: The Invisible Wounds of War.**

The course examines topics at the individual, family, group, organizational, and community levels related to troops who are returning from current combat operations and their families. It reviews the needs, community resources, and policies in place for helping them and their families make this transition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5339. Selected Topics in Social Work.**

Students study relevant social work topics in depth. Topics, such as social work in schools or in health care, are selected according to students' needs and professional trends. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 5360. Directed Study in Social Work.**

This one-semester course highlights individualized reading, independent study and projects, and guided instruction. It is offered by invitation of the professor and with the consent of the MSW Coordinator. It may not be repeated for credit. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5370. Advanced Program Planning and Grant-Based Resource Development.**

This advanced course emphasizes social work practice in building and developing non-profit and public human services organizations. Course topics include: determining organizational needs and priorities; identifying resources to address needs and priorities; and pursuing grant-funded resources to address organizational needs. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5371. Advanced Assessment, Leadership, and Supervision in Social Service Organizations.**

This advanced course focuses on observational and interview-based evaluations of organizational functioning related to change, diversity, ethical decision-making, budgeting, and implementation of action plans. The course also focuses on development of supervisory strategies to effectively lead and transform an organization. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5372. Advanced Diagnostic Assessment and Intervention with Individuals.**

This advanced course focuses on culturally relevant diagnostic assessment of and intervention with individuals based on current theory. The course emphasizes critical analysis of contemporary mental health practice using a psychosocial framework. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5373. Advanced Intervention with Families and Groups.**

This advanced course focuses on culturally-relevant knowledge and skills for theory-based, therapeutic assessment and intervention with diverse families and groups. The course emphasizes systemic, critical analysis of contemporary mental health practice using a psychosocial, strengths-based framework. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5376. Foundation Field Integrative Seminar I.**

This course is an integrative seminar for generalist social work practice in social service agencies applying micro, mezzo, and macro level knowledge. The content of the course includes social work competencies, ethical values, professional development, and basic knowledge of social work practice and the profession overall. This seminar course is completed by students enrolled in full-time and part-time. Prerequisite: SOWK 5313 and SOWK 5314 both with grades of "B" or better. Corequisite: SOWK 5111 or SOWK 5577 either with a grade of "Credit".

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 5378. Advanced Field Practicum I.**

This course is the first part of the advanced MSW field practicum in which students participate in a field seminar course in conjunction with completing field practicum hours at an agency. Field seminar provides the opportunity for students to apply and critically analyze social work knowledge gained in core. Prerequisites: SOWK 5370 and SOWK 5371 and SOWK 5372 and SOWK 5373 all with grades of "B" or better and a minimum 3.0 Overall GPA. Corequisite: SOWK 5379 or SOWK 5979 either with a grade of "Credit".

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 5379. Advanced Part-Time Field Practicum I.**

This course is taken in conjunction with SOWK 5378 as Part I of the advanced/final field practicum courses for part-time students requiring completion of a minimum of 270 hours of internship in a social service agency. This course requires application of classroom knowledge to address complex level social justice issues. Prerequisite: SOWK 5370 and SOWK 5371 and SOWK 5372 and SOWK 5373 all with grades of "B" or better and a minimum 3.0 Overall GPA. Corequisite: SOWK 5378 with a grade of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5411. Foundation Part-Time Field Practicum II.**

This second foundation part-time course continues a supervised internship/practicum focused on generalist social work practice in agencies for a minimum of 180 clock hours, applying classroom knowledge to work with individuals, families, groups, and communities. Prerequisites: SOWK 5376 with a grade of "B" or better and SOWK 5111 with a grade of "credit".

**4 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5577. Foundation Full-Time Field Practicum II.**

This course provides experiential learning opportunities through application of complex micro, mezzo, and macro level knowledge in social service agencies. This is the second course of the foundation full-time field sequence, and requires completion of 360 hours. This course is completed by students enrolled full-time only. Prerequisite: SOWK 5313 and SOWK 5314 both with grades of "B" or better. Corequisite: SOWK 5376 with a grade of "B" or better.

**5 Credit Hours. 0 Lecture Contact Hours. 24 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5679. Advanced Part-Time Field Practicum II.**

This is the second part of the advanced practicum course sequence for part-time students requiring completion of a minimum of 270 hours in a social service agency. This course continues the experiential learning process initiated in SOWK 5379 including application of classroom knowledge to address complex level social justice issues. Prerequisite: SOWK 5378 with a grade of "B" or better and SOWK 5379 with a grade of "Credit" and a minimum 3.0 Overall GPA.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5979. Advanced Field Practicum II.**

This course is taken in conjunction with SOWK 5378 and is the advanced/final field practicum course in the final field course sequence for full-time students requiring completion of 540 hours of internship in a social service agency. This course requires application of classroom knowledge to address complex level social justice issues. Prerequisite: SOWK 5370 and SOWK 5371 and SOWK 5372 and SOWK 5373 all with grades of "B" or better and a minimum 3.0 Overall GPA. Corequisite: SOWK 5378 with a grade of "B" or better.

**9 Credit Hours. 0 Lecture Contact Hours. 35 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Dean**

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**Associate Dean**

Diego E. Vacaflares, Ph.D.

**Associate Dean**

Phillip E. Davis, Ph.D.

**Associate Dean**

David Wierschem, Ph.D.

**Department Chairs**

Accounting—Wilhelmina J. Pizzini, Ph.D.  
Finance and Economics—Haiyong Liu, Ph.D.  
Information Systems and Analytics—Sam Lee, Ph.D.  
Management—William C. McDowell, Ph.D.  
Marketing—Anna Turri, Ph.D.

Named on February 27, 2004 in honor of the generous support of Mr. and Mrs. Emmett McCoy, Texas State's Emmett and Miriam McCoy College of Business provides broad-based undergraduate and master's-level educational programs that produce graduates with the values, knowledge, and skills to help them excel in a diverse, globally-competitive environment.

The McCoy College of Business fosters an engaged learning community that prepares a diverse student population for successful business careers as responsible global citizens. The McCoy College complements these efforts with research that adds to knowledge, provides solutions to business challenges, and contributes to pedagogical advances.

The McCoy College of Business offers six (6) graduate degree programs, all of which are fully accredited by AACSB.

The Master of Business Administration (M.B.A.) degree emphasizes the knowledge, soft skills and analytical mindset needed for professional success and is designed for those individuals who expect to pursue careers focused on the management and leadership of organizations. Students in the M.B.A. program may choose an optional concentration in one of six areas: Computer Information Systems, Engineering Technology, International Business, Health Administration, Human Resource Management, or Supply Chain Management.

The Master of Accountancy (M.Acy.) degree is designed to broaden the educational experience of individuals preparing for a career in the public accounting profession. Students explore the social, ethical, and environmental effects of accounting information on those who rely on it for their decision-making needs. The M.Acy. program can be used to satisfy the 150-hour education requirement for the Certified Public Accountant (CPA) license. An undergraduate degree in Accounting is not required.

The Master of Science major in Accounting and Information Technology (MSAIT) program prepares students for successful careers in public accounting and accounting information management. The MSAIT degree develops accounting and information technology competencies needed to respond to the evolving demands being placed on accountants and information technology professionals in modern organizations. The MSAIT program can be used to satisfy the 150-hour education requirement for the Certified Public Accountant (CPA) license. An undergraduate degree in accounting is not required.

The Master of Science major in Data Analytics and Information Systems (MSDAIS) program produces graduates with the skills required to be proficient in data analytics and information systems. The MSDAIS program is designed to prepare students to use information systems and quantitative skills to conduct data analysis. Graduates of this program will be capable of transforming organizational data into actionable information using data analytics and information systems skills.

The Master of Science major in Marketing Research and Analysis (MSMRA) program readies graduates for positions in marketing that will be involved in creating, analyzing, interpreting, and utilizing data. These positions include market researchers, data analysts, marketing and digital specialists, and marketing managers. Typical job titles include Strategic Data Insights Analysts, Digital Marketing Specialists, Marketing Analyst, Consumer Insights Manager, Digital Marketing Analyst, and Data Specialist.

The Master of Science in Quantitative Finance and Economics (MSQFE) prepares students with advanced skills in financial and economic analysis using large data sets. Graduates from this program have the quantitative and methodological skills and knowledge needed in the marketplace, becoming capable of transforming financial and economic problems into business solutions through statistical analysis, computation and simulation methods, and numerical modeling.

## Master of Business Administration

- Major in Business Administration (Flex Computer Information Systems Concentration) (p. 922)
- Major in Business Administration (Flex Engineering Technology Concentration) (p. 937)
- Major in Business Administration (Flex Healthcare Administration Concentration) (p. 952)
- Major in Business Administration (Flex Human Resource Management Concentration) (p. 967)



- Major in Business Administration (Flex International Business Concentration) (p. 982)
- Major in Business Administration (Flex Supply Chain Management Concentration) (p. 997)
- Major in Business Administration (Full-Time Cohort) (p. 1012)
- Major in Business Administration (General Flex Non-thesis Option) (p. 1027)
- Major in Business Administration (General Flex Thesis Option) (p. 1041)

## Master of Healthcare Administration (M.H.A.) / Master of Business Administration (M.B.A.)

- Major in Healthcare Administration / Business Administration (Dual Degree Option) (p. 1056)

### Program Overview

The Master of Business Administration (M.B.A.) degree with a major in Business Administration program in the McCoy College emphasizes the knowledge and tools needed for professional success and is designed for those individuals who expect to pursue careers in the management of organizations in either the public or private sector. The curriculum provides broad-based, generalized education with the flexibility to meet individual needs. Students may choose an optional concentration in one of six areas of study in a flexible format or select a full-time cohort program. The general Flex M.B.A. program can be completed at either the San Marcos or Round Rock Campus. For the Flex M.B.A. program concentrations, some specialized courses may only be offered at the San Marcos Campus or the Round Rock Campus. The Full-Time Cohort program is available exclusively at the San Marcos Campus.

Students in the Flex M.B.A. program with a **Computer Information Systems Concentration** learn how technology has changed the way business operates and how to harness the power of technology in various business management settings.

The Flex M.B.A. with an **Engineering Technology Concentration** is offered in cooperation with the Department of Engineering Technology, an academic division of the College of Science and Engineering. M.B.A. students pursuing the Engineering Technology Concentration should find enhanced career opportunities with companies oriented significantly toward manufacturing.

Students interested in careers related to international business may choose to seek the Flex M.B.A. degree with an **International Business Concentration**. This program is designed to provide focused study in international business including cultural, historical, and political issues. While this program is available to all students in the M.B.A. program, it is especially well suited for undergraduate students in the international studies undergraduate program.

If a student's interest is the healthcare industry, the Flex M.B.A. with a **Healthcare Administration Concentration** may be for them. Offered jointly with the College of Health Professions, the program combines academic content from both colleges to prepare students for a successful career in healthcare.

For those interested in the field of human resources, a Flex M.B.A. with a **Human Resource Management Concentration** is available. This program

provides information on organizational change, staffing, compensation and benefits, and international HR.

Students in the Flex M.B.A. program with a **Supply Chain Management Concentration** will obtain the knowledge and skills required to effectively manage the supply chain process in today's global marketplace.

The **Full-Time Cohort** M.B.A. is offered exclusively at the San Marcos Campus. In addition to the core courses, students must complete an internship and an international trip in a specific semester as outlined for each cohort group.

### Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - an overall competitive GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - responses to specific essay questions
  - resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
  - two letters of recommendation from persons best able to assess the student's ability to succeed in graduate school
  - GPA and GMAT/GRE Requirement
- The GMAT/GRE is not required for applicants with an overall 3.5 GPA or a 3.5 GPA in the last-60-hours GPA of undergraduate course work. If the GPA falls below the minimum requirement, the official GMAT or GRE (general test only) with competitive scores will be required in order to be considered. The Graduate College will notify applicants via email should this occur.

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- 0
- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Business Administration (M.B.A.) degree with a major in Business Administration concentration in Computer Information Systems requires 39 semester credit hours.

B A 5100 and B A 5351 should be taken in the first semester and MGT 5313 should be taken in the last term because it serves as the capstone course and includes the comprehensive examination.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of C or lower. Even if the grade of C or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third C (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 C Policy takes precedent over probationary status. So, if a student earns a third C they are automatically dismissed from their program permanently; even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
B A 5100	Business Professional Development Seminar (Taken three times in different terms)	3
B A 5351	Organizational Performance and Competitive Advantage	3
ACC 5361	Accounting Analysis for Managerial Decision Making	3
ECO 5316	Managerial Economics	3
FIN 5352	Financial Management	3
MGT 5313	Strategic Management	3
MGT 5314	Organizational Behavior and Theory	3
MKT 5321	Marketing Management	3
ANLY 5334	Statistical Methods for Business	3
ANLY 5338	Operations Management	3
<b>Prescribed Electives</b>		<b>9</b>

Choose 9 hours from the following:

ISAN 5318	Information Technology in Digital Economy
ISAN 5355	Database Management Systems

ISAN 5358	Agile Project Management For Business Professionals	
ISAN 5360	E-Commerce: Strategies, Technologies, and Applications	
ISAN 5364	Data Warehousing	
ISAN 5368	Information Security	
ISAN 5370	Enterprise Resource Planning and Business Intelligence	
ISAN 5390	Topics in Information Systems	
<b>Total Hours</b>		<b>39</b>

## Comprehensive Examination Requirement

The comprehensive examination consists of a consulting project with companies in the community. The exam is a written paper and oral presentation at the end of the semester, associated with capstone course MGT 5313. If the student fails, they must retake the capstone course, MGT 5313, the following term.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student

will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's

progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Business Administration: ACC (<http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/courseleaf.cgi?page=/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#accounting>), ANLY (p. 927), B A ([http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#business-administration](http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/courseleaf.cgi?page=/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#business-administration)), BLAW ([http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#business-law](http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/courseleaf.cgi?page=/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#business-law)), ECO ([http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#economics](http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/courseleaf.cgi?page=/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#economics)), FIN ([http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#finance](http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/courseleaf.cgi?page=/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#finance)), ISAN, (p. 930) MGT ([http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#management](http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/courseleaf.cgi?page=/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#management)), MKT ([http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#marketing](http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/courseleaf.cgi?page=/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#marketing)),

## Courses Offered

***Students must complete the appropriate background course or its equivalent before enrolling in elective courses.***

## Accounting (ACC)

### ACC 5315. Selected Topics in Financial Accounting.

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ACC 5316. Advanced Accounting.

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-forprofit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ACC 5320. Auditing.

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ACC 5323. Accounting Data Analytics.

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ACC 5340. Individual Income Tax.

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ACC 5350. Professional Accounting Research.

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ACC 5352. Financial Statement Reporting and Analysis.

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ACC 5355. IT Auditing.

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ACC 5357. Regulation and Professionalism.

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments. Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ACC 5361. Accounting Analysis for Managerial Decision Making.

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ACC 5362. Cost and Managerial Accounting Theory.

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules of the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Analytics (ANLY)****ANLY 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5332. Optimization for Business Analytics.**

This course introduces optimization theory and applications for analyzing and solving business decision-making problems. The students will learn to apply in various business domains optimization concepts and tools such as linear programming, integer/mixed-integer programming, and other classes of optimization models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5334. Statistical Methods for Business.**

This course provides the quantitative foundation for business analysis and decision making. Topics include inferential statistics, regression analysis, and other analytical/modeling techniques with wide applicability in decision-making and problem solving in all functional areas of business.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5335. Forecasting and Simulation.**

This course introduces the concepts and principles of forecasting and simulation techniques as applies to planning and decision making in organizations. Topical coverage includes time series forecasting, causal forecasting, discrete event simulation, and continuous-event simulation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5336. Analytics.**

This course introduces analytics which refers to the process of transforming data into information for making decisions. The topics include the introduction to analytics, visualization, analytics applications, and challenges related to business data. Students will learn how to use software, conduct data analysis and communicate their results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5338. Operations Management.**

This course introduces the processes and strategies to create, produce, and deliver goods and services that drive organizations' overall success. It will highlight operational and tactical problems organizations typically confront and introduce the concepts and analytical tools (both process and systems based) used to deal with these problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5342. Probability and Statistical Models.**

This course introduces the concept of probability and probability distributions. It includes general and generalized linear models, inflated and mixture models, and hierarchical models. Model validity and choice will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5343. Data Mining.**

This course covers data mining concepts and applications of data mining techniques to solve business problems. It emphasizes algorithms such as classification, clustering, association, and text mining. Model selection and assessment are also emphasized. Prerequisite: ANLY 5336 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5369. Independent Study in Analytics.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in quantitative methods and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANLY 5390A. Statistical Computing.**

This course covers programming and statistical computing concepts. Programming concepts include data manipulation, data structures, control structures, functions, basic algorithms, and matrix manipulations. Statistical computing topics include numerical linear algebra, Monte Carlo methods, and numerical optimization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANLY 5395. Internship in Analytics.**

This course is based on experiential learning while the student works in quantitative methods and statistics. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Data Analytics and Information Systems. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANLY 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Business Administration (B A)****B A 5100. Business Professional Development Seminar.**

This course is designed to contribute to the development of the business professional. Academic content is supplemented by training in soft skill topics to better prepare the students for a successful business career. Repeatable for credit with different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**B A 5351. Organizational Performance and Competitive Advantage.**

This course is designed to provide an integrative understanding of the firm. A variety of organizational models and perspectives will be incorporated to facilitate understanding of the complexities of the firm, its environments, and its relationships with stakeholders. Includes focus on case analysis issues and communication skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5353. Understanding and Analyzing Organizational Problems.**

An introduction to the concepts of economic theory and optimization, with an emphasis on developing skills in data and economic analysis to solve business problems. Coverage includes prices, costs, market structures, macroeconomic policies, and optimization. Corequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5368A. MBA Full Time Cohort International Experience.**

This course will focus on developing an understanding and analysis of issues related to business challenges in another country. Students will gain first-hand experience with the business practices, culture and economy of another country. Corequisite: MGT 5313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**B A 5396. Internship in Business Administration.**

This course is based on experiential learning while the student works in business administration. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**B A 5398. Independent Study in Business Administration.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in business administration and work independently on a specialized project. Course may be repeated with approval of associate dean for graduate programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**Business Law (BLAW)****BLAW 5310. The Employment Relationship.**

A study of trends in the rapidly evolving "law of workplace," with emphasis on how lawmakers attempt to balance the rights and responsibilities of employers and workers. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BLAW 5315. Legal Issues in International Business.**

This course examines legal issues relevant to international business transactions, emphasizing international trade, licensing of intellectual property, and foreign direct investment. Environmental, dispute resolution, labor, e-commerce, marketing, and ethical issues will also be discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**BLAW 5333. Legal Issues of Sustainability and Responsibility.**

Diverse frameworks and analytical methods underlying our understanding of sustainability are explored, including the legal aspects & impact on business, society, environment and economy. Topics include corporate governance, globalization, urbanization, energy, human population, food, natural resources, water and equity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BLAW 5364. Commercial Law.**

A traditional business law course which examines sales, negotiable instruments, creditor's rights and remedies, secured transactions, bankruptcy law, personal property, bailments, real property and landlord-tenant relationships. Prerequisite: BLAW 3301 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BLAW 5368I. International Business Ethics.**

This course examines the legal and ethical challenges inherent in international marketing, international environmental and energy practices, international labor and employment practices, trade negotiations, foreign direct investment, intellectual property licensing, technology development, data collection mining, corporate tax inversion, and global corporate social responsibility. Students will also discuss the individual behavioral, organizational, and cultural factors that influence ethical and unethical business decisions in the global business environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Economics (ECO)****ECO 5302. Economic Theory and Policy.**

An intensive study of micro-and macroeconomic concepts; the price system as it functions under competition, monopoly, monopolistic competition and oligopoly; national income measurement and determination; business cycles; money and banking; monetary policy; fiscal policy and economic stabilization. May not be counted as an elective MBA course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ECO 5310. International Economics.**

Examination of the patterns of trade and finance among nations, integrating the topics of exchange rates, trade barriers, customs unions, and macroeconomics policy into a unified treatment of international economic relations. (MULT) Prerequisite: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ECO 5316. Managerial Economics.**

The application of economic theory and analysis to the formulation of business policy, including demand analysis, production theory, linear programming, and pricing policy. (MBA with Technology Emphasis students complete TECH 5315.) Prerequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECO 5320. Emerging Market Economies.**

The course focuses on the structural characteristics of the emerging market economies, with an emphasis on analyzing the salient economic challenges and opportunities facing contemporary emerging market economies. Prerequisites: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Finance (FIN)****FIN 5322. Investment Analysis.**

This course cover the application of finance theory to investment analysis. Topics include modern investment theories, asset pricing models and derivative pricing models, with a focus on application of derivatives to manage risk exposure. Prerequisite: B A 5352 with a grade of "C" or better or FIN 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5332. Portfolio Theory and Capital Markets.**

This course is designed to provide students with an overview of the strategies for creating and managing portfolios. At the end of this course, students should understand the tools for investment management.

Topics covered include portfolio construction and analysis, risk analysis, asset class management, derivatives, and portfolio performance analysis. Prerequisite: FIN 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5338. International Investments and Financial Management.**

Examination of economic incentives and rationale for international investment and financing. Topics include exchange rate risk exposure and management, global debt and equity investment and financing, foreign currency derivative markets, and general investment and financing strategy in global capital market. (MULT) Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FIN 5347C. Real Estate Investment.**

An application of capital budgeting to real estate investment decisions. Prerequisite: FIN 5387 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FIN 5352. Financial Management.**

This course introduces students to the major considerations in financial decision making. These considerations are analyzed by exploring the role of financial managers in creating value and maximizing shareholder wealth within the constraints of legal and ethical behavior. The development of critical thinking, quantitative applications, and analytical skills are major goals of this course because the topics require knowledge of specialized problem-solving techniques. Prerequisite: ACC 5361 with a grade of "C" or better. Corequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 5387. Managerial Finance.**

Concentrates on the finance function, analysis and budgeting of funds, management of current assets, short and intermediate-term financing requirements, long-term debt policy and capital structure, capital budgeting, and the concept of cost of capital. Risk and return trade-offs also are studied. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Information Systems (ISAN)****ISAN 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5318. Information Technology in Digital Economy.**

This course provides an understanding of the issues in managing organizations' information assets. The course examines users' issues and challenges within the Information Technology (IT) management arena as part of a firm's business and IT strategy. The course provides frameworks and management principles that current or aspiring managers can employ with the challenges of implementing rapidly advancing technology. The focus is on managerial rather than technical issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5355. Database Management Systems.**

This course explores the concepts, principles, issues, and techniques for managing data resources using database management systems. Topics include techniques for analysis, design, and development of database systems, creating and using logical data models, database query languages, and procedures for evaluating management software. Students will develop a management information system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5357. Computing for Data Analytics.**

This course focuses on fundamentals of programming. Students will learn to design and implement applications, and programmatically handle a variety of data management functionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5358. Agile Project Management For Business Professionals.**

This course provides an in-depth study of the project management body of knowledge as applied to Information Technology, emphasizing Agile methodologies and the processes of managing scope, costs, schedules, quality, and risks. Topics include program management, system planning and design methodologies, material & capacity requirements, human, cultural, & international issues, and their impact on the organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5360. E-Commerce: Strategies, Technologies, and Applications.**

This course is designed to familiarize students with current and emerging e-commerce technologies. Topics include Internet technology for business advantage, reinventing the future of business through e-commerce, business opportunities in e-commerce, and social, political, global, and ethical issues associated with ecommerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5364. Data Warehousing.**

This course allows students to familiarize with current and emerging data warehousing technologies that play a strategic role in business organizations. Topics include data warehouse development life cycle, data warehouse navigation, data quality, and performance issues. Prerequisite: ISAN 5355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5367. Machine Learning.**

This course focuses on deriving actionable knowledge from data using algorithms and industry standard tools. Topics covered are the complete process, key technologies, core machine learning algorithms, and programming used for business intelligence. Prerequisite: ISAN 5357 and ANLY 5336 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5368. Information Security.**

This course covers the analysis, design, development, implementation, and maintenance of information security systems in communication networks. Topics include legal, ethical, professional, and personnel issues, concepts, theories, and processes of risk management, technology; cryptography theory and practice; and physical and hardware security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5369. Independent Study in Information Systems.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in Information Systems and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ISAN 5370. Enterprise Resource Planning and Business Intelligence.**

This course uses information technology integrations in enterprises for operational control and business intelligence is examined via Enterprise Resource Planning (ERP) applications in customer relationships management, accounting, finance, purchasing, production control, sales, marketing, and human resource management. Emphasizes managerial issues surrounding the need, selection, and implementation of ERP systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5371. Accounting Information Systems and Controls.**

This course examines accounting information systems and controls and their role in the current technology-intensive business environment. Emphasis is placed on contemporary technology and applications, information technology and business information systems assessments, design of internal controls to satisfy regulation and policy requirements, control concepts, theories, and processes, information systems auditing, systems development life cycle, and information structure, data transfer, and transaction cycles. Prerequisite: ACC 3313 or ACC 5361 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5378. Information Security Policies and Compliance.**

This course focuses on the technology and managerial issues related to information policies, regulations, and compliance that assure confidentiality, integrity, and availability of data and computer systems. Topics include information security policy, regulations, laws, standards, framework, compliance, and governance. Prerequisite: ISAN 5368 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ISAN 5390A. Introduction to Design Thinking.**

This course provides an overview and hands-on introduction to Design Thinking and the human-centered design process. Topics include an introduction, defining the problem, ideation, and concept generation, prototyping & testing, refining, and launching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ISAN 5395. Internship in Information Systems.**

This course provides students with opportunities for experiential learning by contributing to a computer information systems project. The course enables integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ISAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Management (MGT)****MGT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5301. Graduate Assistant Development.**

Completion of this course is required as a condition of employment for graduate assistants. The course is seminar based and covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MGT 5310. Organizational Change Management.**

Presents an overview of the process of change in an organization and stresses the key issues involved in reengineering and renewing organizations. Problems dealing with stress and conflict during major change will be explored along with practical ideas on building effective teams to make change possible and sustainable.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5311. Process Improvement Management in Organizations.**

Learn existing and latest developments in process improvement techniques for continuous improvement and the role of quality as a system for establishing an organization's competitive advantage. Process mapping is emphasized and assessment of effectiveness in the interactions of the managerial and technical systems of organizations is also studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5312. Seminar in Management.**

Development of philosophy, strategy, and tactics in managing an enterprise. Administrative processes common to all enterprises, such as entrepreneurship, business and society, leadership and group behavior in organizations, business ethics, and international management. (Course may be repeated for credit with different course focus.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5313. Strategic Management.**

An integrative approach to policy formulation and administration (decision making) to achieve organization objectives. Should be taken the last semester of student's MBA program. Prerequisite: ACC 5361 and FIN 5387 and MKT 5321 and QMST 5334 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5314. Organizational Behavior and Theory.**

Organizational behavior and structure as influenced by environmental variables and system relationships. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5315. New Venture Management.**

This course provides an overview of the entrepreneurial process from the initial idea through start-up, growth, and harvest. Students learn how to write a business plan, manage all the elements of an entrepreneurial business, and develop a better understanding of the requirements of the entrepreneurial life path.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5318. Cross-Cultural Management.**

The global environment requires sensitivity to and the adaptation of leadership and management skills and practices, and the culture-bound differences in workplace behavior and attitudes. Explores how differences in cultural core values shape behavior and attitudes of workers, managerial colleagues, and negotiating partners. (MULT) Prerequisites: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5321. Supply Chain Management.**

A variety of tools and frameworks provide students and understanding of the basis behind supply chain decision making. Topics include supply management concepts, demand-supply management, pull/push system, capacity and resource allocation, performance measurement, relationship assessment, and outsourcing in an integrated supply chain. Require graduate standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5325. Managing Business Creativity.**

This course focuses on the means by which businesses and individuals foster and maintain their creative and innovative skills. Key topics include: idea generation and refinement, idea screening, prototype development, and feasibility analysis. Objectives are met through classroom exercises, case analysis, guest speakers, and individual and team projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5330. Seminar in Human Resource Management.**

A study of current developments and practices in human resource management, including employment laws; planning, recruitment and selection; training and development programs; wage and benefits administration; performance management, human relations and productivity; labor relations; safety and health; an current contributions to human resource management theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5333. Problems in Business Administration.**

The student is here given the opportunity to work in the field of his special interest, particularly in the subjects of accounting, business law, marketing, statistics, finance, and insurance. The course will be conducted by conferences between the student and instructors concerned. Problems will be assigned as nearly as possible for the needs of the individual student.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5335. New Venture Launch.**

The purpose of this class is to ensure students gain a full understanding of what it takes to start and grow a business. Students learn the process of creating a new venture from the inside by planning, organizing and launching an actual business. Prerequisite: MGT 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5336. Compensation and Benefits.**

This course addresses the rewards systems in organizations. Strategic and technical considerations in designing, administering and managing compensation and benefits plans in organizations, including job analysis and evaluation, wage levels and structures, legal issues, individual and group incentives, and benefits are considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5337. Organizational Staffing.**

A study of the methods involved in recruitment and selection of employees with an emphasis on measurement, job analysis, performance appraisal, legal issues, and the role of human resource planning and strategy. This course relies on statistics to teach students to make reliable and valid employment decisions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5338. Human Resource Development.**

A study of theoretical and applied perspectives on needs assessment, design, development delivery and evaluation of training and development as well as organizational change and development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5339. International Human Resource Management.**

A study of challenges that decision makers consider when managing their human resources across the globe. Drawing on theories and models from cross-cultural and international management areas, this course covers such topics as globalization, culture, emerging international assignments, and expatriate recruitment, selection, training, repatriation, and career management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5380A. Business Ethics Leadership.**

This course examines a variety of ethical issues in business from multiple stakeholder perspectives (top management, employees, community members, etc.). The course is designed to enhance moral awareness and facilitate individual development with respect to making ethical decisions that contribute to effective corporate management and leadership.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MGT 5380C. Group Dynamics in Organizations.**

This course explores the theoretical framework of group interactions as well as the practical workplace challenges associated with organizing, participating on, and managing teams and groups. It addresses the development and use of teams to improve business organizations and is recommended for graduate students preparing for business careers.

Prerequisite: B A 5351 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380D. Labor Relations and Negotiation.**

This graduate level course is a study of labor organizations and their impact as well as negotiation and conflict resolution issues. The course will examine the National Labor Relations Act (NLRA), union and employer rights under the NLRA, union organizing, collective bargaining, negotiation, contract administration, mediation and arbitration.

Corequisite: MGT 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380E. International Leadership.**

Course will include lectures, business engagements, cultural excursions, and a service-learning project. To reinforce the theories discussed in class students will interact directly with managers, employees, and international business professionals, learn perspective on cultural and leadership issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380F. Management for Organizational Sustainability.**

This course is designed to take a broad look at Sustainability from both Ecological and Organizational perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380G. Artificial Intelligence (AI) for Business Managers.**

This course provides a basic foundation in artificial intelligence for students of the business school by introducing a means to make economically sound decisions regarding the implementation areas.

In this course all students of the business school may implement small projects in the functional disciplines of the business school (e.g. marketing, finance, etc.). It could also be of interest for students of the School of Engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5390. Managerial Data Analysis.**

Designed to prepare managers to make more effective decisions based upon evidence from data analysis. Covers all elements of the general linear model from t-tests to multiple regression analysis. Involves acquiring and analyzing data for prediction and explanation, developing reports with actionable recommendations, and communicating results for managerial decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5391. Managing the Communication Process.**

The study and application of theory and psychology of managerial communication using written, oral, and technological modes to communicate within the business environment. The course includes the process and product approach to graphics, leadership, problem solving, prioritizing, interviewing, and communicating change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5395. Graduate Business Internship.**

Integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in MGT 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Marketing (MKT)****MKT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5321. Marketing Management.**

A study of the planning and coordination of marketing functions, marketing policies, and the analysis of marketing administration.

Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5322. Marketing Research Methods.**

An advanced study of the marketing research process to include problem formulation, determination of sources of information and research design, design of data collection forms, design of the sample, collection of the data, analysis and interpretation of the data, preparation of the research report, and oral presentation of the research findings.

Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5323. Qualitative Research in Marketing.**

This course examines qualitative methods as used in marketing and market research. Topics include the design and execution of qualitative research projects using various qualitative methodological approaches. Activities include application of qualitative methods for conducting research. Students will apply learning in a qualitative research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5330. International Marketing.**

An application of marketing concepts to the global business environment. Examines marketing in the light of international economic, social, cultural, business, and environmental factors. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5331. Integrated Marketing Communications.**

An analysis of consumer behavior in the marketplace and its application to the preparation and presentation of a complete integrated marketing communications plan for a local, regional, and/or national client.

Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5335. Services Marketing.**

Services dominate the U.S. economy and are becoming critical for competitive advantage in companies across the globe and in all industry sectors. This course examines the foundations of services marketing, which are necessary to create, promise, and deliver a successful, interactive customer experience. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5340. Digital Marketing.**

This course examines marketing strategies in the digital environment. It examines the latest technology and analytical tools used in e-marketing and e-commerce, including online advertising, mobile marketing, social media marketing, search marketing, email marketing, and web analytics. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5341. Social Media Marketing and Analysis.**

This course provides a conceptual foundation and practical approach for conducting social media analysis and developing a social media marketing plan and/or campaign will be presented. Students will gain hands-on experience using social media strategically to achieve desired marketing goals through a hands-on project. Students will also earn applicable digital marketing certifications. Prerequisite: MKT 5321 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5345. Marketing Analytics.**

This course is a study of the scientific approach that connects customer data and competitive information to drive marketing decision-making. The course explores customer data analysis techniques and their theoretical foundations that are applied to real world business problems. Students will learn software, conduct data analysis and communicate the results. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5346. Contemporary Topics in Marketing Analytics.**

This course covers contemporary topics in marketing analytics. Students will learn (1) concepts and methods in strategic marketing analytics, (2) analytical and mapping tools in geospatial data and information, (3) concepts and methods in Bayesian Networks, (4) Topic Analysis using big data in marketing, and (5) other emerging analytical tools and methods in marketing. Prerequisite: QMST 5334 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5347. AI and Data Visualization for Marketing.**

This course consists of applied training in foundational topics for artificial intelligence and data visualization. It covers both prediction as well as classification problems. While many technical aspects are covered, the main emphasis is on knowing how to apply a wide range of modern techniques to specific marketing problems. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5348. Python for Marketing Analytics.**

This course consists of learning Python and using this programming language for data analysis and visualization. This course will help to leverage the power of historical data and to develop models that project future trends. Python will be used for exploratory data analysis, market forecasting, customer segmentation, deep learning, social media analysis and analysis of marketing images and videos. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5350. Strategic Marketing Analysis and Planning.**

This course examines strategic marketing decision making through the analysis and interpretation of marketing intelligence, metrics, and dashboards. Topics will include data-driven decision making on marketing challenges pertaining to customers, brands, marketing mix decisions, online strategy and social media, market performance, and firm profitability. Prerequisite: MKT 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5395. Independent Study in Marketing.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in Marketing. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5397I. Entrepreneurial Marketing.**

Entrepreneurship involves the discovery, implementation, and pursuit of new business opportunities. Successful execution of an entrepreneurial idea requires an effective marketing plan and related skills. In this course, we will investigate how marketing concepts (product, price, promotion, place, people, processes, brand image, segmentation, targeting, positioning, quality perceptions) can facilitate entrepreneurs' realization of their ideas. A conceptual foundation and practical approach for developing an entrepreneurship-focused marketing plan will be discussed. Using a hands-on approach, students will gain skills and knowledge on the effective use of marketing concepts to achieve entrepreneurial goals. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MKT 5398. Internship in Marketing.**

Internship in marketing is an external employer supervised, experiential learning course that enables a student to integrate professional and graduate business coursework. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5399A. Thesis.**

This course represents a student's initial thesis enrollments. No thesis credit is awarded until student has completed the thesis in Marketing Research and Analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**MKT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Business Administration (M.B.A.) degree with a major in Business Administration in the McCoy College emphasizes the knowledge and tools needed for professional success and is designed for those individuals who expect to pursue careers in the management of organizations in either the public or private sector. The curriculum provides broad-based, generalized education with the flexibility to meet individual needs. Students may choose an optional concentration in one of six areas of study in a flexible format or select a full-time cohort program. The general Flex M.B.A. program can be completed at either the San Marcos or Round Rock Campus. For the Flex M.B.A. program concentrations, some specialized courses may only be offered at the San Marcos Campus or the Round Rock Campus. The Full-Time Cohort program is available exclusively at the San Marcos Campus.

Students in the Flex M.B.A. program with a **Computer Information Systems Concentration** learn how technology has changed the way business operates and how to harness the power of technology in various business management settings.

The Flex M.B.A. with an **Engineering Technology Concentration** is offered in cooperation with the Department of Engineering Technology, an academic division of the College of Science and Engineering. M.B.A. students pursuing the Engineering Technology Concentration should find enhanced career opportunities with companies oriented significantly toward manufacturing.

Students interested in careers related to international business may choose to seek the Flex M.B.A. degree with an **International Business Concentration**. This program is designed to provide focused study in international business including cultural, historical, and political issues. While this program is available to all students in the M.B.A. program, it

is especially well suited for undergraduate students in the international studies undergraduate program.

If a student's interest is the healthcare industry, the Flex M.B.A. with a **Healthcare Administration Concentration** may be for them. Offered jointly with the College of Health Professions, the program combines academic content from both colleges to prepare students for a successful career in healthcare.

For those interested in the field of human resources, a Flex M.B.A. with a **Human Resource Management Concentration** is available. This program provides information on organizational change, staffing, compensation and benefits, and international HR.

Students in the Flex M.B.A. program with a **Supply Chain Management Concentration** will obtain the knowledge and skills required to effectively manage the supply chain process in today's global marketplace.

The **Full-Time Cohort** M.B.A. is offered exclusively at the San Marcos Campus. In addition to the core courses, students must complete an internship and an international trip in a specific semester as outlined for each cohort group.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
  - or
  - \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - an overall competitive GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - responses to specific essay questions
  - resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
  - two letters of recommendation from persons best able to assess the student's ability to succeed in graduate school
  - GPA and GMAT/GRE Requirement
- The GMAT/GRE is not required for applicants with an overall 3.5 GPA or a 3.5 GPA in the last 60 hours GPA of undergraduate course work. If the GPA falls below the minimum requirement, the official GMAT or GRE (general test only) with competitive scores will be required in

order to be considered. The Graduate College will notify applicants via email should this occur.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- o
- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Business Administration (M.B.A.) degree with a major in Business Administration concentration in Engineering Technology requires 39 semester credit hours.

B A 5100 and B A 5351 should be taken in the first semester and MGT 5313 should be taken in the last term because it serves as the capstone course and includes the comprehensive examination.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of C or lower. Even if the grade of C or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third C (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 C Policy takes precedent over probationary status. So, if a student earns a third C they are automatically dismissed from their program permanently; even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
B A 5100	Business Professional Development Seminar (Taken three times in different terms)	3
B A 5351	Organizational Performance and Competitive Advantage	3
ACC 5361	Accounting Analysis for Managerial Decision Making	3
ECO 5316	Managerial Economics	3
FIN 5352	Financial Management	3

MGT 5313	Strategic Management	3
MGT 5314	Organizational Behavior and Theory	3
MKT 5321	Marketing Management	3
ANLY 5334	Statistical Methods for Business	3
ANLY 5338	Operations Management	3

### Prescribed Electives

Choose 9 hours of advisor-approved technology electives.		9
TECH 5315	Engineering Economic Analysis	
TECH 5364	Robust Product and Process Design	
TECH 5382	Industrial Ecology and Sustainability Engineering	
TECH 5385	Readings in Technology	
TECH 5387	Advanced Facilities Planning	
TECH 5394	Design of Experiments	
May choose other advisor-approved technology courses.		

**Total Hours** **39**

## Comprehensive Examination Requirement

The comprehensive examination consists of a consulting project with companies in the community. The exam is a written paper and oral presentation at the end of the semester, associated with capstone course MGT 5313. If the student fails, they must retake the capstone course, MGT 5313, the following term.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Business Administration: ACC (<http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/courseleaf.cgi?page=/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#accounting>), ANLY, (p. 942) B A (<http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/courseleaf.cgi?page=/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#business-administration>), BLAW (<http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/courseleaf.cgi?page=/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#business-law>), ECO (<http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/courseleaf.cgi?page=/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#economics>), FIN (<http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/courseleaf.cgi?page=/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#finance>), ISAN (p. 945), (p. 930) MGT (<http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/courseleaf.cgi?page=/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#management>), MKT (<http://mycatalog.txstate.edu/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/courseleaf.cgi?page=/graduate/mccoy-business-administration/business-flex-computerinfosystems-mba/index.html&step=coursetext#marketing>),

## Courses Offered

*Students must complete the appropriate background course or its equivalent before enrolling in elective courses.*

### Accounting (ACC)

#### ACC 5315. Selected Topics in Financial Accounting.

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5316. Advanced Accounting.

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-forprofit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5320. Auditing.

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5323. Accounting Data Analytics.

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5340. Individual Income Tax.

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5350. Professional Accounting Research.

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5352. Financial Statement Reporting and Analysis.

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5355. IT Auditing.

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5357. Regulation and Professionalism.

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments. Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5361. Accounting Analysis for Managerial Decision Making.

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5362. Cost and Managerial Accounting Theory.

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules of the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Analytics (ANLY)****ANLY 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5332. Optimization for Business Analytics.**

This course introduces optimization theory and applications for analyzing and solving business decision-making problems. The students will learn to apply in various business domains optimization concepts and tools such as linear programming, integer/mixed-integer programming, and other classes of optimization models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5334. Statistical Methods for Business.**

This course provides the quantitative foundation for business analysis and decision making. Topics include inferential statistics, regression analysis, and other analytical/modeling techniques with wide applicability in decision-making and problem solving in all functional areas of business.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5335. Forecasting and Simulation.**

This course introduces the concepts and principles of forecasting and simulation techniques as applies to planning and decision making in organizations. Topical coverage includes time series forecasting, causal forecasting, discrete event simulation, and continuous-event simulation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5336. Analytics.**

This course introduces analytics which refers to the process of transforming data into information for making decisions. The topics include the introduction to analytics, visualization, analytics applications, and challenges related to business data. Students will learn how to use software, conduct data analysis and communicate their results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5338. Operations Management.**

This course introduces the processes and strategies to create, produce, and deliver goods and services that drive organizations' overall success. It will highlight operational and tactical problems organizations typically confront and introduce the concepts and analytical tools (both process and systems based) used to deal with these problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5342. Probability and Statistical Models.**

This course introduces the concept of probability and probability distributions. It includes general and generalized linear models, inflated and mixture models, and hierarchical models. Model validity and choice will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5343. Data Mining.**

This course covers data mining concepts and applications of data mining techniques to solve business problems. It emphasizes algorithms such as classification, clustering, association, and text mining. Model selection and assessment are also emphasized. Prerequisite: ANLY 5336 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5369. Independent Study in Analytics.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in quantitative methods and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANLY 5390A. Statistical Computing.**

This course covers programming and statistical computing concepts. Programming concepts include data manipulation, data structures, control structures, functions, basic algorithms, and matrix manipulations. Statistical computing topics include numerical linear algebra, Monte Carlo methods, and numerical optimization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANLY 5395. Internship in Analytics.**

This course is based on experiential learning while the student works in quantitative methods and statistics. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Data Analytics and Information Systems. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANLY 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Business Administration (B A)****B A 5100. Business Professional Development Seminar.**

This course is designed to contribute to the development of the business professional. Academic content is supplemented by training in soft skill topics to better prepare the students for a successful business career. Repeatable for credit with different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**B A 5351. Organizational Performance and Competitive Advantage.**

This course is designed to provide an integrative understanding of the firm. A variety of organizational models and perspectives will be incorporated to facilitate understanding of the complexities of the firm, its environments, and its relationships with stakeholders. Includes focus on case analysis issues and communication skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5353. Understanding and Analyzing Organizational Problems.**

An introduction to the concepts of economic theory and optimization, with an emphasis on developing skills in data and economic analysis to solve business problems. Coverage includes prices, costs, market structures, macroeconomic policies, and optimization. Corequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5368A. MBA Full Time Cohort International Experience.**

This course will focus on developing an understanding and analysis of issues related to business challenges in another country. Students will gain first-hand experience with the business practices, culture and economy of another country. Corequisite: MGT 5313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**B A 5396. Internship in Business Administration.**

This course is based on experiential learning while the student works in business administration. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**B A 5398. Independent Study in Business Administration.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in business administration and work independently on a specialized project. Course may be repeated with approval of associate dean for graduate programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**Business Law (BLAW)****BLAW 5310. The Employment Relationship.**

A study of trends in the rapidly evolving "law of workplace," with emphasis on how lawmakers attempt to balance the rights and responsibilities of employers and workers. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BLAW 5315. Legal Issues in International Business.**

This course examines legal issues relevant to international business transactions, emphasizing international trade, licensing of intellectual property, and foreign direct investment. Environmental, dispute resolution, labor, e-commerce, marketing, and ethical issues will also be discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**BLAW 5333. Legal Issues of Sustainability and Responsibility.**

Diverse frameworks and analytical methods underlying our understanding of sustainability are explored, including the legal aspects & impact on business, society, environment and economy. Topics include corporate governance, globalization, urbanization, energy, human population, food, natural resources, water and equity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BLAW 5364. Commercial Law.**

A traditional business law course which examines sales, negotiable instruments, creditor's rights and remedies, secured transactions, bankruptcy law, personal property, bailments, real property and landlord-tenant relationships. Prerequisite: BLAW 3301 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BLAW 5368I. International Business Ethics.**

This course examines the legal and ethical challenges inherent in international marketing, international environmental and energy practices, international labor and employment practices, trade negotiations, foreign direct investment, intellectual property licensing, technology development, data collection mining, corporate tax inversion, and global corporate social responsibility. Students will also discuss the individual behavioral, organizational, and cultural factors that influence ethical and unethical business decisions in the global business environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Economics (ECO)****ECO 5302. Economic Theory and Policy.**

An intensive study of micro-and macroeconomic concepts; the price system as it functions under competition, monopoly, monopolistic competition and oligopoly; national income measurement and determination; business cycles; money and banking; monetary policy; fiscal policy and economic stabilization. May not be counted as an elective MBA course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ECO 5310. International Economics.**

Examination of the patterns of trade and finance among nations, integrating the topics of exchange rates, trade barriers, customs unions, and macroeconomics policy into a unified treatment of international economic relations. (MULT) Prerequisite: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ECO 5316. Managerial Economics.**

The application of economic theory and analysis to the formulation of business policy, including demand analysis, production theory, linear programming, and pricing policy. (MBA with Technology Emphasis students complete TECH 5315.) Prerequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECO 5320. Emerging Market Economies.**

The course focuses on the structural characteristics of the emerging market economies, with an emphasis on analyzing the salient economic challenges and opportunities facing contemporary emerging market economies. Prerequisites: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Finance (FIN)****FIN 5322. Investment Analysis.**

This course cover the application of finance theory to investment analysis. Topics include modern investment theories, asset pricing models and derivative pricing models, with a focus on application of derivatives to manage risk exposure. Prerequisite: B A 5352 with a grade of "C" or better or FIN 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5332. Portfolio Theory and Capital Markets.**

This course is designed to provide students with an overview of the strategies for creating and managing portfolios. At the end of this course, students should understand the tools for investment management.

Topics covered include portfolio construction and analysis, risk analysis, asset class management, derivatives, and portfolio performance analysis. Prerequisite: FIN 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5338. International Investments and Financial Management.**

Examination of economic incentives and rationale for international investment and financing. Topics include exchange rate risk exposure and management, global debt and equity investment and financing, foreign currency derivative markets, and general investment and financing strategy in global capital market. (MULT) Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FIN 5347C. Real Estate Investment.**

An application of capital budgeting to real estate investment decisions. Prerequisite: FIN 5387 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FIN 5352. Financial Management.**

This course introduces students to the major considerations in financial decision making. These considerations are analyzed by exploring the role of financial managers in creating value and maximizing shareholder wealth within the constraints of legal and ethical behavior. The development of critical thinking, quantitative applications, and analytical skills are major goals of this course because the topics require knowledge of specialized problem-solving techniques. Prerequisite: ACC 5361 with a grade of "C" or better. Corequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 5387. Managerial Finance.**

Concentrates on the finance function, analysis and budgeting of funds, management of current assets, short and intermediate-term financing requirements, long-term debt policy and capital structure, capital budgeting, and the concept of cost of capital. Risk and return trade-offs also are studied. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Information Systems (ISAN)****ISAN 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5318. Information Technology in Digital Economy.**

This course provides an understanding of the issues in managing organizations' information assets. The course examines users' issues and challenges within the Information Technology (IT) management arena as part of a firm's business and IT strategy. The course provides frameworks and management principles that current or aspiring managers can employ with the challenges of implementing rapidly advancing technology. The focus is on managerial rather than technical issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5355. Database Management Systems.**

This course explores the concepts, principles, issues, and techniques for managing data resources using database management systems. Topics include techniques for analysis, design, and development of database systems, creating and using logical data models, database query languages, and procedures for evaluating management software. Students will develop a management information system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5357. Computing for Data Analytics.**

This course focuses on fundamentals of programming. Students will learn to design and implement applications, and programmatically handle a variety of data management functionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5358. Agile Project Management For Business Professionals.**

This course provides an in-depth study of the project management body of knowledge as applied to Information Technology, emphasizing Agile methodologies and the processes of managing scope, costs, schedules, quality, and risks. Topics Include program management, system planning and design methodologies, material & capacity requirements, human, cultural, & international issues, and their impact on the organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5360. E-Commerce: Strategies, Technologies, and Applications.**

This course is designed to familiarize students with current and emerging e-commerce technologies. Topics include Internet technology for business advantage, reinventing the future of business through e-commerce, business opportunities in e-commerce, and social, political, global, and ethical issues associated with ecommerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5364. Data Warehousing.**

This course allows students to familiarize with current and emerging data warehousing technologies that play a strategic role in business organizations. Topics include data warehouse development life cycle, data warehouse navigation, data quality, and performance issues. Prerequisite: ISAN 5355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5367. Machine Learning.**

This course focuses on deriving actionable knowledge from data using algorithms and industry standard tools. Topics covered are the complete process, key technologies, core machine learning algorithms, and programming used for business intelligence. Prerequisite: ISAN 5357 and ANLY 5336 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5368. Information Security.**

This course covers the analysis, design, development, implementation, and maintenance of information security systems in communication networks. Topics include legal, ethical, professional, and personnel issues, concepts, theories, and processes of risk management, technology; cryptography theory and practice; and physical and hardware security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5369. Independent Study in Information Systems.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in Information Systems and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ISAN 5370. Enterprise Resource Planning and Business Intelligence.**

This course uses information technology integrations in enterprises for operational control and business intelligence is examined via Enterprise Resource Planning (ERP) applications in customer relationships management, accounting, finance, purchasing, production control, sales, marketing, and human resource management. Emphasizes managerial issues surrounding the need, selection, and implementation of ERP systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5371. Accounting Information Systems and Controls.**

This course examines accounting information systems and controls and their role in the current technology-intensive business environment. Emphasis is placed on contemporary technology and applications, information technology and business information systems assessments, design of internal controls to satisfy regulation and policy requirements, control concepts, theories, and processes, information systems auditing, systems development life cycle, and information structure, data transfer, and transaction cycles. Prerequisite: ACC 3313 or ACC 5361 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5378. Information Security Policies and Compliance.**

This course focuses on the technology and managerial issues related to information policies, regulations, and compliance that assure confidentiality, integrity, and availability of data and computer systems. Topics include information security policy, regulations, laws, standards, framework, compliance, and governance. Prerequisite: ISAN 5368 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ISAN 5390A. Introduction to Design Thinking.**

This course provides an overview and hands-on introduction to Design Thinking and the human-centered design process. Topics include an introduction, defining the problem, ideation, and concept generation, prototyping & testing, refining, and launching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ISAN 5395. Internship in Information Systems.**

This course provides students with opportunities for experiential learning by contributing to a computer information systems project. The course enables integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ISAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Management (MGT)****MGT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5301. Graduate Assistant Development.**

Completion of this course is required as a condition of employment for graduate assistants. The course is seminar based and covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MGT 5310. Organizational Change Management.**

Presents an overview of the process of change in an organization and stresses the key issues involved in reengineering and renewing organizations. Problems dealing with stress and conflict during major change will be explored along with practical ideas on building effective teams to make change possible and sustainable.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5311. Process Improvement Management in Organizations.**

Learn existing and latest developments in process improvement techniques for continuous improvement and the role of quality as a system for establishing an organization's competitive advantage. Process mapping is emphasized and assessment of effectiveness in the interactions of the managerial and technical systems of organizations is also studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5312. Seminar in Management.**

Development of philosophy, strategy, and tactics in managing an enterprise. Administrative processes common to all enterprises, such as entrepreneurship, business and society, leadership and group behavior in organizations, business ethics, and international management. (Course may be repeated for credit with different course focus.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5313. Strategic Management.**

An integrative approach to policy formulation and administration (decision making) to achieve organization objectives. Should be taken the last semester of student's MBA program. Prerequisite: ACC 5361 and FIN 5387 and MKT 5321 and QMST 5334 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5314. Organizational Behavior and Theory.**

Organizational behavior and structure as influenced by environmental variables and system relationships. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5315. New Venture Management.**

This course provides an overview of the entrepreneurial process from the initial idea through start-up, growth, and harvest. Students learn how to write a business plan, manage all the elements of an entrepreneurial business, and develop a better understanding of the requirements of the entrepreneurial life path.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5318. Cross-Cultural Management.**

The global environment requires sensitivity to and the adaptation of leadership and management skills and practices, and the culture-bound differences in workplace behavior and attitudes. Explores how differences in cultural core values shape behavior and attitudes of workers, managerial colleagues, and negotiating partners. (MULT) Prerequisites: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5321. Supply Chain Management.**

A variety of tools and frameworks provide students and understanding of the basis behind supply chain decision making. Topics include supply management concepts, demand-supply management, pull/push system, capacity and resource allocation, performance measurement, relationship assessment, and outsourcing in an integrated supply chain. Require graduate standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5325. Managing Business Creativity.**

This course focuses on the means by which businesses and individuals foster and maintain their creative and innovative skills. Key topics include: idea generation and refinement, idea screening, prototype development, and feasibility analysis. Objectives are met through classroom exercises, case analysis, guest speakers, and individual and team projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5330. Seminar in Human Resource Management.**

A study of current developments and practices in human resource management, including employment laws; planning, recruitment and selection; training and development programs; wage and benefits administration; performance management, human relations and productivity; labor relations; safety and health; an current contributions to human resource management theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5333. Problems in Business Administration.**

The student is here given the opportunity to work in the field of his special interest, particularly in the subjects of accounting, business law, marketing, statistics, finance, and insurance. The course will be conducted by conferences between the student and instructors concerned. Problems will be assigned as nearly as possible for the needs of the individual student.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5335. New Venture Launch.**

The purpose of this class is to ensure students gain a full understanding of what it takes to start and grow a business. Students learn the process of creating a new venture from the inside by planning, organizing and launching an actual business. Prerequisite: MGT 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5336. Compensation and Benefits.**

This course addresses the rewards systems in organizations. Strategic and technical considerations in designing, administering and managing compensation and benefits plans in organizations, including job analysis and evaluation, wage levels and structures, legal issues, individual and group incentives, and benefits are considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5337. Organizational Staffing.**

A study of the methods involved in recruitment and selection of employees with an emphasis on measurement, job analysis, performance appraisal, legal issues, and the role of human resource planning and strategy. This course relies on statistics to teach students to make reliable and valid employment decisions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5338. Human Resource Development.**

A study of theoretical and applied perspectives on needs assessment, design, development delivery and evaluation of training and development as well as organizational change and development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5339. International Human Resource Management.**

A study of challenges that decision makers consider when managing their human resources across the globe. Drawing on theories and models from cross-cultural and international management areas, this course covers such topics as globalization, culture, emerging international assignments, and expatriate recruitment, selection, training, repatriation, and career management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5380A. Business Ethics Leadership.**

This course examines a variety of ethical issues in business from multiple stakeholder perspectives (top management, employees, community members, etc.). The course is designed to enhance moral awareness and facilitate individual development with respect to making ethical decisions that contribute to effective corporate management and leadership.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MGT 5380C. Group Dynamics in Organizations.**

This course explores the theoretical framework of group interactions as well as the practical workplace challenges associated with organizing, participating on, and managing teams and groups. It addresses the development and use of teams to improve business organizations and is recommended for graduate students preparing for business careers.

Prerequisite: B A 5351 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380D. Labor Relations and Negotiation.**

This graduate level course is a study of labor organizations and their impact as well as negotiation and conflict resolution issues. The course will examine the National Labor Relations Act (NLRA), union and employer rights under the NLRA, union organizing, collective bargaining, negotiation, contract administration, mediation and arbitration.

Corequisite: MGT 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380E. International Leadership.**

Course will include lectures, business engagements, cultural excursions, and a service-learning project. To reinforce the theories discussed in class students will interact directly with managers, employees, and international business professionals, learn perspective on cultural and leadership issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380F. Management for Organizational Sustainability.**

This course is designed to take a broad look at Sustainability from both Ecological and Organizational perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380G. Artificial Intelligence (AI) for Business Managers.**

This course provides a basic foundation in artificial intelligence for students of the business school by introducing a means to make economically sound decisions regarding the implementation areas. In this course all students of the business school may implement small projects in the functional disciplines of the business school (e.g. marketing, finance, etc.). It could also be of interest for students of the School of Engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5390. Managerial Data Analysis.**

Designed to prepare managers to make more effective decisions based upon evidence from data analysis. Covers all elements of the general linear model from t-tests to multiple regression analysis. Involves acquiring and analyzing data for prediction and explanation, developing reports with actionable recommendations, and communicating results for managerial decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5391. Managing the Communication Process.**

The study and application of theory and psychology of managerial communication using written, oral, and technological modes to communicate within the business environment. The course includes the process and product approach to graphics, leadership, problem solving, prioritizing, interviewing, and communicating change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5395. Graduate Business Internship.**

Integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in MGT 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Marketing (MKT)****MKT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5321. Marketing Management.**

A study of the planning and coordination of marketing functions, marketing policies, and the analysis of marketing administration.

Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5322. Marketing Research Methods.**

An advanced study of the marketing research process to include problem formulation, determination of sources of information and research design, design of data collection forms, design of the sample, collection of the data, analysis and interpretation of the data, preparation of the research report, and oral presentation of the research findings.

Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5323. Qualitative Research in Marketing.**

This course examines qualitative methods as used in marketing and market research. Topics include the design and execution of qualitative research projects using various qualitative methodological approaches. Activities include application of qualitative methods for conducting research. Students will apply learning in a qualitative research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5330. International Marketing.**

An application of marketing concepts to the global business environment. Examines marketing in the light of international economic, social, cultural, business, and environmental factors. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5331. Integrated Marketing Communications.**

An analysis of consumer behavior in the marketplace and its application to the preparation and presentation of a complete integrated marketing communications plan for a local, regional, and/or national client.

Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5335. Services Marketing.**

Services dominate the U.S. economy and are becoming critical for competitive advantage in companies across the globe and in all industry sectors. This course examines the foundations of services marketing, which are necessary to create, promise, and deliver a successful, interactive customer experience. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5340. Digital Marketing.**

This course examines marketing strategies in the digital environment. It examines the latest technology and analytical tools used in e-marketing and e-commerce, including online advertising, mobile marketing, social media marketing, search marketing, email marketing, and web analytics. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5341. Social Media Marketing and Analysis.**

This course provides a conceptual foundation and practical approach for conducting social media analysis and developing a social media marketing plan and/or campaign will be presented. Students will gain hands-on experience using social media strategically to achieve desired marketing goals through a hands-on project. Students will also earn applicable digital marketing certifications. Prerequisite: MKT 5321 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5345. Marketing Analytics.**

This course is a study of the scientific approach that connects customer data and competitive information to drive marketing decision-making. The course explores customer data analysis techniques and their theoretical foundations that are applied to real world business problems. Students will learn software, conduct data analysis and communicate the results. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5346. Contemporary Topics in Marketing Analytics.**

This course covers contemporary topics in marketing analytics. Students will learn (1) concepts and methods in strategic marketing analytics, (2) analytical and mapping tools in geospatial data and information, (3) concepts and methods in Bayesian Networks, (4) Topic Analysis using big data in marketing, and (5) other emerging analytical tools and methods in marketing. Prerequisite: QMST 5334 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5347. AI and Data Visualization for Marketing.**

This course consists of applied training in foundational topics for artificial intelligence and data visualization. It covers both prediction as well as classification problems. While many technical aspects are covered, the main emphasis is on knowing how to apply a wide range of modern techniques to specific marketing problems. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5348. Python for Marketing Analytics.**

This course consists of learning Python and using this programming language for data analysis and visualization. This course will help to leverage the power of historical data and to develop models that project future trends. Python will be used for exploratory data analysis, market forecasting, customer segmentation, deep learning, social media analysis and analysis of marketing images and videos. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5350. Strategic Marketing Analysis and Planning.**

This course examines strategic marketing decision making through the analysis and interpretation of marketing intelligence, metrics, and dashboards. Topics will include data-driven decision making on marketing challenges pertaining to customers, brands, marketing mix decisions, online strategy and social media, market performance, and firm profitability. Prerequisite: MKT 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5395. Independent Study in Marketing.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in Marketing. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5397I. Entrepreneurial Marketing.**

Entrepreneurship involves the discovery, implementation, and pursuit of new business opportunities. Successful execution of an entrepreneurial idea requires an effective marketing plan and related skills. In this course, we will investigate how marketing concepts (product, price, promotion, place, people, processes, brand image, segmentation, targeting, positioning, quality perceptions) can facilitate entrepreneurs' realization of their ideas. A conceptual foundation and practical approach for developing an entrepreneurship-focused marketing plan will be discussed. Using a hands-on approach, students will gain skills and knowledge on the effective use of marketing concepts to achieve entrepreneurial goals. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MKT 5398. Internship in Marketing.**

Internship in marketing is an external employer supervised, experiential learning course that enables a student to integrate professional and graduate business coursework. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5399A. Thesis.**

This course represents a student's initial thesis enrollments. No thesis credit is awarded until student has completed the thesis in Marketing Research and Analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**MKT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Business Administration (M.B.A.) degree with a major in Business Administration in the McCoy College emphasizes the knowledge and tools needed for professional success and is designed for those individuals who expect to pursue careers in the management of organizations in either the public or private sector. The curriculum provides broad-based, generalized education with the flexibility to meet individual needs. Students may choose an optional concentration in one of six areas of study in a flexible format or select a full-time cohort program. The general Flex M.B.A. program can be completed at either the San Marcos or Round Rock Campus. For the Flex M.B.A. program concentrations, some specialized courses may only be offered at the San Marcos Campus or the Round Rock Campus. The Full-Time Cohort program is available exclusively at the San Marcos Campus.

Students in the Flex M.B.A. program with a **Computer Information Systems Concentration** learn how technology has changed the way business operates and how to harness the power of technology in various business management settings.

The Flex M.B.A. with an **Engineering Technology Concentration** is offered in cooperation with the Department of Engineering Technology, an academic division of the College of Science and Engineering. M.B.A. students pursuing the Engineering Technology Concentration should find enhanced career opportunities with companies oriented significantly toward manufacturing.

Students interested in careers related to international business may choose to seek the Flex M.B.A. degree with an **International Business Concentration**. This program is designed to provide focused study in international business including cultural, historical, and political issues. While this program is available to all students in the M.B.A. program, it

is especially well suited for undergraduate students in the international studies undergraduate program.

If a student's interest is the healthcare industry, the Flex M.B.A. with a **Healthcare Administration Concentration** may be for them. Offered jointly with the College of Health Professions, the program combines academic content from both colleges to prepare students for a successful career in healthcare.

For those interested in the field of human resources, a Flex M.B.A. with a **Human Resource Management Concentration** is available. This program provides information on organizational change, staffing, compensation and benefits, and international HR.

Students in the Flex M.B.A. program with a **Supply Chain Management Concentration** will obtain the knowledge and skills required to effectively manage the supply chain process in today's global marketplace.

The **Full-Time Cohort** M.B.A. is offered exclusively at the San Marcos Campus. In addition to the core courses, students must complete an internship and an international trip in a specific semester as outlined for each cohort group.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
  - or
  - \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - an overall competitive GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - responses to specific essay questions
  - resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
  - two letters of recommendation from persons best able to assess the student's ability to succeed in graduate school
  - GPA and GMAT/GRE Requirement
- The GMAT/GRE is not required for applicants with an overall 3.5 GPA or a 3.5 GPA in the last 60 hours GPA of undergraduate course work. If the GPA falls below the minimum requirement, the official GMAT or GRE (general test only) with competitive scores will be required in

order to be considered. The Graduate College will notify applicants via email should this occur.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Business Administration (M.B.A.) degree with a major in Business Administration concentration in Healthcare Administration requires 39 semester credit hours.

B A 5100 and B A 5351 should be taken in the first semester and MGT 5313 should be taken in the last term because it serves as the capstone course and includes the comprehensive examination.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of C or lower. Even if the grade of C or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third C (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 C Policy takes precedent over probationary status. So, if a student earns a third C they are automatically dismissed from their program permanently; even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
B A 5100	Business Professional Development Seminar (Taken three times in different terms)	3
B A 5351	Organizational Performance and Competitive Advantage	3
ACC 5361	Accounting Analysis for Managerial Decision Making	3
ECO 5316	Managerial Economics	3
FIN 5352	Financial Management	3
MGT 5313	Strategic Management	3

MGT 5314	Organizational Behavior and Theory	3
MKT 5321	Marketing Management	3
ANLY 5334	Statistical Methods for Business	3
ANLY 5338	Operations Management	3

### Prescribed Electives

Choose 9 hours from the following:		9
HA 5300	Healthcare Organization and Delivery	
HA 5321	Healthcare Law and Policy	
HA 5325	Health Care Quality and Operations Improvement	
HA 5334	Data-Guided Healthcare Decision-Making	
HA 5335	Public Health for Healthcare Administrators	
HA 5355	Emerging Trends in Healthcare Human Resources	
HA 5356	Policy Development in Healthcare Arena	

**Total Hours** 39

## Comprehensive Examination Requirement

The comprehensive examination consists of a consulting project with companies in the community. The exam is a written paper and oral presentation at the end of the semester, associated with capstone course MGT 5313. If the student fails, they must retake the capstone course, MGT 5313, the following term.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Business Administration: ACC (p. 954), ANLY (p. 957), B A (p. 958), BLAW (p. 959), ECO (p. 959), FIN (p. 959), ISAN (p. 960), MGT (p. 962), MKT (p. 965)

## Courses Offered

***Students must complete the appropriate background course or its equivalent before enrolling in elective courses.***

### Accounting (ACC)

#### **ACC 5315. Selected Topics in Financial Accounting.**

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ACC 5316. Advanced Accounting.**

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-for-profit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5320. Auditing.**

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5323. Accounting Data Analytics.**

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5340. Individual Income Tax.**

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5350. Professional Accounting Research.**

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5352. Financial Statement Reporting and Analysis.**

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5355. IT Auditing.**

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5357. Regulation and Professionalism.**

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments. Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5361. Accounting Analysis for Managerial Decision Making.**

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5362. Cost and Managerial Accounting Theory.**

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules or the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Analytics (ANLY)****ANLY 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5332. Optimization for Business Analytics.**

This course introduces optimization theory and applications for analyzing and solving business decision-making problems. The students will learn to apply in various business domains optimization concepts and tools such as linear programming, integer/mixed-integer programming, and other classes of optimization models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5334. Statistical Methods for Business.**

This course provides the quantitative foundation for business analysis and decision making. Topics include inferential statistics, regression analysis, and other analytical/modeling techniques with wide applicability in decision-making and problem solving in all functional areas of business.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5335. Forecasting and Simulation.**

This course introduces the concepts and principles of forecasting and simulation techniques as applies to planning and decision making in organizations. Topical coverage includes time series forecasting, causal forecasting, discrete event simulation, and continuous-event simulation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5336. Analytics.**

This course introduces analytics which refers to the process of transforming data into information for making decisions. The topics include the introduction to analytics, visualization, analytics applications, and challenges related to business data. Students will learn how to use software, conduct data analysis and communicate their results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5338. Operations Management.**

This course introduces the processes and strategies to create, produce, and deliver goods and services that drive organizations' overall success. It will highlight operational and tactical problems organizations typically confront and introduce the concepts and analytical tools (both process and systems based) used to deal with these problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5342. Probability and Statistical Models.**

This course introduces the concept of probability and probability distributions. It includes general and generalized linear models, inflated and mixture models, and hierarchical models. Model validity and choice will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5343. Data Mining.**

This course covers data mining concepts and applications of data mining techniques to solve business problems. It emphasizes algorithms such as classification, clustering, association, and text mining. Model selection and assessment are also emphasized. Prerequisite: ANLY 5336 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5369. Independent Study in Analytics.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in quantitative methods and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANLY 5390A. Statistical Computing.**

This course covers programming and statistical computing concepts. Programming concepts include data manipulation, data structures, control structures, functions, basic algorithms, and matrix manipulations. Statistical computing topics include numerical linear algebra, Monte Carlo methods, and numerical optimization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANLY 5395. Internship in Analytics.**

This course is based on experiential learning while the student works in quantitative methods and statistics. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Data Analytics and Information Systems. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANLY 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Business Administration (B A)****B A 5100. Business Professional Development Seminar.**

This course is designed to contribute to the development of the business professional. Academic content is supplemented by training in soft skill topics to better prepare the students for a successful business career. Repeatable for credit with different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**B A 5351. Organizational Performance and Competitive Advantage.**

This course is designed to provide an integrative understanding of the firm. A variety of organizational models and perspectives will be incorporated to facilitate understanding of the complexities of the firm, its environments, and its relationships with stakeholders. Includes focus on case analysis issues and communication skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5353. Understanding and Analyzing Organizational Problems.**

An introduction to the concepts of economic theory and optimization, with an emphasis on developing skills in data and economic analysis to solve business problems. Coverage includes prices, costs, market structures, macroeconomic policies, and optimization. Corequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5368A. MBA Full Time Cohort International Experience.**

This course will focus on developing an understanding and analysis of issues related to business challenges in another country. Students will gain first-hand experience with the business practices, culture and economy of another country. Corequisite: MGT 5313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**B A 5396. Internship in Business Administration.**

This course is based on experiential learning while the student works in business administration. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**B A 5398. Independent Study in Business Administration.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in business administration and work independently on a specialized project. Course may be repeated with approval of associate dean for graduate programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Business Law (BLAW)

### BLAW 5310. The Employment Relationship.

A study of trends in the rapidly evolving "law of workplace," with emphasis on how lawmakers attempt to balance the rights and responsibilities of employers and workers. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### BLAW 5315. Legal Issues in International Business.

This course examines legal issues relevant to international business transactions, emphasizing international trade, licensing of intellectual property, and foreign direct investment. Environmental, dispute resolution, labor, e-commerce, marketing, and ethical issues will also be discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### BLAW 5333. Legal Issues of Sustainability and Responsibility.

Diverse frameworks and analytical methods underlying our understanding of sustainability are explored, including the legal aspects & impact on business, society, environment and economy. Topics include corporate governance, globalization, urbanization, energy, human population, food, natural resources, water and equity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### BLAW 5364. Commercial Law.

A traditional business law course which examines sales, negotiable instruments, creditor's rights and remedies, secured transactions, bankruptcy law, personal property, bailments, real property and landlord-tenant relationships. Prerequisite: BLAW 3301 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### BLAW 5368I. International Business Ethics.

This course examines the legal and ethical challenges inherent in international marketing, international environmental and energy practices, international labor and employment practices, trade negotiations, foreign direct investment, intellectual property licensing, technology development, data collection mining, corporate tax inversion, and global corporate social responsibility. Students will also discuss the individual behavioral, organizational, and cultural factors that influence ethical and unethical business decisions in the global business environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Economics (ECO)

### ECO 5302. Economic Theory and Policy.

An intensive study of micro-and macroeconomic concepts; the price system as it functions under competition, monopoly, monopolistic competition and oligopoly; national income measurement and determination; business cycles; money and banking; monetary policy; fiscal policy and economic stabilization. May not be counted as an elective MBA course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

### ECO 5310. International Economics.

Examination of the patterns of trade and finance among nations, integrating the topics of exchange rates, trade barriers, customs unions, and macroeconomics policy into a unified treatment of international economic relations. (MULT) Prerequisite: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### ECO 5316. Managerial Economics.

The application of economic theory and analysis to the formulation of business policy, including demand analysis, production theory, linear programming, and pricing policy. (MBA with Technology Emphasis students complete TECH 5315.) Prerequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ECO 5320. Emerging Market Economies.

The course focuses on the structural characteristics of the emerging market economies, with an emphasis on analyzing the salient economic challenges and opportunities facing contemporary emerging market economies. Prerequisites: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Finance (FIN)

### FIN 5322. Investment Analysis.

This course cover the application of finance theory to investment analysis. Topics include modern investment theories, asset pricing models and derivative pricing models, with a focus on application of derivatives to manage risk exposure. Prerequisite: B A 5352 with a grade of "C" or better or FIN 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5332. Portfolio Theory and Capital Markets.**

This course is designed to provide students with an overview of the strategies for creating and managing portfolios. At the end of this course, students should understand the tools for investment management.

Topics covered include portfolio construction and analysis, risk analysis, asset class management, derivatives, and portfolio performance analysis. Prerequisite: FIN 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5338. International Investments and Financial Management.**

Examination of economic incentives and rationale for international investment and financing. Topics include exchange rate risk exposure and management, global debt and equity investment and financing, foreign currency derivative markets, and general investment and financing strategy in global capital market. (MULT) Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FIN 5347C. Real Estate Investment.**

An application of capital budgeting to real estate investment decisions.

Prerequisite: FIN 5387 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FIN 5352. Financial Management.**

This course introduces students to the major considerations in financial decision making. These considerations are analyzed by exploring the role of financial managers in creating value and maximizing shareholder wealth within the constraints of legal and ethical behavior. The development of critical thinking, quantitative applications, and analytical skills are major goals of this course because the topics require knowledge of specialized problem-solving techniques. Prerequisite: ACC 5361 with a grade of "C" or better. Corequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 5387. Managerial Finance.**

Concentrates on the finance function, analysis and budgeting of funds, management of current assets, short and intermediate-term financing requirements, long-term debt policy and capital structure, capital budgeting, and the concept of cost of capital. Risk and return trade-offs also are studied. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Information Systems (ISAN)****ISAN 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5318. Information Technology in Digital Economy.**

This course provides an understanding of the issues in managing organizations' information assets. The course examines users' issues and challenges within the Information Technology (IT) management arena as part of a firm's business and IT strategy. The course provides frameworks and management principles that current or aspiring managers can employ with the challenges of implementing rapidly advancing technology. The focus is on managerial rather than technical issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5355. Database Management Systems.**

This course explores the concepts, principles, issues, and techniques for managing data resources using database management systems. Topics include techniques for analysis, design, and development of database systems, creating and using logical data models, database query languages, and procedures for evaluating management software. Students will develop a management information system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5357. Computing for Data Analytics.**

This course focuses on fundamentals of programming. Students will learn to design and implement applications, and programmatically handle a variety of data management functionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5358. Agile Project Management For Business Professionals.**

This course provides an in-depth study of the project management body of knowledge as applied to Information Technology, emphasizing Agile methodologies and the processes of managing scope, costs, schedules, quality, and risks. Topics Include program management, system planning and design methodologies, material & capacity requirements, human, cultural, & international issues, and their impact on the organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5360. E-Commerce: Strategies, Technologies, and Applications.**

This course is designed to familiarize students with current and emerging e-commerce technologies. Topics include Internet technology for business advantage, reinventing the future of business through e-commerce, business opportunities in e-commerce, and social, political, global, and ethical issues associated with ecommerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5364. Data Warehousing.**

This course allows students to familiarize with current and emerging data warehousing technologies that play a strategic role in business organizations. Topics include data warehouse development life cycle, data warehouse navigation, data quality, and performance issues.

Prerequisite: ISAN 5355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5367. Machine Learning.**

This course focuses on deriving actionable knowledge from data using algorithms and industry standard tools. Topics covered are the complete process, key technologies, core machine learning algorithms, and programming used for business intelligence. Prerequisite: ISAN 5357 and ANLY 5336 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5368. Information Security.**

This course covers the analysis, design, development, implementation, and maintenance of information security systems in communication networks. Topics include legal, ethical, professional, and personnel issues, concepts, theories, and processes of risk management, technology; cryptography theory and practice; and physical and hardware security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5369. Independent Study in Information Systems.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in Information Systems and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ISAN 5370. Enterprise Resource Planning and Business Intelligence.**

This course uses information technology integrations in enterprises for operational control and business intelligence is examined via Enterprise Resource Planning (ERP) applications in customer relationships management, accounting, finance, purchasing, production control, sales, marketing, and human resource management. Emphasizes managerial issues surrounding the need, selection, and implementation of ERP systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5371. Accounting Information Systems and Controls.**

This course examines accounting information systems and controls and their role in the current technology-intensive business environment. Emphasis is placed on contemporary technology and applications, information technology and business information systems assessments, design of internal controls to satisfy regulation and policy requirements, control concepts, theories, and processes, information systems auditing, systems development life cycle, and information structure, data transfer, and transaction cycles. Prerequisite: ACC 3313 or ACC 5361 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5378. Information Security Policies and Compliance.**

This course focuses on the technology and managerial issues related to information policies, regulations, and compliance that assure confidentiality, integrity, and availability of data and computer systems. Topics include information security policy, regulations, laws, standards, framework, compliance, and governance. Prerequisite: ISAN 5368 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5390A. Introduction to Design Thinking.**

This course provides an overview and hands-on introduction to Design Thinking and the human-centered design process. Topics include an introduction, defining the problem, ideation, and concept generation, prototyping & testing, refining, and launching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ISAN 5395. Internship in Information Systems.**

This course provides students with opportunities for experiential learning by contributing to a computer information systems project. The course enables integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ISAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Management (MGT)****MGT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5301. Graduate Assistant Development.**

Completion of this course is required as a condition of employment for graduate assistants. The course is seminar based and covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MGT 5310. Organizational Change Management.**

Presents an overview of the process of change in an organization and stresses the key issues involved in reengineering and renewing organizations. Problems dealing with stress and conflict during major change will be explored along with practical ideas on building effective teams to make change possible and sustainable.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5311. Process Improvement Management in Organizations.**

Learn existing and latest developments in process improvement techniques for continuous improvement and the role of quality as a system for establishing an organization's competitive advantage. Process mapping is emphasized and assessment of effectiveness in the interactions of the managerial and technical systems of organizations is also studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5312. Seminar in Management.**

Development of philosophy, strategy, and tactics in managing an enterprise. Administrative processes common to all enterprises, such as entrepreneurship, business and society, leadership and group behavior in organizations, business ethics, and international management. (Course may be repeated for credit with different course focus.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5313. Strategic Management.**

An integrative approach to policy formulation and administration (decision making) to achieve organization objectives. Should be taken the last semester of student's MBA program. Prerequisite: ACC 5361 and FIN 5387 and MKT 5321 and QMST 5334 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5314. Organizational Behavior and Theory.**

Organizational behavior and structure as influenced by environmental variables and system relationships. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5315. New Venture Management.**

This course provides an overview of the entrepreneurial process from the initial idea through start-up, growth, and harvest. Students learn how to write a business plan, manage all the elements of an entrepreneurial business, and develop a better understanding of the requirements of the entrepreneurial life path.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5318. Cross-Cultural Management.**

The global environment requires sensitivity to and the adaptation of leadership and management skills and practices, and the culture-bound differences in workplace behavior and attitudes. Explores how differences in cultural core values shape behavior and attitudes of workers, managerial colleagues, and negotiating partners. (MULT)  
Prerequisites: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5321. Supply Chain Management.**

A variety of tools and frameworks provide students with understanding of the basis behind supply chain decision making. Topics include supply management concepts, demand-supply management, pull/push system, capacity and resource allocation, performance measurement, relationship assessment, and outsourcing in an integrated supply chain. Require graduate standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5325. Managing Business Creativity.**

This course focuses on the means by which businesses and individuals foster and maintain their creative and innovative skills. Key topics include: idea generation and refinement, idea screening, prototype development, and feasibility analysis. Objectives are met through classroom exercises, case analysis, guest speakers, and individual and team projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5330. Seminar in Human Resource Management.**

A study of current developments and practices in human resource management, including employment laws; planning, recruitment and selection; training and development programs; wage and benefits administration; performance management, human relations and productivity; labor relations; safety and health; and current contributions to human resource management theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5333. Problems in Business Administration.**

The student is here given the opportunity to work in the field of his special interest, particularly in the subjects of accounting, business law, marketing, statistics, finance, and insurance. The course will be conducted by conferences between the student and instructors concerned. Problems will be assigned as nearly as possible for the needs of the individual student.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5335. New Venture Launch.**

The purpose of this class is to ensure students gain a full understanding of what it takes to start and grow a business. Students learn the process of creating a new venture from the inside by planning, organizing and launching an actual business. Prerequisite: MGT 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5336. Compensation and Benefits.**

This course addresses the rewards systems in organizations. Strategic and technical considerations in designing, administering and managing compensation and benefits plans in organizations, including job analysis and evaluation, wage levels and structures, legal issues, individual and group incentives, and benefits are considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5337. Organizational Staffing.**

A study of the methods involved in recruitment and selection of employees with an emphasis on measurement, job analysis, performance appraisal, legal issues, and the role of human resource planning and strategy. This course relies on statistics to teach students to make reliable and valid employment decisions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5338. Human Resource Development.**

A study of theoretical and applied perspectives on needs assessment, design, development delivery and evaluation of training and development as well as organizational change and development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5339. International Human Resource Management.**

A study of challenges that decision makers consider when managing their human resources across the globe. Drawing on theories and models from cross-cultural and international management areas, this course covers such topics as globalization, culture, emerging international assignments, and expatriate recruitment, selection, training, repatriation, and career management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5380A. Business Ethics Leadership.**

This course examines a variety of ethical issues in business from multiple stakeholder perspectives (top management, employees, community members, etc.). The course is designed to enhance moral awareness and facilitate individual development with respect to making ethical decisions that contribute to effective corporate management and leadership.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MGT 5380C. Group Dynamics in Organizations.**

This course explores the theoretical framework of group interactions as well as the practical workplace challenges associated with organizing, participating on, and managing teams and groups. It addresses the development and use of teams to improve business organizations and is recommended for graduate students preparing for business careers.

Prerequisite: B A 5351 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380D. Labor Relations and Negotiation.**

This graduate level course is a study of labor organizations and their impact as well as negotiation and conflict resolution issues. The course will examine the National Labor Relations Act (NLRA), union and employer rights under the NLRA, union organizing, collective bargaining, negotiation, contract administration, mediation and arbitration.

Corequisite: MGT 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380E. International Leadership.**

Course will include lectures, business engagements, cultural excursions, and a service-learning project. To reinforce the theories discussed in class students will interact directly with managers, employees, and international business professionals, learn perspective on cultural and leadership issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380F. Management for Organizational Sustainability.**

This course is designed to take a broad look at Sustainability from both Ecological and Organizational perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380G. Artificial Intelligence (AI) for Business Managers.**

This course provides a basic foundation in artificial intelligence for students of the business school by introducing a means to make economically sound decisions regarding the implementation areas. In this course all students of the business school may implement small projects in the functional disciplines of the business school (e.g. marketing, finance, etc.). It could also be of interest for students of the School of Engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5390. Managerial Data Analysis.**

Designed to prepare managers to make more effective decisions based upon evidence from data analysis. Covers all elements of the general linear model from t-tests to multiple regression analysis. Involves acquiring and analyzing data for prediction and explanation, developing reports with actionable recommendations, and communicating results for managerial decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5391. Managing the Communication Process.**

The study and application of theory and psychology of managerial communication using written, oral, and technological modes to communicate within the business environment. The course includes the process and product approach to graphics, leadership, problem solving, prioritizing, interviewing, and communicating change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5395. Graduate Business Internship.**

Integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in MGT 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Marketing (MKT)****MKT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5321. Marketing Management.**

A study of the planning and coordination of marketing functions, marketing policies, and the analysis of marketing administration.

Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5322. Marketing Research Methods.**

An advanced study of the marketing research process to include problem formulation, determination of sources of information and research design, design of data collection forms, design of the sample, collection of the data, analysis and interpretation of the data, preparation of the research report, and oral presentation of the research findings.

Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5323. Qualitative Research in Marketing.**

This course examines qualitative methods as used in marketing and market research. Topics include the design and execution of qualitative research projects using various qualitative methodological approaches. Activities include application of qualitative methods for conducting research. Students will apply learning in a qualitative research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5330. International Marketing.**

An application of marketing concepts to the global business environment. Examines marketing in the light of international economic, social, cultural, business, and environmental factors. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5331. Integrated Marketing Communications.**

An analysis of consumer behavior in the marketplace and its application to the preparation and presentation of a complete integrated marketing communications plan for a local, regional, and/or national client.

Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5335. Services Marketing.**

Services dominate the U.S. economy and are becoming critical for competitive advantage in companies across the globe and in all industry sectors. This course examines the foundations of services marketing, which are necessary to create, promise, and deliver a successful, interactive customer experience. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5340. Digital Marketing.**

This course examines marketing strategies in the digital environment. It examines the latest technology and analytical tools used in e-marketing and e-commerce, including online advertising, mobile marketing, social media marketing, search marketing, email marketing, and web analytics. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5341. Social Media Marketing and Analysis.**

This course provides a conceptual foundation and practical approach for conducting social media analysis and developing a social media marketing plan and/or campaign will be presented. Students will gain hands-on experience using social media strategically to achieve desired marketing goals through a hands-on project. Students will also earn applicable digital marketing certifications. Prerequisite: MKT 5321 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5345. Marketing Analytics.**

This course is a study of the scientific approach that connects customer data and competitive information to drive marketing decision-making. The course explores customer data analysis techniques and their theoretical foundations that are applied to real world business problems. Students will learn software, conduct data analysis and communicate the results. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5346. Contemporary Topics in Marketing Analytics.**

This course covers contemporary topics in marketing analytics. Students will learn (1) concepts and methods in strategic marketing analytics, (2) analytical and mapping tools in geospatial data and information, (3) concepts and methods in Bayesian Networks, (4) Topic Analysis using big data in marketing, and (5) other emerging analytical tools and methods in marketing. Prerequisite: QMST 5334 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5347. AI and Data Visualization for Marketing.**

This course consists of applied training in foundational topics for artificial intelligence and data visualization. It covers both prediction as well as classification problems. While many technical aspects are covered, the main emphasis is on knowing how to apply a wide range of modern techniques to specific marketing problems. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5348. Python for Marketing Analytics.**

This course consists of learning Python and using this programming language for data analysis and visualization. This course will help to leverage the power of historical data and to develop models that project future trends. Python will be used for exploratory data analysis, market forecasting, customer segmentation, deep learning, social media analysis and analysis of marketing images and videos. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5350. Strategic Marketing Analysis and Planning.**

This course examines strategic marketing decision making through the analysis and interpretation of marketing intelligence, metrics, and dashboards. Topics will include data-driven decision making on marketing challenges pertaining to customers, brands, marketing mix decisions, online strategy and social media, market performance, and firm profitability. Prerequisite: MKT 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5395. Independent Study in Marketing.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in Marketing. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5397I. Entrepreneurial Marketing.**

Entrepreneurship involves the discovery, implementation, and pursuit of new business opportunities. Successful execution of an entrepreneurial idea requires an effective marketing plan and related skills. In this course, we will investigate how marketing concepts (product, price, promotion, place, people, processes, brand image, segmentation, targeting, positioning, quality perceptions) can facilitate entrepreneurs' realization of their ideas. A conceptual foundation and practical approach for developing an entrepreneurship-focused marketing plan will be discussed. Using a hands-on approach, students will gain skills and knowledge on the effective use of marketing concepts to achieve entrepreneurial goals. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MKT 5398. Internship in Marketing.**

Internship in marketing is an external employer supervised, experiential learning course that enables a student to integrate professional and graduate business coursework. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5399A. Thesis.**

This course represents a student's initial thesis enrollments. No thesis credit is awarded until student has completed the thesis in Marketing Research and Analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**MKT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Business Administration (M.B.A.) degree with a major in Business Administration in the McCoy College emphasizes the knowledge and tools needed for professional success and is designed for those individuals who expect to pursue careers in the management of organizations in either the public or private sector. The curriculum provides broad-based, generalized education with the flexibility to meet individual needs. Students may choose an optional concentration in one of six areas of study in a flexible format or select a full-time cohort program. The general Flex M.B.A. program can be completed at either the San Marcos or Round Rock Campus. For the Flex M.B.A. program concentrations, some specialized courses may only be offered at the San Marcos Campus or the Round Rock Campus. The Full-Time Cohort program is available exclusively at the San Marcos Campus.

Students in the Flex M.B.A. program with a **Computer Information Systems Concentration** learn how technology has changed the way business operates and how to harness the power of technology in various business management settings.

The Flex M.B.A. with an **Engineering Technology Concentration** is offered in cooperation with the Department of Engineering Technology, an academic division of the College of Science and Engineering. M.B.A. students pursuing the Engineering Technology Concentration should find enhanced career opportunities with companies oriented significantly toward manufacturing.

Students interested in careers related to international business may choose to seek the Flex M.B.A. degree with an **International Business Concentration**. This program is designed to provide focused study in international business including cultural, historical, and political issues. While this program is available to all students in the M.B.A. program, it

is especially well suited for undergraduate students in the international studies undergraduate program.

If a student's interest is the healthcare industry, the Flex M.B.A. with a **Healthcare Administration Concentration** may be for them. Offered jointly with the College of Health Professions, the program combines academic content from both colleges to prepare students for a successful career in healthcare.

For those interested in the field of human resources, a Flex M.B.A. with a **Human Resource Management Concentration** is available. This program provides information on organizational change, staffing, compensation and benefits, and international HR.

Students in the Flex M.B.A. program with a **Supply Chain Management Concentration** will obtain the knowledge and skills required to effectively manage the supply chain process in today's global marketplace.

The **Full-Time Cohort** M.B.A. is offered exclusively at the San Marcos Campus. In addition to the core courses, students must complete an internship and an international trip in a specific semester as outlined for each cohort group.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
  - or
  - \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txstate.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - an overall competitive GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - responses to specific essay questions
  - resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
  - two letters of recommendation from persons best able to assess the student's ability to succeed in graduate school
  - GPA and GMAT/GRE Requirement
- The GMAT/GRE is not required for applicants with an overall 3.5 GPA or a 3.5 GPA in the last 60 hours GPA of undergraduate course work. If the GPA falls below the minimum requirement, the official GMAT or GRE (general test only) with competitive scores will be required in

order to be considered. The Graduate College will notify applicants via email should this occur.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Business Administration (M.B.A.) degree with a major in Business Administration concentration in Human Resource Management requires 39 semester credit hours.

B A 5100 and B A 5351 should be taken in the first semester and MGT 5313 should be taken in the last term because it serves as the capstone course and includes the comprehensive examination.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of C or lower. Even if the grade of C or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third C (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 C Policy takes precedent over probationary status. So, if a student earns a third C they are automatically dismissed from their program permanently; even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
B A 5100	Business Professional Development Seminar (Taken three times in different terms)	3
B A 5351	Organizational Performance and Competitive Advantage	3
ACC 5361	Accounting Analysis for Managerial Decision Making	3
ECO 5316	Managerial Economics	3
FIN 5352	Financial Management	3
MGT 5313	Strategic Management	3

MGT 5314	Organizational Behavior and Theory	3
MKT 5321	Marketing Management	3
ANLY 5334	Statistical Methods for Business	3
ANLY 5338	Operations Management	3

### Prescribed Electives

Choose 9 hours from the following:		9
BLAW 5310	The Employment Relationship	
MGT 5310	Organizational Change Management	
MGT 5330	Seminar in Human Resource Management	
MGT 5336	Compensation and Benefits	
MGT 5337	Organizational Staffing	
MGT 5338	Human Resource Development	
MGT 5339	International Human Resource Management	

**Total Hours** **39**

## Comprehensive Examination Requirement

The comprehensive examination consists of a consulting project with companies in the community. The exam is a written paper and oral presentation at the end of the semester, associated with capstone course MGT 5313. If the student fails, they must retake the capstone course, MGT 5313, the following term.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Business Administration: ACC (p. 969), ANLY (p. 972), B A (p. 973), BLAW (p. 974), ECO (p. 974), FIN (p. 974), ISAN (p. 975), MGT (p. 977), MKT (p. 980)

## Courses Offered

***Students must complete the appropriate background course or its equivalent before enrolling in elective courses.***

### Accounting (ACC)

#### **ACC 5315. Selected Topics in Financial Accounting.**

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ACC 5316. Advanced Accounting.**

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-for-profit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5320. Auditing.**

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5323. Accounting Data Analytics.**

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5340. Individual Income Tax.**

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5350. Professional Accounting Research.**

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5352. Financial Statement Reporting and Analysis.**

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5355. IT Auditing.**

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5357. Regulation and Professionalism.**

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments. Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5361. Accounting Analysis for Managerial Decision Making.**

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5362. Cost and Managerial Accounting Theory.**

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules or the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Analytics (ANLY)****ANLY 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5332. Optimization for Business Analytics.**

This course introduces optimization theory and applications for analyzing and solving business decision-making problems. The students will learn to apply in various business domains optimization concepts and tools such as linear programming, integer/mixed-integer programming, and other classes of optimization models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5334. Statistical Methods for Business.**

This course provides the quantitative foundation for business analysis and decision making. Topics include inferential statistics, regression analysis, and other analytical/modeling techniques with wide applicability in decision-making and problem solving in all functional areas of business.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5335. Forecasting and Simulation.**

This course introduces the concepts and principles of forecasting and simulation techniques as applies to planning and decision making in organizations. Topical coverage includes time series forecasting, causal forecasting, discrete event simulation, and continuous-event simulation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5336. Analytics.**

This course introduces analytics which refers to the process of transforming data into information for making decisions. The topics include the introduction to analytics, visualization, analytics applications, and challenges related to business data. Students will learn how to use software, conduct data analysis and communicate their results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5338. Operations Management.**

This course introduces the processes and strategies to create, produce, and deliver goods and services that drive organizations' overall success. It will highlight operational and tactical problems organizations typically confront and introduce the concepts and analytical tools (both process and systems based) used to deal with these problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5342. Probability and Statistical Models.**

This course introduces the concept of probability and probability distributions. It includes general and generalized linear models, inflated and mixture models, and hierarchical models. Model validity and choice will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5343. Data Mining.**

This course covers data mining concepts and applications of data mining techniques to solve business problems. It emphasizes algorithms such as classification, clustering, association, and text mining. Model selection and assessment are also emphasized. Prerequisite: ANLY 5336 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5369. Independent Study in Analytics.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in quantitative methods and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANLY 5390A. Statistical Computing.**

This course covers programming and statistical computing concepts. Programming concepts include data manipulation, data structures, control structures, functions, basic algorithms, and matrix manipulations. Statistical computing topics include numerical linear algebra, Monte Carlo methods, and numerical optimization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANLY 5395. Internship in Analytics.**

This course is based on experiential learning while the student works in quantitative methods and statistics. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Data Analytics and Information Systems. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANLY 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Business Administration (B A)****B A 5100. Business Professional Development Seminar.**

This course is designed to contribute to the development of the business professional. Academic content is supplemented by training in soft skill topics to better prepare the students for a successful business career. Repeatable for credit with different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**B A 5351. Organizational Performance and Competitive Advantage.**

This course is designed to provide an integrative understanding of the firm. A variety of organizational models and perspectives will be incorporated to facilitate understanding of the complexities of the firm, its environments, and its relationships with stakeholders. Includes focus on case analysis issues and communication skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5353. Understanding and Analyzing Organizational Problems.**

An introduction to the concepts of economic theory and optimization, with an emphasis on developing skills in data and economic analysis to solve business problems. Coverage includes prices, costs, market structures, macroeconomic policies, and optimization. Corequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5368A. MBA Full Time Cohort International Experience.**

This course will focus on developing an understanding and analysis of issues related to business challenges in another country. Students will gain first-hand experience with the business practices, culture and economy of another country. Corequisite: MGT 5313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**B A 5396. Internship in Business Administration.**

This course is based on experiential learning while the student works in business administration. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**B A 5398. Independent Study in Business Administration.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in business administration and work independently on a specialized project. Course may be repeated with approval of associate dean for graduate programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Business Law (BLAW)

### **BLAW 5310. The Employment Relationship.**

A study of trends in the rapidly evolving "law of workplace," with emphasis on how lawmakers attempt to balance the rights and responsibilities of employers and workers. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **BLAW 5315. Legal Issues in International Business.**

This course examines legal issues relevant to international business transactions, emphasizing international trade, licensing of intellectual property, and foreign direct investment. Environmental, dispute resolution, labor, e-commerce, marketing, and ethical issues will also be discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### **BLAW 5333. Legal Issues of Sustainability and Responsibility.**

Diverse frameworks and analytical methods underlying our understanding of sustainability are explored, including the legal aspects & impact on business, society, environment and economy. Topics include corporate governance, globalization, urbanization, energy, human population, food, natural resources, water and equity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **BLAW 5364. Commercial Law.**

A traditional business law course which examines sales, negotiable instruments, creditor's rights and remedies, secured transactions, bankruptcy law, personal property, bailments, real property and landlord-tenant relationships. Prerequisite: BLAW 3301 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **BLAW 5368I. International Business Ethics.**

This course examines the legal and ethical challenges inherent in international marketing, international environmental and energy practices, international labor and employment practices, trade negotiations, foreign direct investment, intellectual property licensing, technology development, data collection mining, corporate tax inversion, and global corporate social responsibility. Students will also discuss the individual behavioral, organizational, and cultural factors that influence ethical and unethical business decisions in the global business environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Economics (ECO)

### **ECO 5302. Economic Theory and Policy.**

An intensive study of micro-and macroeconomic concepts; the price system as it functions under competition, monopoly, monopolistic competition and oligopoly; national income measurement and determination; business cycles; money and banking; monetary policy; fiscal policy and economic stabilization. May not be counted as an elective MBA course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

### **ECO 5310. International Economics.**

Examination of the patterns of trade and finance among nations, integrating the topics of exchange rates, trade barriers, customs unions, and macroeconomics policy into a unified treatment of international economic relations. (MULT) Prerequisite: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### **ECO 5316. Managerial Economics.**

The application of economic theory and analysis to the formulation of business policy, including demand analysis, production theory, linear programming, and pricing policy. (MBA with Technology Emphasis students complete TECH 5315.) Prerequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECO 5320. Emerging Market Economies.**

The course focuses on the structural characteristics of the emerging market economies, with an emphasis on analyzing the salient economic challenges and opportunities facing contemporary emerging market economies. Prerequisites: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Finance (FIN)

### **FIN 5322. Investment Analysis.**

This course cover the application of finance theory to investment analysis. Topics include modern investment theories, asset pricing models and derivative pricing models, with a focus on application of derivatives to manage risk exposure. Prerequisite: B A 5352 with a grade of "C" or better or FIN 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5332. Portfolio Theory and Capital Markets.**

This course is designed to provide students with an overview of the strategies for creating and managing portfolios. At the end of this course, students should understand the tools for investment management.

Topics covered include portfolio construction and analysis, risk analysis, asset class management, derivatives, and portfolio performance analysis. Prerequisite: FIN 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5338. International Investments and Financial Management.**

Examination of economic incentives and rationale for international investment and financing. Topics include exchange rate risk exposure and management, global debt and equity investment and financing, foreign currency derivative markets, and general investment and financing strategy in global capital market. (MULT) Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FIN 5347C. Real Estate Investment.**

An application of capital budgeting to real estate investment decisions.

Prerequisite: FIN 5387 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FIN 5352. Financial Management.**

This course introduces students to the major considerations in financial decision making. These considerations are analyzed by exploring the role of financial managers in creating value and maximizing shareholder wealth within the constraints of legal and ethical behavior. The development of critical thinking, quantitative applications, and analytical skills are major goals of this course because the topics require knowledge of specialized problem-solving techniques. Prerequisite: ACC 5361 with a grade of "C" or better. Corequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 5387. Managerial Finance.**

Concentrates on the finance function, analysis and budgeting of funds, management of current assets, short and intermediate-term financing requirements, long-term debt policy and capital structure, capital budgeting, and the concept of cost of capital. Risk and return trade-offs also are studied. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Information Systems (ISAN)****ISAN 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5318. Information Technology in Digital Economy.**

This course provides an understanding of the issues in managing organizations' information assets. The course examines users' issues and challenges within the Information Technology (IT) management arena as part of a firm's business and IT strategy. The course provides frameworks and management principles that current or aspiring managers can employ with the challenges of implementing rapidly advancing technology. The focus is on managerial rather than technical issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5355. Database Management Systems.**

This course explores the concepts, principles, issues, and techniques for managing data resources using database management systems. Topics include techniques for analysis, design, and development of database systems, creating and using logical data models, database query languages, and procedures for evaluating management software. Students will develop a management information system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5357. Computing for Data Analytics.**

This course focuses on fundamentals of programming. Students will learn to design and implement applications, and programmatically handle a variety of data management functionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5358. Agile Project Management For Business Professionals.**

This course provides an in-depth study of the project management body of knowledge as applied to Information Technology, emphasizing Agile methodologies and the processes of managing scope, costs, schedules, quality, and risks. Topics Include program management, system planning and design methodologies, material & capacity requirements, human, cultural, & international issues, and their impact on the organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5360. E-Commerce: Strategies, Technologies, and Applications.**

This course is designed to familiarize students with current and emerging e-commerce technologies. Topics include Internet technology for business advantage, reinventing the future of business through e-commerce, business opportunities in e-commerce, and social, political, global, and ethical issues associated with ecommerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5364. Data Warehousing.**

This course allows students to familiarize with current and emerging data warehousing technologies that play a strategic role in business organizations. Topics include data warehouse development life cycle, data warehouse navigation, data quality, and performance issues. Prerequisite: ISAN 5355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5367. Machine Learning.**

This course focuses on deriving actionable knowledge from data using algorithms and industry standard tools. Topics covered are the complete process, key technologies, core machine learning algorithms, and programming used for business intelligence. Prerequisite: ISAN 5357 and ANLY 5336 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5368. Information Security.**

This course covers the analysis, design, development, implementation, and maintenance of information security systems in communication networks. Topics include legal, ethical, professional, and personnel issues, concepts, theories, and processes of risk management, technology; cryptography theory and practice; and physical and hardware security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5369. Independent Study in Information Systems.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in Information Systems and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ISAN 5370. Enterprise Resource Planning and Business Intelligence.**

This course uses information technology integrations in enterprises for operational control and business intelligence is examined via Enterprise Resource Planning (ERP) applications in customer relationships management, accounting, finance, purchasing, production control, sales, marketing, and human resource management. Emphasizes managerial issues surrounding the need, selection, and implementation of ERP systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5371. Accounting Information Systems and Controls.**

This course examines accounting information systems and controls and their role in the current technology-intensive business environment. Emphasis is placed on contemporary technology and applications, information technology and business information systems assessments, design of internal controls to satisfy regulation and policy requirements, control concepts, theories, and processes, information systems auditing, systems development life cycle, and information structure, data transfer, and transaction cycles. Prerequisite: ACC 3313 or ACC 5361 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5378. Information Security Policies and Compliance.**

This course focuses on the technology and managerial issues related to information policies, regulations, and compliance that assure confidentiality, integrity, and availability of data and computer systems. Topics include information security policy, regulations, laws, standards, framework, compliance, and governance. Prerequisite: ISAN 5368 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5390A. Introduction to Design Thinking.**

This course provides an overview and hands-on introduction to Design Thinking and the human-centered design process. Topics include an introduction, defining the problem, ideation, and concept generation, prototyping & testing, refining, and launching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ISAN 5395. Internship in Information Systems.**

This course provides students with opportunities for experiential learning by contributing to a computer information systems project. The course enables integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ISAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Management (MGT)****MGT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5301. Graduate Assistant Development.**

Completion of this course is required as a condition of employment for graduate assistants. The course is seminar based and covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MGT 5310. Organizational Change Management.**

Presents an overview of the process of change in an organization and stresses the key issues involved in reengineering and renewing organizations. Problems dealing with stress and conflict during major change will be explored along with practical ideas on building effective teams to make change possible and sustainable.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5311. Process Improvement Management in Organizations.**

Learn existing and latest developments in process improvement techniques for continuous improvement and the role of quality as a system for establishing an organization's competitive advantage. Process mapping is emphasized and assessment of effectiveness in the interactions of the managerial and technical systems of organizations is also studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5312. Seminar in Management.**

Development of philosophy, strategy, and tactics in managing an enterprise. Administrative processes common to all enterprises, such as entrepreneurship, business and society, leadership and group behavior in organizations, business ethics, and international management. (Course may be repeated for credit with different course focus.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5313. Strategic Management.**

An integrative approach to policy formulation and administration (decision making) to achieve organization objectives. Should be taken the last semester of student's MBA program. Prerequisite: ACC 5361 and FIN 5387 and MKT 5321 and QMST 5334 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5314. Organizational Behavior and Theory.**

Organizational behavior and structure as influenced by environmental variables and system relationships. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5315. New Venture Management.**

This course provides an overview of the entrepreneurial process from the initial idea through start-up, growth, and harvest. Students learn how to write a business plan, manage all the elements of an entrepreneurial business, and develop a better understanding of the requirements of the entrepreneurial life path.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5318. Cross-Cultural Management.**

The global environment requires sensitivity to and the adaptation of leadership and management skills and practices, and the culture-bound differences in workplace behavior and attitudes. Explores how differences in cultural core values shape behavior and attitudes of workers, managerial colleagues, and negotiating partners. (MULT) Prerequisites: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5321. Supply Chain Management.**

A variety of tools and frameworks provide students with understanding of the basis behind supply chain decision making. Topics include supply management concepts, demand-supply management, pull/push system, capacity and resource allocation, performance measurement, relationship assessment, and outsourcing in an integrated supply chain. Require graduate standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5325. Managing Business Creativity.**

This course focuses on the means by which businesses and individuals foster and maintain their creative and innovative skills. Key topics include: idea generation and refinement, idea screening, prototype development, and feasibility analysis. Objectives are met through classroom exercises, case analysis, guest speakers, and individual and team projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5330. Seminar in Human Resource Management.**

A study of current developments and practices in human resource management, including employment laws; planning, recruitment and selection; training and development programs; wage and benefits administration; performance management, human relations and productivity; labor relations; safety and health; and current contributions to human resource management theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5333. Problems in Business Administration.**

The student is here given the opportunity to work in the field of his special interest, particularly in the subjects of accounting, business law, marketing, statistics, finance, and insurance. The course will be conducted by conferences between the student and instructors concerned. Problems will be assigned as nearly as possible for the needs of the individual student.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5335. New Venture Launch.**

The purpose of this class is to ensure students gain a full understanding of what it takes to start and grow a business. Students learn the process of creating a new venture from the inside by planning, organizing and launching an actual business. Prerequisite: MGT 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5336. Compensation and Benefits.**

This course addresses the rewards systems in organizations. Strategic and technical considerations in designing, administering and managing compensation and benefits plans in organizations, including job analysis and evaluation, wage levels and structures, legal issues, individual and group incentives, and benefits are considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5337. Organizational Staffing.**

A study of the methods involved in recruitment and selection of employees with an emphasis on measurement, job analysis, performance appraisal, legal issues, and the role of human resource planning and strategy. This course relies on statistics to teach students to make reliable and valid employment decisions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5338. Human Resource Development.**

A study of theoretical and applied perspectives on needs assessment, design, development delivery and evaluation of training and development as well as organizational change and development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5339. International Human Resource Management.**

A study of challenges that decision makers consider when managing their human resources across the globe. Drawing on theories and models from cross-cultural and international management areas, this course covers such topics as globalization, culture, emerging international assignments, and expatriate recruitment, selection, training, repatriation, and career management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5380A. Business Ethics Leadership.**

This course examines a variety of ethical issues in business from multiple stakeholder perspectives (top management, employees, community members, etc.). The course is designed to enhance moral awareness and facilitate individual development with respect to making ethical decisions that contribute to effective corporate management and leadership.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MGT 5380C. Group Dynamics in Organizations.**

This course explores the theoretical framework of group interactions as well as the practical workplace challenges associated with organizing, participating on, and managing teams and groups. It addresses the development and use of teams to improve business organizations and is recommended for graduate students preparing for business careers.

Prerequisite: B A 5351 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380D. Labor Relations and Negotiation.**

This graduate level course is a study of labor organizations and their impact as well as negotiation and conflict resolution issues. The course will examine the National Labor Relations Act (NLRA), union and employer rights under the NLRA, union organizing, collective bargaining, negotiation, contract administration, mediation and arbitration.

Corequisite: MGT 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380E. International Leadership.**

Course will include lectures, business engagements, cultural excursions, and a service-learning project. To reinforce the theories discussed in class students will interact directly with managers, employees, and international business professionals, learn perspective on cultural and leadership issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380F. Management for Organizational Sustainability.**

This course is designed to take a broad look at Sustainability from both Ecological and Organizational perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380G. Artificial Intelligence (AI) for Business Managers.**

This course provides a basic foundation in artificial intelligence for students of the business school by introducing a means to make economically sound decisions regarding the implementation areas. In this course all students of the business school may implement small projects in the functional disciplines of the business school (e.g. marketing, finance, etc.). It could also be of interest for students of the School of Engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5390. Managerial Data Analysis.**

Designed to prepare managers to make more effective decisions based upon evidence from data analysis. Covers all elements of the general linear model from t-tests to multiple regression analysis. Involves acquiring and analyzing data for prediction and explanation, developing reports with actionable recommendations, and communicating results for managerial decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5391. Managing the Communication Process.**

The study and application of theory and psychology of managerial communication using written, oral, and technological modes to communicate within the business environment. The course includes the process and product approach to graphics, leadership, problem solving, prioritizing, interviewing, and communicating change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5395. Graduate Business Internship.**

Integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in MGT 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Marketing (MKT)

**MKT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5321. Marketing Management.**

A study of the planning and coordination of marketing functions, marketing policies, and the analysis of marketing administration.

Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5322. Marketing Research Methods.**

An advanced study of the marketing research process to include problem formulation, determination of sources of information and research design, design of data collection forms, design of the sample, collection of the data, analysis and interpretation of the data, preparation of the research report, and oral presentation of the research findings.

Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5323. Qualitative Research in Marketing.**

This course examines qualitative methods as used in marketing and market research. Topics include the design and execution of qualitative research projects using various qualitative methodological approaches. Activities include application of qualitative methods for conducting research. Students will apply learning in a qualitative research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5330. International Marketing.**

An application of marketing concepts to the global business environment. Examines marketing in the light of international economic, social, cultural, business, and environmental factors. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5331. Integrated Marketing Communications.**

An analysis of consumer behavior in the marketplace and its application to the preparation and presentation of a complete integrated marketing communications plan for a local, regional, and/or national client.

Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5335. Services Marketing.**

Services dominate the U.S. economy and are becoming critical for competitive advantage in companies across the globe and in all industry sectors. This course examines the foundations of services marketing, which are necessary to create, promise, and deliver a successful, interactive customer experience. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5340. Digital Marketing.**

This course examines marketing strategies in the digital environment. It examines the latest technology and analytical tools used in e-marketing and e-commerce, including online advertising, mobile marketing, social media marketing, search marketing, email marketing, and web analytics. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5341. Social Media Marketing and Analysis.**

This course provides a conceptual foundation and practical approach for conducting social media analysis and developing a social media marketing plan and/or campaign will be presented. Students will gain hands-on experience using social media strategically to achieve desired marketing goals through a hands-on project. Students will also earn applicable digital marketing certifications. Prerequisite: MKT 5321 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5345. Marketing Analytics.**

This course is a study of the scientific approach that connects customer data and competitive information to drive marketing decision-making. The course explores customer data analysis techniques and their theoretical foundations that are applied to real world business problems. Students will learn software, conduct data analysis and communicate the results. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5346. Contemporary Topics in Marketing Analytics.**

This course covers contemporary topics in marketing analytics. Students will learn (1) concepts and methods in strategic marketing analytics, (2) analytical and mapping tools in geospatial data and information, (3) concepts and methods in Bayesian Networks, (4) Topic Analysis using big data in marketing, and (5) other emerging analytical tools and methods in marketing. Prerequisite: QMST 5334 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5347. AI and Data Visualization for Marketing.**

This course consists of applied training in foundational topics for artificial intelligence and data visualization. It covers both prediction as well as classification problems. While many technical aspects are covered, the main emphasis is on knowing how to apply a wide range of modern techniques to specific marketing problems. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5348. Python for Marketing Analytics.**

This course consists of learning Python and using this programming language for data analysis and visualization. This course will help to leverage the power of historical data and to develop models that project future trends. Python will be used for exploratory data analysis, market forecasting, customer segmentation, deep learning, social media analysis and analysis of marketing images and videos. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5350. Strategic Marketing Analysis and Planning.**

This course examines strategic marketing decision making through the analysis and interpretation of marketing intelligence, metrics, and dashboards. Topics will include data-driven decision making on marketing challenges pertaining to customers, brands, marketing mix decisions, online strategy and social media, market performance, and firm profitability. Prerequisite: MKT 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5395. Independent Study in Marketing.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in Marketing. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5397I. Entrepreneurial Marketing.**

Entrepreneurship involves the discovery, implementation, and pursuit of new business opportunities. Successful execution of an entrepreneurial idea requires an effective marketing plan and related skills. In this course, we will investigate how marketing concepts (product, price, promotion, place, people, processes, brand image, segmentation, targeting, positioning, quality perceptions) can facilitate entrepreneurs' realization of their ideas. A conceptual foundation and practical approach for developing an entrepreneurship-focused marketing plan will be discussed. Using a hands-on approach, students will gain skills and knowledge on the effective use of marketing concepts to achieve entrepreneurial goals. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MKT 5398. Internship in Marketing.**

Internship in marketing is an external employer supervised, experiential learning course that enables a student to integrate professional and graduate business coursework. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5399A. Thesis.**

This course represents a student's initial thesis enrollments. No thesis credit is awarded until student has completed the thesis in Marketing Research and Analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**MKT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Business Administration (M.B.A.) degree with a major in Business Administration program in the McCoy College emphasizes the knowledge and tools needed for professional success and is designed for those individuals who expect to pursue careers in the management of organizations in either the public or private sector. The curriculum provides broad-based, generalized education with the flexibility to meet individual needs. Students may choose an optional concentration in one of six areas of study in a flexible format or select a full-time cohort program. The general Flex M.B.A. program can be completed at either the San Marcos or Round Rock Campus. For the Flex M.B.A. program concentrations, some specialized courses may only be offered at the San Marcos Campus or the Round Rock Campus. The Full-Time Cohort program is available exclusively at the San Marcos Campus.

Students in the Flex M.B.A. program with a **Computer Information Systems Concentration** learn how technology has changed the way business operates and how to harness the power of technology in various business management settings.

The Flex M.B.A. with an **Engineering Technology Concentration** is offered in cooperation with the Department of Engineering Technology, an academic division of the College of Science and Engineering. M.B.A. students pursuing the Engineering Technology Concentration should find enhanced career opportunities with companies oriented significantly toward manufacturing.

Students interested in careers related to international business may choose to seek the Flex M.B.A. degree with an **International Business Concentration**. This program is designed to provide focused study in international business including cultural, historical, and political issues. While this program is available to all students in the M.B.A. program, it

is especially well suited for undergraduate students in the international studies undergraduate program.

If a student's interest is the healthcare industry, the Flex M.B.A. with a **Healthcare Administration Concentration** may be for them. Offered jointly with the College of Health Professions, the program combines academic content from both colleges to prepare students for a successful career in healthcare.

For those interested in the field of human resources, a Flex M.B.A. with a **Human Resource Management Concentration** is available. This program provides information on organizational change, staffing, compensation and benefits, and international HR.

Students in the Flex M.B.A. program with a **Supply Chain Management Concentration** will obtain the knowledge and skills required to effectively manage the supply chain process in today's global marketplace.

The **Full-Time Cohort** M.B.A. is offered exclusively at the San Marcos Campus. In addition to the core courses, students must complete an internship and an international trip in a specific semester as outlined for each cohort group.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
  - or
  - \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - an overall competitive GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - responses to specific essay questions
  - resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
  - two letters of recommendation from persons best able to assess the student's ability to succeed in graduate school
  - GPA and GMAT/GRE Requirement
- The GMAT/GRE is not required for applicants with an overall 3.5 GPA or a 3.5 GPA in the last 60 hours GPA of undergraduate course work. If the GPA falls below the minimum requirement, the official GMAT or GRE (general test only) with competitive scores will be required in

order to be considered. The Graduate College will notify applicants via email should this occur.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Business Administration (M.B.A.) degree with a major in Business Administration concentration in International Business requires 39 semester credit hours.

B A 5100 and B A 5351 should be taken in the first semester, and MGT 5313 should be taken in the last term because it serves as the capstone course that includes the comprehensive examination.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of C or lower. Even if the grade of C or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third C (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 C Policy takes precedent over probationary status. So, if a student earns a third C they are automatically dismissed from their program permanently, even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
B A 5100	Business Professional Development Seminar (Taken three times in different terms)	3
B A 5351	Organizational Performance and Competitive Advantage	3
ACC 5361	Accounting Analysis for Managerial Decision Making	3
ECO 5316	Managerial Economics	3
FIN 5352	Financial Management	3
MGT 5313	Strategic Management	3

MGT 5314	Organizational Behavior and Theory	3
MKT 5321	Marketing Management	3
ANLY 5334	Statistical Methods for Business	3
ANLY 5338	Operations Management	3

### Prescribed Electives

Choose 9 hours from the following:		9
BLAW 5315	Legal Issues in International Business	
ECO 5310	International Economics	
ECO 5320	Emerging Market Economies	
FIN 5338	International Investments and Financial Management	
MGT 5318	Cross-Cultural Management	
MGT 5339	International Human Resource Management	
MKT 5330	International Marketing	

**Total Hours** **39**

## Comprehensive Examination Requirements

The comprehensive examination consists of a consulting project with companies in the community. The exam is a written paper and oral presentation at the end of the semester, associated with capstone course MGT 5313. If the student fails, they must retake the capstone course, MGT 5313, the following term.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Business Administration: ACC (p. 984), ANLY (p. 987), B A (p. 988), BLAW (p. 989), ECO (p. 989), FIN (p. 989), ISAN (p. 990), MGT (p. 992), MKT (p. 995)

## Courses Offered

***Students must complete the appropriate background course or its equivalent before enrolling in elective courses.***

### Accounting (ACC)

**ACC 5315. Selected Topics in Financial Accounting.**

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5316. Advanced Accounting.**

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-for-profit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5320. Auditing.**

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5323. Accounting Data Analytics.**

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5340. Individual Income Tax.**

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5350. Professional Accounting Research.**

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5352. Financial Statement Reporting and Analysis.**

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5355. IT Auditing.**

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5357. Regulation and Professionalism.**

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments. Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5361. Accounting Analysis for Managerial Decision Making.**

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5362. Cost and Managerial Accounting Theory.**

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules or the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Analytics (ANLY)****ANLY 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5332. Optimization for Business Analytics.**

This course introduces optimization theory and applications for analyzing and solving business decision-making problems. The students will learn to apply in various business domains optimization concepts and tools such as linear programming, integer/mixed-integer programming, and other classes of optimization models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5334. Statistical Methods for Business.**

This course provides the quantitative foundation for business analysis and decision making. Topics include inferential statistics, regression analysis, and other analytical/modeling techniques with wide applicability in decision-making and problem solving in all functional areas of business.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5335. Forecasting and Simulation.**

This course introduces the concepts and principles of forecasting and simulation techniques as applies to planning and decision making in organizations. Topical coverage includes time series forecasting, causal forecasting, discrete event simulation, and continuous-event simulation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5336. Analytics.**

This course introduces analytics which refers to the process of transforming data into information for making decisions. The topics include the introduction to analytics, visualization, analytics applications, and challenges related to business data. Students will learn how to use software, conduct data analysis and communicate their results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5338. Operations Management.**

This course introduces the processes and strategies to create, produce, and deliver goods and services that drive organizations' overall success. It will highlight operational and tactical problems organizations typically confront and introduce the concepts and analytical tools (both process and systems based) used to deal with these problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5342. Probability and Statistical Models.**

This course introduces the concept of probability and probability distributions. It includes general and generalized linear models, inflated and mixture models, and hierarchical models. Model validity and choice will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5343. Data Mining.**

This course covers data mining concepts and applications of data mining techniques to solve business problems. It emphasizes algorithms such as classification, clustering, association, and text mining. Model selection and assessment are also emphasized. Prerequisite: ANLY 5336 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5369. Independent Study in Analytics.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in quantitative methods and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANLY 5390A. Statistical Computing.**

This course covers programming and statistical computing concepts. Programming concepts include data manipulation, data structures, control structures, functions, basic algorithms, and matrix manipulations. Statistical computing topics include numerical linear algebra, Monte Carlo methods, and numerical optimization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANLY 5395. Internship in Analytics.**

This course is based on experiential learning while the student works in quantitative methods and statistics. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Data Analytics and Information Systems. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANLY 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Business Administration (B A)****B A 5100. Business Professional Development Seminar.**

This course is designed to contribute to the development of the business professional. Academic content is supplemented by training in soft skill topics to better prepare the students for a successful business career. Repeatable for credit with different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**B A 5351. Organizational Performance and Competitive Advantage.**

This course is designed to provide an integrative understanding of the firm. A variety of organizational models and perspectives will be incorporated to facilitate understanding of the complexities of the firm, its environments, and its relationships with stakeholders. Includes focus on case analysis issues and communication skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5353. Understanding and Analyzing Organizational Problems.**

An introduction to the concepts of economic theory and optimization, with an emphasis on developing skills in data and economic analysis to solve business problems. Coverage includes prices, costs, market structures, macroeconomic policies, and optimization. Corequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5368A. MBA Full Time Cohort International Experience.**

This course will focus on developing an understanding and analysis of issues related to business challenges in another country. Students will gain first-hand experience with the business practices, culture and economy of another country. Corequisite: MGT 5313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**B A 5396. Internship in Business Administration.**

This course is based on experiential learning while the student works in business administration. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**B A 5398. Independent Study in Business Administration.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in business administration and work independently on a specialized project. Course may be repeated with approval of associate dean for graduate programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Business Law (BLAW)

### BLAW 5310. The Employment Relationship.

A study of trends in the rapidly evolving "law of workplace," with emphasis on how lawmakers attempt to balance the rights and responsibilities of employers and workers. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### BLAW 5315. Legal Issues in International Business.

This course examines legal issues relevant to international business transactions, emphasizing international trade, licensing of intellectual property, and foreign direct investment. Environmental, dispute resolution, labor, e-commerce, marketing, and ethical issues will also be discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### BLAW 5333. Legal Issues of Sustainability and Responsibility.

Diverse frameworks and analytical methods underlying our understanding of sustainability are explored, including the legal aspects & impact on business, society, environment and economy. Topics include corporate governance, globalization, urbanization, energy, human population, food, natural resources, water and equity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### BLAW 5364. Commercial Law.

A traditional business law course which examines sales, negotiable instruments, creditor's rights and remedies, secured transactions, bankruptcy law, personal property, bailments, real property and landlord-tenant relationships. Prerequisite: BLAW 3301 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### BLAW 5368I. International Business Ethics.

This course examines the legal and ethical challenges inherent in international marketing, international environmental and energy practices, international labor and employment practices, trade negotiations, foreign direct investment, intellectual property licensing, technology development, data collection mining, corporate tax inversion, and global corporate social responsibility. Students will also discuss the individual behavioral, organizational, and cultural factors that influence ethical and unethical business decisions in the global business environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Economics (ECO)

### ECO 5302. Economic Theory and Policy.

An intensive study of micro-and macroeconomic concepts; the price system as it functions under competition, monopoly, monopolistic competition and oligopoly; national income measurement and determination; business cycles; money and banking; monetary policy; fiscal policy and economic stabilization. May not be counted as an elective MBA course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

### ECO 5310. International Economics.

Examination of the patterns of trade and finance among nations, integrating the topics of exchange rates, trade barriers, customs unions, and macroeconomics policy into a unified treatment of international economic relations. (MULT) Prerequisite: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### ECO 5316. Managerial Economics.

The application of economic theory and analysis to the formulation of business policy, including demand analysis, production theory, linear programming, and pricing policy. (MBA with Technology Emphasis students complete TECH 5315.) Prerequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ECO 5320. Emerging Market Economies.

The course focuses on the structural characteristics of the emerging market economies, with an emphasis on analyzing the salient economic challenges and opportunities facing contemporary emerging market economies. Prerequisites: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Finance (FIN)

### FIN 5322. Investment Analysis.

This course cover the application of finance theory to investment analysis. Topics include modern investment theories, asset pricing models and derivative pricing models, with a focus on application of derivatives to manage risk exposure. Prerequisite: B A 5352 with a grade of "C" or better or FIN 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5332. Portfolio Theory and Capital Markets.**

This course is designed to provide students with an overview of the strategies for creating and managing portfolios. At the end of this course, students should understand the tools for investment management.

Topics covered include portfolio construction and analysis, risk analysis, asset class management, derivatives, and portfolio performance analysis. Prerequisite: FIN 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5338. International Investments and Financial Management.**

Examination of economic incentives and rationale for international investment and financing. Topics include exchange rate risk exposure and management, global debt and equity investment and financing, foreign currency derivative markets, and general investment and financing strategy in global capital market. (MULT) Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FIN 5347C. Real Estate Investment.**

An application of capital budgeting to real estate investment decisions.

Prerequisite: FIN 5387 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FIN 5352. Financial Management.**

This course introduces students to the major considerations in financial decision making. These considerations are analyzed by exploring the role of financial managers in creating value and maximizing shareholder wealth within the constraints of legal and ethical behavior. The development of critical thinking, quantitative applications, and analytical skills are major goals of this course because the topics require knowledge of specialized problem-solving techniques. Prerequisite: ACC 5361 with a grade of "C" or better. Corequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 5387. Managerial Finance.**

Concentrates on the finance function, analysis and budgeting of funds, management of current assets, short and intermediate-term financing requirements, long-term debt policy and capital structure, capital budgeting, and the concept of cost of capital. Risk and return trade-offs also are studied. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Information Systems (ISAN)****ISAN 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5318. Information Technology in Digital Economy.**

This course provides an understanding of the issues in managing organizations' information assets. The course examines users' issues and challenges within the Information Technology (IT) management arena as part of a firm's business and IT strategy. The course provides frameworks and management principles that current or aspiring managers can employ with the challenges of implementing rapidly advancing technology. The focus is on managerial rather than technical issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5355. Database Management Systems.**

This course explores the concepts, principles, issues, and techniques for managing data resources using database management systems. Topics include techniques for analysis, design, and development of database systems, creating and using logical data models, database query languages, and procedures for evaluating management software. Students will develop a management information system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5357. Computing for Data Analytics.**

This course focuses on fundamentals of programming. Students will learn to design and implement applications, and programmatically handle a variety of data management functionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5358. Agile Project Management For Business Professionals.**

This course provides an in-depth study of the project management body of knowledge as applied to Information Technology, emphasizing Agile methodologies and the processes of managing scope, costs, schedules, quality, and risks. Topics Include program management, system planning and design methodologies, material & capacity requirements, human, cultural, & international issues, and their impact on the organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5360. E-Commerce: Strategies, Technologies, and Applications.**

This course is designed to familiarize students with current and emerging e-commerce technologies. Topics include Internet technology for business advantage, reinventing the future of business through e-commerce, business opportunities in e-commerce, and social, political, global, and ethical issues associated with ecommerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5364. Data Warehousing.**

This course allows students to familiarize with current and emerging data warehousing technologies that play a strategic role in business organizations. Topics include data warehouse development life cycle, data warehouse navigation, data quality, and performance issues.

Prerequisite: ISAN 5355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5367. Machine Learning.**

This course focuses on deriving actionable knowledge from data using algorithms and industry standard tools. Topics covered are the complete process, key technologies, core machine learning algorithms, and programming used for business intelligence. Prerequisite: ISAN 5357 and ANLY 5336 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5368. Information Security.**

This course covers the analysis, design, development, implementation, and maintenance of information security systems in communication networks. Topics include legal, ethical, professional, and personnel issues, concepts, theories, and processes of risk management, technology; cryptography theory and practice; and physical and hardware security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5369. Independent Study in Information Systems.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in Information Systems and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ISAN 5370. Enterprise Resource Planning and Business Intelligence.**

This course uses information technology integrations in enterprises for operational control and business intelligence is examined via Enterprise Resource Planning (ERP) applications in customer relationships management, accounting, finance, purchasing, production control, sales, marketing, and human resource management. Emphasizes managerial issues surrounding the need, selection, and implementation of ERP systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5371. Accounting Information Systems and Controls.**

This course examines accounting information systems and controls and their role in the current technology-intensive business environment. Emphasis is placed on contemporary technology and applications, information technology and business information systems assessments, design of internal controls to satisfy regulation and policy requirements, control concepts, theories, and processes, information systems auditing, systems development life cycle, and information structure, data transfer, and transaction cycles. Prerequisite: ACC 3313 or ACC 5361 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5378. Information Security Policies and Compliance.**

This course focuses on the technology and managerial issues related to information policies, regulations, and compliance that assure confidentiality, integrity, and availability of data and computer systems. Topics include information security policy, regulations, laws, standards, framework, compliance, and governance. Prerequisite: ISAN 5368 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5390A. Introduction to Design Thinking.**

This course provides an overview and hands-on introduction to Design Thinking and the human-centered design process. Topics include an introduction, defining the problem, ideation, and concept generation, prototyping & testing, refining, and launching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ISAN 5395. Internship in Information Systems.**

This course provides students with opportunities for experiential learning by contributing to a computer information systems project. The course enables integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ISAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Management (MGT)****MGT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5301. Graduate Assistant Development.**

Completion of this course is required as a condition of employment for graduate assistants. The course is seminar based and covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MGT 5310. Organizational Change Management.**

Presents an overview of the process of change in an organization and stresses the key issues involved in reengineering and renewing organizations. Problems dealing with stress and conflict during major change will be explored along with practical ideas on building effective teams to make change possible and sustainable.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5311. Process Improvement Management in Organizations.**

Learn existing and latest developments in process improvement techniques for continuous improvement and the role of quality as a system for establishing an organization's competitive advantage. Process mapping is emphasized and assessment of effectiveness in the interactions of the managerial and technical systems of organizations is also studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5312. Seminar in Management.**

Development of philosophy, strategy, and tactics in managing an enterprise. Administrative processes common to all enterprises, such as entrepreneurship, business and society, leadership and group behavior in organizations, business ethics, and international management. (Course may be repeated for credit with different course focus.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5313. Strategic Management.**

An integrative approach to policy formulation and administration (decision making) to achieve organization objectives. Should be taken the last semester of student's MBA program. Prerequisite: ACC 5361 and FIN 5387 and MKT 5321 and QMST 5334 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5314. Organizational Behavior and Theory.**

Organizational behavior and structure as influenced by environmental variables and system relationships. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5315. New Venture Management.**

This course provides an overview of the entrepreneurial process from the initial idea through start-up, growth, and harvest. Students learn how to write a business plan, manage all the elements of an entrepreneurial business, and develop a better understanding of the requirements of the entrepreneurial life path.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5318. Cross-Cultural Management.**

The global environment requires sensitivity to and the adaptation of leadership and management skills and practices, and the culture-bound differences in workplace behavior and attitudes. Explores how differences in cultural core values shape behavior and attitudes of workers, managerial colleagues, and negotiating partners. (MULT) Prerequisites: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5321. Supply Chain Management.**

A variety of tools and frameworks provide students with understanding of the basis behind supply chain decision making. Topics include supply management concepts, demand-supply management, pull/push system, capacity and resource allocation, performance measurement, relationship assessment, and outsourcing in an integrated supply chain. Require graduate standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5325. Managing Business Creativity.**

This course focuses on the means by which businesses and individuals foster and maintain their creative and innovative skills. Key topics include: idea generation and refinement, idea screening, prototype development, and feasibility analysis. Objectives are met through classroom exercises, case analysis, guest speakers, and individual and team projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5330. Seminar in Human Resource Management.**

A study of current developments and practices in human resource management, including employment laws; planning, recruitment and selection; training and development programs; wage and benefits administration; performance management, human relations and productivity; labor relations; safety and health; and current contributions to human resource management theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5333. Problems in Business Administration.**

The student is here given the opportunity to work in the field of his special interest, particularly in the subjects of accounting, business law, marketing, statistics, finance, and insurance. The course will be conducted by conferences between the student and instructors concerned. Problems will be assigned as nearly as possible for the needs of the individual student.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5335. New Venture Launch.**

The purpose of this class is to ensure students gain a full understanding of what it takes to start and grow a business. Students learn the process of creating a new venture from the inside by planning, organizing and launching an actual business. Prerequisite: MGT 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5336. Compensation and Benefits.**

This course addresses the rewards systems in organizations. Strategic and technical considerations in designing, administering and managing compensation and benefits plans in organizations, including job analysis and evaluation, wage levels and structures, legal issues, individual and group incentives, and benefits are considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5337. Organizational Staffing.**

A study of the methods involved in recruitment and selection of employees with an emphasis on measurement, job analysis, performance appraisal, legal issues, and the role of human resource planning and strategy. This course relies on statistics to teach students to make reliable and valid employment decisions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5338. Human Resource Development.**

A study of theoretical and applied perspectives on needs assessment, design, development delivery and evaluation of training and development as well as organizational change and development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5339. International Human Resource Management.**

A study of challenges that decision makers consider when managing their human resources across the globe. Drawing on theories and models from cross-cultural and international management areas, this course covers such topics as globalization, culture, emerging international assignments, and expatriate recruitment, selection, training, repatriation, and career management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5380A. Business Ethics Leadership.**

This course examines a variety of ethical issues in business from multiple stakeholder perspectives (top management, employees, community members, etc.). The course is designed to enhance moral awareness and facilitate individual development with respect to making ethical decisions that contribute to effective corporate management and leadership.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MGT 5380C. Group Dynamics in Organizations.**

This course explores the theoretical framework of group interactions as well as the practical workplace challenges associated with organizing, participating on, and managing teams and groups. It addresses the development and use of teams to improve business organizations and is recommended for graduate students preparing for business careers.

Prerequisite: B A 5351 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380D. Labor Relations and Negotiation.**

This graduate level course is a study of labor organizations and their impact as well as negotiation and conflict resolution issues. The course will examine the National Labor Relations Act (NLRA), union and employer rights under the NLRA, union organizing, collective bargaining, negotiation, contract administration, mediation and arbitration.

Corequisite: MGT 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380E. International Leadership.**

Course will include lectures, business engagements, cultural excursions, and a service-learning project. To reinforce the theories discussed in class students will interact directly with managers, employees, and international business professionals, learn perspective on cultural and leadership issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380F. Management for Organizational Sustainability.**

This course is designed to take a broad look at Sustainability from both Ecological and Organizational perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380G. Artificial Intelligence (AI) for Business Managers.**

This course provides a basic foundation in artificial intelligence for students of the business school by introducing a means to make economically sound decisions regarding the implementation areas. In this course all students of the business school may implement small projects in the functional disciplines of the business school (e.g. marketing, finance, etc.). It could also be of interest for students of the School of Engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5390. Managerial Data Analysis.**

Designed to prepare managers to make more effective decisions based upon evidence from data analysis. Covers all elements of the general linear model from t-tests to multiple regression analysis. Involves acquiring and analyzing data for prediction and explanation, developing reports with actionable recommendations, and communicating results for managerial decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5391. Managing the Communication Process.**

The study and application of theory and psychology of managerial communication using written, oral, and technological modes to communicate within the business environment. The course includes the process and product approach to graphics, leadership, problem solving, prioritizing, interviewing, and communicating change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5395. Graduate Business Internship.**

Integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in MGT 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Marketing (MKT)****MKT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5321. Marketing Management.**

A study of the planning and coordination of marketing functions, marketing policies, and the analysis of marketing administration.

Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5322. Marketing Research Methods.**

An advanced study of the marketing research process to include problem formulation, determination of sources of information and research design, design of data collection forms, design of the sample, collection of the data, analysis and interpretation of the data, preparation of the research report, and oral presentation of the research findings.

Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5323. Qualitative Research in Marketing.**

This course examines qualitative methods as used in marketing and market research. Topics include the design and execution of qualitative research projects using various qualitative methodological approaches. Activities include application of qualitative methods for conducting research. Students will apply learning in a qualitative research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5330. International Marketing.**

An application of marketing concepts to the global business environment. Examines marketing in the light of international economic, social, cultural, business, and environmental factors. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5331. Integrated Marketing Communications.**

An analysis of consumer behavior in the marketplace and its application to the preparation and presentation of a complete integrated marketing communications plan for a local, regional, and/or national client.

Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5335. Services Marketing.**

Services dominate the U.S. economy and are becoming critical for competitive advantage in companies across the globe and in all industry sectors. This course examines the foundations of services marketing, which are necessary to create, promise, and deliver a successful, interactive customer experience. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5340. Digital Marketing.**

This course examines marketing strategies in the digital environment. It examines the latest technology and analytical tools used in e-marketing and e-commerce, including online advertising, mobile marketing, social media marketing, search marketing, email marketing, and web analytics. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5341. Social Media Marketing and Analysis.**

This course provides a conceptual foundation and practical approach for conducting social media analysis and developing a social media marketing plan and/or campaign will be presented. Students will gain hands-on experience using social media strategically to achieve desired marketing goals through a hands-on project. Students will also earn applicable digital marketing certifications. Prerequisite: MKT 5321 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5345. Marketing Analytics.**

This course is a study of the scientific approach that connects customer data and competitive information to drive marketing decision-making. The course explores customer data analysis techniques and their theoretical foundations that are applied to real world business problems. Students will learn software, conduct data analysis and communicate the results. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5346. Contemporary Topics in Marketing Analytics.**

This course covers contemporary topics in marketing analytics. Students will learn (1) concepts and methods in strategic marketing analytics, (2) analytical and mapping tools in geospatial data and information, (3) concepts and methods in Bayesian Networks, (4) Topic Analysis using big data in marketing, and (5) other emerging analytical tools and methods in marketing. Prerequisite: QMST 5334 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5347. AI and Data Visualization for Marketing.**

This course consists of applied training in foundational topics for artificial intelligence and data visualization. It covers both prediction as well as classification problems. While many technical aspects are covered, the main emphasis is on knowing how to apply a wide range of modern techniques to specific marketing problems. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5348. Python for Marketing Analytics.**

This course consists of learning Python and using this programming language for data analysis and visualization. This course will help to leverage the power of historical data and to develop models that project future trends. Python will be used for exploratory data analysis, market forecasting, customer segmentation, deep learning, social media analysis and analysis of marketing images and videos. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5350. Strategic Marketing Analysis and Planning.**

This course examines strategic marketing decision making through the analysis and interpretation of marketing intelligence, metrics, and dashboards. Topics will include data-driven decision making on marketing challenges pertaining to customers, brands, marketing mix decisions, online strategy and social media, market performance, and firm profitability. Prerequisite: MKT 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5395. Independent Study in Marketing.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in Marketing. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5397I. Entrepreneurial Marketing.**

Entrepreneurship involves the discovery, implementation, and pursuit of new business opportunities. Successful execution of an entrepreneurial idea requires an effective marketing plan and related skills. In this course, we will investigate how marketing concepts (product, price, promotion, place, people, processes, brand image, segmentation, targeting, positioning, quality perceptions) can facilitate entrepreneurs' realization of their ideas. A conceptual foundation and practical approach for developing an entrepreneurship-focused marketing plan will be discussed. Using a hands-on approach, students will gain skills and knowledge on the effective use of marketing concepts to achieve entrepreneurial goals. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MKT 5398. Internship in Marketing.**

Internship in marketing is an external employer supervised, experiential learning course that enables a student to integrate professional and graduate business coursework. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5399A. Thesis.**

This course represents a student's initial thesis enrollments. No thesis credit is awarded until student has completed the thesis in Marketing Research and Analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**MKT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Business Administration (M.B.A.) degree with a major in Business Administration in the McCoy College emphasizes the knowledge and tools needed for professional success and is designed for those individuals who expect to pursue careers in the management of organizations in either the public or private sector. The curriculum provides broad-based, generalized education with the flexibility to meet individual needs. Students may choose an optional concentration in one of six areas of study in a flexible format or select a full-time cohort program. The general Flex M.B.A. program can be completed at either the San Marcos or Round Rock Campus. For the Flex M.B.A. program concentrations, some specialized courses may only be offered at the San Marcos Campus or the Round Rock Campus. The Full-Time Cohort program is available exclusively at the San Marcos Campus.

Students in the Flex M.B.A. program with a **Computer Information Systems Concentration** learn how technology has changed the way business operates and how to harness the power of technology in various business management settings.

The Flex M.B.A. with an **Engineering Technology Concentration** is offered in cooperation with the Department of Engineering Technology, an academic division of the College of Science and Engineering. M.B.A. students pursuing the Engineering Technology Concentration should find enhanced career opportunities with companies oriented significantly toward manufacturing.

Students interested in careers related to international business may choose to seek the Flex M.B.A. degree with an **International Business Concentration**. This program is designed to provide focused study in international business including cultural, historical, and political issues. While this program is available to all students in the M.B.A. program, it

is especially well suited for undergraduate students in the international studies undergraduate program.

If a student's interest is the healthcare industry, the Flex M.B.A. with a **Healthcare Administration Concentration** may be for them. Offered jointly with the College of Health Professions, the program combines academic content from both colleges to prepare students for a successful career in healthcare.

For those interested in the field of human resources, a Flex M.B.A. with a **Human Resource Management Concentration** is available. This program provides information on organizational change, staffing, compensation and benefits, and international HR.

Students in the Flex M.B.A. program with a **Supply Chain Management Concentration** will obtain the knowledge and skills required to effectively manage the supply chain process in today's global marketplace.

The **Full-Time Cohort** M.B.A. is offered exclusively at the San Marcos Campus. In addition to the core courses, students must complete an internship and an international trip in a specific semester as outlined for each cohort group.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
  - or
  - \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - an overall competitive GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - responses to specific essay questions
  - resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
  - two letters of recommendation from persons best able to assess the student's ability to succeed in graduate school
  - GPA and GMAT/GRE Requirement
- The GMAT/GRE is not required for applicants with an overall 3.5 GPA or a 3.5 GPA in the last 60 hours GPA of undergraduate course work. If the GPA falls below the minimum requirement, the official GMAT or GRE (general test only) with competitive scores will be required in

order to be considered. The Graduate College will notify applicants via email should this occur.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Business Administration (M.B.A.) degree with a major in Business Administration concentration in Supply Chain Management requires 39 semester credit hours.

B A 5100 and B A 5351 should be taken in the first semester and MGT 5313 should be taken in the last term because it serves as the capstone course and includes the comprehensive examination.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of C or lower. Even if the grade of C or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third C (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 C Policy takes precedent over probationary status. So, if a student earns a third C they are automatically dismissed from their program permanently, even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
B A 5100	Business Professional Development Seminar (Taken three times in different terms)	3
B A 5351	Organizational Performance and Competitive Advantage	3
ACC 5361	Accounting Analysis for Managerial Decision Making	3
ECO 5316	Managerial Economics	3
FIN 5352	Financial Management	3
MGT 5313	Strategic Management	3

MGT 5314	Organizational Behavior and Theory	3
MKT 5321	Marketing Management	3
ANLY 5334	Statistical Methods for Business	3
ANLY 5338	Operations Management	3

### Prescribed Electives

Choose 9 hours from the following:		9
ISAN 5358	Agile Project Management For Business Professionals	
ISAN 5370	Enterprise Resource Planning and Business Intelligence	
MGT 5311	Process Improvement Management in Organizations	
MGT 5318	Cross-Cultural Management	
MGT 5380D	Labor Relations and Negotiation	
MKT 5330	International Marketing	

**Total Hours** **39**

## Comprehensive Examination Requirement

The comprehensive examination consists of a consulting project with companies in the community. The exam is a written paper and oral presentation at the end of the semester, associated with capstone course MGT 5313. If the student fails, they must retake the capstone course, MGT 5313, the following term.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Business Administration: ACC (p. 999), ANLY (p. 1002), B A (p. 1003), BLAW (p. 1004), ECO (p. 1004), FIN (p. 1004), ISAN (p. 1005), MGT (p. 1007), MKT (p. 1010)

## Courses Offered

***Students must complete the appropriate background course or its equivalent before enrolling in elective courses.***

### Accounting (ACC)

#### **ACC 5315. Selected Topics in Financial Accounting.**

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ACC 5316. Advanced Accounting.**

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-for-profit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5320. Auditing.**

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5323. Accounting Data Analytics.**

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5340. Individual Income Tax.**

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5350. Professional Accounting Research.**

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5352. Financial Statement Reporting and Analysis.**

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5355. IT Auditing.**

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5357. Regulation and Professionalism.**

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments. Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5361. Accounting Analysis for Managerial Decision Making.**

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5362. Cost and Managerial Accounting Theory.**

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules or the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Analytics (ANLY)****ANLY 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5332. Optimization for Business Analytics.**

This course introduces optimization theory and applications for analyzing and solving business decision-making problems. The students will learn to apply in various business domains optimization concepts and tools such as linear programming, integer/mixed-integer programming, and other classes of optimization models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5334. Statistical Methods for Business.**

This course provides the quantitative foundation for business analysis and decision making. Topics include inferential statistics, regression analysis, and other analytical/modeling techniques with wide applicability in decision-making and problem solving in all functional areas of business.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5335. Forecasting and Simulation.**

This course introduces the concepts and principles of forecasting and simulation techniques as applies to planning and decision making in organizations. Topical coverage includes time series forecasting, causal forecasting, discrete event simulation, and continuous-event simulation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5336. Analytics.**

This course introduces analytics which refers to the process of transforming data into information for making decisions. The topics include the introduction to analytics, visualization, analytics applications, and challenges related to business data. Students will learn how to use software, conduct data analysis and communicate their results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5338. Operations Management.**

This course introduces the processes and strategies to create, produce, and deliver goods and services that drive organizations' overall success. It will highlight operational and tactical problems organizations typically confront and introduce the concepts and analytical tools (both process and systems based) used to deal with these problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5342. Probability and Statistical Models.**

This course introduces the concept of probability and probability distributions. It includes general and generalized linear models, inflated and mixture models, and hierarchical models. Model validity and choice will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5343. Data Mining.**

This course covers data mining concepts and applications of data mining techniques to solve business problems. It emphasizes algorithms such as classification, clustering, association, and text mining. Model selection and assessment are also emphasized. Prerequisite: ANLY 5336 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5369. Independent Study in Analytics.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in quantitative methods and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANLY 5390A. Statistical Computing.**

This course covers programming and statistical computing concepts. Programming concepts include data manipulation, data structures, control structures, functions, basic algorithms, and matrix manipulations. Statistical computing topics include numerical linear algebra, Monte Carlo methods, and numerical optimization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANLY 5395. Internship in Analytics.**

This course is based on experiential learning while the student works in quantitative methods and statistics. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Data Analytics and Information Systems. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANLY 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Business Administration (B A)****B A 5100. Business Professional Development Seminar.**

This course is designed to contribute to the development of the business professional. Academic content is supplemented by training in soft skill topics to better prepare the students for a successful business career. Repeatable for credit with different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**B A 5351. Organizational Performance and Competitive Advantage.**

This course is designed to provide an integrative understanding of the firm. A variety of organizational models and perspectives will be incorporated to facilitate understanding of the complexities of the firm, its environments, and its relationships with stakeholders. Includes focus on case analysis issues and communication skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5353. Understanding and Analyzing Organizational Problems.**

An introduction to the concepts of economic theory and optimization, with an emphasis on developing skills in data and economic analysis to solve business problems. Coverage includes prices, costs, market structures, macroeconomic policies, and optimization. Corequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5368A. MBA Full Time Cohort International Experience.**

This course will focus on developing an understanding and analysis of issues related to business challenges in another country. Students will gain first-hand experience with the business practices, culture and economy of another country. Corequisite: MGT 5313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**B A 5396. Internship in Business Administration.**

This course is based on experiential learning while the student works in business administration. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**B A 5398. Independent Study in Business Administration.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in business administration and work independently on a specialized project. Course may be repeated with approval of associate dean for graduate programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Business Law (BLAW)

### BLAW 5310. The Employment Relationship.

A study of trends in the rapidly evolving "law of workplace," with emphasis on how lawmakers attempt to balance the rights and responsibilities of employers and workers. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### BLAW 5315. Legal Issues in International Business.

This course examines legal issues relevant to international business transactions, emphasizing international trade, licensing of intellectual property, and foreign direct investment. Environmental, dispute resolution, labor, e-commerce, marketing, and ethical issues will also be discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### BLAW 5333. Legal Issues of Sustainability and Responsibility.

Diverse frameworks and analytical methods underlying our understanding of sustainability are explored, including the legal aspects & impact on business, society, environment and economy. Topics include corporate governance, globalization, urbanization, energy, human population, food, natural resources, water and equity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### BLAW 5364. Commercial Law.

A traditional business law course which examines sales, negotiable instruments, creditor's rights and remedies, secured transactions, bankruptcy law, personal property, bailments, real property and landlord-tenant relationships. Prerequisite: BLAW 3301 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### BLAW 5368I. International Business Ethics.

This course examines the legal and ethical challenges inherent in international marketing, international environmental and energy practices, international labor and employment practices, trade negotiations, foreign direct investment, intellectual property licensing, technology development, data collection mining, corporate tax inversion, and global corporate social responsibility. Students will also discuss the individual behavioral, organizational, and cultural factors that influence ethical and unethical business decisions in the global business environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Economics (ECO)

### ECO 5302. Economic Theory and Policy.

An intensive study of micro-and macroeconomic concepts; the price system as it functions under competition, monopoly, monopolistic competition and oligopoly; national income measurement and determination; business cycles; money and banking; monetary policy; fiscal policy and economic stabilization. May not be counted as an elective MBA course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

### ECO 5310. International Economics.

Examination of the patterns of trade and finance among nations, integrating the topics of exchange rates, trade barriers, customs unions, and macroeconomics policy into a unified treatment of international economic relations. (MULT) Prerequisite: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### ECO 5316. Managerial Economics.

The application of economic theory and analysis to the formulation of business policy, including demand analysis, production theory, linear programming, and pricing policy. (MBA with Technology Emphasis students complete TECH 5315.) Prerequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ECO 5320. Emerging Market Economies.

The course focuses on the structural characteristics of the emerging market economies, with an emphasis on analyzing the salient economic challenges and opportunities facing contemporary emerging market economies. Prerequisites: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Finance (FIN)

### FIN 5322. Investment Analysis.

This course cover the application of finance theory to investment analysis. Topics include modern investment theories, asset pricing models and derivative pricing models, with a focus on application of derivatives to manage risk exposure. Prerequisite: B A 5352 with a grade of "C" or better or FIN 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5332. Portfolio Theory and Capital Markets.**

This course is designed to provide students with an overview of the strategies for creating and managing portfolios. At the end of this course, students should understand the tools for investment management.

Topics covered include portfolio construction and analysis, risk analysis, asset class management, derivatives, and portfolio performance analysis. Prerequisite: FIN 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5338. International Investments and Financial Management.**

Examination of economic incentives and rationale for international investment and financing. Topics include exchange rate risk exposure and management, global debt and equity investment and financing, foreign currency derivative markets, and general investment and financing strategy in global capital market. (MULT) Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FIN 5347C. Real Estate Investment.**

An application of capital budgeting to real estate investment decisions.

Prerequisite: FIN 5387 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FIN 5352. Financial Management.**

This course introduces students to the major considerations in financial decision making. These considerations are analyzed by exploring the role of financial managers in creating value and maximizing shareholder wealth within the constraints of legal and ethical behavior. The development of critical thinking, quantitative applications, and analytical skills are major goals of this course because the topics require knowledge of specialized problem-solving techniques. Prerequisite: ACC 5361 with a grade of "C" or better. Corequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 5387. Managerial Finance.**

Concentrates on the finance function, analysis and budgeting of funds, management of current assets, short and intermediate-term financing requirements, long-term debt policy and capital structure, capital budgeting, and the concept of cost of capital. Risk and return trade-offs also are studied. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Information Systems (ISAN)****ISAN 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5318. Information Technology in Digital Economy.**

This course provides an understanding of the issues in managing organizations' information assets. The course examines users' issues and challenges within the Information Technology (IT) management arena as part of a firm's business and IT strategy. The course provides frameworks and management principles that current or aspiring managers can employ with the challenges of implementing rapidly advancing technology. The focus is on managerial rather than technical issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5355. Database Management Systems.**

This course explores the concepts, principles, issues, and techniques for managing data resources using database management systems. Topics include techniques for analysis, design, and development of database systems, creating and using logical data models, database query languages, and procedures for evaluating management software. Students will develop a management information system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5357. Computing for Data Analytics.**

This course focuses on fundamentals of programming. Students will learn to design and implement applications, and programmatically handle a variety of data management functionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5358. Agile Project Management For Business Professionals.**

This course provides an in-depth study of the project management body of knowledge as applied to Information Technology, emphasizing Agile methodologies and the processes of managing scope, costs, schedules, quality, and risks. Topics Include program management, system planning and design methodologies, material & capacity requirements, human, cultural, & international issues, and their impact on the organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5360. E-Commerce: Strategies, Technologies, and Applications.**

This course is designed to familiarize students with current and emerging e-commerce technologies. Topics include Internet technology for business advantage, reinventing the future of business through e-commerce, business opportunities in e-commerce, and social, political, global, and ethical issues associated with ecommerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5364. Data Warehousing.**

This course allows students to familiarize with current and emerging data warehousing technologies that play a strategic role in business organizations. Topics include data warehouse development life cycle, data warehouse navigation, data quality, and performance issues. Prerequisite: ISAN 5355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5367. Machine Learning.**

This course focuses on deriving actionable knowledge from data using algorithms and industry standard tools. Topics covered are the complete process, key technologies, core machine learning algorithms, and programming used for business intelligence. Prerequisite: ISAN 5357 and ANLY 5336 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5368. Information Security.**

This course covers the analysis, design, development, implementation, and maintenance of information security systems in communication networks. Topics include legal, ethical, professional, and personnel issues, concepts, theories, and processes of risk management, technology; cryptography theory and practice; and physical and hardware security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5369. Independent Study in Information Systems.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in Information Systems and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ISAN 5370. Enterprise Resource Planning and Business Intelligence.**

This course uses information technology integrations in enterprises for operational control and business intelligence is examined via Enterprise Resource Planning (ERP) applications in customer relationships management, accounting, finance, purchasing, production control, sales, marketing, and human resource management. Emphasizes managerial issues surrounding the need, selection, and implementation of ERP systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5371. Accounting Information Systems and Controls.**

This course examines accounting information systems and controls and their role in the current technology-intensive business environment. Emphasis is placed on contemporary technology and applications, information technology and business information systems assessments, design of internal controls to satisfy regulation and policy requirements, control concepts, theories, and processes, information systems auditing, systems development life cycle, and information structure, data transfer, and transaction cycles. Prerequisite: ACC 3313 or ACC 5361 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5378. Information Security Policies and Compliance.**

This course focuses on the technology and managerial issues related to information policies, regulations, and compliance that assure confidentiality, integrity, and availability of data and computer systems. Topics include information security policy, regulations, laws, standards, framework, compliance, and governance. Prerequisite: ISAN 5368 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5390A. Introduction to Design Thinking.**

This course provides an overview and hands-on introduction to Design Thinking and the human-centered design process. Topics include an introduction, defining the problem, ideation, and concept generation, prototyping & testing, refining, and launching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ISAN 5395. Internship in Information Systems.**

This course provides students with opportunities for experiential learning by contributing to a computer information systems project. The course enables integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ISAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Management (MGT)****MGT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5301. Graduate Assistant Development.**

Completion of this course is required as a condition of employment for graduate assistants. The course is seminar based and covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MGT 5310. Organizational Change Management.**

Presents an overview of the process of change in an organization and stresses the key issues involved in reengineering and renewing organizations. Problems dealing with stress and conflict during major change will be explored along with practical ideas on building effective teams to make change possible and sustainable.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5311. Process Improvement Management in Organizations.**

Learn existing and latest developments in process improvement techniques for continuous improvement and the role of quality as a system for establishing an organization's competitive advantage. Process mapping is emphasized and assessment of effectiveness in the interactions of the managerial and technical systems of organizations is also studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5312. Seminar in Management.**

Development of philosophy, strategy, and tactics in managing an enterprise. Administrative processes common to all enterprises, such as entrepreneurship, business and society, leadership and group behavior in organizations, business ethics, and international management. (Course may be repeated for credit with different course focus.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5313. Strategic Management.**

An integrative approach to policy formulation and administration (decision making) to achieve organization objectives. Should be taken the last semester of student's MBA program. Prerequisite: ACC 5361 and FIN 5387 and MKT 5321 and QMST 5334 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5314. Organizational Behavior and Theory.**

Organizational behavior and structure as influenced by environmental variables and system relationships. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5315. New Venture Management.**

This course provides an overview of the entrepreneurial process from the initial idea through start-up, growth, and harvest. Students learn how to write a business plan, manage all the elements of an entrepreneurial business, and develop a better understanding of the requirements of the entrepreneurial life path.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5318. Cross-Cultural Management.**

The global environment requires sensitivity to and the adaptation of leadership and management skills and practices, and the culture-bound differences in workplace behavior and attitudes. Explores how differences in cultural core values shape behavior and attitudes of workers, managerial colleagues, and negotiating partners. (MULT) Prerequisites: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5321. Supply Chain Management.**

A variety of tools and frameworks provide students with understanding of the basis behind supply chain decision making. Topics include supply management concepts, demand-supply management, pull/push system, capacity and resource allocation, performance measurement, relationship assessment, and outsourcing in an integrated supply chain. Require graduate standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5325. Managing Business Creativity.**

This course focuses on the means by which businesses and individuals foster and maintain their creative and innovative skills. Key topics include: idea generation and refinement, idea screening, prototype development, and feasibility analysis. Objectives are met through classroom exercises, case analysis, guest speakers, and individual and team projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5330. Seminar in Human Resource Management.**

A study of current developments and practices in human resource management, including employment laws; planning, recruitment and selection; training and development programs; wage and benefits administration; performance management, human relations and productivity; labor relations; safety and health; and current contributions to human resource management theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5333. Problems in Business Administration.**

The student is here given the opportunity to work in the field of his special interest, particularly in the subjects of accounting, business law, marketing, statistics, finance, and insurance. The course will be conducted by conferences between the student and instructors concerned. Problems will be assigned as nearly as possible for the needs of the individual student.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5335. New Venture Launch.**

The purpose of this class is to ensure students gain a full understanding of what it takes to start and grow a business. Students learn the process of creating a new venture from the inside by planning, organizing and launching an actual business. Prerequisite: MGT 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5336. Compensation and Benefits.**

This course addresses the rewards systems in organizations. Strategic and technical considerations in designing, administering and managing compensation and benefits plans in organizations, including job analysis and evaluation, wage levels and structures, legal issues, individual and group incentives, and benefits are considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5337. Organizational Staffing.**

A study of the methods involved in recruitment and selection of employees with an emphasis on measurement, job analysis, performance appraisal, legal issues, and the role of human resource planning and strategy. This course relies on statistics to teach students to make reliable and valid employment decisions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5338. Human Resource Development.**

A study of theoretical and applied perspectives on needs assessment, design, development delivery and evaluation of training and development as well as organizational change and development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5339. International Human Resource Management.**

A study of challenges that decision makers consider when managing their human resources across the globe. Drawing on theories and models from cross-cultural and international management areas, this course covers such topics as globalization, culture, emerging international assignments, and expatriate recruitment, selection, training, repatriation, and career management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5380A. Business Ethics Leadership.**

This course examines a variety of ethical issues in business from multiple stakeholder perspectives (top management, employees, community members, etc.). The course is designed to enhance moral awareness and facilitate individual development with respect to making ethical decisions that contribute to effective corporate management and leadership.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MGT 5380C. Group Dynamics in Organizations.**

This course explores the theoretical framework of group interactions as well as the practical workplace challenges associated with organizing, participating on, and managing teams and groups. It addresses the development and use of teams to improve business organizations and is recommended for graduate students preparing for business careers.

Prerequisite: B A 5351 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380D. Labor Relations and Negotiation.**

This graduate level course is a study of labor organizations and their impact as well as negotiation and conflict resolution issues. The course will examine the National Labor Relations Act (NLRA), union and employer rights under the NLRA, union organizing, collective bargaining, negotiation, contract administration, mediation and arbitration.

Corequisite: MGT 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380E. International Leadership.**

Course will include lectures, business engagements, cultural excursions, and a service-learning project. To reinforce the theories discussed in class students will interact directly with managers, employees, and international business professionals, learn perspective on cultural and leadership issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380F. Management for Organizational Sustainability.**

This course is designed to take a broad look at Sustainability from both Ecological and Organizational perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380G. Artificial Intelligence (AI) for Business Managers.**

This course provides a basic foundation in artificial intelligence for students of the business school by introducing a means to make economically sound decisions regarding the implementation areas. In this course all students of the business school may implement small projects in the functional disciplines of the business school (e.g. marketing, finance, etc.). It could also be of interest for students of the School of Engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5390. Managerial Data Analysis.**

Designed to prepare managers to make more effective decisions based upon evidence from data analysis. Covers all elements of the general linear model from t-tests to multiple regression analysis. Involves acquiring and analyzing data for prediction and explanation, developing reports with actionable recommendations, and communicating results for managerial decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5391. Managing the Communication Process.**

The study and application of theory and psychology of managerial communication using written, oral, and technological modes to communicate within the business environment. The course includes the process and product approach to graphics, leadership, problem solving, prioritizing, interviewing, and communicating change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5395. Graduate Business Internship.**

Integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in MGT 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Marketing (MKT)

**MKT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5321. Marketing Management.**

A study of the planning and coordination of marketing functions, marketing policies, and the analysis of marketing administration.

Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5322. Marketing Research Methods.**

An advanced study of the marketing research process to include problem formulation, determination of sources of information and research design, design of data collection forms, design of the sample, collection of the data, analysis and interpretation of the data, preparation of the research report, and oral presentation of the research findings.

Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5323. Qualitative Research in Marketing.**

This course examines qualitative methods as used in marketing and market research. Topics include the design and execution of qualitative research projects using various qualitative methodological approaches. Activities include application of qualitative methods for conducting research. Students will apply learning in a qualitative research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5330. International Marketing.**

An application of marketing concepts to the global business environment. Examines marketing in the light of international economic, social, cultural, business, and environmental factors. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5331. Integrated Marketing Communications.**

An analysis of consumer behavior in the marketplace and its application to the preparation and presentation of a complete integrated marketing communications plan for a local, regional, and/or national client.

Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5335. Services Marketing.**

Services dominate the U.S. economy and are becoming critical for competitive advantage in companies across the globe and in all industry sectors. This course examines the foundations of services marketing, which are necessary to create, promise, and deliver a successful, interactive customer experience. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5340. Digital Marketing.**

This course examines marketing strategies in the digital environment. It examines the latest technology and analytical tools used in e-marketing and e-commerce, including online advertising, mobile marketing, social media marketing, search marketing, email marketing, and web analytics. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5341. Social Media Marketing and Analysis.**

This course provides a conceptual foundation and practical approach for conducting social media analysis and developing a social media marketing plan and/or campaign will be presented. Students will gain hands-on experience using social media strategically to achieve desired marketing goals through a hands-on project. Students will also earn applicable digital marketing certifications. Prerequisite: MKT 5321 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5345. Marketing Analytics.**

This course is a study of the scientific approach that connects customer data and competitive information to drive marketing decision-making. The course explores customer data analysis techniques and their theoretical foundations that are applied to real world business problems. Students will learn software, conduct data analysis and communicate the results. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5346. Contemporary Topics in Marketing Analytics.**

This course covers contemporary topics in marketing analytics. Students will learn (1) concepts and methods in strategic marketing analytics, (2) analytical and mapping tools in geospatial data and information, (3) concepts and methods in Bayesian Networks, (4) Topic Analysis using big data in marketing, and (5) other emerging analytical tools and methods in marketing. Prerequisite: QMST 5334 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5347. AI and Data Visualization for Marketing.**

This course consists of applied training in foundational topics for artificial intelligence and data visualization. It covers both prediction as well as classification problems. While many technical aspects are covered, the main emphasis is on knowing how to apply a wide range of modern techniques to specific marketing problems. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5348. Python for Marketing Analytics.**

This course consists of learning Python and using this programming language for data analysis and visualization. This course will help to leverage the power of historical data and to develop models that project future trends. Python will be used for exploratory data analysis, market forecasting, customer segmentation, deep learning, social media analysis and analysis of marketing images and videos. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5350. Strategic Marketing Analysis and Planning.**

This course examines strategic marketing decision making through the analysis and interpretation of marketing intelligence, metrics, and dashboards. Topics will include data-driven decision making on marketing challenges pertaining to customers, brands, marketing mix decisions, online strategy and social media, market performance, and firm profitability. Prerequisite: MKT 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5395. Independent Study in Marketing.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in Marketing. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5397I. Entrepreneurial Marketing.**

Entrepreneurship involves the discovery, implementation, and pursuit of new business opportunities. Successful execution of an entrepreneurial idea requires an effective marketing plan and related skills. In this course, we will investigate how marketing concepts (product, price, promotion, place, people, processes, brand image, segmentation, targeting, positioning, quality perceptions) can facilitate entrepreneurs' realization of their ideas. A conceptual foundation and practical approach for developing an entrepreneurship-focused marketing plan will be discussed. Using a hands-on approach, students will gain skills and knowledge on the effective use of marketing concepts to achieve entrepreneurial goals. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MKT 5398. Internship in Marketing.**

Internship in marketing is an external employer supervised, experiential learning course that enables a student to integrate professional and graduate business coursework. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5399A. Thesis.**

This course represents a student's initial thesis enrollments. No thesis credit is awarded until student has completed the thesis in Marketing Research and Analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**MKT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Business Administration (M.B.A.) degree with a major in Business Administration in the McCoy College emphasizes the knowledge and tools needed for professional success and is designed for those individuals who expect to pursue careers in the management of organizations in either the public or private sector. The curriculum provides broad-based, generalized education with the flexibility to meet individual needs. Students may choose an optional concentration in one of six areas of study in a flexible format or select a full-time cohort program. The general Flex M.B.A. program can be completed at either the San Marcos or Round Rock Campus. For the Flex M.B.A. program concentrations, some specialized courses may only be offered at the San Marcos Campus or the Round Rock Campus. The Full-Time Cohort program is available exclusively at the San Marcos Campus.

Students in the Flex M.B.A. program with a **Computer Information Systems Concentration** learn how technology has changed the way business operates and how to harness the power of technology in various business management settings.

The Flex M.B.A. with an **Engineering Technology Concentration** is offered in cooperation with the Department of Engineering Technology, an academic division of the College of Science and Engineering. M.B.A. students pursuing the Engineering Technology Concentration should find enhanced career opportunities with companies oriented significantly toward manufacturing.

Students interested in careers related to international business may choose to seek the Flex M.B.A. degree with an **International Business Concentration**. This program is designed to provide focused study in international business including cultural, historical, and political issues. While this program is available to all students in the M.B.A. program, it

is especially well suited for undergraduate students in the international studies undergraduate program.

If a student's interest is the healthcare industry, the Flex M.B.A. with a **Healthcare Administration Concentration** may be for them. Offered jointly with the College of Health Professions, the program combines academic content from both colleges to prepare students for a successful career in healthcare.

For those interested in the field of human resources, a Flex M.B.A. with a **Human Resource Management Concentration** is available. This program provides information on organizational change, staffing, compensation and benefits, and international HR.

Students in the Flex M.B.A. program with a **Supply Chain Management Concentration** will obtain the knowledge and skills required to effectively manage the supply chain process in today's global marketplace.

The **Full-Time Cohort** M.B.A. is offered exclusively at the San Marcos Campus. In addition to the core courses, students must complete an internship and an international trip in a specific semester as outlined for each cohort group.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- an overall competitive GPA or a competitive GPA in the last 60 hours of undergraduate course work, plus any completed graduate courses
- responses to specific essay questions
- resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
- two letters of recommendation from persons best able to assess the student's ability to succeed in graduate school
- GPA and GMAT/GRE Requirement:  
The GMAT/GRE is not required for applicants with an overall 3.5 GPA or a 3.5 GPA in the last-60-hours GPA of undergraduate course work. If the GPA falls below the minimum requirement, the official GMAT or GRE (general test only) with competitive scores will be required in

order to be considered. Admissions will notify applicants via email should this occur.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Business Administration (M.B.A.) degree with a major in Business Administration requires 36 semester credit hours. The Full-Time Cohort MBA is a lock-step program that requires students to take the same prescribed courses simultaneously. An internship and a class-related international trip are required.

The course sequencing requires students to take 10-credit hours in both fall semesters, 13-credit hours in the spring, and the 3-credit hour internship during the summer.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of C or lower. Even if the grade of C or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third C (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 C Policy takes precedent over probationary status. So, if a student earns a third C they are automatically dismissed from their program permanently; even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
B A 5100	Business Professional Development Seminar (Taken three times in different terms)	3
B A 5351	Organizational Performance and Competitive Advantage	3
ACC 5361	Accounting Analysis for Managerial Decision Making	3
ECO 5316	Managerial Economics	3
FIN 5352	Financial Management	3

MGT 5313	Strategic Management	3
MGT 5314	Organizational Behavior and Theory	3
MKT 5321	Marketing Management	3
ANLY 5334	Statistical Methods for Business	3
ANLY 5338	Operations Management	3
<b>Internship and International Experience</b>		
MGT 5395	Graduate Business Internship	3
B A 5368A	MBA Full Time Cohort International Experience	3
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The comprehensive examination consists of a consulting project with companies in the community. The exam is a written paper and oral presentation at the end of the semester, associated with capstone course MGT 5313. If the student fails, they must retake the capstone course, MGT 5313, the following term.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the

thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Business Administration: ACC (p. 1014), ANLY (p. 1017), B A (p. 1018), BLAW (p. 1019), ECO (p. 1019), FIN (p. 1019), ISAN (p. 1020), MGT (p. 1022), MKT (p. 1025)

## Courses Offered

*Students must complete the appropriate background course or its equivalent before enrolling in elective courses.*

### Accounting (ACC)

#### ACC 5315. Selected Topics in Financial Accounting.

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5316. Advanced Accounting.

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-forprofit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5320. Auditing.

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5323. Accounting Data Analytics.**

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5340. Individual Income Tax.**

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5350. Professional Accounting Research.**

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5352. Financial Statement Reporting and Analysis.**

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5355. IT Auditing.**

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5357. Regulation and Professionalism.**

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments. Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5361. Accounting Analysis for Managerial Decision Making.**

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5362. Cost and Managerial Accounting Theory.**

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules of the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Analytics (ANLY)****ANLY 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5332. Optimization for Business Analytics.**

This course introduces optimization theory and applications for analyzing and solving business decision-making problems. The students will learn to apply in various business domains optimization concepts and tools such as linear programming, integer/mixed-integer programming, and other classes of optimization models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5334. Statistical Methods for Business.**

This course provides the quantitative foundation for business analysis and decision making. Topics include inferential statistics, regression analysis, and other analytical/modeling techniques with wide applicability in decision-making and problem solving in all functional areas of business.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5335. Forecasting and Simulation.**

This course introduces the concepts and principles of forecasting and simulation techniques as applies to planning and decision making in organizations. Topical coverage includes time series forecasting, causal forecasting, discrete event simulation, and continuous-event simulation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5336. Analytics.**

This course introduces analytics which refers to the process of transforming data into information for making decisions. The topics include the introduction to analytics, visualization, analytics applications, and challenges related to business data. Students will learn how to use software, conduct data analysis and communicate their results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5338. Operations Management.**

This course introduces the processes and strategies to create, produce, and deliver goods and services that drive organizations' overall success. It will highlight operational and tactical problems organizations typically confront and introduce the concepts and analytical tools (both process and systems based) used to deal with these problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5342. Probability and Statistical Models.**

This course introduces the concept of probability and probability distributions. It includes general and generalized linear models, inflated and mixture models, and hierarchical models. Model validity and choice will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5343. Data Mining.**

This course covers data mining concepts and applications of data mining techniques to solve business problems. It emphasizes algorithms such as classification, clustering, association, and text mining. Model selection and assessment are also emphasized. Prerequisite: ANLY 5336 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5369. Independent Study in Analytics.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in quantitative methods and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANLY 5390A. Statistical Computing.**

This course covers programming and statistical computing concepts. Programming concepts include data manipulation, data structures, control structures, functions, basic algorithms, and matrix manipulations. Statistical computing topics include numerical linear algebra, Monte Carlo methods, and numerical optimization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANLY 5395. Internship in Analytics.**

This course is based on experiential learning while the student works in quantitative methods and statistics. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Data Analytics and Information Systems. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANLY 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Business Administration (B A)****B A 5100. Business Professional Development Seminar.**

This course is designed to contribute to the development of the business professional. Academic content is supplemented by training in soft skill topics to better prepare the students for a successful business career. Repeatable for credit with different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**B A 5351. Organizational Performance and Competitive Advantage.**

This course is designed to provide an integrative understanding of the firm. A variety of organizational models and perspectives will be incorporated to facilitate understanding of the complexities of the firm, its environments, and its relationships with stakeholders. Includes focus on case analysis issues and communication skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5353. Understanding and Analyzing Organizational Problems.**

An introduction to the concepts of economic theory and optimization, with an emphasis on developing skills in data and economic analysis to solve business problems. Coverage includes prices, costs, market structures, macroeconomic policies, and optimization. Corequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5368A. MBA Full Time Cohort International Experience.**

This course will focus on developing an understanding and analysis of issues related to business challenges in another country. Students will gain first-hand experience with the business practices, culture and economy of another country. Corequisite: MGT 5313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**B A 5396. Internship in Business Administration.**

This course is based on experiential learning while the student works in business administration. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**B A 5398. Independent Study in Business Administration.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in business administration and work independently on a specialized project. Course may be repeated with approval of associate dean for graduate programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Business Law (BLAW)

### **BLAW 5310. The Employment Relationship.**

A study of trends in the rapidly evolving "law of workplace," with emphasis on how lawmakers attempt to balance the rights and responsibilities of employers and workers. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **BLAW 5315. Legal Issues in International Business.**

This course examines legal issues relevant to international business transactions, emphasizing international trade, licensing of intellectual property, and foreign direct investment. Environmental, dispute resolution, labor, e-commerce, marketing, and ethical issues will also be discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### **BLAW 5333. Legal Issues of Sustainability and Responsibility.**

Diverse frameworks and analytical methods underlying our understanding of sustainability are explored, including the legal aspects & impact on business, society, environment and economy. Topics include corporate governance, globalization, urbanization, energy, human population, food, natural resources, water and equity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **BLAW 5364. Commercial Law.**

A traditional business law course which examines sales, negotiable instruments, creditor's rights and remedies, secured transactions, bankruptcy law, personal property, bailments, real property and landlord-tenant relationships. Prerequisite: BLAW 3301 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **BLAW 5368I. International Business Ethics.**

This course examines the legal and ethical challenges inherent in international marketing, international environmental and energy practices, international labor and employment practices, trade negotiations, foreign direct investment, intellectual property licensing, technology development, data collection mining, corporate tax inversion, and global corporate social responsibility. Students will also discuss the individual behavioral, organizational, and cultural factors that influence ethical and unethical business decisions in the global business environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Economics (ECO)

### **ECO 5302. Economic Theory and Policy.**

An intensive study of micro-and macroeconomic concepts; the price system as it functions under competition, monopoly, monopolistic competition and oligopoly; national income measurement and determination; business cycles; money and banking; monetary policy; fiscal policy and economic stabilization. May not be counted as an elective MBA course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

### **ECO 5310. International Economics.**

Examination of the patterns of trade and finance among nations, integrating the topics of exchange rates, trade barriers, customs unions, and macroeconomics policy into a unified treatment of international economic relations. (MULT) Prerequisite: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### **ECO 5316. Managerial Economics.**

The application of economic theory and analysis to the formulation of business policy, including demand analysis, production theory, linear programming, and pricing policy. (MBA with Technology Emphasis students complete TECH 5315.) Prerequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECO 5320. Emerging Market Economies.**

The course focuses on the structural characteristics of the emerging market economies, with an emphasis on analyzing the salient economic challenges and opportunities facing contemporary emerging market economies. Prerequisites: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Finance (FIN)

### **FIN 5322. Investment Analysis.**

This course cover the application of finance theory to investment analysis. Topics include modern investment theories, asset pricing models and derivative pricing models, with a focus on application of derivatives to manage risk exposure. Prerequisite: B A 5352 with a grade of "C" or better or FIN 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5332. Portfolio Theory and Capital Markets.**

This course is designed to provide students with an overview of the strategies for creating and managing portfolios. At the end of this course, students should understand the tools for investment management.

Topics covered include portfolio construction and analysis, risk analysis, asset class management, derivatives, and portfolio performance analysis. Prerequisite: FIN 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5338. International Investments and Financial Management.**

Examination of economic incentives and rationale for international investment and financing. Topics include exchange rate risk exposure and management, global debt and equity investment and financing, foreign currency derivative markets, and general investment and financing strategy in global capital market. (MULT) Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FIN 5347C. Real Estate Investment.**

An application of capital budgeting to real estate investment decisions.

Prerequisite: FIN 5387 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FIN 5352. Financial Management.**

This course introduces students to the major considerations in financial decision making. These considerations are analyzed by exploring the role of financial managers in creating value and maximizing shareholder wealth within the constraints of legal and ethical behavior. The development of critical thinking, quantitative applications, and analytical skills are major goals of this course because the topics require knowledge of specialized problem-solving techniques. Prerequisite: ACC 5361 with a grade of "C" or better. Corequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 5387. Managerial Finance.**

Concentrates on the finance function, analysis and budgeting of funds, management of current assets, short and intermediate-term financing requirements, long-term debt policy and capital structure, capital budgeting, and the concept of cost of capital. Risk and return trade-offs also are studied. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Information Systems (ISAN)**

**ISAN 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5318. Information Technology in Digital Economy.**

This course provides an understanding of the issues in managing organizations' information assets. The course examines users' issues and challenges within the Information Technology (IT) management arena as part of a firm's business and IT strategy. The course provides frameworks and management principles that current or aspiring managers can employ with the challenges of implementing rapidly advancing technology. The focus is on managerial rather than technical issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5355. Database Management Systems.**

This course explores the concepts, principles, issues, and techniques for managing data resources using database management systems. Topics include techniques for analysis, design, and development of database systems, creating and using logical data models, database query languages, and procedures for evaluating management software. Students will develop a management information system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5357. Computing for Data Analytics.**

This course focuses on fundamentals of programming. Students will learn to design and implement applications, and programmatically handle a variety of data management functionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5358. Agile Project Management For Business Professionals.**

This course provides an in-depth study of the project management body of knowledge as applied to Information Technology, emphasizing Agile methodologies and the processes of managing scope, costs, schedules, quality, and risks. Topics Include program management, system planning and design methodologies, material & capacity requirements, human, cultural, & international issues, and their impact on the organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5360. E-Commerce: Strategies, Technologies, and Applications.**

This course is designed to familiarize students with current and emerging e-commerce technologies. Topics include Internet technology for business advantage, reinventing the future of business through e-commerce, business opportunities in e-commerce, and social, political, global, and ethical issues associated with ecommerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5364. Data Warehousing.**

This course allows students to familiarize with current and emerging data warehousing technologies that play a strategic role in business organizations. Topics include data warehouse development life cycle, data warehouse navigation, data quality, and performance issues.

Prerequisite: ISAN 5355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5367. Machine Learning.**

This course focuses on deriving actionable knowledge from data using algorithms and industry standard tools. Topics covered are the complete process, key technologies, core machine learning algorithms, and programming used for business intelligence. Prerequisite: ISAN 5357 and ANLY 5336 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5368. Information Security.**

This course covers the analysis, design, development, implementation, and maintenance of information security systems in communication networks. Topics include legal, ethical, professional, and personnel issues, concepts, theories, and processes of risk management, technology; cryptography theory and practice; and physical and hardware security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5369. Independent Study in Information Systems.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in Information Systems and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ISAN 5370. Enterprise Resource Planning and Business Intelligence.**

This course uses information technology integrations in enterprises for operational control and business intelligence is examined via Enterprise Resource Planning (ERP) applications in customer relationships management, accounting, finance, purchasing, production control, sales, marketing, and human resource management. Emphasizes managerial issues surrounding the need, selection, and implementation of ERP systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5371. Accounting Information Systems and Controls.**

This course examines accounting information systems and controls and their role in the current technology-intensive business environment. Emphasis is placed on contemporary technology and applications, information technology and business information systems assessments, design of internal controls to satisfy regulation and policy requirements, control concepts, theories, and processes, information systems auditing, systems development life cycle, and information structure, data transfer, and transaction cycles. Prerequisite: ACC 3313 or ACC 5361 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5378. Information Security Policies and Compliance.**

This course focuses on the technology and managerial issues related to information policies, regulations, and compliance that assure confidentiality, integrity, and availability of data and computer systems. Topics include information security policy, regulations, laws, standards, framework, compliance, and governance. Prerequisite: ISAN 5368 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5390A. Introduction to Design Thinking.**

This course provides an overview and hands-on introduction to Design Thinking and the human-centered design process. Topics include an introduction, defining the problem, ideation, and concept generation, prototyping & testing, refining, and launching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ISAN 5395. Internship in Information Systems.**

This course provides students with opportunities for experiential learning by contributing to a computer information systems project. The course enables integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ISAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Management (MGT)****MGT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5301. Graduate Assistant Development.**

Completion of this course is required as a condition of employment for graduate assistants. The course is seminar based and covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MGT 5310. Organizational Change Management.**

Presents an overview of the process of change in an organization and stresses the key issues involved in reengineering and renewing organizations. Problems dealing with stress and conflict during major change will be explored along with practical ideas on building effective teams to make change possible and sustainable.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5311. Process Improvement Management in Organizations.**

Learn existing and latest developments in process improvement techniques for continuous improvement and the role of quality as a system for establishing an organization's competitive advantage. Process mapping is emphasized and assessment of effectiveness in the interactions of the managerial and technical systems of organizations is also studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5312. Seminar in Management.**

Development of philosophy, strategy, and tactics in managing an enterprise. Administrative processes common to all enterprises, such as entrepreneurship, business and society, leadership and group behavior in organizations, business ethics, and international management. (Course may be repeated for credit with different course focus.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5313. Strategic Management.**

An integrative approach to policy formulation and administration (decision making) to achieve organization objectives. Should be taken the last semester of student's MBA program. Prerequisite: ACC 5361 and FIN 5387 and MKT 5321 and QMST 5334 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5314. Organizational Behavior and Theory.**

Organizational behavior and structure as influenced by environmental variables and system relationships. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5315. New Venture Management.**

This course provides an overview of the entrepreneurial process from the initial idea through start-up, growth, and harvest. Students learn how to write a business plan, manage all the elements of an entrepreneurial business, and develop a better understanding of the requirements of the entrepreneurial life path.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5318. Cross-Cultural Management.**

The global environment requires sensitivity to and the adaptation of leadership and management skills and practices, and the culture-bound differences in workplace behavior and attitudes. Explores how differences in cultural core values shape behavior and attitudes of workers, managerial colleagues, and negotiating partners. (MULT) Prerequisites: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5321. Supply Chain Management.**

A variety of tools and frameworks provide students with understanding of the basis behind supply chain decision making. Topics include supply management concepts, demand-supply management, pull/push system, capacity and resource allocation, performance measurement, relationship assessment, and outsourcing in an integrated supply chain. Require graduate standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5325. Managing Business Creativity.**

This course focuses on the means by which businesses and individuals foster and maintain their creative and innovative skills. Key topics include: idea generation and refinement, idea screening, prototype development, and feasibility analysis. Objectives are met through classroom exercises, case analysis, guest speakers, and individual and team projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5330. Seminar in Human Resource Management.**

A study of current developments and practices in human resource management, including employment laws; planning, recruitment and selection; training and development programs; wage and benefits administration; performance management, human relations and productivity; labor relations; safety and health; and current contributions to human resource management theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5333. Problems in Business Administration.**

The student is here given the opportunity to work in the field of his special interest, particularly in the subjects of accounting, business law, marketing, statistics, finance, and insurance. The course will be conducted by conferences between the student and instructors concerned. Problems will be assigned as nearly as possible for the needs of the individual student.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5335. New Venture Launch.**

The purpose of this class is to ensure students gain a full understanding of what it takes to start and grow a business. Students learn the process of creating a new venture from the inside by planning, organizing and launching an actual business. Prerequisite: MGT 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5336. Compensation and Benefits.**

This course addresses the rewards systems in organizations. Strategic and technical considerations in designing, administering and managing compensation and benefits plans in organizations, including job analysis and evaluation, wage levels and structures, legal issues, individual and group incentives, and benefits are considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5337. Organizational Staffing.**

A study of the methods involved in recruitment and selection of employees with an emphasis on measurement, job analysis, performance appraisal, legal issues, and the role of human resource planning and strategy. This course relies on statistics to teach students to make reliable and valid employment decisions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5338. Human Resource Development.**

A study of theoretical and applied perspectives on needs assessment, design, development delivery and evaluation of training and development as well as organizational change and development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5339. International Human Resource Management.**

A study of challenges that decision makers consider when managing their human resources across the globe. Drawing on theories and models from cross-cultural and international management areas, this course covers such topics as globalization, culture, emerging international assignments, and expatriate recruitment, selection, training, repatriation, and career management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5380A. Business Ethics Leadership.**

This course examines a variety of ethical issues in business from multiple stakeholder perspectives (top management, employees, community members, etc.). The course is designed to enhance moral awareness and facilitate individual development with respect to making ethical decisions that contribute to effective corporate management and leadership.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MGT 5380C. Group Dynamics in Organizations.**

This course explores the theoretical framework of group interactions as well as the practical workplace challenges associated with organizing, participating on, and managing teams and groups. It addresses the development and use of teams to improve business organizations and is recommended for graduate students preparing for business careers.

Prerequisite: B A 5351 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380D. Labor Relations and Negotiation.**

This graduate level course is a study of labor organizations and their impact as well as negotiation and conflict resolution issues. The course will examine the National Labor Relations Act (NLRA), union and employer rights under the NLRA, union organizing, collective bargaining, negotiation, contract administration, mediation and arbitration.

Corequisite: MGT 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380E. International Leadership.**

Course will include lectures, business engagements, cultural excursions, and a service-learning project. To reinforce the theories discussed in class students will interact directly with managers, employees, and international business professionals, learn perspective on cultural and leadership issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380F. Management for Organizational Sustainability.**

This course is designed to take a broad look at Sustainability from both Ecological and Organizational perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380G. Artificial Intelligence (AI) for Business Managers.**

This course provides a basic foundation in artificial intelligence for students of the business school by introducing a means to make economically sound decisions regarding the implementation areas. In this course all students of the business school may implement small projects in the functional disciplines of the business school (e.g. marketing, finance, etc.). It could also be of interest for students of the School of Engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5390. Managerial Data Analysis.**

Designed to prepare managers to make more effective decisions based upon evidence from data analysis. Covers all elements of the general linear model from t-tests to multiple regression analysis. Involves acquiring and analyzing data for prediction and explanation, developing reports with actionable recommendations, and communicating results for managerial decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5391. Managing the Communication Process.**

The study and application of theory and psychology of managerial communication using written, oral, and technological modes to communicate within the business environment. The course includes the process and product approach to graphics, leadership, problem solving, prioritizing, interviewing, and communicating change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5395. Graduate Business Internship.**

Integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in MGT 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Marketing (MKT)****MKT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5321. Marketing Management.**

A study of the planning and coordination of marketing functions, marketing policies, and the analysis of marketing administration.

Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5322. Marketing Research Methods.**

An advanced study of the marketing research process to include problem formulation, determination of sources of information and research design, design of data collection forms, design of the sample, collection of the data, analysis and interpretation of the data, preparation of the research report, and oral presentation of the research findings.

Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5323. Qualitative Research in Marketing.**

This course examines qualitative methods as used in marketing and market research. Topics include the design and execution of qualitative research projects using various qualitative methodological approaches. Activities include application of qualitative methods for conducting research. Students will apply learning in a qualitative research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5330. International Marketing.**

An application of marketing concepts to the global business environment. Examines marketing in the light of international economic, social, cultural, business, and environmental factors. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5331. Integrated Marketing Communications.**

An analysis of consumer behavior in the marketplace and its application to the preparation and presentation of a complete integrated marketing communications plan for a local, regional, and/or national client.

Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5335. Services Marketing.**

Services dominate the U.S. economy and are becoming critical for competitive advantage in companies across the globe and in all industry sectors. This course examines the foundations of services marketing, which are necessary to create, promise, and deliver a successful, interactive customer experience. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5340. Digital Marketing.**

This course examines marketing strategies in the digital environment. It examines the latest technology and analytical tools used in e-marketing and e-commerce, including online advertising, mobile marketing, social media marketing, search marketing, email marketing, and web analytics. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5341. Social Media Marketing and Analysis.**

This course provides a conceptual foundation and practical approach for conducting social media analysis and developing a social media marketing plan and/or campaign will be presented. Students will gain hands-on experience using social media strategically to achieve desired marketing goals through a hands-on project. Students will also earn applicable digital marketing certifications. Prerequisite: MKT 5321 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5345. Marketing Analytics.**

This course is a study of the scientific approach that connects customer data and competitive information to drive marketing decision-making. The course explores customer data analysis techniques and their theoretical foundations that are applied to real world business problems. Students will learn software, conduct data analysis and communicate the results. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5346. Contemporary Topics in Marketing Analytics.**

This course covers contemporary topics in marketing analytics. Students will learn (1) concepts and methods in strategic marketing analytics, (2) analytical and mapping tools in geospatial data and information, (3) concepts and methods in Bayesian Networks, (4) Topic Analysis using big data in marketing, and (5) other emerging analytical tools and methods in marketing. Prerequisite: QMST 5334 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5347. AI and Data Visualization for Marketing.**

This course consists of applied training in foundational topics for artificial intelligence and data visualization. It covers both prediction as well as classification problems. While many technical aspects are covered, the main emphasis is on knowing how to apply a wide range of modern techniques to specific marketing problems. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5348. Python for Marketing Analytics.**

This course consists of learning Python and using this programming language for data analysis and visualization. This course will help to leverage the power of historical data and to develop models that project future trends. Python will be used for exploratory data analysis, market forecasting, customer segmentation, deep learning, social media analysis and analysis of marketing images and videos. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5350. Strategic Marketing Analysis and Planning.**

This course examines strategic marketing decision making through the analysis and interpretation of marketing intelligence, metrics, and dashboards. Topics will include data-driven decision making on marketing challenges pertaining to customers, brands, marketing mix decisions, online strategy and social media, market performance, and firm profitability. Prerequisite: MKT 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5395. Independent Study in Marketing.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in Marketing. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5397I. Entrepreneurial Marketing.**

Entrepreneurship involves the discovery, implementation, and pursuit of new business opportunities. Successful execution of an entrepreneurial idea requires an effective marketing plan and related skills. In this course, we will investigate how marketing concepts (product, price, promotion, place, people, processes, brand image, segmentation, targeting, positioning, quality perceptions) can facilitate entrepreneurs' realization of their ideas. A conceptual foundation and practical approach for developing an entrepreneurship-focused marketing plan will be discussed. Using a hands-on approach, students will gain skills and knowledge on the effective use of marketing concepts to achieve entrepreneurial goals. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MKT 5398. Internship in Marketing.**

Internship in marketing is an external employer supervised, experiential learning course that enables a student to integrate professional and graduate business coursework. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5399A. Thesis.**

This course represents a student's initial thesis enrollments. No thesis credit is awarded until student has completed the thesis in Marketing Research and Analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**MKT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Business Administration (M.B.A.) degree with a major in Business Administration in the McCoy College emphasizes the knowledge and tools needed for professional success and is designed for those individuals who expect to pursue careers in the management of organizations in either the public or private sector. The curriculum provides broad-based, generalized education with the flexibility to meet individual needs. Students may choose an optional concentration in one of six areas of study in a flexible format or select a full-time cohort program. The general Flex M.B.A. program can be completed at either the San Marcos or Round Rock Campus. For the Flex M.B.A. program concentrations, some specialized courses may only be offered at the San Marcos Campus or the Round Rock Campus. The Full-Time Cohort program is available exclusively at the San Marcos Campus.

Students in the Flex M.B.A. program with a **Computer Information Systems Concentration** learn how technology has changed the way business operates and how to harness the power of technology in various business management settings.

The Flex M.B.A. with an **Engineering Technology Concentration** is offered in cooperation with the Department of Engineering Technology, an academic division of the College of Science and Engineering. M.B.A. students pursuing the Engineering Technology Concentration should find enhanced career opportunities with companies oriented significantly toward manufacturing.

Students interested in careers related to international business may choose to seek the Flex M.B.A. degree with an **International Business Concentration**. This program is designed to provide focused study in international business including cultural, historical, and political issues. While this program is available to all students in the M.B.A. program, it

is especially well suited for undergraduate students in the international studies undergraduate program.

If a student's interest is the healthcare industry, the Flex M.B.A. with a **Healthcare Administration Concentration** may be for them. Offered jointly with the College of Health Professions, the program combines academic content from both colleges to prepare students for a successful career in healthcare.

For those interested in the field of human resources, a Flex M.B.A. with a **Human Resource Management Concentration** is available. This program provides information on organizational change, staffing, compensation and benefits, and international HR.

Students in the Flex M.B.A. program with a **Supply Chain Management Concentration** will obtain the knowledge and skills required to effectively manage the supply chain process in today's global marketplace.

The **Full-Time Cohort** M.B.A. is offered exclusively at the San Marcos Campus. In addition to the core courses, students must complete an internship and an international trip in a specific semester as outlined for each cohort group.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
  - or
  - \$90 nonrefundable application fee with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - an overall competitive GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - responses to specific essay questions
  - resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
  - two letters of recommendation from persons best able to assess the student's ability to succeed in graduate school
  - GPA and GMAT/GRE Requirement
- The GMAT/GRE is not required for applicants with an overall 3.5 GPA or a 3.5 GPA in the last 60 hours GPA of undergraduate course work. If the GPA falls below the minimum requirement, the official GMAT or GRE (general test only) with competitive scores will be required in order to be considered. The Graduate College will notify applicants via email should this occur.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Business Administration (M.B.A.) degree with a major in Business Administration requires 36 semester credit hours.

B A 5100 and B A 5351 should be taken in the first semester, and MGT 5313 should be taken in the last term because it serves as the capstone course that includes the comprehensive examination.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of C or lower. Even if the grade of C or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third C (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 C Policy takes precedent over probationary status. So, if a student earns a third C they are automatically dismissed from their program permanently; even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
B A 5100	Business Professional Development Seminar (Taken three times in different terms)	3
B A 5351	Organizational Performance and Competitive Advantage	3
ACC 5361	Accounting Analysis for Managerial Decision Making	3
ECO 5316	Managerial Economics	3
FIN 5352	Financial Management	3
MGT 5313	Strategic Management	3
MGT 5314	Organizational Behavior and Theory	3
MKT 5321	Marketing Management	3
ANLY 5334	Statistical Methods for Business	3
ANLY 5338	Operations Management	3

### Electives

Choose 6 hours of advisor-approved electives. <sup>1</sup> 6

**Total Hours** 36

<sup>1</sup> Electives are available in accounting, business law, computer information systems, economics, finance, management, marketing, quantitative methods, and disciplines outside the field of business. A maximum of three elective hours may be taken outside of business, but the courses must be approved by the graduate advisor **before the student enrolls** in the course.

## Comprehensive Examination Requirement

The comprehensive examination consists of a consulting project with companies in the community. The exam is a written paper and oral presentation at the end of the semester, associated with capstone course MGT 5313. If the student fails, they must retake the capstone course, MGT 5313, the following term.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Business Administration: ACC (p. 1028), ANLY (p. 1031), B A (p. 1032), BLAW (p. 1033), ECO (p. 1033), FIN (p. 1033), ISAN (p. 1034), MGT (p. 1036), MKT (p. 1039)

## Courses Offered

*Students must complete the appropriate background course or its equivalent before enrolling in elective courses.*

### Accounting (ACC)

#### ACC 5315. Selected Topics in Financial Accounting.

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5316. Advanced Accounting.

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-forprofit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5320. Auditing.**

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5323. Accounting Data Analytics.**

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5340. Individual Income Tax.**

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5350. Professional Accounting Research.**

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5352. Financial Statement Reporting and Analysis.**

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5355. IT Auditing.**

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5357. Regulation and Professionalism.**

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments. Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5361. Accounting Analysis for Managerial Decision Making.**

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5362. Cost and Managerial Accounting Theory.**

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules or the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Analytics (ANLY)****ANLY 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5332. Optimization for Business Analytics.**

This course introduces optimization theory and applications for analyzing and solving business decision-making problems. The students will learn to apply in various business domains optimization concepts and tools such as linear programming, integer/mixed-integer programming, and other classes of optimization models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5334. Statistical Methods for Business.**

This course provides the quantitative foundation for business analysis and decision making. Topics include inferential statistics, regression analysis, and other analytical/modeling techniques with wide applicability in decision-making and problem solving in all functional areas of business.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5335. Forecasting and Simulation.**

This course introduces the concepts and principles of forecasting and simulation techniques as applies to planning and decision making in organizations. Topical coverage includes time series forecasting, causal forecasting, discrete event simulation, and continuous-event simulation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5336. Analytics.**

This course introduces analytics which refers to the process of transforming data into information for making decisions. The topics include the introduction to analytics, visualization, analytics applications, and challenges related to business data. Students will learn how to use software, conduct data analysis and communicate their results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5338. Operations Management.**

This course introduces the processes and strategies to create, produce, and deliver goods and services that drive organizations' overall success. It will highlight operational and tactical problems organizations typically confront and introduce the concepts and analytical tools (both process and systems based) used to deal with these problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5342. Probability and Statistical Models.**

This course introduces the concept of probability and probability distributions. It includes general and generalized linear models, inflated and mixture models, and hierarchical models. Model validity and choice will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5343. Data Mining.**

This course covers data mining concepts and applications of data mining techniques to solve business problems. It emphasizes algorithms such as classification, clustering, association, and text mining. Model selection and assessment are also emphasized. Prerequisite: ANLY 5336 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5369. Independent Study in Analytics.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in quantitative methods and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANLY 5390A. Statistical Computing.**

This course covers programming and statistical computing concepts. Programming concepts include data manipulation, data structures, control structures, functions, basic algorithms, and matrix manipulations. Statistical computing topics include numerical linear algebra, Monte Carlo methods, and numerical optimization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ANLY 5395. Internship in Analytics.**

This course is based on experiential learning while the student works in quantitative methods and statistics. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Data Analytics and Information Systems. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANLY 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Business Administration (B A)****B A 5100. Business Professional Development Seminar.**

This course is designed to contribute to the development of the business professional. Academic content is supplemented by training in soft skill topics to better prepare the students for a successful business career. Repeatable for credit with different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**B A 5351. Organizational Performance and Competitive Advantage.**

This course is designed to provide an integrative understanding of the firm. A variety of organizational models and perspectives will be incorporated to facilitate understanding of the complexities of the firm, its environments, and its relationships with stakeholders. Includes focus on case analysis issues and communication skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5353. Understanding and Analyzing Organizational Problems.**

An introduction to the concepts of economic theory and optimization, with an emphasis on developing skills in data and economic analysis to solve business problems. Coverage includes prices, costs, market structures, macroeconomic policies, and optimization. Corequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5368A. MBA Full Time Cohort International Experience.**

This course will focus on developing an understanding and analysis of issues related to business challenges in another country. Students will gain first-hand experience with the business practices, culture and economy of another country. Corequisite: MGT 5313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**B A 5396. Internship in Business Administration.**

This course is based on experiential learning while the student works in business administration. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**B A 5398. Independent Study in Business Administration.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in business administration and work independently on a specialized project. Course may be repeated with approval of associate dean for graduate programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Business Law (BLAW)

### BLAW 5310. The Employment Relationship.

A study of trends in the rapidly evolving "law of workplace," with emphasis on how lawmakers attempt to balance the rights and responsibilities of employers and workers. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### BLAW 5315. Legal Issues in International Business.

This course examines legal issues relevant to international business transactions, emphasizing international trade, licensing of intellectual property, and foreign direct investment. Environmental, dispute resolution, labor, e-commerce, marketing, and ethical issues will also be discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### BLAW 5333. Legal Issues of Sustainability and Responsibility.

Diverse frameworks and analytical methods underlying our understanding of sustainability are explored, including the legal aspects & impact on business, society, environment and economy. Topics include corporate governance, globalization, urbanization, energy, human population, food, natural resources, water and equity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### BLAW 5364. Commercial Law.

A traditional business law course which examines sales, negotiable instruments, creditor's rights and remedies, secured transactions, bankruptcy law, personal property, bailments, real property and landlord-tenant relationships. Prerequisite: BLAW 3301 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### BLAW 5368I. International Business Ethics.

This course examines the legal and ethical challenges inherent in international marketing, international environmental and energy practices, international labor and employment practices, trade negotiations, foreign direct investment, intellectual property licensing, technology development, data collection mining, corporate tax inversion, and global corporate social responsibility. Students will also discuss the individual behavioral, organizational, and cultural factors that influence ethical and unethical business decisions in the global business environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Economics (ECO)

### ECO 5302. Economic Theory and Policy.

An intensive study of micro-and macroeconomic concepts; the price system as it functions under competition, monopoly, monopolistic competition and oligopoly; national income measurement and determination; business cycles; money and banking; monetary policy; fiscal policy and economic stabilization. May not be counted as an elective MBA course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

### ECO 5310. International Economics.

Examination of the patterns of trade and finance among nations, integrating the topics of exchange rates, trade barriers, customs unions, and macroeconomics policy into a unified treatment of international economic relations. (MULT) Prerequisite: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### ECO 5316. Managerial Economics.

The application of economic theory and analysis to the formulation of business policy, including demand analysis, production theory, linear programming, and pricing policy. (MBA with Technology Emphasis students complete TECH 5315.) Prerequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ECO 5320. Emerging Market Economies.

The course focuses on the structural characteristics of the emerging market economies, with an emphasis on analyzing the salient economic challenges and opportunities facing contemporary emerging market economies. Prerequisites: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Finance (FIN)

### FIN 5322. Investment Analysis.

This course cover the application of finance theory to investment analysis. Topics include modern investment theories, asset pricing models and derivative pricing models, with a focus on application of derivatives to manage risk exposure. Prerequisite: B A 5352 with a grade of "C" or better or FIN 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5332. Portfolio Theory and Capital Markets.**

This course is designed to provide students with an overview of the strategies for creating and managing portfolios. At the end of this course, students should understand the tools for investment management.

Topics covered include portfolio construction and analysis, risk analysis, asset class management, derivatives, and portfolio performance analysis. Prerequisite: FIN 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5338. International Investments and Financial Management.**

Examination of economic incentives and rationale for international investment and financing. Topics include exchange rate risk exposure and management, global debt and equity investment and financing, foreign currency derivative markets, and general investment and financing strategy in global capital market. (MULT) Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FIN 5347C. Real Estate Investment.**

An application of capital budgeting to real estate investment decisions.

Prerequisite: FIN 5387 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FIN 5352. Financial Management.**

This course introduces students to the major considerations in financial decision making. These considerations are analyzed by exploring the role of financial managers in creating value and maximizing shareholder wealth within the constraints of legal and ethical behavior. The development of critical thinking, quantitative applications, and analytical skills are major goals of this course because the topics require knowledge of specialized problem-solving techniques. Prerequisite: ACC 5361 with a grade of "C" or better. Corequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 5387. Managerial Finance.**

Concentrates on the finance function, analysis and budgeting of funds, management of current assets, short and intermediate-term financing requirements, long-term debt policy and capital structure, capital budgeting, and the concept of cost of capital. Risk and return trade-offs also are studied. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Information Systems (ISAN)****ISAN 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5318. Information Technology in Digital Economy.**

This course provides an understanding of the issues in managing organizations' information assets. The course examines users' issues and challenges within the Information Technology (IT) management arena as part of a firm's business and IT strategy. The course provides frameworks and management principles that current or aspiring managers can employ with the challenges of implementing rapidly advancing technology. The focus is on managerial rather than technical issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5355. Database Management Systems.**

This course explores the concepts, principles, issues, and techniques for managing data resources using database management systems. Topics include techniques for analysis, design, and development of database systems, creating and using logical data models, database query languages, and procedures for evaluating management software. Students will develop a management information system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5357. Computing for Data Analytics.**

This course focuses on fundamentals of programming. Students will learn to design and implement applications, and programmatically handle a variety of data management functionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5358. Agile Project Management For Business Professionals.**

This course provides an in-depth study of the project management body of knowledge as applied to Information Technology, emphasizing Agile methodologies and the processes of managing scope, costs, schedules, quality, and risks. Topics Include program management, system planning and design methodologies, material & capacity requirements, human, cultural, & international issues, and their impact on the organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5360. E-Commerce: Strategies, Technologies, and Applications.**

This course is designed to familiarize students with current and emerging e-commerce technologies. Topics include Internet technology for business advantage, reinventing the future of business through e-commerce, business opportunities in e-commerce, and social, political, global, and ethical issues associated with ecommerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5364. Data Warehousing.**

This course allows students to familiarize with current and emerging data warehousing technologies that play a strategic role in business organizations. Topics include data warehouse development life cycle, data warehouse navigation, data quality, and performance issues.

Prerequisite: ISAN 5355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5367. Machine Learning.**

This course focuses on deriving actionable knowledge from data using algorithms and industry standard tools. Topics covered are the complete process, key technologies, core machine learning algorithms, and programming used for business intelligence. Prerequisite: ISAN 5357 and ANLY 5336 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5368. Information Security.**

This course covers the analysis, design, development, implementation, and maintenance of information security systems in communication networks. Topics include legal, ethical, professional, and personnel issues, concepts, theories, and processes of risk management, technology; cryptography theory and practice; and physical and hardware security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5369. Independent Study in Information Systems.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in Information Systems and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ISAN 5370. Enterprise Resource Planning and Business Intelligence.**

This course uses information technology integrations in enterprises for operational control and business intelligence is examined via Enterprise Resource Planning (ERP) applications in customer relationships management, accounting, finance, purchasing, production control, sales, marketing, and human resource management. Emphasizes managerial issues surrounding the need, selection, and implementation of ERP systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5371. Accounting Information Systems and Controls.**

This course examines accounting information systems and controls and their role in the current technology-intensive business environment. Emphasis is placed on contemporary technology and applications, information technology and business information systems assessments, design of internal controls to satisfy regulation and policy requirements, control concepts, theories, and processes, information systems auditing, systems development life cycle, and information structure, data transfer, and transaction cycles. Prerequisite: ACC 3313 or ACC 5361 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5378. Information Security Policies and Compliance.**

This course focuses on the technology and managerial issues related to information policies, regulations, and compliance that assure confidentiality, integrity, and availability of data and computer systems. Topics include information security policy, regulations, laws, standards, framework, compliance, and governance. Prerequisite: ISAN 5368 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5390A. Introduction to Design Thinking.**

This course provides an overview and hands-on introduction to Design Thinking and the human-centered design process. Topics include an introduction, defining the problem, ideation, and concept generation, prototyping & testing, refining, and launching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ISAN 5395. Internship in Information Systems.**

This course provides students with opportunities for experiential learning by contributing to a computer information systems project. The course enables integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ISAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Management (MGT)****MGT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5301. Graduate Assistant Development.**

Completion of this course is required as a condition of employment for graduate assistants. The course is seminar based and covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MGT 5310. Organizational Change Management.**

Presents an overview of the process of change in an organization and stresses the key issues involved in reengineering and renewing organizations. Problems dealing with stress and conflict during major change will be explored along with practical ideas on building effective teams to make change possible and sustainable.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5311. Process Improvement Management in Organizations.**

Learn existing and latest developments in process improvement techniques for continuous improvement and the role of quality as a system for establishing an organization's competitive advantage. Process mapping is emphasized and assessment of effectiveness in the interactions of the managerial and technical systems of organizations is also studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5312. Seminar in Management.**

Development of philosophy, strategy, and tactics in managing an enterprise. Administrative processes common to all enterprises, such as entrepreneurship, business and society, leadership and group behavior in organizations, business ethics, and international management. (Course may be repeated for credit with different course focus.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5313. Strategic Management.**

An integrative approach to policy formulation and administration (decision making) to achieve organization objectives. Should be taken the last semester of student's MBA program. Prerequisite: ACC 5361 and FIN 5387 and MKT 5321 and QMST 5334 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MGT 5314. Organizational Behavior and Theory.**

Organizational behavior and structure as influenced by environmental variables and system relationships. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5315. New Venture Management.**

This course provides an overview of the entrepreneurial process from the initial idea through start-up, growth, and harvest. Students learn how to write a business plan, manage all the elements of an entrepreneurial business, and develop a better understanding of the requirements of the entrepreneurial life path.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5318. Cross-Cultural Management.**

The global environment requires sensitivity to and the adaptation of leadership and management skills and practices, and the culture-bound differences in workplace behavior and attitudes. Explores how differences in cultural core values shape behavior and attitudes of workers, managerial colleagues, and negotiating partners. (MULT) Prerequisites: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5321. Supply Chain Management.**

A variety of tools and frameworks provide students with understanding of the basis behind supply chain decision making. Topics include supply management concepts, demand-supply management, pull/push system, capacity and resource allocation, performance measurement, relationship assessment, and outsourcing in an integrated supply chain. Require graduate standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5325. Managing Business Creativity.**

This course focuses on the means by which businesses and individuals foster and maintain their creative and innovative skills. Key topics include: idea generation and refinement, idea screening, prototype development, and feasibility analysis. Objectives are met through classroom exercises, case analysis, guest speakers, and individual and team projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5330. Seminar in Human Resource Management.**

A study of current developments and practices in human resource management, including employment laws; planning, recruitment and selection; training and development programs; wage and benefits administration; performance management, human relations and productivity; labor relations; safety and health; and current contributions to human resource management theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5333. Problems in Business Administration.**

The student is here given the opportunity to work in the field of his special interest, particularly in the subjects of accounting, business law, marketing, statistics, finance, and insurance. The course will be conducted by conferences between the student and instructors concerned. Problems will be assigned as nearly as possible for the needs of the individual student.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5335. New Venture Launch.**

The purpose of this class is to ensure students gain a full understanding of what it takes to start and grow a business. Students learn the process of creating a new venture from the inside by planning, organizing and launching an actual business. Prerequisite: MGT 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5336. Compensation and Benefits.**

This course addresses the rewards systems in organizations. Strategic and technical considerations in designing, administering and managing compensation and benefits plans in organizations, including job analysis and evaluation, wage levels and structures, legal issues, individual and group incentives, and benefits are considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5337. Organizational Staffing.**

A study of the methods involved in recruitment and selection of employees with an emphasis on measurement, job analysis, performance appraisal, legal issues, and the role of human resource planning and strategy. This course relies on statistics to teach students to make reliable and valid employment decisions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5338. Human Resource Development.**

A study of theoretical and applied perspectives on needs assessment, design, development delivery and evaluation of training and development as well as organizational change and development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5339. International Human Resource Management.**

A study of challenges that decision makers consider when managing their human resources across the globe. Drawing on theories and models from cross-cultural and international management areas, this course covers such topics as globalization, culture, emerging international assignments, and expatriate recruitment, selection, training, repatriation, and career management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5380A. Business Ethics Leadership.**

This course examines a variety of ethical issues in business from multiple stakeholder perspectives (top management, employees, community members, etc.). The course is designed to enhance moral awareness and facilitate individual development with respect to making ethical decisions that contribute to effective corporate management and leadership.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MGT 5380C. Group Dynamics in Organizations.**

This course explores the theoretical framework of group interactions as well as the practical workplace challenges associated with organizing, participating on, and managing teams and groups. It addresses the development and use of teams to improve business organizations and is recommended for graduate students preparing for business careers.

Prerequisite: B A 5351 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380D. Labor Relations and Negotiation.**

This graduate level course is a study of labor organizations and their impact as well as negotiation and conflict resolution issues. The course will examine the National Labor Relations Act (NLRA), union and employer rights under the NLRA, union organizing, collective bargaining, negotiation, contract administration, mediation and arbitration.

Corequisite: MGT 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380E. International Leadership.**

Course will include lectures, business engagements, cultural excursions, and a service-learning project. To reinforce the theories discussed in class students will interact directly with managers, employees, and international business professionals, learn perspective on cultural and leadership issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380F. Management for Organizational Sustainability.**

This course is designed to take a broad look at Sustainability from both Ecological and Organizational perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380G. Artificial Intelligence (AI) for Business Managers.**

This course provides a basic foundation in artificial intelligence for students of the business school by introducing a means to make economically sound decisions regarding the implementation areas. In this course all students of the business school may implement small projects in the functional disciplines of the business school (e.g. marketing, finance, etc.). It could also be of interest for students of the School of Engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5390. Managerial Data Analysis.**

Designed to prepare managers to make more effective decisions based upon evidence from data analysis. Covers all elements of the general linear model from t-tests to multiple regression analysis. Involves acquiring and analyzing data for prediction and explanation, developing reports with actionable recommendations, and communicating results for managerial decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5391. Managing the Communication Process.**

The study and application of theory and psychology of managerial communication using written, oral, and technological modes to communicate within the business environment. The course includes the process and product approach to graphics, leadership, problem solving, prioritizing, interviewing, and communicating change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5395. Graduate Business Internship.**

Integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in MGT 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Marketing (MKT)****MKT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5321. Marketing Management.**

A study of the planning and coordination of marketing functions, marketing policies, and the analysis of marketing administration.

Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5322. Marketing Research Methods.**

An advanced study of the marketing research process to include problem formulation, determination of sources of information and research design, design of data collection forms, design of the sample, collection of the data, analysis and interpretation of the data, preparation of the research report, and oral presentation of the research findings.

Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5323. Qualitative Research in Marketing.**

This course examines qualitative methods as used in marketing and market research. Topics include the design and execution of qualitative research projects using various qualitative methodological approaches. Activities include application of qualitative methods for conducting research. Students will apply learning in a qualitative research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5330. International Marketing.**

An application of marketing concepts to the global business environment. Examines marketing in the light of international economic, social, cultural, business, and environmental factors. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5331. Integrated Marketing Communications.**

An analysis of consumer behavior in the marketplace and its application to the preparation and presentation of a complete integrated marketing communications plan for a local, regional, and/or national client.

Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5335. Services Marketing.**

Services dominate the U.S. economy and are becoming critical for competitive advantage in companies across the globe and in all industry sectors. This course examines the foundations of services marketing, which are necessary to create, promise, and deliver a successful, interactive customer experience. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5340. Digital Marketing.**

This course examines marketing strategies in the digital environment. It examines the latest technology and analytical tools used in e-marketing and e-commerce, including online advertising, mobile marketing, social media marketing, search marketing, email marketing, and web analytics. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5341. Social Media Marketing and Analysis.**

This course provides a conceptual foundation and practical approach for conducting social media analysis and developing a social media marketing plan and/or campaign will be presented. Students will gain hands-on experience using social media strategically to achieve desired marketing goals through a hands-on project. Students will also earn applicable digital marketing certifications. Prerequisite: MKT 5321 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5345. Marketing Analytics.**

This course is a study of the scientific approach that connects customer data and competitive information to drive marketing decision-making. The course explores customer data analysis techniques and their theoretical foundations that are applied to real world business problems. Students will learn software, conduct data analysis and communicate the results. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5346. Contemporary Topics in Marketing Analytics.**

This course covers contemporary topics in marketing analytics. Students will learn (1) concepts and methods in strategic marketing analytics, (2) analytical and mapping tools in geospatial data and information, (3) concepts and methods in Bayesian Networks, (4) Topic Analysis using big data in marketing, and (5) other emerging analytical tools and methods in marketing. Prerequisite: QMST 5334 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5347. AI and Data Visualization for Marketing.**

This course consists of applied training in foundational topics for artificial intelligence and data visualization. It covers both prediction as well as classification problems. While many technical aspects are covered, the main emphasis is on knowing how to apply a wide range of modern techniques to specific marketing problems. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5348. Python for Marketing Analytics.**

This course consists of learning Python and using this programming language for data analysis and visualization. This course will help to leverage the power of historical data and to develop models that project future trends. Python will be used for exploratory data analysis, market forecasting, customer segmentation, deep learning, social media analysis and analysis of marketing images and videos. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5350. Strategic Marketing Analysis and Planning.**

This course examines strategic marketing decision making through the analysis and interpretation of marketing intelligence, metrics, and dashboards. Topics will include data-driven decision making on marketing challenges pertaining to customers, brands, marketing mix decisions, online strategy and social media, market performance, and firm profitability. Prerequisite: MKT 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5395. Independent Study in Marketing.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in Marketing. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5397I. Entrepreneurial Marketing.**

Entrepreneurship involves the discovery, implementation, and pursuit of new business opportunities. Successful execution of an entrepreneurial idea requires an effective marketing plan and related skills. In this course, we will investigate how marketing concepts (product, price, promotion, place, people, processes, brand image, segmentation, targeting, positioning, quality perceptions) can facilitate entrepreneurs' realization of their ideas. A conceptual foundation and practical approach for developing an entrepreneurship-focused marketing plan will be discussed. Using a hands-on approach, students will gain skills and knowledge on the effective use of marketing concepts to achieve entrepreneurial goals. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MKT 5398. Internship in Marketing.**

Internship in marketing is an external employer supervised, experiential learning course that enables a student to integrate professional and graduate business coursework. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5399A. Thesis.**

This course represents a student's initial thesis enrollments. No thesis credit is awarded until student has completed the thesis in Marketing Research and Analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MKT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Business Administration (M.B.A.) degree with a major in Business Administration in the McCoy College emphasizes the knowledge and tools needed for professional success and is designed for those individuals who expect to pursue careers in the management of organizations in either the public or private sector. The curriculum provides broad-based, generalized education with the flexibility to meet individual needs. Students may choose an optional concentration in one of six areas of study in a flexible format or select a full-time cohort program. The general Flex M.B.A. program can be completed at either the San Marcos or Round Rock Campus. For the Flex M.B.A. program concentrations, some specialized courses may only be offered at the San Marcos Campus or the Round Rock Campus. The Full-Time Cohort program is available exclusively at the San Marcos Campus.

Students in the Flex M.B.A. program with a **Computer Information Systems Concentration** learn how technology has changed the way business operates and how to harness the power of technology in various business management settings.

The Flex M.B.A. with an **Engineering Technology Concentration** is offered in cooperation with the Department of Engineering Technology, an academic division of the College of Science and Engineering. M.B.A. students pursuing the Engineering Technology Concentration should find enhanced career opportunities with companies oriented significantly toward manufacturing.

Students interested in careers related to international business may choose to seek the Flex M.B.A. degree with an **International Business Concentration**. This program is designed to provide focused study in international business including cultural, historical, and political issues. While this program is available to all students in the M.B.A. program, it

is especially well suited for undergraduate students in the international studies undergraduate program.

If a student's interest is the healthcare industry, the Flex M.B.A. with a **Healthcare Administration Concentration** may be for them. Offered jointly with the College of Health Professions, the program combines academic content from both colleges to prepare students for a successful career in healthcare.

For those interested in the field of human resources, a Flex M.B.A. with a **Human Resource Management Concentration** is available. This program provides information on organizational change, staffing, compensation and benefits, and international HR.

Students in the Flex M.B.A. program with a **Supply Chain Management Concentration** will obtain the knowledge and skills required to effectively manage the supply chain process in today's global marketplace.

The **Full-Time Cohort** M.B.A. is offered exclusively at the San Marcos Campus. In addition to the core courses, students must complete an internship and an international trip in a specific semester as outlined for each cohort group.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
  - or
  - \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - an overall competitive GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - responses to specific essay questions
  - resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
  - two letters of recommendation from persons best able to assess the student's ability to succeed in graduate school
  - GPA and GMAT/GRE Requirement
- The GMAT/GRE is not required for applicants with an overall 3.5 GPA or a 3.5 GPA in the last 60 hours GPA of undergraduate course work. If the GPA falls below the minimum requirement, the official GMAT or GRE (general test only) with competitive scores will be required in



order to be considered. The Graduate College will notify applicants via email should this occur.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- [official Duolingo scores required with a 110 overall](#)
- [official TOEFL Essentials scores required with an 8.5 overall](#)

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Business Administration (M.B.A.) degree with a major in Business Administration requires 36 semester credit hours, including a thesis.

B A 5100 and B A 5351 should be taken in the first term, and MGT 5313 should be taken in the last term because it serves as the capstone course and includes the comprehensive examination.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of C or lower. Even if the grade of C or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third C (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 C Policy takes precedent over probationary status. So, if a student earns a third C they are automatically dismissed from their program permanently; even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
B A 5100	Business Professional Development Seminar (Taken three times in different terms)	3
B A 5351	Organizational Performance and Competitive Advantage	3
ACC 5361	Accounting Analysis for Managerial Decision Making	3
ECO 5316	Managerial Economics	3
FIN 5352	Financial Management	3
MGT 5313	Strategic Management	3

MGT 5314	Organizational Behavior and Theory	3
MKT 5321	Marketing Management	3
ANLY 5334	Statistical Methods for Business	3
ANLY 5338	Operations Management	3
<b>Thesis</b>		
MGT 5399A	Thesis	3
Choose a minimum of three hours from the following:		3
MGT 5199B	Thesis	
MGT 5299B	Thesis	
MGT 5399B	Thesis	
MGT 5599B	Thesis	
MGT 5999B	Thesis	

**Total Hours** **36**

## Comprehensive Examination Requirement

The comprehensive examination consists of a consulting project with companies in the community. The exam is a written paper and oral presentation at the end of the semester, associated with capstone course MGT 5313. If the student fails, they must retake the capstone course, MGT 5313, the following term.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Business Administration: ACC (p. 1043), ANLY (p. 1046), B A (p. 1047), BLAW (p. 1048), ECO (p. 1048), FIN (p. 1048), ISAN (p. 1049), MGT (p. 1051), MKT (p. 1054)

## Courses Offered

***Students must complete the appropriate background course or its equivalent before enrolling in elective courses.***

### Accounting (ACC)

#### **ACC 5315. Selected Topics in Financial Accounting.**

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ACC 5316. Advanced Accounting.**

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-forprofit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5320. Auditing.**

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5323. Accounting Data Analytics.**

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5340. Individual Income Tax.**

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5350. Professional Accounting Research.**

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5352. Financial Statement Reporting and Analysis.**

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5355. IT Auditing.**

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5357. Regulation and Professionalism.**

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments. Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5361. Accounting Analysis for Managerial Decision Making.**

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5362. Cost and Managerial Accounting Theory.**

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules or the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Analytics (ANLY)****ANLY 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5332. Optimization for Business Analytics.**

This course introduces optimization theory and applications for analyzing and solving business decision-making problems. The students will learn to apply in various business domains optimization concepts and tools such as linear programming, integer/mixed-integer programming, and other classes of optimization models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5334. Statistical Methods for Business.**

This course provides the quantitative foundation for business analysis and decision making. Topics include inferential statistics, regression analysis, and other analytical/modeling techniques with wide applicability in decision-making and problem solving in all functional areas of business.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5335. Forecasting and Simulation.**

This course introduces the concepts and principles of forecasting and simulation techniques as applies to planning and decision making in organizations. Topical coverage includes time series forecasting, causal forecasting, discrete event simulation, and continuous-event simulation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5336. Analytics.**

This course introduces analytics which refers to the process of transforming data into information for making decisions. The topics include the introduction to analytics, visualization, analytics applications, and challenges related to business data. Students will learn how to use software, conduct data analysis and communicate their results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5338. Operations Management.**

This course introduces the processes and strategies to create, produce, and deliver goods and services that drive organizations' overall success. It will highlight operational and tactical problems organizations typically confront and introduce the concepts and analytical tools (both process and systems based) used to deal with these problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5342. Probability and Statistical Models.**

This course introduces the concept of probability and probability distributions. It includes general and generalized linear models, inflated and mixture models, and hierarchical models. Model validity and choice will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5343. Data Mining.**

This course covers data mining concepts and applications of data mining techniques to solve business problems. It emphasizes algorithms such as classification, clustering, association, and text mining. Model selection and assessment are also emphasized. Prerequisite: ANLY 5336 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5369. Independent Study in Analytics.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in quantitative methods and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANLY 5390A. Statistical Computing.**

This course covers programming and statistical computing concepts. Programming concepts include data manipulation, data structures, control structures, functions, basic algorithms, and matrix manipulations. Statistical computing topics include numerical linear algebra, Monte Carlo methods, and numerical optimization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ANLY 5395. Internship in Analytics.**

This course is based on experiential learning while the student works in quantitative methods and statistics. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Data Analytics and Information Systems. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANLY 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Business Administration (B A)****B A 5100. Business Professional Development Seminar.**

This course is designed to contribute to the development of the business professional. Academic content is supplemented by training in soft skill topics to better prepare the students for a successful business career. Repeatable for credit with different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**B A 5351. Organizational Performance and Competitive Advantage.**

This course is designed to provide an integrative understanding of the firm. A variety of organizational models and perspectives will be incorporated to facilitate understanding of the complexities of the firm, its environments, and its relationships with stakeholders. Includes focus on case analysis issues and communication skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5353. Understanding and Analyzing Organizational Problems.**

An introduction to the concepts of economic theory and optimization, with an emphasis on developing skills in data and economic analysis to solve business problems. Coverage includes prices, costs, market structures, macroeconomic policies, and optimization. Corequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5368A. MBA Full Time Cohort International Experience.**

This course will focus on developing an understanding and analysis of issues related to business challenges in another country. Students will gain first-hand experience with the business practices, culture and economy of another country. Corequisite: MGT 5313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**B A 5396. Internship in Business Administration.**

This course is based on experiential learning while the student works in business administration. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**B A 5398. Independent Study in Business Administration.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in business administration and work independently on a specialized project. Course may be repeated with approval of associate dean for graduate programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Business Law (BLAW)

### BLAW 5310. The Employment Relationship.

A study of trends in the rapidly evolving "law of workplace," with emphasis on how lawmakers attempt to balance the rights and responsibilities of employers and workers. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### BLAW 5315. Legal Issues in International Business.

This course examines legal issues relevant to international business transactions, emphasizing international trade, licensing of intellectual property, and foreign direct investment. Environmental, dispute resolution, labor, e-commerce, marketing, and ethical issues will also be discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### BLAW 5333. Legal Issues of Sustainability and Responsibility.

Diverse frameworks and analytical methods underlying our understanding of sustainability are explored, including the legal aspects & impact on business, society, environment and economy. Topics include corporate governance, globalization, urbanization, energy, human population, food, natural resources, water and equity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### BLAW 5364. Commercial Law.

A traditional business law course which examines sales, negotiable instruments, creditor's rights and remedies, secured transactions, bankruptcy law, personal property, bailments, real property and landlord-tenant relationships. Prerequisite: BLAW 3301 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### BLAW 5368I. International Business Ethics.

This course examines the legal and ethical challenges inherent in international marketing, international environmental and energy practices, international labor and employment practices, trade negotiations, foreign direct investment, intellectual property licensing, technology development, data collection mining, corporate tax inversion, and global corporate social responsibility. Students will also discuss the individual behavioral, organizational, and cultural factors that influence ethical and unethical business decisions in the global business environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Economics (ECO)

### ECO 5302. Economic Theory and Policy.

An intensive study of micro-and macroeconomic concepts; the price system as it functions under competition, monopoly, monopolistic competition and oligopoly; national income measurement and determination; business cycles; money and banking; monetary policy; fiscal policy and economic stabilization. May not be counted as an elective MBA course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

### ECO 5310. International Economics.

Examination of the patterns of trade and finance among nations, integrating the topics of exchange rates, trade barriers, customs unions, and macroeconomics policy into a unified treatment of international economic relations. (MULT) Prerequisite: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### ECO 5316. Managerial Economics.

The application of economic theory and analysis to the formulation of business policy, including demand analysis, production theory, linear programming, and pricing policy. (MBA with Technology Emphasis students complete TECH 5315.) Prerequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ECO 5320. Emerging Market Economies.

The course focuses on the structural characteristics of the emerging market economies, with an emphasis on analyzing the salient economic challenges and opportunities facing contemporary emerging market economies. Prerequisites: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Finance (FIN)

### FIN 5322. Investment Analysis.

This course cover the application of finance theory to investment analysis. Topics include modern investment theories, asset pricing models and derivative pricing models, with a focus on application of derivatives to manage risk exposure. Prerequisite: B A 5352 with a grade of "C" or better or FIN 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5332. Portfolio Theory and Capital Markets.**

This course is designed to provide students with an overview of the strategies for creating and managing portfolios. At the end of this course, students should understand the tools for investment management.

Topics covered include portfolio construction and analysis, risk analysis, asset class management, derivatives, and portfolio performance analysis. Prerequisite: FIN 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5338. International Investments and Financial Management.**

Examination of economic incentives and rationale for international investment and financing. Topics include exchange rate risk exposure and management, global debt and equity investment and financing, foreign currency derivative markets, and general investment and financing strategy in global capital market. (MULT) Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FIN 5347C. Real Estate Investment.**

An application of capital budgeting to real estate investment decisions.

Prerequisite: FIN 5387 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FIN 5352. Financial Management.**

This course introduces students to the major considerations in financial decision making. These considerations are analyzed by exploring the role of financial managers in creating value and maximizing shareholder wealth within the constraints of legal and ethical behavior. The development of critical thinking, quantitative applications, and analytical skills are major goals of this course because the topics require knowledge of specialized problem-solving techniques. Prerequisite: ACC 5361 with a grade of "C" or better. Corequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 5387. Managerial Finance.**

Concentrates on the finance function, analysis and budgeting of funds, management of current assets, short and intermediate-term financing requirements, long-term debt policy and capital structure, capital budgeting, and the concept of cost of capital. Risk and return trade-offs also are studied. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Information Systems (ISAN)****ISAN 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5318. Information Technology in Digital Economy.**

This course provides an understanding of the issues in managing organizations' information assets. The course examines users' issues and challenges within the Information Technology (IT) management arena as part of a firm's business and IT strategy. The course provides frameworks and management principles that current or aspiring managers can employ with the challenges of implementing rapidly advancing technology. The focus is on managerial rather than technical issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5355. Database Management Systems.**

This course explores the concepts, principles, issues, and techniques for managing data resources using database management systems. Topics include techniques for analysis, design, and development of database systems, creating and using logical data models, database query languages, and procedures for evaluating management software. Students will develop a management information system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5357. Computing for Data Analytics.**

This course focuses on fundamentals of programming. Students will learn to design and implement applications, and programmatically handle a variety of data management functionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5358. Agile Project Management For Business Professionals.**

This course provides an in-depth study of the project management body of knowledge as applied to Information Technology, emphasizing Agile methodologies and the processes of managing scope, costs, schedules, quality, and risks. Topics Include program management, system planning and design methodologies, material & capacity requirements, human, cultural, & international issues, and their impact on the organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5360. E-Commerce: Strategies, Technologies, and Applications.**

This course is designed to familiarize students with current and emerging e-commerce technologies. Topics include Internet technology for business advantage, reinventing the future of business through e-commerce, business opportunities in e-commerce, and social, political, global, and ethical issues associated with ecommerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5364. Data Warehousing.**

This course allows students to familiarize with current and emerging data warehousing technologies that play a strategic role in business organizations. Topics include data warehouse development life cycle, data warehouse navigation, data quality, and performance issues. Prerequisite: ISAN 5355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5367. Machine Learning.**

This course focuses on deriving actionable knowledge from data using algorithms and industry standard tools. Topics covered are the complete process, key technologies, core machine learning algorithms, and programming used for business intelligence. Prerequisite: ISAN 5357 and ANLY 5336 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5368. Information Security.**

This course covers the analysis, design, development, implementation, and maintenance of information security systems in communication networks. Topics include legal, ethical, professional, and personnel issues, concepts, theories, and processes of risk management, technology; cryptography theory and practice; and physical and hardware security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5369. Independent Study in Information Systems.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in Information Systems and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ISAN 5370. Enterprise Resource Planning and Business Intelligence.**

This course uses information technology integrations in enterprises for operational control and business intelligence is examined via Enterprise Resource Planning (ERP) applications in customer relationships management, accounting, finance, purchasing, production control, sales, marketing, and human resource management. Emphasizes managerial issues surrounding the need, selection, and implementation of ERP systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5371. Accounting Information Systems and Controls.**

This course examines accounting information systems and controls and their role in the current technology-intensive business environment. Emphasis is placed on contemporary technology and applications, information technology and business information systems assessments, design of internal controls to satisfy regulation and policy requirements, control concepts, theories, and processes, information systems auditing, systems development life cycle, and information structure, data transfer, and transaction cycles. Prerequisite: ACC 3313 or ACC 5361 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5378. Information Security Policies and Compliance.**

This course focuses on the technology and managerial issues related to information policies, regulations, and compliance that assure confidentiality, integrity, and availability of data and computer systems. Topics include information security policy, regulations, laws, standards, framework, compliance, and governance. Prerequisite: ISAN 5368 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5390A. Introduction to Design Thinking.**

This course provides an overview and hands-on introduction to Design Thinking and the human-centered design process. Topics include an introduction, defining the problem, ideation, and concept generation, prototyping & testing, refining, and launching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ISAN 5395. Internship in Information Systems.**

This course provides students with opportunities for experiential learning by contributing to a computer information systems project. The course enables integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ISAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Management (MGT)****MGT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5301. Graduate Assistant Development.**

Completion of this course is required as a condition of employment for graduate assistants. The course is seminar based and covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MGT 5310. Organizational Change Management.**

Presents an overview of the process of change in an organization and stresses the key issues involved in reengineering and renewing organizations. Problems dealing with stress and conflict during major change will be explored along with practical ideas on building effective teams to make change possible and sustainable.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5311. Process Improvement Management in Organizations.**

Learn existing and latest developments in process improvement techniques for continuous improvement and the role of quality as a system for establishing an organization's competitive advantage. Process mapping is emphasized and assessment of effectiveness in the interactions of the managerial and technical systems of organizations is also studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5312. Seminar in Management.**

Development of philosophy, strategy, and tactics in managing an enterprise. Administrative processes common to all enterprises, such as entrepreneurship, business and society, leadership and group behavior in organizations, business ethics, and international management. (Course may be repeated for credit with different course focus.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5313. Strategic Management.**

An integrative approach to policy formulation and administration (decision making) to achieve organization objectives. Should be taken the last semester of student's MBA program. Prerequisite: ACC 5361 and FIN 5387 and MKT 5321 and QMST 5334 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MGT 5314. Organizational Behavior and Theory.**

Organizational behavior and structure as influenced by environmental variables and system relationships. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5315. New Venture Management.**

This course provides an overview of the entrepreneurial process from the initial idea through start-up, growth, and harvest. Students learn how to write a business plan, manage all the elements of an entrepreneurial business, and develop a better understanding of the requirements of the entrepreneurial life path.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5318. Cross-Cultural Management.**

The global environment requires sensitivity to and the adaptation of leadership and management skills and practices, and the culture-bound differences in workplace behavior and attitudes. Explores how differences in cultural core values shape behavior and attitudes of workers, managerial colleagues, and negotiating partners. (MULT) Prerequisites: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5321. Supply Chain Management.**

A variety of tools and frameworks provide students with understanding of the basis behind supply chain decision making. Topics include supply management concepts, demand-supply management, pull/push system, capacity and resource allocation, performance measurement, relationship assessment, and outsourcing in an integrated supply chain. Require graduate standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5325. Managing Business Creativity.**

This course focuses on the means by which businesses and individuals foster and maintain their creative and innovative skills. Key topics include: idea generation and refinement, idea screening, prototype development, and feasibility analysis. Objectives are met through classroom exercises, case analysis, guest speakers, and individual and team projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5330. Seminar in Human Resource Management.**

A study of current developments and practices in human resource management, including employment laws; planning, recruitment and selection; training and development programs; wage and benefits administration; performance management, human relations and productivity; labor relations; safety and health; and current contributions to human resource management theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5333. Problems in Business Administration.**

The student is here given the opportunity to work in the field of his special interest, particularly in the subjects of accounting, business law, marketing, statistics, finance, and insurance. The course will be conducted by conferences between the student and instructors concerned. Problems will be assigned as nearly as possible for the needs of the individual student.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5335. New Venture Launch.**

The purpose of this class is to ensure students gain a full understanding of what it takes to start and grow a business. Students learn the process of creating a new venture from the inside by planning, organizing and launching an actual business. Prerequisite: MGT 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5336. Compensation and Benefits.**

This course addresses the rewards systems in organizations. Strategic and technical considerations in designing, administering and managing compensation and benefits plans in organizations, including job analysis and evaluation, wage levels and structures, legal issues, individual and group incentives, and benefits are considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5337. Organizational Staffing.**

A study of the methods involved in recruitment and selection of employees with an emphasis on measurement, job analysis, performance appraisal, legal issues, and the role of human resource planning and strategy. This course relies on statistics to teach students to make reliable and valid employment decisions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5338. Human Resource Development.**

A study of theoretical and applied perspectives on needs assessment, design, development delivery and evaluation of training and development as well as organizational change and development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5339. International Human Resource Management.**

A study of challenges that decision makers consider when managing their human resources across the globe. Drawing on theories and models from cross-cultural and international management areas, this course covers such topics as globalization, culture, emerging international assignments, and expatriate recruitment, selection, training, repatriation, and career management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5380A. Business Ethics Leadership.**

This course examines a variety of ethical issues in business from multiple stakeholder perspectives (top management, employees, community members, etc.). The course is designed to enhance moral awareness and facilitate individual development with respect to making ethical decisions that contribute to effective corporate management and leadership.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MGT 5380C. Group Dynamics in Organizations.**

This course explores the theoretical framework of group interactions as well as the practical workplace challenges associated with organizing, participating on, and managing teams and groups. It addresses the development and use of teams to improve business organizations and is recommended for graduate students preparing for business careers.

Prerequisite: B A 5351 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380D. Labor Relations and Negotiation.**

This graduate level course is a study of labor organizations and their impact as well as negotiation and conflict resolution issues. The course will examine the National Labor Relations Act (NLRA), union and employer rights under the NLRA, union organizing, collective bargaining, negotiation, contract administration, mediation and arbitration.

Corequisite: MGT 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380E. International Leadership.**

Course will include lectures, business engagements, cultural excursions, and a service-learning project. To reinforce the theories discussed in class students will interact directly with managers, employees, and international business professionals, learn perspective on cultural and leadership issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380F. Management for Organizational Sustainability.**

This course is designed to take a broad look at Sustainability from both Ecological and Organizational perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380G. Artificial Intelligence (AI) for Business Managers.**

This course provides a basic foundation in artificial intelligence for students of the business school by introducing a means to make economically sound decisions regarding the implementation areas. In this course all students of the business school may implement small projects in the functional disciplines of the business school (e.g. marketing, finance, etc.). It could also be of interest for students of the School of Engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5390. Managerial Data Analysis.**

Designed to prepare managers to make more effective decisions based upon evidence from data analysis. Covers all elements of the general linear model from t-tests to multiple regression analysis. Involves acquiring and analyzing data for prediction and explanation, developing reports with actionable recommendations, and communicating results for managerial decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5391. Managing the Communication Process.**

The study and application of theory and psychology of managerial communication using written, oral, and technological modes to communicate within the business environment. The course includes the process and product approach to graphics, leadership, problem solving, prioritizing, interviewing, and communicating change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5395. Graduate Business Internship.**

Integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in MGT 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Marketing (MKT)

**MKT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5321. Marketing Management.**

A study of the planning and coordination of marketing functions, marketing policies, and the analysis of marketing administration.

Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5322. Marketing Research Methods.**

An advanced study of the marketing research process to include problem formulation, determination of sources of information and research design, design of data collection forms, design of the sample, collection of the data, analysis and interpretation of the data, preparation of the research report, and oral presentation of the research findings.

Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5323. Qualitative Research in Marketing.**

This course examines qualitative methods as used in marketing and market research. Topics include the design and execution of qualitative research projects using various qualitative methodological approaches. Activities include application of qualitative methods for conducting research. Students will apply learning in a qualitative research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5330. International Marketing.**

An application of marketing concepts to the global business environment. Examines marketing in the light of international economic, social, cultural, business, and environmental factors. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5331. Integrated Marketing Communications.**

An analysis of consumer behavior in the marketplace and its application to the preparation and presentation of a complete integrated marketing communications plan for a local, regional, and/or national client.

Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5335. Services Marketing.**

Services dominate the U.S. economy and are becoming critical for competitive advantage in companies across the globe and in all industry sectors. This course examines the foundations of services marketing, which are necessary to create, promise, and deliver a successful, interactive customer experience. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5340. Digital Marketing.**

This course examines marketing strategies in the digital environment. It examines the latest technology and analytical tools used in e-marketing and e-commerce, including online advertising, mobile marketing, social media marketing, search marketing, email marketing, and web analytics. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5341. Social Media Marketing and Analysis.**

This course provides a conceptual foundation and practical approach for conducting social media analysis and developing a social media marketing plan and/or campaign will be presented. Students will gain hands-on experience using social media strategically to achieve desired marketing goals through a hands-on project. Students will also earn applicable digital marketing certifications. Prerequisite: MKT 5321 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5345. Marketing Analytics.**

This course is a study of the scientific approach that connects customer data and competitive information to drive marketing decision-making. The course explores customer data analysis techniques and their theoretical foundations that are applied to real world business problems. Students will learn software, conduct data analysis and communicate the results. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5346. Contemporary Topics in Marketing Analytics.**

This course covers contemporary topics in marketing analytics. Students will learn (1) concepts and methods in strategic marketing analytics, (2) analytical and mapping tools in geospatial data and information, (3) concepts and methods in Bayesian Networks, (4) Topic Analysis using big data in marketing, and (5) other emerging analytical tools and methods in marketing. Prerequisite: QMST 5334 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5347. AI and Data Visualization for Marketing.**

This course consists of applied training in foundational topics for artificial intelligence and data visualization. It covers both prediction as well as classification problems. While many technical aspects are covered, the main emphasis is on knowing how to apply a wide range of modern techniques to specific marketing problems. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5348. Python for Marketing Analytics.**

This course consists of learning Python and using this programming language for data analysis and visualization. This course will help to leverage the power of historical data and to develop models that project future trends. Python will be used for exploratory data analysis, market forecasting, customer segmentation, deep learning, social media analysis and analysis of marketing images and videos. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5350. Strategic Marketing Analysis and Planning.**

This course examines strategic marketing decision making through the analysis and interpretation of marketing intelligence, metrics, and dashboards. Topics will include data-driven decision making on marketing challenges pertaining to customers, brands, marketing mix decisions, online strategy and social media, market performance, and firm profitability. Prerequisite: MKT 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5395. Independent Study in Marketing.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in Marketing. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5397I. Entrepreneurial Marketing.**

Entrepreneurship involves the discovery, implementation, and pursuit of new business opportunities. Successful execution of an entrepreneurial idea requires an effective marketing plan and related skills. In this course, we will investigate how marketing concepts (product, price, promotion, place, people, processes, brand image, segmentation, targeting, positioning, quality perceptions) can facilitate entrepreneurs' realization of their ideas. A conceptual foundation and practical approach for developing an entrepreneurship-focused marketing plan will be discussed. Using a hands-on approach, students will gain skills and knowledge on the effective use of marketing concepts to achieve entrepreneurial goals. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MKT 5398. Internship in Marketing.**

Internship in marketing is an external employer supervised, experiential learning course that enables a student to integrate professional and graduate business coursework. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5399A. Thesis.**

This course represents a student's initial thesis enrollments. No thesis credit is awarded until student has completed the thesis in Marketing Research and Analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **MKT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **MKT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **MKT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## **Program Overview**

This MHA-MBA dual degree program prepares students to obtain two master's degrees, a MHA degree and an MBA degree. Students who obtain this dual degree can work as executives or managers of healthcare organizations or any other business organizations.

## **Application requirements for the M.H.A. program**

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable international evaluation fee (if applicable)
- a baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts required from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in your last 60 hours (<https://www.gradcollege.txst.edu/admissions/policy.html#gpa>) of undergraduate course work (plus any completed graduate courses)
- a statement of purpose
- resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
- three letters of recommendation

### **Approved English Proficiency Exam Scores**

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- Official PTE scores required with a 52 overall
- Official IELTS (academic) scores required with a 6.5 overall and

minimum individual module scores of 6.0

- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## **Application requirements for the M.B.A. program**

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable international evaluation fee (if applicable)
- a baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree, in most cases, three-year degrees are not considered)
- official transcripts required from **each institution** where course credit was granted
- an overall competitive GPA or a competitive GPA in the last 60 hours of undergraduate course work, plus any completed graduate courses
- responses to specific essay questions (two essays are required):

1. Why have you chosen to pursue a graduate business degree at Texas State University? What do you hope to accomplish during your time in the program?
2. Tell us about your three most significant accomplishments. Why do you view them as such? What lessons did you learn from them?
3. **optional personal statement:** In cover-letter format, student may address the admissions committee about anything related to your background, application, and/or desire to attend graduate school at Texas State University.

- resume/CV detailing applicant's work experience, extracurricular and community activities, and honors and achievements
- two letters of recommendation from persons best able to assess your ability to succeed in graduate school.

- official GMAT/GRE (general test only) not required for applicants with an overall 3.5 GPA or a last-60-hours GPA of 3.5 or higher. If the last-60-hours GPA falls below the minimum requirement of 3.5, the official GMAT or GRE (general test only) with competitive scores



will be required in order to be considered. Admissions will notify applicants via email should this occur.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waliver>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and

minimum individual module scores of 6.0

- official Duolingo scored required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

Applicants should refer to The Graduate College website for additional information regarding the admission process.

Students who are currently enrolled in either MHA or MBA program can apply to the other program.

## Degree Requirements

Code	Title	Hours
<b>Required Courses</b>		
HA 5300	Healthcare Organization and Delivery	3
B A 5351	Organizational Performance and Competitive Advantage	3
B A 5100	Business Professional Development Seminar (Taken 3 times)	3
HA 5335	Public Health for Healthcare Administrators	3
FIN 5352	Financial Management	3
or HA 5316	Healthcare Financial Management II	
MGT 5314	Organizational Behavior and Theory	3
or HA 5362	Healthcare Organizational Behavior, Theory, and Leadership	
HA 5304	Healthcare Financial Management I	3
HA 5355	Emerging Trends in Healthcare Human Resources	3
HA 5303	Analytics and Information Systems Management in Healthcare	3
MKT 5321	Marketing Management	3
HA 5325	Health Care Quality and Operations Improvement	3
ANLY 5334	Statistical Methods for Business	3
ANLY 5338	Operations Management	3
ACC 5361	Accounting Analysis for Managerial Decision Making	3

ECO 5316	Managerial Economics	3
HA 5191	Program Competencies Assessments and Integrative Experience Preparation	1
HA 5321	Healthcare Law and Policy	3
MGT 5313	Strategic Management	3
HA 5840	Administrative Field Placement	8
<b>Total Hours</b>		<b>60</b>

Master's level courses in Healthcare Administration and Business Administration: HA, ACC, ANLY, B A, ECO, FIN, MKT, MKT

## Healthcare Administration (HA)

### HA 5111. Topics in Health Administration.

An in-depth study of a singular topic or a related problem being faced by practicing managers in the rapidly changing healthcare industry. Special emphasis will be placed on the topic's current relevance and its utilitarian value to the participant. May be repeated if topic differs.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### HA 5191. Field Experience Orientation.

This course will assist the student to prepare for the field experience and to prepare for the comprehensive exam. An extensive orientation to the field experience will be provided to better enable students to move from the classroom setting to a workplace scenario.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### HA 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### HA 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### HA 5300. Healthcare Organization and Delivery.

A survey of the organization and delivery of health services focusing on the history and development of health systems as they relate to the overall health and medical care systems. Major attention is given to governing bodies, patient care organizations, and executive management structures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5301. Healthcare Administration Research Methods.**

A study of research methodology as it pertains to healthcare administration. Included are hypothesis forming, designing research, and the collection, manipulation and analysis of data. Knowledge of numeracy and statistics is essential.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5303. Information Systems Management in Healthcare.**

This course provides a comprehensive introduction to information systems management for healthcare organizations. It covers the determination of information required by whom, design of information flows, procurement of information systems technology resources, assurance of information security, and management of systems integration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5304. Healthcare Economics and Financial Theory.**

A study of economic theories that have an impact on the healthcare industry. Special emphasis will be placed on emerging economic research and its impact on potential policy ramifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5311. Trends in Health Administration.**

An in-depth study of singular trend or a related problem being faced by practicing managers in the rapidly changing healthcare industry. Special emphasis will be placed on the topic's current relevance and its utilitarian value to the participant. Examples of trends, which are typically offered, include trends in rural health, managed care ethical issues, and in total quality management. This course may be repeated for credit with a different subject area.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5316. Healthcare Financial Management.**

An introduction to healthcare financial management including the financial management in healthcare organizations, healthcare payment systems, financing and investment decisions, and financial planning, analysis, and control. Prerequisites: accounting, economics, and statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5321. Healthcare Law.**

An in-depth analysis of healthcare law and its effect on the relationships between the patient, the patient's family, the provider, and other interested third parties. Analysis of cases is the primary method of study.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5325. Health Care Quality Improvement Concepts and Tools.**

This course teaches the concepts of quality in health care and the use of quality improvement tools. Quality management will be explored using Lean Six Sigma continuous process improvement methodologies. This course is intended to help students learn and translate health care quality management theory, concepts, and knowledge into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5334. Operational Decision Making for Healthcare Managers.**

An introduction to the fundamentals of selected operations research techniques essential to the analysis of healthcare managerial problem situations, the design of new and improved systems, and the implementation of systems to achieve desired systems performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5335. Public Health for Healthcare Administrators.**

This course introduces the healthcare manager to public health and its role in preventing illnesses and improving the health of the community. Students will learn of the role of the manager in disease prevention and how to participate and lead community efforts for the wellness of the community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5346. Healthcare Strategic Management.**

This capstone course examines mission, vision, strategy, and operations from both the formulation and implementation perspectives. Emphasis will be on the role of the manager/leader in strategic management analysis, creativity, and action. This course is available to HA majors only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5355. Human Resource Management in Healthcare Facilities.**

A study of personnel administration in the healthcare facility and the environment in which it functions. Emphasis will be on the role of the Personnel Office in forecasting, developing, and managing human resources, in addition to a review of current legislation affecting the personnel function.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5356. Policy Development in Healthcare Arena.**

Prospective healthcare administrators analyze changing healthcare paradigm to determine decision-points where policies can be affected. Course allows students to apply existing skills to real world policy issues at state and national levels and to analyze policy development from numerous stakeholders' viewpoints.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5362. Healthcare Organizational Behavior/Theory.**

This course is a study of theory and concepts drawn from the behavioral and social sciences. These concepts are applied as a foundation and conceptual framework for the analysis, diagnosis, prediction and guidance of human behavior in healthcare organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5371. Marketing of Health Services.**

A study of marketing functions and principles as they relate to the healthcare delivery system. Analysis of marketing concepts such as market segmentation, marketing planning, marketing audit, marketing positioning, and marketing mix will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5375. Healthcare Accounting.**

An introduction to financial accounting in healthcare with an emphasis on the preparation of non-profit financial statements for healthcare service organizations, control procedures for healthcare entities, and accounting issues unique to the healthcare industry. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**HA 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis, HA 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5450. Administrative Field Placement.**

A one-semester, full-time field experience which allows students to apply their foundational didactic education by means of rotations, experiences, and projects in a healthcare organization. This course is graded on a credit (CR), no-credit (F) basis. Prerequisite: Instructor approval.

**4 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HA 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5640. Administrative Practicum.**

A one-semester, part-time field experience designed for the student already working full-time in healthcare. The practicum provides a broader orientation to the student's organization and exposure to special projects.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5840. Administrative Field Placement.**

A one-semester, full-time field experience which allows students to apply their foundational didactic education by means of rotations, experiences, and projects in a healthcare organization.

**8 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Accounting (ACC)****ACC 5315. Selected Topics in Financial Accounting.**

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5316. Advanced Accounting.**

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-forprofit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5320. Auditing.**

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5323. Accounting Data Analytics.**

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5340. Individual Income Tax.**

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5350. Professional Accounting Research.**

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5352. Financial Statement Reporting and Analysis.**

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5355. IT Auditing.**

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5357. Regulation and Professionalism.**

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments. Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5361. Accounting Analysis for Managerial Decision Making.**

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5362. Cost and Managerial Accounting Theory.**

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules or the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## **Analytics (ANLY)**

**ANLY 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5332. Optimization for Business Analytics.**

This course introduces optimization theory and applications for analyzing and solving business decision-making problems. The students will learn to apply in various business domains optimization concepts and tools such as linear programming, integer/mixed-integer programming, and other classes of optimization models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5334. Statistical Methods for Business.**

This course provides the quantitative foundation for business analysis and decision making. Topics include inferential statistics, regression analysis, and other analytical/modeling techniques with wide applicability in decision-making and problem solving in all functional areas of business.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5335. Forecasting and Simulation.**

This course introduces the concepts and principles of forecasting and simulation techniques as applies to planning and decision making in organizations. Topical coverage includes time series forecasting, causal forecasting, discrete event simulation, and continuous-event simulation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5336. Analytics.**

This course introduces analytics which refers to the process of transforming data into information for making decisions. The topics include the introduction to analytics, visualization, analytics applications, and challenges related to business data. Students will learn how to use software, conduct data analysis and communicate their results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5338. Operations Management.**

This course introduces the processes and strategies to create, produce, and deliver goods and services that drive organizations' overall success. It will highlight operational and tactical problems organizations typically confront and introduce the concepts and analytical tools (both process and systems based) used to deal with these problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5342. Probability and Statistical Models.**

This course introduces the concept of probability and probability distributions. It includes general and generalized linear models, inflated and mixture models, and hierarchical models. Model validity and choice will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5343. Data Mining.**

This course covers data mining concepts and applications of data mining techniques to solve business problems. It emphasizes algorithms such as classification, clustering, association, and text mining. Model selection and assessment are also emphasized. Prerequisite: ANLY 5336 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5369. Independent Study in Analytics.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in quantitative methods and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANLY 5390A. Statistical Computing.**

This course covers programming and statistical computing concepts. Programming concepts include data manipulation, data structures, control structures, functions, basic algorithms, and matrix manipulations. Statistical computing topics include numerical linear algebra, Monte Carlo methods, and numerical optimization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANLY 5395. Internship in Analytics.**

This course is based on experiential learning while the student works in quantitative methods and statistics. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Data Analytics and Information Systems. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANLY 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Business Administration (B A)****B A 5100. Business Professional Development Seminar.**

This course is designed to contribute to the development of the business professional. Academic content is supplemented by training in soft skill topics to better prepare the students for a successful business career. Repeatable for credit with different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**B A 5351. Organizational Performance and Competitive Advantage.**

This course is designed to provide an integrative understanding of the firm. A variety of organizational models and perspectives will be incorporated to facilitate understanding of the complexities of the firm, its environments, and its relationships with stakeholders. Includes focus on case analysis issues and communication skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5353. Understanding and Analyzing Organizational Problems.**

An introduction to the concepts of economic theory and optimization, with an emphasis on developing skills in data and economic analysis to solve business problems. Coverage includes prices, costs, market structures, macroeconomic policies, and optimization. Corequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5368A. MBA Full Time Cohort International Experience.**

This course will focus on developing an understanding and analysis of issues related to business challenges in another country. Students will gain first-hand experience with the business practices, culture and economy of another country. Corequisite: MGT 5313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**B A 5396. Internship in Business Administration.**

This course is based on experiential learning while the student works in business administration. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**B A 5398. Independent Study in Business Administration.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in business administration and work independently on a specialized project. Course may be repeated with approval of associate dean for graduate programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Business Law (BLAW)

### **BLAW 5310. The Employment Relationship.**

A study of trends in the rapidly evolving "law of workplace," with emphasis on how lawmakers attempt to balance the rights and responsibilities of employers and workers. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **BLAW 5315. Legal Issues in International Business.**

This course examines legal issues relevant to international business transactions, emphasizing international trade, licensing of intellectual property, and foreign direct investment. Environmental, dispute resolution, labor, e-commerce, marketing, and ethical issues will also be discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### **BLAW 5333. Legal Issues of Sustainability and Responsibility.**

Diverse frameworks and analytical methods underlying our understanding of sustainability are explored, including the legal aspects & impact on business, society, environment and economy. Topics include corporate governance, globalization, urbanization, energy, human population, food, natural resources, water and equity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **BLAW 5364. Commercial Law.**

A traditional business law course which examines sales, negotiable instruments, creditor's rights and remedies, secured transactions, bankruptcy law, personal property, bailments, real property and landlord-tenant relationships. Prerequisite: BLAW 3301 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **BLAW 5368I. International Business Ethics.**

This course examines the legal and ethical challenges inherent in international marketing, international environmental and energy practices, international labor and employment practices, trade negotiations, foreign direct investment, intellectual property licensing, technology development, data collection mining, corporate tax inversion, and global corporate social responsibility. Students will also discuss the individual behavioral, organizational, and cultural factors that influence ethical and unethical business decisions in the global business environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Economics (ECO)

### **ECO 5302. Economic Theory and Policy.**

An intensive study of micro-and macroeconomic concepts; the price system as it functions under competition, monopoly, monopolistic competition and oligopoly; national income measurement and determination; business cycles; money and banking; monetary policy; fiscal policy and economic stabilization. May not be counted as an elective MBA course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

### **ECO 5310. International Economics.**

Examination of the patterns of trade and finance among nations, integrating the topics of exchange rates, trade barriers, customs unions, and macroeconomics policy into a unified treatment of international economic relations. (MULT) Prerequisite: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### **ECO 5316. Managerial Economics.**

The application of economic theory and analysis to the formulation of business policy, including demand analysis, production theory, linear programming, and pricing policy. (MBA with Technology Emphasis students complete TECH 5315.) Prerequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECO 5320. Emerging Market Economies.**

The course focuses on the structural characteristics of the emerging market economies, with an emphasis on analyzing the salient economic challenges and opportunities facing contemporary emerging market economies. Prerequisites: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Finance (FIN)

### **FIN 5322. Investment Analysis.**

This course cover the application of finance theory to investment analysis. Topics include modern investment theories, asset pricing models and derivative pricing models, with a focus on application of derivatives to manage risk exposure. Prerequisite: B A 5352 with a grade of "C" or better or FIN 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5332. Portfolio Theory and Capital Markets.**

This course is designed to provide students with an overview of the strategies for creating and managing portfolios. At the end of this course, students should understand the tools for investment management.

Topics covered include portfolio construction and analysis, risk analysis, asset class management, derivatives, and portfolio performance analysis. Prerequisite: FIN 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5338. International Investments and Financial Management.**

Examination of economic incentives and rationale for international investment and financing. Topics include exchange rate risk exposure and management, global debt and equity investment and financing, foreign currency derivative markets, and general investment and financing strategy in global capital market. (MULT) Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FIN 5347C. Real Estate Investment.**

An application of capital budgeting to real estate investment decisions.

Prerequisite: FIN 5387 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FIN 5352. Financial Management.**

This course introduces students to the major considerations in financial decision making. These considerations are analyzed by exploring the role of financial managers in creating value and maximizing shareholder wealth within the constraints of legal and ethical behavior. The development of critical thinking, quantitative applications, and analytical skills are major goals of this course because the topics require knowledge of specialized problem-solving techniques. Prerequisite: ACC 5361 with a grade of "C" or better. Corequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 5387. Managerial Finance.**

Concentrates on the finance function, analysis and budgeting of funds, management of current assets, short and intermediate-term financing requirements, long-term debt policy and capital structure, capital budgeting, and the concept of cost of capital. Risk and return trade-offs also are studied. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Management (MGT)****MGT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5301. Graduate Assistant Development.**

Completion of this course is required as a condition of employment for graduate assistants. The course is seminar based and covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MGT 5310. Organizational Change Management.**

Presents an overview of the process of change in an organization and stresses the key issues involved in reengineering and renewing organizations. Problems dealing with stress and conflict during major change will be explored along with practical ideas on building effective teams to make change possible and sustainable.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5311. Process Improvement Management in Organizations.**

Learn existing and latest developments in process improvement techniques for continuous improvement and the role of quality as a system for establishing an organization's competitive advantage. Process mapping is emphasized and assessment of effectiveness in the interactions of the managerial and technical systems of organizations is also studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5312. Seminar in Management.**

Development of philosophy, strategy, and tactics in managing an enterprise. Administrative processes common to all enterprises, such as entrepreneurship, business and society, leadership and group behavior in organizations, business ethics, and international management. (Course may be repeated for credit with different course focus.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5313. Strategic Management.**

An integrative approach to policy formulation and administration (decision making) to achieve organization objectives. Should be taken the last semester of student's MBA program. Prerequisite: ACC 5361 and FIN 5387 and MKT 5321 and QMST 5334 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5314. Organizational Behavior and Theory.**

Organizational behavior and structure as influenced by environmental variables and system relationships. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5315. New Venture Management.**

This course provides an overview of the entrepreneurial process from the initial idea through start-up, growth, and harvest. Students learn how to write a business plan, manage all the elements of an entrepreneurial business, and develop a better understanding of the requirements of the entrepreneurial life path.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5318. Cross-Cultural Management.**

The global environment requires sensitivity to and the adaptation of leadership and management skills and practices, and the culture-bound differences in workplace behavior and attitudes. Explores how differences in cultural core values shape behavior and attitudes of workers, managerial colleagues, and negotiating partners. (MULT) Prerequisites: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5321. Supply Chain Management.**

A variety of tools and frameworks provide students and understanding of the basis behind supply chain decision making. Topics include supply management concepts, demand-supply management, pull/push system, capacity and resource allocation, performance measurement, relationship assessment, and outsourcing in an integrated supply chain. Require graduate standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5325. Managing Business Creativity.**

This course focuses on the means by which businesses and individuals foster and maintain their creative and innovative skills. Key topics include: idea generation and refinement, idea screening, prototype development, and feasibility analysis. Objectives are met through classroom exercises, case analysis, guest speakers, and individual and team projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5330. Seminar in Human Resource Management.**

A study of current developments and practices in human resource management, including employment laws; planning, recruitment and selection; training and development programs; wage and benefits administration; performance management, human relations and productivity; labor relations; safety and health; an current contributions to human resource management theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5333. Problems in Business Administration.**

The student is here given the opportunity to work in the field of his special interest, particularly in the subjects of accounting, business law, marketing, statistics, finance, and insurance. The course will be conducted by conferences between the student and instructors concerned. Problems will be assigned as nearly as possible for the needs of the individual student.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5335. New Venture Launch.**

The purpose of this class is to ensure students gain a full understanding of what it takes to start and grow a business. Students learn the process of creating a new venture from the inside by planning, organizing and launching an actual business. Prerequisite: MGT 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5336. Compensation and Benefits.**

This course addresses the rewards systems in organizations. Strategic and technical considerations in designing, administering and managing compensation and benefits plans in organizations, including job analysis and evaluation, wage levels and structures, legal issues, individual and group incentives, and benefits are considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5337. Organizational Staffing.**

A study of the methods involved in recruitment and selection of employees with an emphasis on measurement, job analysis, performance appraisal, legal issues, and the role of human resource planning and strategy. This course relies on statistics to teach students to make reliable and valid employment decisions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5338. Human Resource Development.**

A study of theoretical and applied perspectives on needs assessment, design, development delivery and evaluation of training and development as well as organizational change and development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MGT 5339. International Human Resource Management.**

A study of challenges that decision makers consider when managing their human resources across the globe. Drawing on theories and models from cross-cultural and international management areas, this course covers such topics as globalization, culture, emerging international assignments, and expatriate recruitment, selection, training, repatriation, and career management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5380A. Business Ethics Leadership.**

This course examines a variety of ethical issues in business from multiple stakeholder perspectives (top management, employees, community members, etc.). The course is designed to enhance moral awareness and facilitate individual development with respect to making ethical decisions that contribute to effective corporate management and leadership.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MGT 5380C. Group Dynamics in Organizations.**

This course explores the theoretical framework of group interactions as well as the practical workplace challenges associated with organizing, participating on, and managing teams and groups. It addresses the development and use of teams to improve business organizations and is recommended for graduate students preparing for business careers.

Prerequisite: B A 5351 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380D. Labor Relations and Negotiation.**

This graduate level course is a study of labor organizations and their impact as well as negotiation and conflict resolution issues. The course will examine the National Labor Relations Act (NLRA), union and employer rights under the NLRA, union organizing, collective bargaining, negotiation, contract administration, mediation and arbitration.

Corequisite: MGT 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380E. International Leadership.**

Course will include lectures, business engagements, cultural excursions, and a service-learning project. To reinforce the theories discussed in class students will interact directly with managers, employees, and international business professionals, learn perspective on cultural and leadership issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380F. Management for Organizational Sustainability.**

This course is designed to take a broad look at Sustainability from both Ecological and Organizational perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380G. Artificial Intelligence (AI) for Business Managers.**

This course provides a basic foundation in artificial intelligence for students of the business school by introducing a means to make economically sound decisions regarding the implementation areas. In this course all students of the business school may implement small projects in the functional disciplines of the business school (e.g. marketing, finance, etc.). It could also be of interest for students of the School of Engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5390. Managerial Data Analysis.**

Designed to prepare managers to make more effective decisions based upon evidence from data analysis. Covers all elements of the general linear model from t-tests to multiple regression analysis. Involves acquiring and analyzing data for prediction and explanation, developing reports with actionable recommendations, and communicating results for managerial decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5391. Managing the Communication Process.**

The study and application of theory and psychology of managerial communication using written, oral, and technological modes to communicate within the business environment. The course includes the process and product approach to graphics, leadership, problem solving, prioritizing, interviewing, and communicating change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5395. Graduate Business Internship.**

Integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in MGT 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## **Marketing (MKT)**

**MKT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5321. Marketing Management.**

A study of the planning and coordination of marketing functions, marketing policies, and the analysis of marketing administration.

Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5322. Marketing Research Methods.**

An advanced study of the marketing research process to include problem formulation, determination of sources of information and research design, design of data collection forms, design of the sample, collection of the data, analysis and interpretation of the data, preparation of the research report, and oral presentation of the research findings.

Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5323. Qualitative Research in Marketing.**

This course examines qualitative methods as used in marketing and market research. Topics include the design and execution of qualitative research projects using various qualitative methodological approaches. Activities include application of qualitative methods for conducting research. Students will apply learning in a qualitative research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5330. International Marketing.**

An application of marketing concepts to the global business environment. Examines marketing in the light of international economic, social, cultural, business, and environmental factors. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5331. Integrated Marketing Communications.**

An analysis of consumer behavior in the marketplace and its application to the preparation and presentation of a complete integrated marketing communications plan for a local, regional, and/or national client.

Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5335. Services Marketing.**

Services dominate the U.S. economy and are becoming critical for competitive advantage in companies across the globe and in all industry sectors. This course examines the foundations of services marketing, which are necessary to create, promise, and deliver a successful, interactive customer experience. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5340. Digital Marketing.**

This course examines marketing strategies in the digital environment. It examines the latest technology and analytical tools used in e-marketing and e-commerce, including online advertising, mobile marketing, social media marketing, search marketing, email marketing, and web analytics. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5341. Social Media Marketing and Analysis.**

This course provides a conceptual foundation and practical approach for conducting social media analysis and developing a social media marketing plan and/or campaign will be presented. Students will gain hands-on experience using social media strategically to achieve desired marketing goals through a hands-on project. Students will also earn applicable digital marketing certifications. Prerequisite: MKT 5321 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5345. Marketing Analytics.**

This course is a study of the scientific approach that connects customer data and competitive information to drive marketing decision-making. The course explores customer data analysis techniques and their theoretical foundations that are applied to real world business problems. Students will learn software, conduct data analysis and communicate the results. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5346. Contemporary Topics in Marketing Analytics.**

This course covers contemporary topics in marketing analytics. Students will learn (1) concepts and methods in strategic marketing analytics, (2) analytical and mapping tools in geospatial data and information, (3) concepts and methods in Bayesian Networks, (4) Topic Analysis using big data in marketing, and (5) other emerging analytical tools and methods in marketing. Prerequisite: QMST 5334 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5347. AI and Data Visualization for Marketing.**

This course consists of applied training in foundational topics for artificial intelligence and data visualization. It covers both prediction as well as classification problems. While many technical aspects are covered, the main emphasis is on knowing how to apply a wide range of modern techniques to specific marketing problems. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5348. Python for Marketing Analytics.**

This course consists of learning Python and using this programming language for data analysis and visualization. This course will help to leverage the power of historical data and to develop models that project future trends. Python will be used for exploratory data analysis, market forecasting, customer segmentation, deep learning, social media analysis and analysis of marketing images and videos. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5350. Strategic Marketing Analysis and Planning.**

This course examines strategic marketing decision making through the analysis and interpretation of marketing intelligence, metrics, and dashboards. Topics will include data-driven decision making on marketing challenges pertaining to customers, brands, marketing mix decisions, online strategy and social media, market performance, and firm profitability. Prerequisite: MKT 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5395. Independent Study in Marketing.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in Marketing. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5397I. Entrepreneurial Marketing.**

Entrepreneurship involves the discovery, implementation, and pursuit of new business opportunities. Successful execution of an entrepreneurial idea requires an effective marketing plan and related skills. In this course, we will investigate how marketing concepts (product, price, promotion, place, people, processes, brand image, segmentation, targeting, positioning, quality perceptions) can facilitate entrepreneurs' realization of their ideas. A conceptual foundation and practical approach for developing an entrepreneurship-focused marketing plan will be discussed. Using a hands-on approach, students will gain skills and knowledge on the effective use of marketing concepts to achieve entrepreneurial goals. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MKT 5398. Internship in Marketing.**

Internship in marketing is an external employer supervised, experiential learning course that enables a student to integrate professional and graduate business coursework. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5399A. Thesis.**

This course represents a student's initial thesis enrollments. No thesis credit is awarded until student has completed the thesis in Marketing Research and Analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MKT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

McCoy Hall Room 431

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<http://www.accounting.mccoy.txst.edu/>

The McCoy College of Business Department of Accounting is dedicated to preparing our diverse students population for professional success in an ever-changing global economy. Our faculty make McCoy a primary-choice school for students by providing a rigorous and innovative curriculum that is informed by impactful research, engagement with the professional community, and meaningful service.

The Master of Accountancy (M.Acy.) degree broadens the educational experience of individuals preparing for a career in public accounting. Students explore the social, ethical, and environmental effects of accounting information on those who rely on it for their decision-making needs. The M.Acy. program can be used to satisfy the 150-hour education requirement for the Certified Public Accountant (CPA) license. An undergraduate degree in accounting is not required.

The Master of Science major in Accounting and Information Technology (MSAIT) program prepares students for successful careers in public accounting and accounting information management. The MSAIT degree develops accounting and information technology competencies needed to respond to the evolving demands being placed on accountants and information technology professionals in modern organizations. The MSAIT program can be used to satisfy the 150-hour education requirement for the Certified Public Accountant (CPA) license. An undergraduate degree in accounting is not required.

## AACSB Accreditation

Texas State is one of only 186 business schools worldwide (top 5%) to be accredited in both general business and accounting by the Association to Advance Collegiate Schools of Business (AACSB). AACSB Accreditation is known, worldwide, as the longest standing, most recognized form of

specialized/professional accreditation an institution and its accounting programs can earn.

## Master of Accountancy (M.Acy.)

- Major in Accounting (Auditing and Analytics Concentration) (p. 1070)
- Major in Accounting (Professional Accounting and Reporting Concentration) (p. 1075)
- Major in Accounting (Taxation Concentration) (p. 1079)
- Major in Accounting B.B.A./M.Acy. (Integrated) (p. 1084)

## Master of Science (M.S.)

- Major in Accounting and Information Technology (p. 1091)

## Program Overview

The Master of Accountancy (M.Acy.) degree with a major in Accounting is designed to broaden the educational experience of individuals preparing for a career in the public accounting profession. Students explore the social, ethical, and environmental effects of accounting information on those who rely on it for their decision making needs. The M.Acy. program can be used to satisfy the 150-hour education requirement for the Certified Public Accountant (CPA) license in Texas.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- an overall competitive GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- **Before applying** to the program, applicants must have completed either: a minimum of ACC 3305 and ACC 3313 with a grade of "B" or better and at least 6 additional hours of upper level accounting courses from the following for a total of 12 upper level accounting hours: ACC 3314, ACC 3323, ACC 3365, ACC 3385, ACC 4313, ACC 3308 OR, a minimum of ACC 3313 and ACC 3314 with a grade of "B" or better and at least 6 additional hours of upper level accounting courses from the following for a total of 12 upper level accounting hours: ACC 3323, ACC 3365, ACC 3385, ACC 4313, ACC 3308.

- Texas State accounting majors with at least an overall 3.2 GPA and a 3.4 GPA in upper-level accounting courses and who earn an "A" the first time taking ACC 3313 and a "B" or better in one additional upper level accounting course may apply to the program before completing additional upper level accounting courses.
- **Fall 2024:** official GMAT/GRE (general test only) not required for applicants with an overall 3.5 GPA or a 3.5 GPA in your last-60-hours of undergraduate course work. If the last-60-hours GPA falls below the minimum requirement, the official GMAT or GRE (general test only) with competitive scores will be required in order to be considered. The Graduate College will notify applicants via email should this occur.
- **Fall 2024:** The GRE or GMAT requirement may be waived for Texas State accounting undergraduate students who:
  - provided at least two forms of recommendation from Texas State faculty
  - earned a minimum of a 3.0 GPA or higher in upper-level accounting courses taken at Texas State University
  - earned an overall 3.2 GPA or a 3.2 GPA in the last 60 hours of undergraduate course work.
- **Spring 2025 and beyond:** GMAT/GRE not required
- resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
- two forms of recommendation from persons best able to assess the student's ability to succeed in graduate school
- responses to specific essay questions
- An essay waiver may be available for Texas State accounting undergraduate applicants who have:
  - provided at least two reference forms from Texas State faculty
  - earned a minimum of a 3.0 GPA or higher in upper-level accounting courses, and
  - earned a minimum of 3.2 GPA or higher in the last 60 hours of undergraduate course work, and

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores with a 110 overall
- official TOEFL Essentials scores with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Accountancy (M.Acy.) degree with a major in Accounting concentration in Auditing requires 30 semester credit hours. Students must complete a comprehensive examination at the end of the program to satisfy university requirements. Students who do not have the appropriate background course work may be required to complete leveling or prerequisite courses.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of "C" or lower. Even if the grade of "C" or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third "C" (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 "C" Policy takes precedent over probationary status. So, if a student earns a third "C" they are automatically dismissed from their program permanently; even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ACC 5320	Auditing	3
ACC 5323	Accounting Data Analytics	3
ACC 5350	Professional Accounting Research	3
ACC 5355	IT Auditing	3
ACC 5366	Business Entity Taxation	3
ACC 5680	Internship in Accounting <sup>1</sup>	6
ACC 5389	Corporate Governance and Ethics	3
<b>Electives</b>		
Choose 6 hours from the following:		6
Choose an additional 3-6 hours if not completing ACC 5680 internship <sup>1</sup>		
ACC 5316	Advanced Accounting	
ACC 5352	Financial Statement Reporting and Analysis	
ACC 5357	Regulation and Professionalism	
ACC 5362	Cost and Managerial Accounting Theory	
ACC 5369	Special Studies in Accounting	
ACC 5370	Internship in Accounting	
ACC 5373	Fraud Examination	
ACC 5375	Business Information Consulting	
ACC 5378	Tax Practice, Procedures, Audits and Controversy	
ACC 5390A	International Accounting	
ACC 5390G	Sustainability Reporting	
BLAW 5310	The Employment Relationship	
BLAW 5333	Legal Issues of Sustainability and Responsibility	
ISAN 5355	Database Management Systems	
ISAN 5358	Agile Project Management For Business Professionals	
ISAN 5360	E-Commerce: Strategies, Technologies, and Applications	
ISAN 5364	Data Warehousing	
ISAN 5368	Information Security	



ISAN 5370	Enterprise Resource Planning and Business Intelligence
ISAN 5371	Accounting Information Systems and Controls
ECO 5310	International Economics
ECO 5320	Emerging Market Economies
FIN 5322	Investment Analysis
FIN 5332	Portfolio Theory and Capital Markets
FIN 5338	International Investments and Financial Management
FIN 5347C	Real Estate Investment
MGT 5310	Organizational Change Management
MGT 5311	Process Improvement Management in Organizations
MGT 5312	Seminar in Management
MGT 5315	New Venture Management
MGT 5318	Cross-Cultural Management
MGT 5321	Supply Chain Management
MGT 5325	Managing Business Creativity
MGT 5330	Seminar in Human Resource Management
MGT 5335	New Venture Launch
MGT 5390	Managerial Data Analysis
MGT 5391	Managing the Communication Process
MGT 5395	Graduate Business Internship
MKT 5322	Marketing Research Methods
MKT 5330	International Marketing
MKT 5331	Integrated Marketing Communications
MKT 5335	Services Marketing
MKT 5395	Independent Study in Marketing
ANLY 5332	Optimization for Business Analytics
ANLY 5334	Statistical Methods for Business
ANLY 5335	Forecasting and Simulation
ANLY 5336	Analytics
ANLY 5390	Topics in Data Analytics

**Total Hours** **30**

<sup>1</sup> Students who do not complete an audit internship must take ACC 5373 and one additional business or accounting elective. Students who complete a three-hour internship must take one additional business or accounting elective.

## Leveling Courses

Students who do not have the appropriate background course work may be required to complete leveling or prerequisite courses.

Code	Title	Hours
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
ACC 3305	Financial Accounting and Reporting	3
ACC 3308	Survey of Income Tax	3
ACC 3313	Intermediate Accounting I	3
ACC 3314	Intermediate Accounting II	3
ACC 3385	Accounting Systems	3
ACC 4313	Auditing and Internal Controls	3

## Courses for CPA Eligibility

All graduates will have the 27 upper-level accounting hours and ethics course required become a licensed CPA in Texas; however, graduates may still need 24 hours of related business course work. To be eligible to sit for the CPA exam in Texas, the candidate must have 24 hours of upper level business courses. The 24 hours may be completed at a community college or university, at the undergraduate or graduate level. There is a limit of 6 hours in any one area (i.e., management, economics, business law, etc.). Additionally, business statistics and communication may be used to meet this requirement. For further information, please consult with the Texas State Board of Public Accountancy <http://www.tsbpa.state.tx.us/>.

## Comprehensive Examination Requirement

The MACy program requires satisfactory completion of a comprehensive portfolio that documents abilities acquired during the program. These abilities include: analytical and critical thinking skills to apply accounting knowledge; use of information technology, data analytics, and other analytical methods to evaluate accounting issues, form judgments, and communicate; and conceptualizing a complex issue into a coherent, informative, and persuasive written or oral statement. The portfolio is evaluated in its entirety and no partial credit is given. Detailed instructions and requirements for completing the portfolio are available on the MACy Canvas site. Students who do not successfully complete the portfolio within the required timeline will be dismissed from the program.

Master's level courses in Accounting: ACC

## Courses Offered

### Accounting (ACC)

#### ACC 5315. Selected Topics in Financial Accounting.

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5316. Advanced Accounting.

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-forprofit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5320. Auditing.**

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5323. Accounting Data Analytics.**

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5340. Individual Income Tax.**

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5350. Professional Accounting Research.**

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5352. Financial Statement Reporting and Analysis.**

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5355. IT Auditing.**

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5357. Regulation and Professionalism.**

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments. Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5361. Accounting Analysis for Managerial Decision Making.**

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5362. Cost and Managerial Accounting Theory.**

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules or the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Accountancy (M.Acy.) degree with a major in Accounting is designed to broaden the educational experience of individuals preparing for a career in the public accounting profession. Students explore the social, ethical, and environmental effects of accounting information on those who rely on it for their decision making needs. The M.Acy. program can be used to satisfy the 150-hour education requirement for the Certified Public Accountant (CPA) license in Texas.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- an overall competitive GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- **Before applying** to the program, applicants must have completed either: a minimum of ACC 3305 and ACC 3313 with a grade of "B" or better and at least 6 additional hours of upper level accounting courses from the following for a total of 12 upper level accounting hours: ACC 3314, ACC 3323, ACC 3365, ACC 3385, ACC 4313, ACC 3308 OR, a minimum of ACC 3313 and ACC 3314 with a grade of "B" or better and at least 6 additional hours of upper level accounting courses from the following for a total of 12 upper level accounting hours: ACC 3323, ACC 3365, ACC 3385, ACC 4313, ACC 3308.
- Texas State undergraduate accounting majors with at least an overall 3.2 GPA and a 3.4 GPA in upper-level accounting courses who earn an "A" **the first time taking** ACC 3313 and a "B" or better in one additional

upper level accounting course may apply to the graduate program before completing additional upper level accounting courses.

- **Fall 2024:** official GMAT/GRE (general test only) not required for applicants with an overall 3.5 GPA or a 3.5 GPA in your last-60-hours GPA of undergraduate course work. 3.5 or higher. If the last-60-hours GPA falls below the minimum requirement, requirement of 3.5, the official GMAT or GRE (general test only) with competitive scores will be required in order to be considered. The Graduate College will notify applicants via email should this occur.
- **Fall 2024:** The A GRE or GMAT requirement waiver and essay waiver may be waived available for Texas State accounting undergraduate students who: applicants who have:
  - provided at least two reference forms of recommendation from Texas State faculty TOEFL, PTE, or IELTS Scores
  - earned a minimum of a 3.0 GPA or higher in upper-level accounting courses taken at Texas State University
  - earned an overall a minimum of a 3.2 GPA or a 3.2 GPA higher in the last 60 hours of undergraduate course work. work, and
- **Spring 2025 and beyond:** GMAT/GRE not required
- resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
- two forms of recommendation from persons best able to assess the student's ability to succeed in graduate school
- responses to specific essay questions
- An essay waiver may be available for Texas State accounting undergraduate applicants who have:
  - provided at least two reference forms from Texas State faculty, and
  - earned a minimum of a 3.0 GPA or higher in upper-level accounting courses, and
  - earned a minimum of a 3.2 GPA or higher in the last 60 hours of undergraduate course work

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waveir>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores with a 110 overall
- official TOEFL Essentials scores with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Accountancy (M.Acy.) degree with a major in Accounting concentration in Professional Accounting and Reporting requires 30 semester credit hours.

Students who do not have the appropriate background course work may be required to complete leveling or prerequisite courses.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of "C" or lower. Even if the grade of "C" or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third "C" (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 "C" Policy takes precedent over probationary status. So, if a student earns a third "C" they are automatically dismissed from their program permanently; even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ACC 5316	Advanced Accounting	3
ACC 5323	Accounting Data Analytics	3
ACC 5366	Business Entity Taxation	3
ACC 5389	Corporate Governance and Ethics	3
<b>Prescribed Elective</b>		
Choose 3 hours from the following:		3
ACC 5350	Professional Accounting Research	
ACC 5372	Tax Research	
Choose 15 hours from the following:		15
<b>Accounting Electives</b>		
ACC 5320	Auditing	
ACC 5352	Financial Statement Reporting and Analysis	
ACC 5350	Professional Accounting Research	
ACC 5355	IT Auditing	
ACC 5372	Tax Research	
ACC 5357	Regulation and Professionalism	
ACC 5362	Cost and Managerial Accounting Theory	
ACC 5369	Special Studies in Accounting	
ACC 5370	Internship in Accounting	
ACC 5373	Fraud Examination	
ACC 5375	Business Information Consulting	
ACC 5377	Partnership Taxation	
ACC 5378	Tax Practice, Procedures, Audits and Controversy	
ACC 5680	Internship in Accounting	
ACC 5390A	International Accounting	
ACC 5390G	Sustainability Reporting	
<b>Business Electives</b>		
BLAW 5310	The Employment Relationship	
BLAW 5315	Legal Issues in International Business	
BLAW 5333	Legal Issues of Sustainability and Responsibility	
ISAN 5355	Database Management Systems	

ISAN 5358	Agile Project Management For Business Professionals
ISAN 5368	Information Security
ISAN 5360	E-Commerce: Strategies, Technologies, and Applications
ISAN 5364	Data Warehousing
ISAN 5370	Enterprise Resource Planning and Business Intelligence
ISAN 5371	Accounting Information Systems and Controls
ECO 5310	International Economics
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FIN 5322	Investment Analysis
FIN 5332	Portfolio Theory and Capital Markets
FIN 5338	International Investments and Financial Management
FIN 5347C	Real Estate Investment
MGT 5310	Organizational Change Management
MGT 5311	Process Improvement Management in Organizations
MGT 5312	Seminar in Management
MGT 5315	New Venture Management
MGT 5318	Cross-Cultural Management
MGT 5321	Supply Chain Management
MGT 5325	Managing Business Creativity
MGT 5330	Seminar in Human Resource Management
MGT 5335	New Venture Launch
MGT 5390	Managerial Data Analysis
MGT 5391	Managing the Communication Process
MGT 5395	Graduate Business Internship
MKT 5322	Marketing Research Methods
MKT 5330	International Marketing
MKT 5331	Integrated Marketing Communications
MKT 5335	Services Marketing
MKT 5395	Independent Study in Marketing
ANLY 5332	Optimization for Business Analytics
ANLY 5334	Statistical Methods for Business
ANLY 5335	Forecasting and Simulation
ANLY 5336	Analytics
ANLY 5390	Topics in Data Analytics
<b>Total Hours</b>	<b>30</b>

## Leveling Courses

Students who do not have the appropriate background course work may be required to complete leveling or prerequisite courses.

Code	Title	Hours
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
ACC 3305	Financial Accounting and Reporting ("B" or better required to continue)	3
ACC 3308	Survey of Income Tax	3
ACC 3313	Intermediate Accounting I	3
ACC 3314	Intermediate Accounting II	3



ACC 3385	Accounting Systems	3
ACC 4313	Auditing and Internal Controls	3

## Courses for CPA Eligibility

All graduates will have the 27 upper-level accounting hours and ethics course required to become a licensed CPA in Texas; however, graduates may still need 24 hours of related business course work. To be eligible to sit for the CPA exam in Texas, the candidate must have 24 hours of upper level business courses. The 24 hours may be completed at a community college or university, at the undergraduate or graduate level. There is a limit of 6 hours in any one area (i.e., management, economics, business law, etc.). Additionally, business statistics and communication may be used to meet this requirement. For further information, please consult with the Texas State Board of Public Accountancy <http://www.tsbpa.state.tx.us/>.

## Comprehensive Examination Requirement

The MAcy program requires satisfactory completion of a comprehensive portfolio that documents abilities acquired during the program. These abilities include: analytical and critical thinking skills to apply accounting knowledge; use of information technology, data analytics, and other analytical methods to evaluate accounting issues, form judgments, and communicate; and conceptualizing a complex issue into a coherent, informative, and persuasive written or oral statement. The portfolio is evaluated in its entirety and no partial credit is given. Detailed instructions and requirements for completing the portfolio are available on the MAcy Canvas site. Students who do not successfully complete the portfolio within the required timeline will be dismissed from the program.

Master's level courses in Accounting: ACC

## Courses Offered

### Accounting (ACC)

#### ACC 5315. Selected Topics in Financial Accounting.

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5316. Advanced Accounting.

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-forprofit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5320. Auditing.

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5323. Accounting Data Analytics.

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5340. Individual Income Tax.

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5350. Professional Accounting Research.

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5352. Financial Statement Reporting and Analysis.

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5355. IT Auditing.

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5357. Regulation and Professionalism.**

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments. Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5361. Accounting Analysis for Managerial Decision Making.**

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5362. Cost and Managerial Accounting Theory.**

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules or the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Accountancy (M.Acy.) degree with a major in Accounting is designed to broaden the educational experience of individuals preparing for a career in the public accounting profession. Students explore the social, ethical, and environmental effects of accounting information on those who rely on it for their decision making needs. The M.Acy. program can be used to satisfy the 150-hour education requirement for the Certified Public Accountant (CPA) license in Texas.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- an overall competitive GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- **Before applying** to the program, applicants must have completed either: a minimum of ACC 3305 and ACC 3313 with a grade of "B" or better and at least 6 additional hours of upper level accounting courses from the following for a total of 12 upper level accounting hours: ACC 3314, ACC 3323, ACC 3365, ACC 3385, ACC 4313, ACC 3308 or, a minimum of ACC 3313 and ACC 3314 with a grade of "B" or better and at least 6 additional hours of upper level accounting courses from the following for a total of 12 upper level accounting hours: ACC 3323, ACC 3365, ACC 3385, ACC 4313, and ACC 3308.
- Texas State accounting majors with at least an overall 3.2 GPA and a 3.4 GPA in upper-level accounting courses and who earn an "A" the first time taking ACC 3313 and a "B" or better in one additional upper

level accounting course may apply to the program before completing additional upper level accounting courses.

- **Fall 2024:** official GMAT/GRE (general test only) not required for applicants with an overall 3.5 GPA or a 3.5 GPA in your last-60-hours GPA of undergraduate course work, 3.5 or higher. If the last-60-hours GPA falls below the minimum requirement, requirement of 3.5, the official GMAT or GRE (general test only) with competitive scores will be required in order to be considered. The Graduate College will notify applicants via email should this occur.
- **Fall 2024:** The A GRE or GMAT requirement waiver and essay waiver may be waived available for Texas State accounting undergraduate students who: applicants who have:
  - provided at least two reference forms of recommendation from Texas State faculty TOEFL, PTE, or IELTS Scores
  - earned a minimum of a 3.0 GPA or higher in upper-level accounting courses taken at Texas State University
  - earned an overall a minimum of a 3.2 GPA or a 3.2 GPA higher in the last 60 hours of undergraduate course work, work, and
- **Spring 2025 and beyond:** GMAT/GRE not required
- resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
- two forms of recommendation from persons best able to assess the student's ability to succeed in graduate school
- responses to specific essay questions
- An essay waiver may be available for Texas State accounting undergraduate applicants who have:
  - provided at least two reference forms from Texas State faculty
  - earned a minimum of a 3.0 GPA or higher in upper-level accounting courses, and
  - earned a minimum of a 3.2 GPA or higher in the last 60 hours of undergraduate course work, and

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waveir>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores with a 110 overall
- official TOEFL Essentials scores with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Accountancy (M.Acy.) degree with a major in Accounting concentration in Taxation requires 30 semester credit hours. Students

must complete a comprehensive examination at the end of the program to satisfy university requirements.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of "C" or lower. Even if the grade of "C" or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third "C" (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 "C" Policy takes precedent over probationary status. So, if a student earns a third "C" they are automatically dismissed from their program permanently; even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ACC 5323	Accounting Data Analytics	3
ACC 5357	Regulation and Professionalism	3
ACC 5366	Business Entity Taxation	3
ACC 5372	Tax Research	3
ACC 5377	Partnership Taxation	3
ACC 5680	Internship in Accounting <sup>1</sup>	6
ACC 5389	Corporate Governance and Ethics	3
<b>Accounting or Business Electives</b>		
Choose 6 hours from the following: <sup>1</sup>		6
ACC 5316	Advanced Accounting	
ACC 5320	Auditing	
ACC 5350	Professional Accounting Research	
ACC 5352	Financial Statement Reporting and Analysis	
ACC 5355	IT Auditing	
ACC 5362	Cost and Managerial Accounting Theory	
ACC 5369	Special Studies in Accounting	
ACC 5370	Internship in Accounting	
ACC 5373	Fraud Examination	
ACC 5375	Business Information Consulting	
ACC 5378	Tax Practice, Procedures, Audits and Controversy	
ACC 5390A	International Accounting	
ACC 5390G	Sustainability Reporting	
BLAW 5310	The Employment Relationship	
BLAW 5333	Legal Issues of Sustainability and Responsibility	
ISAN 5355	Database Management Systems	
ISAN 5357	Computing for Data Analytics	
ISAN 5358	Agile Project Management For Business Professionals	
ISAN 5360	E-Commerce: Strategies, Technologies, and Applications	
ISAN 5364	Data Warehousing	
ISAN 5368	Information Security	
ISAN 5370	Enterprise Resource Planning and Business Intelligence	
ISAN 5371	Accounting Information Systems and Controls	
ISAN 5378	Information Security Policies and Compliance	
ECO 5310	International Economics	



ECO 5320	Emerging Market Economies
FIN 5322	Investment Analysis
FIN 5332	Portfolio Theory and Capital Markets
FIN 5338	International Investments and Financial Management
FIN 5347C	Real Estate Investment
MGT 5310	Organizational Change Management
MGT 5311	Process Improvement Management in Organizations
MGT 5312	Seminar in Management
MGT 5315	New Venture Management
MGT 5318	Cross-Cultural Management
MGT 5321	Supply Chain Management
MGT 5325	Managing Business Creativity
MGT 5330	Seminar in Human Resource Management
MGT 5335	New Venture Launch
MGT 5390	Managerial Data Analysis
MGT 5391	Managing the Communication Process
MGT 5395	Graduate Business Internship
MKT 5322	Marketing Research Methods
MKT 5330	International Marketing
MKT 5331	Integrated Marketing Communications
MKT 5335	Services Marketing
MKT 5395	Independent Study in Marketing
ANLY 5332	Optimization for Business Analytics
ANLY 5334	Statistical Methods for Business
ANLY 5335	Forecasting and Simulation
ANLY 5336	Analytics
ANLY 5390	Topics in Data Analytics

**Total Hours** **30**

<sup>1</sup> Students who do not complete a tax internship must take ACC 5378 and one additional business or accounting elective. Students who complete a three-hour internship must take one additional business or accounting elective.

## Leveling Courses

Students who do not have the appropriate background course work may be required to complete leveling or prerequisite courses.

Code	Title	Hours
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
ACC 3305	Financial Accounting and Reporting ("B" or better required to continue)	3
ACC 3308	Survey of Income Tax	3
ACC 3313	Intermediate Accounting I	3
ACC 3314	Intermediate Accounting II	3
ACC 3385	Accounting Systems	3
ACC 4313	Auditing and Internal Controls	3

## Courses for CPA Eligibility

All graduates will have the 27 upper-level accounting hours and ethics course required to become a licensed CPA in Texas; however, graduates

may still need 24 hours of related business course work. To be eligible to sit for the CPA exam in Texas, the candidate must have 24 hours of upper level business courses. The 24 hours may be completed at a community college or university, at the undergraduate or graduate level. There is a limit of 6 hours in any one area (i.e., management, economics, business law, etc.). Additionally, business statistics and communication may be used to meet this requirement. For further information, please consult with the Texas State Board of Public Accountancy <http://www.tsbpa.state.tx.us/>.

## Comprehensive Examination Requirement

The MACy program requires satisfactory completion of a comprehensive portfolio that documents abilities acquired during the program. These abilities include: analytical and critical thinking skills to apply accounting knowledge; use of information technology, data analytics, and other analytical methods to evaluate accounting issues, form judgments, and communicate; and conceptualizing a complex issue into a coherent, informative, and persuasive written or oral statement. The portfolio is evaluated in its entirety and no partial credit is given. Detailed instructions and requirements for completing the portfolio are available on the MACy Canvas site. Students who do not successfully complete the portfolio within the required timeline will be dismissed from the program.

Master's level courses in Accounting: ACC

## Courses Offered

### Accounting (ACC)

#### ACC 5315. Selected Topics in Financial Accounting.

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5316. Advanced Accounting.

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-forprofit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ACC 5320. Auditing.

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ACC 5323. Accounting Data Analytics.**

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5340. Individual Income Tax.**

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5350. Professional Accounting Research.**

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5352. Financial Statement Reporting and Analysis.**

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5355. IT Auditing.**

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5357. Regulation and Professionalism.**

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments. Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5361. Accounting Analysis for Managerial Decision Making.**

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5362. Cost and Managerial Accounting Theory.**

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules of the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Department of Accounting offers Texas State students majoring in Accounting the opportunity to earn their B.B.A. and their M.Acy. simultaneously in the B.B.A./M.Acy. Integrated program. The Integrated program allows students to complete the two degrees quicker than if they were completed consecutively.

## Undergraduate Admissions Information (B.B.A.)

Admission to McCoy College is competitive, and a student must be admitted to the College to pursue a B.B.A. degree. Consideration for admission to McCoy College undergraduate programs is based on specific admission criteria.

To be considered for admission to McCoy College, students should list a business major in their first-choice major and apply to Texas State by the stated deadlines on the Undergraduate Admissions website.

Students who are admitted to the University but denied admission to McCoy College will be considered for admission to their second choice major or if one is not listed, students will be declared an Exploratory Professional major.

### Admission Process for Prospective Texas State Students

#### Freshman

- Students admitted to Texas State as a Freshman will be automatically admitted to McCoy College if they meet Assured Admission requirements and select business major as their first-choice major.

#### Transfer

- Students admitted to Texas State as a Transfer will be automatically admitted McCoy College if they meet Program Entry requirements based on total semester credit hours earned and select a business major as their first-choice major.

### Admission Process for Current Texas State Students

For current Texas State students, an internal application is available online on the CenturyLink Academic Advising Center website. Students attending Texas State who are currently on academic probation are not eligible for admission to McCoy College.

## Graduate Application Requirements (M.Acy.)

The items listed below are required for M.Acy. admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu/faculty-staff/faculty.html>). International students should review the International Admission Documents webpage (<http://mycatalog.txstate.edu/graduate/admission-documents/international/>) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- official transcripts required from each institution where course credit was granted
- an overall competitive GPA or a competitive GPA in your last 60 hours of undergraduate course work (plus any completed graduate courses)
- at least 90 credit hours of undergraduate course work
- **Before applying** to the program, applicants must have completed: minimum of ACC 3305 and ACC 3313 with a grade of "B" or better and at least six additional hours of upper-level accounting courses from the following for a total of 12 upper level accounting hours:
  - ACC 3308
  - ACC 3314
  - ACC 3323
  - ACC 3365
  - ACC 3385
  - ACC 4313
- Texas State accounting majors with at least an overall 3.2 GPA and a 3.4 GPA in upper-level accounting courses and who earn an "A" **the first time taking ACC 3313** and a "B" or better in one additional upper level accounting course may apply to the program before completing ACC 3314 and additional upper level accounting courses.
- **Fall 2024:** official GMAT/GRE (general test only) not required for applicants with an overall 3.5 GPA or a 3.5 GPA in your last-60-hours of undergraduate course work. If the last-60-hours GPA falls below the minimum requirement, the official GMAT or GRE (general test only) with competitive scores will be required in order to be considered. The Graduate College will notify applicants via email should this occur.
- **Fall 2024:** The GRE or GMAT requirement may be waived for Texas State accounting undergraduate students who:
  - provided at least two forms of recommendation from Texas State faculty
  - earned a minimum of a 3.0 GPA or higher in upper-level accounting courses taken at Texas State University
  - earned an overall 3.2 GPA or a 3.2 GPA in the last 60 hours of undergraduate course work.
- **Spring 2025:** GMAT/GRE not required
- responses to specific essay questions

- An essay waiver may be available for Texas State accounting undergraduate applicants who have:
  - provided at least two reference forms from Texas State faculty, and
  - earned a minimum of a 3.0 GPA or higher in upper-level accounting courses taken at Texas State University, and
  - earned a minimum of a 3.2 GPA or higher in the last 60 hours of undergraduate course work
- resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
- two forms of recommendation from persons best able to assess the student's ability to succeed in graduate school

### TOEFL or IELTS Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores with a 110 overall
- official TOEFL Essentials scores with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## General Requirements

1. The Integrated major in Accounting requires 150 semester credit hours, including 120 hours for the B.B.A. and 30 hours for the M.Acy.
2. For the B.B.A. degree, any McCoy College student whose Texas State GPA drops below a 2.0 is placed on probation by Texas State and on restricted status by McCoy College. Students on restricted status must increase their Texas State GPA to at least 2.0 in the subsequent semester or their admission to McCoy College will be voided. Students are required to meet with a representative of the McCoy College Academic Advising Center to remove probation holds; otherwise, the hold will prevent registration or schedule changes. A student whose admission is voided may regain admission to McCoy College by going through the application process and competing with other applicants for openings. Students with a Texas State GPA below a 2.0 are also subject to the University academic probation and suspension policies.
3. All students seeking the B.B.A. must complete the following general education core curriculum courses as required by McCoy College. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) section of this catalog for other information about the general education core curriculum.
4. To provide a common body of knowledge in business, all students seeking the B.B.A. must complete the following common core of

business courses or their equivalents as required by the McCoy College:

Code	Title	Hours
B A 1310	Introduction to Business	3
ISAN 1323	Introduction to Microcomputer Applications	3
ECO 2314	Principles of Microeconomics	3
ECO 2315	Principles of Macroeconomics	3
ANLY 2333	Business Statistics	3
ACC 2361	Introduction to Financial Accounting	3
ACC 2362	Introduction to Managerial Accounting	3
B A 3110	Professional Development I	1
B A 3120	Professional Development II	1
BLAW 3301	Legal Environment of Business	3
FIN 3312	Business Finance	3
MGT 3303	Management of Organizations	3
MKT 3343	Principles of Marketing	3
MGT 3353	Business Communication	3
ISAN 3380	Enterprise Information Technology and Business Intelligence	3
MGT 4335	Strategic Management and Business Policy	3

5. A combination of courses in the major program area specified by the appropriate academic department and restricted upper-division business electives to complement the major are also required for the B.B.A.
6. Free electives to achieve a minimum total of 120 hours are also required. To ensure compliance with the course requirements for a B.B.A. degree, students should follow the general sequence of courses specified for the curriculum in this section of the catalog.
7. Also, students in the B.B.A who did not complete satisfactorily at least two years of the same foreign language in high school must complete two semesters (6-8 hours) of a single foreign language in college.
8. Nine hours of designated "writing intensive" (WI) courses must be completed at Texas State to satisfy the B.B.A. degree requirements.
9. B.B.A. students must achieve the following grade point averages for graduation:
  - a Texas State GPA of 2.00
  - a Business GPA of 2.25 (includes common business core, major(s), and restrictive/advanced electives)
  - a GPA of 2.0 in the minor(s); and
  - a Major GPA of 2.50
10. Any student enrolled in a graduate degree program in the McCoy College of Business can earn no more than two grades of "C" or lower. Even if the grade of "C" or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third "C" (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 "C" Policy takes precedent over probationary status. So, if a student earns a third "C" they are automatically dismissed from their program permanently, even if probation does not occur.
11. Once students are in their fifth year, they will have the opportunity to select a concentration.

## Course Requirements

			Freshman			
Fall Hours	Spring Hours					
Semester	Semester					
ENG 1310 (Communication Component Code 010 [TCCN ENGL 1301])	3 ENG 1320 (Communication Component Code 010 [TCCN ENGL 1302])	3		ECO 2314 (Social and Behavioral Sciences Component Code 080 [TCCN ECON 2302])	3 ECO 2315 (TCCN ECON 2301)	3
MATH 1329 (Mathematic Component 020 [TCCN MATH 1325])	3 PHIL 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 2306])	3		ANLY 2333 (TCCN BUSI 2305)	3 Creative Arts Component Code 050	3
B A 1310 (TCCN BUSI 1301)	3 Life and Physical Sciences Component Code 030	3		American History Component Code 060	3 POSI 2320 (Governmen Political Science Component Code 070 [TCCN GOVT 2305])	3
POSI 2310 (Governmen Political Science Component Code 070 [TCCN GOVT 2306])	3 American History Component Code 060	3		Life and Physical Sciences Component Code 030	3 ACC 3305	3
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3 ISAN 1323 (TCCN BCIS 1305)	3			B A 3110	1
US 1100	1			15	16	
16	15					Junior
Fall Hours	Spring Hours			Fall Hours	Spring Hours	
Semester	Semester			Semester	Semester	
ACC 3308	3 ACC 3314	3		ACC 3313	3 ACC 3323	3
ACC 3313	3 ACC 3323	3		ISAN 3380	3 BLAW 3301 (TCCN BUSI 2301)	3
MGT 3303	3 MKT 3343	3		MGT 3303	3 MKT 3343	3
Component	3 FIN 3312	3		Component	3 FIN 3312	3
Area				Area		
Option				Option		
Code 090				Code 090		
B A 3120	1			B A 3120	1	
16	15			16	15	
						Senior
Fall Hours	Spring Hours			Fall Hours	Spring Hours	Summer Hours
Semester	Semester			Semester	Semester	
ACC 2361 (TCCN ACCT 2301)	3 ACC 2362 (TCCN ACCT 2302)	3		ACC 3365	3 ACC 5316	3 ACC 4313
				ACC 3385	3 ACC 5389	3 Free Electives (undergradu
				MGT 3353	3 ACC Electives (graduate)	6
				Free Electives (undergradu	6	
				15	12	6



Fifth Year		
Fall Hours Semester	Spring Hours Semester	
MGT 4335	3 BUS or ACC Electives (graduate)	6
Free Electives (undergradu	3 ACC Elective (graduate)	3
ACC 5323	3 ACC 5350 or 5372	3
ACC 5366	3	
<b>12</b>	<b>12</b>	

**Total Hours: 150**

<sup>1</sup> Credit can be earned by successfully passing a test. Students must pay a fee to take the test.

Code	Title	Hours
<b>Accounting Electives</b>		
Choose 9-15 hours from the following:		
ACC 5320	Auditing	
ACC 5350	Professional Accounting Research	
ACC 5352	Financial Statement Reporting and Analysis	
ACC 5355	IT Auditing	
ACC 5357	Regulation and Professionalism	
ACC 5362	Cost and Managerial Accounting Theory	
ACC 5369	Special Studies in Accounting	
ACC 5370	Internship in Accounting	
ACC 5372	Tax Research	
ACC 5373	Fraud Examination	
ACC 5375	Business Information Consulting	
ACC 5377	Partnership Taxation	
ACC 5378	Tax Practice, Procedures, Audits and Controversy	
ACC 5680	Internship in Accounting	
ACC 5390A	International Accounting	
ACC 5390G	Sustainability Reporting	
<b>Business Electives</b>		
Choose 0-9 hours from the following:		
BLAW 5310	The Employment Relationship	
BLAW 5315	Legal Issues in International Business	
BLAW 5333	Legal Issues of Sustainability and Responsibility	
ISAN 5355	Database Management Systems	
ISAN 5358	Agile Project Management For Business Professionals	
ISAN 5360	E-Commerce: Strategies, Technologies, and Applications	
ISAN 5364	Data Warehousing	
ISAN 5368	Information Security	
ISAN 5370	Enterprise Resource Planning and Business Intelligence	
ISAN 5371	Accounting Information Systems and Controls	
ECO 5310	International Economics	
ECO 5320	Emerging Market Economies	

FIN 5322	Investment Analysis
FIN 5332	Portfolio Theory and Capital Markets
FIN 5338	International Investments and Financial Management
FIN 5347C	Real Estate Investment
MGT 5310	Organizational Change Management
MGT 5311	Process Improvement Management in Organizations
MGT 5312	Seminar in Management
MGT 5315	New Venture Management
MGT 5318	Cross-Cultural Management
MGT 5321	Supply Chain Management
MGT 5325	Managing Business Creativity
MGT 5330	Seminar in Human Resource Management
MGT 5335	New Venture Launch
MGT 5390	Managerial Data Analysis
MGT 5391	Managing the Communication Process
MGT 5395	Graduate Business Internship
MKT 5322	Marketing Research Methods
MKT 5330	International Marketing
MKT 5331	Integrated Marketing Communications
MKT 5335	Services Marketing
MKT 5395	Independent Study in Marketing
ANLY 5332	Optimization for Business Analytics
ANLY 5334	Statistical Methods for Business
ANLY 5335	Forecasting and Simulation
ANLY 5336	Analytics
ANLY 5390	Topics in Data Analytics

## Comprehensive Examination Requirement

The MACy program requires satisfactory completion of a comprehensive portfolio that documents abilities acquired during the program. These abilities include: analytical and critical thinking skills to apply accounting knowledge; use of information technology, data analytics, and other analytical methods to evaluate accounting issues, form judgments, and communicate; and conceptualizing a complex issue into a coherent, informative, and persuasive written or oral statement. The portfolio is evaluated in its entirety and no partial credit is given. Detailed instructions and requirements for completing the portfolio are available on the MACy Canvas site. Students who do not successfully complete the portfolio within the required timeline will be dismissed from the program.

## Courses Offered

### Accounting

#### ACC 2301. Accounting in Organizations and Society.

Introductory accounting course for non-business majors. Describes the role of accounting as an information system essential for the operation of today's organizations. Focus is on (1) how data is captured and processed to provide information for decision-making, and (2) how the information provided can be used for decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 2361. Introduction to Financial Accounting.**

This course introduces financial accounting concepts and their application in the accounting process for business organizations, including financial statement preparation, analysis and communication of financial information and related ethical responsibilities. Prerequisite: MATH 1315 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2331 or MATH 2417 or MATH 2471 or HON 3391 or ACT Mathematics score of 27 or better or SAT Mathematics score of 580 or better or SAT Math Section Score 600-800.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**TCCN:** ACCT 2301

**ACC 2362. Introduction to Managerial Accounting.**

This course provides an introduction to the use of accounting information as an aid to management decision making and budgeting. Students will gain an appreciation of control processes and an understanding of accounting reports and related ethical responsibilities. Prerequisites: ACC 2361 and ISAN 1323 and (MATH 1315 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2331 or MATH 2417 or MATH 2471 or HON 3391); all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**TCCN:** ACCT 2302

**ACC 3305. Financial Accounting and Reporting.**

This course expands upon financial accounting concepts introduced in ACC 2361 by emphasizing the use of financial accounting principles to prepare and analyze an organization's financial statements and provides an in-depth study of the accounting cycle. Prerequisites: ACC 2361 with a grade of "C" or better and ISAN 1323 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3308. Survey of Income Tax.**

This course is an introduction to federal income tax provisions, concepts and issues concerning individuals, business and property transactions. The coursework focuses on income and expense recognition as well as tax planning opportunities. Prerequisite: ACC 3305 with a grade of "C" or better or ACC 3313 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3313. Intermediate Accounting I.**

An in-depth study of financial accounting concepts and standards with emphasis on current theory and practices relating to corporate financial statements particularly stressing elements of the balance sheet. Prerequisite: ACC 3305 with a grade of "B" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3314. Intermediate Accounting II.**

This course is a continuation of ACC 3313 and provides an in-depth study of advanced financial accounting topics. Prerequisite: ACC 3313 with a grade of "B" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3323. Data Analytics for Accounting.**

This courses introduces students to the application of data analytics in accounting. The focus is on developing a data analytics mindset so that students can critically think through the planning, analysis, and interpretation of data analysis results before making and communicating a professional judgment or decision. Prerequisite: ACC 3305 with a grade of "B" or better and [QMST 2333 or MATH 2328] with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3363. Governmental Accounting.**

A study of concepts and techniques of fund accounting, and financial reporting for governmental and not-for-profit organizations including state and local government, universities, hospitals, and other public sector entities. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3365. Cost/Managerial Accounting.**

The study of cost/management accounting within the manufacturing and merchandising environment. Includes the analysis of cost accumulation, planning, and control within the organization. Specific topics emphasized are job order and process costing; standard costing, standard costing and variance analysis; absorption and direct costing; budgetary procedures; cost/volume profit analysis; and capital budgeting techniques. Prerequisite: ACC 2362 with a grade of "C" or better and [QMST 2333 or MATH 2328] with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3385. Accounting Systems.**

A study of elements of theory, procedures, and practice relating to system design and implementation for manual and computerized accounting information systems. Emphasis placed on system selection, data entry, file structure, internal control implementation, and report generation for various information end-users. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better and CIS 3380 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 4313. Auditing and Internal Controls.**

This course provides a study of the theory and practices relating to auditing. The course emphasizes the procedures used to evaluate the effectiveness of risk management and control processes, including prevention and detection of fraud. Prerequisite: ACC 3385 with a grade of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**ACC 4390A. International Accounting.**

This course introduces students to accounting issues unique to multinational enterprises and international business activity. Financial accounting practices are compared across different countries. The development of international accounting standards is also explored. (MULT) Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5315. Selected Topics in Financial Accounting.**

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5316. Advanced Accounting.**

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-forprofit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5320. Auditing.**

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5323. Accounting Data Analytics.**

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5340. Individual Income Tax.**

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5350. Professional Accounting Research.**

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5352. Financial Statement Reporting and Analysis.**

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5355. IT Auditing.**

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5357. Regulation and Professionalism.**

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments.

Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5361. Accounting Analysis for Managerial Decision Making.**

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5362. Cost and Managerial Accounting Theory.**

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules or the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Accounting and Information Technology is a cross-department curriculum comprised of accounting and information technology core courses, electives, and a prescribed accounting research elective. Applicants with undergraduate degrees in disciplines other than accounting or from a non-AACSB accredited university may be required to complete additional background coursework. The MSAIT program can be used to satisfy the 150-hour education requirement for the Certified Public Accountant (CPA) license in Texas.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- responses to specific essay questions
- resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
- two forms of recommendation from persons best able to assess the student's ability to succeed in graduate school
- **Before applying** to the program, applicants must have completed either: a minimum of ACC 3305 and ACC 3313 with a grade of "B" or better and at least 6 additional hours of upper level accounting courses from the following for a total of 12 upper level accounting hours: ACC 3314, ACC 3323, ACC 3365, ACC 3385, ACC 4313, ACC 3308 OR, a minimum of ACC 3313 and ACC 3314 with a grade of "B" or better and at least 6 additional hours of upper level accounting courses from the following for a total of 12 upper level accounting hours: ACC 3323, ACC 3365, ACC 3385, ACC 4313, ACC 3308.
- Texas State undergraduate accounting majors with at least an overall 3.2 GPA and a 3.4 GPA in upper-level accounting courses who earn an "A" **the first time taking** ACC 3313 and a "B" or better in one additional upper level accounting course may apply to the graduate program before completing additional upper level accounting courses.

### Approved English Proficiency Exam Scores



Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Accounting and Information Technology requires 30 semester credit hours.

## MSAIT Program (30 hours total)

Code	Title	Hours
<b>Leveling Courses</b>		
(if needed, do not count towards 30 hours)		
ACC 2361	Introduction to Financial Accounting	
ACC 2362	Introduction to Managerial Accounting	
ACC 3305	Financial Accounting and Reporting ("B" or better required to continue)	
ACC 3308	Survey of Income Tax	
ACC 3313	Intermediate Accounting I	
ACC 3314	Intermediate Accounting II	
ACC 3385	Accounting Systems	
ACC 4313	Auditing and Internal Controls	
<b>Required Courses</b>		
		<b>15</b>
ACC 5323	Accounting Data Analytics	
ACC 5389	Corporate Governance and Ethics	
ACC 5366	Business Entity Taxation	
ISAN 5355	Database Management Systems	
ISAN 5368	Information Security	
<b>Prescribed Electives</b>		
		<b>3</b>
Choose 3 hours from the following:		
ACC 5350	Professional Accounting Research	
	or ACC 5372 Tax Research	
<b>Electives</b>		
		<b>12</b>
Accounting Electives Choose 3-9 hours from the following:		
ACC 5316	Advanced Accounting	
ACC 5320	Auditing	
ACC 5350	Professional Accounting Research	

ACC 5352	Financial Statement Reporting and Analysis	
ACC 5355	IT Auditing	
ACC 5357	Regulation and Professionalism	
ACC 5362	Cost and Managerial Accounting Theory	
ACC 5369	Special Studies in Accounting	
ACC 5370	Internship in Accounting	
ACC 5372	Tax Research	
ACC 5373	Fraud Examination	
ACC 5375	Business Information Consulting	
ACC 5377	Partnership Taxation	
ACC 5378	Tax Practice, Procedures, Audits and Controversy	
ACC 5680	Internship in Accounting	
CIS Electives Choose 3-9 hours from the following:		
ISAN 5318	Information Technology in Digital Economy	
ISAN 5358	Agile Project Management For Business Professionals	
ISAN 5357	Computing for Data Analytics	
ISAN 5360	E-Commerce: Strategies, Technologies, and Applications	
ISAN 5364	Data Warehousing	
ISAN 5369	Independent Study in Information Systems	
ISAN 5370	Enterprise Resource Planning and Business Intelligence	
ISAN 5378	Information Security Policies and Compliance	
ISAN 5395	Internship in Information Systems	
Total Hours		30

## Comprehensive Examination Requirement

The MSAIT program requires satisfactory completion of a comprehensive portfolio that documents abilities acquired during the program. These abilities include: analytical and critical thinking skills to apply accounting knowledge; use of information technology, data analytics, and other analytical methods to evaluate accounting issues, form judgments, and communicate; and conceptualizing a complex issue into a coherent, informative, and persuasive written or oral statement. The portfolio is evaluated in its entirety and no partial credit is given. Detailed instructions and requirements for completing the portfolio are available on the MSAIT Canvas site. Students who do not successfully complete the portfolio within the required timeline will be dismissed from the program.

Masters level courses in Accounting, and Computer Information Systems: ACC, (p. 1093) ISAN (p. 1095)

## Courses Offered

### Accounting (ACC)

#### **ACC 5315. Selected Topics in Financial Accounting.**

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ACC 5316. Advanced Accounting.**

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-forprofit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ACC 5320. Auditing.**

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ACC 5323. Accounting Data Analytics.**

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ACC 5340. Individual Income Tax.**

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ACC 5350. Professional Accounting Research.**

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ACC 5352. Financial Statement Reporting and Analysis.**

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ACC 5355. IT Auditing.**

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ACC 5357. Regulation and Professionalism.**

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments. Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ACC 5361. Accounting Analysis for Managerial Decision Making.**

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ACC 5362. Cost and Managerial Accounting Theory.**

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules of the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Information Systems (ISAN)****ISAN 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5318. Information Technology in Digital Economy.**

This course provides an understanding of the issues in managing organizations' information assets. The course examines users' issues and challenges within the Information Technology (IT) management arena as part of a firm's business and IT strategy. The course provides frameworks and management principles that current or aspiring managers can employ with the challenges of implementing rapidly advancing technology. The focus is on managerial rather than technical issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5355. Database Management Systems.**

This course explores the concepts, principles, issues, and techniques for managing data resources using database management systems. Topics include techniques for analysis, design, and development of database systems, creating and using logical data models, database query languages, and procedures for evaluating management software. Students will develop a management information system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5357. Computing for Data Analytics.**

This course focuses on fundamentals of programming. Students will learn to design and implement applications, and programmatically handle a variety of data management functionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5358. Agile Project Management For Business Professionals.**

This course provides an in-depth study of the project management body of knowledge as applied to Information Technology, emphasizing Agile methodologies and the processes of managing scope, costs, schedules, quality, and risks. Topics Include program management, system planning and design methodologies, material & capacity requirements, human, cultural, & international issues, and their impact on the organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5360. E-Commerce: Strategies, Technologies, and Applications.**

This course is designed to familiarize students with current and emerging e-commerce technologies. Topics include Internet technology for business advantage, reinventing the future of business through e-commerce, business opportunities in e-commerce, and social, political, global, and ethical issues associated with e-commerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5364. Data Warehousing.**

This course allows students to familiarize with current and emerging data warehousing technologies that play a strategic role in business organizations. Topics include data warehouse development life cycle, data warehouse navigation, data quality, and performance issues. Prerequisite: ISAN 5355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5367. Machine Learning.**

This course focuses on deriving actionable knowledge from data using algorithms and industry standard tools. Topics covered are the complete process, key technologies, core machine learning algorithms, and programming used for business intelligence. Prerequisite: ISAN 5357 and ANLY 5336 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5368. Information Security.**

This course covers the analysis, design, development, implementation, and maintenance of information security systems in communication networks. Topics include legal, ethical, professional, and personnel issues, concepts, theories, and processes of risk management, technology; cryptography theory and practice; and physical and hardware security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5369. Independent Study in Information Systems.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in Information Systems and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ISAN 5370. Enterprise Resource Planning and Business Intelligence.**

This course uses information technology integrations in enterprises for operational control and business intelligence is examined via Enterprise Resource Planning (ERP) applications in customer relationships management, accounting, finance, purchasing, production control, sales, marketing, and human resource management. Emphasizes managerial issues surrounding the need, selection, and implementation of ERP systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5371. Accounting Information Systems and Controls.**

This course examines accounting information systems and controls and their role in the current technology-intensive business environment. Emphasis is placed on contemporary technology and applications, information technology and business information systems assessments, design of internal controls to satisfy regulation and policy requirements, control concepts, theories, and processes, information systems auditing, systems development life cycle, and information structure, data transfer, and transaction cycles. Prerequisite: ACC 3313 or ACC 5361 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5378. Information Security Policies and Compliance.**

This course focuses on the technology and managerial issues related to information policies, regulations, and compliance that assure confidentiality, integrity, and availability of data and computer systems. Topics include information security policy, regulations, laws, standards, framework, compliance, and governance. Prerequisite: ISAN 5368 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5390A. Introduction to Design Thinking.**

This course provides an overview and hands-on introduction to Design Thinking and the human-centered design process. Topics include an introduction, defining the problem, ideation, and concept generation, prototyping & testing, refining, and launching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ISAN 5395. Internship in Information Systems.**

This course provides students with opportunities for experiential learning by contributing to a computer information systems project. The course enables integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ISAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

McCoy Hall Room 404

T: 512.245.2291

[isa.mccoy.txst.edu \(http://www.isa.mccoy.txst.edu/\)](http://www.isa.mccoy.txst.edu/)

The mission of the Department of Information Systems and Analytics is to provide relevant educational opportunities to graduate students



wishing to pursue professional careers related to information systems, technology and data analytics. The department strives to create an environment for preparing individuals for a lifetime of learning and growth by producing graduates who understand the concepts and uses of information systems, analytics and are capable of applying these concepts to business and government.

The Master of Science in Data Analytics and Information Systems (MSDAIS) program produces graduates with the skills required to be proficient in data analytics and information systems. The MSDAIS program is designed to prepare students to use information systems and quantitative skills to conduct data analysis. Graduates of this program will be capable of transforming organizational data into actionable information using data analytics and information systems skills.

## AACSB Accreditation

The McCoy College of Business is accredited by the Association to Advance Collegiate Schools of Business (AACSB). AACSB Accreditation is known, worldwide, as the longest standing most recognized form of specialized/professional accreditation an institution can earn.

## Master of Science (M.S.)

- Major in Data Analytics and Information Systems (Non-thesis Option) (p. 1097)
- Major in Data Analytics and Information Systems (Thesis Option) (p. 1101)

## Program Overview

The science of analyzing data to make actionable data-driven business decisions and gain competitive advantage has received widespread attention among business and government enterprises in the last few years. Various referred to as Business Intelligence, Data Analytics, or Data Science, this is an emerging field that uniquely combines mathematical and statistical modeling, data visualization and information systems. The primary driving force behind the significant increase in the use of data analytics has been the extensive digitization of intra- and inter-organizational processes that generate massive amounts of data. This discipline has experienced an explosive growth during the past few years.

The main objective of the M.S. major in Data Analytics and Information Systems is to ensure that graduates can use appropriate data analysis methods and cutting-edge information technologies to derive actionable business intelligence. In a survey by KPMG, 99% of surveyed executives indicated that the skills for managing and analyzing big data sets to derive actionable insights is important for developing sound business strategy. This requires employees with advanced knowledge of data management technologies to manage big data sets and apply appropriate analytical techniques to analyze these data sets. The proposed program will provide students with integrated knowledge of information technology and data analysis methods to effectively manage and analyze data to support data-driven decision-making. The curriculum of the degree program will provide students with the technical skills required for the DSA jobs. This includes both information systems and data analytics skills such as data management, structured query language, R and Python programming, descriptive, predictive and prescriptive analytics, machine learning, statistical computing, big data analysis, and data visualization.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a competitive overall GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GMAT or GRE (general test only) with a competitive score
- responses to specific essay questions and a personal statement
- resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
- three letters of recommendation from individuals best able to assess the student's ability to succeed in graduate school

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official PTE scores required with a 52
- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

Degree Requirements

The Master of Science (M.S.) degree with a major in Data Analytics and Information Systems non-thesis option requires 30 semester credit hours.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of C or lower. Even if the grade of C or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a “strike” under this policy. Upon earning the third C (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 C Policy takes precedent over probationary status. So, if a student earns a third C they are automatically dismissed from their program permanently; even if probation does not occur.

Course Requirements

Code	Title	Hours
Required Courses		
ISAN 5355	Database Management Systems	3
ISAN 5357	Computing for Data Analytics	3
ISAN 5364	Data Warehousing	3
ISAN 5367	Machine Learning	3
ANLY 5332	Optimization for Business Analytics	3
ANLY 5334	Statistical Methods for Business	3
ANLY 5335	Forecasting and Simulation	3
ANLY 5336	Analytics	3
Electives		6
Management Electives		
Choose 3-6 hours from the following:		
ISAN 5390A	Introduction to Design Thinking	
ISAN 5358	Agile Project Management For Business Professionals	
ISAN 5318	Information Technology in Digital Economy	
B A 5351	Organizational Performance and Competitive Advantage	
MKT 5321	Marketing Management	
MKT 5340	Digital Marketing	
ANLY 5338	Operations Management	
ACC 5361	Accounting Analysis for Managerial Decision Making	
MGT 5311	Process Improvement Management in Organizations	
MGT 5321	Supply Chain Management	
Prescribed Electives		
Choose 0-3 hours from the following:		
ISAN 5358	Agile Project Management For Business Professionals	
ISAN 5369	Independent Study in Information Systems	
ISAN 5370	Enterprise Resource Planning and Business Intelligence	
ISAN 5395	Internship in Information Systems	
GEO 5301	Multivariate Quantitative Methods	
GEO 5418	Geographic Information Systems I	

GEO 5419	Geographic Information Systems II
HIM 5311	Health Informatics and Data Visualization
HIM 5340	Healthcare Informatics
IE 5310	Advanced Statistical Design of Experiments for Engineers
IE 5340	Applied Deterministic Operations Research for Engineers
IE 5343	Non-Linear Optimization Techniques for Engineers
IE 5398C	Data-Intensive Analysis and Simulation for Engineers
MKT 5322	Marketing Research Methods
MKT 5323	Qualitative Research in Marketing
MKT 5345	Marketing Analytics
MKT 5346	Contemporary Topics in Marketing Analytics
MKT 5347	AI and Data Visualization for Marketing
QFE 5320	Econometrics
QFE 5335	Financial Analytics
ANLY 5342	Probability and Statistical Models
ANLY 5343	Data Mining
ANLY 5369	Independent Study in Analytics
ANLY 5395	Internship in Analytics
Total Hours	30

Comprehensive Examination Requirement

All MSDAIS students are required to take a written comprehensive examination in their last semester of the program. Students must pass the comprehensive exam during the last semester in at most two attempts. If a student fails to pass the comprehensive exam in two attempts during the final semester, the student will retake the comprehensive exam during the next regular semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master’s level courses in Data Analytics and Information Systems: ANLY (p. 1098), ISAN (p. 1100)

Courses Offered

Analytics (ANLY)

ANLY 5199B. Thesis.

This course represents a student’s continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

ANLY 5299B. Thesis.

This course represents a student’s continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

**ANLY 5332. Optimization for Business Analytics.**

This course introduces optimization theory and applications for analyzing and solving business decision-making problems. The students will learn to apply in various business domains optimization concepts and tools such as linear programming, integer/mixed-integer programming, and other classes of optimization models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5334. Statistical Methods for Business.**

This course provides the quantitative foundation for business analysis and decision making. Topics include inferential statistics, regression analysis, and other analytical/modeling techniques with wide applicability in decision-making and problem solving in all functional areas of business.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5335. Forecasting and Simulation.**

This course introduces the concepts and principles of forecasting and simulation techniques as applies to planning and decision making in organizations. Topical coverage includes time series forecasting, causal forecasting, discrete event simulation, and continuous-event simulation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5336. Analytics.**

This course introduces analytics which refers to the process of transforming data into information for making decisions. The topics include the introduction to analytics, visualization, analytics applications, and challenges related to business data. Students will learn how to use software, conduct data analysis and communicate their results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5338. Operations Management.**

This course introduces the processes and strategies to create, produce, and deliver goods and services that drive organizations' overall success. It will highlight operational and tactical problems organizations typically confront and introduce the concepts and analytical tools (both process and systems based) used to deal with these problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5342. Probability and Statistical Models.**

This course introduces the concept of probability and probability distributions. It includes general and generalized linear models, inflated and mixture models, and hierarchical models. Model validity and choice will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5343. Data Mining.**

This course covers data mining concepts and applications of data mining techniques to solve business problems. It emphasizes algorithms such as classification, clustering, association, and text mining. Model selection and assessment are also emphasized. Prerequisite: ANLY 5336 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANLY 5369. Independent Study in Analytics.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in quantitative methods and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANLY 5390A. Statistical Computing.**

This course covers programming and statistical computing concepts. Programming concepts include data manipulation, data structures, control structures, functions, basic algorithms, and matrix manipulations. Statistical computing topics include numerical linear algebra, Monte Carlo methods, and numerical optimization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANLY 5395. Internship in Analytics.**

This course is based on experiential learning while the student works in quantitative methods and statistics. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Data Analytics and Information Systems. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANLY 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Information Systems (ISAN)

**ISAN 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5318. Information Technology in Digital Economy.**

This course provides an understanding of the issues in managing organizations' information assets. The course examines users' issues and challenges within the Information Technology (IT) management arena as part of a firm's business and IT strategy. The course provides frameworks and management principles that current or aspiring managers can employ with the challenges of implementing rapidly advancing technology. The focus is on managerial rather than technical issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5355. Database Management Systems.**

This course explores the concepts, principles, issues, and techniques for managing data resources using database management systems. Topics include techniques for analysis, design, and development of database systems, creating and using logical data models, database query languages, and procedures for evaluating management software. Students will develop a management information system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5357. Computing for Data Analytics.**

This course focuses on fundamentals of programming. Students will learn to design and implement applications, and programmatically handle a variety of data management functionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5358. Agile Project Management For Business Professionals.**

This course provides an in-depth study of the project management body of knowledge as applied to Information Technology, emphasizing Agile methodologies and the processes of managing scope, costs, schedules, quality, and risks. Topics Include program management, system planning and design methodologies, material & capacity requirements, human, cultural, & international issues, and their impact on the organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5360. E-Commerce: Strategies, Technologies, and Applications.**

This course is designed to familiarize students with current and emerging e-commerce technologies. Topics include Internet technology for business advantage, reinventing the future of business through e-commerce, business opportunities in e-commerce, and social, political, global, and ethical issues associated with e-commerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5364. Data Warehousing.**

This course allows students to familiarize with current and emerging data warehousing technologies that play a strategic role in business organizations. Topics include data warehouse development life cycle, data warehouse navigation, data quality, and performance issues. Prerequisite: ISAN 5355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5367. Machine Learning.**

This course focuses on deriving actionable knowledge from data using algorithms and industry standard tools. Topics covered are the complete process, key technologies, core machine learning algorithms, and programming used for business intelligence. Prerequisite: ISAN 5357 and ANLY 5336 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5368. Information Security.**

This course covers the analysis, design, development, implementation, and maintenance of information security systems in communication networks. Topics include legal, ethical, professional, and personnel issues, concepts, theories, and processes of risk management, technology; cryptography theory and practice; and physical and hardware security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5369. Independent Study in Information Systems.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in Information Systems and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ISAN 5370. Enterprise Resource Planning and Business Intelligence.**

This course uses information technology integrations in enterprises for operational control and business intelligence is examined via Enterprise Resource Planning (ERP) applications in customer relationships management, accounting, finance, purchasing, production control, sales, marketing, and human resource management. Emphasizes managerial issues surrounding the need, selection, and implementation of ERP systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5371. Accounting Information Systems and Controls.**

This course examines accounting information systems and controls and their role in the current technology-intensive business environment. Emphasis is placed on contemporary technology and applications, information technology and business information systems assessments, design of internal controls to satisfy regulation and policy requirements, control concepts, theories, and processes, information systems auditing, systems development life cycle, and information structure, data transfer, and transaction cycles. Prerequisite: ACC 3313 or ACC 5361 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5378. Information Security Policies and Compliance.**

This course focuses on the technology and managerial issues related to information policies, regulations, and compliance that assure confidentiality, integrity, and availability of data and computer systems. Topics include information security policy, regulations, laws, standards, framework, compliance, and governance. Prerequisite: ISAN 5368 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5390A. Introduction to Design Thinking.**

This course provides an overview and hands-on introduction to Design Thinking and the human-centered design process. Topics include an introduction, defining the problem, ideation, and concept generation, prototyping & testing, refining, and launching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ISAN 5395. Internship in Information Systems.**

This course provides students with opportunities for experiential learning by contributing to a computer information systems project. The course enables integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ISAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The science of analyzing data to make actionable data-driven business decisions and gain competitive advantage has received widespread attention among business and government enterprises in the last few years. Various referred to as Business Intelligence, Data Analytics,



or Data Science, this is an emerging field that uniquely combines mathematical and statistical modeling, data visualization and information systems. The primary driving force behind the significant increase in the use of data analytics has been the extensive digitization of intra- and inter-organizational processes that generate massive amounts of data. This discipline has experienced an explosive growth during the past few years.

The main objective of the M.S. major in Data Analytics and Information Systems is to ensure that graduates can use appropriate data analysis methods and cutting-edge information technologies to derive actionable business intelligence. In a survey by KPMG, 99% of surveyed executives indicated that the skills for managing and analyzing big data sets to derive actionable insights is important for developing sound business strategy. This requires employees with advanced knowledge of data management technologies to manage big data sets and apply appropriate analytical techniques to analyze these data sets. The proposed program will provide students with integrated knowledge of information technology and data analysis methods to effectively manage and analyze data to support data-driven decision-making. The curriculum of the degree program will provide students with the technical skills required for the DSA jobs. This includes both information systems and data analytics skills such as data management, structured query language, R and Python programming, descriptive, predictive and prescriptive analytics, machine learning, statistical computing, big data analysis, and data visualization.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a competitive overall GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GMAT or GRE (general test only) with a competitive score
- responses to specific essay questions and a personal statement
- resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
- three letters of recommendation from individuals best able to assess the student's ability to succeed in graduate school

## Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Data Analytics and Information Systems requires 30 semester credit hours, including a thesis.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of C or lower. Even if the grade of C or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third C (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 C Policy takes precedent over probationary status. So, if a student earns a third C they are automatically dismissed from their program permanently; even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ISAN 5355	Database Management Systems	3
ISAN 5357	Computing for Data Analytics	3
ISAN 5364	Data Warehousing	3
ISAN 5367	Machine Learning	3
ANLY 5332	Optimization for Business Analytics	3
ANLY 5334	Statistical Methods for Business	3
ANLY 5335	Forecasting and Simulation	3
ANLY 5336	Analytics	3
<b>Thesis Courses</b>		
ISAN 5399A	Thesis	3
or ANLY 5399A Thesis		
Choose a minimum of 3 hours from the following:		3
ISAN 5199B	Thesis	
or ANLY 5199B Thesis		

ISAN 5299B Thesis  
or ANLY 5299B Thesis

ISAN 5399B Thesis  
or ANLY 5399B Thesis

ISAN 5599B Thesis  
or ANLY 5599B Thesis

ISAN 5999B Thesis  
or ANLY 5999B Thesis

**Total Hours**

**30**

## Comprehensive Examination Requirement

All MSDAIS students are required to take a written comprehensive examination in their last semester of the program. Students must pass the comprehensive exam during the last semester in at most two attempts. If a student fails to pass the comprehensive exam in two attempts during the final semester, the student will retake the comprehensive exam during the next regular semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student

will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's

progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Data Analytics and Information Systems: ISAN (p. 1104), ANLY (p. 1106)

## Courses Offered (p. 1106)

### Information Systems (ISAN):

#### ISAN 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ISAN 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ISAN 5318. Information Technology in Digital Economy.

This course provides an understanding of the issues in managing organizations' information assets. The course examines users' issues and challenges within the Information Technology (IT) management arena as part of a firm's business and IT strategy. The course provides frameworks and management principles that current or aspiring managers can employ with the challenges of implementing rapidly advancing technology. The focus is on managerial rather than technical issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ISAN 5355. Database Management Systems.

This course explores the concepts, principles, issues, and techniques for managing data resources using database management systems. Topics include techniques for analysis, design, and development of database systems, creating and using logical data models, database query languages, and procedures for evaluating management software. Students will develop a management information system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ISAN 5357. Computing for Data Analytics.

This course focuses on fundamentals of programming. Students will learn to design and implement applications, and programmatically handle a variety of data management functionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ISAN 5358. Agile Project Management For Business Professionals.

This course provides an in-depth study of the project management body of knowledge as applied to Information Technology, emphasizing Agile methodologies and the processes of managing scope, costs, schedules, quality, and risks. Topics Include program management, system planning and design methodologies, material & capacity requirements, human, cultural, & international issues, and their impact on the organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ISAN 5360. E-Commerce: Strategies, Technologies, and Applications.

This course is designed to familiarize students with current and emerging e-commerce technologies. Topics include Internet technology for business advantage, reinventing the future of business through e-commerce, business opportunities in e-commerce, and social, political, global, and ethical issues associated with ecommerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ISAN 5364. Data Warehousing.

This course allows students to familiarize with current and emerging data warehousing technologies that play a strategic role in business organizations. Topics include data warehouse development life cycle, data warehouse navigation, data quality, and performance issues. Prerequisite: ISAN 5355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ISAN 5367. Machine Learning.

This course focuses on deriving actionable knowledge from data using algorithms and industry standard tools. Topics covered are the complete process, key technologies, core machine learning algorithms, and programming used for business intelligence. Prerequisite: ISAN 5357 and ANLY 5336 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5368. Information Security.**

This course covers the analysis, design, development, implementation, and maintenance of information security systems in communication networks. Topics include legal, ethical, professional, and personnel issues, concepts, theories, and processes of risk management, technology; cryptography theory and practice; and physical and hardware security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5369. Independent Study in Information Systems.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in Information Systems and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ISAN 5370. Enterprise Resource Planning and Business Intelligence.**

This course uses information technology integrations in enterprises for operational control and business intelligence is examined via Enterprise Resource Planning (ERP) applications in customer relationships management, accounting, finance, purchasing, production control, sales, marketing, and human resource management. Emphasizes managerial issues surrounding the need, selection, and implementation of ERP systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5371. Accounting Information Systems and Controls.**

This course examines accounting information systems and controls and their role in the current technology-intensive business environment. Emphasis is placed on contemporary technology and applications, information technology and business information systems assessments, design of internal controls to satisfy regulation and policy requirements, control concepts, theories, and processes, information systems auditing, systems development life cycle, and information structure, data transfer, and transaction cycles. Prerequisite: ACC 3313 or ACC 5361 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5378. Information Security Policies and Compliance.**

This course focuses on the technology and managerial issues related to information policies, regulations, and compliance that assure confidentiality, integrity, and availability of data and computer systems. Topics include information security policy, regulations, laws, standards, framework, compliance, and governance. Prerequisite: ISAN 5368 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ISAN 5390A. Introduction to Design Thinking.**

This course provides an overview and hands-on introduction to Design Thinking and the human-centered design process. Topics include an introduction, defining the problem, ideation, and concept generation, prototyping & testing, refining, and launching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ISAN 5395. Internship in Information Systems.**

This course provides students with opportunities for experiential learning by contributing to a computer information systems project. The course enables integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ISAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ISAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



## **Analytics (ANLY):**

### **ANLY 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **ANLY 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **ANLY 5332. Optimization for Business Analytics.**

This course introduces optimization theory and applications for analyzing and solving business decision-making problems. The students will learn to apply in various business domains optimization concepts and tools such as linear programming, integer/mixed-integer programming, and other classes of optimization models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ANLY 5334. Statistical Methods for Business.**

This course provides the quantitative foundation for business analysis and decision making. Topics include inferential statistics, regression analysis, and other analytical/modeling techniques with wide applicability in decision-making and problem solving in all functional areas of business.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ANLY 5335. Forecasting and Simulation.**

This course introduces the concepts and principles of forecasting and simulation techniques as applies to planning and decision making in organizations. Topical coverage includes time series forecasting, causal forecasting, discrete event simulation, and continuous-event simulation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ANLY 5336. Analytics.**

This course introduces analytics which refers to the process of transforming data into information for making decisions. The topics include the introduction to analytics, visualization, analytics applications, and challenges related to business data. Students will learn how to use software, conduct data analysis and communicate their results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ANLY 5338. Operations Management.**

This course introduces the processes and strategies to create, produce, and deliver goods and services that drive organizations' overall success. It will highlight operational and tactical problems organizations typically confront and introduce the concepts and analytical tools (both process and systems based) used to deal with these problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ANLY 5342. Probability and Statistical Models.**

This course introduces the concept of probability and probability distributions. It includes general and generalized linear models, inflated and mixture models, and hierarchical models. Model validity and choice will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ANLY 5343. Data Mining.**

This course covers data mining concepts and applications of data mining techniques to solve business problems. It emphasizes algorithms such as classification, clustering, association, and text mining. Model selection and assessment are also emphasized. Prerequisite: ANLY 5336 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ANLY 5369. Independent Study in Analytics.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in quantitative methods and work independently on a specialized project. Course may be repeated with approval of department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### **ANLY 5390A. Statistical Computing.**

This course covers programming and statistical computing concepts. Programming concepts include data manipulation, data structures, control structures, functions, basic algorithms, and matrix manipulations. Statistical computing topics include numerical linear algebra, Monte Carlo methods, and numerical optimization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

### **ANLY 5395. Internship in Analytics.**

This course is based on experiential learning while the student works in quantitative methods and statistics. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**ANLY 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Data Analytics and Information Systems. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANLY 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANLY 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

McCoy Hall Room 504

T: 512.245.2547

<https://fin-eco.mccoy.txst.edu/>

The mission of the Department of Finance and Economics is to provide students the ability to pursue learning throughout their lives, accept responsibility for their actions, and contribute to the common goals of society. Departmental programs are designed to develop informed citizens capable of thinking critically and succeeding in a highly-complex, interdependent, global society. Ideally, graduates will successfully compete for employment in both the public and private sectors and for entrance to high-quality graduate education.

**M.S. in Quantitative Finance & Economics**

Advanced skills in financial and economic analysis using large data sets have become increasingly important workforce credentials among firms seeking to gain a competitive edge in the marketplace; yet professionals with these skills have been in relatively short supply. To meet this need, the Department of Finance and Economics offers a Master of Science (M.S.) degree with a major in Quantitative Finance and Economics. Finance and Economics are closely intertwined disciplines, with each field contributing insight across different dimensions to the same competitive challenges that firms face and policies that governments create. This intersection of interest and shared outcome create synergies

between the disciplines that support offering a degree program that combines both economics and finance.

The mission of the master's degree program is to serve financial professionals and economists from central Texas, the state of Texas, and the nation by producing graduates with quantitative and methodological skills and knowledge relevant to private and public sectors. The program is designed to prepare students for employment opportunities in the financial and economic sectors that require advanced quantitative and data analysis skills. Graduates of this program will be capable of transforming financial and economic problems into business solutions through logical reasoning, statistical analysis, computation and simulation methods, and numerical modeling.

**AACSB Accreditation**

The McCoy College of Business is accredited by the Association to Advance Collegiate Schools of Business (AACSB). AACSB Accreditation is known, worldwide, as the longest standing most recognized form of specialized/professional accreditation an institution can earn.

**Master of Science (M.S.)**

- Major in Quantitative Finance and Economics (Non-thesis Option) (p. 1107)
- Major in Quantitative Finance and Economics (Thesis Option) (p. 1111)

**Program Overview**

Advanced skills in financial and economic analysis using large data sets have become increasingly important workforce credentials among firms seeking to gain a competitive edge in the marketplace; yet professionals with these skills have been in relatively short supply.

Finance and Economics are closely intertwined disciplines, with each field contributing insight across different dimensions to the same competitive challenges that firms face and policies that governments create. This intersection of interest and shared outcome create synergies between the disciplines that support offering a degree program that combines both economics and finance.

The Master of Science major in Quantitative Finance and Economics degree program is designed for undergraduate STEM-related majors or professionals with an interest in acquiring additional analytical skills to enhance their ability to excel in today's marketplace.

**Application Requirements**

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- Baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- Official transcripts required from **each institution** where course credit was granted
- A competitive GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- Prerequisites: A minimum grade of B in Principles of Microeconomics and Macroeconomics (ECO 2314, ECO 2315 or equivalent), Quantitative Methods and Statistics (QMST 2333 or equivalent), Business Calculus (Math 1329 or equivalent), and Business Finance (FIN3312 or equivalent)
- official GMAT/GRE (general test only) not required for applicants with a last-60-hours GPA of 3.5 or higher. If the last-60-hours GPA falls below the minimum requirement of 3.5, the official GMAT or GRE (general test only) with competitive scores will be required in order to be considered. The Graduate College will notify applicants via email should this occur.
- Responses to specific essay questions on the statement of purpose
- Resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
- Three letters of recommendation from persons best able to assess the student's ability to succeed in graduate school

Given the required prerequisite courses and quantitative and analytical nature of the program, students with undergraduate degrees in Accounting, Economics, Finance, Information Systems, Engineering, Mathematics, Statistics, and Physics are suitable applicants, although students with other degrees may be considered. The program is targeted at full time students. However, part-time students can enroll in the program with a longer time frame for completion. Students must have completed the prerequisite courses by the end of the summer prior to the student's first fall semester of the program.

Applicants should refer to The Graduate College website for additional information regarding the admission process.

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with an 80 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

Degree Requirements

The Master of Science (M.S.) degree with a major in Quantitative Finance and Economics requires 30 semester credit hours.

Course Requirements

Code	Title	Hours
Required Courses		
FIN 5322	Investment Analysis	3
QFE 5310	Microeconomic Theory and Applications	3
QFE 5315	Macroeconomic Theory and Applications	3
QFE 5320	Econometrics	3
QFE 5330	Financial Theory and Corporate Policy	3
QFE 5340	Financial Econometrics	3
Prescribed Electives		
Choose 3 hours from the following:		3
CIS 5357		
QFE 5335	Financial Analytics	
QMST 5336		
Choose 9 hours from the following:		9
CIS 5355		
QFE 5353	Fixed Income Analysis	
QFE 5369	Internship	
QFE 5390A	International Economics	
QFE 5392A	Financial Markets and Institutions	
QFE 5392B	Securities Law	
QFE 5395	Independent Study	
QMST 5335		
QMST 5342		
QMST 5343		
QMST 5390A		
Total Hours		30

Comprehensive Examination

All candidates for graduate degrees must pass one or more comprehensive examinations, either written, oral, or both, covering at least the field of concentration.

Non-thesis students are required to take a written comprehensive examination in their last semester of the program. If a student fails to pass the comprehensive exam during the final semester, the student will be required to take GC 5100 during the following term to retake the failed portions of the comprehensive exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Quantitative Finance and Economics: QFE

## Courses Offered

### Quantitative Finance and Economics (QFE)

#### **QFE 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is completed. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **QFE 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is completed. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **QFE 5310. Microeconomic Theory and Applications.**

This course provides a rigorous introduction to the methods of microeconomic theory and quantitative applications. Topics covered include consumer and producer theory, decision-making under uncertainty, markets and competition, general equilibrium, and game theory. Along with each topic, applications to empirical work are conducted by discussing and re-producing quantitative results of journal articles. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **QFE 5315. Macroeconomic Theory and Applications.**

This course explores macroeconomic policy arguments at an advanced level. Topics include traditional and modern theories of income, price, employment, long-run economic growth, business cycle models, role of monetary and fiscal policy in promoting economic stability, and empirical applications of macroeconomic theories. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **QFE 5320. Econometrics.**

This course combines theoretical framework of regression models with empirical applications in economics, finance, and public policy. Topics include different modeling techniques, assessment tools, and application of computer-assisted regression analysis to business and economic problems. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **QFE 5330. Financial Theory and Corporate Policy.**

This course provides an introduction to theories fundamental to the field of finance, with specific emphasis on corporate finance applications.

Topics covered include theories of utility, state-preference, mean-variance optimization, asset pricing, and capital structure, as well as introduction to option pricing theories applied to corporate finance. Prerequisite:

ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **QFE 5335. Financial Analytics.**

This course explores open-source software in a Finance context. This is a hands-on practical programming course with step-by-step source code. Students learn major financial models related to investments and corporate finance and how to write their own code to implement models in real-world scenarios as well as visualize and analyze financial data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **QFE 5340. Financial Econometrics.**

This course explores corporate finance and asset pricing models in application of economic and financial data. Topics include estimation and inferences of financial models, principle component/factor analysis, capital asset pricing, volatility modeling, risk management, derivative pricing, portfolio allocation/optimizations, simulating financial systems, among others. Analytical software will be used to estimate models.

Prerequisite: QFE 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **QFE 5353. Fixed Income Analysis.**

This course covers the valuation of a wide variety of fixed income securities and their derivatives, including money-market instruments, government bonds, repurchase agreements, interest-rate swaps, mortgage-backed securities, and corporate bonds. It focuses on analytic tools used in bond portfolio management and interest rate risk management. Prerequisite: FIN 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **QFE 5369. Internship.**

This course is based on experiential learning. Students will integrate both professional and academic experiences through an internship with an external employer. Prerequisite: Must have completed 12 graduate hours and other prerequisites may be specified by the employer with the consent of Program Director and department chair and instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5390A. International Economics.**

This course examines open economy macroeconomics and monetary issues of international economics. Topics include international financial markets, exchange rates, trade policies, international monetary systems, international financial crises and contagions, and applications of theory with data on international macroeconomic & financial behavior.

Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better or advisor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**QFE 5390B. Research Topics in Sports Economics.**

This course provides a statistically rigorous introduction to the field of sports economics at the graduate level. Students will be required to read recent literature in the field of sports economics, with a focus on empirical research using data from US professional baseball, US and English professional soccer, and US collegiate sports. Research topics will cover both theoretical background and empirical results, covering such topics as the demand for sport, the structure of the sports industry, and the labor markets of sport. Prerequisite: QFE 5310 and QFE 5320 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**QFE 5392A. Financial Markets and Institutions.**

This course focuses on US financial markets and institutions, with a lesser focus on their international counterparts. Topics covered include the characteristics and roles of the various financial markets including money and capital markets, equity and debt markets; relationships between the financial markets and financial institutions; interest rate fundamentals; and the impact of regulators and central banking on financial markets and institutions. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better or advisor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**QFE 5392B. Securities Law.**

This course explores the role of U.S. federal securities laws that enable market participants to make legal, ethical, and strategic business decisions. Topics covered include the Securities Act of 1933, the Securities Exchange Act of 1934, Sarbanes-Oxley, Dodd Frank, and other topical legislation, as well as global regulatory, judicial, and litigation trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5392C. Active Portfolio Management.**

This course focuses on practical applications of the modern portfolio theory. It develops innovative processes to uncover raw signals of asset returns and convert them to superior return forecasts. These forecasts are used to construct portfolios and control risk. This course also teaches how to use economics, econometrics, and operation research to solve complicated practical investment problems. It additionally covers a comprehensive set of concepts for guiding the process of active investment management. Prerequisite: QFE 5330 and QFE 5320 both with grades of "C" or better or advisor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**QFE 5392D. Financial Derivatives with Python.**

This course covers financial derivatives, their pricing and their use for hedging. The types of derivatives studied are futures, forwards, vanilla and exotic options. Mathematical tools such as binomial trees, Monte Carlo methods, implied volatilities, replication portfolios, and calculation of the Greeks are introduced. Python programming language is used to implement the covered models. Prerequisite: QFE 5330 and QFE 5320 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**QFE 5395. Independent Study.**

This course focuses on individual in-depth study. Students, in consultation with a faculty member, choose a selected area of study in Quantitative Finance or Economics on a specialized project. Prerequisite: instructor and program director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Quantitative Finance & Economics. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**QFE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is completed. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**QFE 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is completed. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**QFE 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is completed. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

Advanced skills in financial and economic analysis using large data sets have become increasingly important workforce credentials among firms seeking to gain a competitive edge in the marketplace; yet professionals with these skills have been in relatively short supply.

Finance and Economics are closely intertwined disciplines, with each field contributing insight across different dimensions to the same competitive challenges that firms face and policies that governments create. This intersection of interest and shared outcome create synergies between the disciplines that support offering a degree program that combines both economics and finance.

The Master of Science major in Quantitative Finance and Economics degree program is designed for undergraduate STEM-related majors or professionals with an interest in acquiring additional analytical skills to enhance their ability to excel in today's marketplace.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- Baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- Official transcripts required from **each institution** where course credit was granted

- A competitive overall GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- Prerequisites: A minimum grade of B in Principles of Microeconomics and Macroeconomics (ECO 2314, ECO 2315 or equivalent), Quantitative Methods and Statistics (QMST 2333 or equivalent), Business Calculus (Math 1329 or equivalent), and Business Finance (FIN3312 or equivalent)
- official GMAT/GRE (general test only) not required for applicants with a last-60-hours GPA of 3.5 or higher. If the overall or last-60-hours GPA falls below the minimum requirement of 3.5, the official GMAT or GRE (general test only) with competitive scores will be required in order to be considered. The Graduate College will notify applicants via email should this occur.
- Responses to specific essay questions on the statement of purpose
- Resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
- Three letters of recommendation from persons best able to assess the student's ability to succeed in graduate school

Given the required prerequisite courses and quantitative and analytical nature of the program, students with undergraduate degrees in Accounting, Economics, Finance, Information Systems, Engineering, Mathematics, Statistics, and Physics are suitable applicants, although students with other degrees may be considered. The program is targeted at full time students. However, part-time students can enroll in the program with a longer time frame for completion. Students must have completed the prerequisite courses by the end of the summer prior to the student's first fall semester of the program.

Applicants should refer to The Graduate College website for additional information regarding the admission process.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with an 80 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Quantitative Finance and Economics requires 30 semester credit hours, including a thesis.



## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
FIN 5322	Investment Analysis	3
QFE 5310	Microeconomic Theory and Applications	3
QFE 5315	Macroeconomic Theory and Applications	3
QFE 5320	Econometrics	3
QFE 5330	Financial Theory and Corporate Policy	3
QFE 5340	Financial Econometrics	3
<b>Prescribed Electives</b>		
Choose 3 hours from the following:		3
CIS 5357		
QFE 5335	Financial Analytics	
QMST 5336		
Choose 3 hours from the following:		3
CIS 5355		
QFE 5353	Fixed Income Analysis	
QFE 5369	Internship	
QFE 5390A	International Economics	
QFE 5392A	Financial Markets and Institutions	
QFE 5392B	Securities Law	
QFE 5395	Independent Study	
QMST 5335		
QMST 5342		
QMST 5343		
QMST 5390A		
<b>Thesis</b>		
QFE 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
QFE 5199B	Thesis	
QFE 5299B	Thesis	
QFE 5399B	Thesis	
QFE 5599B	Thesis	
QFE 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination

All candidates for graduate degrees must pass one or more comprehensive examinations, either written, oral, or both, covering the field of concentration. An oral thesis defense will substitute for the comprehensive exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until

the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses offered in Quantitative Finance and Economics: QFE

## Courses Offered

### Quantitative Finance and Economics (QFE)

#### QFE 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is completed. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### QFE 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is completed. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### QFE 5310. Microeconomic Theory and Applications.

This course provides a rigorous introduction to the methods of microeconomic theory and quantitative applications. Topics covered include consumer and producer theory, decision-making under uncertainty, markets and competition, general equilibrium, and game theory. Along with each topic, applications to empirical work are conducted by discussing and re-producing quantitative results of journal articles. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### QFE 5315. Macroeconomic Theory and Applications.

This course explores macroeconomic policy arguments at an advanced level. Topics include traditional and modern theories of income, price, employment, long-run economic growth, business cycle models, role of monetary and fiscal policy in promoting economic stability, and empirical applications of macroeconomic theories. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### QFE 5320. Econometrics.

This course combines theoretical framework of regression models with empirical applications in economics, finance, and public policy. Topics include different modeling techniques, assessment tools, and application of computer-assisted regression analysis to business and economic problems. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5330. Financial Theory and Corporate Policy.**

This course provides an introduction to theories fundamental to the field of finance, with specific emphasis on corporate finance applications. Topics covered include theories of utility, state-preference, mean-variance optimization, asset pricing, and capital structure, as well as introduction to option pricing theories applied to corporate finance. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5335. Financial Analytics.**

This course explores open-source software in a Finance context. This is a hands-on practical programming course with step-by-step source code. Students learn major financial models related to investments and corporate finance and how to write their own code to implement models in real-world scenarios as well as visualize and analyze financial data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5340. Financial Econometrics.**

This course explores corporate finance and asset pricing models in application of economic and financial data. Topics include estimation and inferences of financial models, principle component/factor analysis, capital asset pricing, volatility modeling, risk management, derivative pricing, portfolio allocation/optimizations, simulating financial systems, among others. Analytical software will be used to estimate models.

Prerequisite: QFE 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5353. Fixed Income Analysis.**

This course covers the valuation of a wide variety of fixed income securities and their derivatives, including money-market instruments, government bonds, repurchase agreements, interest-rate swaps, mortgage-backed securities, and corporate bonds. It focuses on analytic tools used in bond portfolio management and interest rate risk management. Prerequisite: FIN 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5369. Internship.**

This course is based on experiential learning. Students will integrate both professional and academic experiences through an internship with an external employer. Prerequisite: Must have completed 12 graduate hours and other prerequisites may be specified by the employer with the consent of Program Director and department chair and instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5390A. International Economics.**

This course examines open economy macroeconomics and monetary issues of international economics. Topics include international financial markets, exchange rates, trade policies, international monetary systems, international financial crises and contagions, and applications of theory with data on international macroeconomic & financial behavior. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better or advisor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**QFE 5390B. Research Topics in Sports Economics.**

This course provides a statistically rigorous introduction to the field of sports economics at the graduate level. Students will be required to read recent literature in the field of sports economics, with a focus on empirical research using data from US professional baseball, US and English professional soccer, and US collegiate sports. Research topics will cover both theoretical background and empirical results, covering such topics as the demand for sport, the structure of the sports industry, and the labor markets of sport. Prerequisite: QFE 5310 and QFE 5320 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**QFE 5392A. Financial Markets and Institutions.**

This course focuses on US financial markets and institutions, with a lesser focus on their international counterparts. Topics covered include the characteristics and roles of the various financial markets including money and capital markets, equity and debt markets; relationships between the financial markets and financial institutions; interest rate fundamentals; and the impact of regulators and central banking on financial markets and institutions. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better or advisor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**QFE 5392B. Securities Law.**

This course explores the role of U.S. federal securities laws that enable market participants to make legal, ethical, and strategic business decisions. Topics covered include the Securities Act of 1933, the Securities Exchange Act of 1934, Sarbanes-Oxley, Dodd Frank, and other topical legislation, as well as global regulatory, judicial, and litigation trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5392C. Active Portfolio Management.**

This course focuses on practical applications of the modern portfolio theory. It develops innovative processes to uncover raw signals of asset returns and convert them to superior return forecasts. These forecasts are used to construct portfolios and control risk. This course also teaches how to use economics, econometrics, and operation research to solve complicated practical investment problems. It additionally covers a comprehensive set of concepts for guiding the process of active investment management. Prerequisite: QFE 5330 and QFE 5320 both with grades of "C" or better or advisor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**QFE 5392D. Financial Derivatives with Python.**

This course covers financial derivatives, their pricing and their use for hedging. The types of derivatives studied are futures, forwards, vanilla and exotic options. Mathematical tools such as binomial trees, Monte Carlo methods, implied volatilities, replication portfolios, and calculation of the Greeks are introduced. Python programming language is used to implement the covered models. Prerequisite: QFE 5330 and QFE 5320 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**QFE 5395. Independent Study.**

This course focuses on individual in-depth study. Students, in consultation with a faculty member, choose a selected area of study in Quantitative Finance or Economics on a specialized project. Prerequisite: instructor and program director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Quantitative Finance & Economics. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**QFE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is completed. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**QFE 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is completed. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**QFE 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is completed. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

McCoy Hall Room 524

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<https://mgt.mccoy.txst.edu/>

The mission of the Department of Management is to educate our students to become successful managers and leaders in a dynamic business world. To accomplish the mission, we balance effective teaching with scholarly activities and our professional services contributions. Faculty strive for quality in all departments course offerings and undertakings to help prepare students for leadership and service in private and public organizations.

## AACSB Accreditation

The McCoy College of Business is accredited by the Association to Advance Collegiate Schools of Business (AACSB). AACSB Accreditation is known, worldwide, as the longest standing most recognized form of specialized/professional accreditation an institution can earn.

## Master of Science (M.S.)

- Major in Human Resource Management (p. 1115)

## Program Overview

The Master of Science (M.S.) degree with a major in Human Resource Management is a flexible, part-time to full-time program designed to prepare people for successful careers in human resource management. In comparison to the M.B.A. program, which offers a broad-based business education, the M.S. program offers in-depth knowledge associated with the major aspects of human resource management. The M.S. curriculum has been designed to adhere to educational guidelines set forth by the Society for Human Resource Management (SHRM), the premier professional association for the human resource field.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review

the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree (preferably in business administration or a related field) from a regionally accredited university
    - Texas State undergraduate management majors with at least an overall 3.2 GPA and a 3.4 GPA in upper-level management courses may apply to the program if at least 90 hours of undergraduate coursework has been completed.
  - official transcripts from **each institution** where course credit was granted
  - a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - responses to specific essay questions
  - knowledge of business functions (management, marketing, finance, accounting, MIS) demonstrated through previous course work and/or work experience
  - official GRE (general test only) or GMAT required with competitive scores
    - A GRE or GMAT waiver may be available for Texas State undergraduate management applicants with at least 90 hours completed who have:
      - earned a minimum of a 3.2 overall GPA
      - earned a minimum of a 3.4 GPA in upper-level management courses taken at Texas State University
      - provided at least two references from Texas State faculty
  - resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
  - two letters of recommendation from persons best able to assess the student's ability to succeed in graduate school

#### TOEFL, PTE, or IELTS Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Human Resource Management requires 30 semester credit hours.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of C or lower. Even if the grade of C or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third C (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 C Policy takes precedent over probationary status. So, if a student earns a third C they are automatically dismissed from their program permanently; even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
B A 5351	Organizational Performance and Competitive Advantage	3
MGT 5314	Organizational Behavior and Theory	3
MGT 5330	Seminar in Human Resource Management	3
MGT 5336	Compensation and Benefits	3
MGT 5337	Organizational Staffing	3
MGT 5338	Human Resource Development	3
MGT 5339	International Human Resource Management	3
MGT 5390	Managerial Data Analysis	3
<b>Prescribed Electives</b>		
Select six hours from the following:		6
BLAW 5310	The Employment Relationship	
BLAW 5368I	International Business Ethics	
MGT 5310	Organizational Change Management	
MGT 5312	Seminar in Management	
MGT 5318	Cross-Cultural Management	
MGT 5333	PROB IN BUS ADMIN	
MGT 5380A	Business Ethics Leadership	
MGT 5380C	Group Dynamics in Organizations	
MGT 5380D	Labor Relations and Negotiation	
MGT 5395	Graduate Business Internship	
Other 5000-level courses within the McCoy College of Business Administration may be selected with prior approval from the graduate advisor.		
<b>Total Hours</b>		<b>30</b>

#### Comprehensive Examination Requirement

The comprehensive examination consists of a written exam taken in the student's final semester. If the student does not pass the written exam, the student must take an oral exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Human Resource Management: MGT



## Courses Offered

### Management (MGT)

#### **MGT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **MGT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **MGT 5301. Graduate Assistant Development.**

Completion of this course is required as a condition of employment for graduate assistants. The course is seminar based and covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **MGT 5310. Organizational Change Management.**

Presents an overview of the process of change in an organization and stresses the key issues involved in reengineering and renewing organizations. Problems dealing with stress and conflict during major change will be explored along with practical ideas on building effective teams to make change possible and sustainable.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MGT 5311. Process Improvement Management in Organizations.**

Learn existing and latest developments in process improvement techniques for continuous improvement and the role of quality as a system for establishing an organization's competitive advantage. Process mapping is emphasized and assessment of effectiveness in the interactions of the managerial and technical systems of organizations is also studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MGT 5312. Seminar in Management.**

Development of philosophy, strategy, and tactics in managing an enterprise. Administrative processes common to all enterprises, such as entrepreneurship, business and society, leadership and group behavior in organizations, business ethics, and international management. (Course may be repeated for credit with different course focus.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MGT 5313. Strategic Management.**

An integrative approach to policy formulation and administration (decision making) to achieve organization objectives. Should be taken the last semester of student's MBA program. Prerequisite: ACC 5361 and FIN 5387 and MKT 5321 and QMST 5334 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MGT 5314. Organizational Behavior and Theory.**

Organizational behavior and structure as influenced by environmental variables and system relationships. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MGT 5315. New Venture Management.**

This course provides an overview of the entrepreneurial process from the initial idea through start-up, growth, and harvest. Students learn how to write a business plan, manage all the elements of an entrepreneurial business, and develop a better understanding of the requirements of the entrepreneurial life path.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MGT 5318. Cross-Cultural Management.**

The global environment requires sensitivity to and the adaptation of leadership and management skills and practices, and the culture-bound differences in workplace behavior and attitudes. Explores how differences in cultural core values shape behavior and attitudes of workers, managerial colleagues, and negotiating partners. (MULT) Prerequisites: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

#### **MGT 5321. Supply Chain Management.**

A variety of tools and frameworks provide students and understanding of the basis behind supply chain decision making. Topics include supply management concepts, demand-supply management, pull/push system, capacity and resource allocation, performance measurement, relationship assessment, and outsourcing in an integrated supply chain. Require graduate standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MGT 5325. Managing Business Creativity.**

This course focuses on the means by which businesses and individuals foster and maintain their creative and innovative skills. Key topics include: idea generation and refinement, idea screening, prototype development, and feasibility analysis. Objectives are met through classroom exercises, case analysis, guest speakers, and individual and team projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5330. Seminar in Human Resource Management.**

A study of current developments and practices in human resource management, including employment laws; planning, recruitment and selection; training and development programs; wage and benefits administration; performance management, human relations and productivity; labor relations; safety and health; and current contributions to human resource management theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5333. Problems in Business Administration.**

The student is here given the opportunity to work in the field of his special interest, particularly in the subjects of accounting, business law, marketing, statistics, finance, and insurance. The course will be conducted by conferences between the student and instructors concerned. Problems will be assigned as nearly as possible for the needs of the individual student.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5335. New Venture Launch.**

The purpose of this class is to ensure students gain a full understanding of what it takes to start and grow a business. Students learn the process of creating a new venture from the inside by planning, organizing and launching an actual business. Prerequisite: MGT 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5336. Compensation and Benefits.**

This course addresses the rewards systems in organizations. Strategic and technical considerations in designing, administering and managing compensation and benefits plans in organizations, including job analysis and evaluation, wage levels and structures, legal issues, individual and group incentives, and benefits are considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5337. Organizational Staffing.**

A study of the methods involved in recruitment and selection of employees with an emphasis on measurement, job analysis, performance appraisal, legal issues, and the role of human resource planning and strategy. This course relies on statistics to teach students to make reliable and valid employment decisions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5338. Human Resource Development.**

A study of theoretical and applied perspectives on needs assessment, design, development delivery and evaluation of training and development as well as organizational change and development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5339. International Human Resource Management.**

A study of challenges that decision makers consider when managing their human resources across the globe. Drawing on theories and models from cross-cultural and international management areas, this course covers such topics as globalization, culture, emerging international assignments, and expatriate recruitment, selection, training, repatriation, and career management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5380A. Business Ethics Leadership.**

This course examines a variety of ethical issues in business from multiple stakeholder perspectives (top management, employees, community members, etc.). The course is designed to enhance moral awareness and facilitate individual development with respect to making ethical decisions that contribute to effective corporate management and leadership.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MGT 5380C. Group Dynamics in Organizations.**

This course explores the theoretical framework of group interactions as well as the practical workplace challenges associated with organizing, participating on, and managing teams and groups. It addresses the development and use of teams to improve business organizations and is recommended for graduate students preparing for business careers. Prerequisite: B A 5351 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380D. Labor Relations and Negotiation.**

This graduate level course is a study of labor organizations and their impact as well as negotiation and conflict resolution issues. The course will examine the National Labor Relations Act (NLRA), union and employer rights under the NLRA, union organizing, collective bargaining, negotiation, contract administration, mediation and arbitration. Corequisite: MGT 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380E. International Leadership.**

Course will include lectures, business engagements, cultural excursions, and a service-learning project. To reinforce the theories discussed in class students will interact directly with managers, employees, and international business professionals, learn perspective on cultural and leadership issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380F. Management for Organizational Sustainability.**

This course is designed to take a broad look at Sustainability from both Ecological and Organizational perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380G. Artificial Intelligence (AI) for Business Managers.**

This course provides a basic foundation in artificial intelligence for students of the business school by introducing a means to make economically sound decisions regarding the implementation areas. In this course all students of the business school may implement small projects in the functional disciplines of the business school (e.g. marketing, finance, etc.). It could also be of interest for students of the School of Engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5390. Managerial Data Analysis.**

Designed to prepare managers to make more effective decisions based upon evidence from data analysis. Covers all elements of the general linear model from t-tests to multiple regression analysis. Involves acquiring and analyzing data for prediction and explanation, developing reports with actionable recommendations, and communicating results for managerial decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5391. Managing the Communication Process.**

The study and application of theory and psychology of managerial communication using written, oral, and technological modes to communicate within the business environment. The course includes the process and product approach to graphics, leadership, problem solving, prioritizing, interviewing, and communicating change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5395. Graduate Business Internship.**

Integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in MGT 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

McCoy Hall Room 424

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<https://marketing.mccoy.txst.edu/>

The mission of the Department of Marketing is to prepare a diverse student population to become successful marketing professionals and responsible global citizens in a data driven world. The department complements these efforts with research that adds to marketing knowledge while providing solutions to marketing challenges. To accomplish this mission, faculty will combine effective teaching with basic, applied, and instructional scholarship with professional service. The faculty will strive for quality in all activities to help prepare students for leadership and service in a diverse, global, and competitive environment.

The Master of Science in Marketing Research and Analysis program readies graduates for positions in marketing that will be involved in creating, analyzing, interpreting, and utilizing data. These positions include market researchers, data analysts, marketing and digital specialists, and marketing managers. Typical job titles include Strategic Data Insights Analyst, Digital Marketing Specialists, Marketing Analyst, Consumer Insights Manager, Digital Marketing Analyst, and Data Specialist.

The mission of the Master of Science in Marketing Research and Analysis program is to better prepare marketing professionals for a marketplace that heavily relies on data and analytics. The program will prepare students to conduct marketing research and utilize marketing analytics, and to interpret the results to inform marketing strategy decisions. Students will learn to design, evaluate, execute, and effectively communicate results. Special emphasis will be placed on how to best leverage the vast amounts of data that are being collected about customers, products, and other key elements of the organizational environment to increase competitive advantage as well as productivity and profitability.

## AACSB Accreditation

The McCoy College of Business is accredited by the Association to Advance Collegiate Schools of Business (AACSB). AACSB Accreditation is known, worldwide, as the longest standing most recognized form of specialized/professional accreditation an institution can earn.

## Master of Science (M.S.)

- Major in Marketing Research and Analysis (Non-thesis Option) (p. 1120)
- Major in Marketing Research and Analysis (Thesis Option) (p. 1123)

## Program Overview

Marketing research and analytics are used by companies to link information about products, customers and markets to financial metrics like sales, margin, and EBITDA (earnings before interest, taxes, depreciation, and amortization). Further, McKinsey & Company claims that marketing and sales leaders need to use analytics since companies that effectively use data will improve productivity and profitability. Marketing research is increasingly being incorporated into the strategic planning function by organizations. This shift is increasing the scope and demand for marketing managers with strong research skills as well as the need for market research analysts and survey researchers.

The M.S. major in Marketing Research and Analysis is a specialized degree program that helps to fill the disconnect between marketing practice and marketing education. As technology advances and data collection becomes the primary source for managerial decisions, a need has evolved for a managerial workforce with advanced degrees in marketing to be able to make effective use of this vast amount of data coming into the organization. These marketing research and analysis functions are a critical part of modern marketing in organizations. Effective organizations are making decisions based on facts and these facts are gleaned from analysis of incoming data. More and more organizations are using marketing analytics and digital marketing. There is an unmet need for marketing professionals who can interpret and relate that data to marketing decisions as well as make marketing decisions in an increasingly digital marketplace.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree (preferably in business administration or a related field) from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered.

Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a competitive overall GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- knowledge of business functions (management, marketing, finance, accounting, MIS) demonstrated through previous course work and/or work experience
- official GMAT or GRE (general test only) with a competitive score for those who do not have a 3.5 overall GPA or a 3.5 GPA in your last-60-hours of undergraduate course work. If the GPA falls below the minimum requirement, the official GMAT or GRE (general test only) with competitive scores will be required in order to be considered. Admissions will notify applicants via email should this occur.
- responses to specific essay questions on the statement of purpose
- resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
- three letters of recommendation from persons best able to assess the student's ability to succeed in graduate school

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 80 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Marketing Research and Analysis non-thesis option requires 30 semester credit hours.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of C or lower. Even if the grade of C or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third C (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 C Policy takes precedent over probationary status. So, if a student earns a third C they are automatically dismissed from their program permanently; even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MKT 5321	Marketing Management	3
MKT 5322	Marketing Research Methods	3
MKT 5323	Qualitative Research in Marketing	3
MKT 5340	Digital Marketing	3
MKT 5345	Marketing Analytics	3
MKT 5348	Python for Marketing Analytics	3
MKT 5350	Strategic Marketing Analysis and Planning	3
ANLY 5334	Statistical Methods for Business	3
<b>Prescribed Electives</b>		
Choose 6 hours from the following:		6
ISAN 5355	Database Management Systems	
ISAN 5357	Computing for Data Analytics	
ISAN 5358	Agile Project Management For Business Professionals	
ISAN 5360	E-Commerce: Strategies, Technologies, and Applications	
ISAN 5370	Enterprise Resource Planning and Business Intelligence	
MGT 5311	Process Improvement Management in Organizations	
MGT 5321	Supply Chain Management	
MKT 5341	Social Media Marketing and Analysis	
MKT 5346	Contemporary Topics in Marketing Analytics	
MKT 5395	Independent Study in Marketing	
MKT 5398	Internship in Marketing	
ANLY 5332	Optimization for Business Analytics	
ANLY 5335	Forecasting and Simulation	
ANLY 5336	Analytics	
ANLY 5338	Operations Management	
ANLY 5342	Probability and Statistical Models	
ANLY 5343	Data Mining	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

All students are required to take a written comprehensive examination in their last semester of the program. Students must pass the comprehensive exam during the last semester in at most two attempts. If a student fails to pass the comprehensive exam in two attempts during the final semester, the student will be required to take GC 5100 the following term to retake the comprehensive exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Marketing: MKT

### MKT 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### MKT 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### MKT 5321. Marketing Management.

A study of the planning and coordination of marketing functions, marketing policies, and the analysis of marketing administration. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MKT 5322. Marketing Research Methods.

An advanced study of the marketing research process to include problem formulation, determination of sources of information and research design, design of data collection forms, design of the sample, collection of the data, analysis and interpretation of the data, preparation of the research report, and oral presentation of the research findings.

Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MKT 5323. Qualitative Research in Marketing.

This course examines qualitative methods as used in marketing and market research. Topics include the design and execution of qualitative research projects using various qualitative methodological approaches. Activities include application of qualitative methods for conducting research. Students will apply learning in a qualitative research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MKT 5330. International Marketing.

An application of marketing concepts to the global business environment. Examines marketing in the light of international economic, social, cultural, business, and environmental factors. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MKT 5331. Integrated Marketing Communications.**

An analysis of consumer behavior in the marketplace and its application to the preparation and presentation of a complete integrated marketing communications plan for a local, regional, and/or national client.

Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5335. Services Marketing.**

Services dominate the U.S. economy and are becoming critical for competitive advantage in companies across the globe and in all industry sectors. This course examines the foundations of services marketing, which are necessary to create, promise, and deliver a successful, interactive customer experience. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5340. Digital Marketing.**

This course examines marketing strategies in the digital environment. It examines the latest technology and analytical tools used in e-marketing and e-commerce, including online advertising, mobile marketing, social media marketing, search marketing, email marketing, and web analytics. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5341. Social Media Marketing and Analysis.**

This course provides a conceptual foundation and practical approach for conducting social media analysis and developing a social media marketing plan and/or campaign will be presented. Students will gain hands-on experience using social media strategically to achieve desired marketing goals through a hands-on project. Students will also earn applicable digital marketing certifications. Prerequisite: MKT 5321 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5345. Marketing Analytics.**

This course is a study of the scientific approach that connects customer data and competitive information to drive marketing decision-making. The course explores customer data analysis techniques and their theoretical foundations that are applied to real world business problems. Students will learn software, conduct data analysis and communicate the results. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5346. Contemporary Topics in Marketing Analytics.**

This course covers contemporary topics in marketing analytics. Students will learn (1) concepts and methods in strategic marketing analytics, (2) analytical and mapping tools in geospatial data and information, (3) concepts and methods in Bayesian Networks, (4) Topic Analysis using big data in marketing, and (5) other emerging analytical tools and methods in marketing. Prerequisite: QMST 5334 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5347. AI and Data Visualization for Marketing.**

This course consists of applied training in foundational topics for artificial intelligence and data visualization. It covers both prediction as well as classification problems. While many technical aspects are covered, the main emphasis is on knowing how to apply a wide range of modern techniques to specific marketing problems. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5348. Python for Marketing Analytics.**

This course consists of learning Python and using this programming language for data analysis and visualization. This course will help to leverage the power of historical data and to develop models that project future trends. Python will be used for exploratory data analysis, market forecasting, customer segmentation, deep learning, social media analysis and analysis of marketing images and videos. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5350. Strategic Marketing Analysis and Planning.**

This course examines strategic marketing decision making through the analysis and interpretation of marketing intelligence, metrics, and dashboards. Topics will include data-driven decision making on marketing challenges pertaining to customers, brands, marketing mix decisions, online strategy and social media, market performance, and firm profitability. Prerequisite: MKT 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5395. Independent Study in Marketing.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in Marketing. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5397I. Entrepreneurial Marketing.**

Entrepreneurship involves the discovery, implementation, and pursuit of new business opportunities. Successful execution of an entrepreneurial idea requires an effective marketing plan and related skills. In this course, we will investigate how marketing concepts (product, price, promotion, place, people, processes, brand image, segmentation, targeting, positioning, quality perceptions) can facilitate entrepreneurs' realization of their ideas. A conceptual foundation and practical approach for developing an entrepreneurship-focused marketing plan will be discussed. Using a hands-on approach, students will gain skills and knowledge on the effective use of marketing concepts to achieve entrepreneurial goals. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MKT 5398. Internship in Marketing.**

Internship in marketing is an external employer supervised, experiential learning course that enables a student to integrate professional and graduate business coursework. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5399A. Thesis.**

This course represents a student's initial thesis enrollments. No thesis credit is awarded until student has completed the thesis in Marketing Research and Analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MKT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

Marketing research and analytics are used by companies to link information about products, customers and markets to financial metrics like sales, margin, and EBITDA (earnings before interest, taxes, depreciation, and amortization). Further, McKinsey & Company claims that marketing and sales leaders need to use analytics since companies that effectively use data will improve productivity and profitability. Marketing research is increasingly being incorporated into the strategic planning function by organizations. This shift is increasing the scope and demand for marketing managers with strong research skills as well as the need for market research analysts and survey researchers.

The M.S. major in Marketing Research and Analysis is a specialized degree program that helps to fill the disconnect between marketing practice and marketing education. As technology advances and data collection becomes the primary source for managerial decisions, a need has evolved for a managerial workforce with advanced degrees in marketing to be able to make effective use of this vast amount of data coming into the organization. These marketing research and analysis functions are a critical part of modern marketing in organizations. Effective organizations are making decisions based on facts and these facts are gleaned from analysis of incoming data. More and more organizations are using marketing analytics and digital marketing. There is an unmet need for marketing professionals who can interpret and relate that data to marketing decisions as well as make marketing decisions in an increasingly digital marketplace.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree (preferably in business administration or a related field) from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a competitive overall GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- knowledge of business functions (management, marketing, finance, accounting, MIS) demonstrated through previous course work and/or work experience
- official GMAT or GRE (general test only) with a competitive score for those who do not have a 3.5 overall GPA or a 3.5 GPA in the last 60 hours of undergraduate course work. If the GPA falls below the

minimum requirement, the official GMAT or GRE (general test only) with competitive scores will be required in order to be considered. Admissions will notify applicants via email should this occur.

- responses to specific essay questions on the statement of purpose
- resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
- three letters of recommendation from persons best able to assess the student's ability to succeed in graduate school

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 80 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- [official Duolingo scores required with a 110 overall](#)
- [official TOEFL Essentials scores required with an 8.5 overall](#)

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Marketing Research and Analysis requires 30 semester credit hours, including a thesis.

Any student enrolled in a graduate degree program in the McCoy College of Business Administration can earn no more than two grades of C or lower. Even if the grade of C or lower was replaced with a higher grade as a result of repeating the course, the original grade counts as a "strike" under this policy. Upon earning the third C (or lower), the student is automatically placed on academic suspension and permanently dismissed from their degree program without any possibility of readmission to their program or another degree program in McCoy College. The 3 C Policy takes precedent over probationary status. So, if a student earns a third C they are automatically dismissed from their program permanently; even if probation does not occur.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MKT 5321	Marketing Management	3
MKT 5322	Marketing Research Methods	3
MKT 5323	Qualitative Research in Marketing	3
MKT 5340	Digital Marketing	3
MKT 5345	Marketing Analytics	3
MKT 5348	Python for Marketing Analytics	3
MKT 5350	Strategic Marketing Analysis and Planning	3

ANLY 5334	Statistical Methods for Business	3
<b>Thesis Courses</b>		
MKT 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
MKT 5199B	Thesis	
MKT 5299B	Thesis	
MKT 5399B	Thesis	
MKT 5599B	Thesis	
MKT 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

All students are required to take a written comprehensive examination in their last semester of the program. Students must pass the comprehensive exam during the last semester in at most two attempts. If a student fails to pass the comprehensive exam in two attempts during the final semester, the student will be required to take GC 5100 the following term to retake the comprehensive exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Marketing: MKT

### **MKT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **MKT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **MKT 5321. Marketing Management.**

A study of the planning and coordination of marketing functions, marketing policies, and the analysis of marketing administration. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **MKT 5322. Marketing Research Methods.**

An advanced study of the marketing research process to include problem formulation, determination of sources of information and research design, design of data collection forms, design of the sample, collection of the data, analysis and interpretation of the data, preparation of the research report, and oral presentation of the research findings. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MKT 5323. Qualitative Research in Marketing.**

This course examines qualitative methods as used in marketing and market research. Topics include the design and execution of qualitative research projects using various qualitative methodological approaches. Activities include application of qualitative methods for conducting research. Students will apply learning in a qualitative research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5330. International Marketing.**

An application of marketing concepts to the global business environment. Examines marketing in the light of international economic, social, cultural, business, and environmental factors. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5331. Integrated Marketing Communications.**

An analysis of consumer behavior in the marketplace and its application to the preparation and presentation of a complete integrated marketing communications plan for a local, regional, and/or national client.

Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5335. Services Marketing.**

Services dominate the U.S. economy and are becoming critical for competitive advantage in companies across the globe and in all industry sectors. This course examines the foundations of services marketing, which are necessary to create, promise, and deliver a successful, interactive customer experience. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5340. Digital Marketing.**

This course examines marketing strategies in the digital environment. It examines the latest technology and analytical tools used in e-marketing and e-commerce, including online advertising, mobile marketing, social media marketing, search marketing, email marketing, and web analytics. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5341. Social Media Marketing and Analysis.**

This course provides a conceptual foundation and practical approach for conducting social media analysis and developing a social media marketing plan and/or campaign will be presented. Students will gain hands-on experience using social media strategically to achieve desired marketing goals through a hands-on project. Students will also earn applicable digital marketing certifications. Prerequisite: MKT 5321 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5345. Marketing Analytics.**

This course is a study of the scientific approach that connects customer data and competitive information to drive marketing decision-making. The course explores customer data analysis techniques and their theoretical foundations that are applied to real world business problems. Students will learn software, conduct data analysis and communicate the results. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5346. Contemporary Topics in Marketing Analytics.**

This course covers contemporary topics in marketing analytics. Students will learn (1) concepts and methods in strategic marketing analytics, (2) analytical and mapping tools in geospatial data and information, (3) concepts and methods in Bayesian Networks, (4) Topic Analysis using big data in marketing, and (5) other emerging analytical tools and methods in marketing. Prerequisite: QMST 5334 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5347. AI and Data Visualization for Marketing.**

This course consists of applied training in foundational topics for artificial intelligence and data visualization. It covers both prediction as well as classification problems. While many technical aspects are covered, the main emphasis is on knowing how to apply a wide range of modern techniques to specific marketing problems. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5348. Python for Marketing Analytics.**

This course consists of learning Python and using this programming language for data analysis and visualization. This course will help to leverage the power of historical data and to develop models that project future trends. Python will be used for exploratory data analysis, market forecasting, customer segmentation, deep learning, social media analysis and analysis of marketing images and videos. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5350. Strategic Marketing Analysis and Planning.**

This course examines strategic marketing decision making through the analysis and interpretation of marketing intelligence, metrics, and dashboards. Topics will include data-driven decision making on marketing challenges pertaining to customers, brands, marketing mix decisions, online strategy and social media, market performance, and firm profitability. Prerequisite: MKT 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MKT 5395. Independent Study in Marketing.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in Marketing. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5397I. Entrepreneurial Marketing.**

Entrepreneurship involves the discovery, implementation, and pursuit of new business opportunities. Successful execution of an entrepreneurial idea requires an effective marketing plan and related skills. In this course, we will investigate how marketing concepts (product, price, promotion, place, people, processes, brand image, segmentation, targeting, positioning, quality perceptions) can facilitate entrepreneurs' realization of their ideas. A conceptual foundation and practical approach for developing an entrepreneurship-focused marketing plan will be discussed. Using a hands-on approach, students will gain skills and knowledge on the effective use of marketing concepts to achieve entrepreneurial goals. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MKT 5398. Internship in Marketing.**

Internship in marketing is an external employer supervised, experiential learning course that enables a student to integrate professional and graduate business coursework. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5399A. Thesis.**

This course represents a student's initial thesis enrollments. No thesis credit is awarded until student has completed the thesis in Marketing Research and Analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MKT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Dean**

Michael P. O'Malley, Ed.D.

Education Building Room 2001

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**Associate Dean for Academic Affairs and Educational Partnerships**

Joellen Coryell, Ph.D.

**Associate Dean for Faculty Development and Strategic Planning**

Jodi Patrick Holschuh, Ph.D.

**Department Chairs**

Counseling, Leadership, Adult Education, and School Psychology—

Elizabeth Hartwig, Ph.D.

Curriculum and Instruction—Glenna M. Billingsley, Ph.D.

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Texas State University's legacy as a normal school founded in 1899 with a mission dedicated to preparing new teachers remains with us today in the College of Education's commitment to the highest quality educator and professional preparation across many fields. One out of every four Texas State graduate students is enrolled in the College of Education. Our high-caliber doctoral programs prepare candidates for careers in research or as leaders of educational practice.

Our graduate programs at the master's, specialist, and post-baccalaureate levels reflect our dedication to powerful and equitable educational opportunity through the preparation of elementary and secondary school teachers, principals and superintendents, school psychologists, school counselors, special education professionals, and reading specialists. For accomplished educators, our advanced master's programs develop expertise in areas such as Autism/Applied Behavior Analysis, teaching advanced academics, Spanish-English bilingual/bicultural education, and much more.. Equally significant to the college's mission is our substantial focus on health and wellness fields through graduate programs in professional counseling, exercise and sports science, athletic training, public health, recreation administration, and therapeutic recreation. The College of Education has also developed a core focus on learning across the lifespan with programs in adult

education, postsecondary student success, educational technology, and student affairs in higher education. College of Education faculty and graduate students work together in learning and research activities oriented toward the transformative well-being of individuals, communities, and our world.

Education Building, Room 4037  
T: 512-245-2575 F: 512-245-8872  
<http://www.txst.edu/clas> (<http://www.txst.edu/clas/>)

The Department of Counseling, Leadership, Adult Education, and School Psychology (CLAS) is comprised primarily of graduate programs at the master's and doctoral levels. Our department engages a multidisciplinary team of professors and highly qualified staff committed to the educational and professional success of our students. Our students and graduates provide leadership and professional service to schools, agencies, communities, colleges and universities, and professions across Texas as well as nationally and internationally. Pursuing the dreams and possibilities of a graduate education, our students come from many distinct fields, diverse backgrounds, and bring a wide range of professional and personal experiences that enrich our work together. Our faculty are deeply involved in innovative and clinically relevant research projects generating knowledge oriented toward the flourishing of communities, individuals, and the social institutions that support them. Eager to share the work of research, scholarship, and learning with their students, the faculty also supports and advances Texas State as a Hispanic Serving Institution. The department consists of approximately 36 full-time faculty, 20 part-time faculty with practitioner and leadership expertise, 5 staff, 465 graduate students, and an additional 135 doctoral students. The department employs 25 doctoral and graduate assistants and operates community counseling clinics at both the San Marcos and Round Rock campuses.

## Certification and Licensure Programs

Academic preparation for certification and licensure is available in addition to majors and emphases associated with several CLAS Department degree programs. These include certification in school counseling, principal and superintendent certification, and licensure as a Licensed Marriage and Family Therapist, Licensed Professional Counselor, or Licensed Specialist in School Psychology. Inquiries regarding any of these certification or licensure programs should be directed to the appropriate program advisor. To be considered for admission to a certification or licensure program, students must meet the same admission and deadline requirements as the degree-seeking students, which are detailed on The Graduate College's website. Other conditions and professional tests are required by the state of Texas to be certified or licensed. It is the responsibility of the student to be aware of and meet these conditions.

### Professional Counseling

The Professional Counseling program prepares graduates to pursue different post-graduate clinical licensure and certification opportunities, depending on their degree track. Students on the Clinical Mental Health Counseling degree track can pursue post-graduate licensure as a Licensed Professional Counselor (LPC). Students on the Marriage Couple and Family Counseling degree track can pursue post-graduate licensure as both a Licensed Marriage and Family Therapist (LMFT) and a LPC. Students on the School Counseling degree track can pursue certification as a Certified School Counselor (CSC) as well as licensure as an LPC.

The Professional Counseling program is also an Approved Center for Play Therapy. This program offers three play therapy courses that allow students to complete training hours to become a Registered Play Therapist (RPT) through the Association for Play Therapy. Another certification opportunity through the Professional Counseling program is the Texas State University Animal-Assisted Counseling (AAC) Academy. The AAC Academy is a professional training program that promotes the human-animal bond through the study and practice of animal-assisted counseling and play therapy. The mission of the AAC Academy is to provide quality training and certification in animal-assisted counseling that improves the wellbeing of children, teens, adults, and families through positive human-animal interactions.

### Educational Leadership

The Educational Leadership program offers two distinct certifications as Texas public school administrators: a principal/assistant principal certification and a superintendent certification, which requires 15 additional hours above the principal certification. These programs fulfill academic requirements for leadership positions in elementary, middle, or high school principal, assistant principal, superintendent, and school district level positions.

### School Psychology

The School Psychology program meets the academic and supervised practice standards of the Texas State Board of Examiners of Psychologists for providing psychological services in the public schools as a Licensed Specialist in School Psychology (LSSP). This program also meets the standards of the National Association of School Psychologists (NASP) for the National Certified School Psychologist (NCSP) credential. Applicants must have graduated from a master's, specialist, or doctoral program in psychology to be eligible for re-specialization and licensure in school psychology.

## Student Fitness and Performance

### Program Standards

Students enrolled in all academic programs in The Graduate College must maintain high scholastic standards and develop a mastery of the knowledge and methods of their respective discipline. Students are expected to demonstrate emotional and mental fitness in their interactions with others, use skills and methods that are generally accepted by others in the profession, and conform to the code of ethics of their respective discipline, and the university's honor code. A student's acceptance in any program does not guarantee the student's fitness to remain in that program. The faculty is responsible for verifying that only those students who continue to meet program standards are allowed to continue in any program.

### Evaluation of Student Fitness and Performance

Members of the faculty, using their professional judgments, evaluate student fitness and performance continuously. The criteria used by the faculty to make such judgments include instructors' observations of student performance in class or in activities related to courses; evaluations of student performance on theses, dissertations, and practica; site supervisors' evaluations of student performance in practica and internships, and the codes of ethics for the student's field of study. Students who are not making satisfactory progress or who are not meeting program standards will need to participate in a student review process described below.

## Student Review Process

If a faculty member believes that a student is not making satisfactory progress or meeting program standards, the faculty member should discuss the situation with the student. If the faculty member believes that the student's performance is not on track to improve to acceptable standards, the faculty member should refer the student to the Program Standards Committee (PSC) of the appropriate academic program. The PSC consists of three faculty members appointed by the department chair in consultation with the department's senior faculty.

The PSC will notify the student of the reasons that they are not making satisfactory progress or meeting program standards and will give the student an opportunity to meet with the PSC to respond and present information. The PSC will also meet with the faculty member who referred the student and review any pertinent student records or evaluations. After considering the matter, and within ten working days of meeting with the student, the PSC will report its decision to the student and the department chair. The decision may include a statement of whether the student should either remain in or leave the program. The PSC may make other decisions, such as placing restrictions or conditions on the student's continuing in the program, and/or specific recommendations for improvement in meeting program standards. Within ten working days of receiving the PSC's decision, the student will notify the PSC of their acceptance or rejection of the PSC's decision. If the student rejects the PSC's decision, they may appeal to the department chair.

## Appeal Process

Within ten working days of receiving the student's appeal, the chair will review the student's appeal and all documentation provided by the PSC. The chair will make a decision as to the student's continued enrollment in the program. The chair may or may not choose to meet with the student, based on the documentation provided by both the student and the PSC. The chair will notify the student of the decision.

If the student is dissatisfied with the chair's decision, they may appeal to the dean of the college. However, in order for the dean to consider an appeal, the student must submit a written notice of appeal to the chair and the dean within ten working days of receiving the chair's decision. The dean will consider the matter based on information and documentation compiled by the chair and notify the student of the decision within ten working days of the dean's receipt of the appeal from the chair. The dean may meet with the student and give the student an opportunity to address the issues. The dean's decision is final.

## Financial Assistance

There are several options for receiving financial assistance in the CLAS Department. For information on scholarships, loans, tuition, veteran's benefits and more please visit Financial Aid and Scholarships (<https://www.finaid.txst.edu/>) and also visit The Graduate College's Funding (<https://www.gradcollege.txst.edu/funding.html>) site.

Graduate and Doctoral Assistants (<https://www.gradcollege.txst.edu/funding/assistantships.html>) are employed to work in research, instruction, or program administration. They are supervised by a faculty member and work for either 10 or 20 hours per week. Appointments may be made for one semester, an academic year, or a summer. Assistants are required to be available for the assigned work schedule and locations. General requirements and campus wide postings are available at the link above.

## Doctor of Philosophy (Ph.D.)

- Major in Adult, Professional, and Community Education (p. 1130)
- Major in Educational and Community Leadership (p. 1142)

## Specialist in School Psychology (S.S.P.)

- Major in School Psychology (p. 1153)

## Master of Arts (M.A.)

- Major in Adult, Professional, and Community Education (Adult English as a Second Language Concentration Non-thesis Option) (p. 1157)
- Major in Adult, Professional, and Community Education (Adult English as a Second Language Concentration Thesis Option) (p. 1160)
- Major in Adult, Professional, and Community Education (Workplace, Community, and Continuing Education Concentration Non-thesis Option) (p. 1165)
- Major in Adult, Professional, and Community Education (Workplace, Community, and Continuing Education Concentration Thesis Option) (p. 1168)
- Major in Educational Leadership (Instructional Leadership Concentration) (p. 1173)
- Major in Professional Counseling (Clinical Mental Health Counseling Concentration Non-thesis Option) (p. 1176)
- Major in Professional Counseling (Clinical Mental Health Counseling Concentration Thesis Option) (p. 1181)
- Major in Professional Counseling (Marriage and Family Counseling Concentration Non-thesis Option) (p. 1187)
- Major in Professional Counseling (Marriage and Family Counseling Concentration Thesis Option) (p. 1191)
- Major in Professional Counseling (School Counseling Concentration) (p. 1197)
- Major in Professional Counseling (School Counselor Concentration, Early Childhood Through Grade 12 Professional Certification) (p. 1202)

## Master of Education (M.Ed.)

- Major in Educational Leadership (Principal Certification Concentration) (p. 1207)
- Major in Student Affairs in Higher Education (p. 1210)

## Minors

- Adult Education (p. 1215)
- Educational Leadership (p. 1215)

## Certificate

- Adult English as a Second/Foreign Language (p. 1215)

## Program Overview

The Doctor of Philosophy (Ph.D.) degree with a major in Adult, Professional, and Community Education (APCE) is designed for individuals in a variety of educational roles who wish to develop and refine their abilities to provide leadership for educational excellence. The program prepares education professionals to individually and collaboratively engage in reflective and ethical practice as they foster the development of individual learners as well as existing and emerging learning communities, including schools, post-secondary institutions, workplaces, and community-based organizations.

The program admits students in the fall term only, and the students enroll each year as a cohort group. All students in a given cohort (including full-time and part-time students) will enroll together in each core course during the first year. All students in a given cohort who choose the same major also ordinarily enroll together in each course in the major.

## Educational Goal

The College of Education's educational goal is to provide graduates with the experience to:

1. act as change agents;
2. apply the fundamental principles of facilitating student-centered, life-long learning;
3. accommodate the diverse needs of those they teach;
4. use technology as a tool for communication, research, teaching, and learning;
5. make ethically sound decisions and articulate the values and principles that guide decision making;
6. engage in professional development and support the professional development of others;
7. conduct and use research to strengthen the ties between educational theory and practice.

## Financial Assistance

Doctoral assistantships are available to qualified candidates. Please see the Ph.D. program website (<http://apce.education.txstate.edu/future-students/dra.html>) or contact the doctoral program director for more information about assistantships and the degree program. Please see The Graduate College website for information on scholarship opportunities ( <http://www.gradcollege.txstate.edu/funding.html> ) <http://www.gradcollege.txstate.edu/funding.html>).

## Advising

During the first year, the student will be assigned an academic program mentor. The academic program mentor will work with the student to develop a program of study, and provide general academic and career-related advisement to the student. The doctoral program director, acting in the role of graduate advisor for the program, will submit all recommendations for the program of study and results of programs examinations to the dean of The Graduate College for approval. The dean of The Graduate College has final approval on all recommendations from the doctoral program director.

A dissertation advisor must be selected by the time a student takes the comprehensive examination; a complete dissertation committee must be formed prior to presenting a dissertation proposal for defense.

In the first term that a student enrolls for doctoral study, the student should confer with their graduate advisor and prepare a degree audit

for their program. Doctoral degree audits are tailored with the individual student in mind. It is therefore possible for the individual degree audit to exceed the number of degree hours identified in the catalog.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- master's degree from an accredited university in an area related to proposed studies with a competitive grade point average for courses applied to the master's degree
- official transcripts from **each institution** where course credit was granted
- competitive grade point average in all completed graduate course work
- GRE not required
- interview with program faculty
- resume/CV
- statement of purpose (approximately 500 words) that describes background and professional goals and includes the rationale for pursuing a doctoral degree in adult, professional, and community education
- three forms of recommendation addressing professional and academic background. References are required to use the program's Professional Reference Evaluation form and are also strongly encouraged to attach a recommendation letter to the form.

## Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing



- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Adult, Professional, and Community Education (APCE) requires 60 semester credit hours. In some cases, a student may need to complete additional hours before being allowed to advance to candidacy. The student must have satisfied the residency requirement of 18 graduate credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ED 7314	Community Development for Educators	3
ED 7312	Leadership and Organizational Change	3
ED 7321	Historical and Philosophical Foundations and Contemporary Issues in Adult Education	3
ED 7316	Advanced Studies in Adult Development	3
ED 7318	Advanced Studies in Adult Learning	3
ED 7324	Problems and Strategies in Program Planning Seminar	3
ED 7322	Human Resource and Professional Development	3
ADED 7325	Teaching Adults: Principles and Practices	3
ED 7315	Models of Inquiry: Understanding Epistemologies	3
ED 7320	Literature Review for Research Writing	3
ED 7352	Beginning Qualitative Design and Analysis	3
ED 7351	Beginning Quantitative Research Design and Analysis	3
ED 7341	Dissertation Proposal Development	3
ED 7354	Intermediate Qualitative Design and Analysis	3
or ED 7353	Intermediate Quantitative Research Design and Analysis	
<b>Prescribed Electives</b>		
Choose 6 hours from the following:		6
ADED 7325	Teaching Adults: Principles and Practices	
ADED 7337	Adult Literacy	
ADED 7342	Adult ESL Methods and Materials	
ADED 7343	Organizational Learning and Development	
ADED 7344	Multicultural Perspectives in Postsecondary Education and Adult Education	
ADED 7345	Current Issues in Adult, Continuing and Professional Education	
ADED 7346	Adult and Nontraditional Students in Higher Education	
CI 7302	Research Methods and Measurement in Education	
CI 7310	Teaching in College	
CI 7326	Grant Development and Management	
CI 7351	Beginning Quantitative Research Design and Analysis	
CI 7352	Beginning Qualitative Design and Analysis	

CI 7353	Intermediate Quantitative Research Design and Analysis
CI 7354	Intermediate Qualitative Design and Analysis
CI 7355	Mixed Methods in Research and Evaluation
CI 7358	Theoretical and Conceptual Frameworks in Qualitative Research
CI 7359	Seminar in Quantitative Research
CI 7360	Designing Educational Research
CI 7378	Independent Study
CI 7389A	Topics in Instructional Technology
CI 7389C	Special Topics: Race Theory in Educational Research
COMM 7325A	Instructional Communication
DE 7301	Understanding Learners in Developmental Education Contexts
DE 7302	Policy and Politics in Developmental Education
DE 7304B	Theory and Research of Digital Literacies
DE 7304D	Transformative Learning
DE 7321	The Community College
DE 7322	Learning Support Centers in Postsecondary Settings
DE 7323	Academic Support for Students with Learning Disabilities
DE 7324	Teaching Learning Strategies and Critical Thinking in Postsecondary Contexts
DE 7325	Advising, Coaching, and Mentoring Learners in Postsecondary Education
ED 7345	Human Resources and Instructional Management
ED 7311	Educational Philosophy in a Social Context
ED 7322	Human Resource and Professional Development
ED 7331	Foundations of School Improvement
ED 7334	Processes for Educational Evaluation and Analysis
ED 7347	The Superintendency
ED 7345	Human Resources and Instructional Management
ED 7349	School Finance and Business Management
ED 7357	Advanced Study in Action Research
ED 7359	Seminar in Quantitative Research
ED 7364	Personal, Team, and Professional Development in Education
ED 7371	Anthropology and Education
ED 7378	Problems in Education
ED 7379	Independent Study
ED 7389B	Seminar in International Educational Research: Chile
ED 7389C	Advanced Theory in Qualitative Research
ED 7389D	Advanced Theory in Qualitative Research: Narrative Research
ED 7389H	Oracy and Language Expression for Educators
ED 7389I	Comparative Studies in International Adult Education
ED 7389L	Writing for Publication
ED 7389M	Shifting Demographics in Texas: Exploring Education, Democracy and Healthy Communities



ED 73890	Educational Privatization: Policies, Actors, and Effects	
ED 7389P	International Comparative Adult, Community, and Higher Education Research and Study: Italy	
ED 7389Q	Schools, Communities and Race in a Democratic Society	
ED 7389R	Understanding the Self: Anatomy of Engaged Scholarship	
ED 7389S	Feminist and Critical Thought in Education	
EDCL 7344	Campus Leadership	
EDCL 7387	Field Practicum, Part I	
EDCL 7388	Field Practicum Part II	
SAHE 7345	Gender and Sexuality in College	
SAHE 7379C	Professional Development in Student Affairs	
SAHE 7379E	Intergroup Dialogue	
SAHE 7379F	Interpersonal and Group Facilitation	
<b>Dissertation</b>		
Choose a minimum of 12 hours from the following:		12
ED 7199A	Dissertation in Education-Adult, Professional, and Community Education	
ED 7299A	Dissertation in Education-Adult, Professional and Community Education	
ED 7399A	Dissertation	
ED 7399B	Dissertation	
ED 7599A	Dissertation in Education - Adult, Professional and Community Education	
ED 7699A	Dissertation	
ED 7699B	Dissertation	
ED 7999A	Dissertation in Education - Adult, Professional and Community Education	
<b>Total Hours</b>		<b>60</b>

## Comprehensive Examination Requirements

All candidates for graduate degrees must pass one or more comprehensive examinations.

## Advancement to Candidacy

### Application for Advancement to Candidacy

Doctoral students will need to be advanced to candidacy within five years of initiating Ph.D. course work. Students need to indicate their intent to advance to candidacy during the term they complete the 51 hours of required course work. The Application for Advancement to Candidacy form may be obtained from The Graduate College website. The doctoral program director will then submit the completed forms to the dean of The Graduate College for review.

### Advancement to Candidacy Time Limit

No credit will be applied toward the doctoral degree for course work completed more than five years before the date on which the student is advanced to candidacy. This time limit applies toward credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions.

Requests for a time extension must be submitted to the doctoral program director, who in turn, submits a recommendation to the dean of The Graduate College.

## Grade-Point Requirements for Advancement to Candidacy

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.0. No grade earned below a "B" on any graduate course may apply toward a Ph.D. at Texas State.

Incomplete grades must be cleared through the office of The Graduate College before a student can be approved for advancement to candidacy.

## Comprehensive Examination

The doctoral students in the Ph.D. program are required to pass a comprehensive examination in which the student must integrate knowledge from core and concentration courses to solve a problem that the student is likely to encounter in a professional work setting. Arrangements for comprehensive examinations are made through the director of the Ph.D. program and the dissertation advisor. The results of the examination must be filed in the office of The Graduate College before the dean of The Graduate College gives final approval of advancement to candidacy. The Department of Counseling, Leadership, Adult Education, and School Psychology is responsible for submitting the reports to The Graduate College.

## Dissertation Proposal

The dissertation proposal must be successfully defended and approved by the dean of The Graduate College before a student can be advanced to candidacy. Students must submit the dissertation proposal and one copy of the official "Dissertation Proposal form" to the dissertation advisor. Guidelines that discuss the purpose of the proposal, its preparation, its format, and procedures for its presentation and defense are available from the program director. After defending the dissertation proposal and obtaining committee members' signatures, the student must submit the dissertation proposal and dissertation proposal form to the program director for signature. The form also requires evidence of the IRB approval for any research involving human subjects. The program director will then forward the dissertation proposal and form through the department chair, to the dean of The Graduate College for final approval. Final approval must be received before proceeding with research on the dissertation. The Dissertation Proposal form may be obtained from the office of The Graduate College; proposal guidelines are also available at the website or from the doctoral program director.

## Defense of the Dissertation Proposal

Students must defend the dissertation proposal in a meeting that begins with a public presentation and continues with an oral examination by the dissertation committee. The examination will address the proposed dissertation topic (problem definition and scope), research method, and relevant literature. The dissertation committee must sign the "Defense of the Dissertation Proposal form" to indicate approval and then submit the form for the signature of the doctoral program director and the department chair. The approved Defense of the Dissertation Proposal form must be forwarded to the dean of The Graduate College. The dissertation proposal must be approved and the Defense of the Dissertation Proposal form must be on file in the office of The Graduate College before any student can be advanced to candidacy.

## Recommendation for Advancement to Candidacy

The dissertation committee recommends the applicant for advancement to candidacy to the doctoral program director, the department chair, and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been met. To be eligible for admission to candidacy the student must have successfully completed the comprehensive exam, completed all course work, and successfully defended the dissertation proposal.

## Dissertation Research and Writing

All doctoral students are required to complete a dissertation. The dissertation must be an original contribution to scholarship and the result of independent investigation in a significant area. Preparation of the dissertation must follow the latest edition of the *Publication Manual of the American Psychological Association*.

## Dissertation Enrollment Requirements

### Enrollment

Any time a student is receiving official guidance on the dissertation, the student must be enrolled in a dissertation course. A student must maintain continuous enrollment in dissertation hours every term from the time they advance to candidacy until the dissertation is defended and approved. If a student is receiving supervision on the dissertation during the summer or the student is graduating during the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred.

Students will normally register for at least three credit hours of dissertation. With the approval of the dissertation chair and the program director, they may be allowed to register for one hour of credit (ED 7199A or ED 7199B) when working less intensely on the dissertation (more detailed explanation available from the program director). Approval is not needed to register for ED 7199A or ED 7199B in the summer. This one-credit course is ordinarily repeatable for only three times during fall or spring terms.

Adult, Professional, and Community Education majors will enroll in a combination of the following dissertation courses:

Code	Title	Hours
ED 7199A	Dissertation in Education-Adult, Professional, and Community Education	1
ED 7299A	Dissertation in Education-Adult, Professional and Community Education	2
ED 7399A	Dissertation	3
ED 7399B	Dissertation	3
ED 7599A	Dissertation in Education - Adult, Professional and Community Education	5
ED 7699A	Dissertation	6
ED 7699B	Dissertation	6
ED 7999A	Dissertation in Education - Adult, Professional and Community Education	9

### Hours

Students must complete a minimum of 12 semester hours of dissertation research and writing credit.

## Dissertation Time Limit

Students are expected to complete the dissertation within five years of advancement to candidacy. The dissertation committee will review the student's progress annually.

## Dissertation Advisor and Committee

A dissertation committee must be formed to oversee the research and writing of the dissertation. The dissertation committee will include a dissertation advisor and a minimum of three additional committee members.

The members must be chosen from qualified Ph.D. faculty. The dissertation advisor will chair the dissertation committee and must be from the College of Education. The committee members must be selected in consultation with the dissertation advisor. At least two members of the dissertation committee must be from the Department of Counseling, Leadership, Adult Education, and School Psychology. No more than one of the four required members of the committee should be someone external to the university (either a practitioner or a faculty member from another university approved as adjunct doctoral faculty). The doctoral program director, the department chair, and the dean of The Graduate College must approve the dissertation advisor and committee members.

### Committee Changes

Any changes to the dissertation committee must be submitted for approval to the dissertation advisor, the doctoral program director, the department chair, and the dean of The Graduate College. Changes must be submitted no less than sixty days before the final dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be obtained from The Graduate College website.

## Defense of the Dissertation

Students must pass the final oral examination that covers the dissertation and the general field of the dissertation. Students must defend the dissertation in a meeting that begins with a public presentation and continues with an oral exam by the dissertation committee. Before scheduling the final oral exam, the student must have received approval of the dissertation chair. A completed "Dissertation Defense Report form" report must be submitted according to the schedule posted by the dean of The Graduate College and no later than ten days before the date of graduation.

## Approval and Submission of the Dissertation and Abstract

The approval of the dissertation and abstract requires positive votes from the dissertation advisor and from a majority of the dissertation committee members. Refer to the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation* for specific guidelines regarding submission of the dissertation. The document must be submitted in electronic format.

Doctoral level courses in Education: ADED (p. 1134), COMM (p. 1134), ED (p. 1135), EDCL (p. 1140), SAHE (p. 1141)

## Courses Offered

### Adult Education (ADED)

#### **ADED 7325. Teaching Adults: Principles and Practices.**

Seminar that addresses methods and techniques for effective instruction of adults across a variety of settings and content. Emphasis on concepts, theories, and principles relevant to the selection, use, and evaluation of instructional strategies. Participants will have an opportunity to practice strategies that expand their teaching repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ADED 7337. Adult Literacy.**

This course is designed to provide students with a broad foundation about the needs of undereducated students with a broad foundation about the needs of undereducated adults, including adult English language learners. Students will analyze and evaluate adult literacy legislation, instruction, research, and delivery systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ADED 7342. Adult ESL Methods and Materials.**

This course reviews traditional and contemporary adult language teaching methodologies. It focuses on the design of lessons that integrate listening, speaking, reading, writing, culture and all language skills. This class provides strategies for choosing, adopting, and adapting textbooks that integrate teaching material appropriate to different adult language learning settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ADED 7343. Organizational Learning and Development.**

The course addresses a range of topics, including the effects of change, methods of organizational change, and factors influencing organizational development success. Students learn the roles of internal and external organizational development consultants, tools and processes for helping organizational members identify problems, gather and analyze information, and implement solutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ADED 7344. Multicultural Perspectives in Postsecondary Education and Adult Education.**

This seminar covers a broad range of topics related to diversity within postsecondary and adult education. Course readings and projects relate to a wide variety of setting including colleges and universities, adult literacy programs, the workplace, and community based organizations. Students who have completed ADED 5344 may not take this course for doctoral credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

#### **ADED 7345. Current Issues in Adult, Continuing and Professional Education.**

A seminar style course focusing on current issues in continuing and professional education including research and professional practice. Specific emphasis will vary depending on changes in contemporary issues. Students who have completed ADED 5345 may not take this course for doctoral credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ADED 7346. Adult and Nontraditional Students in Higher Education.**

This seminar focuses on the "nontraditional student" in higher education, with emphasis on undergraduates 25 and older. Also considered are other nontraditional students facing similar challenges to participation in higher education. Topics include student characteristics, motivations, barriers, persistence, and outcomes as well as institutional and programmatic responses to this population.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Communications (COMM)

#### **COMM 7315. Directed Research in Communication Studies.**

Independent study of a specific communication research area. May be repeated with different emphasis for additional credit. Prerequisite: Doctoral level standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### **COMM 7325A. Instructional Communication.**

A review of instructional communication theory and research with an emphasis on the function of communication in instructional settings. Prerequisite: Doctoral level standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### **COMM 7325B. Organizational Communication.**

A review of organizational communication theory and research with an emphasis on organizational development from a communication perspective. Prerequisite: Doctoral level standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### **COMM 7325C. Communication Assessment.**

An in depth study of communication assessment techniques employed in the field of oral communication. Statistical, experimental, and observational methods of assessing oral communication in interpersonal, group, and classroom settings are included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Education (ED)

### ED 7199A. Dissertation.

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### ED 7199B. Dissertation.

Original research and writing in Education-School improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### ED 7299A. Dissertation.

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### ED 7299B. Dissertation.

Original research and writing in Education-School improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### ED 7310. Instructional Roles in Counseling, Leadership, Adult Education & School Psychology.

This seminar is intended to prepare graduate teaching and instructional assistants in the CLAS Department to function effectively in various instructional and instructional support roles. Required for first-year teaching assistants and GIAs. This course does not earn graduate degree credit. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### ED 7311. Educational Philosophy in a Social Context.

This course examines the philosophical foundations of education from the time of Plato through current writings. It frames these foundations through the lens of educational challenges of today. Readings include classical and current writings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ED 7312. Leadership and Organizational Change.

This course will familiarize students with different perspectives on organizations, different paradigms by which they might be viewed, and a survey of research done on organizations, organizational leadership and change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

### ED 7313. Advanced Studies in Adult Learning and Development.

This advanced seminar will examine research and theoretical literature on a variety of topics including: characteristics of adult learners; models of adult cognitive and psychosocial development; adult cognition, memory, and intelligence; and principles for facilitating adult learning. Restricted to Ph.D. in Education degree, Major in School Improvement.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ED 7314. Community Development for Educators.

Examines models and methods of community development as relevant to the practice and scholarship of formal and non-formal education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ED 7315. Models of Inquiry: Understanding Epistemologies.

This course examines the philosophies informing different research epistemologies, and examples of how these can be actualized methodologically. Philosophies to be analyzed include feminism, and race-based theory. This course will help students see the multiple possibilities for conducting research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ED 7316. Advanced Studies in Adult Development.

This course examines current theories of adult development, fundamental developmental changes in adulthood, and the implications for practice in adult education. Restricted to students admitted to the Education Ph.D. Program- APCE major or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ED 7317. Instructional Leadership for Organizational Change.

This course will introduce students to the major stream of research on instructional leadership and organizational change in education while analyzing models of leadership and change from critical, systemic, and cross-cultural context lenses. The relationship between instructional supervision, professional development, and curriculum development, with experiential applications will also be explored. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7318. Advanced Studies in Adult Learning.**

This advanced seminar will examine research and theoretical literature on a variety of topics related to adult learning such as: characteristics and diversity of adult learners; key theories of adult learning; alternative perspectives on adult learning; intelligence, aging and wisdom; and learning in the digital age. Restricted to students admitted to the Education Ph.D. Program – APCE major or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7319. Foundations of Educational and Community Leadership.**

This course examines the philosophical, political, psychological, cultural, ethical, and technological foundations of educational and community leadership, with a focus on the purpose of education and history of educational and community leadership in American education and how leadership shapes teaching and learning. Some topics related to educational and community leadership to be explored include decision and policy making, school culture, schools as learning communities, the change process, action plans, and research-based school improvement models/networks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7320. Literature Review for Research Writing.**

In this seminar course, students conduct a careful examination of a body of literature related to a research topic in adult/professional/community/lifelong education. The literature review tests research questions in relation to what is published about a topic, discusses various positions, crafts coherent arguments and addresses knowledge gaps. Prerequisites: ED 7352 or ED 7351, all with a grade of "B" or better. Restriction: Doctoral standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7321. Historical and Philosophical Foundations and Contemporary Issues in Adult Education.**

Examines historical and philosophical foundations for the study and practice of adult professional, and community education in formal and non-formal settings; and contemporary issues in adult education in a "learning society." Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7322. Human Resource and Professional Development.**

Examines the methods, practices, and issues of facilitating learning related to occupational, professional, and volunteer roles. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7324. Problems and Strategies in Program Planning Seminar.**

Addresses principles and procedures, issues and trends, utilization of assessment, goal setting, and other effective strategies for developing learning opportunities and programs responsive to human, professional, and community needs. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7325. Sociocultural Dynamics in Learning Communities.**

This course draws on interdisciplinary literature to explore social, cultural, historical, and political dynamics and its implications on education for people, organizations, and communities. This will involve an exploration of the sociocultural dynamics in learning communities through a personal lived perspective and through the ecologies of knowing framework (Guajardo et al., 2013; Guajardo et al., 2016): self, organization, and community. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7326. Policy and Politics as Practice.**

This course examines the historical and theoretical underpinnings informing educational policy, politics, and social justice. It addresses both the micro and macro levels of the context, values, and cultural norms guiding policy and politics as practice in a democratic society. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7327. Education Policy Development.**

This course equips students with the skills needed to analyze the origins and consequences of existing policy and to play active roles in policy development for educational equity and social justice. Prerequisite: ED 7326 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7328. Research and Analysis in Education Policy.**

This course engages students in a field-based educational policy research project using quantitative and qualitative techniques. Students will develop their skills to identify policy issues, gather and analyze data, and draw conclusions, and disseminate findings. Prerequisites: ED 7326 and ED 7327 and ED 7351 and ED 7352, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7329. Field-Based Experience in Educational Policy.**

This course provides fieldbased practice in policy analysis and development from a democratic and social justice perspective. With guidance from a university faculty supervisor and site mentor, the student will develop and implement a policy project related to democracy and social justice. Prerequisite: ED 7328 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ED 7331. Foundations of School Improvement.**

Examines school improvement efforts from philosophical, political, psychological, cultural, ethical, and technological foundations.

Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7332. Facilitating School Improvement.**

Examines school culture, schools as learning communities, the change process, and research-based school improvement models, with experiential applications. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7333. Curriculum and Instructional Leadership.**

Examines the relationship between curriculum, instructional improvement, and teacher development, with experiential applications. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7334. Processes for Educational Evaluation and Analysis.**

This course focuses on the development of the requisite knowledge and skills to facilitate the evaluation and analysis of educational programs and initiatives in complex community and school settings to inform pedagogy, leadership and community development. The course includes the assessment, evaluation, and analysis of student learning at the individual, classroom, school, and system level; teacher assessment; and program assessment. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7341. Dissertation Proposal Development.**

In this course students approaching dissertation stage meet in a seminar designed to help them clarify their research problem and develop a preliminary proposal for the dissertation. Core and concentration courses must be completed with minimum grades of "B" in each course prior to taking ED 7341. Prerequisites: ED 7351 and ED 7352, and ED 7353 or ED 7354, all with a grade of "B" or better. Departmental approval required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7345. Human Resources and Instructional Management.**

This course focuses on the twin areas of human resource administration and instructional improvement. Topics addressed include legal requirements for personnel management, staff supervision, appraisal, and development, curriculum planning and alignment and student assessment. Students taking the course will complete an original research project under the instructor's direction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7347. The Superintendency.**

This course addressed issues critical to superintendents in Texas. These include leadership, leadership assessment, school board relations, and other governance issues, management strategies, the role of public education in a democratic society, and professional ethics. Students taking the course will complete an original research project under the instructor's direction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7349. School Finance and Business Management.**

This course focuses on the financing of public schools. Students will examine the school budgeting process, sources of school revenues, principals of taxation, methods of school fund accounting, and techniques of business management. Students taking the course will complete an original research project under the instructor's direction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7351. Beginning Quantitative Research Design and Analysis.**

Includes descriptive statistics; sampling techniques; statistical inference including the null hypothesis, significance tests, and confidence intervals; and causal-comparative analyses, including t-test and ANOVA.

Prerequisites: Core and Concentration courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7352. Beginning Qualitative Design and Analysis.**

Introduces the qualitative paradigm. Includes distinctive features, alternative qualitative traditions, purposeful sampling, common data collection methods, inductive analysis, the role of the researcher, and evaluating qualitative research. Prerequisites: Core and Concentration courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7353. Intermediate Quantitative Research Design and Analysis.**

This course focuses on issues in the design and implementation of quantitative research. Topics include ANOVA, ANCOVA, and MANOVA, correlation analysis, regression analysis, nonparametric tests, and relationships between experimental designs and statistical analysis techniques. Prerequisite: ED 7351 with a grade of "B" or better, or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7354. Intermediate Qualitative Design and Analysis.**

Focuses on issues in design and implementation of qualitative research. Topics include influence of alternative traditions, literature in qualitative research, access to the field and ethical issues, researcher-participant relationships, purposeful sampling strategies, inductive analysis procedures, developing theory, and reporting research. Prerequisite: ED 7352 with a minimum grade of "B", or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7357. Advanced Study in Action Research.**

This course examines underlying theory, practice, skills, and issues in action research. Conducting research in the area of action research is also addressed. This course is an appropriate elective for majors in School Improvement or Adult, Professional and Community Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7359. Seminar in Quantitative Research.**

This course is a small group seminar that focuses on analytic strategies specific to the doctoral student's dissertation topic. Examples include structural equation modeling, hierarchical linear modeling, log linear modeling, non-parametric analyses, factor analysis, factorial analysis of variance, and other multivariate statistical methods. Prerequisites: ED 7351 and ED 7353, all with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7364. Personal, Team, and Professional Development in Education.**

This course focuses on the interconnectivity and development of individuals and teams to acquire the knowledge, skills, and dispositions needed in professional education contexts to improve educational organizations, teaching, and learning. Because of its focus on education, it is recommended only for doctoral students preparing for careers in educational settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7371. Anthropology and Education.**

This course introduces the student to the basic concepts in anthropology and education and sketches the application of these concepts. It explores the research in anthropology and education with relevance to both K-12 schools and other, more general educational settings. The course is an appropriate elective for Education Ph.D. majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7378. Problems in Education.**

Individual problems or topics will be designed and completed to emphasize selected areas of study. May be repeated for additional credit at the discretion of the program coordinator.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dual Enrollment Permitted

**Grade Mode:** Standard Letter

**ED 7379. Independent Study.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in the Counseling, Leadership, Adult Education & School Psychology Department. May be repeated for additional credit at the discretion of the program coordinator.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7389B. Seminar in International Educational Research: Chile.**

This course develops theoretical knowledge, methodological skills, and scholarly capacity for international educational research. It focuses on research within the complex educational environment of Chile, involving seminar components held at the university and research fieldwork in Chile. International research is framed as a form of service learning. Restricted to students in the PhD in Education program.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389C. Advanced Theory in Qualitative Research.**

This course features advanced study in qualitative research methods. The course studies such methods as ethnography, case study, phenomenology, narrative analysis, post-qualitative research, grounded theory, or more advanced qualitative research in general and their constitutive field techniques. Prerequisites: Introduction to Qualitative Research and Intermediate Qualitative Research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ED 7389D. Advanced Theory in Qualitative Research: Narrative Research.**

The purpose of this course is to explore the possibilities of narrative research. The course will provide an overview of narrative inquiry, look at various theories and corresponding examples of research, and explore, analyze, and interpret data using narrative methods. Prerequisites: Introduction to Qualitative Research and Intermediate Qualitative Research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ED 7389E. Mexican Perspectives on Mexico - U.S. Immigration.**

The course gives U.S. educators an understanding of Mexican to U.S. immigration from Mexican women's perspectives. Students will read background information and visit Mexico where through lectures, field interviews, and field visits, they will view immigration from the "other side". They will analyze and write up data when they return. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ED 7389H. Oracy and Language Expression for Educators.**

This course focuses on the theory and practice of language expression. It emphasizes the relationship between audience analysis, speaker goals, organized outlines, delivery and development of personal style of presentation skills. The course offers direct experience writing, delivering, and constructively evaluating public speeches in a variety of educational contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389I. Comparative Studies in International Adult Education.**

This course compares a model of adult learning, communities of practice (CoP) today with its practice in pre-historical times. It will involve international travel and working with scholars to contrast theory and practice in the United States with the new setting. Students from both contexts will be encouraged to present their work in a conference format.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389L. Writing for Publication.**

Students will hone their writing skills. Students will work individually and in groups, getting feedback from other students and the instructor. Topics include APA style, getting started, first drafts, polishing and tightening, re-writing, submitting a manuscript, responding to feedback/reviews and more. Restricted to masters' and doctoral students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ED 7389M. Shifting Demographics in Texas: Exploring Education, Democracy and Healthy Communities.**

Students will explore the shifting population in Texas through multiple frames including historical, sociological, anthropological and political. Class will canvas the literature and emerging community conditions as a vehicle for imagining possible theoretical, policy and local responses to the conditions we see in schools and local communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389O. Educational Privatization: Policies, Actors, and Effects.**

This course interrogates the origins and outcomes of educational privatization. In this course, students will review the foundations of education as a public good, study frameworks and theories of privatization, trace public policies promoting privatization, delineate types of educational privatization over time, and examine the actors involved in educational privatization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389P. International Comparative Adult, Community, and Higher Education Research and Study: Italy.**

This course develops theoretical knowledge, methodological skills, and scholarly capacity for educational research. It focuses on comparative adult, higher, and socio-cultural education within the complex educational environment of Italy, involving seminar components held at the university and research fieldwork and presentation in Italy. Prerequisite: Should the student not be able to participate in the international component of the course, a domestic alternative can be discussed prior to enrollment.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389Q. Schools, Communities and Race in a Democratic Society.**

The class explores race through a personal lived perspective. This class will view race as a social construct. Students will interrogate the phenomena of race through multiple lens and frames, including but not limited to, an ontological perspective, its use in organizations, and its use in re-segregating society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389R. Understanding the Self: Anatomy of Engaged Scholarship.**

Successful leadership in school settings requires an understanding of human behavior. This understanding begins with knowledge of self and leads to the understanding of others at the micro and macro levels. The focus of this course is on you, the learner, and your surroundings. The goal is to enhance the student's self-awareness of values, beliefs, attitudes and the ecological context informing and impacting their school leadership experience. This understanding will inform the past, but also begin to inform your future as you matriculate through your course work. We will employ interdisciplinary literature to inform this work.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389S. Feminist and Critical Thought in Education.**

Feminist and Critical thought provides a means to examine and understand how issues of power shape and impact cultures, societies, and their associated policies and practices. In this seminar, students will engage with varying feminist and critical perspectives, frameworks, theories, epistemologies and methodologies to consider their application in examining their own educational journeys as well as current and systemic issues in education. Course readings and materials will primarily draw from the work of seminal and minoritized feminist and critical scholars, while providing students an opportunity to identify and explore course readings and materials of their choice as well.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389T. LGBTQIA+ Issues in Educational Leadership.**

This course examines the intersectionality of gender identity, sexual orientation, and other identities within the educational context, offering a nuanced exploration of the social, legal, and psychological aspects that influence LGBTQIA+ experiences in schools. Participants will engage in critical discussions on policy development, cultural competence, and leadership strategies that promote diversity, equity, and inclusion. The course is designed to address the unique challenges and opportunities facing educational leaders in fostering inclusive and affirming environments for LGBTQIA+ individuals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7399A. Dissertation.**

Original research and writing in Adult, Professional, and Community Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dual Enrollment Permitted

**Grade Mode:** Credit/No Credit

**ED 7399B. Dissertation.**

Original research and writing in School Improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dual Enrollment Permitted

**Grade Mode:** Credit/No Credit

**ED 7599A. Dissertation.**

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7599B. Dissertation.**

Original research and writing in Education-School improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7699A. Dissertation.**

The student conducts original research and writing in Adult, Professional, and Community Education, guided by the direct supervision of the dissertation chair. While conducting dissertation research and writing, students must be continuously enrolled.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7699B. Dissertation.**

Students produce a dissertation under direct supervision of dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled. Prerequisites: Core, Concentration, and Methodology courses or instructor's permission.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7999A. Dissertation.**

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7999B. Dissertation.**

Original research and writing in Education-School Improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Educational Leadership (EDCL)****EDCL 7344. Campus Leadership.**

Develops the skills needed as a practitioner in elementary and secondary schools, focusing on the role and functions of the principal as a leader. Activities lead participants to practice skill development in evaluation processes, student activity programs, staffing patterns, site-based decision-making, community relations, accounting procedures, as well as other skills. Prerequisites: All Level I core courses, and EDCL 6342, EDCL 6343, EDCL 6348, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 7348. Public School Law.**

Examines constitutional provision, statutory laws, court decisions, and regulations governing public schools, with reference to state and federal relationships. Participants develop skills in researching and interpreting law, policy development and impact on public schools and communities. (Note: Students who took EDCL 6348 may not repeat this course for doctoral credit.)

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 7387. Field Practicum, Part I.**

Students seeking Principal Certification must complete this field-based 2 semester internship focusing on actual experiences with each of the state standards. The practicum provides opportunities to plan, produce, participate in, and reflect upon campus leadership. (Note: Students who took EDCL 6387 may not repeat these courses for doctoral credit.).

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 7388. Field Practicum Part II.**

Students seeking Principal Certification must complete this field-based 2-semester internship focusing on actual experiences with each of the state standards. The practicum provides opportunities to plan, produce, participate in, and reflect upon campus leadership. (Note: Students who took EDCL 6388 may not repeat these courses for doctoral credit.).

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 7389. Superintendent Practicum I.**

The practicum provides prospective superintendents and district leaders with practical experiences to prepare for various roles and responsibilities of central office leadership. Students work under the joint mentorship of a practicing school superintendent and a university supervisor. Offered fall semester only. May be taken concurrently with other superintendent certification courses. Prerequisite: ED 7347 with a grade of "B" or better.

**3 Credit Hours. .5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 7390. Superintendent Practicum II.**

This course is a continuation of EDCL7389 Superintendent Practicum I, providing prospective district leaders with practical experiences to prepare for central office leadership. Students work under the joint mentorship of a practicing school superintendent and a university supervisor. May be taken concurrently with other superintendent courses. Prerequisite: EDCL 7389.

**3 Credit Hours. .5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Student Affairs in Higher Education (SAHE)****SAHE 7178. Independent Study.**

This course focuses on individual research topics. Students choose a selected area of study and work independently on a specialized project. Repeatable with departmental approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SAHE 7345. Gender and Sexuality in College.**

This course examines the role of gender and sexuality in the college experience. Designed using feminist theory and a social justice framework, the course includes topics of gender identity development, intersectionality, and multiple identities, sexual orientation, gender privilege and oppression, gender disparities in achievement and persistence, femininity, and masculinity. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SAHE 7378. Independent Study.**

This course focuses on individual research topics. Students choose a selected area of study and work independently on a specialized project. Repeatable with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SAHE 7379C. Professional Development in Student Affairs.**

Professional development plays an important role in student affairs. This course will allow students to learn more about professional development, professional associations, and conferences. Additionally, students will attend a professional conference and explore the theme of the conference through readings and meetings with professional association leaders and speakers.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 7379E. Intergroup Dialogue.**

This course is designed to give students both a theoretical and practical foundation in the knowledge, understanding, and skills needed to effectively facilitate intergroup dialogue. While providing foundational grounding in the theory and pedagogy of intergroup dialogue, the course directs particular attention to intergroup dynamics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 7379F. Interpersonal and Group Facilitation.**

This course is designed to give students both a theoretical and practical foundation in the knowledge, understanding, and skills needed to effectively facilitate groups and group development. Communication, facilitation, peer leadership, and experiential learning are the focus of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**SAHE 7379G. Project-Based Applications in Student Affairs.**

In this course students engage in project-based applications in the field of student affairs. Students will select a project of their choice and implement the project with support of faculty and practitioners in the field. Students will engage in reflection and document their project for their portfolio.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Program Overview

The doctoral program in Educational and Community Leadership is designed for individuals in a variety of educational roles who wish to develop and refine their abilities to provide leadership for educational excellence. The program prepares education professionals to individually and collaboratively engage in reflective and ethical practice as they foster the development of individual learners as well as existing and emerging learning communities, including schools, post-secondary institutions, workplaces, and community-based organizations.

The program admits students in the fall term only, and the students enroll each year as a cohort group. All students in a given cohort (including full-time and part-time students) will enroll together in each core course during the first year. All students in a given cohort who choose the same major also ordinarily enroll together in each course in the major.

## Educational Goal

The College of Education's educational goal is to provide graduates with the experience to:

1. act as change agents;
2. apply the fundamental principles of facilitating student-centered, life-long learning;
3. accommodate the diverse needs of those they teach;
4. use technology as a tool for communication, research, teaching, and learning;
5. make ethically sound decisions and articulate the values and principles that guide decision making;
6. engage in professional development and support the professional development of others;
7. conduct and use research to strengthen the ties between educational theory and practice.

## Financial Assistance

Doctoral assistantships are available to qualified candidates. Please see the Ph.D. program website (<http://si.education.txstate.edu/Student-Resources/doc-assistantships.html>) or contact the doctoral program director for more information about assistantships and the degree program. Please see The Graduate College website for information on scholarship opportunities (<http://www.gradcollege.txstate.edu/funding> (<http://www.gradcollege.txstate.edu/funding.html>)).

## Advising

During the first year, the student will be assigned an academic program mentor. The academic program mentor will work with the student to develop a program of study, and provide general academic and career-related advisement to the student. The doctoral program director, acting in the role of graduate advisor for the program, will submit all

recommendations for the program of study and results of programs examinations to the dean of The Graduate College for approval. The dean of The Graduate College has final approval on all recommendations from the doctoral program director.

A dissertation advisor must be selected by the time a student takes the comprehensive examination; a complete dissertation committee must be formed prior to presenting a dissertation proposal for defense.

In the first term that a student enrolls for doctoral study, the student should confer with their graduate advisor and prepare a degree audit for their program. Doctoral degree audits are tailored with the individual student in mind. It is therefore possible for the individual degree audit to exceed the number of degree hours identified in the catalog.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- master's degree in a field related to the proposed studies from a regionally accredited university
- official transcripts from **each institution** where course credit was granted
- minimum 3.5 GPA in all completed graduate course work
- GRE not required
- resume/CV
- statement of purpose (approximately 500 words) describing background and professional goals, including the student's rationale for pursuing a doctoral degree
- three recommendation forms addressing the student's professional and academic background. References are required to use the program's Professional Reference Evaluation form and are also strongly encouraged to attach a recommendation letter to the form.
- possible interview with program faculty
- possible academic writing sample

## Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt

countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Educational and Community Leadership requires 60 semester credit hours. In some cases, a student may need to complete additional hours before being allowed to advance to candidacy. The student must have satisfied the residency requirement of 18 graduate credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
<b>Semester One</b>		
ED 7311	Educational Philosophy in a Social Context	3
ED 7364	Personal, Team, and Professional Development in Education	3
<b>Semester Two</b>		
ED 7315	Models of Inquiry: Understanding Epistemologies	3
ED 7351	Beginning Quantitative Research Design and Analysis	3
or ED 7352	Beginning Qualitative Design and Analysis	
<b>Semester Three</b>		
ED 7313	Advanced Studies in Adult Learning and Development	3
ED 7314	Community Development for Educators	3
<b>Semester Four</b>		
ED 7319	Foundations of Educational and Community Leadership	3
ED 7352	Beginning Qualitative Design and Analysis	3
or ED 7351	Beginning Quantitative Research Design and Analysis	
<b>Semester Five</b>		
ED 7317	Instructional Leadership for Organizational Change	3
ED 7325	Sociocultural Dynamics in Learning Communities	3
<b>Semester Six</b>		
ED 7326	Policy and Politics as Practice	3
ED 7353	Intermediate Quantitative Research Design and Analysis	3
or ED 7354	Intermediate Qualitative Design and Analysis	
<b>Semester Seven</b>		
ED 7334	Processes for Educational Evaluation and Analysis	3
<b>Elective #1 (Must be 7000 level course; may be taken out of department)</b>		
<b>Semester Eight</b>		
ED 7341	Dissertation Proposal Development	3

**Must submit Dissertation Advisor Form (Form A) before enrolling**

<b>Elective #2 (Must be 7000 level course; may be taken out of department)</b>		<b>3</b>
<b>Semester Nine</b>		
ED 7399B	Dissertation	3
<b>Semester Ten</b>		
ED 7399B	Dissertation	3
<b>Semester Eleven</b>		
ED 7699B	Dissertation	6
<b>Total Hours</b>		<b>60</b>

## Comprehensive Examination Requirements

All candidates for graduate degrees must pass one or more comprehensive examinations.

## Advancement to Candidacy

### Application for Advancement to Candidacy

Doctoral students will need to be advanced to candidacy within five years of initiating Ph.D. course work. Students need to indicate their intent to advance to candidacy during the term they complete the 51 hours of required course work. The "Application for Advancement to Candidacy form" may be obtained from The Graduate College website. The doctoral program director will then submit the completed forms to the dean of The Graduate College for review.

### Advancement to Candidacy Time Limit

No credit will be applied toward the doctoral degree for course work completed more than five years before the date on which the student is advanced to candidacy. This time limit applies toward credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions.

Requests for a time extension must be submitted to the doctoral program director, who in turn, submits a recommendation to the dean of The Graduate College.

## Grade-Point Requirements for Advancement to Candidacy

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.0. No grade earned below a "B" on any graduate course may apply toward a Ph.D. at Texas State.

Incomplete grades must be cleared through the office of The Graduate College before a student can be approved for advancement to candidacy.

## Comprehensive Examination

The doctoral students in the Ph.D. in education program are required to pass a comprehensive examination in which the student must integrate knowledge from core and concentration courses to solve a problem that the student is likely to encounter in a professional work setting. Arrangements for comprehensive examinations are made through the director of the Ph.D. program and the dissertation advisor. The results of the examination must be filed in the office of The Graduate College before the dean of the Graduate College gives final approval of advancement to candidacy. The Department of CLAS is responsible for submitting the reports to The Graduate College.

## Dissertation Proposal

The dissertation proposal must be successfully defended and approved by the dean of The Graduate College before a student can be advanced to candidacy. Students must submit the dissertation proposal and one copy of the official "Dissertation Proposal form" to the dissertation advisor. Guidelines that discuss the purpose of the proposal, its preparation, its format, and procedures for its presentation and defense are available from the program director. After defending the dissertation proposal and obtaining committee members' signatures, the student must submit the dissertation proposal and dissertation proposal form to the program director for signature. The form also requires evidence of the IRB approval for any research involving human subjects. The program director will then forward the dissertation proposal and form through the department chair, to the dean of The Graduate College for final approval. Final approval must be received before proceeding with research on the dissertation. The Dissertation Proposal form may be obtained from The Graduate College website; proposal guidelines are also available at the website or from the doctoral program director.

## Defense of the Dissertation Proposal

Students must defend the dissertation proposal in a meeting that begins with a public presentation and continues with an oral examination by the dissertation committee. The examination will address the proposed dissertation topic (problem definition and scope), research method, and relevant literature. The dissertation committee must sign the "Defense of the Dissertation Proposal form" to indicate approval and then submit the form for the signature of the doctoral program director and the department chair. The approved Defense of the Dissertation Proposal form must be forwarded to the dean of The Graduate College. The dissertation proposal must be approved and the Defense of the Dissertation Proposal form must be on file in the office of The Graduate College before any student can be advanced to candidacy.

## Recommendation for Advancement to Candidacy

The dissertation committee recommends the applicant for advancement to candidacy to the doctoral program director, the department chair, and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been met. To be eligible for admission to candidacy the student must have successfully completed the comprehensive exam, completed all course work, and successfully defended the dissertation proposal.

## Dissertation Research and Writing

All doctoral students are required to complete a dissertation. The dissertation must be an original contribution to scholarship and the result of independent investigation in a significant area. Preparation of the dissertation must follow the latest edition of *Publication Manual of the American Psychological Association*.

## Dissertation Enrollment Requirements

### Enrollment

Any time a student is receiving official guidance on the dissertation, the student must be enrolled in a dissertation course. A student must maintain continuous enrollment in dissertation hours every term from the time they advance to candidacy until the dissertation is defended and approved. If a student is receiving supervision on the dissertation during the summer or the student is graduating during the summer, the student must be enrolled in dissertation hours for the summer. All candidates

for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred.

Students will normally register for at least three credit hours of dissertation. With the approval of the dissertation chair and the program director, they may be allowed to register for one hour of credit (ED 7199A or ED 7199B) when working less intensely on the dissertation (more detailed explanation available from the program director). Approval is not needed to register for ED 7199A or ED 7199B in the summer. This one-credit course is ordinarily repeatable for only three times during fall or spring terms.

Education-school improvement majors will enroll in a combination of:

Code	Title	Hours
ED 7199B	Dissertation in Education-School Improvement	1
ED 7299B	Dissertation in Education - School Improvement	2
ED 7399A	Dissertation	3
ED 7399B	Dissertation	3
ED 7599B	Dissertation in Education - School Improvement	5
ED 7699A	Dissertation	6
ED 7699B	Dissertation	6
ED 7999B	Dissertation in Education - School Improvement	9

## Hours

Students must complete a minimum of 12 semester hours of dissertation research and writing credit.

## Dissertation Time Limit

Students are expected to complete the dissertation within five years of advancement to candidacy. The dissertation committee will review the student's progress annually.

## Dissertation Advisor and Committee

A dissertation committee must be formed to oversee the research and writing of the dissertation. The dissertation committee will include a dissertation advisor and a minimum of three additional committee members.

The members must be chosen from qualified Ph.D. faculty. The dissertation advisor will chair the dissertation committee and must be from the College of Education. The committee members must be selected in consultation with the dissertation advisor. At least two members of the dissertation committee must be from the Department of Counseling, Leadership, Adult Education, and School Psychology. No more than one of the four required members of the committee should be someone external to the University (either a practitioner or a faculty member from another university approved as adjunct doctoral faculty). The doctoral program director, the department chair, and the dean of The Graduate College must approve the dissertation advisor and committee members.

## Committee Changes

Any changes to the dissertation committee must be submitted for approval to the dissertation advisor, the doctoral program director, the department chair, and the dean of The Graduate College. Changes must be submitted no less than sixty days before the final dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be obtained from The Graduate College website.

## Defense of the Dissertation

Students must pass the final oral examination that covers the dissertation and the general field of the dissertation. Students must defend the dissertation in a meeting that begins with a public presentation and continues with an oral exam by the dissertation committee. Before scheduling the final oral exam, the student must have received approval of the dissertation chair. A completed "Dissertation Defense Report form" must be submitted according to the schedule posted by the dean of The Graduate College and no later than ten days before the date of graduation.

## Approval and Submission of the Dissertation and Abstract

The approval of the dissertation and abstract requires positive votes from the dissertation advisor and from a majority of the dissertation committee members. Refer to the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation* for specific guidelines regarding submission of the dissertation. The document must be submitted in electronic format.

Doctoral level courses in Education: ADED (p. 1145), COMM (p. 1145), ED (p. 1146), EDCL (p. 1152), SAHE (p. 1152)

## Courses Offered

### Adult Education (ADED)

#### ADED 7325. Teaching Adults: Principles and Practices.

Seminar that addresses methods and techniques for effective instruction of adults across a variety of settings and content. Emphasis on concepts, theories, and principles relevant to the selection, use, and evaluation of instructional strategies. Participants will have an opportunity to practice strategies that expand their teaching repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ADED 7337. Adult Literacy.

This course is designed to provide students with a broad foundation about the needs of undereducated students with a broad foundation about the needs of undereducated adults, including adult English language learners. Students will analyze and evaluate adult literacy legislation, instruction, research, and delivery systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ADED 7342. Adult ESL Methods and Materials.

This course reviews traditional and contemporary adult language teaching methodologies. It focuses on the design of lessons that integrate listening, speaking, reading, writing, culture and all language skills. This class provides strategies for choosing, adopting, and adapting textbooks that integrate teaching material appropriate to different adult language learning settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ADED 7343. Organizational Learning and Development.

The course addresses a range of topics, including the effects of change, methods of organizational change, and factors influencing organizational development success. Students learn the roles of internal and external organizational development consultants, tools and processes for helping organizational members identify problems, gather and analyze information, and implement solutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ADED 7344. Multicultural Perspectives in Postsecondary Education and Adult Education.

This seminar covers a broad range of topics related to diversity within postsecondary and adult education. Course readings and projects relate to a wide variety of setting including colleges and universities, adult literacy programs, the workplace, and community based organizations. Students who have completed ADED 5344 may not take this course for doctoral credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

#### ADED 7345. Current Issues in Adult, Continuing and Professional Education.

A seminar style course focusing on current issues in continuing and professional education including research and professional practice. Specific emphasis will vary depending on changes in contemporary issues. Students who have completed ADED 5345 may not take this course for doctoral credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ADED 7346. Adult and Nontraditional Students in Higher Education.

This seminar focuses on the "nontraditional student" in higher education, with emphasis on undergraduates 25 and older. Also considered are other nontraditional students facing similar challenges to participation in higher education. Topics include student characteristics, motivations, barriers, persistence, and outcomes as well as institutional and programmatic responses to this population.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Communications (COMM)

#### COMM 7315. Directed Research in Communication Studies.

Independent study of a specific communication research area. May be repeated with different emphasis for additional credit. Prerequisite: Doctoral level standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 7325A. Instructional Communication.**

A review of instructional communication theory and research with an emphasis on the function of communication in instructional settings. Prerequisite: Doctoral level standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 7325B. Organizational Communication.**

A review of organizational communication theory and research with an emphasis on organizational development from a communication perspective. Prerequisite: Doctoral level standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 7325C. Communication Assessment.**

An in depth study of communication assessment techniques employed in the field of oral communication. Statistical, experimental, and observational methods of assessing oral communication in interpersonal, group, and classroom settings are included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Education (ED)****ED 7199A. Dissertation.**

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7199B. Dissertation.**

Original research and writing in Education-School improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7299A. Dissertation.**

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7299B. Dissertation.**

Original research and writing in Education-School improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7310. Instructional Roles in Counseling, Leadership, Adult Education & School Psychology.**

This seminar is intended to prepare graduate teaching and instructional assistants in the CLAS Department to function effectively in various instructional and instructional support roles. Required for first-year teaching assistants and GIAs. This course does not earn graduate degree credit. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ED 7311. Educational Philosophy in a Social Context.**

This course examines the philosophical foundations of education from the time of Plato through current writings. It frames these foundations through the lens of educational challenges of today. Readings include classical and current writings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7312. Leadership and Organizational Change.**

This course will familiarize students with different perspectives on organizations, different paradigms by which they might be viewed, and a survey of research done on organizations, organizational leadership and change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**ED 7313. Advanced Studies in Adult Learning and Development.**

This advanced seminar will examine research and theoretical literature on a variety of topics including: characteristics of adult learners; models of adult cognitive and psychosocial development; adult cognition, memory, and intelligence; and principles for facilitating adult learning. Restricted to Ph.D. in Education degree, Major in School Improvement.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7314. Community Development for Educators.**

Examines models and methods of community development as relevant to the practice and scholarship of formal and non-formal education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ED 7315. Models of Inquiry: Understanding Epistemologies.**

This course examines the philosophies informing different research epistemologies, and examples of how these can be actualized methodologically. Philosophies to be analyzed include feminism, and race-based theory. This course will help students see the multiple possibilities for conducting research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7316. Advanced Studies in Adult Development.**

This course examines current theories of adult development, fundamental developmental changes in adulthood, and the implications for practice in adult education. Restricted to students admitted to the Education Ph.D. Program- APCE major or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7317. Instructional Leadership for Organizational Change.**

This course will introduce students to the major stream of research on instructional leadership and organizational change in education while analyzing models of leadership and change from critical, systemic, and cross-cultural context lenses. The relationship between instructional supervision, professional development, and curriculum development, with experiential applications will also be explored. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7318. Advanced Studies in Adult Learning.**

This advanced seminar will examine research and theoretical literature on a variety of topics related to adult learning such as: characteristics and diversity of adult learners; key theories of adult learning; alternative perspectives on adult learning; intelligence, aging and wisdom; and learning in the digital age. Restricted to students admitted to the Education Ph.D. Program – APCE major or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7319. Foundations of Educational and Community Leadership.**

This course examines the philosophical, political, psychological, cultural, ethical, and technological foundations of educational and community leadership, with a focus on the purpose of education and history of educational and community leadership in American education and how leadership shapes teaching and learning. Some topics related to educational and community leadership to be explored include decision and policy making, school culture, schools as learning communities, the change process, action plans, and research-based school improvement models/networks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7320. Literature Review for Research Writing.**

In this seminar course, students conduct a careful examination of a body of literature related to a research topic in adult/professional/community/lifelong education. The literature review tests research questions in relation to what is published about a topic, discusses various positions, crafts coherent arguments and addresses knowledge gaps. Prerequisites: ED 7352 or ED 7351, all with a grade of "B" or better. Restriction: Doctoral standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7321. Historical and Philosophical Foundations and Contemporary Issues in Adult Education.**

Examines historical and philosophical foundations for the study and practice of adult professional, and community education in formal and non-formal settings; and contemporary issues in adult education in a "learning society." Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7322. Human Resource and Professional Development.**

Examines the methods, practices, and issues of facilitating learning related to occupational, professional, and volunteer roles. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7324. Problems and Strategies in Program Planning Seminar.**

Addresses principles and procedures, issues and trends, utilization of assessment, goal setting, and other effective strategies for developing learning opportunities and programs responsive to human, professional, and community needs. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7325. Sociocultural Dynamics in Learning Communities.**

This course draws on interdisciplinary literature to explore social, cultural, historical, and political dynamics and its implications on education for people, organizations, and communities. This will involve an exploration of the sociocultural dynamics in learning communities through a personal lived perspective and through the ecologies of knowing framework (Guajardo et al., 2013; Guajardo et al., 2016): self, organization, and community. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7326. Policy and Politics as Practice.**

This course examines the historical and theoretical underpinnings informing educational policy, politics, and social justice. It addresses both the micro and macro levels of the context, values, and cultural norms guiding policy and politics as practice in a democratic society. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7327. Education Policy Development.**

This course equips students with the skills needed to analyze the origins and consequences of existing policy and to play active roles in policy development for educational equity and social justice. Prerequisite: ED 7326 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7328. Research and Analysis in Education Policy.**

This course engages students in a field-based educational policy research project using quantitative and qualitative techniques. Students will develop their skills to identify policy issues, gather and analyze data, and draw conclusions, and disseminate findings. Prerequisites: ED 7326 and ED 7327 and ED 7351 and ED 7352, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7329. Field-Based Experience in Educational Policy.**

This course provides fieldbased practice in policy analysis and development from a democratic and social justice perspective. With guidance from a university faculty supervisor and site mentor, the student will develop and implement a policy project related to democracy and social justice. Prerequisite: ED 7328 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7331. Foundations of School Improvement.**

Examines school improvement efforts from philosophical, political, psychological, cultural, ethical, and technological foundations. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7332. Facilitating School Improvement.**

Examines school culture, schools as learning communities, the change process, and research-based school improvement models, with experiential applications. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7333. Curriculum and Instructional Leadership.**

Examines the relationship between curriculum, instructional improvement, and teacher development, with experiential applications. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7334. Processes for Educational Evaluation and Analysis.**

This course focuses on the development of the requisite knowledge and skills to facilitate the evaluation and analysis of educational programs and initiatives in complex community and school settings to inform pedagogy, leadership and community development. The course includes the assessment, evaluation, and analysis of student learning at the individual, classroom, school, and system level; teacher assessment; and program assessment. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7341. Dissertation Proposal Development.**

In this course students approaching dissertation stage meet in a seminar designed to help them clarify their research problem and develop a preliminary proposal for the dissertation. Core and concentration courses must be completed with minimum grades of "B" in each course prior to taking ED 7341. Prerequisites: ED 7351 and ED 7352, and ED 7353 or ED 7354, all with a grade of "B" or better. Departmental approval required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7345. Human Resources and Instructional Management.**

This course focuses on the twin areas of human resource administration and instructional improvement. Topics addressed include legal requirements for personnel management, staff supervision, appraisal, and development, curriculum planning and alignment and student assessment. Students taking the course will complete an original research project under the instructor's direction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7347. The Superintendency.**

This course addressed issues critical to superintendents in Texas. These include leadership, leadership assessment, school board relations, and other governance issues, management strategies, the role of public education in a democratic society, and professional ethics. Students taking the course will complete an original research project under the instructor's direction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7349. School Finance and Business Management.**

This course focuses on the financing of public schools. Students will examine the school budgeting process, sources of school revenues, principals of taxation, methods of school fund accounting, and techniques of business management. Students taking the course will complete an original research project under the instructor's direction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7351. Beginning Quantitative Research Design and Analysis.**

Includes descriptive statistics; sampling techniques; statistical inference including the null hypothesis, significance tests, and confidence intervals; and causal-comparative analyses, including t-test and ANOVA.

Prerequisites: Core and Concentration courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7352. Beginning Qualitative Design and Analysis.**

Introduces the qualitative paradigm. Includes distinctive features, alternative qualitative traditions, purposeful sampling, common data collection methods, inductive analysis, the role of the researcher, and evaluating qualitative research. Prerequisites: Core and Concentration courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7353. Intermediate Quantitative Research Design and Analysis.**

This course focuses on issues in the design and implementation of quantitative research. Topics include ANOVA, ANCOVA, and MANOVA, correlation analysis, regression analysis, nonparametric tests, and relationships between experimental designs and statistical analysis techniques. Prerequisite: ED 7351 with a grade of "B" or better, or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7354. Intermediate Qualitative Design and Analysis.**

Focuses on issues in design and implementation of qualitative research. Topics include influence of alternative traditions, literature in qualitative research, access to the field and ethical issues, researcher-participant relationships, purposeful sampling strategies, inductive analysis procedures, developing theory, and reporting research. Prerequisite: ED 7352 with a minimum grade of "B", or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7357. Advanced Study in Action Research.**

This course examines underlying theory, practice, skills, and issues in action research. Conducting research in the area of action research is also addressed. This course is an appropriate elective for majors in School Improvement or Adult, Professional and Community Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7359. Seminar in Quantitative Research.**

This course is a small group seminar that focuses on analytic strategies specific to the doctoral student's dissertation topic. Examples include structural equation modeling, hierarchical linear modeling, log linear modeling, non-parametric analyses, factor analysis, factorial analysis of variance, and other multivariate statistical methods. Prerequisites: ED 7351 and ED 7353, all with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7364. Personal, Team, and Professional Development in Education.**

This course focuses on the interconnectivity and development of individuals and teams to acquire the knowledge, skills, and dispositions needed in professional education contexts to improve educational organizations, teaching, and learning. Because of its focus on education, it is recommended only for doctoral students preparing for careers in educational settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7371. Anthropology and Education.**

This course introduces the student to the basic concepts in anthropology and education and sketches the application of these concepts. It explores the research in anthropology and education with relevance to both K-12 schools and other, more general educational settings. The course is an appropriate elective for Education Ph.D. majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7378. Problems in Education.**

Individual problems or topics will be designed and completed to emphasize selected areas of study. May be repeated for additional credit at the discretion of the program coordinator.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dual Enrollment Permitted

**Grade Mode:** Standard Letter

**ED 7379. Independent Study.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in the Counseling, Leadership, Adult Education & School Psychology Department. May be repeated for additional credit at the discretion of the program coordinator.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7389B. Seminar in International Educational Research: Chile.**

This course develops theoretical knowledge, methodological skills, and scholarly capacity for international educational research. It focuses on research within the complex educational environment of Chile, involving seminar components held at the university and research fieldwork in Chile. International research is framed as a form of service learning. Restricted to students in the PhD in Education program.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389C. Advanced Theory in Qualitative Research.**

This course features advanced study in qualitative research methods. The course studies such methods as ethnography, case study, phenomenology, narrative analysis, post-qualitative research, grounded theory, or more advanced qualitative research in general and their constitutive field techniques. Prerequisites: Introduction to Qualitative Research and Intermediate Qualitative Research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ED 7389D. Advanced Theory in Qualitative Research: Narrative Research.**

The purpose of this course is to explore the possibilities of narrative research. The course will provide an overview of narrative inquiry, look at various theories and corresponding examples of research, and explore, analyze, and interpret data using narrative methods. Prerequisites: Introduction to Qualitative Research and Intermediate Qualitative Research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ED 7389E. Mexican Perspectives on Mexico - U.S. Immigration.**

The course gives U.S. educators an understanding of Mexican to U.S. immigration from Mexican women's perspectives. Students will read background information and visit Mexico where through lectures, field interviews, and field visits, they will view immigration from the "other side". They will analyze and write up data when they return. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ED 7389H. Oracy and Language Expression for Educators.**

This course focuses on the theory and practice of language expression. It emphasizes the relationship between audience analysis, speaker goals, organized outlines, delivery and development of personal style of presentation skills. The course offers direct experience writing, delivering, and constructively evaluating public speeches in a variety of educational contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389I. Comparative Studies in International Adult Education.**

This course compares a model of adult learning, communities of practice (CoP) today with its practice in pre-historical times. It will involve international travel and working with scholars to contrast theory and practice in the United States with the new setting. Students from both contexts will be encouraged to present their work in a conference format.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389L. Writing for Publication.**

Students will hone their writing skills. Students will work individually and in groups, getting feedback from other students and the instructor. Topics include APA style, getting started, first drafts, polishing and tightening, re-writing, submitting a manuscript, responding to feedback/reviews and more. Restricted to masters' and doctoral students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ED 7389M. Shifting Demographics in Texas: Exploring Education, Democracy and Healthy Communities.**

Students will explore the shifting population in Texas through multiple frames including historical, sociological, anthropological and political. Class will canvas the literature and emerging community conditions as a vehicle for imagining possible theoretical, policy and local responses to the conditions we see in schools and local communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389O. Educational Privatization: Policies, Actors, and Effects.**

This course interrogates the origins and outcomes of educational privatization. In this course, students will review the foundations of education as a public good, study frameworks and theories of privatization, trace public policies promoting privatization, delineate types of educational privatization over time, and examine the actors involved in educational privatization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389P. International Comparative Adult, Community, and Higher Education Research and Study: Italy.**

This course develops theoretical knowledge, methodological skills, and scholarly capacity for educational research. It focuses on comparative adult, higher, and socio-cultural education within the complex educational environment of Italy, involving seminar components held at the university and research fieldwork and presentation in Italy. Prerequisite: Should the student not be able to participate in the international component of the course, a domestic alternative can be discussed prior to enrollment.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389Q. Schools, Communities and Race in a Democratic Society.**

The class explores race through a personal lived perspective. This class will view race as a social construct. Students will interrogate the phenomena of race through multiple lens and frames, including but not limited to, an ontological perspective, its use in organizations, and its use in re-segregating society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389R. Understanding the Self: Anatomy of Engaged Scholarship.**

Successful leadership in school settings requires an understanding of human behavior. This understanding begins with knowledge of self and leads to the understanding of others at the micro and macro levels. The focus of this course is on you, the learner, and your surroundings. The goal is to enhance the student's self-awareness of values, beliefs, attitudes and the ecological context informing and impacting their school leadership experience. This understanding will inform the past, but also begin to inform your future as you matriculate through your course work. We will employ interdisciplinary literature to inform this work.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389S. Feminist and Critical Thought in Education.**

Feminist and Critical thought provides a means to examine and understand how issues of power shape and impact cultures, societies, and their associated policies and practices. In this seminar, students will engage with varying feminist and critical perspectives, frameworks, theories, epistemologies and methodologies to consider their application in examining their own educational journeys as well as current and systemic issues in education. Course readings and materials will primarily draw from the work of seminal and minoritized feminist and critical scholars, while providing students an opportunity to identify and explore course readings and materials of their choice as well.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389T. LGBTQIA+ Issues in Educational Leadership.**

This course examines the intersectionality of gender identity, sexual orientation, and other identities within the educational context, offering a nuanced exploration of the social, legal, and psychological aspects that influence LGBTQIA+ experiences in schools. Participants will engage in critical discussions on policy development, cultural competence, and leadership strategies that promote diversity, equity, and inclusion. The course is designed to address the unique challenges and opportunities facing educational leaders in fostering inclusive and affirming environments for LGBTQIA+ individuals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7399A. Dissertation.**

Original research and writing in Adult, Professional, and Community Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dual Enrollment Permitted

**Grade Mode:** Credit/No Credit

**ED 7399B. Dissertation.**

Original research and writing in School Improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dual Enrollment Permitted

**Grade Mode:** Credit/No Credit

**ED 7599A. Dissertation.**

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7599B. Dissertation.**

Original research and writing in Education-School improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7699A. Dissertation.**

The student conducts original research and writing in Adult, Professional, and Community Education, guided by the direct supervision of the dissertation chair. While conducting dissertation research and writing, students must be continuously enrolled.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7699B. Dissertation.**

Students produce a dissertation under direct supervision of dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled. Prerequisites: Core, Concentration, and Methodology courses or instructor's permission.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**ED 7999A. Dissertation.**

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7999B. Dissertation.**

Original research and writing in Education-School Improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Educational Leadership (EDCL)

**EDCL 7344. Campus Leadership.**

Develops the skills needed as a practitioner in elementary and secondary schools, focusing on the role and functions of the principal as a leader. Activities lead participants to practice skill development in evaluation processes, student activity programs, staffing patterns, site-based decision-making, community relations, accounting procedures, as well as other skills. Prerequisites: All Level I core courses, and EDCL 6342, EDCL 6343, EDCL 6348, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 7348. Public School Law.**

Examines constitutional provision, statutory laws, court decisions, and regulations governing public schools, with reference to state and federal relationships. Participants develop skills in researching and interpreting law, policy development and impact on public schools and communities. (Note: Students who took EDCL 6348 may not repeat this course for doctoral credit.)

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 7387. Field Practicum, Part I.**

Students seeking Principal Certification must complete this field-based 2 semester internship focusing on actual experiences with each of the state standards. The practicum provides opportunities to plan, produce, participate in, and reflect upon campus leadership. (Note: Students who took EDCL 6387 may not repeat these courses for doctoral credit.)

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 7388. Field Practicum Part II.**

Students seeking Principal Certification must complete this field-based 2-semester internship focusing on actual experiences with each of the state standards. The practicum provides opportunities to plan, produce, participate in, and reflect upon campus leadership. (Note: Students who took EDCL 6388 may not repeat these courses for doctoral credit.)

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 7389. Superintendent Practicum I.**

The practicum provides prospective superintendents and district leaders with practical experiences to prepare for various roles and responsibilities of central office leadership. Students work under the joint mentorship of a practicing school superintendent and a university supervisor. Offered fall semester only. May be taken concurrently with other superintendent certification courses. Prerequisite: ED 7347 with a grade of "B" or better.

**3 Credit Hours. .5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 7390. Superintendent Practicum II.**

This course is a continuation of EDCL7389 Superintendent Practicum I, providing prospective district leaders with practical experiences to prepare for central office leadership. Students work under the joint mentorship of a practicing school superintendent and a university supervisor. May be taken concurrently with other superintendent courses. Prerequisite: EDCL 7389.

**3 Credit Hours. .5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Student Affairs in Higher Education (SAHE)

**SAHE 7178. Independent Study.**

This course focuses on individual research topics. Students choose a selected area of study and work independently on a specialized project. Repeatable with departmental approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SAHE 7345. Gender and Sexuality in College.**

This course examines the role of gender and sexuality in the college experience. Designed using feminist theory and a social justice framework, the course includes topics of gender identity development, intersectionality, and multiple identities, sexual orientation, gender privilege and oppression, gender disparities in achievement and persistence, femininity, and masculinity. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SAHE 7378. Independent Study.**

This course focuses on individual research topics. Students choose a selected area of study and work independently on a specialized project. Repeatable with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SAHE 7379C. Professional Development in Student Affairs.**

Professional development plays an important role in student affairs. This course will allow students to learn more about professional development, professional associations, and conferences. Additionally, students will attend a professional conference and explore the theme of the conference through readings and meetings with professional association leaders and speakers.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 7379E. Intergroup Dialogue.**

This course is designed to give students both a theoretical and practical foundation in the knowledge, understanding, and skills needed to effectively facilitate intergroup dialogue. While providing foundational grounding in the theory and pedagogy of intergroup dialogue, the course directs particular attention to intergroup dynamics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 7379F. Interpersonal and Group Facilitation.**

This course is designed to give students both a theoretical and practical foundation in the knowledge, understanding, and skills needed to effectively facilitate groups and group development. Communication, facilitation, peer leadership, and experiential learning are the focus of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 7379G. Project-Based Applications in Student Affairs.**

In this course students engage in project-based applications in the field of student affairs. Students will select a project of their choice and implement the project with support of faculty and practitioners in the field. Students will engage in reflection and document their project for their portfolio.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Program Overview

The Specialist in School Psychology (S.S.P.) program is fully approved by the National Association of School Psychologists as a specialist-level degree that includes a 1200-clock-hour internship. The curriculum meets state and national standards for specialist-level training in school psychology. It includes didactic and experiential course work in data-

based decision-making, problem solving, evidence-based interventions, and interactions among family, school, and community systems.

School psychology may not serve as a minor for other programs. Graduates of the program are eligible to apply for the following credentials: Licensed Specialist in School Psychology and/or Licensed Psychological Associate from the Texas State Board of Examiners of Psychologists; and Nationally Certified School Psychologist from the National School Psychology Certification Board.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in your last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in abnormal psychology, developmental psychology, and statistics (or equivalent courses)
- official GRE (general test only) with competitive scores in the verbal reasoning, quantitative reasoning, and analytical writing sections
  - The GRE may be waived if the student holds a master's or doctoral degree from a regionally accredited U.S. institution. If the student holds a master's or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
- departmental application
- resume/CV including work and volunteer experience, organizations, interests and hobbies, and honors and awards
- statement of purpose
  - Why do you want to pursue training in School Psychology?
  - Please describe the professional and academic experiences that have prepared you to pursue a graduate degree in school psychology (e.g., experience working in schools/with children; internships, etc.).
  - Please describe the life experiences that have prepared you to pursue a graduate degree in school psychology (e.g., experience working in schools/with children; internships, etc.).
  - Please describe your strengths and how these strengths will assist you with being successful in a school psychology program.

- Please describe your weaknesses (e.g., areas that you would like to improve), and if accepted into the program, how you plan to address these weaknesses during your graduate studies.
- If there are elements of your application that you would like us to consider (e.g., GRE scores, grade point average, etc.) please address them here, if not, you may skip this entry.
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

The statement of purpose will be evaluated for content, style, and quality.

## Degree Requirements

The Specialist in School Psychology (S.S.P) degree with a major in School Psychology requires 69 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SPSY 5300	Interviewing, Counseling, and Consulting in School Psychology	3
SPSY 5376	Psychoeducational Assessment	3
SPSY 5377	Social, Emotional, and Behavioral Assessment	3
SPSY 5387	Data-Based Decision-Making in Evaluation and Intervention	3
SPSY 5379	Prevention and Treatment of Child and Adolescent Psychological Disorders: Individual, Group, and Sch	3
SPSY 5380	Individual and Group Counseling Techniques for School Psychology	3
SPSY 5385	Ethics, Standards, and Procedures in Professional School Psychology	3
SPSY 5386	Consultation and Professional Issues in School Psychology	3
SPSY 5388	Psychometrics for School Psychologists	3
SPSY 5389	Practicum in School Psychology (Taken three times)	9
SPSY 5394	Multicultural Issues in School Psychology	3
SPSY 5396	Biological Bases of Behavior	3
SPSY 5398	Alternative Evaluation, Intervention, and Student Outcomes	3

SPSY 6301	Professional Internship in School Psychology	3
SPSY 6302	Professional Internship in School Psychology	3
<b>Composite Minor School Psychology</b>		
SPED 5375	Behavior Management: School Application of Applied Behavior Analysis	3
SPSY 5355	Assessment of Culturally and Linguistically Diverse Students	3
SPSY 5399A		3
SPSY 5399C	Fostering Self-Care and Wellness in School Communities	3
Choose 6 hours of advisor-approved electives		6
<b>Total Hours</b>		<b>69</b>

## Comprehensive Examination Requirement

The School Psychology Program faculty do not limit how many times a student may retake the Praxis School Psychology Exam (comprehensive exam). However, in order to remain consistent with Graduate College policy on degree completion time limits, which are outlined in the Graduate Student Handbook, the exam a) cannot be taken until the student has completed at least 18 semester hours of graduate degree credit in the School Psychology program, b) may not be taken before the final term if the student has an Incomplete (I) in any course, c) cannot be taken unless the student is enrolled in at least one credit hour of course work when taking the comprehensive examination, and d) the exam must be passed within six years from date of initial enrollment in the School Psychology Training program.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Counseling, Leadership, Adult Education, and School Psychology: SPSY

## Courses Offered School Psychology (SPSY)

### SPSY 5178. Independent Study.

This course includes individual problems or research topics designed to place emphasis on selected areas of study. It may be repeated for additional credit at the discretion of the department chair.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### SPSY 5300. Interviewing, Counseling, and Consulting in School Psychology.

This course includes acquisition of skills for conducting interviews, counseling, consulting, and collaborating with children, adolescents, and adults. The emphasis is upon the development of basic communication skills that can be applied by the school psychologist in a variety of multicultural contexts, with an emphasis on family-school collaboration. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPSY 5355. Assessment of Culturally and Linguistically Diverse Students.**

This course will focus on the psychoeducational assessment of students from culturally and linguistically diverse backgrounds for purposes of special education eligibility and for instructional decision making. A major emphasis is placed on learning nonbiased assessment methods and procedures to assess language proficiency, intelligence, academic skills and personality-behavioral functioning. (MULT) Restricted to students in the School Psychology SSP Program. Prerequisite: SPSY 5394 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPSY 5356. Psycholinguistics of Second Language Acquisition.**

This course will focus on the linguistic and psycholinguistic underpinnings of the bilingual brain. It will provide a comprehensive introduction to the foundations of bilingualism, covering language processing, and language acquisition. Topics will include simultaneous and sequential bilingualism, language selection and switching, cognitive consequences of bilingualism, and the bilingual brain. Prerequisite: SPSY 5355 and SPSY 5394 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5360. Crisis Prevention, Intervention, and Response in the Schools.**

This course provides access to core knowledge related to fostering school safety and healthy learning environments, preventing school violence, preparing for crisis events that may impact the school community, and responding to school crises. It emphasizes research that informs best practices and provides fundamental information to promote leadership on school safety teams.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5376. Psychoeducational Assessment.**

This course is designed to teach the selection, administration, scoring, and interpretation of selected standardized, individual tests of general intelligence and achievement for children and adolescents of varying abilities and from diverse racial/ethnic and linguistic backgrounds. The main focus of the course is on theories and measurement of intelligence and academic abilities, the administration and interpretation of selected tests, integrated report writing, and the development of recommendations to address limitations and strengths. (MULT) Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPSY 5377. Social, Emotional, and Behavioral Assessment.**

This course covers the evaluation of personality, mental status, and behavior. This includes the theoretical bases, construction, administration, scoring, and interpretation of structured and projective personality tests with integrative report writing emphasizing the assessment of emotional disturbance and behavior disorders.

Prerequisite: SPSY 5376 with a grade of a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5378. Problems - School Psychology.**

This course includes individual problems not related to thesis or research problems. It is designed to place emphasis on selected areas of study. It may be repeated for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5379. Prevention and Treatment of Child and Adolescent Psychological Disorders: Individual, Group, and Sch.**

This course is an advanced investigation into the prevention and treatment of child and adolescent psychopathology. This course includes features of common childhood psychological disorders and empirically based strategies for preventing and treating these disorders. This course will cover individual, group, and schoolwide techniques by emphasizing culturally responsive Cognitive Behavioral Therapy (CBT), Acceptance and Commitment Therapy (ACT), and Social and Emotional Learning (SEL) approaches. Prerequisite: SPSY 5377 and SPSY 5380 both with grades of a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5380. Individual and Group Counseling Techniques for School Psychology.**

This course focuses on the acquisition and practice of techniques used in counseling interventions with children and adolescents in school settings. Individual and group counseling techniques are emphasized, along with a review and refinement of techniques for interviewing and consulting with parents. (MULT) Prerequisite: SPSY 5300 with a grade of a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5381. Independent Study.**

This course provides opportunity for individual work on problems or research topics of interest to the student and relevant to the field of school psychology. Course may be repeated once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPSY 5385. Ethics, Standards, and Procedures in Professional School Psychology.**

This course includes the presentation of historical foundations, role and functions, and procedures used by psychologists in the school setting. Emphasis includes ethical and legal issues, professional standards, state and federal law, and organization and operation of the schools as applied to the mental health and education of exceptional learners. (MULT)

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPSY 5386. Consultation and Professional Issues in School Psychology.**

This course presents models of consultation as they apply to the professional development and ethical position of the school psychologist. The course emphasizes the consultative role in relation to school administrators, guidance and counseling personnel, teachers, parents, students, and referral sources. (MULT) Prerequisite: SPSY 5300 and SPSY 5385 both with grades of "B" or better. Corequisite: SPSY 5389 with a grade of "CR" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPSY 5387. Data-Based Decision-Making in Evaluation and Intervention.**

This course covers advanced techniques for assessment of special populations, including early childhood, and integration of information from a variety of sources for the development of educational interventions. A problem solving approach that focuses on linking evaluation and intervention processes will be utilized throughout the course. (MULT) Prerequisite: SPSY 5376 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPSY 5388. Psychometrics for School Psychologists.**

This course covers measurement theory and applications for school psychologists. Topics include the statistical foundations of psychological measurement, interpretation of standardized scores, test development, reliability, validity, factor analysis, and bias and fairness in testing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5389. Practicum in School Psychology.**

Three practicum experiences occur in a school or agency setting with supervision by on-site and university supervisor. This course must be repeated for a total of nine credit hours. (MULT) Prerequisite: SPSY 5376 and SPSY 5385 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Credit/No Credit

**SPSY 5390. Applied Behavior Analysis for School Psychologists.**

This course will cover behavior-analytic assessment strategies and intervention techniques used to prevent and address challenging behavior and teach prosocial behaviors that support successful academic functioning of students with and without disabilities. The primary goal for the course is for learners to become familiar with the role of school psychologists in conducting functional behavior assessments and utilizing that information to develop individualized plans to meet the needs of different learners. Prerequisite: SPSY 5387 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5391. Research Seminar.**

This course provides students with knowledge of the nature and techniques of social science research. Students will develop research literacy through critical reading and examination of both quantitative and qualitative research. Additional emphasis is given to the relationship and application of science to professional practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPSY 5394. Multicultural Issues in School Psychology.**

The course provides a broad overview of the psychosocial, psychoeducational and multicultural issues surrounding the delivery of psychoeducational services to students in school systems. The course will help the student develop cross-cultural sensitivity when conducting assessments, providing consultation and performing other interventions. (MULT)

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPSY 5395. Basic Psychopharmacology.**

This course introduces knowledge of psychopharmacology with children and adolescents, including brain-behavior relationships, psychopathology, and research methods, with application to childhood disorders for which medication is often prescribed. Emphasis is placed on informed consultation with parents, teachers, and medical professionals regarding children prescribed psychotropic medications. Prerequisite: SPSY 5300 and SPSY 5376 and SPSY 5377 and SPSY 5382 and SPSY 5385 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5396. Biological Bases of Behavior.**

This course covers atypical disorders of brain development or function, particularly those likely to be encountered in the practice of school psychology. It includes an overview of neuropsychological and other tests with emphasis on development of a comprehensive assessment and intervention model through interpretation and critique or case studies. Prerequisite: SPSY 5376 and SPSY 5377 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**SPSY 5398. Alternative Evaluation, Intervention, and Student Outcomes.**

This course introduces students to the practice of curriculum based assessment in the context of a problem solving model of psychological services in the schools. Lectures, assignments, and activities develop competencies in the areas of non-traditional assessment, development of academic interventions, and the evaluation of student outcomes.

Prerequisite: SPSY 5387 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5399B. Essentials for the Assessment of Autism.**

This course will focus on evidence-based practices in the assessment of autism spectrum disorder. This is an experiential course in which students will apply relevant assessment skills under faculty supervision in a clinic-based setting [i.e., Clinic for Autism Research, Evaluation and Support (CARES)]. Prerequisite: SPSY 5376 and SPSY 5377 and SPSY 5388 and SPSY 5387 all with grades of a "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**SPSY 5399C. Fostering Self-Care and Wellness in School Communities.**

This course will cover experiential strategies for promoting self-care and wellness among school professionals (e.g., school psychologists, administrators, school counselors, teachers). Students will become familiar with the literature on stress and burn-out among educators and the empirically based strategies for promoting emotional, physical, and mental well-being. In this course, students will engage in a wellness assessment, identify wellness goals, and implement personal self-care strategies throughout the course. Students will also work together to develop individual, social, and systemic plans for integrating self-care and wellness practices in their school communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SPSY 6301. Professional Internship in School Psychology.**

Professional internship may be a continuation of the supervised school based experience or a placement in an appropriate alternative setting with supervision by a licensed psychologist. A minimum of 600 clock hours of experience is required. Prerequisite: SPSY 5389 with a grade of "CR" or better and a grade of "B" or better in all SPSY program coursework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPSY 6302. Professional Internship in School Psychology.**

Professional internship may be a continuation of the supervised school based experience or a placement in an appropriate alternative setting with supervision by a licensed psychologist. A minimum of 600 clock hours of experience is required. Prerequisite: SPSY 5389 with a grade of "CR" or better and grades of "B" or better in all SPSY program coursework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) degree with a major in Adult, Professional, and Community Education is an academically rigorous program designed for individuals serving in or aspiring to leadership positions in the diverse field of adult, professional, and community education. Adult, Professional, and Community Education, in this context, includes:

- adult basic and secondary education,
- English as a second language,
- community learning and development,
- workplace learning,
- university continuing education,
- continuing professional development, and
- organizational development.

Individuals completing this degree will be well prepared to teach, develop, evaluate, and/or administer programs in adult education or to conduct applied research regarding those programs.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- a copy of an official transcript from each institution where course credit was granted
- official transcripts from **each institution** where course credit was granted
- minimum 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- **Fall 2024:** three letters of recommendation from individuals with knowledge of you as a student or as a professional
- **Fall 2024:** writing sample (maximum 1,000 words) discussing a major issue currently confronting adult education.
- **Fall 2025 and beyond:** no letters of recommendation; writing sample (maximum 300 words) discussing your interest in adult education.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below

unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#walver>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Adult, Professional, and Community Education concentration in Adult English as a Second Language requires 33 semester credit hours, including an internship.

## Course Requirements

Code	Title	Hours
Required Courses		
ADED 5321	Adult Learning and Development	3
ADED 5325	Teaching Adults: Principles and Practices	3
ADED 5330	Planning, Evaluating, and Managing Programs in Adult Education	3
ADED 5335	Applied Research in Adult Education	3
ADED 5344	Multicultural Perspectives in Postsecondary Education and Adult Education	3
ADED 5384	Internship in Adult Education	3
Concentration		
ADED 5337	Adult Literacy	3
ADED 5338	Applied Linguistics for ESL Teachers of Adults	3
ADED 5339	Adult Literacy ESL Assesment and Evaluation	3
ADED 5340	Adult Second Language Acquisition	3
ADED 5342	Adult ESL Methods and Materials	3
Total Hours		33

## Comprehensive Examination Requirement

Students are required to take a written Comprehensive Examination in their last semester of the program. Students must pass the comprehensive exam during the last semester in at most two attempts. If the student fails to pass the comprehensive exam in two attempts during the final semester, the student will retake the comprehensive exam during the next regular semester. A second failure rating on the Examination is final. The student may not take the Examination a third time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master’s level courses in Counseling, Leadership, Adult Education, and School Psychology: ADED (p. 1158)

## Courses Offered

### Adult Education (ADED)

**ADED 5199B. Thesis.**  
This course represents a student’s continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.  
**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**ADED 5299B. Thesis.**  
This course represents a student’s continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.  
**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**ADED 5314. Community Development for Educators.**  
Educators in community organizations and higher education will develop a theoretical and practical understanding of the role of learning, teaching, and leading within a community development framework. They will develop an awareness of self as change agent and community builder, as well as the importance of tapping into community assets.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ADED 5321. Adult Learning and Development.**  
This seminar will cover a range of topics of interest of professionals working with adult learners in a variety of settings, including characteristics and motivations of adult learners; theories of adult learning and intelligence; modes of adult cognitive and psychosocial development.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ADED 5322. Human Resources and Professional Development.**  
This course examines the primary role of human resources development in the organization to help people and organizations effectively manage change. It focuses on strategies for implementing training and organizational development efforts that positively impact the performance of the individual and the work group.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Perspective|Multicultural Content  
**Grade Mode:** Standard Letter

**ADED 5325. Teaching Adults: Principles and Practices.**  
This seminar addresses methods and techniques for effective instruction of adults across a variety of settings and content. The emphasis is on concepts, theories, and principles relevant to the selection, use, and evaluation of instructional strategies. Participants will have an opportunity to practice strategies that expand their teaching repertoire.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ADED 5330. Planning, Evaluating, and Managing Programs in Adult Education.**

This seminar course introduces skills and concepts needed to plan, evaluate, and manage adult education programs within various settings. This course addresses principles and procedures, utilization of assessment, goal setting, and other effective strategies for developing learning opportunities and programs responsive to human, professional, and community needs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5335. Applied Research in Adult Education.**

An examination of purpose, principles, and methods of current research in adult education. Quantitative, qualitative, and mixed methods research design will be investigated as used in applied research including action research, evaluation research, and needs assessment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5337. Adult Literacy.**

The course is designed to provide students with a broad foundation about the needs of undereducated adults, including adult English language learners. Students will analyze and evaluate adult literacy legislation, instruction, research, and delivery systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5338. Applied Linguistics for ESL Teachers of Adults.**

This course is designed to provide language teachers a practical introduction to the elements of the English language as applied to the teaching of ESL in adult settings; specifically, the course covers English syntactic structure, morphology, and phonology. (MULT)

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ADED 5339. Adult Literacy ESL Assessment and Evaluation.**

This course is an introduction to assessment of adult students with emphasis on literacy and ESL populations. It is an overview of assessment constructs and social and historical movements in student literacy assessment and evaluation traditional assessment and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5340. Adult Second Language Acquisition.**

This course covers topics related to contemporary adult second language acquisition practices. It also examines the complexities of adult second language acquisition and the ways in which limited English-proficient adults learn more efficiently. Class readings and projects address a variety of issues dealing with adult second language acquisition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5342. Adult ESL Methods and Materials.**

This course reviews traditional and contemporary adult language teaching methodologies. It focuses on the design of lessons that integrate listening, speaking, reading, writing, culture and all language skills. This course provides strategies for choosing, adopting, and adapting textbooks that integrate teaching material appropriate to different adult language learning settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5343. Organizational Learning and Development.**

The course addresses a range of topics, including the effects of change, methods of organizational change, and factors influencing organizational development success. Students learn the roles of internal and external organizational development consultants, tools and processes for helping organizational members identify problems, gather and analyze information, and implement solutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5344. Multicultural Perspectives in Postsecondary Education and Adult Education.**

This seminar covers a broad range of topics related to diversity within postsecondary and adult education. Course readings and projects relate to a wide variety of settings including colleges and universities, adult literacy programs, the workplace, and community-based organizations. Students taking ADED 5344 may not take ADED 7344 for doctoral level credit. (MULT)

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ADED 5345. Current Issues in Adult, Continuing and Professional Education.**

A seminar style course focusing on current issues in continuing and professional education including research and professional practice. Specific emphasis will vary depending on changes in contemporary issues. Students taking ADED 5345 may not take ADED 7345 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5346. Adult and Nontraditional Students in Higher Education.**

This seminar focuses on the "nontraditional student" in higher education, with emphasis on undergraduates 25 and older. Also considered are other nontraditional students facing similar challenges to participation in higher education. Topics include student characteristics, motivations, barriers, persistence, and outcomes as well as institutional and programmatic responses to this population.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5357. Advanced Studies in Action Research.**

This course examines underlying theory, practice, skills, and issues in action research. Students will be introduced to various educational research methods used in action research and review the components and processes of action research. They will develop a plan for an action research project focused on a specific educational problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5364. Team Development in Education.**

This course addresses the development and use of educational teams to improve educational organizations, teaching, and learning. Team development instruction focuses on managing teams, identifying leadership roles. Study topics include: the importance of shared leadership, product teams, and team decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5378. Problems in Adult Education.**

This course is designed to examine topical problems faced by practitioners in adult education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5382. Foundations of Adult Education.**

This course will provide an overview of the field of adult education in its various forms and settings. Topics include (1) historical origins of adult education as a field of study and practice, (2) philosophical perspectives, (3) organization and delivery of adult education, and (4) emerging developments and issues in the profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5384. Internship in Adult Education.**

This course is an 80-clock hour internship is required of all Adult Education majors. The experience involves instruction and/or administration in an adult education setting and includes orientation to the roles, responsibilities, and functions of professionals in adult education. Prerequisite: ADED 5321 and ADED 5330 and ED 7324 and ADED 7325 all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Adult Education 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) degree with a major in Adult, Professional, and Community Education is an academically rigorous program designed for individuals serving in or aspiring to leadership positions in the diverse field of adult, professional, and community education. Adult, Professional, and Community Education, in this context, includes:

- adult basic and secondary education,
- English as a second language,
- community learning and development,
- workplace learning,
- university continuing education,
- continuing professional development, and
- organizational development.

Individuals completing this degree will be well prepared to teach, develop, evaluate, and/or administer programs in adult education or to conduct applied research regarding those programs.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- minimum 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- **Fall 2024:** three letters of recommendation from individuals with knowledge of you as a the student or as a in-academic-and/ or professional settings
- **Fall 2024:** writing sample (maximum 1,000 words) discussing a major issue currently confronting adult education.
- **Fall 2025 and beyond:** no letters of recommendation; writing sample (maximum 300 words) discussing your interest in adult education.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Adult, Professional, and Community Education concentration in Adult English as a Second Language requires 39 semester credit hours, including an internship and a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ADED 5321	Adult Learning and Development	3
ADED 5325	Teaching Adults: Principles and Practices	3
ADED 5330	Planning, Evaluating, and Managing Programs in Adult Education	3
ADED 5335	Applied Research in Adult Education	3
ADED 5344	Multicultural Perspectives in Postsecondary Education and Adult Education	3
ADED 5384	Internship in Adult Education	3
<b>Concentration</b>		
ADED 5337	Adult Literacy	3
ADED 5338	Applied Linguistics for ESL Teachers of Adults	3
ADED 5339	Adult Literacy ESL Assessment and Evaluation	3
ADED 5340	Adult Second Language Acquisition	3
ADED 5342	Adult ESL Methods and Materials	3
<b>Thesis</b>		
ADED 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
ADED 5199B	Thesis	
ADED 5299B	Thesis	
ADED 5399B	Thesis	
ADED 5599B	Thesis	
ADED 5999B	Thesis	
<b>Total Hours</b>		<b>39</b>

## Comprehensive Examination Requirement

Students are required to take a written Comprehensive Examination in their last semester of the program. Students must pass the comprehensive exam during the last semester in at most two attempts. If the student fails to pass the comprehensive exam in two attempts during the final semester, the student will retake the comprehensive exam during the next regular semester. A second failure rating on the Examination is final. The student may not take the Examination a third time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.



## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until

the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Counseling, Leadership, Adult Education, and School Psychology: ADED (p. 1163)

## Courses Offered

### Adult Education (ADED)

#### ADED 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ADED 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ADED 5314. Community Development for Educators.

Educators in community organizations and higher education will develop a theoretical and practical understanding of the role of learning, teaching, and leading within a community development framework. They will develop an awareness of self as change agent and community builder, as well as the importance of tapping into community assets.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ADED 5321. Adult Learning and Development.

This seminar will cover a range of topics of interest of professionals working with adult learners in a variety of settings, including characteristics and motivations of adult learners; theories of adult learning and intelligence; modes of adult cognitive and psychosocial development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ADED 5322. Human Resources and Professional Development.

This course examines the primary role of human resources development in the organization to help people and organizations effectively manage change. It focuses on strategies for implementing training and organizational development efforts that positively impact the performance of the individual and the work group.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

#### ADED 5325. Teaching Adults: Principles and Practices.

This seminar addresses methods and techniques for effective instruction of adults across a variety of settings and content. The emphasis is on concepts, theories, and principles relevant to the selection, use, and evaluation of instructional strategies. Participants will have an opportunity to practice strategies that expand their teaching repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ADED 5330. Planning, Evaluating, and Managing Programs in Adult Education.

This seminar course introduces skills and concepts needed to plan, evaluate, and manage adult education programs within various settings. This course addresses principles and procedures, utilization of assessment, goal setting, and other effective strategies for developing learning opportunities and programs responsive to human, professional, and community needs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ADED 5334. Family Literacy.

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ADED 5335. Applied Research in Adult Education.

An examination of purpose, principles, and methods of current research in adult education. Quantitative, qualitative, and mixed methods research design will be investigated as used in applied research including action research, evaluation research, and needs assessment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ADED 5337. Adult Literacy.

The course is designed to provide students with a broad foundation about the needs of undereducated adults, including adult English language learners. Students will analyze and evaluate adult literacy legislation, instruction, research, and delivery systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ADED 5338. Applied Linguistics for ESL Teachers of Adults.

This course is designed to provide language teachers a practical introduction to the elements of the English language as applied to the teaching of ESL in adult settings; specifically, the course covers English syntactic structure, morphology, and phonology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

#### ADED 5339. Adult Literacy ESL Assessment and Evaluation.

This course is an introduction to assessment of adult students with emphasis on literacy and ESL populations. It is an overview of assessment constructs and social and historical movements in student literacy assessment and evaluation traditional assessment and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5340. Adult Second Language Acquisition.**

This course covers topics related to contemporary adult second language acquisition practices. It also examines the complexities of adult second language acquisition and the ways in which limited English-proficient adults learn more efficiently. Class readings and projects address a variety of issues dealing with adult second language acquisition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5342. Adult ESL Methods and Materials.**

This course reviews traditional and contemporary adult language teaching methodologies. It focuses on the design of lessons that integrate listening, speaking, reading, writing, culture and all language skills. This course provides strategies for choosing, adopting, and adapting textbooks that integrate teaching material appropriate to different adult language learning settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5343. Organizational Learning and Development.**

The course addresses a range of topics, including the effects of change, methods of organizational change, and factors influencing organizational development success. Students learn the roles of internal and external organizational development consultants, tools and processes for helping organizational members identify problems, gather and analyze information, and implement solutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5344. Multicultural Perspectives in Postsecondary Education and Adult Education.**

This seminar covers a broad range of topics related to diversity within postsecondary and adult education. Course readings and projects relate to a wide variety of settings including colleges and universities, adult literacy programs, the workplace, and community-based organizations. Students taking ADED 5344 may not take ADED 7344 for doctoral level credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ADED 5345. Current Issues in Adult, Continuing and Professional Education.**

A seminar style course focusing on current issues in continuing and professional education including research and professional practice. Specific emphasis will vary depending on changes in contemporary issues. Students taking ADED 5345 may not take ADED 7345 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5346. Adult and Nontraditional Students in Higher Education.**

This seminar focuses on the "nontraditional student" in higher education, with emphasis on undergraduates 25 and older. Also considered are other nontraditional students facing similar challenges to participation in higher education. Topics include student characteristics, motivations, barriers, persistence, and outcomes as well as institutional and programmatic responses to this population.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5357. Advanced Studies in Action Research.**

This course examines underlying theory, practice, skills, and issues in action research. Students will be introduced to various educational research methods used in action research and review the components and processes of action research. They will develop a plan for an action research project focused on a specific educational problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5364. Team Development in Education.**

This course addresses the development and use of educational teams to improve educational organizations, teaching, and learning. Team development instruction focuses on managing teams, identifying leadership roles. Study topics include: the importance of shared leadership, product teams, and team decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5378. Problems in Adult Education.**

This course is designed to examine topical problems faced by practitioners in adult education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5382. Foundations of Adult Education.**

This course will provide an overview of the field of adult education in its various forms and settings. Topics include (1) historical origins of adult education as a field of study and practice, (2) philosophical perspectives, (3) organization and delivery of adult education, and (4) emerging developments and issues in the profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5384. Internship in Adult Education.**

This course is an 80-clock hour internship is required of all Adult Education majors. The experience involves instruction and/or administration in an adult education setting and includes orientation to the roles, responsibilities, and functions of professionals in adult education. Prerequisite: ADED 5321 and ADED 5330 and ED 7324 and ADED 7325 all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Adult Education 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) degree with a major in Adult, Professional, and Community Education is an academically rigorous program designed for individuals serving in or aspiring to leadership positions in the diverse field of Adult, Professional, and Community Education. Adult, Professional, and Community Education, in this context, includes:

- adult basic and secondary education,
- English as a second language,
- community learning and development,
- workplace learning,
- university continuing education,
- continuing professional development, and
- organizational development.

Individuals completing this degree will be well prepared to teach, develop, evaluate, and/or administer programs in adult education or to conduct applied research regarding those programs.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- minimum 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- **Fall 2024:** three letters of recommendation from individuals with knowledge of you as a the student or as a ~~in-academic-and/~~ ~~or professional settings~~
- **Fall 2024:** writing sample (maximum 1,000 words) discussing a major issue currently confronting adult education.
- **Fall 2025 and beyond:** no letters of recommendation; writing sample (maximum 300 words) discussing your interest in adult education.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Adult, Professional, and Community Education concentration in Workplace, Community, and Continuing Education requires 30 semester credit hours, including an internship.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ADED 5321	Adult Learning and Development	3
ADED 5325	Teaching Adults: Principles and Practices	3
ADED 5330	Planning, Evaluating, and Managing Programs in Adult Education	3
ADED 5335	Applied Research in Adult Education	3
ADED 5344	Multicultural Perspectives in Postsecondary Education and Adult Education	3
ADED 5384	Internship in Adult Education	3
<b>Concentration</b>		
ADED 5314	Community Development for Educators	3
ADED 5322	Human Resources and Professional Development	3
ADED 5343	Organizational Learning and Development	3
ADED 5382	Foundations of Adult Education	3
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

Students are required to take a written Comprehensive Examination in their last semester of the program. Students must pass the comprehensive exam during the last semester in at most two attempts. If the student fails to pass the comprehensive exam in two attempts during the final semester, the student will retake the comprehensive exam during the next regular semester. A second failure rating on the Examination is final. The student may not take the Examination a third time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Counseling, Leadership, Adult Education, and School Psychology: ADED (p. 1166)

## Courses Offered

### Adult Education (ADED)

#### ADED 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ADED 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ADED 5314. Community Development for Educators.

Educators in community organizations and higher education will develop a theoretical and practical understanding of the role of learning, teaching, and leading within a community development framework. They will develop an awareness of self as change agent and community builder, as well as the importance of tapping into community assets.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ADED 5321. Adult Learning and Development.

This seminar will cover a range of topics of interest of professionals working with adult learners in a variety of settings, including characteristics and motivations of adult learners; theories of adult learning and intelligence; modes of adult cognitive and psychosocial development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ADED 5322. Human Resources and Professional Development.

This course examines the primary role of human resources development in the organization to help people and organizations effectively manage change. It focuses on strategies for implementing training and organizational development efforts that positively impact the performance of the individual and the work group.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

#### ADED 5325. Teaching Adults: Principles and Practices.

This seminar addresses methods and techniques for effective instruction of adults across a variety of settings and content. The emphasis is on concepts, theories, and principles relevant to the selection, use, and evaluation of instructional strategies. Participants will have an opportunity to practice strategies that expand their teaching repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ADED 5330. Planning, Evaluating, and Managing Programs in Adult Education.

This seminar course introduces skills and concepts needed to plan, evaluate, and manage adult education programs within various settings. This course addresses principles and procedures, utilization of assessment, goal setting, and other effective strategies for developing learning opportunities and programs responsive to human, professional, and community needs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ADED 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5335. Applied Research in Adult Education.**

An examination of purpose, principles, and methods of current research in adult education. Quantitative, qualitative, and mixed methods research design will be investigated as used in applied research including action research, evaluation research, and needs assessment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5337. Adult Literacy.**

The course is designed to provide students with a broad foundation about the needs of undereducated adults, including adult English language learners. Students will analyze and evaluate adult literacy legislation, instruction, research, and delivery systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5338. Applied Linguistics for ESL Teachers of Adults.**

This course is designed to provide language teachers a practical introduction to the elements of the English language as applied to the teaching of ESL in adult settings; specifically, the course covers English syntactic structure, morphology, and phonology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ADED 5339. Adult Literacy ESL Assessment and Evaluation.**

This course is an introduction to assessment of adult students with emphasis on literacy and ESL populations. It is an overview of assessment constructs and social and historical movements in student literacy assessment and evaluation traditional assessment and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5340. Adult Second Language Acquisition.**

This course covers topics related to contemporary adult second language acquisition practices. It also examines the complexities of adult second language acquisition and the ways in which limited English-proficient adults learn more efficiently. Class readings and projects address a variety of issues dealing with adult second language acquisition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5342. Adult ESL Methods and Materials.**

This course reviews traditional and contemporary adult language teaching methodologies. It focuses on the design of lessons that integrate listening, speaking, reading, writing, culture and all language skills. This course provides strategies for choosing, adopting, and adapting textbooks that integrate teaching material appropriate to different adult language learning settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5343. Organizational Learning and Development.**

The course addresses a range of topics, including the effects of change, methods of organizational change, and factors influencing organizational development success. Students learn the roles of internal and external organizational development consultants, tools and processes for helping organizational members identify problems, gather and analyze information, and implement solutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5344. Multicultural Perspectives in Postsecondary Education and Adult Education.**

This seminar covers a broad range of topics related to diversity within postsecondary and adult education. Course readings and projects relate to a wide variety of settings including colleges and universities, adult literacy programs, the workplace, and community-based organizations. Students taking ADED 5344 may not take ADED 7344 for doctoral level credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ADED 5345. Current Issues in Adult, Continuing and Professional Education.**

A seminar style course focusing on current issues in continuing and professional education including research and professional practice. Specific emphasis will vary depending on changes in contemporary issues. Students taking ADED 5345 may not take ADED 7345 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5346. Adult and Nontraditional Students in Higher Education.**

This seminar focuses on the "nontraditional student" in higher education, with emphasis on undergraduates 25 and older. Also considered are other nontraditional students facing similar challenges to participation in higher education. Topics include student characteristics, motivations, barriers, persistence, and outcomes as well as institutional and programmatic responses to this population.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5357. Advanced Studies in Action Research.**

This course examines underlying theory, practice, skills, and issues in action research. Students will be introduced to various educational research methods used in action research and review the components and processes of action research. They will develop a plan for an action research project focused on a specific educational problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5364. Team Development in Education.**

This course addresses the development and use of educational teams to improve educational organizations, teaching, and learning. Team development instruction focuses on managing teams, identifying leadership roles. Study topics include: the importance of shared leadership, product teams, and team decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5378. Problems in Adult Education.**

This course is designed to examine topical problems faced by practitioners in adult education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5382. Foundations of Adult Education.**

This course will provide an overview of the field of adult education in its various forms and settings. Topics include (1) historical origins of adult education as a field of study and practice, (2) philosophical perspectives, (3) organization and delivery of adult education, and (4) emerging developments and issues in the profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5384. Internship in Adult Education.**

This course is an 80-clock hour internship is required of all Adult Education majors. The experience involves instruction and/or administration in an adult education setting and includes orientation to the roles, responsibilities, and functions of professionals in adult education. Prerequisite: ADED 5321 and ADED 5330 and ED 7324 and ADED 7325 all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Adult Education 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) degree with a major in Adult, Professional, and Community Education and a concentration in Workplace, Community, and Continuing Education Thesis Option is an academically rigorous program designed for individuals serving in or aspiring to leadership positions in the diverse field of Adult, Professional, and Community Education. Adult, Professional, and Community Education, in this context, includes:

- adult basic and secondary education,
- English as a second language,
- community learning and development,
- workplace learning,
- university continuing education,
- continuing professional development, and
- organizational development.

Individuals completing this degree will be well prepared to teach, develop, evaluate, and/or administer programs in adult education or to conduct applied research regarding those programs.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review

the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- minimum 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- **Fall 2024:** three letters of recommendation from individuals with knowledge of you as a the student or as a ~~in-academic-and/~~ ~~or~~ professional ~~settings~~
- **Fall 2024:** writing sample (maximum 1,000 words) discussing a major issue currently confronting adult education.
- **Fall 2025 and beyond:** no letters of recommendation; writing sample (maximum 300 words) discussing your interest in adult education.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Adult, Professional, and Community Education concentration in Workplace, Community, and Continuing Education requires 36 semester credit hours, including an internship and a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ADED 5321	Adult Learning and Development	3
ADED 5325	Teaching Adults: Principles and Practices	3
ADED 5330	Planning, Evaluating, and Managing Programs in Adult Education	3
ADED 5335	Applied Research in Adult Education	3
ADED 5344	Multicultural Perspectives in Postsecondary Education and Adult Education	3
ADED 5384	Internship in Adult Education	3
<b>Concentration</b>		
ADED 5314	Community Development for Educators	3
ADED 5322	Human Resources and Professional Development	3
ADED 5343	Organizational Learning and Development	3
ADED 5382	Foundations of Adult Education	3
<b>Thesis</b>		
ADED 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
ADED 5199B	Thesis	
ADED 5299B	Thesis	
ADED 5399B	Thesis	
ADED 5599B	Thesis	
ADED 5999B	Thesis	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

Students are required to take a written Comprehensive Examination in their last semester of the program. Students must pass the comprehensive exam during the last semester in at most two attempts. If the student fails to pass the comprehensive exam in two attempts during the final semester, the student will retake the comprehensive exam during the next regular semester. A second failure rating on the Examination is final. The student may not take the Examination a third time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis

Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The

completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Counseling, Leadership, Adult Education, and School Psychology: ADED (p. 1170)

## Courses Offered

### Adult Education (ADED)

#### ADED 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ADED 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5314. Community Development for Educators.**

Educators in community organizations and higher education will develop a theoretical and practical understanding of the role of learning, teaching, and leading within a community development framework. They will develop an awareness of self as change agent and community builder, as well as the importance of tapping into community assets.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5321. Adult Learning and Development.**

This seminar will cover a range of topics of interest of professionals working with adult learners in a variety of settings, including characteristics and motivations of adult learners; theories of adult learning and intelligence; modes of adult cognitive and psychosocial development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5322. Human Resources and Professional Development.**

This course examines the primary role of human resources development in the organization to help people and organizations effectively manage change. It focuses on strategies for implementing training and organizational development efforts that positively impact the performance of the individual and the work group.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**ADED 5325. Teaching Adults: Principles and Practices.**

This seminar addresses methods and techniques for effective instruction of adults across a variety of settings and content. The emphasis is on concepts, theories, and principles relevant to the selection, use, and evaluation of instructional strategies. Participants will have an opportunity to practice strategies that expand their teaching repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5330. Planning, Evaluating, and Managing Programs in Adult Education.**

This seminar course introduces skills and concepts needed to plan, evaluate, and manage adult education programs within various settings. This course addresses principles and procedures, utilization of assessment, goal setting, and other effective strategies for developing learning opportunities and programs responsive to human, professional, and community needs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5335. Applied Research in Adult Education.**

An examination of purpose, principles, and methods of current research in adult education. Quantitative, qualitative, and mixed methods research design will be investigated as used in applied research including action research, evaluation research, and needs assessment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5337. Adult Literacy.**

The course is designed to provide students with a broad foundation about the needs of undereducated adults, including adult English language learners. Students will analyze and evaluate adult literacy legislation, instruction, research, and delivery systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5338. Applied Linguistics for ESL Teachers of Adults.**

This course is designed to provide language teachers a practical introduction to the elements of the English language as applied to the teaching of ESL in adult settings; specifically, the course covers English syntactic structure, morphology, and phonology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ADED 5339. Adult Literacy ESL Assessment and Evaluation.**

This course is an introduction to assessment of adult students with emphasis on literacy and ESL populations. It is an overview of assessment constructs and social and historical movements in student literacy assessment and evaluation traditional assessment and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5340. Adult Second Language Acquisition.**

This course covers topics related to contemporary adult second language acquisition practices. It also examines the complexities of adult second language acquisition and the ways in which limited English-proficient adults learn more efficiently. Class readings and projects address a variety of issues dealing with adult second language acquisition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ADED 5342. Adult ESL Methods and Materials.**

This course reviews traditional and contemporary adult language teaching methodologies. It focuses on the design of lessons that integrate listening, speaking, reading, writing, culture and all language skills. This course provides strategies for choosing, adopting, and adapting textbooks that integrate teaching material appropriate to different adult language learning settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5343. Organizational Learning and Development.**

The course addresses a range of topics, including the effects of change, methods of organizational change, and factors influencing organizational development success. Students learn the roles of internal and external organizational development consultants, tools and processes for helping organizational members identify problems, gather and analyze information, and implement solutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5344. Multicultural Perspectives in Postsecondary Education and Adult Education.**

This seminar covers a broad range of topics related to diversity within postsecondary and adult education. Course readings and projects relate to a wide variety of settings including colleges and universities, adult literacy programs, the workplace, and community-based organizations. Students taking ADED 5344 may not take ADED 7344 for doctoral level credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ADED 5345. Current Issues in Adult, Continuing and Professional Education.**

A seminar style course focusing on current issues in continuing and professional education including research and professional practice. Specific emphasis will vary depending on changes in contemporary issues. Students taking ADED 5345 may not take ADED 7345 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5346. Adult and Nontraditional Students in Higher Education.**

This seminar focuses on the "nontraditional student" in higher education, with emphasis on undergraduates 25 and older. Also considered are other nontraditional students facing similar challenges to participation in higher education. Topics include student characteristics, motivations, barriers, persistence, and outcomes as well as institutional and programmatic responses to this population.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5357. Advanced Studies in Action Research.**

This course examines underlying theory, practice, skills, and issues in action research. Students will be introduced to various educational research methods used in action research and review the components and processes of action research. They will develop a plan for an action research project focused on a specific educational problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5364. Team Development in Education.**

This course addresses the development and use of educational teams to improve educational organizations, teaching, and learning. Team development instruction focuses on managing teams, identifying leadership roles. Study topics include: the importance of shared leadership, product teams, and team decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5378. Problems in Adult Education.**

This course is designed to examine topical problems faced by practitioners in adult education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5382. Foundations of Adult Education.**

This course will provide an overview of the field of adult education in its various forms and settings. Topics include (1) historical origins of adult education as a field of study and practice, (2) philosophical perspectives, (3) organization and delivery of adult education, and (4) emerging developments and issues in the profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5384. Internship in Adult Education.**

This course is an 80-clock hour internship is required of all Adult Education majors. The experience involves instruction and/or administration in an adult education setting and includes orientation to the roles, responsibilities, and functions of professionals in adult education. Prerequisite: ADED 5321 and ADED 5330 and ED 7324 and ADED 7325 all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Adult Education 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The purpose of the Educational Leadership program is to prepare leaders for the schools of Texas. The program offers graduate work leading to the master's degree in educational leadership and certification as a principal (for students who already hold a master's degree) or superintendent (for students with a master's degree and a principal certificate). If you have questions about admission to the educational leadership program you may contact the coordinator of the educational leadership program.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's

degree. In most cases, three-year degrees are not considered.

Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts required from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- copy of official teaching certificate documenting initial teaching certification
- copy of official teaching record documenting at least one year of teaching experience

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Educational Leadership concentration in Instructional Leadership requires 36 semester credit hours. Students are required to maintain a 3.25 cumulative grade-point average (GPA) for all courses listed as Course Requirements.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
EDCL 5339	Understanding Self: Developing a Personal Vision of Leadership	3
EDCL 5345	Understanding People: Professional Development	3
EDCL 5348	Supervision of Instruction	3
EDCL 6342	Curriculum Design	3
EDCL 6343	Continuous School Improvement	3
EDCL 6351	Instructional Models	3
EDCL 6352	School as Center of Inquiry	3
EDCL 6358	Integrative Seminar	3
<b>Cognate</b>		
Choose 12 hours of advisor-approved courses		12
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

As a capstone for the degree, students design a school-based action research project. In addition to preparing a written plan for this project as an academic paper, students present their action research plan to a panel

of three faculty members. This is a formal presentation and constitutes the Comprehensive Examination for the master's degree. A passing grade is required for degree completion. The faculty panel may request revisions to the written plan before issuing a final passing grade for the Comprehensive Examination. A student may not submit revisions and redo the Comprehensive Examination more than twice.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Counseling, Leadership, Adult Education, and School Psychology: EDCL

## Courses Offered

### Educational Leadership (EDCL)

#### **EDCL 5100. Educational Leaders' Continuing Professional Development.**

This course provides state-of-the-art continuing professional development for in-service, non-degree seeking educational leaders. New topics will be addressed with each offering. The course may be repeated once if necessary.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **EDCL 5339. Understanding Self: Developing a Personal Vision of Leadership.**

Successful leadership in organizational settings requires an understanding of human behavior. This understanding begins with the knowledge of self and leads to the understanding of others. The focus of this course is on the individual student. The intent is to enhance the student's self-awareness of values, beliefs, and attitudes related to successful school leadership.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **EDCL 5340. Shaping Organizations and Using Inquiry: Management and Leadership.**

This course includes an understanding of the basic structural components of educational organizations and the theoretical frameworks that describe organizational behavior. Students will focus on the process of action research, planning, decision-making, change in organizations, and leadership. Prerequisites: EDCL 5339, EDCL 5345, EDCL 5347, and EDCL 5348.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **EDCL 5345. Understanding People: Professional Development.**

This course includes fundamental issues related to the development of personnel, entry-level knowledge of staff appraisal, adult learning and development, and staff development. Prerequisite: EDCL 5339. Corequisite: EDCL 5339.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **EDCL 5347. Understanding Environments: Social, Political, Economic, Legal, and Technological.**

Concepts of the internal and external environment of educational organizations are explored. Entry level concepts are presented in areas of school environments. Prerequisite: EDCL 5339. Corequisite: EDCL 5339.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **EDCL 5348. Supervision of Instruction.**

Concepts of curriculum and instructional leadership models for schools will be developed. Factors such as curriculum leadership and instructional improvement are considered part of the internal environment of schools. Prerequisite: EDCL 5339 and EDCL 5345.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **EDCL 5349. Practicum in Instructional Leadership.**

Students obtaining an MA in educational leadership with a concentration in instructional leadership apply the knowledge and skills they have developed in their program of study in a school setting, with mentoring by a school administrator and under the supervision of a faculty member in the educational leadership program. Prerequisite: EDCL 5339, EDCL 5345, EDCL 5348, EDCL 6342, EDCL 6352, and EDCL 6358.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **EDCL 5351. Understanding Self Within School & Community Environments.**

Successful leadership in school settings requires an understanding of human behavior and its ethics within a diverse context. This understanding begins with knowledge of self and leads to the understanding of organizations within the micro and macro environments. The focus of this course is on you, the learner, and your school and community. The goal is to enhance the student's self-awareness of values, beliefs, attitudes and the ecological context informing and impacting their school leadership experience. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **EDCL 5352. Instructional Leadership, Supervision, and Professional Development.**

The relationship between school improvement and instructional leadership will be examined. The course will examine current research and trends related to professional learning and supervision in a school setting. Students will have an opportunity to learn about the design, development, implementation, and evaluation of individual, campus, and district professional development. The course is designed to promote leadership knowledge and skills that will enhance the instructional capacity of all campus staff members and thereby improve overall student success. Prerequisite: EDCL 5351 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5353. Campus Leadership and School Law.**

This course is designed to develop campus leadership skills in elementary and secondary schools, focusing on the role and functions of the principal as a leader. This course also surveys and examines the implications of legal issues likely to be encountered by a school leader, examining constitutional provisions, statutory laws, court decisions, and regulations governing public schools with special reference to state and federal relationships. Prerequisite: EDCL 5352 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5388. Problems in Administration.**

Individual problems not related to thesis or research problems. Designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6342. Curriculum Design.**

Theory and practice in planning for curriculum needs assessment, development, implementation, and evaluation. Prerequisite: EDCL 5339, EDCL 5345, EDCL 5347, EDCL 5348, and EDCL 6352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6343. Continuous School Improvement.**

Applies the concept and principles of Total Quality Improvement to schools and classrooms and integrates Total Quality Improvement with other school improvement models. Prerequisite: All Level I core courses or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6344. Campus Leadership.**

This course develops campus leadership skills for elementary and secondary schools, focusing on the role and functions of the principal as a leader. Students practice skill development in evaluation processes, student activity programs, staffing patterns, site-based decision-making, community relations, and accounting procedures. Prerequisites: EDCL 5339, EDCL 5345, and EDCL 5348. Corequisite: EDCL 5347.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6348. School Law.**

This course examines the constitutional provisions, statutory laws, court decisions, and regulations governing public schools with special reference to state and federal relationships. Prerequisite: EDCL 5339, EDCL 5345, EDCL 5347, EDCL 5348, EDCL 6342, EDCL 6344, EDCL 6358, and EDCL 6387.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6351. Instructional Models.**

Characteristics of effective teaching are identified and correlated with learning theories and their corresponding instructional models. Matching instruction to the needs of learners and integrative approaches are emphasized. Prerequisites: All Level I and II courses or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6352. School as Center of Inquiry.**

Prepares the educational leader to be an intelligent consumer of research and to assume a leadership role in school-wide action research. This course is a prerequisite for EDCL 6358. Prerequisites: EDCL 5339 and EDCL 5345. Corequisite: EDCL 5345.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6358. Integrative Seminar.**

This course integrates key theories, concepts, and principles learned during the student's course of study. The student will complete a paper including an action research plan designed to solve an educational problem present within a specific educational setting. The master's student will defend the plan during the oral examination. Prerequisites: EDCL 5339, EDCL 5345, EDCL 5347, EDCL 5348, and EDCL 6352. Corequisite: EDCL 5348.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6387. Principal Field-Based Practicum I.**

The practicum provides students the opportunity to develop leadership skills needed by principals of elementary and secondary schools. Students will develop a practicum proposal in cooperation with their site-mentor and university supervisor. The course focus is on the development of administrative skills in a real world setting. Prerequisites: EDCL 5339, EDCL 5348, EDCL 6344, and EDCL 6358. Corequisites: EDCL 6344 and EDCL 6358.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 6388. Principal Field-Based Practicum II.**

This course is a continuation of EDCL 6387 and allows students to continue projects and activities begun in the fall semester and to work further with their on-site mentor and university supervisor. This course is offered in the spring semester only. Prerequisites: EDCL 5339, EDCL 6358, and EDCL 6387.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 6389. Superintendent's Practicum I.**

The practicum is intended to give prospective school superintendents the opportunity to hone their leadership skills under the guidance an experienced and successful school leader. Offered fall semester only and may be taken concurrently with other superintendent certification courses.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 6390. Superintendent's Practicum II.**

A continuation of EDCL 6389, this course allows students to carry through projects and activities begun in the fall semester and to work further with their on-site mentor and university supervisor. Offered spring semester only. May be taken concurrently with other superintendent certification courses. Prerequisite: EDCL 6389.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) with a major in Professional Counseling consists of four concentrations:

- clinical mental health counseling,
- marital, couple and family counseling, and
- school counseling
- school counselor - Texas Certificate

These four areas of concentration in the professional counseling major have required course sequences that build skills through three levels, from basic to advanced, via didactic and experiential activities. The curriculum includes core foundations in theories, interventions, assessment, and research. In addition, core tenets that are emphasized throughout the program include diversity, ethics, professional development, and self-awareness. There is a strong emphasis on experiential learning integrated with the application of didactic, research-based knowledge. Internship is required as the capstone experience. The concentration in clinical mental health counseling; marriage, couple, and family counseling; and school counseling are nationally accredited by the Council for Accreditation of Counseling and Related Programs (CACREP).

The concentration of School Counselor - Texas Certificate, has similar courses and sequencing as the areas above. This concentration is focused on developing strong clinical skills and meeting the requirements of the Texas State Board of Educator Certification.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
  - The GRE may be waived if the student holds a master's or doctoral degree from a regionally accredited U.S. institution. If the student holds a master's or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
- informed consent form
- resume/CV detailing unique competencies that contribute to an aptitude for graduate study; personal experiences, such as volunteer work, that have aided in preparations for a career in counseling; additional language skills; technological competence and computer literacy
- statement of purpose (maximum 750 words, typed and double-spaced) addressing the following:\*
  - professional goals and rationale for pursuing education and training in professional counseling as opposed to another mental health discipline such as psychology, social work, or counseling psychology
  - rationale for choosing the clinical mental health counseling concentration
  - major strengths and weaknesses with respect to being admitted into the program
  - perspective on diversity including
    - personal contributions to and benefits from the richness of the professional counseling program
    - ways to increase inclusion of diversity in the counseling profession
- three forms of recommendation (not general reference letters)

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall



This program does **not** offer admission if the scores above are not met.

#### \*Additional Information

The statement of purpose will be evaluated for content, style, and quality. While the applicant may seek consultation and editing suggestions, this statement must be representative of the student's current level and style of writing and representative of what could be expected if admitted into the program.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Professional Counseling concentration in Clinical Mental Health Counseling requires 60 semester credit hours. This concentration meets academic requirements for the Texas Licensed Professional Counselor credential. A grade of "B" or better must be earned in all course work counting toward a professional counseling degree.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
COUN 5305	Assessment in Counseling	3
COUN 5307	Theories of Counseling and Personality	3
COUN 5316	Counseling Diverse Populations	3
COUN 5350	Advanced Counselor Ethics	3
COUN 5354	Basic Counseling Skills and Abnormal Behavior	3
COUN 5355	Career Counseling	3
COUN 5358	Dynamics & Processes in Group Counseling	3
COUN 5359	Psychopathology in Clinical Mental Health Counseling	3
COUN 5368	Developmental Issues in Counseling Children, Adolescents, and Adults	3
COUN 5369	Child and Adolescent Counseling Methods	3
COUN 5391	Research Methods	3
<b>Concentration</b>		
COUN 5301	Professional Counseling Orientation	3
COUN 5344	Introduction to Addictions Counseling	3
COUN 5366	Intermediate Methods in Adult Counseling	3
or COUN 5370	Intermediate Methods in Counseling Adolescents	
or COUN 5373	Intermediate Methods in Play Therapy	
COUN 5367	Marital and Family Counseling: Current Theories	3
COUN 5389	Site-Based Internship (Taken twice)	6
COUN 5689	Clinical Practicum	6
<b>Electives</b>		
Choose 3 hours of advisor-approved electives		3
<b>Total Hours</b>		<b>60</b>

## Comprehensive Examination Requirement

Students are required to take and pass the Counselor Preparation Comprehensive Examination (CPCE) in order to register for the Clinical Practicum. Students are allowed three opportunities to pass the exam. Students who fail the CPCE after the first attempt must set up an appointment with their faculty advisor to develop a study plan prior to completing the program's application for a second CPCE administration. Students who fail the CPCE after the second attempt will meet with a Program Standards Committee (PSC) to discuss additional needs and

support for the third administration. Upon the third failed attempt and PSC application of program policy, students are not allowed to register for classes and are not allowed further attempts at the comprehensive examination.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Counseling, Leadership, Adult Education, and School Psychology: COUN

## Courses Offered

### Counseling (COUN)

#### COUN 5178. Independent Study.

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated twice for additional credit at the discretion of the department chair.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COUN 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### COUN 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### COUN 5301. Professional Counseling Orientation.

This course is presented as a basis for future counselors to understand community counseling agencies, standards of preparation, and the role identity of persons providing direct counseling treatment interventions. This course includes information on the licensure process, professional organizations, ethical and legal aspects of practice, advocacy processes, and theoretical/applied information.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COUN 5305. Assessment in Counseling.

This course will include problems and principles of administration, scoring and interpreting group and individually administered tests; utilization of test data for diagnostic, placement, predictive, and evaluative purposes; elementary statistical procedures; laboratory activities in test administration, scoring, and interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5307. Theories of Counseling and Personality.**

This course surveys systematically derived theories of counseling and personality from their origins in social discourse, philosophy, and psychology to the present time. Each theorist is presented biographically and the theory considered with regard to its clinical, cultural, and ethical relevance and application to diverse populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5316. Counseling Diverse Populations.**

This seminar is designed to sensitize students to the roles societal power disparities, counselor's racial identity and awareness, and client racial/cultural identity play in counseling persons of diverse backgrounds.

The dynamics of counseling clients who are African-American, Asian-American, female, gay/lesbian, Latino/a, Native-American, and persons with disabilities, will be examined. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COUN 5328. Professional Orientation in School Counseling: Leadership, Advocacy, and Accountability.**

This course provides an orientation to identity and role of professional school counselors, and introduction to the study of comprehensive developmental guidance programs. Course reflects the Texas and ASCA Models with related standards. Topics include: program planning, implementation, and evaluation; use of data and accountability; leadership role; and ethical and legal practices in schools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5338. Advanced Issues in School Counseling: Counseling, Consultation, and Coordination of Services.**

This course includes advanced topics in counseling children and adolescents in schools. Emphasis will be placed on developmentally appropriate preventative and responsive counseling services. Consultation and collaboration with parents, school personnel, community partners and contextual issues in school counseling will be addressed. Prerequisites: COUN 5316 and COUN 5328 and COUN 5368 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5344. Introduction to Addictions Counseling.**

This course provides an introduction to best practices in counseling clients dealing with substance and process addictions. Students gain a historical context and current understanding of the etiology, course, and progression of addictive disorders. Students learn to conceptualize addiction from contextual, systemic, relational, and holistic perspectives, with an emphasis on theory and research-driven counseling practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5346. Filial Therapy.**

Theoretical and practical application of the filial model will be addressed as well as techniques in training parents in the overall principles and methodology of child-centered play therapy. Prerequisite: COUN 5358 and COUN 5373 both with grades of "B" or better. Corequisite: COUN 5389 or COUN 5689 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5350. Advanced Counselor Ethics.**

This course focuses on ethical standards of professional counseling organizations and credentialing bodies, and applications of ethical and legal considerations in professional counseling settings. Emphasis is placed on national and current state board rules, records management, strategies for personal and professional self-evaluation, implications for practice, and client and professional advocacy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5351. Current Issues in Marriage, Couple and Family Therapy.**

This course provides students with information regarding special issues in marital, couple and family counseling, including: grief and loss; domestic violence; substance abuse in the family; lesbian, gay, bisexual, and transgender issues; divorce; and re-parenting. Prerequisite: COUN 5316 and COUN 5367 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5354. Basic Counseling Skills and Abnormal Behavior.**

This course is designed to introduce the student to basic counseling skills via role-play and practice session recording. The course also provides a general model for assessing abnormal behavior of clients and effective skills to elicit identifying behavior. Prerequisites: COUN 5307 and COUN 5350 both with grades of "B" or better. Corequisite: COUN 5301 or COUN 5328 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5355. Career Counseling.**

This course considers career choice and development as critical aspects of persons in material cultures where occupation is a major component of one's identity. Career concerns often addressed in counseling are presented and discussed along with the area of vocational guidance, occupational information, and preference inventories.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5358. Dynamics & Processes in Group Counseling.**

In this course, students will develop knowledge and skills in the basic principles of the dynamics that are characteristic of therapeutic groups. This course is an academic and clinical experience requiring highly active student participation in the form of honest, direct, and open communication combined with authentic self-exploration within the group setting. Corequisite: COUN 5354 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5359. Psychopathology in Clinical Mental Health Counseling.**

This course explores the principles of dysfunction in human behavior and systemic organization. This course includes diagnostic, preventive, and remedial methods and interventions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5360. Intermediate Methods in Marital, Couple and Family Counseling.**

Marital, couple, and family theory and techniques are discussed, selected, applied, and refined through lecture and supervised clinical practice.

Specific skills include joining, diagnosis, goal formulation, treatment planning, termination, referral, and record keeping. Graded on a credit (CR), no credit (F) basis. Prerequisite: COUN 5316 and COUN 5354 and COUN 5367 all with grades of "B" or better. Corequisite: COUN 5359 and COUN 5369 both with grades of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5362. Practicum in Professional Supervision: Theories and Applications.**

Provides experience in supervising practicum or intern students and integrating the theoretical foundations and current issues of professional supervision. Emphasis includes ethical, multicultural, gender, age, and lifestyle concerns in supervisory relationships, and academic requirements for supervisory status for Texas Licensed Professional Counselor and Licensed Specialist in School Psychology credentials. Course can be repeated once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5366. Intermediate Methods in Adult Counseling.**

Counseling theories and techniques are discussed, selected, applied and refined through lecture and supervised practice. Specific skills include initiating the helping relationship process, diagnosis, goal formulation, treatment planning, termination, referral, and record keeping. Prerequisite: COUN 5316 and COUN 5354 both with grades of "B" or better. Corequisite: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5367. Marital and Family Counseling: Current Theories.**

This course is designed to examine the principles of communication and the goals of marital, couple and family counseling. Selected theories, approaches and techniques used in marital, couple and family counseling will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5368. Developmental Issues in Counseling Children, Adolescents, and Adults.**

Emphasis will be on understanding the interactions between the developmental needs of each of these age groups and counseling techniques and procedures used to deliver mental health services to each of these groups.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5369. Child and Adolescent Counseling Methods.**

This course focus is an overview of counseling interventions with children and adolescents in agency, school, and private practice. Group, individual, and systems techniques will be covered. Assessment of child psychopathology and techniques for consulting with parents will be included. Prerequisites: COUN 5368 with a grade of "B" or better. Corequisites: COUN 5354 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5370. Intermediate Methods in Counseling Adolescents.**

This course will provide an overview of the physical, social, psychological, and behavioral characteristics of the adolescent. This course has a supervised practice experience. Emphasis will be placed on counseling interventions utilizing current research. Prerequisites: COUN 5316 and COUN 5369 both with grades of "B" or better. Corequisites: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5372. Assessment and Treatment in Marriage and Family Counseling.**

This course addresses the assessment of individual, couple, and family functioning and the planning and implementation of marital, couple and family treatment methods. Prerequisite: COUN 5367 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5373. Intermediate Methods in Play Therapy.**

This course explores the philosophical basis for play therapy, the history of play therapy, theoretical applications, techniques, stages, ethical issues, and application to a variety of populations and diagnostic categories. This course has a supervised practice experience.

Prerequisite: COUN 5316 and COUN 5369 both with grades of "B" or better. Corequisite: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5378. Problems in Counseling.**

Individual problems not related to thesis. Designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5380. Introduction to Animal-Assisted Counseling.**

Animal-assisted counseling (AAC) is a goal-directed process in which a trained therapy animal works in partnership with a counselor to help clients resolve psychosocial challenges and achieve growth. This course will provide an introduction to the AAC field, the human-animal bond, evidence-based research in AAC, and positive training approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5381. Sandtray Therapy Methods.**

This course provides students with the philosophical basis for sandtray therapy as a therapeutic intervention for children and families, including a review of its history, applications, techniques, stages, and ethical issues. Didactic and experiential methods are used. Prerequisite: COUN 5369 with a grade of "B" or better. Corequisite: COUN 5389 or COUN 5689 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5389. Site-Based Internship.**

This course is an on-site practicum-internship occurring in a school or agency setting with supervision by on-site and university supervisors. It may be repeated based on the recommendation of the counseling faculty. Prerequisites: COUN 5689 with a grade of "CR" and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COUN 5391. Research Methods.**

This course provides an understanding of research methods and design, statistical analysis, needs assessment, and program evaluation relevant to the field of professional counseling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5394. Counseling Women.**

This elective course involves student exploration of gender in historical, social, and global contexts with emphasis on counseling approaches and interventions specific to the concerns of women and girls. Topics include gender development, gender socialization, sexuality, career and family, violence against women, body image concerns, and overall women's mental health. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COUN 5395. Foundations of Trauma and Crisis Counseling.**

The course offers an introduction to principles of trauma counseling and crisis interventions. Topics include the neurobiology of trauma, diagnosis of trauma-related mental health concerns, and best practices related to trauma-informed counseling and crisis intervention addressing symptomatology of individuals, families, and communities directly or secondarily affected by crisis and trauma.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in COUN 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5689. Clinical Practicum.**

This practicum involves providing supervised counseling services to clients in university-affiliated counseling clinics and a staffing seminar. It may be taken up to three times (18 credit hours) based on the recommendation of the counseling faculty. Prerequisites: COUN 5358 and COUN 5369 and [COUN 5360 or COUN 5366 or COUN 5370 or COUN 5373] all with grades of "B" or better and instructor approval.

**6 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COUN 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) with a major in Professional Counseling consists of four concentrations:

- clinical mental health counseling,
- marital, couple and family counseling, and
- school counseling
- school counselor - Texas Certificate

These four areas of concentration in the professional counseling major have required course sequences that build skills through three levels, from basic to advanced, via didactic and experiential activities. The curriculum includes core foundations in theories, interventions, assessment, and research. In addition, core tenets that are emphasized throughout the program include diversity, ethics, professional development, and self-awareness. There is a strong emphasis on experiential learning integrated with the application of didactic, research-based knowledge. Internship is required as the capstone experience. The concentration in clinical mental health counseling; marriage, couple, and family counseling; and school counseling are nationally accredited by the Council for Accreditation of Counseling and Related Programs (CACREP).

The concentration of School Counselor - Texas Certificate, has similar courses and sequencing as the areas above. This concentration is focused on developing strong clinical skills and meeting the requirements of the Texas State Board of Educator Certification.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted

- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
  - The GRE may be waived if the student holds a master's or doctoral degree from a regionally accredited U.S. institution. If the student holds a master's or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
- informed consent form
- resume/CV detailing unique competencies that contribute to an aptitude for graduate study; personal experiences, such as volunteer work, that have aided in preparations for a career in counseling; additional language skills; technological competence and computer literacy
- statement of purpose (maximum 750 words, typed and double-spaced) addressing the following:\*
  - professional goals and rationale for pursuing education and training in professional counseling as opposed to another mental health discipline such as psychology, social work, or counseling psychology
  - rationale for choosing the clinical mental health counseling concentration
  - major strengths and weaknesses with respect to being admitted into the program
  - perspective on diversity including
    - personal contributions to and benefits from the richness of the professional counseling program
    - ways to increase inclusion of diversity in the counseling profession
- three forms of recommendation (not general reference letters)

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waveir>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

The statement of purpose will be evaluated for content, style, and quality. While the applicant may seek consultation and editing suggestions, this statement must be representative of the student's current level and style of writing and representative of what could be expected if admitted into the program.



## Degree Requirements

The Master of Arts (M.A.) degree with a major in Professional Counseling concentration in Clinical Mental Health Counseling requires 66 semester credit hours, including a thesis. This concentration meets academic requirements for the Texas Licensed Professional Counselor credential. A grade of "B" or better must be earned in all course work counting toward a professional counseling degree

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
COUN 5305	Assessment in Counseling	3
COUN 5307	Theories of Counseling and Personality	3
COUN 5316	Counseling Diverse Populations	3
COUN 5350	Advanced Counselor Ethics	3
COUN 5354	Basic Counseling Skills and Abnormal Behavior	3
COUN 5355	Career Counseling	3
COUN 5358	Dynamics & Processes in Group Counseling	3
COUN 5359	Psychopathology in Clinical Mental Health Counseling	3
COUN 5368	Developmental Issues in Counseling Children, Adolescents, and Adults	3
COUN 5369	Child and Adolescent Counseling Methods	3
COUN 5391	Research Methods	3
<b>Concentration</b>		
COUN 5301	Professional Counseling Orientation	3
COUN 5344	Introduction to Addictions Counseling	3
COUN 5366	Intermediate Methods in Adult Counseling	3
or COUN 5370	Intermediate Methods in Counseling Adolescents	
or COUN 5373	Intermediate Methods in Play Therapy	
COUN 5367	Marital and Family Counseling: Current Theories	3
COUN 5389	Site-Based Internship (Taken twice)	6
COUN 5689	Clinical Practicum	6
<b>Electives</b>		
Choose 3 hours of advisor-approved electives		3
<b>Thesis</b>		
COUN 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
COUN 5199B	Thesis	
COUN 5299B	Thesis	
COUN 5399B	Thesis	
COUN 5599B	Thesis	
COUN 5999B	Thesis	
<b>Total Hours</b>		<b>66</b>

## Comprehensive Examination Requirement

Students are required to take and pass the Counselor Preparation Comprehensive Examination (CPCE) in order to register for the Clinical Practicum. Students are allowed three opportunities to pass the exam. All-candidates-for-graduate-degrees-must pass the Counselor Preparation Comprehensive Examination (CPCE) in order to register for the Clinical Practicum. Students are allowed three opportunities to pass the exam. Students who fail the CPCE after the first attempt must set up an appointment with their faculty advisor to develop a

study plan prior to completing the program's application for a second CPCE administration. Students who fail the CPCE after the second attempt will meet with a Program Standards Committee (PSC) to discuss additional needs and support for the third administration. Upon the third failed attempt and PSC application of program policy, students are not allowed to register for classes and are not allowed further attempts at the comprehensive examination.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process.

Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Counseling, Leadership, Adult Education, and School Psychology: COUN

## Courses Offered

### Counseling (COUN)

#### COUN 5178. Independent Study.

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated twice for additional credit at the discretion of the department chair.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COUN 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### COUN 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### COUN 5301. Professional Counseling Orientation.

This course is presented as a basis for future counselors to understand community counseling agencies, standards of preparation, and the role identity of persons providing direct counseling treatment interventions. This course includes information on the licensure process, professional organizations, ethical and legal aspects of practice, advocacy processes, and theoretical/applied information.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COUN 5305. Assessment in Counseling.

This course will include problems and principles of administration, scoring and interpreting group and individually administered tests; utilization of test data for diagnostic, placement, predictive, and evaluative purposes; elementary statistical procedures; laboratory activities in test administration, scoring, and interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5307. Theories of Counseling and Personality.**

This course surveys systematically derived theories of counseling and personality from their origins in social discourse, philosophy, and psychology to the present time. Each theorist is presented biographically and the theory considered with regard to its clinical, cultural, and ethical relevance and application to diverse populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5316. Counseling Diverse Populations.**

This seminar is designed to sensitize students to the roles societal power disparities, counselor's racial identity and awareness, and client racial/cultural identity play in counseling persons of diverse backgrounds.

The dynamics of counseling clients who are African-American, Asian-American, female, gay/lesbian, Latino/a, Native-American, and persons with disabilities, will be examined. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COUN 5328. Professional Orientation in School Counseling: Leadership, Advocacy, and Accountability.**

This course provides an orientation to identity and role of professional school counselors, and introduction to the study of comprehensive developmental guidance programs. Course reflects the Texas and ASCA Models with related standards. Topics include: program planning, implementation, and evaluation; use of data and accountability; leadership role; and ethical and legal practices in schools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5338. Advanced Issues in School Counseling: Counseling, Consultation, and Coordination of Services.**

This course includes advanced topics in counseling children and adolescents in schools. Emphasis will be placed on developmentally appropriate preventative and responsive counseling services. Consultation and collaboration with parents, school personnel, community partners and contextual issues in school counseling will be addressed. Prerequisites: COUN 5316 and COUN 5328 and COUN 5368 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5344. Introduction to Addictions Counseling.**

This course provides an introduction to best practices in counseling clients dealing with substance and process addictions. Students gain a historical context and current understanding of the etiology, course, and progression of addictive disorders. Students learn to conceptualize addiction from contextual, systemic, relational, and holistic perspectives, with an emphasis on theory and research-driven counseling practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5346. Filial Therapy.**

Theoretical and practical application of the filial model will be addressed as well as techniques in training parents in the overall principles and methodology of child-centered play therapy. Prerequisite: COUN 5358 and COUN 5373 both with grades of "B" or better. Corequisite: COUN 5389 or COUN 5689 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5350. Advanced Counselor Ethics.**

This course focuses on ethical standards of professional counseling organizations and credentialing bodies, and applications of ethical and legal considerations in professional counseling settings. Emphasis is placed on national and current state board rules, records management, strategies for personal and professional self-evaluation, implications for practice, and client and professional advocacy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5351. Current Issues in Marriage, Couple and Family Therapy.**

This course provides students with information regarding special issues in marital, couple and family counseling, including: grief and loss; domestic violence; substance abuse in the family; lesbian, gay, bisexual, and transgender issues; divorce; and re-parenting. Prerequisite: COUN 5316 and COUN 5367 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5354. Basic Counseling Skills and Abnormal Behavior.**

This course is designed to introduce the student to basic counseling skills via role-play and practice session recording. The course also provides a general model for assessing abnormal behavior of clients and effective skills to elicit identifying behavior. Prerequisites: COUN 5307 and COUN 5350 both with grades of "B" or better. Corequisite: COUN 5301 or COUN 5328 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5355. Career Counseling.**

This course considers career choice and development as critical aspects of persons in material cultures where occupation is a major component of one's identity. Career concerns often addressed in counseling are presented and discussed along with the area of vocational guidance, occupational information, and preference inventories.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5358. Dynamics & Processes in Group Counseling.**

In this course, students will develop knowledge and skills in the basic principles of the dynamics that are characteristic of therapeutic groups. This course is an academic and clinical experience requiring highly active student participation in the form of honest, direct, and open communication combined with authentic self-exploration within the group setting. Corequisite: COUN 5354 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5359. Psychopathology in Clinical Mental Health Counseling.**

This course explores the principles of dysfunction in human behavior and systemic organization. This course includes diagnostic, preventive, and remedial methods and interventions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5360. Intermediate Methods in Marital, Couple and Family Counseling.**

Marital, couple, and family theory and techniques are discussed, selected, applied, and refined through lecture and supervised clinical practice.

Specific skills include joining, diagnosis, goal formulation, treatment planning, termination, referral, and record keeping. Graded on a credit (CR), no credit (F) basis. Prerequisite: COUN 5316 and COUN 5354 and COUN 5367 all with grades of "B" or better. Corequisite: COUN 5359 and COUN 5369 both with grades of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5362. Practicum in Professional Supervision: Theories and Applications.**

Provides experience in supervising practicum or intern students and integrating the theoretical foundations and current issues of professional supervision. Emphasis includes ethical, multicultural, gender, age, and lifestyle concerns in supervisory relationships, and academic requirements for supervisory status for Texas Licensed Professional Counselor and Licensed Specialist in School Psychology credentials. Course can be repeated once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5366. Intermediate Methods in Adult Counseling.**

Counseling theories and techniques are discussed, selected, applied and refined through lecture and supervised practice. Specific skills include initiating the helping relationship process, diagnosis, goal formulation, treatment planning, termination, referral, and record keeping. Prerequisite: COUN 5316 and COUN 5354 both with grades of "B" or better. Corequisite: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5367. Marital and Family Counseling: Current Theories.**

This course is designed to examine the principles of communication and the goals of marital, couple and family counseling. Selected theories, approaches and techniques used in marital, couple and family counseling will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5368. Developmental Issues in Counseling Children, Adolescents, and Adults.**

Emphasis will be on understanding the interactions between the developmental needs of each of these age groups and counseling techniques and procedures used to deliver mental health services to each of these groups.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5369. Child and Adolescent Counseling Methods.**

This course focus is an overview of counseling interventions with children and adolescents in agency, school, and private practice. Group, individual, and systems techniques will be covered. Assessment of child psychopathology and techniques for consulting with parents will be included. Prerequisites: COUN 5368 with a grade of "B" or better. Corequisites: COUN 5354 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5370. Intermediate Methods in Counseling Adolescents.**

This course will provide an overview of the physical, social, psychological, and behavioral characteristics of the adolescent. This course has a supervised practice experience. Emphasis will be placed on counseling interventions utilizing current research. Prerequisites: COUN 5316 and COUN 5369 both with grades of "B" or better. Corequisites: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5372. Assessment and Treatment in Marriage and Family Counseling.**

This course addresses the assessment of individual, couple, and family functioning and the planning and implementation of marital, couple and family treatment methods. Prerequisite: COUN 5367 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5373. Intermediate Methods in Play Therapy.**

This course explores the philosophical basis for play therapy, the history of play therapy, theoretical applications, techniques, stages, ethical issues, and application to a variety of populations and diagnostic categories. This course has a supervised practice experience.

Prerequisite: COUN 5316 and COUN 5369 both with grades of "B" or better. Corequisite: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5378. Problems in Counseling.**

Individual problems not related to thesis. Designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5380. Introduction to Animal-Assisted Counseling.**

Animal-assisted counseling (AAC) is a goal-directed process in which a trained therapy animal works in partnership with a counselor to help clients resolve psychosocial challenges and achieve growth. This course will provide an introduction to the AAC field, the human-animal bond, evidence-based research in AAC, and positive training approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5381. Sandtray Therapy Methods.**

This course provides students with the philosophical basis for sandtray therapy as a therapeutic intervention for children and families, including a review of its history, applications, techniques, stages, and ethical issues. Didactic and experiential methods are used. Prerequisite: COUN 5369 with a grade of "B" or better. Corequisite: COUN 5389 or COUN 5689 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5389. Site-Based Internship.**

This course is an on-site practicum-internship occurring in a school or agency setting with supervision by on-site and university supervisors. It may be repeated based on the recommendation of the counseling faculty. Prerequisites: COUN 5689 with a grade of "CR" and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COUN 5391. Research Methods.**

This course provides an understanding of research methods and design, statistical analysis, needs assessment, and program evaluation relevant to the field of professional counseling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5394. Counseling Women.**

This elective course involves student exploration of gender in historical, social, and global contexts with emphasis on counseling approaches and interventions specific to the concerns of women and girls. Topics include gender development, gender socialization, sexuality, career and family, violence against women, body image concerns, and overall women's mental health. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COUN 5395. Foundations of Trauma and Crisis Counseling.**

The course offers an introduction to principles of trauma counseling and crisis interventions. Topics include the neurobiology of trauma, diagnosis of trauma-related mental health concerns, and best practices related to trauma-informed counseling and crisis intervention addressing symptomatology of individuals, families, and communities directly or secondarily affected by crisis and trauma.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in COUN 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5689. Clinical Practicum.**

This practicum involves providing supervised counseling services to clients in university-affiliated counseling clinics and a staffing seminar. It may be taken up to three times (18 credit hours) based on the recommendation of the counseling faculty. Prerequisites: COUN 5358 and COUN 5369 and [COUN 5360 or COUN 5366 or COUN 5370 or COUN 5373] all with grades of "B" or better and instructor approval.

**6 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**COUN 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) with a major in Professional Counseling consists of four concentrations:

- clinical mental health counseling,
- marital, couple and family counseling, and
- school counseling
- school counselor - Texas Certificate

These four areas of concentration in the professional counseling major have required course sequences that build skills through three levels, from basic to advanced, via didactic and experiential activities. The curriculum includes core foundations in theories, interventions, assessment, and research. In addition, core tenets that are emphasized throughout the program include diversity, ethics, professional development, and self-awareness. There is a strong emphasis on experiential learning integrated with the application of didactic, research-based knowledge. Internship is required as the capstone experience. The concentration in clinical mental health counseling; marriage, couple, and family counseling; and school counseling are nationally accredited by the Council for Accreditation of Counseling and Related Programs (CACREP).

The concentration of School Counselor - Texas Certificate, has similar courses and sequencing as the areas above. This concentration is focused on developing strong clinical skills and meeting the requirements of the Texas State Board of Educator Certification.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fees for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted

- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
  - The GRE may be waived if the student holds a master's or doctoral degree from a regionally accredited U.S. institution. If the student holds a master's or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
- informed consent form
- resume/CV detailing unique competencies that contribute to an aptitude for graduate study; personal experiences, such as volunteer work, that have aided in preparations for a career in counseling; additional language skills; technological competence and computer literacy
- statement of purpose (maximum 750 words, typed and double-spaced) addressing the following:
  - professional goals and rationale for pursuing education and training in professional counseling as opposed to another mental health discipline such as psychology, social work, or counseling psychology
  - rationale for choosing the marriage and family counseling concentration
  - major strengths and weaknesses with respect to being admitted into the program
  - perspective on diversity including
    - personal contributions to and benefits from the richness of the professional counseling program
    - ways to increase inclusion of diversity in the counseling profession
- three forms of recommendation (not general reference letters)

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waveir>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

The statement of purpose will be evaluated for content, style, and quality. While the applicant may seek consultation and editing suggestions, this statement must be representative of the student's current level and style of writing and representative of what could be expected if admitted into the program.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Professional Counseling concentration in Marriage and Family Counseling requires 60 semester credit hours. This concentration meets academic requirements for the Texas Licensed Professional Counselor (LPC) credential and the Texas Licensed Marriage and Family Therapist (LMFT) credential. A grade of "B" or better must be earned in all course work counting toward a professional counseling degree.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
COUN 5305	Assessment in Counseling	3
COUN 5307	Theories of Counseling and Personality	3
COUN 5316	Counseling Diverse Populations	3
COUN 5350	Advanced Counselor Ethics	3
COUN 5354	Basic Counseling Skills and Abnormal Behavior	3
COUN 5355	Career Counseling	3
COUN 5358	Dynamics & Processes in Group Counseling	3
COUN 5359	Psychopathology in Clinical Mental Health Counseling	3
COUN 5368	Developmental Issues in Counseling Children, Adolescents, and Adults	3
COUN 5369	Child and Adolescent Counseling Methods	3
COUN 5391	Research Methods	3
<b>Concentration</b>		
COUN 5301	Professional Counseling Orientation	3
COUN 5351	Current Issues in Marriage, Couple and Family Therapy	3
COUN 5360	Intermediate Methods in Marital, Couple and Family Counseling	3
COUN 5367	Marital and Family Counseling: Current Theories	3
COUN 5372	Assessment and Treatment in Marriage and Family Counseling	3
COUN 5389	Site-Based Internship (Taken twice)	6
COUN 5689	Clinical Practicum	6
<b>Total Hours</b>		<b>60</b>

## Comprehensive Examination Requirement

Students are required to take and pass the Counselor Preparation Comprehensive Examination (CPCE) in order to register for the Clinical Practicum. Students are allowed three opportunities to pass the exam. Students who fail the CPCE after the first attempt must set up an appointment with their faculty advisor to develop a study plan prior to completing the program's application for a second CPCE administration. Students who fail the CPCE after the second attempt will meet with a Program Standards Committee (PSC) to discuss additional needs and support for the third administration. Upon the third failed attempt and PSC application of program policy, students are not allowed to register for classes and are not allowed further attempts at the comprehensive examination.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Counseling, Leadership, Adult Education, and School Psychology: COUN

## Courses Offered

### Counseling (COUN)

#### COUN 5178. Independent Study.

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated twice for additional credit at the discretion of the department chair.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COUN 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### COUN 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### COUN 5301. Professional Counseling Orientation.

This course is presented as a basis for future counselors to understand community counseling agencies, standards of preparation, and the role identity of persons providing direct counseling treatment interventions. This course includes information on the licensure process, professional organizations, ethical and legal aspects of practice, advocacy processes, and theoretical/applied information.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COUN 5305. Assessment in Counseling.

This course will include problems and principles of administration, scoring and interpreting group and individually administered tests; utilization of test data for diagnostic, placement, predictive, and evaluative purposes; elementary statistical procedures; laboratory activities in test administration, scoring, and interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COUN 5307. Theories of Counseling and Personality.

This course surveys systematically derived theories of counseling and personality from their origins in social discourse, philosophy, and psychology to the present time. Each theorist is presented biographically and the theory considered with regard to its clinical, cultural, and ethical relevance and application to diverse populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5316. Counseling Diverse Populations.**

This seminar is designed to sensitize students to the roles societal power disparities, counselor's racial identity and awareness, and client racial/cultural identity play in counseling persons of diverse backgrounds.

The dynamics of counseling clients who are African-American, Asian-American, female, gay/lesbian, Latino/a, Native-American, and persons with disabilities, will be examined. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COUN 5328. Professional Orientation in School Counseling: Leadership, Advocacy, and Accountability.**

This course provides an orientation to identity and role of professional school counselors, and introduction to the study of comprehensive developmental guidance programs. Course reflects the Texas and ASCA Models with related standards. Topics include: program planning, implementation, and evaluation; use of data and accountability; leadership role; and ethical and legal practices in schools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5338. Advanced Issues in School Counseling: Counseling, Consultation, and Coordination of Services.**

This course includes advanced topics in counseling children and adolescents in schools. Emphasis will be placed on developmentally appropriate preventative and responsive counseling services.

Consultation and collaboration with parents, school personnel, community partners and contextual issues in school counseling will be addressed. Prerequisites: COUN 5316 and COUN 5328 and COUN 5368 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5344. Introduction to Addictions Counseling.**

This course provides an introduction to best practices in counseling clients dealing with substance and process addictions. Students gain a historical context and current understanding of the etiology, course, and progression of addictive disorders. Students learn to conceptualize addiction from contextual, systemic, relational, and holistic perspectives, with an emphasis on theory and research-driven counseling practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5346. Filial Therapy.**

Theoretical and practical application of the filial model will be addressed as well as techniques in training parents in the overall principles and methodology of child-centered play therapy. Prerequisite: COUN 5358 and COUN 5373 both with grades of "B" or better. Corequisite: COUN 5389 or COUN 5689 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5350. Advanced Counselor Ethics.**

This course focuses on ethical standards of professional counseling organizations and credentialing bodies, and applications of ethical and legal considerations in professional counseling settings. Emphasis is placed on national and current state board rules, records management, strategies for personal and professional self-evaluation, implications for practice, and client and professional advocacy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5351. Current Issues in Marriage, Couple and Family Therapy.**

This course provides students with information regarding special issues in marital, couple and family counseling, including: grief and loss; domestic violence; substance abuse in the family; lesbian, gay, bisexual, and transgender issues; divorce; and re-parenting. Prerequisite: COUN 5316 and COUN 5367 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5354. Basic Counseling Skills and Abnormal Behavior.**

This course is designed to introduce the student to basic counseling skills via role-play and practice session recording. The course also provides a general model for assessing abnormal behavior of clients and effective skills to elicit identifying behavior. Prerequisites: COUN 5307 and COUN 5350 both with grades of "B" or better. Corequisite: COUN 5301 or COUN 5328 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5355. Career Counseling.**

This course considers career choice and development as critical aspects of persons in material cultures where occupation is a major component of one's identity. Career concerns often addressed in counseling are presented and discussed along with the area of vocational guidance, occupational information, and preference inventories.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5358. Dynamics & Processes in Group Counseling.**

In this course, students will develop knowledge and skills in the basic principles of the dynamics that are characteristic of therapeutic groups. This course is an academic and clinical experience requiring highly active student participation in the form of honest, direct, and open communication combined with authentic self-exploration within the group setting. Corequisite: COUN 5354 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5359. Psychopathology in Clinical Mental Health Counseling.**

This course explores the principles of dysfunction in human behavior and systemic organization. This course includes diagnostic, preventive, and remedial methods and interventions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5360. Intermediate Methods in Marital, Couple and Family Counseling.**

Marital, couple, and family theory and techniques are discussed, selected, applied, and refined through lecture and supervised clinical practice. Specific skills include joining, diagnosis, goal formulation, treatment planning, termination, referral, and record keeping. Graded on a credit (CR), no credit (F) basis. Prerequisite: COUN 5316 and COUN 5354 and COUN 5367 all with grades of "B" or better. Corequisite: COUN 5359 and COUN 5369 both with grades of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5362. Practicum in Professional Supervision: Theories and Applications.**

Provides experience in supervising practicum or intern students and integrating the theoretical foundations and current issues of professional supervision. Emphasis includes ethical, multicultural, gender, age, and lifestyle concerns in supervisory relationships, and academic requirements for supervisory status for Texas Licensed Professional Counselor and Licensed Specialist in School Psychology credentials. Course can be repeated once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5366. Intermediate Methods in Adult Counseling.**

Counseling theories and techniques are discussed, selected, applied and refined through lecture and supervised practice. Specific skills include initiating the helping relationship process, diagnosis, goal formulation, treatment planning, termination, referral, and record keeping. Prerequisite: COUN 5316 and COUN 5354 both with grades of "B" or better. Corequisite: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5367. Marital and Family Counseling: Current Theories.**

This course is designed to examine the principles of communication and the goals of marital, couple and family counseling. Selected theories, approaches and techniques used in marital, couple and family counseling will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5368. Developmental Issues in Counseling Children, Adolescents, and Adults.**

Emphasis will be on understanding the interactions between the developmental needs of each of these age groups and counseling techniques and procedures used to deliver mental health services to each of these groups.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5369. Child and Adolescent Counseling Methods.**

This course focus is an overview of counseling interventions with children and adolescents in agency, school, and private practice. Group, individual, and systems techniques will be covered. Assessment of child psychopathology and techniques for consulting with parents will be included. Prerequisites: COUN 5368 with a grade of "B" or better. Corequisites: COUN 5354 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5370. Intermediate Methods in Counseling Adolescents.**

This course will provide an overview of the physical, social, psychological, and behavioral characteristics of the adolescent. This course has a supervised practice experience. Emphasis will be placed on counseling interventions utilizing current research. Prerequisites: COUN 5316 and COUN 5369 both with grades of "B" or better. Corequisites: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5372. Assessment and Treatment in Marriage and Family Counseling.**

This course addresses the assessment of individual, couple, and family functioning and the planning and implementation of marital, couple and family treatment methods. Prerequisite: COUN 5367 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5373. Intermediate Methods in Play Therapy.**

This course explores the philosophical basis for play therapy, the history of play therapy, theoretical applications, techniques, stages, ethical issues, and application to a variety of populations and diagnostic categories. This course has a supervised practice experience. Prerequisite: COUN 5316 and COUN 5369 both with grades of "B" or better. Corequisite: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5378. Problems in Counseling.**

Individual problems not related to thesis. Designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5380. Introduction to Animal-Assisted Counseling.**

Animal-assisted counseling (AAC) is a goal-directed process in which a trained therapy animal works in partnership with a counselor to help clients resolve psychosocial challenges and achieve growth. This course will provide an introduction to the AAC field, the human-animal bond, evidence-based research in AAC, and positive training approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5381. Sandtray Therapy Methods.**

This course provides students with the philosophical basis for sandtray therapy as a therapeutic intervention for children and families, including a review of its history, applications, techniques, stages, and ethical issues. Didactic and experiential methods are used. Prerequisite: COUN 5369 with a grade of "B" or better. Corequisite: COUN 5389 or COUN 5689 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5389. Site-Based Internship.**

This course is an on-site practicum-internship occurring in a school or agency setting with supervision by on-site and university supervisors. It may be repeated based on the recommendation of the counseling faculty. Prerequisites: COUN 5689 with a grade of "CR" and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COUN 5391. Research Methods.**

This course provides an understanding of research methods and design, statistical analysis, needs assessment, and program evaluation relevant to the field of professional counseling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5394. Counseling Women.**

This elective course involves student exploration of gender in historical, social, and global contexts with emphasis on counseling approaches and interventions specific to the concerns of women and girls. Topics include gender development, gender socialization, sexuality, career and family, violence against women, body image concerns, and overall women's mental health. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COUN 5395. Foundations of Trauma and Crisis Counseling.**

The course offers an introduction to principles of trauma counseling and crisis interventions. Topics include the neurobiology of trauma, diagnosis of trauma-related mental health concerns, and best practices related to trauma-informed counseling and crisis intervention addressing symptomatology of individuals, families, and communities directly or secondarily affected by crisis and trauma.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in COUN 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5689. Clinical Practicum.**

This practicum involves providing supervised counseling services to clients in university-affiliated counseling clinics and a staffing seminar. It may be taken up to three times (18 credit hours) based on the recommendation of the counseling faculty. Prerequisites: COUN 5358 and COUN 5369 and [COUN 5360 or COUN 5366 or COUN 5370 or COUN 5373] all with grades of "B" or better and instructor approval.

**6 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COUN 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) with a major in Professional Counseling consists of four concentrations:

- clinical mental health counseling,
- marital, couple and family counseling, and
- school counseling
- school counselor - Texas Certificate

These four areas of concentration in the professional counseling major have required course sequences that build skills through three levels, from basic to advanced, via didactic and experiential activities. The curriculum includes core foundations in theories, interventions, assessment, and research. In addition, core tenets that are emphasized throughout the program include diversity, ethics, professional development, and self-awareness. There is a strong emphasis on experiential learning integrated with the application of didactic, research-based knowledge. Internship is required as the capstone experience. The concentration in clinical mental health counseling; marriage, couple, and family counseling; and school counseling are nationally accredited by the Council for Accreditation of Counseling and Related Programs (CACREP).

The concentration of School Counselor - Texas Certificate, has similar courses and sequencing as the areas above. This concentration is



focused on developing strong clinical skills and meeting the requirements of the Texas State Board of Educator Certification.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
  - The GRE may be waived if the student holds a master's or doctoral degree from a regionally accredited U.S. institution. If the student holds a master's or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
- informed consent form
- resume/CV detailing unique competencies that contribute to an aptitude for graduate study; personal experiences, such as volunteer work, that have aided in preparations for a career in counseling; additional language skills; technological competence and computer literacy
- statement of purpose (maximum 750 words, typed and double-spaced) addressing the following:\*
  - professional goals and rationale for pursuing education and training in professional counseling as opposed to another mental health discipline such as psychology, social work, or counseling psychology
  - rationale for choosing the marriage and family counseling concentration
  - major strengths and weaknesses with respect to being admitted into the program
  - perspective on diversity including
    - personal contributions to and benefits from the richness of the professional counseling program
    - ways to increase inclusion of diversity in the counseling profession
- three forms of recommendation (not general reference letters)

## Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waveir>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## \*Additional Information

\*The statement of purpose will be evaluated for content, style, and quality. While the applicant may seek consultation and editing suggestions, this statement must be representative of the student's current level and style of writing and representative of what could be expected if admitted into the program.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Professional Counseling concentration in Marriage and Family Counseling requires 66 semester credit hours, including a thesis. This concentration meets academic requirements for the Texas Licensed Professional Counselor (LPC) credential and the Texas Licensed Marriage and Family Therapist (LMFT) credential. A grade of "B" or better must be earned in all course work counting toward a professional counseling degree.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
COUN 5305	Assessment in Counseling	3
COUN 5307	Theories of Counseling and Personality	3
COUN 5316	Counseling Diverse Populations	3
COUN 5350	Advanced Counselor Ethics	3
COUN 5354	Basic Counseling Skills and Abnormal Behavior	3
COUN 5355	Career Counseling	3
COUN 5358	Dynamics & Processes in Group Counseling	3
COUN 5359	Psychopathology in Clinical Mental Health Counseling	3
COUN 5368	Developmental Issues in Counseling Children, Adolescents, and Adults	3
COUN 5369	Child and Adolescent Counseling Methods	3
COUN 5391	Research Methods	3
<b>Concentration</b>		
COUN 5301	Professional Counseling Orientation	3
COUN 5351	Current Issues in Marriage, Couple and Family Therapy	3
COUN 5360	Intermediate Methods in Marital, Couple and Family Counseling	3
COUN 5367	Marital and Family Counseling: Current Theories	3

COUN 5372	Assessment and Treatment in Marriage and Family Counseling	3
COUN 5389	Site-Based Internship (Taken twice)	6
COUN 5689	Clinical Practicum	6

**Thesis**

COUN 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
COUN 5199B	Thesis	
COUN 5299B	Thesis	
COUN 5399B	Thesis	
COUN 5599B	Thesis	
COUN 5999B	Thesis	

**Total Hours** **66**

## Comprehensive Examination Requirement

Students are required to take and pass the Counselor Preparation Comprehensive Examination (CPCE) in order to register for the Clinical Practicum. Students are allowed three opportunities to pass the exam. Students who fail the CPCE after the first attempt must set up an appointment with their faculty advisor to develop a study plan prior to completing the program's application for a second CPCE administration. Students who fail the CPCE after the second attempt will meet with a Program Standards Committee (PSC) to discuss additional needs and support for the third administration. Upon the third failed attempt and PSC application of program policy, students are not allowed to register for classes and are not allowed further attempts at the comprehensive examination.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College

by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.

2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Counseling, Leadership, Adult Education, and School Psychology: COUN

## Courses Offered

### Counseling (COUN)

#### COUN 5178. Independent Study.

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated twice for additional credit at the discretion of the department chair.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COUN 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### COUN 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### COUN 5301. Professional Counseling Orientation.

This course is presented as a basis for future counselors to understand community counseling agencies, standards of preparation, and the role identity of persons providing direct counseling treatment interventions. This course includes information on the licensure process, professional organizations, ethical and legal aspects of practice, advocacy processes, and theoretical/applied information.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COUN 5305. Assessment in Counseling.

This course will include problems and principles of administration, scoring and interpreting group and individually administered tests; utilization of test data for diagnostic, placement, predictive, and evaluative purposes; elementary statistical procedures; laboratory activities in test administration, scoring, and interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COUN 5307. Theories of Counseling and Personality.

This course surveys systematically derived theories of counseling and personality from their origins in social discourse, philosophy, and psychology to the present time. Each theorist is presented biographically and the theory considered with regard to its clinical, cultural, and ethical relevance and application to diverse populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COUN 5316. Counseling Diverse Populations.

This seminar is designed to sensitize students to the roles societal power disparities, counselor's racial identity and awareness, and client racial/cultural identity play in counseling persons of diverse backgrounds.

The dynamics of counseling clients who are African-American, Asian-American, female, gay/lesbian, Latino/a, Native-American, and persons with disabilities, will be examined. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

#### COUN 5328. Professional Orientation in School Counseling: Leadership, Advocacy, and Accountability.

This course provides an orientation to identity and role of professional school counselors, and introduction to the study of comprehensive developmental guidance programs. Course reflects the Texas and ASCA Models with related standards. Topics include: program planning, implementation, and evaluation; use of data and accountability; leadership role; and ethical and legal practices in schools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5338. Advanced Issues in School Counseling: Counseling, Consultation, and Coordination of Services.**

This course includes advanced topics in counseling children and adolescents in schools. Emphasis will be placed on developmentally appropriate preventative and responsive counseling services. Consultation and collaboration with parents, school personnel, community partners and contextual issues in school counseling will be addressed. Prerequisites: COUN 5316 and COUN 5328 and COUN 5368 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5344. Introduction to Addictions Counseling.**

This course provides an introduction to best practices in counseling clients dealing with substance and process addictions. Students gain a historical context and current understanding of the etiology, course, and progression of addictive disorders. Students learn to conceptualize addiction from contextual, systemic, relational, and holistic perspectives, with an emphasis on theory and research-driven counseling practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5346. Filial Therapy.**

Theoretical and practical application of the filial model will be addressed as well as techniques in training parents in the overall principles and methodology of child-centered play therapy. Prerequisite: COUN 5358 and COUN 5373 both with grades of "B" or better. Corequisite: COUN 5389 or COUN 5689 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5350. Advanced Counselor Ethics.**

This course focuses on ethical standards of professional counseling organizations and credentialing bodies, and applications of ethical and legal considerations in professional counseling settings. Emphasis is placed on national and current state board rules, records management, strategies for personal and professional self-evaluation, implications for practice, and client and professional advocacy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5351. Current Issues in Marriage, Couple and Family Therapy.**

This course provides students with information regarding special issues in marital, couple and family counseling, including: grief and loss; domestic violence; substance abuse in the family; lesbian, gay, bisexual, and transgender issues; divorce; and re-parenting. Prerequisite: COUN 5316 and COUN 5367 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5354. Basic Counseling Skills and Abnormal Behavior.**

This course is designed to introduce the student to basic counseling skills via role-play and practice session recording. The course also provides a general model for assessing abnormal behavior of clients and effective skills to elicit identifying behavior. Prerequisites: COUN 5307 and COUN 5350 both with grades of "B" or better. Corequisite: COUN 5301 or COUN 5328 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5355. Career Counseling.**

This course considers career choice and development as critical aspects of persons in material cultures where occupation is a major component of one's identity. Career concerns often addressed in counseling are presented and discussed along with the area of vocational guidance, occupational information, and preference inventories.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5358. Dynamics & Processes in Group Counseling.**

In this course, students will develop knowledge and skills in the basic principles of the dynamics that are characteristic of therapeutic groups.

This course is an academic and clinical experience requiring highly active student participation in the form of honest, direct, and open communication combined with authentic self-exploration within the group setting. Corequisite: COUN 5354 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5359. Psychopathology in Clinical Mental Health Counseling.**

This course explores the principles of dysfunction in human behavior and systemic organization. This course includes diagnostic, preventive, and remedial methods and interventions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5360. Intermediate Methods in Marital, Couple and Family Counseling.**

Marital, couple, and family theory and techniques are discussed, selected, applied, and refined through lecture and supervised clinical practice. Specific skills include joining, diagnosis, goal formulation, treatment planning, termination, referral, and record keeping. Graded on a credit (CR), no credit (F) basis. Prerequisite: COUN 5316 and COUN 5354 and COUN 5367 all with grades of "B" or better. Corequisite: COUN 5359 and COUN 5369 both with grades of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5362. Practicum in Professional Supervision: Theories and Applications.**

Provides experience in supervising practicum or intern students and integrating the theoretical foundations and current issues of professional supervision. Emphasis includes ethical, multicultural, gender, age, and lifestyle concerns in supervisory relationships, and academic requirements for supervisory status for Texas Licensed Professional Counselor and Licensed Specialist in School Psychology credentials. Course can be repeated once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5366. Intermediate Methods in Adult Counseling.**

Counseling theories and techniques are discussed, selected, applied and refined through lecture and supervised practice. Specific skills include initiating the helping relationship process, diagnosis, goal formulation, treatment planning, termination, referral, and record keeping. Prerequisite: COUN 5316 and COUN 5354 both with grades of "B" or better. Corequisite: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5367. Marital and Family Counseling: Current Theories.**

This course is designed to examine the principles of communication and the goals of marital, couple and family counseling. Selected theories, approaches and techniques used in marital, couple and family counseling will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5368. Developmental Issues in Counseling Children, Adolescents, and Adults.**

Emphasis will be on understanding the interactions between the developmental needs of each of these age groups and counseling techniques and procedures used to deliver mental health services to each of these groups.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5369. Child and Adolescent Counseling Methods.**

This course focus is an overview of counseling interventions with children and adolescents in agency, school, and private practice. Group, individual, and systems techniques will be covered. Assessment of child psychopathology and techniques for consulting with parents will be included. Prerequisites: COUN 5368 with a grade of "B" or better. Corequisites: COUN 5354 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5370. Intermediate Methods in Counseling Adolescents.**

This course will provide an overview of the physical, social, psychological, and behavioral characteristics of the adolescent. This course has a supervised practice experience. Emphasis will be placed on counseling interventions utilizing current research. Prerequisites: COUN 5316 and COUN 5369 both with grades of "B" or better. Corequisites: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5372. Assessment and Treatment in Marriage and Family Counseling.**

This course addresses the assessment of individual, couple, and family functioning and the planning and implementation of marital, couple and family treatment methods. Prerequisite: COUN 5367 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5373. Intermediate Methods in Play Therapy.**

This course explores the philosophical basis for play therapy, the history of play therapy, theoretical applications, techniques, stages, ethical issues, and application to a variety of populations and diagnostic categories. This course has a supervised practice experience.

Prerequisite: COUN 5316 and COUN 5369 both with grades of "B" or better. Corequisite: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5378. Problems in Counseling.**

Individual problems not related to thesis. Designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5380. Introduction to Animal-Assisted Counseling.**

Animal-assisted counseling (AAC) is a goal-directed process in which a trained therapy animal works in partnership with a counselor to help clients resolve psychosocial challenges and achieve growth. This course will provide an introduction to the AAC field, the human-animal bond, evidence-based research in AAC, and positive training approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5381. Sandtray Therapy Methods.**

This course provides students with the philosophical basis for sandtray therapy as a therapeutic intervention for children and families, including a review of its history, applications, techniques, stages, and ethical issues. Didactic and experiential methods are used. Prerequisite: COUN 5369 with a grade of "B" or better. Corequisite: COUN 5389 or COUN 5689 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**COUN 5389. Site-Based Internship.**

This course is an on-site practicum-internship occurring in a school or agency setting with supervision by on-site and university supervisors. It may be repeated based on the recommendation of the counseling faculty. Prerequisites: COUN 5689 with a grade of "CR" and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COUN 5391. Research Methods.**

This course provides an understanding of research methods and design, statistical analysis, needs assessment, and program evaluation relevant to the field of professional counseling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5394. Counseling Women.**

This elective course involves student exploration of gender in historical, social, and global contexts with emphasis on counseling approaches and interventions specific to the concerns of women and girls. Topics include gender development, gender socialization, sexuality, career and family, violence against women, body image concerns, and overall women's mental health. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COUN 5395. Foundations of Trauma and Crisis Counseling.**

The course offers an introduction to principles of trauma counseling and crisis interventions. Topics include the neurobiology of trauma, diagnosis of trauma-related mental health concerns, and best practices related to trauma-informed counseling and crisis intervention addressing symptomatology of individuals, families, and communities directly or secondarily affected by crisis and trauma.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in COUN 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5689. Clinical Practicum.**

This practicum involves providing supervised counseling services to clients in university-affiliated counseling clinics and a staffing seminar. It may be taken up to three times (18 credit hours) based on the recommendation of the counseling faculty. Prerequisites: COUN 5358 and COUN 5369 and [COUN 5360 or COUN 5366 or COUN 5370 or COUN 5373] all with grades of "B" or better and instructor approval.

**6 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COUN 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) with a major in Professional Counseling consists of four concentrations:

- clinical mental health counseling,
- marital, couple and family counseling, and
- school counseling
- school counselor - Texas Certificate

These four areas of concentration in the professional counseling major have required course sequences that build skills through three levels, from basic to advanced, via didactic and experiential activities. The curriculum includes core foundations in theories, interventions, assessment, and research. In addition, core tenets that are emphasized throughout the program include diversity, ethics, professional development, and self-awareness. There is a strong emphasis on experiential learning integrated with the application of didactic, research-based knowledge. Internship is required as the capstone experience. The concentration in clinical mental health counseling; marriage, couple, and family counseling; and school counseling are nationally accredited by the Council for Accreditation of Counseling and Related Programs (CACREP).

The concentration of School Counselor - Texas Certificate, has similar courses and sequencing as the areas above. This concentration is focused on developing strong clinical skills and meeting the requirements of the Texas State Board of Educator Certification.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current

academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$35 nonrefundable Texas Education Agency technology fee (if offered admission)
- and either
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
  - The GRE may be waived if the student holds a master's or doctoral degree from a regionally accredited U.S. institution. If the student holds a master's or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
- informed consent form
- resume/CV detailing unique competencies that contribute to an aptitude for graduate study; personal experiences, such as volunteer work, that have aided in preparations for a career in counseling; additional language skills; technological competence and computer literacy
- statement of purpose (maximum 750 words, typed and double-spaced) addressing the following:\*
  - professional goals and rationale for pursuing education and training in professional counseling as opposed to another mental health discipline such as psychology, social work, or counseling psychology
  - rationale for choosing the school counseling concentration
  - major strengths and weaknesses with respect to being admitted into the program
  - perspective on diversity including
    - personal contributions to and benefits from the richness of the professional counseling program
    - ways to increase inclusion of diversity in the counseling profession
- three forms of recommendation (not general reference letters)

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt

countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores with minimum individual scores of
  - 22 listening
  - 22 reading
  - 24 speaking
  - 21 writing

This program does **not** offer admission if the scores above are not met.

#### \*Additional Information

The statement of purpose will be evaluated for content, style, and quality. While the applicant may seek consultation and editing suggestions, this statement must be representative of the student's current level and style of writing and representative of what could be expected if admitted into the program.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Professional Counseling concentration in School Counseling requires 60 semester hours. The concentration in School Counseling meets the Texas Education Agency's requirements for the All-Level Professional School Counselor certificate.

A grade of "B" or better must be earned in all course work counting toward the professional counseling degree programs.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
COUN 5305	Assessment in Counseling	3
COUN 5307	Theories of Counseling and Personality	3
COUN 5316	Counseling Diverse Populations	3
COUN 5350	Advanced Counselor Ethics	3
COUN 5354	Basic Counseling Skills and Abnormal Behavior	3
COUN 5355	Career Counseling	3
COUN 5358	Dynamics & Processes in Group Counseling	3
COUN 5359	Psychopathology in Clinical Mental Health Counseling	3
COUN 5368	Developmental Issues in Counseling Children, Adolescents, and Adults	3
COUN 5369	Child and Adolescent Counseling Methods	3
COUN 5391	Research Methods	3
<b>Concentration</b>		
COUN 5328	Professional Orientation in School Counseling: Leadership, Advocacy, and Accountability	3
COUN 5338	Advanced Issues in School Counseling: Counseling, Consultation, and Coordination of Services	3
COUN 5344	Introduction to Addictions Counseling	3
COUN 5367	Marital and Family Counseling: Current Theories	3
COUN 5370	Intermediate Methods in Counseling Adolescents	3
COUN 5373	Intermediate Methods in Play Therapy	3
COUN 5389	Site-Based Internship	3

COUN 5689 Clinical Practicum

6

Total Hours

60

## Comprehensive Examination Requirement

Students are required to take and pass the Counselor Preparation Comprehensive Examination (CPCE) in order to register for the Clinical Practicum. Students are allowed three opportunities to pass the exam. All candidates for graduate degrees must pass the Counselor Preparation Comprehensive Examination (CPCE) in order to register for the Clinical Practicum. Students are allowed three opportunities to pass the exam. Students who fail the CPCE after the first attempt must set up an appointment with their faculty advisor to develop a study plan prior to completing the program's application for a second CPCE administration. Students who fail the CPCE after the second attempt will meet with a Program Standards Committee (PSC) to discuss additional needs and support for the third administration. Upon the third failed attempt and PSC application of program policy, students are not allowed to register for classes and are not allowed further attempts at the comprehensive examination.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Counseling, Leadership, Adult Education, and School Psychology: COUN

## Courses Offered Counseling (COUN)

### COUN 5178. Independent Study.

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated twice for additional credit at the discretion of the department chair.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### COUN 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### COUN 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### COUN 5301. Professional Counseling Orientation.

This course is presented as a basis for future counselors to understand community counseling agencies, standards of preparation, and the role identity of persons providing direct counseling treatment interventions. This course includes information on the licensure process, professional organizations, ethical and legal aspects of practice, advocacy processes, and theoretical/applied information.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### COUN 5305. Assessment in Counseling.

This course will include problems and principles of administration, scoring and interpreting group and individually administered tests; utilization of test data for diagnostic, placement, predictive, and evaluative purposes; elementary statistical procedures; laboratory activities in test administration, scoring, and interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### COUN 5307. Theories of Counseling and Personality.

This course surveys systematically derived theories of counseling and personality from their origins in social discourse, philosophy, and psychology to the present time. Each theorist is presented biographically and the theory considered with regard to its clinical, cultural, and ethical relevance and application to diverse populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### COUN 5316. Counseling Diverse Populations.

This seminar is designed to sensitize students to the roles societal power disparities, counselor's racial identity and awareness, and client racial/cultural identity play in counseling persons of diverse backgrounds.

The dynamics of counseling clients who are African-American, Asian-American, female, gay/lesbian, Latino/a, Native-American, and persons with disabilities, will be examined. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### COUN 5328. Professional Orientation in School Counseling: Leadership, Advocacy, and Accountability.

This course provides an orientation to identity and role of professional school counselors, and introduction to the study of comprehensive developmental guidance programs. Course reflects the Texas and ASCA Models with related standards. Topics include: program planning, implementation, and evaluation; use of data and accountability; leadership role; and ethical and legal practices in schools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5338. Advanced Issues in School Counseling: Counseling, Consultation, and Coordination of Services.**

This course includes advanced topics in counseling children and adolescents in schools. Emphasis will be placed on developmentally appropriate preventative and responsive counseling services. Consultation and collaboration with parents, school personnel, community partners and contextual issues in school counseling will be addressed. Prerequisites: COUN 5316 and COUN 5328 and COUN 5368 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5344. Introduction to Addictions Counseling.**

This course provides an introduction to best practices in counseling clients dealing with substance and process addictions. Students gain a historical context and current understanding of the etiology, course, and progression of addictive disorders. Students learn to conceptualize addiction from contextual, systemic, relational, and holistic perspectives, with an emphasis on theory and research-driven counseling practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5346. Filial Therapy.**

Theoretical and practical application of the filial model will be addressed as well as techniques in training parents in the overall principles and methodology of child-centered play therapy. Prerequisite: COUN 5358 and COUN 5373 both with grades of "B" or better. Corequisite: COUN 5389 or COUN 5689 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5350. Advanced Counselor Ethics.**

This course focuses on ethical standards of professional counseling organizations and credentialing bodies, and applications of ethical and legal considerations in professional counseling settings. Emphasis is placed on national and current state board rules, records management, strategies for personal and professional self-evaluation, implications for practice, and client and professional advocacy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5351. Current Issues in Marriage, Couple and Family Therapy.**

This course provides students with information regarding special issues in marital, couple and family counseling, including: grief and loss; domestic violence; substance abuse in the family; lesbian, gay, bisexual, and transgender issues; divorce; and re-parenting. Prerequisite: COUN 5316 and COUN 5367 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5354. Basic Counseling Skills and Abnormal Behavior.**

This course is designed to introduce the student to basic counseling skills via role-play and practice session recording. The course also provides a general model for assessing abnormal behavior of clients and effective skills to elicit identifying behavior. Prerequisites: COUN 5307 and COUN 5350 both with grades of "B" or better. Corequisite: COUN 5301 or COUN 5328 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5355. Career Counseling.**

This course considers career choice and development as critical aspects of persons in material cultures where occupation is a major component of one's identity. Career concerns often addressed in counseling are presented and discussed along with the area of vocational guidance, occupational information, and preference inventories.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5358. Dynamics & Processes in Group Counseling.**

In this course, students will develop knowledge and skills in the basic principles of the dynamics that are characteristic of therapeutic groups.

This course is an academic and clinical experience requiring highly active student participation in the form of honest, direct, and open communication combined with authentic self-exploration within the group setting. Corequisite: COUN 5354 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5359. Psychopathology in Clinical Mental Health Counseling.**

This course explores the principles of dysfunction in human behavior and systemic organization. This course includes diagnostic, preventive, and remedial methods and interventions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5360. Intermediate Methods in Marital, Couple and Family Counseling.**

Marital, couple, and family theory and techniques are discussed, selected, applied, and refined through lecture and supervised clinical practice. Specific skills include joining, diagnosis, goal formulation, treatment planning, termination, referral, and record keeping. Graded on a credit (CR), no credit (F) basis. Prerequisite: COUN 5316 and COUN 5354 and COUN 5367 all with grades of "B" or better. Corequisite: COUN 5359 and COUN 5369 both with grades of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5362. Practicum in Professional Supervision: Theories and Applications.**

Provides experience in supervising practicum or intern students and integrating the theoretical foundations and current issues of professional supervision. Emphasis includes ethical, multicultural, gender, age, and lifestyle concerns in supervisory relationships, and academic requirements for supervisory status for Texas Licensed Professional Counselor and Licensed Specialist in School Psychology credentials. Course can be repeated once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5366. Intermediate Methods in Adult Counseling.**

Counseling theories and techniques are discussed, selected, applied and refined through lecture and supervised practice. Specific skills include initiating the helping relationship process, diagnosis, goal formulation, treatment planning, termination, referral, and record keeping. Prerequisite: COUN 5316 and COUN 5354 both with grades of "B" or better. Corequisite: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5367. Marital and Family Counseling: Current Theories.**

This course is designed to examine the principles of communication and the goals of marital, couple and family counseling. Selected theories, approaches and techniques used in marital, couple and family counseling will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5368. Developmental Issues in Counseling Children, Adolescents, and Adults.**

Emphasis will be on understanding the interactions between the developmental needs of each of these age groups and counseling techniques and procedures used to deliver mental health services to each of these groups.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5369. Child and Adolescent Counseling Methods.**

This course focus is an overview of counseling interventions with children and adolescents in agency, school, and private practice. Group, individual, and systems techniques will be covered. Assessment of child psychopathology and techniques for consulting with parents will be included. Prerequisites: COUN 5368 with a grade of "B" or better. Corequisites: COUN 5354 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5370. Intermediate Methods in Counseling Adolescents.**

This course will provide an overview of the physical, social, psychological, and behavioral characteristics of the adolescent. This course has a supervised practice experience. Emphasis will be placed on counseling interventions utilizing current research. Prerequisites: COUN 5316 and COUN 5369 both with grades of "B" or better. Corequisites: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5372. Assessment and Treatment in Marriage and Family Counseling.**

This course addresses the assessment of individual, couple, and family functioning and the planning and implementation of marital, couple and family treatment methods. Prerequisite: COUN 5367 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5373. Intermediate Methods in Play Therapy.**

This course explores the philosophical basis for play therapy, the history of play therapy, theoretical applications, techniques, stages, ethical issues, and application to a variety of populations and diagnostic categories. This course has a supervised practice experience.

Prerequisite: COUN 5316 and COUN 5369 both with grades of "B" or better. Corequisite: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5378. Problems in Counseling.**

Individual problems not related to thesis. Designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5380. Introduction to Animal-Assisted Counseling.**

Animal-assisted counseling (AAC) is a goal-directed process in which a trained therapy animal works in partnership with a counselor to help clients resolve psychosocial challenges and achieve growth. This course will provide an introduction to the AAC field, the human-animal bond, evidence-based research in AAC, and positive training approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5381. Sandtray Therapy Methods.**

This course provides students with the philosophical basis for sandtray therapy as a therapeutic intervention for children and families, including a review of its history, applications, techniques, stages, and ethical issues. Didactic and experiential methods are used. Prerequisite: COUN 5369 with a grade of "B" or better. Corequisite: COUN 5389 or COUN 5689 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**COUN 5389. Site-Based Internship.**

This course is an on-site practicum-internship occurring in a school or agency setting with supervision by on-site and university supervisors. It may be repeated based on the recommendation of the counseling faculty. Prerequisites: COUN 5689 with a grade of "CR" and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COUN 5391. Research Methods.**

This course provides an understanding of research methods and design, statistical analysis, needs assessment, and program evaluation relevant to the field of professional counseling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5394. Counseling Women.**

This elective course involves student exploration of gender in historical, social, and global contexts with emphasis on counseling approaches and interventions specific to the concerns of women and girls. Topics include gender development, gender socialization, sexuality, career and family, violence against women, body image concerns, and overall women's mental health. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COUN 5395. Foundations of Trauma and Crisis Counseling.**

The course offers an introduction to principles of trauma counseling and crisis interventions. Topics include the neurobiology of trauma, diagnosis of trauma-related mental health concerns, and best practices related to trauma-informed counseling and crisis intervention addressing symptomatology of individuals, families, and communities directly or secondarily affected by crisis and trauma.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in COUN 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5689. Clinical Practicum.**

This practicum involves providing supervised counseling services to clients in university-affiliated counseling clinics and a staffing seminar. It may be taken up to three times (18 credit hours) based on the recommendation of the counseling faculty. Prerequisites: COUN 5358 and COUN 5369 and [COUN 5360 or COUN 5366 or COUN 5370 or COUN 5373] all with grades of "B" or better and instructor approval.

**6 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COUN 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) with a major in Professional Counseling consists of four concentrations:

- clinical mental health counseling,
- marital, couple and family counseling, and
- school counseling
- school counselor - Texas Certificate

These four areas of concentration in the professional counseling major have required course sequences that build skills through three levels, from basic to advanced, via didactic and experiential activities. The curriculum includes core foundations in theories, interventions, assessment, and research. In addition, core tenets that are emphasized throughout the program include diversity, ethics, professional development, and self-awareness. There is a strong emphasis on experiential learning integrated with the application of didactic, research-based knowledge. Internship is required as the capstone experience. The concentration in clinical mental health counseling; marriage, couple, and family counseling; and school counseling are nationally accredited by the Council for Accreditation of Counseling and Related Programs (CACREP).

The concentration of School Counselor - Texas Certificate, has similar courses and sequencing as the areas above. This concentration is focused on developing strong clinical skills and meeting the requirements of the Texas State Board of Educator Certification.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current

academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$35 nonrefundable Texas Education Agency technology fee (if offered admission)
- and either
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
  - The GRE may be waived if the student holds a master's or doctoral degree from a regionally accredited U.S. institution. If the student holds a master's or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
- informed consent form
- resume/CV detailing unique competencies that contribute to an aptitude for graduate study; personal experiences, such as volunteer work, that have aided in preparations for a career in counseling; additional language skills; technological competence and computer literacy
- statement of purpose (maximum 750 words, typed and double-spaced) addressing the following:\*
  - professional goals and rationale for pursuing education and training in professional counseling as opposed to another mental health discipline such as psychology, social work, or counseling psychology
  - rationale for choosing the school counseling concentration
  - major strengths and weaknesses with respect to being admitted into the program
  - perspective on diversity including
    - personal contributions to and benefits from the richness of the professional counseling program
    - ways to increase inclusion of diversity in the counseling profession
- three forms of recommendation (not general reference letters)

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt

countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores with minimum individual scores of
  - 22 listening
  - 22 reading
  - 24 speaking
  - 21 writing

This program does **not** offer admission if the scores above are not met.

#### \*Additional Information

The statement of purpose will be evaluated for content, style, and quality. While the applicant may seek consultation and editing suggestions, this statement must be representative of the student's current level and style of writing and representative of what could be expected if admitted into the program.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Professional Counseling concentration in School Counselor for Early Childhood through Grade 12 requires 48 semester credit hours. A grade of "B" or better must be earned in all course work counting toward a Professional Counseling degree.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
COUN 5305	Assessment in Counseling	3
COUN 5307	Theories of Counseling and Personality	3
COUN 5316	Counseling Diverse Populations	3
COUN 5328	Professional Orientation in School Counseling: Leadership, Advocacy, and Accountability	3
COUN 5338	Advanced Issues in School Counseling: Counseling, Consultation, and Coordination of Services	3
COUN 5350	Advanced Counselor Ethics	3
COUN 5354	Basic Counseling Skills and Abnormal Behavior	3
COUN 5355	Career Counseling	3
COUN 5358	Dynamics & Processes in Group Counseling	3
COUN 5368	Developmental Issues in Counseling Children, Adolescents, and Adults	3
COUN 5369	Child and Adolescent Counseling Methods	3
COUN 5373	Intermediate Methods in Play Therapy	3
COUN 5389	Site-Based Internship	3
COUN 5391	Research Methods	3
COUN 5689	Clinical Practicum	6
<b>Total Hours</b>		<b>48</b>

## Comprehensive Examination Requirement

Students are required to take and pass the Counselor Preparation Comprehensive Examination (CPCE) in order to register for the Clinical Practicum. Students are allowed three opportunities to pass the exam. Students who fail the CPCE after the first attempt must set up an appointment with their faculty advisor to develop a study plan prior to completing the program's application for a second CPCE

administration. Students who fail the CPCE after the second attempt will meet with a Program Standards Committee (PSC) to discuss additional needs and support for the third administration. Upon the third failed attempt and PSC application of program policy, students are not allowed to register for classes and are not allowed further attempts at the comprehensive examination.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Counseling, Leadership, Adult Education, and School Psychology: COUN

## Courses Offered

### Counseling (COUN)

#### **COUN 5178. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated twice for additional credit at the discretion of the department chair.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **COUN 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **COUN 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **COUN 5301. Professional Counseling Orientation.**

This course is presented as a basis for future counselors to understand community counseling agencies, standards of preparation, and the role identity of persons providing direct counseling treatment interventions. This course includes information on the licensure process, professional organizations, ethical and legal aspects of practice, advocacy processes, and theoretical/applied information.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **COUN 5305. Assessment in Counseling.**

This course will include problems and principles of administration, scoring and interpreting group and individually administered tests; utilization of test data for diagnostic, placement, predictive, and evaluative purposes; elementary statistical procedures; laboratory activities in test administration, scoring, and interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **COUN 5307. Theories of Counseling and Personality.**

This course surveys systematically derived theories of counseling and personality from their origins in social discourse, philosophy, and psychology to the present time. Each theorist is presented biographically and the theory considered with regard to its clinical, cultural, and ethical relevance and application to diverse populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **COUN 5316. Counseling Diverse Populations.**

This seminar is designed to sensitize students to the roles societal power disparities, counselor's racial identity and awareness, and client racial/cultural identity play in counseling persons of diverse backgrounds.

The dynamics of counseling clients who are African-American, Asian-American, female, gay/lesbian, Latino/a, Native-American, and persons with disabilities, will be examined. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

#### **COUN 5328. Professional Orientation in School Counseling: Leadership, Advocacy, and Accountability.**

This course provides an orientation to identity and role of professional school counselors, and introduction to the study of comprehensive developmental guidance programs. Course reflects the Texas and ASCA Models with related standards. Topics include: program planning, implementation, and evaluation; use of data and accountability; leadership role; and ethical and legal practices in schools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **COUN 5338. Advanced Issues in School Counseling: Counseling, Consultation, and Coordination of Services.**

This course includes advanced topics in counseling children and adolescents in schools. Emphasis will be placed on developmentally appropriate preventative and responsive counseling services. Consultation and collaboration with parents, school personnel, community partners and contextual issues in school counseling will be addressed. Prerequisites: COUN 5316 and COUN 5328 and COUN 5368 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **COUN 5344. Introduction to Addictions Counseling.**

This course provides an introduction to best practices in counseling clients dealing with substance and process addictions. Students gain a historical context and current understanding of the etiology, course, and progression of addictive disorders. Students learn to conceptualize addiction from contextual, systemic, relational, and holistic perspectives, with an emphasis on theory and research-driven counseling practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5346. Filial Therapy.**

Theoretical and practical application of the filial model will be addressed as well as techniques in training parents in the overall principles and methodology of child-centered play therapy. Prerequisite: COUN 5358 and COUN 5373 both with grades of "B" or better. Corequisite: COUN 5389 or COUN 5689 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5350. Advanced Counselor Ethics.**

This course focuses on ethical standards of professional counseling organizations and credentialing bodies, and applications of ethical and legal considerations in professional counseling settings. Emphasis is placed on national and current state board rules, records management, strategies for personal and professional self-evaluation, implications for practice, and client and professional advocacy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5351. Current Issues in Marriage, Couple and Family Therapy.**

This course provides students with information regarding special issues in marital, couple and family counseling, including: grief and loss; domestic violence; substance abuse in the family; lesbian, gay, bisexual, and transgender issues; divorce; and re-parenting. Prerequisite: COUN 5316 and COUN 5367 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5354. Basic Counseling Skills and Abnormal Behavior.**

This course is designed to introduce the student to basic counseling skills via role-play and practice session recording. The course also provides a general model for assessing abnormal behavior of clients and effective skills to elicit identifying behavior. Prerequisites: COUN 5307 and COUN 5350 both with grades of "B" or better. Corequisite: COUN 5301 or COUN 5328 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5355. Career Counseling.**

This course considers career choice and development as critical aspects of persons in material cultures where occupation is a major component of one's identity. Career concerns often addressed in counseling are presented and discussed along with the area of vocational guidance, occupational information, and preference inventories.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5358. Dynamics & Processes in Group Counseling.**

In this course, students will develop knowledge and skills in the basic principles of the dynamics that are characteristic of therapeutic groups. This course is an academic and clinical experience requiring highly active student participation in the form of honest, direct, and open communication combined with authentic self-exploration within the group setting. Corequisite: COUN 5354 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5359. Psychopathology in Clinical Mental Health Counseling.**

This course explores the principles of dysfunction in human behavior and systemic organization. This course includes diagnostic, preventive, and remedial methods and interventions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5360. Intermediate Methods in Marital, Couple and Family Counseling.**

Marital, couple, and family theory and techniques are discussed, selected, applied, and refined through lecture and supervised clinical practice.

Specific skills include joining, diagnosis, goal formulation, treatment planning, termination, referral, and record keeping. Graded on a credit (CR), no credit (F) basis. Prerequisite: COUN 5316 and COUN 5354 and COUN 5367 all with grades of "B" or better. Corequisite: COUN 5359 and COUN 5369 both with grades of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5362. Practicum in Professional Supervision: Theories and Applications.**

Provides experience in supervising practicum or intern students and integrating the theoretical foundations and current issues of professional supervision. Emphasis includes ethical, multicultural, gender, age, and lifestyle concerns in supervisory relationships, and academic requirements for supervisory status for Texas Licensed Professional Counselor and Licensed Specialist in School Psychology credentials. Course can be repeated once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5366. Intermediate Methods in Adult Counseling.**

Counseling theories and techniques are discussed, selected, applied and refined through lecture and supervised practice. Specific skills include initiating the helping relationship process, diagnosis, goal formulation, treatment planning, termination, referral, and record keeping. Prerequisite: COUN 5316 and COUN 5354 both with grades of "B" or better. Corequisite: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5367. Marital and Family Counseling: Current Theories.**

This course is designed to examine the principles of communication and the goals of marital, couple and family counseling. Selected theories, approaches and techniques used in marital, couple and family counseling will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5368. Developmental Issues in Counseling Children, Adolescents, and Adults.**

Emphasis will be on understanding the interactions between the developmental needs of each of these age groups and counseling techniques and procedures used to deliver mental health services to each of these groups.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5369. Child and Adolescent Counseling Methods.**

This course focus is an overview of counseling interventions with children and adolescents in agency, school, and private practice. Group, individual, and systems techniques will be covered. Assessment of child psychopathology and techniques for consulting with parents will be included. Prerequisites: COUN 5368 with a grade of "B" or better. Corequisites: COUN 5354 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5370. Intermediate Methods in Counseling Adolescents.**

This course will provide an overview of the physical, social, psychological, and behavioral characteristics of the adolescent. This course has a supervised practice experience. Emphasis will be placed on counseling interventions utilizing current research. Prerequisites: COUN 5316 and COUN 5369 both with grades of "B" or better. Corequisites: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5372. Assessment and Treatment in Marriage and Family Counseling.**

This course addresses the assessment of individual, couple, and family functioning and the planning and implementation of marital, couple and family treatment methods. Prerequisite: COUN 5367 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5373. Intermediate Methods in Play Therapy.**

This course explores the philosophical basis for play therapy, the history of play therapy, theoretical applications, techniques, stages, ethical issues, and application to a variety of populations and diagnostic categories. This course has a supervised practice experience. Prerequisite: COUN 5316 and COUN 5369 both with grades of "B" or better. Corequisite: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5378. Problems in Counseling.**

Individual problems not related to thesis. Designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5380. Introduction to Animal-Assisted Counseling.**

Animal-assisted counseling (AAC) is a goal-directed process in which a trained therapy animal works in partnership with a counselor to help clients resolve psychosocial challenges and achieve growth. This course will provide an introduction to the AAC field, the human-animal bond, evidence-based research in AAC, and positive training approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5381. Sandtray Therapy Methods.**

This course provides students with the philosophical basis for sandtray therapy as a therapeutic intervention for children and families, including a review of its history, applications, techniques, stages, and ethical issues. Didactic and experiential methods are used. Prerequisite: COUN 5369 with a grade of "B" or better. Corequisite: COUN 5389 or COUN 5689 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5389. Site-Based Internship.**

This course is an on-site practicum-internship occurring in a school or agency setting with supervision by on-site and university supervisors. It may be repeated based on the recommendation of the counseling faculty. Prerequisites: COUN 5689 with a grade of "CR" and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COUN 5391. Research Methods.**

This course provides an understanding of research methods and design, statistical analysis, needs assessment, and program evaluation relevant to the field of professional counseling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**COUN 5394. Counseling Women.**

This elective course involves student exploration of gender in historical, social, and global contexts with emphasis on counseling approaches and interventions specific to the concerns of women and girls. Topics include gender development, gender socialization, sexuality, career and family, violence against women, body image concerns, and overall women's mental health. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COUN 5395. Foundations of Trauma and Crisis Counseling.**

The course offers an introduction to principles of trauma counseling and crisis interventions. Topics include the neurobiology of trauma, diagnosis of trauma-related mental health concerns, and best practices related to trauma-informed counseling and crisis intervention addressing symptomatology of individuals, families, and communities directly or secondarily affected by crisis and trauma.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in COUN 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5689. Clinical Practicum.**

This practicum involves providing supervised counseling services to clients in university-affiliated counseling clinics and a staffing seminar. It may be taken up to three times (18 credit hours) based on the recommendation of the counseling faculty. Prerequisites: COUN 5358 and COUN 5369 and [COUN 5360 or COUN 5366 or COUN 5370 or COUN 5373] all with grades of "B" or better and instructor approval.

**6 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COUN 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The purpose of the Educational Leadership program is to prepare leaders for the schools of Texas. The program offers graduate work leading to the master's degree in educational leadership and certification as a principal (for students who already hold a master's degree) or superintendent (for students with a master's degree and a principal certificate). Questions about admission to the educational leadership program may be directed to the coordinator of the educational leadership program.

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. The student may be ineligible for issuance of a certificate upon completion of the Educator Preparation Program, based on information recorded in the criminal history. Student's with criminal history may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0)).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$35 Texas Education Agency technology fee (if offered admission)
  - and either
- \$55 nonrefundable application fee
  - or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- copy of official teaching certificate documenting initial teaching certification
- copy of official teaching record documenting at least one year of teaching experience

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores with minimum individual scores of
  - 22 listening
  - 22 reading
  - 24 speaking
  - 21 writing

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Educational Leadership principal certification requires 30 semester credit hours. Students are required to maintain a 3.25 cumulative grade-point average (GPA) for all courses listed as Course Requirements.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
EDCL 5339	Understanding Self: Developing a Personal Vision of Leadership	3
EDCL 5340	Shaping Organizations and Using Inquiry: Management and Leadership	3
EDCL 5347	Understanding Environments: Social, Political, Economic, Legal, and Technological	3
EDCL 5352	Instructional Leadership, Supervision, and Professional Development	3
EDCL 5353	Campus Leadership and School Law	3
EDCL 6342	Curriculum Design	3
EDCL 6352	School as Center of Inquiry	3
EDCL 6358	Integrative Seminar	3
EDCL 6387	Principal Field-Based Practicum I	3
EDCL 6388	Principal Field-Based Practicum II	3
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

As a capstone for the degree, students design a school-based action research project. Graduate degrees must pass one or more comprehensive examinations. In addition to preparing a written plan for this project as an academic paper, students present their action research plan to a panel of three faculty members. This is a formal

presentation and constitutes the Comprehensive Examination for the master's degree. A passing grade is required for degree completion. The faculty panel may request revisions to the written plan before issuing a final passing grade for the Comprehensive Examination. A student may not submit revisions and redo the Comprehensive Examination more than twice.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Counseling, Leadership, Adult Education, and School Psychology: EDCL

## Courses Offered

### Educational Leadership (EDCL)

#### EDCL 5100. Educational Leaders' Continuing Professional Development.

This course provides state-of-the-art continuing professional development for in-service, non-degree seeking educational leaders. New topics will be addressed with each offering. The course may be repeated once if necessary.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### EDCL 5339. Understanding Self: Developing a Personal Vision of Leadership.

Successful leadership in organizational settings requires an understanding of human behavior. This understanding begins with the knowledge of self and leads to the understanding of others. The focus of this course is on the individual student. The intent is to enhance the student's self-awareness of values, beliefs, and attitudes related to successful school leadership.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### EDCL 5340. Shaping Organizations and Using Inquiry: Management and Leadership.

This course includes an understanding of the basic structural components of educational organizations and the theoretical frameworks that describe organizational behavior. Students will focus on the process of action research, planning, decision-making, change in organizations, and leadership. Prerequisites: EDCL 5339, EDCL 5345, EDCL 5347, and EDCL 5348.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### EDCL 5345. Understanding People: Professional Development.

This course includes fundamental issues related to the development of personnel, entry-level knowledge of staff appraisal, adult learning and development, and staff development. Prerequisite: EDCL 5339. Corequisite: EDCL 5339.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5347. Understanding Environments: Social, Political, Economic, Legal, and Technological.**

Concepts of the internal and external environment of educational organizations are explored. Entry level concepts are presented in areas of school environments. Prerequisite: EDCL 5339. Corequisite: EDCL 5339.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5348. Supervision of Instruction.**

Concepts of curriculum and instructional leadership models for schools will be developed. Factors such as curriculum leadership and instructional improvement are considered part of the internal environment of schools. Prerequisite: EDCL 5339 and EDCL 5345.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5349. Practicum in Instructional Leadership.**

Students obtaining an MA in educational leadership with a concentration in instructional leadership apply the knowledge and skills they have developed in their program of study in a school setting, with mentoring by a school administrator and under the supervision of a faculty member in the educational leadership program. Prerequisite: EDCL 5339, EDCL 5345, EDCL 5348, EDCL 6342, EDCL 6352, and EDCL 6358.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5351. Understanding Self Within School & Community Environments.**

Successful leadership in school settings requires an understanding of human behavior and its ethics within a diverse context. This understanding begins with knowledge of self and leads to the understanding of organizations within the micro and macro environments. The focus of this course is on you, the learner, and your school and community. The goal is to enhance the student's self-awareness of values, beliefs, attitudes and the ecological context informing and impacting their school leadership experience. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5352. Instructional Leadership, Supervision, and Professional Development.**

The relationship between school improvement and instructional leadership will be examined. The course will examine current research and trends related to professional learning and supervision in a school setting. Students will have an opportunity to learn about the design, development, implementation, and evaluation of individual, campus, and district professional development. The course is designed to promote leadership knowledge and skills that will enhance the instructional capacity of all campus staff members and thereby improve overall student success. Prerequisite: EDCL 5351 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5353. Campus Leadership and School Law.**

This course is designed to develop campus leadership skills in elementary and secondary schools, focusing on the role and functions of the principal as a leader. This course also surveys and examines the implications of legal issues likely to be encountered by a school leader, examining constitutional provisions, statutory laws, court decisions, and regulations governing public schools with special reference to state and federal relationships. Prerequisite: EDCL 5352 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5388. Problems in Administration.**

Individual problems not related to thesis or research problems. Designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6342. Curriculum Design.**

Theory and practice in planning for curriculum needs assessment, development, implementation, and evaluation. Prerequisite: EDCL 5339, EDCL 5345, EDCL 5347, EDCL 5348, and EDCL 6352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6343. Continuous School Improvement.**

Applies the concept and principles of Total Quality Improvement to schools and classrooms and integrates Total Quality Improvement with other school improvement models. Prerequisite: All Level I core courses or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6344. Campus Leadership.**

This course develops campus leadership skills for elementary and secondary schools, focusing on the role and functions of the principal as a leader. Students practice skill development in evaluation processes, student activity programs, staffing patterns, site-based decision-making, community relations, and accounting procedures. Prerequisites: EDCL 5339, EDCL 5345, and EDCL 5348. Corequisite: EDCL 5347.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6348. School Law.**

This course examines the constitutional provisions, statutory laws, court decisions, and regulations governing public schools with special reference to state and federal relationships. Prerequisite: EDCL 5339, EDCL 5345, EDCL 5347, EDCL 5348, EDCL 6342, EDCL 6344, EDCL 6358, and EDCL 6387.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6351. Instructional Models.**

Characteristics of effective teaching are identified and correlated with learning theories and their corresponding instructional models. Matching instruction to the needs of learners and integrative approaches are emphasized. Prerequisites: All Level I and II courses or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6352. School as Center of Inquiry.**

Prepares the educational leader to be an intelligent consumer of research and to assume a leadership role in school-wide action research. This course is a prerequisite for EDCL 6358. Prerequisites: EDCL 5339 and EDCL 5345. Corequisite: EDCL 5345.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6358. Integrative Seminar.**

This course integrates key theories, concepts, and principles learned during the student's course of study. The student will complete a paper including an action research plan designed to solve an educational problem present within a specific educational setting. The master's student will defend the plan during the oral examination. Prerequisites: EDCL 5339, EDCL 5345, EDCL 5347, EDCL 5348, and EDCL 6352. Corequisite: EDCL 5348.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6387. Principal Field-Based Practicum I.**

The practicum provides students the opportunity to develop leadership skills needed by principals of elementary and secondary schools. Students will develop a practicum proposal in cooperation with their site-mentor and university supervisor. The course focus is on the development of administrative skills in a real world setting. Prerequisites: EDCL 5339, EDCL 5348, EDCL 6344, and EDCL 6358. Corequisites: EDCL 6344 and EDCL 6358.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 6388. Principal Field-Based Practicum II.**

This course is a continuation of EDCL 6387 and allows students to continue projects and activities begun in the fall semester and to work further with their on-site mentor and university supervisor. This course is offered in the spring semester only. Prerequisites: EDCL 5339, EDCL 6358, and EDCL 6387.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 6389. Superintendent's Practicum I.**

The practicum is intended to give prospective school superintendents the opportunity to hone their leadership skills under the guidance an experienced and successful school leader. Offered fall semester only and may be taken concurrently with other superintendent certification courses.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 6390. Superintendent's Practicum II.**

A continuation of EDCL 6389, this course allows students to carry through projects and activities begun in the fall semester and to work further with their on-site mentor and university supervisor. Offered spring semester only. May be taken concurrently with other superintendent certification courses. Prerequisite: EDCL 6389.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Education (M.Ed.) with a major in Student Affairs in Higher Education (SAHE) focuses on preparing students to work in post-secondary and higher education student support services. This comprehensive, cohort-based, application-oriented program is grounded in developmental and learning theory. It celebrates diversity in faculty and student background, experience and culture, and offers practical exposure to the array of careers in student affairs. The innovative curriculum is shaped by student and practitioner participation and is responsive to research and new approaches in the field of student affairs.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a competitive overall GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV

- Fall 2024: three forms of recommendation
- Fall 2025: two letters of recommendation and accompanying recommendation forms
- statement of purpose (maximum 500 words, double-spaced in essay format) addressing the following:\*
  - experiences leading to an interest/career in student affairs
  - qualities, values, characteristics, and/or skills that make the student a strong candidate for the student affairs in higher education (SAHE) program at Texas State
  - the ways in which the personal learning outcomes of the SAHE program relate to the student's personal and professional goals
- Semi-finalist applicants will be expected to participate in an admissions interview.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

The statement of purpose will be evaluated for content, style, and quality. Although the applicant may seek consultation and editing suggestions, this statement should be representative of the applicant's current level and style of writing and representative of what could be expected if admitted into the program.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Student Affairs in Higher Education requires 42 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SAHE 5322	Legal Issues and Governance in Higher Education	3
SAHE 5323	Assessment, Strategic Planning, and Evaluation in Student Affairs	3
SAHE 5335	Leadership in Student Affairs	3
SAHE 5340	College Student Development: Theory & Practice	3
Choose 3 hours from the following:		3
SAHE 5179A	Student Affairs Administration at Minority Serving Institutions	
SAHE 5179B	Staffing and Supervision in Student Affairs	
SAHE 5179C	Crisis Management in Higher Education	
SAHE 5179D	Compassion, Resiliency, and Practitioner Well-Being	

SAHE 5179E	First-Year Student Transitions and Interventions	
SAHE 5179F	Teaching and Learning in Higher Education Curricular and Co-Curricular Contexts	
SAHE 5179G	Inclusive Excellence in Higher Education	
SAHE 5354	Basic Helping Skills	3
SAHE 5387	Research Methods in Student Affairs	3
SAHE 5388	Internship-Student Affairs	3
SAHE 5389	Internship II - Student Affairs	3
SAHE 5390	Student Affairs Functions and Professional Orientation	3
SAHE 5392	Student Affairs Capstone	3
SAHE 5393	Inclusion and Belonging in Higher Education	3
<b>Electives</b>		
Choose 6 hours of advisor-approved electives		6
<b>Total Hours</b>		<b>42</b>

## Comprehensive Examination Requirement

Students must pass an oral comprehensive exam. The comprehensive exam is repeatable one time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Counseling, Leadership, Adult Education, and School Psychology: SAHE (p. 1211)

Doctoral level courses in Counseling, Leadership, Adult Education, and School Psychology: SAHE (p. 1214)

## Courses Offered

### Student Affairs in Higher Education (SAHE) - Master's Level

#### SAHE 5179A. Student Affairs Administration at Minority Serving Institutions.

This course focuses on student affairs and higher education administration at Minority Serving Institutions. Course content includes historical context of MSIs, current landscape of MSIs, programs and services fostering student success at MSIs, and key issues and challenges facing MSIs.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### SAHE 5179B. Staffing and Supervision in Student Affairs.

This course includes various topics relevant to student affairs staffing and supervision. Students will be exposed to current theories and research about each topic and will learn how to translate that information to professional practice. The major purpose of the course is to broaden the knowledge base and repertoire of skills of supervision for those who aspire to administrative leadership positions in higher education.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**SAHE 5179C. Crisis Management in Higher Education.**

The course serves as an introduction to crisis management in higher education. The focus will be various crises faced by colleges and universities; the planning, prevention, response, and recovery from institutions and leadership; and student advocacy. These crises may include environmental and health problems, natural disasters, psychological issues, criminal acts, abuses of student records, media relations, campus disturbances, and other issues.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5179D. Compassion, Resiliency, and Practitioner Well-Being.**

This course focuses on student affairs administration through the lens of compassion, resiliency, and practitioner well-being. With an intrapersonal lens combined with a focus on student affairs administration, students will learn about trauma-informed frameworks, self-care and well-being, resiliency, self-compassion, and compassion for others. Students will consider these topics in connection to crisis response in higher education.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5179E. First-Year Student Transitions and Interventions.**

This course focuses on the first-year college student experience with a focus on the challenges, opportunities, engagement, retention, and intentional intervention. Students will be exposed to relevant theories and research about student transitions and timely interventions, and they will focus on how to translate the theory and research to professional practice.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5179F. Teaching and Learning in Higher Education Curricular and Co-Curricular Contexts.**

In this course students will learn and model evidence-based practices for engaging undergraduate students in both curricular and co-curricular learning. The course focuses on college teaching pedagogies and learning science. Students will learn current theories and research about how college students learn, including cognitive and affective aspects of learning. Students will gain knowledge in writing learning outcomes, designing authentic learning experiences using inclusive teaching practices, engaging students in learning activities, and conducting formative and summative assessments.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5179G. Inclusive Excellence in Higher Education.**

This course will allow students to go beyond theoretical concepts and explore practical strategies for inclusive excellence that can be used in today's higher education workplace. Students will dive into strategic planning, interviewing skills, and exploration of how today's cultural and resource centers support student success through building a sense of belonging and promoting inclusion.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5179H. Advancing Student Success in Higher Education.**

This course will introduce the history and best practices in student success, instill the importance of utilizing technology to help make data-informed decisions, and equip students with essential skills and strategies to increase the number of students earning a post-secondary degree. The course will explore how institutions define student success and strategic goal setting to reach positive outcomes.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5179I. Supporting Student Mental Health and Wellbeing for Academic and Personal Success.**

This course focuses on wellbeing and mental health as a pivotal topic for student success inside and outside of the classroom. Student Affairs practitioners benefit from recognition and understanding of mental health related stressors facing college students and their contributors. A focus on evidence-based prevention strategies and infusion of mental health related supports across student affairs program areas can provide tools for students to enhance their perseverance and resilience. Student will gain a repertoire of strategies for combating compassion fatigue and burn out as they experience the demands of working with students in distress.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5179J. Critical Examination of Student Development and its Future for Student Affairs.**

This course will review several categories of student development theories and examine forces in student affairs and higher education critical to how theory, particularly identity theory, may or may not be applicable to the profession in the future. Students will consider how to create future student affairs and higher education environments that support students' growth and development.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5311. Advising and Facilitating Student Groups and Organizations.**

Designed for student affairs professionals, this course focuses on effectively advising and facilitating a diverse array of student groups and organizations. Topics include: one-on-one and group advising, collaboration, group facilitation, conflict resolution/mediation, supervision, mentoring, teamwork, and teambuilding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5322. Legal Issues and Governance in Higher Education.**

This course provides for the identification and understanding of the legal issues that influence institutions of higher education. There is also a focus on governance of postsecondary institutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5323. Assessment, Strategic Planning, and Evaluation in Student Affairs.**

This course covers the theoretical bases for assessment techniques; research design; strategic planning; developing, managing, and evaluating student affairs programs including information management and computer applications in higher education; and methods of needs analysis applicable to college student populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5335. Leadership in Student Affairs.**

This course provides an examination of leadership in student affairs and higher education through the study of leadership and organizational theory. Additionally, the course focuses on student leadership development. Students will be prepared to apply their knowledge of leadership theories and models to practice leadership and develop leadership in others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5339. Higher Education and Student Affairs Administration.**

This course provides an overview and examination of higher education and student affairs administration with a focus on institutional programs, services, practices, resources, and best practices that support student engagement and success.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5340. College Student Development: Theory & Practice.**

This course seeks to provide in-depth understanding of developmental needs and issues of college and university students, identifies ways to enhance learning by considering developmental and environmental effects, and offers practice in creating learning opportunities that consider developmental needs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5348. Professional Development in Student Affairs.**

Professional development plays an important role in student affairs. This course will allow students to learn more about professional development, professional associations, and conferences. Students will also create a professional development plan and will develop a conference proposal that they could submit to a professional conference.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5354. Basic Helping Skills.**

This course will assist students with the development of basic communication, crisis assessment, and referral skills, through the use of role playing and modeling. It provides didactic and experiential activities to facilitate the acquisition of skills essential to helping in the student affairs context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5380. Interpersonal and Group Facilitation.**

This course is designed to give students both a theoretical and practical foundation in the knowledge, understanding, and skills needed to effectively facilitate groups and group development. Communication, facilitation, peer leadership, and experiential learning are the focus of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5387. Research Methods in Student Affairs.**

Understanding research is an important part of higher education administration. This course focuses on research measurement and design procedures for addressing issues in student affairs in higher education. Students will learn quantitative and qualitative methods as well as fundamentals for reviewing, understanding, and applying research literature. Corequisite: SAHE 5390 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5388. Internship I - Student Affairs.**

With a focus on bridging theory and practice, Internship I focuses on applying professional and theoretical knowledge to a student affairs internship setting and making meaning of one's internship experience. The course involves in-class meetings and clocked internship hours. Repeatable with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SAHE 5389. Internship II - Student Affairs.**

With a focus on career development, Internship II emphasizes applying coursework and practice to students' future careers. The course includes functional area exploration, resume and cover letter development, job search strategies, and interviewing skills. The course involves in-class meetings and clocked internship hours. Repeatable with departmental approval.

**3 Credit Hours. 1 Lecture Contact Hour. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SAHE 5390. Student Affairs Functions and Professional Orientation.**

This course covers the history of student affairs in higher education; the context in which student affairs exists in higher education; the theories used in student affairs work and its philosophical foundations; and the mission, goals, and programs of selected functions in student affairs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**SAHE 5392. Student Affairs Capstone.**

As a culminating and capstone experience, this course provides the opportunity for students to synthesize their learning from their coursework and their professional field experiences (internships and graduate assistantships). Students will analyze case studies, engage in critical self-reflection, discuss current events and issues, engage in practices that promote well-being, and focus on career planning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5393. Inclusion and Belonging in Higher Education.**

This course focuses on the awareness, knowledge, skills, and competencies necessary to serve and support students from multiple and diverse backgrounds. Further, the course focuses on strategies and approaches to addressing higher education institution aims of inclusion and belonging. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

## Student Affairs in Higher Education (SAHE) - Doctoral Level

**SAHE 7178. Independent Study.**

This course focuses on individual research topics. Students choose a selected area of study and work independently on a specialized project. Repeatable with departmental approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SAHE 7345. Gender and Sexuality in College.**

This course examines the role of gender and sexuality in the college experience. Designed using feminist theory and a social justice framework, the course includes topics of gender identity development, intersectionality, and multiple identities, sexual orientation, gender privilege and oppression, gender disparities in achievement and persistence, femininity, and masculinity. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SAHE 7378. Independent Study.**

This course focuses on individual research topics. Students choose a selected area of study and work independently on a specialized project. Repeatable with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SAHE 7379C. Professional Development in Student Affairs.**

Professional development plays an important role in student affairs. This course will allow students to learn more about professional development, professional associations, and conferences. Additionally, students will attend a professional conference and explore the theme of the conference through readings and meetings with professional association leaders and speakers.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 7379E. Intergroup Dialogue.**

This course is designed to give students both a theoretical and practical foundation in the knowledge, understanding, and skills needed to effectively facilitate intergroup dialogue. While providing foundational grounding in the theory and pedagogy of intergroup dialogue, the course directs particular attention to intergroup dynamics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 7379F. Interpersonal and Group Facilitation.**

This course is designed to give students both a theoretical and practical foundation in the knowledge, understanding, and skills needed to effectively facilitate groups and group development. Communication, facilitation, peer leadership, and experiential learning are the focus of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 7379G. Project-Based Applications in Student Affairs.**

In this course students engage in project-based applications in the field of student affairs. Students will select a project of their choice and implement the project with support of faculty and practitioners in the field. Students will engage in reflection and document their project for their portfolio.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

The graduate minor in Adult Education requires 9 semester credit hours.

Code	Title	Hours
<b>Required Course</b>		
ADED 5321	Adult Learning and Development	3
<b>Electives</b>		
Choose 6 hours of ADED or ED advisor-approved electives		6
<b>Total Hours</b>		<b>9</b>

The graduate minor in Educational Leadership requires 12 semester credit hours. Students who wish to pursue educational leadership as a minor for another graduate program of study must have initial teacher certification and at least one year of teaching experience in K-12 schools. The minor develops expertise for teacher leadership. Students entering this minor must provide the following documentation to the Educational Leadership Graduate Advisor:

- copy of official teaching certificate documenting initial teaching certification
- copy of official teaching record documenting at least one year's teaching experience

This minor does not provide principal certification. However, students who complete the minor may apply these courses in the future towards requirements for the post-master's principal certification program. Courses expire seven years after they have been completed. If you have questions about admission to the educational leadership program you may contact the coordinator of the educational leadership program.

Code	Title	Hours
<b>Required Courses</b>		
EDCL 5339	Understanding Self: Developing a Personal Vision of Leadership	3
EDCL 5347	Understanding Environments: Social, Political, Economic, Legal, and Technological	3
EDCL 5348	Supervision of Instruction	3
Choose 3 hours from the following:		3
EDCL 5340	Shaping Organizations and Using Inquiry: Management and Leadership	
EDCL 5345	Understanding People: Professional Development	
<b>Total Hours</b>		<b>12</b>

## Program Overview

The certificate in adult English as a second/foreign language is designed for individuals who desire to teach, design, and coordinate English as a second/foreign language (ESL or EFL) education programs for adults in community colleges, study abroad programs, and profit and not-for-

profit institutions offering adult ESL/EFL instruction. Objectives for the certificate include preparing instructors through:

- Studying and discussing research related to contemporary adult ESL/EFL learning practices,
- Exploring theoretical perspectives supporting innovative adult ESL/EFL methodologies and approaches to assessing/testing adult students' language learning,
- Articulating the relationships and connections between assessment/testing of student performance and program evaluation,
- Designing activities that support and enhance inclusive adult ESL/EFL learning environments that cultivate respect for different cultural and linguistic backgrounds,
- Designing activities and materials to teach listening, speaking, reading, and writing to adult ESL/EFL students, keeping in mind integration of language skills, and
- Making informed/appropriate decisions when choosing textbooks, teaching materials, and assessment/evaluation methods congruent with program and student needs.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$20 nonrefundable application fee
- or
- \$60 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- minimum 2.5 overall GPA or a 2.5 in the last 60 hours of undergraduate course work
- minimum 3.0 GPA in all completed graduate course work (if applicable)
- GRE not required

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of 19

- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- [official Duolingo Scores required with a 110 overall](#)
- [official TOEFL Essentials scores required with an 8.5 overall](#)

The student may qualify for English-based conditional admission if the minimum scores below are met:

- official TOEFL iBT scores required with a 59 overall and minimum individual module scores of 14
- official IELTS (academic) scores required with a 5.5 overall and
  - minimum individual module scores of 5.5

## Course Requirements

			Year 1
First Hours Semester	Second Hours Semester	Third Hours Semester	
ADED 5340	3 ADED 5344	3 ADED 5339	3
ADED 7342	3 ADED 5338	3 ADED 5384 or 5337	3
	6	6	6

**Total Hours: 18**

Education Building Room 3044

Telephone: 512-245-2157 Fax: 512-245-7911

<http://www.txst.edu/ci> (<http://www.txst.edu/ci/>)

The Department of Curriculum and Instruction (C&I) offers a variety of degrees and programs, both master's and doctoral, that are intended to enhance the professional development and career goals of teachers and other educators. C&I also offers post-baccalaureate initial teaching certificates (available only to those not already certified) that may be obtained at the graduate level with or without the master's degree. Before proceeding into any field of education at Texas State, the degree applicant should inquire as to certification requirements associated with or prerequisites to the degree. Those seeking initial teacher certification must keep in mind that certification requirements and graduate degree requirements may not be related and that the satisfactory completion of degree requirements may not always lead to certification. You will find more information on specific programs as well as contact information on the College of Education and C&I websites. For additional information regarding requirements for admittance to teacher certification, please visit the Office of Educator Preparation website.

## Background Requirements

Students seeking either a master's degree or certification combined with a master's degree can typically begin their studies without completing background or leveling classes. An exception to this would be approximately 6-9 hours of college level math, speech communication, computer literacy, and 6 hours of English composition necessary for students seeking initial teacher certification. Additionally, students seeking initial secondary teacher certification may be required to take additional undergraduate or graduate course work in their desired teaching fields. Note: Criminal background checks are required by Texas law for all teachers, and no one convicted of a felony may be certified to teach in Texas.

## Post-Baccalaureate Programs

- **Post-Baccalaureate Initial Teaching Certification** serves individuals who have earned bachelor's degrees in fields other than education and have not previously participated in a teacher preparation program. Students may earn teacher certification for elementary, middle school, secondary, bilingual, or special education by taking graduate level courses that may count toward a graduate degree.
- **Professional Certification** is also available for the reading specialist.

## Admittance to the Educator Preparation Program

All degrees that lead to teaching certification require formal admittance into the Educator Preparation Program by the Office of Educator Preparation Program. This acceptance includes payment to the university of a state mandated Texas Education Agency technology fee. Please see <https://www.education.txstate.edu/oep/> for current admittance requirements and procedures. Note that the Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Programs. If you are concerned about your criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, click here ([https://tea.texas.gov/Texas\\_Educators/Preparation\\_and\\_Continuing\\_Education/Preparation\\_and\\_Continuing\\_Education/](https://tea.texas.gov/Texas_Educators/Preparation_and_Continuing_Education/Preparation_and_Continuing_Education/)).

## Initial Certification Options

An individual may seek initial teacher certification as a post-baccalaureate student in several of the certification areas offered by the State of Texas. Satisfactory performance on a State Board for Educator Certification test is required for provisional or professional certificates in education. For updated information please go to the website for The Office of Educator Preparation at: <http://www.education.txstate.edu/oep/>. **Note:** Criminal background checks are required by Texas law for all teachers, and no one convicted of a felony may be certified to teach in Texas.

## Doctor of Philosophy (Ph.D.)

- Major in Postsecondary Student Success in Learning, Literacy, and Mathematics (Developmental Literacy Concentration) (p. 1217)
- Major in Postsecondary Student Success in Learning, Literacy, and Mathematics (Developmental Mathematics Concentration) (p. 1234)
- Major in Postsecondary Student Success in Learning, Literacy, and Mathematics (Learning Support Concentration) (p. 1250)

## Doctor of Education (Ed.D.)

- Major in Postsecondary Student Success in Learning, Literacy, and Mathematics (Developmental Literacy Concentration) (p. 1266)
- Major in Postsecondary Student Success in Learning, Literacy, and Mathematics (Developmental Mathematics Concentration) (p. 1282)
- Major in Postsecondary Student Success in Learning, Literacy, and Mathematics (Learning Support Concentration) (p. 1298)

## Master of Arts (M.A.)

- Major in Postsecondary Student Success in Learning, Literacy, and Mathematics (Developmental Mathematics Concentration) (p. 1314)
- Major in Postsecondary Student Success in Learning, Literacy, and Mathematics (Learning Support Concentration) (p. 1330)



- Major in Postsecondary Student Success in Learning, Literacy, and Mathematics (Literacy Concentration) (p. 1347)
- Major in Elementary Education (p. 1359)
- Major in Elementary Education (Early Childhood Education Concentration) (p. 1377)
- Major in Elementary Education (Talent Development Concentration) (p. 1394)
- Major in Elementary Education Bilingual/Bicultural (p. 1412)
- Major in Secondary Education (p. 1429)
- Major in Secondary Education (Talent Development Concentration) (p. 1447)

## Master of Education (M.Ed.)

- Major in Educational Technology (p. 1464)
- Major in Elementary Education (p. 1479)
- Major in Elementary Education (Early Childhood Concentration) (p. 1495)
- Major in Elementary Education (Early Childhood through Grade Six Generalist Bilingual Certification Option) (p. 1512)
- Major in Elementary Education (Early Childhood through Grade Six Generalist ESL Certification Option) (p. 1529))
- Major in Elementary Education (Teaching and Transforming Advanced and Gifted Education Concertation) -via Distance Education (p. 1546)
- Major in Elementary Education (Teacher Certification in Core Subjects, Grades Four through Eight) (p. 1579)
- Major in Elementary Education (Teacher Certification in Early Childhood through Grade Six ESL) (p. 1562)
- Major in Elementary Education (Teacher Certification in English Language Arts and Reading, Grades Four through Eight) (p. 1596)
- Major in Elementary Education (Teacher Certification in English Language Arts/Reading/Social Studies, Grades Four through Eight) (p. 1613)
- Major in Elementary Education (Teacher Certification in Mathematics, Grades Four through Eight) (p. 1630)
- Major in Elementary Education (Teacher Certification in Science, Grades Four through Eight) (p. 1647)
- Major in Elementary Education (Teacher Certification in Social Studies, Grades Four through Eight) (p. 1663)
- Major in Elementary Education (Teacher Fellows) (p. 1680)
- Major in Elementary Education Bilingual/Bicultural (p. 1697)
- Major in Reading Education (p. 1713)
- Major in Reading Education (Reading Specialist Concentration, Early Childhood Through Grade Twelve Professional Certification) (p. 1731)
- Major in Secondary Education (p. 1748)
- Major in Secondary Education (Education Technology Concentration) (p. 1764)
- Major in Secondary Education (Creativity, Talent, and Transformation) - via Distance Education (p. 1780)
- Major in Secondary Education (Teacher Recruitment Program) (p. 1797)
- Major in Secondary Education (Teaching Advanced Academics Concentration) (p. 1830)

- Major in Secondary Education (Teaching Certification CMED Concentration) -via Distance Education (p. 1813)
- Major in Special Education (Autism/Applied Behavior Analysis Concentration) (p. 1846)
- Major in Special Education (Behavioral Disorders/Positive Behavior Supports Concentration) (p. 1863)
- Major in Special Education (Learning Disabilities/Inclusion Concentration) (p. 1880)
- Major in Special Education (Learning and Behavioral Disabilities Concentration) - TXST Global (p. 1897)
- Major in Special Education (Teacher Certification CASE Concentration) (p. 1913)

## Minors

- Creativity Studies in Education (p. 1930)
- Developmental Education (p. 1930)
- Elementary Education (p. 1930)
- Elementary Education Bilingual/Bicultural (p. 1931)
- Gifted & Talented Education (p. 1931)
- Methods & Materials (p. 1931)
- Reading Education (p. 1932)
- Secondary Education (p. 1932)
- Special Education (p. 1932)

## Certificates

- Autism (p. 1932)
- Behavioral Disorders/Positive Behavioral Support (p. 1932)
- Learning Disabilities/Inclusion (p. 1933)

## Program Overview

The Department of Curriculum and Instruction in the College of Education at Texas State offers a Ph.D. in Postsecondary Student Success in Learning, Literacy, and Mathematics that produces researchers, university faculty, and scholars focused on building strong research and theoretical base for postsecondary student success. The Ph.D. is designed to fill the urgent need for advanced research in an emerging field that serves those who are underprepared for postsecondary education.

## Mission Statement

The doctoral program in Postsecondary Student Success in Learning, Literacy, and Mathematics within the Department of Curriculum and Instruction prepares future scholars, researchers, leaders, administrators, instructors, and practitioners in the field of postsecondary student success. Both rigorous and supportive, the program aims to advance theory, research, and practice in multiple areas of postsecondary student success — learning, literacy, and mathematics — by actively engaging students in teaching, scholarship, and professional service. As a multidisciplinary program, the faculty, staff, and students work collaboratively across various academic disciplines, diverse communities, and geographic boundaries.

## Educational Goal

Major educational objectives for the programs include the following:

- To prepare postsecondary student success professionals who engage in divergent and critical thinking, are culturally competent,

and are skilled in maximizing technology applications for learning and communication;

- To prepare postsecondary student success professionals who understand and can respond to the nature and needs of students who enroll in postsecondary programs; the complexities of motivation, teaching, learning, and assessment in postsecondary settings; the cultural, political, and social systems that create inequities in educational settings; and the structure and management of academic support programs;
- To prepare postsecondary student success professionals with sophisticated research skills that will enable them to critically evaluate postsecondary programs and practices and implement research agendas that will inform practice and policy;
- To prepare postsecondary student success professionals who will serve as leaders in postsecondary educational settings who can engage in institutional leadership, program administration, and innovative program development and evaluation that will promote systemic change and improvement.

## Advising

Advising takes three forms: the initial advisor, the program mentor, and the dissertation advisor. When students are first admitted, they are assigned an initial advisor who mentors them from entry through their first year benchmarks in the program. By the end of the first year, students formally ask a faculty member to be their program mentor who advises them from the end of their first year until their comprehensive exams. At a time no later than the completion of their comprehensive exams, students then select a dissertation advisor who is the chair of their dissertation committee, which must be formed at that time. These advising roles can be assumed by the same faculty member or different faculty members depending on students' research interests and foci.

In their first term, students will construct a program plan with the assistance of their initial advisor. The program plan is a focused, detailed description of the doctoral student's proposed course work, specialization, and goals for the doctoral program. The program plan will be submitted to the doctoral program plan committee for approval and suggestions. The program plan must include the following:

- goal statement that includes doctoral study goals (including specialization) and future professional goals
- professional curriculum vitae
- course work plan. This is the appropriate place for petitioning for course transfer for graduate work done previously (there is a 5-year time limit on any course work counting toward candidacy).

The student should work with their advisor for direction while completing the program plan prior to submitting it to the program plan committee. It is due to the program plan committee by November 15 in the fall term of the student's first year of study. After the program plan committee reviews the student's program plan, a meeting may be scheduled with the student for further review of the plan.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review

the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- master's degree from a regionally accredited university or demonstrated success in graduate-level studies or professional experience in a field relevant to postsecondary student success in learning, literacy, or mathematics
- The Postsecondary Student Success in Learning, Literacy, and Mathematics doctorate (both Ph.D. and Ed.D. tracks) requires 96 semester credit hours for students admitted with a bachelor's degree. Students admitted with a bachelor's degree will follow the same program of study as students admitted with a master's degree (66 semester credit hours), but with an additional 30 semester credit hours of open electives.
- official transcripts from **each institution** where course credit was granted
- minimum 3.0 GPA (on a 4.0 scale) in all completed graduate course work
- resume/CV
- statement of purpose (approximately 500-1000 words) demonstrating the student's research interest and goals as a postsecondary student success professional and potential to contribute to the advancement of scholarly work in the field of postsecondary student success. Students should discuss relevant teaching, research, and/or policy experience as well as provide clear evidence of a commitment to research and scholarship.
- three letters of recommendation addressing the student's professional and academic background
- interviews with the admissions committee will be arranged, following the initial screening using the admissions criteria listed above, for qualified applicants

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL
- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Postsecondary Student Success in Learning, Literacy, and Mathematics concentration in Developmental Literacy requires 66 semester credit hours or 96 semester credit hours for students admitted with a bachelor's degree. Students admitted with a bachelor's degree will follow the same program of study as students admitted with a master's degree (66 semester credit hours), but with an additional 30 semester credit hours of open electives.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
DE 7301	Understanding Learners in Developmental Education Contexts	3
DE 7302	Policy and Politics in Developmental Education	3
DE 7303	Teaching and Learning in Developmental Education	3
DE 7305	Diversity in P-16 Educational Contexts	3
CI 7101	Introduction to the Research Experience (Taken three times)	3
CI 7302	Research Methods and Measurement in Education	3
CI 7351	Beginning Quantitative Research Design and Analysis	3
CI 7352	Beginning Qualitative Design and Analysis	3
CI 7386	Directed Research	3
Choose 9 hours from the following:		9
CI 7353	Intermediate Quantitative Research Design and Analysis	
CI 7354	Intermediate Qualitative Design and Analysis	
CI 7358	Theoretical and Conceptual Frameworks in Qualitative Research	
CI 7359	Seminar in Quantitative Research	
<b>Concentration</b>		
Choose 15 hours from the following:		15
RDG 7301	Theory and Research of Literacy	
RDG 7302	Theory and Research of College Basic Literacy	
RDG 7303	Theory and Research of College Academic Literacy	
RDG 7304	Theory and Research of Literacy Instruction for Culturally and Linguistically Diverse Readers	
RDG 7305	Theory and Research of College Literacy Assessment	
RDG 7306	Literacy Research Seminar	
RDG 7372	Theory and Research of New Literacies Studies in Developmental Education	
RDG 7373	Community Literacies	
ENG 7300	Language Problems in a Multicultural Environment	
ENG 7316	Foundations in Rhetoric and Composition	
ENG 7317	Specializations in Rhetoric and Composition	
ENG 7326	Contemporary Composition Theory	
ENG 7383	Studies in Rhetorical Theory	

### Prescribed Electives

Choose 3 hours from the following:		3
CI 7303	Educational and Psychological Measurement and Assessment	
CI 7326	Grant Development and Management	
CI 7355	Mixed Methods in Research and Evaluation	
CI 7360	Designing Educational Research	
DE 7304A	Curriculum Design in Developmental Education	
DE 7304B	Theory and Research of Digital Literacies	
DE 7321	The Community College	
DE 7322	Learning Support Centers in Postsecondary Settings	
DE 7323	Academic Support for Students with Learning Disabilities	
DE 7324	Teaching Learning Strategies and Critical Thinking in Postsecondary Contexts	
DE 7325	Advising, Coaching, and Mentoring Learners in Postsecondary Education	
DE 7327	Student Motivation and Self-Regulation	
DE 7380	Managing Developmental Education Programs	
MATH 7188	Seminar in Mathematics Education	
MATH 7302	History of Mathematics	
MATH 7306	Current Research in Math Education	
MATH 7366A	Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors)	
MATH 7366E	Developmental Mathematics Curriculum	
MATH 7378E	Developmental Mathematics Perspectives	
MATH 7386	Independent Study in Mathematics Education	
MATH 7396	Mathematics Education Research Seminar	

### Dissertation

Choose a minimum of 12 hours from the following:		12
DE 7199	Dissertation	
DE 7299	Dissertation	
DE 7399	Dissertation	
DE 7599	Dissertation	
DE 7699	Dissertation	
DE 7999	Dissertation	

**Total Hours** **66**

## Advancement to Candidacy

### Application for Advancement to Candidacy

Once all course work (except for dissertation course work) has been completed, the comprehensive exams have been passed, and the dissertation proposal has been successfully defended, doctoral students will apply for advancement to candidacy. Candidacy must be achieved within five (5) years of initiating program course work. No credit will be applied toward the doctoral degree for course work completed more than five (5) years before the date on which the student is advanced to candidacy. This time limit applies toward credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions. Requests for a time extension must be made to the program, which in turn submits a recommendation to The Graduate College. Achieving doctoral candidacy allows the student to begin

doctoral dissertation research. Candidacy forms are found here: [http://www.gradcollege.txstate.edu/Fac\\_Resources/Forms.html](http://www.gradcollege.txstate.edu/Fac_Resources/Forms.html).

## Grade-Point Requirements for Advancement to Candidacy

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.0. No grade earned below a "B" on any graduate course may apply toward a doctorate at Texas State. Incomplete grades must be cleared through The Graduate College before a student can be approved for advancement to candidacy.

## Comprehensive Exams

All students in the Doctoral Program in Postsecondary Student Success in Learning, Literacy, and Mathematics are required to pass a Comprehensive Examination at the conclusion of coursework, prior to moving into the dissertation phase of the program. The purposes of this exam are to demonstrate mastery of the coursework content and preparation for independent research. Ideally, this process will begin during students' last semester of coursework, and will be completed the same semester.

Students will first discuss their ideas for the comprehensive examination with their advisor. Students will then form a comprehensive exam committee that is comprised of, at least, their advisor (as Chair) and two other faculty members from the Postsecondary Student Success in Learning, Literacy, and Mathematics program.

After stating their intention to take the comprehensive exam at the beginning of the semester, students will submit written responses to three foreknown items and participate in an oral defense of their work that includes a student presentation about their written responses to the items and fielding of faculty questions. Committee evaluations will be either pass, needs revisions, or does not pass. If applicable, students will have two weeks to make revisions, and committee evaluations of the revised work will be either pass or does not pass. Students who do not pass, will have two more attempts to pass the comprehensive exam before being discontinued from the program.

## Dissertation Proposal

At a time no later than the completion of their comprehensive exams, students must select a dissertation advisor. After selecting their dissertation advisor, and before beginning their dissertation proposal, students will form a dissertation committee that will provide technical support for the inception, conduct, and completion of the dissertation research study and evaluate the final product. The student will undertake the research and write the dissertation under the guidance of their dissertation advisor. The dissertation proposal must be successfully defended and approved by the dean of The Graduate College before a student can be advanced to candidacy. Information about the dissertation procedures can be found in the Dissertation tab.

Students must submit the dissertation proposal and one copy of the official "Dissertation Proposal form" (available on The Graduate College website) to the dissertation advisor. After obtaining committee members' signatures, the student must submit the dissertation proposal and dissertation proposal form to the program director for signature. The form also requires evidence of the IRB approval for any research involving human subjects. The program director will then forward the dissertation proposal and form through the department chair to the dean of The Graduate College for final approval. Final approval must be received before proceeding with the defense of the dissertation proposal. The

Dissertation Proposal form may be obtained from The Graduate College website.

## Defense of the Dissertation Proposal

Students must defend the dissertation proposal in a meeting that begins with a public presentation and continues with an oral examination by the dissertation committee. The examination will address the proposed dissertation topic (problem definition and scope), relevant literature, and research method. The dissertation committee must sign the "Defense of the Dissertation Proposal form" to indicate approval and then submit the form for the signature of the doctoral program director and the department chair. The approved Defense of the Dissertation Proposal form must be forwarded to the dean of The Graduate College. The dissertation proposal must be approved and the Defense of the Dissertation Proposal form must be on file in the office of The Graduate College before any student can advance to candidacy and begin dissertation research.

## Recommendation for Advancement to Candidacy

The dissertation committee recommends the applicant for advancement to candidacy to the doctoral program director, the department chair, and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been met. To be eligible for admission to candidacy the student must have successfully completed the comprehensive exam, completed all course work, and successfully defended the dissertation proposal.

## Dissertation Research and Writing

All doctoral students are required to complete a dissertation. The dissertation must be an original contribution to scholarship and the result of independent investigation in a significant area. Preparation of the dissertation must follow the latest edition of the *Publication Manual of the American Psychological Association*.

## Dissertation Enrollment Requirements

Any time a student is receiving official guidance on the dissertation, the student must be enrolled in a dissertation course. A student must maintain continuous enrollment in dissertation hours every term from the time they advance to candidacy until the dissertation is defended and approved. If a student is receiving supervision on the dissertation during the summer or the student is graduating during the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred. Students must enroll in a minimum of 12 dissertation credit hours.

## Dissertation Time Limit

Students must complete the dissertation within five (5) years of advancement to candidacy. The student's dissertation advisor, with the student's dissertation committee, will review the student's progress annually.

## Dissertation Advisor and Dissertation Committee

The dissertation committee must be composed of four approved doctoral graduate faculty members. The doctoral student must select a minimum of four committee members, one of which must be outside the program. The chair of the dissertation committee must be from the program.



All committee members must hold at least associate doctoral faculty status, and chairs must hold core doctoral faculty status. To form the dissertation committee, the "Dissertation Committee Request form" must be completed and signed by the student, committee members, committee chair, doctoral program director, and the department chair and then forwarded to the dean of The Graduate College for approval and signature. The required Dissertation Committee Request form may be obtained from The Graduate College website.

## Committee Changes

Any changes to the dissertation committee must be submitted for approval to the dissertation advisor, the doctoral program director, the department chair, and the dean of The Graduate College. Changes must be submitted no less than sixty (60) days before the final dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be obtained from The Graduate College website.

## Defense of the Dissertation

All dissertations must meet the following requirements as judged by the student's dissertation committee:

1. a systematic investigation of a problem,
2. informed by previous theory and research,
3. that adds to the body of knowledge in the area of investigation, and
4. is presented in a form capable of dissemination to scholars and practitioners.

Students must pass the final oral examination that covers the dissertation and the general field of the dissertation. Students must defend the dissertation in a meeting that begins with a public presentation and continues with an oral exam by the dissertation committee. Before scheduling the final oral exam, the student must have received approval of the dissertation advisor. A completed "Dissertation Defense Report form" must be submitted according to the schedule posted by the dean of The Graduate College and no later than ten days before the date of graduation. The student must complete all aspects of the dissertation, including successful defense and submission of the dissertation to The Graduate College, within five (5) years of advancement to candidacy.

## Approval and Submission of the Dissertation and Abstract

The approval of the dissertation requires positive votes from the dissertation advisor and from a majority of the dissertation committee members. Once the committee has approved the dissertation, one copy of the dissertation and the signed "Committee Approval form" must be submitted to the dean of The Graduate College for final approval. Refer to the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation* for specific guidelines.

Doctoral level courses in Developmental Education: CI (p. 1221), DE (p. 1223), ENG (p. 1225), MATH (p. 1225), RDG (p. 1232)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 7101. Introduction to the Research Experience.

This course is designed to introduce students to the program and to the ongoing research activities of its faculty. Emphasis is placed on identifying and coordinating opportunities for joint research and scholarship among faculty and students. Students must enroll in the course for three semesters before dissertation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### CI 7302. Research Methods and Measurement in Education.

This course provides a comprehensive introduction to educational research with a focus on research design, research methods and methodology, and fundamental measurement issues in quantitative, qualitative, and mixed-methods research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 7303. Educational and Psychological Measurement and Assessment.

Philosophical and empirical foundations of measurement, assessment, testing, and evaluation. Topics include philosophical and mathematical foundations in research; empirical levels and measurement description; test construction; observational rating scales; measurement interpretation; social, legal, and ethical implications; item analysis/refinement for scale performance; reliability and validity evidence; and standardized and placement tests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 7310. Teaching in College.

Teaching strategies for teaching/instructional assistants focused on creating syllabi, adapting to diverse student populations, collaborating with colleagues and staff, implementing active learning strategies, fostering assigned reading, assessing learning, and integrating technology. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CI 7326. Grant Development and Management.

This course focuses on developing competitive grant proposals and understanding grant management resources. Strategies will encompass locating funding sources, evaluating proposals, developing proposals and budgets, and methods of meeting accountability requirements.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 7351. Beginning Quantitative Research Design and Analysis.**

This course introduces students to quantitative research design and analysis. Topics include descriptive statistics; sampling techniques; statistical inference, including the null hypothesis, significance tests, and confidence intervals; and causal-comparative analyses, including t-test and ANOVA. Corequisite: CI 7302 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 7352. Beginning Qualitative Design and Analysis.**

This course introduces students to the qualitative paradigm. Topics include distinctive features, alternative qualitative traditions, purposeful sampling, common data collection methods, inductive analysis, the role of the researcher, and evaluation of qualitative research. Corequisite: CI 7302 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7353. Intermediate Quantitative Research Design and Analysis.**

This course focuses on intermediate quantitative research design and statistical methods of data analysis related to problems in education, psychology, sociology, and biological sciences. The general linear model based univariate and selected multivariate statistical techniques are examined including theory/purpose, logic, practical implications, and interpretation of various analytic techniques. Prerequisite: CI 7351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7354. Intermediate Qualitative Design and Analysis.**

This course focuses on issues in design and implementation of qualitative research. Topics include influence of alternative traditions, literature in qualitative research, access to the field and ethical issues, researcher-participant relationships, purposeful sampling strategies, inductive analysis procedures, developing theory, and reporting research. Prerequisite: CI 7352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7355. Mixed Methods in Research and Evaluation.**

This course will cover mixed methods research designs that can be used in the evaluation of educational interventions and programs. Topics include mixed methods research designs, program evaluation models, quantitative and qualitative data analysis and interpretation, reading mixed methods research articles, and writing mixed methods research proposals and evaluation reports. Prerequisite: CI 7351 and CI 7352 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7358. Theoretical and Conceptual Frameworks in Qualitative Research.**

This course is intended for those versed in current paradigmatic and epistemological states of human inquiry and presents an opportunity to design a research project and address the major issues of a research career. Prerequisite: CI 7352 and CI 7354 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7359. Seminar in Quantitative Research.**

This course is a small-group seminar that focuses on analytic strategies specific to the doctoral student's dissertation topic. Examples include structural equation modeling, hierarchical linear modeling, log linear modeling, non-parametric analyses, factor analysis, factorial analysis of variance, and other multivariate statistical methods. Prerequisite: CI 7351 and CI 7353 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7360. Designing Educational Research.**

Students identify problems in Developmental Education, develop a strategic proposal to apply to these problems, and create an evaluation plan to assess the implementation of their proposal. Students also develop skills in critiquing research reports and in synthesizing research from Developmental Education. Prerequisite: CI 7353 or CI 7354 or CI 7355 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7378. Independent Study.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in the Department of Curriculum and Instruction. May be repeated for additional credit at the discretion of the program coordinator.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7386. Directed Research.**

Students will participate in an authentic research experience, either by working as part of a doctoral faculty member's research team or developing an original research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 7388. Educational Leadership for Social Justice.**

This course provides an in-depth study of the theories and practices related to educational leadership in PreK-12 educational contexts through a social justice lens. Students will examine current social justice issues in schools and develop strategies for conceptualizing and implementing institutional change that works toward a more equitable education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7389A. Topics in Instructional Technology.**

This topic offers an in-depth study of systematic instructional design emphasizing the selection and use of appropriate media for delivering instruction to maximize student learning. Special emphasis in this topic is on the leader's role in influencing the use of technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**CI 7389C. Special Topics: Race Theory in Educational Research.**

This course will explore racial theories and paradigms applicable to the study of race in K-20 educational settings. Students will analyze foundational scholarship in the formation of racial theories, research methodology, key tenets of race research, and literature pertinent to current trends in educational research regarding race. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**Developmental Education (DE)****DE 7199. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7299. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7301. Understanding Learners in Developmental Education Contexts.**

This course identifies the evolution, characteristics, demographics, and needs of learners in Developmental Education contexts. Emphasis is placed on understanding internal factors, including the cognitive, affective, and psychosocial needs of students, as well as on analyzing external factors, including the social, political and institutional forces that impact learners' educational experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7302. Policy and Politics in Developmental Education.**

This course addresses the policy and politics of planning, funding, implementing, and evaluating Developmental Education programs in postsecondary education. Readings and discussions focus on current and historical issues relevant to addressing the academic needs of educationally disadvantaged students from the perspective of researchers, program directors, policy analysts, and instructors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7303. Teaching and Learning in Developmental Education.**

The course focuses on the institutional development, intellectual development, learner development, and self-development for effective teaching and learning in developmental education. Topics include instructional and learner theories, pedagogies, assessment and evaluation techniques, and best practices for instruction and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7304A. Curriculum Design in Developmental Education.**

This course focuses on principles and processes of curriculum design and implementation in developmental education contexts, including examination of emerging research and issues. The course pedagogy also engages students in independent curriculum research, planning, and problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**DE 7304B. Theory and Research of Digital Literacies.**

This course focuses on understanding the complex relationships between technology, teaching, and learning in varied developmental education environments. Tools and strategies for planning, integrating, and assessing technology-supported instruction are explored within frameworks linking theory to practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**DE 7304D. Transformative Learning.**

This course introduces students to the core principles of transformative learning. The course is a theory-driven, project-based advanced class designed to enable students to develop theoretical perspectives, engage in intensive practice, and understand the use of transformative learning for applications with postsecondary individuals, groups, and organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7304E. Current Topics in Motivation Intervention Research.**

This course focuses on analyzing, synthesizing, discussing, and applying cutting-edge research on various types of motivation interventions in education. Emphasis will be placed on theory, research, and practice in postsecondary educational settings and Developmental Education contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7304F. Current Topics in Strategic and Self-Regulated Learning Intervention Research.**

This course examines cutting-edge research on strategic and self-regulated learning interventions. Emphasis will be placed on theory, research, and practice relevant to postsecondary educational settings, however, students will be encouraged to apply course content to their areas of interest which may be outside of postsecondary educational settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7305. Diversity in P-16 Educational Contexts.**

This course uses critical multicultural frameworks to trace the evolution of learners in a P-16 educational system. Students in this course examine school practices and policies in an attempt to map the educational trajectory and improve the educational experiences of P-16 students who are underrepresented and underserved. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7321. The Community College.**

Introduction to community college and to its roles and functions in American education. Special attention will be directed to evolution, development and patterns of organization, purposes, programs, personnel and current issues of the community college.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7322. Learning Support Centers in Postsecondary Settings.**

The course explores the learning assistance movement in postsecondary settings including its history, leaders, and current research. Topics include program planning; leadership, organization, and management; human and financial resources; facilities and equipment; legal responsibilities; equal opportunity and access; diversity; ethics; campus and community relations; and assessment and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7323. Academic Support for Students with Learning Disabilities.**

The course focuses on Learning Disabilities (LD) and Executive Function (EF) Disorders and their nature, prevalence, and significance in postsecondary environments. Topics include theories about the origins and nature of LD and EF, development across the lifespan, characteristics of individuals, and approaches to service, delivery and teaching. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7324. Teaching Learning Strategies and Critical Thinking in Postsecondary Contexts.**

This course explores theory and pedagogy of learning strategies, problem solving, and critical thinking skills in postsecondary contexts. Topics include variables in teaching and learning, methods of assessment, and approaches to instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7325. Advising, Coaching, and Mentoring Learners in Postsecondary Education.**

The course will focus on theories and techniques of academic advising, coaching, and mentoring skills for learners enrolled in postsecondary education. Didactic and experiential activities will provide students enrolled in the course with opportunities to learn and practice skill development within these academic support programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7380. Managing Developmental Education Programs.**

This course focuses on the theoretical and practical elements of management of Developmental Education programs in higher education. Readings and discussions focus generally on best practices in higher education leadership and specifically on best practices in leadership and management in Developmental Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7381. Practicum.**

A 150-clock hour, one-semester practical experience in an institution or agency other than one's own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities to include program planning, management, budgeting, and/or evaluation.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 7399. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7599. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7699. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7999. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**English (ENG)****ENG 7300. Language Problems in a Multicultural Environment.**

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7314. Specializations in Professional and Technical Communication Topics.**

Provides theoretical and practical information for specialized types of technical and professional communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7316. Foundations in Rhetoric and Composition.**

A course providing students with theoretical, pedagogical, and/or methodological foundations in the field of rhetoric and composition.

Emphases vary but may include Contemporary Composition Pedagogy, Basic Writing Theory and Practice, and Writing Assessment. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7317. Specializations in Rhetoric and Composition.**

A course providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Across the Curriculum, Service Learning, Writing Center Theory and Practice, Computers and Writing, Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Mathematics (MATH)****MATH 7111. Seminar in Teaching.**

Seminar on individual study projects concerned with selected problems in the teaching of mathematics. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MATH 7188. Seminar in Mathematics Education.**

Students are required to attend weekly research seminars in Mathematics Education and to give at least one research presentation in the seminar during the semester. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7199A. Dissertation.**

Original research and writing in Mathematics Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7299A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7301. Studies in Mathematics.**

This course provides basic foundations in Mathematics for students entering the doctoral program in Mathematics or Mathematics Education. This course may be repeated. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 7302. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7303. Analysis I.**

This course covers foundations of modern analysis. Topics include: sequences,  $\limsup$ ,  $\liminf$ , Sigma Algebras of sets that include open and closed sets, sequences of functions, pointwise and uniform convergence, lower and upper semi-continuity, Borel sets, outer measure, and Lebesgue measure. Prerequisite: MATH 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7306. Current Research in Math Education.**

This course surveys the various current social, political, and economic trends in local, state, national, and international settings that are related to research in Mathematics Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7307. Algebra I.**

Applications of Algebra and topics in modern algebra, including permutation groups, symmetry groups, Sylow theorems, and select topics from Ring Theory. Prerequisite: MATH 4307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7309. Topology I.**

A course in point-set topology emphasizing topological spaces, continuous functions, connectedness, compactness, countability, separability, metrizability, CWcomplexes, simplicial complexes, nerves, and dimension theory. Prerequisite: MATH 4330.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7313. Analysis II.**

This course covers the theory of integration with special emphasis on Lebesgue integrals. Topics include: Lebesgue integral, Bounded Convergence theorem, differentiation and integration, absolute continuity, and  $L_p$  spaces. Prerequisite: Math 7303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7317. Algebra II.**

A study of the important algebraic structures of rings and fields. Topics covered include rings, ideals, modules, polynomial rings, Euclidean algorithm, finite fields, and field extensions. Topics also include an introduction to Galois Theory with an emphasis on the geometric applications. Prerequisite: MATH 7307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7319. Topology II: Algebraic Topology.**

This course covers the fundamental concepts and tools of algebraic topology. Topics include the fundamental group, covering spaces, homotopy type, the higher homotopy groups, singular homology theory, and the computation of homology groups via exact sequences and applications. Prerequisite: MATH 7307 and MATH 7309.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7321. Graph Theory.**

Topics in this course include trees, connectivity of graphs, Eulerian graphs, Hamiltonian graphs, planar graphs, graph coloring, matchings, factorizations, digraphs, networks, and network flow problems. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MATH 7323. Theories of Knowing and Learning in Mathematics Education.**

This course surveys the major theories of knowing and learning that have influenced mathematics education. These theories include behaviorism, constructivism, sociocultural theories, situated cognition, and others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7324. Curriculum Design & Analysis.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques that are related to curriculum design in Mathematics Education for grade levels P-16.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7325. Statistics 1.**

A study of the mathematical and probabilistic underpinnings of the techniques used in statistical inference. Topics covered include sampling, sampling distributions, confidence intervals, and hypothesis testing with an emphasis on both simulations and derivations. Prerequisite: Math 2321 and Math 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7328. Instructional Techniques & Assessments.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques of instruction in Mathematics Education and the related assessment procedures for each for grade levels P-20.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7331. Combinatorics.**

This course is a study of fundamental principles of combinatorics. Topics include: permutations and combinations, the Pigeonhole principle, the principle of inclusion-exclusion, binomial and multinomial theorems, special counting sequences, partitions, posets, extremal set theory, generating functions, recurrence relations, and the Polya theory of counting. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7335. Statistics II: Linear Modeling.**

A study of the formulation and statistical methodologies for fitting linear models. Topics include the general linear hypothesis, least-squares estimation, Gauss-Markov theorem, assessment of model fit, effects of departures from assumptions, model design, and criteria for selection of optimal regression models. Prerequisite: MATH 3377 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7346. Quantitative Research Analysis in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and use of appropriate design methodologies to achieve the strongest possible evidence to support or refute a knowledge claim. Prerequisite: MATH 7306 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7354. Advanced Qualitative Research.**

This course encompasses the techniques and tools needed for the development, investigation, and demonstration of competence in conducting qualitative research in mathematics education. Principles of qualitative data analysis are a significant focus of the course, with particular attention given to specific methods used to code and analyze data. Prerequisite: ED 7352 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 7356B. Advanced Qualitative Research.**

This course encompasses investigation, development, and demonstration of competence, design, and execution for mathematics education problems in qualitative research. Prerequisite: ED 7352 or CI 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356C. Action Research in Mathematics Education.**

This course examines underlying theory and issues in action research model and the development of action research projects. Prerequisites: MATH 7346 or ED 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7358. Advanced Quantitative Research in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and the use of appropriate design methodologies to achieve the most substantial evidence to support or refute a knowledge claim. Prerequisite: MATH 7346 with a grade of "B" or better or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7361. Seminar in Advanced Mathematics.**

Material in course will vary with the interest of students and faculty. A detailed study of subject matter may be chosen from advanced areas of analysis; algebra; topology and geometry; applied mathematics; and probability and statistics. This course is repeatable for credit when subject matter varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7363A. COMPLEX ANALYSIS.**

This course is a brief introduction to the complex number system and basic point-set topology of the complex plane, followed by a proof-based and rigorous study of the principal results of the analysis of functions of a single complex variable. Prerequisite: MATH 4315 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363B. NUMERICAL ANALYSIS.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using computer algebra systems. Symbolic, numerical, and graphical techniques will be studied. Applications will be drawn from the sciences, engineering, and mathematics. Prerequisite: MATH 3323 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363C. FUNCTIONAL ANALYSIS.**

This course presents the three basic fundamental theorems of functional analysis: the Hahn-Banach theorem, the uniform boundedness theorem, and the open mapping theorem. Prerequisite: MATH 7303 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363E. Numerical Analysis II.**

This course will involve the analysis and numerical implementation of algorithms to solve partial differential equations. Applications will be drawn from science, engineering, and mathematics. Topics include the numerical solution of linear partial differential equations and the related linear systems of equations. Prerequisite: MATH 7363B with a letter grade of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363F. Functional Analysis II.**

This course will involve the analysis of infinite dimensional vector spaces including spaces of functions, measures, and distributions. Topics include Fourier transforms, theory of Banach spaces, and operator theory. Prerequisite: MATH 7363C with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366A. Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors).**

This course examines how to develop and teach post-secondary students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisites: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366B. Teaching K-12 Students (Elementary, Middle School, and High School).**

This course examines how to develop and teach K-12 students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366C. Teaching Teachers (In-Service; Pre-Service).**

This course examines how to prepare teachers of mathematics. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366D. Teaching Specialized Content.**

This course will be an in-depth study of a specialized content area in mathematics with an emphasis on teaching. The specific content area will vary by instructor. Examples include Euclidean Simplex Geometry and Discrete Probability Spaces with Implications for Public School Curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366E. Developmental Mathematics Curriculum.**

This course surveys the research, development, and evaluation of the scope and sequence of developmental mathematics curriculum. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366F. Research in Undergraduate Mathematics Education I.**

Students will develop the requisite knowledge to become a good consumer of Research in Undergraduate Mathematics Education (RUME) research. The course will cover the theoretical underpinnings of current and historic RUME research. Students will develop the knowledge to understand relevant theoretical stances and the role they play in research. Prerequisite: Math 7306 or permission from the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366G. Research in Undergraduate Mathematics Education II.**

In this course, students will develop necessary knowledge to design/conduct RUME research via a topic-driven look at current RUME research. Core topics include proof, analysis/calculus, abstract algebra, linear algebra, and differential equations. Students will develop a depth of knowledge related to these topics and engage in research design and development. Prerequisite: MATH7306 and MATH7366F.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7367B. ADV GROUP THEORY.**

This course covers topics including properties of solvable, p-solvable and nilpotent groups, group actions, transfer theorems, simple groups and composition series, the generalized Fitting subgroup, automorphism groups, classical groups and linear representations of groups. Prerequisite: MATH 7307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369C. Low-dimensional topology.**

This course is an introduction to low-dimensional topology. Topics include surfaces, 3-manifolds, knots, and 4-manifolds. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369D. Characteristic Classes.**

This course is an introduction to vector bundles and characteristic classes. Topics covered include Stiefel-Whitney classes, Chern classes, Euler class, Pontrjagin classes, and their computation. Additional topics may include manifold immersion problems. Prerequisite: MATH 7317 and MATH 7319 both with grades of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369E. Differential Geometry.**

This course is an introduction to modern tools of differential geometry. Topics covered include manifolds, Riemannian metrics, connections, covariant derivatives, geodesics, curvatures, extrinsic and intrinsic computations. Other possible topics include hyperbolic geometry, Lie groups, Chern-Weil theory, surfaces of prescribed mean curvature, the Gauss-Bonnet theorem, and the Cartan-Hadamard theorem. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7371A. Advanced Graph Theory.**

Topics in this course include Turan's problems, Ramsey theory, random graph theory, extremal graph theory, algebraic graph theory, domination of graphs, distance problems, and applications. Prerequisite: MATH 7321.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371B. Advanced Combinatorics.**

Topics in this course include Block designs, Latin squares, combinatorial optimization problems, coding theory, matroids, difference sets, and finite geometry. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371C. Combinatorial Number Theory.**

A study of fundamental techniques in combinatorial number theory. Topics will include Waring's problem, additive number theory, and probabilistic methods in number theory. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371D. Discrete Optimization.**

A study of some fundamental techniques in discrete optimization. Topics include discrete optimization, linear programming, integer programming, integer nonlinear programming, dynamic programming, location problem, scheduling problem, transportation problem, postman problem, traveling salesman problem, matroids, and NP-completeness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371E. Algorithms and Complexity.**

A study of some fundamental concepts of computability and complexity. Topics include polynomially bounded problems, NP-complete problems, exponentially hard problems, undecidable problems, and reducibility. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371F. Probabilistic Methods in Discrete Mathematics.**

A study of some fundamental probabilistic techniques used to solve problems in graph theory, combinatorics, combinatorial number theory, combinatorial geometry, and algorithm. Topics include linearity of expectation, alterations, second moment, local lemma, correlation inequalities, martingales, Poisson paradigm, and pseudo-randomness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371G. Applied Discrete Mathematics.**

This course introduces fundamental concepts in logic, Boolean algebra, and binomial coefficients; and applications in different fields such as complexity of algorithms and network theory. Prerequisites: MATH 2472 and MATH 4307, all with a grade of "C" or better, or with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371H. Combinatorial Networks.**

Combinatorial Networks is an area of study of certain types of networks using combinatorial methods extensively. This course introduces fundamental basics as well as the latest development in this area of research. Prerequisite: MATH 5307/7307 with a grade of "C" or higher.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7373B. Partial Differential Equations I.**

This course covers the theory and application of partial differential equations, typical equations of mathematical physics, Cauchy problem for equations of the first order, classification of second-order equations, Cauchy problem for second-order hyperbolic equations, Duhamel's principle, potential theory and elliptic equations, maximum principle, and parabolic equations. Prerequisite: MATH 3323, 3373 and 3380 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373C. Partial Differential Equations II.**

This course covers the existence and uniqueness theory for boundary value problems of partial differential equations (PDE) including the topics linear evolution equations, variational techniques, non-variational techniques, Hamilton-Jacobi equations, conservation laws. Prerequisite: MATH 7373B with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373G. Spectral Methods.**

This course covers the essentials of spectral collocation methods with an emphasis on numerically implementing algorithms. The problems studied will include ordinary and partial differential equations connected with fluid mechanics, quantum mechanics, waves, and other fields. The techniques used will include both Fourier and Chebyshev methods. Prerequisite: MATH 7363E with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375C. Time Series Analysis.**

A study of the theory of time-dependent data. The analysis includes modeling, estimation, and testing; alternating between the time domain; using autoregressive and moving average models and the frequency domain; and using spectral analysis. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375D. Advanced linear Modeling.**

The course provides an extension of regression methodology to more general settings where standard assumptions for ordinary least squares are violated. Topics include generalized least squares, robust regression, bootstrap, regression in the presence of autocorrelated errors, generalized linear models, and logistic and Poisson regression. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375E. Computational Statistics.**

This course focuses on commonly used sampling and optimization algorithms in statistics. Topics include accept-reject method, importance sampling, Markov Chain Monte Carlo algorithms, Fisher scoring algorithm, expectation-maximization algorithm, and minorization-maximization algorithm. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375F. Multivariate Data Analysis.**

This course focuses on statistical methodologies based on multivariate analysis. Topics include multivariate normal distribution, tests of hypothesis on means, multivariate analysis of variance, discriminant analysis, principal component analysis, factor analysis and canonical correlation analysis. Prerequisite: MATH 5305 and (MATH 3376 or MATH 3377) with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375G. Bayesian Methods.**

This course focuses on Bayesian statistical analysis and associated theories. Topics include one-parameter and multi-parameter Bayesian models, choices of priors, formulation of regression models in the Bayesian framework, and related data analysis. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375I. Advanced Statistical Learning.**

This course covers the theoretical foundations in statistical learning and deep learning. Topics include the framework of empirical risk minimization, metric entropy, Vapnik-Chervonenkis dimension, Rademacher and Gaussian complexity, symmetrization and chaining techniques, contraction principle, uniform law of large numbers, sample complexity, and neural networks. Prerequisite: MATH 7337 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378A. Problem Solving, Reasoning, and Proof.**

A study of the fundamental concepts of problem solving, logic, set theory, and mathematical proof and applications of these concepts in mathematics curriculum for grades P-20. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378B. Connecting and Communicating Math.**

This course examines one of the basic principles involved in mathematics education: Connecting and Communicating Mathematics. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378C. Representing Fundamental Math Ideas (Function, Data Analysis, and Enumeration).**

This course examines the basic principles involved in mathematics education. The process of representing fundamental mathematical ideas will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378D. Math Technologies.**

This course examines the basic principles involved in mathematics education: Technology. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378E. Developmental Mathematics Perspectives.**

This course examines developmental mathematics-specific strands including technological course support and placement tools/decisions. Issues related to the first mathematics core course required of undergraduates will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378F. Research on Mathematical Problem Solving in Secondary Schools.**

In this course a careful study is made of elementary techniques for problem solving in a variety of domains, including algebra, number theory, combinatorics, geometry, and logic puzzles. Students will learn these techniques by actually working on a collection of problems in each of these areas. Students will read and examine research about various aspects of problem solving and research in math education that includes both teacher training and student learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378G. Discourse Processes, Traditions, and Analysis in Mathematics Education.**

Discourse and discourse analysis have been used to answer research questions across disciplines throughout the humanities and social sciences. This course will focus on theory and methods for the analysis of discourse in mathematical settings. We will learn how different approaches to discourse are used to understand mathematics learning. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**MATH 7378H. Equity in Mathematics Education.**

Equity in Mathematics Education is a course examining research on equity issues in mathematics education. These equity issues will range from race, culture, class, and gender as they relate to the teaching, learning, and schooling of mathematics education. We will look at how equity is framed within the field of mathematics education, what has been addressed, and what has not been conceptualized. The course will help students understand the literature in the field, critique the extant research literature, design research, and consider important facets of teaching for various student groups. Prerequisite: MATH 7306 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7385. Independent Study in Mathematics.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of mathematics. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7386. Independent Study in Mathematics Education.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of Mathematics Education. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7389. Internship.**

In this course, students will work under the supervision of a faculty member to gain practical knowledge in their field. Student experience can come from industry, government agencies, or other sources but must directly apply to furthering knowledge of applications of mathematics or mathematics education.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7396. Mathematics Education Research Seminar.**

Collaborative research projects with faculty through identifying an educational issue, reviewing literature, creating a research question, designing a methodology, analyzing data, drawing conclusions, implications, and creating a draft of a publishable paper. Prerequisite: MATH 7356, and ED 7352 or MATH 7346, all with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7399A. Dissertation.**

This course represents a Mathematics or Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MATH 7599A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7699A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7999A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)**

**RDG 7301. Theory and Research of Literacy.**

This course examines the current theories and basic research of literacy development from psychological, cultural, linguistic, educational, and epistemological frameworks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7302. Theory and Research of College Basic Literacy.**

This course examines basic literacy needs and instructional strategies for students within postsecondary institutions. Topics include comparison of basic and academic literacy, research and theory relevant to literacy development in college contexts, analyses of historical and current curricular approaches, and evaluation of instructional strategies and materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7303. Theory and Research of College Academic Literacy.**

This course examines academic literacy needs and instructional strategies for students in college. Topics include comparisons of academic, workplace, and new literacies and instructional strategies and materials for developing vocabulary, comprehension, and critical and strategic reading in multiple sources of information.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7304. Theory and Research of Literacy Instruction for Culturally and Linguistically Diverse Readers.**

This course examines the historical and contemporary understandings of language acquisition and instruction; foundational knowledge of literacy research and cultural and linguistic difference; instructional practices, including culturally responsive instruction, linguistic differences, and creating supportive literacy environments; curriculum, assessment, and evaluation; and critical literacy perspectives. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 7305. Theory and Research of College Literacy Assessment.**

This course reviews literacy assessment theory, research, policy, and practice in postsecondary contexts. Topics include accountability, standards-based curricula, cultural and linguistic effects, assessment-driven instruction, reliability and validity, interpretation, and different types of instruments (high-stakes, placement, diagnostic, classroom tests, and qualitative instruments).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7306. Literacy Research Seminar.**

This course explores research and policy papers in literacy and literacy education, examines methodology and conclusions, and considers additional research questions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7307D. Multimodal Critical Discourse Studies.**

This course introduces students to multimodal critical discourse analysis as both a theoretical framework stemming from multimodal semiotics and a set of analytic tools for uncovering dominant ideologies in print language and visual representations. Through a survey of critical discourse analysis approaches and methods including transitivity analysis, deixis, multimodal metonymy and metaphor analysis, and visual analysis, students will examine underlying assumptions perpetuated by representations of developmental education from external policy-driving organizations. Additionally, students will explore the potential for developmental educators to harness multimodal representations of their students and practice in order to reclaim the narrative of developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7307E. Theory, Research, and Practice of Disciplinary Literacies.**

This course examines core principles of disciplinary literacies. Students will examine the theory, research, and pedagogical practices of literacies across the disciplines with an emphasis on understanding the potential for postsecondary learners and Developmental Education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7307F. Curriculum Design in Developmental Education.**

This course focuses on principles and processes of curriculum design and implementation in developmental education contexts, including examination of emerging research and issues. The course pedagogy also engages students in independent curriculum research, planning, and problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7371. Theory and Research of Postsecondary Integrated Reading and Writing.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7372. Theory and Research of New Literacies Studies in Developmental Education.**

This course focuses on the theory and research of New Literacies Studies, which affects instructional practice in postsecondary Developmental Education. It includes an examination of diverse theories and models of multiple digital technology literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **RDG 7373. Community Literacies.**

This course focuses on exploring, understanding, refining, and reflecting on literacy as social practices within a community that informs effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

## **Program Overview**

The Department of Curriculum and Instruction in the College of Education at Texas State offers a Ph.D. in Postsecondary Student Success in Learning, Literacy, and Mathematics that produces researchers, university faculty, and scholars focused on building strong research and theoretical base for postsecondary student success. The Ph.D. is designed to fill the urgent need for advanced research in an emerging field that serves those who are underprepared for postsecondary education.

### **Mission Statement**

The doctoral program in Postsecondary Student Success in Learning, Literacy, and Mathematics within the Department of Curriculum and Instruction prepares future scholars, researchers, leaders, administrators, instructors, and practitioners in the field of postsecondary student success. Both rigorous and supportive, the program aims to advance theory, research, and practice in multiple areas of postsecondary student success — including learning, literacy, and mathematics — by actively engaging students in teaching, scholarship, and professional service. As a multidisciplinary program, the faculty, staff, and students work collaboratively across various academic disciplines, diverse communities, and geographic boundaries.

### **Educational Goal**

Major educational objectives for the programs include the following:

- To prepare postsecondary student success professionals who engage in divergent and critical thinking, are culturally competent, and are skilled in maximizing technology applications for learning and communication;
- To prepare postsecondary student success professionals who understand and can respond to the nature and needs of students who enroll in postsecondary programs; the complexities of motivation, teaching, learning, and assessment in postsecondary student success settings; the cultural, political, and social systems that create inequities in educational settings; and the structure and management of academic support programs programs;
- To prepare postsecondary student success professionals with sophisticated research skills that will enable them to critically evaluate postsecondary programs and practices and implement research agendas that will inform practice and policy;
- To prepare postsecondary student success professionals who will serve as leaders in postsecondary educational settings who can engage in institutional leadership, program administration, and innovative program development and evaluation that will promote systemic change and improvement.

### **Advising**

Advising takes three forms: the initial advisor, the program mentor, and the dissertation advisor. When students are first admitted, they are assigned an initial advisor who mentors them from entry through their first year benchmarks in the program. By the end of the first year, students formally ask a faculty member to be their program mentor who advises them from the end of their first year until their comprehensive exams. At a time no later than the completion of their comprehensive exams, students then select a dissertation advisor who is the chair of their dissertation committee, which must be formed at that time. These advising roles can be assumed by the same faculty member or different faculty members depending on students' research interests and foci.

In their first term, students will construct a program plan with the assistance of their initial advisor. The program plan is a focused, detailed description of the doctoral student's proposed course work, specialization, and goals for the doctoral program. The program plan will be submitted to the doctoral program plan committee for approval and suggestions. The program plan must include the following:

- goal statement that includes doctoral study goals (including specialization) and future professional goals
- professional curriculum vitae
- course work plan. This is the appropriate place for petitioning for course transfer for graduate work done previously (there is a 5-year time limit on any course work counting toward candidacy).

The student should work with their advisor for direction while completing the program plan prior to submitting it to the program plan committee. It is due to the program plan committee by November 15 in the fall term of the student's first year of study. After the program plan committee reviews the student's program plan, a meeting may be scheduled with the student for further review of the plan.

## **Application Requirements**

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- master's degree from a regionally accredited university or demonstrated success in graduate-level studies or professional experience in a field relevant to postsecondary student success in learning, literacy, or mathematics

- The Postsecondary Student Success in Learning, Literacy, and Mathematics doctorate (both Ph.D. and Ed.D. tracks) requires 96 semester credit hours for students admitted with a bachelor's degree. Students admitted with a bachelor's degree will follow the same program of study as students admitted with a master's degree (66 semester credit hours), but with an additional 30 semester credit hours of open electives.
- official transcripts from **each institution** where course credit was granted
- minimum 3.0 GPA (on a 4.0 scale) in all completed graduate course work
- resume/CV
- statement of purpose (approximately 500-1000 words) demonstrating the student's research interest and goals as a postsecondary student success professional and potential to contribute to the advancement of scholarly work in the field of postsecondary student success. Students should discuss relevant teaching, research, and/or policy experience as well as provide clear evidence of a commitment to research and scholarship.
- three letters of recommendation addressing the student's professional and academic background
- interviews with the admissions committee will be arranged, following the initial screening using the admissions criteria listed above, for qualified applicants

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#walver>).

- official TOEFL
- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in [Postsecondary Student Success in Learning, Literacy, and Mathematics](#) concentration in Developmental Mathematics requires 66 semester credit hours or 96 semester credit hours for students admitted with a bachelor's degree. Students admitted with a bachelor's degree will follow the same program of study as students admitted with a master's degree (66 semester credit hours), but with an additional 30 semester credit hours of open electives.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
DE 7301	Understanding Learners in Developmental Education Contexts	3

DE 7302	Policy and Politics in Developmental Education	3
DE 7303	Teaching and Learning in Developmental Education	3
DE 7305	Diversity in P-16 Educational Contexts	3
CI 7101	Introduction to the Research Experience (Taken three times)	3
CI 7302	Research Methods and Measurement in Education	3
CI 7351	Beginning Quantitative Research Design and Analysis	3
CI 7352	Beginning Qualitative Design and Analysis	3
CI 7386	Directed Research	3
Choose 9 hours from the following:		9
CI 7353	Intermediate Quantitative Research Design and Analysis	
CI 7354	Intermediate Qualitative Design and Analysis	
CI 7358	Theoretical and Conceptual Frameworks in Qualitative Research	
CI 7359	Seminar in Quantitative Research	
<b>Concentration</b>		
Choose 15 hours from the following:		15
MATH 7188	Seminar in Mathematics Education	
MATH 7302	History of Mathematics	
MATH 7324	Curriculum Design & Analysis	
MATH 7328	Instructional Techniques & Assessments	
MATH 7366A	Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors)	
MATH 7366E	Developmental Mathematics Curriculum	
MATH 7378A	Problem Solving, Reasoning, and Proof	
MATH 7378B	Connecting and Communicating Math	
MATH 7378E	Developmental Mathematics Perspectives	
MATH 7386	Independent Study in Mathematics Education	
MATH 7396	Mathematics Education Research Seminar	
<b>Prescribed Electives</b>		
Choose 3 hours from the following:		3
CI 7303	Educational and Psychological Measurement and Assessment	
CI 7326	Grant Development and Management	
CI 7355	Mixed Methods in Research and Evaluation	
CI 7360	Designing Educational Research	
DE 7304A	Curriculum Design in Developmental Education	
DE 7304B	Theory and Research of Digital Literacies	
DE 7321	The Community College	
DE 7322	Learning Support Centers in Postsecondary Settings	
DE 7323	Academic Support for Students with Learning Disabilities	
DE 7324	Teaching Learning Strategies and Critical Thinking in Postsecondary Contexts	
DE 7325	Advising, Coaching, and Mentoring Learners in Postsecondary Education	
DE 7327	Student Motivation and Self-Regulation	
DE 7380	Managing Developmental Education Programs	
ENG 7300	Language Problems in a Multicultural Environment	

ENG 7316	Foundations in Rhetoric and Composition
ENG 7317	Specializations in Rhetoric and Composition
ENG 7326	Contemporary Composition Theory
ENG 7383	Studies in Rhetorical Theory
RDG 7301	Theory and Research of Literacy
RDG 7302	Theory and Research of College Basic Literacy
RDG 7303	Theory and Research of College Academic Literacy
RDG 7304	Theory and Research of Literacy Instruction for Culturally and Linguistically Diverse Readers
RDG 7305	Theory and Research of College Literacy Assessment
RDG 7306	Literacy Research Seminar
RDG 7372	Theory and Research of New Literacies Studies in Developmental Education
RDG 7373	Community Literacies
<b>Dissertation</b>	
Choose a minimum of 12 hours from the following:	
DE 7199	Dissertation
DE 7299	Dissertation
DE 7399	Dissertation
DE 7599	Dissertation
DE 7699	Dissertation
DE 7999	Dissertation
<b>Total Hours</b>	<b>66</b>

## Advancement to Candidacy

### Application for Advancement to Candidacy

Once all course work (except for dissertation course work) has been completed, the comprehensive exams have been passed, and the dissertation proposal has been successfully defended, doctoral students will apply for advancement to candidacy. Candidacy must be achieved within five (5) years of initiating program course work. No credit will be applied toward the doctoral degree for course work completed more than five (5) years before the date on which the student is advanced to candidacy. This time limit applies toward credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions. Requests for a time extension must be made to the program, which in turn submits a recommendation to The Graduate College. Achieving doctoral candidacy allows the student to begin doctoral dissertation research. Candidacy forms are found here: [http://www.gradcollege.txstate.edu/Fac\\_Resources/Forms.html](http://www.gradcollege.txstate.edu/Fac_Resources/Forms.html).

### Grade-Point Requirements for Advancement to Candidacy

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.0. No grade earned below a "B" on any graduate course may apply toward a doctorate at Texas State. Incomplete grades must be cleared through The Graduate College before a student can be approved for advancement to candidacy.

### Comprehensive Exams

All students in the Doctoral Program in Postsecondary Student Success in Learning, Literacy, and Mathematics are required to pass a Comprehensive Examination at the conclusion of coursework, prior to moving into the dissertation phase of the program. The purposes of this exam are to demonstrate mastery of the coursework content and preparation for independent research. Ideally, this process will begin

during students' last semester of coursework, and will be completed the same semester.

Students will first discuss their ideas for the comprehensive examination with their advisor. Students will then form a comprehensive exam committee that is comprised of, at least, their advisor (as Chair) and two other faculty members from the Postsecondary Student Success in Learning, Literacy, and Mathematics program.

After stating their intention to take the comprehensive exam at the beginning of the semester, students will submit written responses to three foreknown items and participate in an oral defense of their work that includes a student presentation about their written responses to the items and fielding of faculty questions. Committee evaluations will be either pass, needs revisions, or does not pass. If applicable, students will have two weeks to make revisions, and committee evaluations of the revised work will be either pass or does not pass. Students who do not pass, will have two more attempts to pass the comprehensive exam before being discontinued from the program.

### Dissertation Proposal

At a time no later than the completion of their comprehensive exams, students must select a dissertation advisor. After selecting their dissertation advisor, and before beginning their dissertation proposal, students will form a dissertation committee that will provide technical support for the inception, conduct, and completion of the dissertation research study and evaluate the final product. The student will undertake the research and write the dissertation under the guidance of their dissertation advisor. The dissertation proposal must be successfully defended and approved by the dean of The Graduate College before a student can be advanced to candidacy. Information about the dissertation procedures can be found in the Dissertation tab.

Students must submit the dissertation proposal and one copy of the official "Dissertation Proposal form" (available on The Graduate College website) to the dissertation advisor. After obtaining committee members' signatures, the student must submit the dissertation proposal and dissertation proposal form to the program director for signature. The form also requires evidence of the IRB approval for any research involving human subjects. The program director will then forward the dissertation proposal and form through the department chair to the dean of The Graduate College for final approval. Final approval must be received before proceeding with the defense of the dissertation proposal. The Dissertation Proposal form may be obtained from The Graduate College website.

### Defense of the Dissertation Proposal

Students must defend the dissertation proposal in a meeting that begins with a public presentation and continues with an oral examination by the dissertation committee. The examination will address the proposed dissertation topic (problem definition and scope), relevant literature, and research method. The dissertation committee must sign the "Defense of the Dissertation Proposal form" to indicate approval and then submit the form for the signature of the doctoral program director and the department chair. The approved Defense of the Dissertation Proposal form must be forwarded to the dean of The Graduate College. The dissertation proposal must be approved and the Defense of the Dissertation Proposal form must be on file in the office of The Graduate College before any student can advance to candidacy and begin dissertation research.



## Recommendation for Advancement to Candidacy

The dissertation committee recommends the applicant for advancement to candidacy to the doctoral program director, the department chair, and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been met. To be eligible for admission to candidacy the student must have successfully completed the comprehensive exam, completed all course work, and successfully defended the dissertation proposal.

## Dissertation Research and Writing

All doctoral students are required to complete a dissertation. The dissertation must be an original contribution to scholarship and the result of independent investigation in a significant area. Preparation of the dissertation must follow the latest edition of the *Publication Manual of the American Psychological Association*.

## Dissertation Enrollment Requirements

Any time a student is receiving official guidance on the dissertation, the student must be enrolled in a dissertation course. A student must maintain continuous enrollment in dissertation hours every term from the time they advance to candidacy until the dissertation is defended and approved. If a student is receiving supervision on the dissertation during the summer or the student is graduating during the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred. Students must enroll in a minimum of 12 dissertation credit hours.

## Dissertation Time Limit

Students must complete the dissertation within five (5) years of advancement to candidacy. The student's dissertation advisor, with the student's dissertation committee, will review the student's progress annually.

## Dissertation Advisor and Dissertation Committee

The dissertation committee must be composed of four approved doctoral graduate faculty members. The doctoral student must select a minimum of four committee members, one of which must be outside the program. The chair of the dissertation committee must be from the program. All committee members must hold at least associate doctoral faculty status, and chairs must hold core doctoral faculty status. To form the dissertation committee, the "Dissertation Committee Request form" must be completed and signed by the student, committee members, committee chair, doctoral program director, and the department chair and then forwarded to the dean of The Graduate College for approval and signature. The required Dissertation Committee Request form may be obtained from The Graduate College website.

## Committee Changes

Any changes to the dissertation committee must be submitted for approval to the dissertation advisor, the doctoral program director, the department chair, and the dean of The Graduate College. Changes must be submitted no less than sixty (60) days before the final dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be obtained from The Graduate College website.

## Defense of the Dissertation

All dissertations must meet the following requirements as judged by the student's dissertation committee:

1. a systematic investigation of a problem,
2. informed by previous theory and research,
3. that adds to the body of knowledge in the area of investigation, and
4. is presented in a form capable of dissemination to scholars and practitioners.

Students must pass the final oral examination that covers the dissertation and the general field of the dissertation. Students must defend the dissertation in a meeting that begins with a public presentation and continues with an oral exam by the dissertation committee. Before scheduling the final oral exam, the student must have received approval of the dissertation advisor. A completed "Dissertation Defense Report form" must be submitted according to the schedule posted by the dean of The Graduate College and no later than ten days before the date of graduation. The student must complete all aspects of the dissertation, including successful defense and submission of the dissertation to The Graduate College, within five (5) years of advancement to candidacy.

## Approval and Submission of the Dissertation and Abstract

The approval of the dissertation requires positive votes from the dissertation advisor and from a majority of the dissertation committee members. Once the committee has approved the dissertation, one copy of the dissertation and the signed "Committee Approval form" must be submitted to the dean of The Graduate College for final approval. Refer to the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation* for specific guidelines.

Doctoral level courses in Developmental Education: CI (p. 1237), DE (p. 1239), ENG (p. 1241), MATH (p. 1242), RDG (p. 1249)

## Courses Offered

### Curriculum and Instruction (CI)

**CI 7101. Introduction to the Research Experience.**

This course is designed to introduce students to the program and to the ongoing research activities of its faculty. Emphasis is placed on identifying and coordinating opportunities for joint research and scholarship among faculty and students. Students must enroll in the course for three semesters before dissertation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 7302. Research Methods and Measurement in Education.**

This course provides a comprehensive introduction to educational research with a focus on research design, research methods and methodology, and fundamental measurement issues in quantitative, qualitative, and mixed-methods research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7303. Educational and Psychological Measurement and Assessment.**

Philosophical and empirical foundations of measurement, assessment, testing, and evaluation. Topics include philosophical and mathematical foundations in research; empirical levels and measurement description; test construction; observational rating scales; measurement interpretation; social, legal, and ethical implications; item analysis/refinement for scale performance; reliability and validity evidence; and standardized and placement tests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7310. Teaching in College.**

Teaching strategies for teaching/instructional assistants focused on creating syllabi, adapting to diverse student populations, collaborating with colleagues and staff, implementing active learning strategies, fostering assigned reading, assessing learning, and integrating technology. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CI 7326. Grant Development and Management.**

This course focuses on developing competitive grant proposals and understanding grant management resources. Strategies will encompass locating funding sources, evaluating proposals, developing proposals and budgets, and methods of meeting accountability requirements.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7351. Beginning Quantitative Research Design and Analysis.**

This course introduces students to quantitative research design and analysis. Topics include descriptive statistics; sampling techniques; statistical inference, including the null hypothesis, significance tests, and confidence intervals; and causal-comparative analyses, including t-test and ANOVA. Corequisite: CI 7302 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 7352. Beginning Qualitative Design and Analysis.**

This course introduces students to the qualitative paradigm. Topics include distinctive features, alternative qualitative traditions, purposeful sampling, common data collection methods, inductive analysis, the role of the researcher, and evaluation of qualitative research. Corequisite: CI 7302 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7353. Intermediate Quantitative Research Design and Analysis.**

This course focuses on intermediate quantitative research design and statistical methods of data analysis related to problems in education, psychology, sociology, and biological sciences. The general linear model based univariate and selected multivariate statistical techniques are examined including theory/purpose, logic, practical implications, and interpretation of various analytic techniques. Prerequisite: CI 7351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7354. Intermediate Qualitative Design and Analysis.**

This course focuses on issues in design and implementation of qualitative research. Topics include influence of alternative traditions, literature in qualitative research, access to the field and ethical issues, researcher-participant relationships, purposeful sampling strategies, inductive analysis procedures, developing theory, and reporting research. Prerequisite: CI 7352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7355. Mixed Methods in Research and Evaluation.**

This course will cover mixed methods research designs that can be used in the evaluation of educational interventions and programs. Topics include mixed methods research designs, program evaluation models, quantitative and qualitative data analysis and interpretation, reading mixed methods research articles, and writing mixed methods research proposals and evaluation reports. Prerequisite: CI 7351 and CI 7352 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7358. Theoretical and Conceptual Frameworks in Qualitative Research.**

This course is intended for those versed in current paradigmatic and epistemological states of human inquiry and presents an opportunity to design a research project and address the major issues of a research career. Prerequisite: CI 7352 and CI 7354 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7359. Seminar in Quantitative Research.**

This course is a small-group seminar that focuses on analytic strategies specific to the doctoral student's dissertation topic. Examples include structural equation modeling, hierarchical linear modeling, log linear modeling, non-parametric analyses, factor analysis, factorial analysis of variance, and other multivariate statistical methods. Prerequisite: CI 7351 and CI 7353 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7360. Designing Educational Research.**

Students identify problems in Developmental Education, develop a strategic proposal to apply to these problems, and create an evaluation plan to assess the implementation of their proposal. Students also develop skills in critiquing research reports and in synthesizing research from Developmental Education. Prerequisite: CI 7353 or CI 7354 or CI 7355 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7378. Independent Study.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in the Department of Curriculum and Instruction. May be repeated for additional credit at the discretion of the program coordinator.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7386. Directed Research.**

Students will participate in an authentic research experience, either by working as part of a doctoral faculty member's research team or developing an original research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 7388. Educational Leadership for Social Justice.**

This course provides an in-depth study of the theories and practices related to educational leadership in PreK-12 educational contexts through a social justice lens. Students will examine current social justice issues in schools and develop strategies for conceptualizing and implementing institutional change that works toward a more equitable education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7389A. Topics in Instructional Technology.**

This topic offers an in-depth study of systematic instructional design emphasizing the selection and use of appropriate media for delivering instruction to maximize student learning. Special emphasis in this topic is on the leader's role in influencing the use of technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**CI 7389C. Special Topics: Race Theory in Educational Research.**

This course will explore racial theories and paradigms applicable to the study of race in K-20 educational settings. Students will analyze foundational scholarship in the formation of racial theories, research methodology, key tenets of race research, and literature pertinent to current trends in educational research regarding race. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**Developmental Education (DE)****DE 7199. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7299. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7301. Understanding Learners in Developmental Education Contexts.**

This course identifies the evolution, characteristics, demographics, and needs of learners in Developmental Education contexts. Emphasis is placed on understanding internal factors, including the cognitive, affective, and psychosocial needs of students, as well as on analyzing external factors, including the social, political and institutional forces that impact learners' educational experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7302. Policy and Politics in Developmental Education.**

This course addresses the policy and politics of planning, funding, implementing, and evaluating Developmental Education programs in postsecondary education. Readings and discussions focus on current and historical issues relevant to addressing the academic needs of educationally disadvantaged students from the perspective of researchers, program directors, policy analysts, and instructors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7303. Teaching and Learning in Developmental Education.**

The course focuses on the institutional development, intellectual development, learner development, and self-development for effective teaching and learning in developmental education. Topics include instructional and learner theories, pedagogies, assessment and evaluation techniques, and best practices for instruction and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7304A. Curriculum Design in Developmental Education.**

This course focuses on principles and processes of curriculum design and implementation in developmental education contexts, including examination of emerging research and issues. The course pedagogy also engages students in independent curriculum research, planning, and problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**DE 7304B. Theory and Research of Digital Literacies.**

This course focuses on understanding the complex relationships between technology, teaching, and learning in varied developmental education environments. Tools and strategies for planning, integrating, and assessing technology-supported instruction are explored within frameworks linking theory to practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**DE 7304D. Transformative Learning.**

This course introduces students to the core principles of transformative learning. The course is a theory-driven, project-based advanced class designed to enable students to develop theoretical perspectives, engage in intensive practice, and understand the use of transformative learning for applications with postsecondary individuals, groups, and organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7304E. Current Topics in Motivation Intervention Research.**

This course focuses on analyzing, synthesizing, discussing, and applying cutting-edge research on various types of motivation interventions in education. Emphasis will be placed on theory, research, and practice in postsecondary educational settings and Developmental Education contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7304F. Current Topics in Strategic and Self-Regulated Learning Intervention Research.**

This course examines cutting-edge research on strategic and self-regulated learning interventions. Emphasis will be placed on theory, research, and practice relevant to postsecondary educational settings, however, students will be encouraged to apply course content to their areas of interest which may be outside of postsecondary educational settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7305. Diversity in P-16 Educational Contexts.**

This course uses critical multicultural frameworks to trace the evolution of learners in a P-16 educational system. Students in this course examine school practices and policies in an attempt to map the educational trajectory and improve the educational experiences of P-16 students who are underrepresented and underserved. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7321. The Community College.**

Introduction to community college and to its roles and functions in American education. Special attention will be directed to evolution, development and patterns of organization, purposes, programs, personnel and current issues of the community college.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7322. Learning Support Centers in Postsecondary Settings.**

The course explores the learning assistance movement in postsecondary settings including its history, leaders, and current research. Topics include program planning; leadership, organization, and management; human and financial resources; facilities and equipment; legal responsibilities; equal opportunity and access; diversity; ethics; campus and community relations; and assessment and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7323. Academic Support for Students with Learning Disabilities.**

The course focuses on Learning Disabilities (LD) and Executive Function (EF) Disorders and their nature, prevalence, and significance in postsecondary environments. Topics include theories about the origins and nature of LD and EF, development across the lifespan, characteristics of individuals, and approaches to service, delivery and teaching. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7324. Teaching Learning Strategies and Critical Thinking in Postsecondary Contexts.**

This course explores theory and pedagogy of learning strategies, problem solving, and critical thinking skills in postsecondary contexts. Topics include variables in teaching and learning, methods of assessment, and approaches to instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7325. Advising, Coaching, and Mentoring Learners in Postsecondary Education.**

The course will focus on theories and techniques of academic advising, coaching, and mentoring skills for learners enrolled in postsecondary education. Didactic and experiential activities will provide students enrolled in the course with opportunities to learn and practice skill development within these academic support programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7380. Managing Developmental Education Programs.**

This course focuses on the theoretical and practical elements of management of Developmental Education programs in higher education. Readings and discussions focus generally on best practices in higher education leadership and specifically on best practices in leadership and management in Developmental Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7381. Practicum.**

A 150-clock hour, one-semester practical experience in an institution or agency other than one's own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities to include program planning, management, budgeting, and/or evaluation.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 7399. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7599. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7699. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7999. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**English (ENG)****ENG 7300. Language Problems in a Multicultural Environment.**

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7314. Specializations in Professional and Technical Communication Topics.**

Provides theoretical and practical information for specialized types of technical and professional communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7316. Foundations in Rhetoric and Composition.**

A course providing students with theoretical, pedagogical, and/or methodological foundations in the field of rhetoric and composition.

Emphases vary but may include Contemporary Composition Pedagogy, Basic Writing Theory and Practice, and Writing Assessment. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7317. Specializations in Rhetoric and Composition.**

A course providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Across the Curriculum, Service Learning, Writing Center Theory and Practice, Computers and Writing, Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ENG 7326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Mathematics (MATH)

**MATH 7111. Seminar in Teaching.**

Seminar on individual study projects concerned with selected problems in the teaching of mathematics. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MATH 7188. Seminar in Mathematics Education.**

Students are required to attend weekly research seminars in Mathematics Education and to give at least one research presentation in the seminar during the semester. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7199A. Dissertation.**

Original research and writing in Mathematics Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7299A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7301. Studies in Mathematics.**

This course provides basic foundations in Mathematics for students entering the doctoral program in Mathematics or Mathematics Education. This course may be repeated. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 7302. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7303. Analysis I.**

This course covers foundations of modern analysis. Topics include: sequences,  $\text{LimSup}$ ,  $\text{LimInf}$ , Sigma Algebras of sets that include open and closed sets, sequences of functions, pointwise and uniform convergence, lower and upper semi-continuity, Borel sets, outer measure, and Lebesgue measure. Prerequisite: MATH 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7306. Current Research in Math Education.**

This course surveys the various current social, political, and economic trends in local, state, national, and international settings that are related to research in Mathematics Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7307. Algebra I.**

Applications of Algebra and topics in modern algebra, including permutation groups, symmetry groups, Sylow theorems, and select topics from Ring Theory. Prerequisite: MATH 4307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7309. Topology I.**

A course in point-set topology emphasizing topological spaces, continuous functions, connectedness, compactness, countability, separability, metrizability, CW-complexes, simplicial complexes, nerves, and dimension theory. Prerequisite: MATH 4330.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7313. Analysis II.**

This course covers the theory of integration with special emphasis on Lebesgue integrals. Topics include: Lebesgue integral, Bounded Convergence theorem, differentiation and integration, absolute continuity, and  $L_p$  spaces. Prerequisite: Math 7303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7317. Algebra II.**

A study of the important algebraic structures of rings and fields. Topics covered include rings, ideals, modules, polynomial rings, Euclidean algorithm, finite fields, and field extensions. Topics also include an introduction to Galois Theory with an emphasis on the geometric applications. Prerequisite: MATH 7307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7319. Topology II: Algebraic Topology.**

This course covers the fundamental concepts and tools of algebraic topology. Topics include the fundamental group, covering spaces, homotopy type, the higher homotopy groups, singular homology theory, and the computation of homology groups via exact sequences and applications. Prerequisite: MATH 7307 and MATH 7309.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7321. Graph Theory.**

Topics in this course include trees, connectivity of graphs, Eulerian graphs, Hamiltonian graphs, planar graphs, graph coloring, matchings, factorizations, digraphs, networks, and network flow problems. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7323. Theories of Knowing and Learning in Mathematics Education.**

This course surveys the major theories of knowing and learning that have influenced mathematics education. These theories include behaviorism, constructivism, sociocultural theories, situated cognition, and others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7324. Curriculum Design & Analysis.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques that are related to curriculum design in Mathematics Education for grade levels P-16.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7325. Statistics 1.**

A study of the mathematical and probabilistic underpinnings of the techniques used in statistical inference. Topics covered include sampling, sampling distributions, confidence intervals, and hypothesis testing with an emphasis on both simulations and derivations. Prerequisite: Math 2321 and Math 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7328. Instructional Techniques & Assessments.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques of instruction in Mathematics Education and the related assessment procedures for each for grade levels P-20.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7331. Combinatorics.**

This course is a study of fundamental principles of combinatorics. Topics include: permutations and combinations, the Pigeonhole principle, the principle of inclusion-exclusion, binomial and multinomial theorems, special counting sequences, partitions, posets, extremal set theory, generating functions, recurrence relations, and the Polya theory of counting. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7335. Statistics II: Linear Modeling.**

A study of the formulation and statistical methodologies for fitting linear models. Topics include the general linear hypothesis, least-squares estimation, Gauss-Markov theorem, assessment of model fit, effects of departures from assumptions, model design, and criteria for selection of optimal regression models. Prerequisite: MATH 3377 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7346. Quantitative Research Analysis in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and use of appropriate design methodologies to achieve the strongest possible evidence to support or refute a knowledge claim. Prerequisite: MATH 7306 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7354. Advanced Qualitative Research.**

This course encompasses the techniques and tools needed for the development, investigation, and demonstration of competence in conducting qualitative research in mathematics education. Principles of qualitative data analysis are a significant focus of the course, with particular attention given to specific methods used to code and analyze data. Prerequisite: ED 7352 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 7356B. Advanced Qualitative Research.**

This course encompasses investigation, development, and demonstration of competence, design, and execution for mathematics education problems in qualitative research. Prerequisite: ED 7352 or CI 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356C. Action Research in Mathematics Education.**

This course examines underlying theory and issues in action research model and the development of action research projects. Prerequisites: MATH 7346 or ED 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7358. Advanced Quantitative Research in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and the use of appropriate design methodologies to achieve the most substantial evidence to support or refute a knowledge claim. Prerequisite: MATH 7346 with a grade of "B" or better or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7361. Seminar in Advanced Mathematics.**

Material in course will vary with the interest of students and faculty. A detailed study of subject matter may be chosen from advanced areas of analysis; algebra; topology and geometry; applied mathematics; and probability and statistics. This course is repeatable for credit when subject matter varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7363A. COMPLEX ANALYSIS.**

This course is a brief introduction to the complex number system and basic point-set topology of the complex plane, followed by a proof-based and rigorous study of the principal results of the analysis of functions of a single complex variable. Prerequisite: MATH 4315 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363B. NUMERICAL ANALYSIS.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using computer algebra systems. Symbolic, numerical, and graphical techniques will be studied. Applications will be drawn from the sciences, engineering, and mathematics. Prerequisite: MATH 3323 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363C. FUNCTIONAL ANALYSIS.**

This course presents the three basic fundamental theorems of functional analysis: the Hahn-Banach theorem, the uniform boundedness theorem, and the open mapping theorem. Prerequisite: MATH 7303 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363E. Numerical Analysis II.**

This course will involve the analysis and numerical implementation of algorithms to solve partial differential equations. Applications will be drawn from science, engineering, and mathematics. Topics include the numerical solution of linear partial differential equations and the related linear systems of equations. Prerequisite: MATH 7363B with a letter grade of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363F. Functional Analysis II.**

This course will involve the analysis of infinite dimensional vector spaces including spaces of functions, measures, and distributions. Topics include Fourier transforms, theory of Banach spaces, and operator theory. Prerequisite: MATH 7363C with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366A. Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors).**

This course examines how to develop and teach post-secondary students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisites: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366B. Teaching K-12 Students (Elementary, Middle School, and High School).**

This course examines how to develop and teach K-12 students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366C. Teaching Teachers (In-Service; Pre-Service).**

This course examines how to prepare teachers of mathematics. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366D. Teaching Specialized Content.**

This course will be an in-depth study of a specialized content area in mathematics with an emphasis on teaching. The specific content area will vary by instructor. Examples include Euclidean Simplex Geometry and Discrete Probability Spaces with Implications for Public School Curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366E. Developmental Mathematics Curriculum.**

This course surveys the research, development, and evaluation of the scope and sequence of developmental mathematics curriculum. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366F. Research in Undergraduate Mathematics Education I.**

Students will develop the requisite knowledge to become a good consumer of Research in Undergraduate Mathematics Education (RUME) research. The course will cover the theoretical underpinnings of current and historic RUME research. Students will develop the knowledge to understand relevant theoretical stances and the role they play in research. Prerequisite: Math 7306 or permission from the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366G. Research in Undergraduate Mathematics Education II.**

In this course, students will develop necessary knowledge to design/conduct RUME research via a topic-driven look at current RUME research. Core topics include proof, analysis/calculus, abstract algebra, linear algebra, and differential equations. Students will develop a depth of knowledge related to these topics and engage in research design and development. Prerequisite: MATH7306 and MATH7366F.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7367B. ADV GROUP THEORY.**

This course covers topics including properties of solvable, p-solvable and nilpotent groups, group actions, transfer theorems, simple groups and composition series, the generalized Fitting subgroup, automorphism groups, classical groups and linear representations of groups. Prerequisite: MATH 7307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369C. Low-dimensional topology.**

This course is an introduction to low-dimensional topology. Topics include surfaces, 3-manifolds, knots, and 4-manifolds. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369D. Characteristic Classes.**

This course is an introduction to vector bundles and characteristic classes. Topics covered include Stiefel-Whitney classes, Chern classes, Euler class, Pontrjagin classes, and their computation. Additional topics may include manifold immersion problems. Prerequisite: MATH 7317 and MATH 7319 both with grades of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369E. Differential Geometry.**

This course is an introduction to modern tools of differential geometry. Topics covered include manifolds, Riemannian metrics, connections, covariant derivatives, geodesics, curvatures, extrinsic and intrinsic computations. Other possible topics include hyperbolic geometry, Lie groups, Chern-Weil theory, surfaces of prescribed mean curvature, the Gauss-Bonnet theorem, and the Cartan-Hadamard theorem. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7371A. Advanced Graph Theory.**

Topics in this course include Turan's problems, Ramsey theory, random graph theory, extremal graph theory, algebraic graph theory, domination of graphs, distance problems, and applications. Prerequisite: MATH 7321.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371B. Advanced Combinatorics.**

Topics in this course include Block designs, Latin squares, combinatorial optimization problems, coding theory, matroids, difference sets, and finite geometry. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371C. Combinatorial Number Theory.**

A study of fundamental techniques in combinatorial number theory. Topics will include Waring's problem, additive number theory, and probabilistic methods in number theory. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371D. Discrete Optimization.**

A study of some fundamental techniques in discrete optimization. Topics include discrete optimization, linear programming, integer programming, integer nonlinear programming, dynamic programming, location problem, scheduling problem, transportation problem, postman problem, traveling salesman problem, matroids, and NP-completeness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371E. Algorithms and Complexity.**

A study of some fundamental concepts of computability and complexity. Topics include polynomially bounded problems, NP-complete problems, exponentially hard problems, undecidable problems, and reducibility. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371F. Probabilistic Methods in Discrete Mathematics.**

A study of some fundamental probabilistic techniques used to solve problems in graph theory, combinatorics, combinatorial number theory, combinatorial geometry, and algorithm. Topics include linearity of expectation, alterations, second moment, local lemma, correlation inequalities, martingales, Poisson paradigm, and pseudo-randomness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371G. Applied Discrete Mathematics.**

This course introduces fundamental concepts in logic, Boolean algebra, and binomial coefficients; and applications in different fields such as complexity of algorithms and network theory. Prerequisites: MATH 2472 and MATH 4307, all with a grade of "C" or better, or with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371H. Combinatorial Networks.**

Combinatorial Networks is an area of study of certain types of networks using combinatorial methods extensively. This course introduces fundamental basics as well as the latest development in this area of research. Prerequisite: MATH 5307/7307 with a grade of "C" or higher.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7373B. Partial Differential Equations I.**

This course covers the theory and application of partial differential equations, typical equations of mathematical physics, Cauchy problem for equations of the first order, classification of second-order equations, Cauchy problem for second-order hyperbolic equations, Duhamel's principle, potential theory and elliptic equations, maximum principle, and parabolic equations. Prerequisite: MATH 3323, 3373 and 3380 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373C. Partial Differential Equations II.**

This course covers the existence and uniqueness theory for boundary value problems of partial differential equations (PDE) including the topics linear evolution equations, variational techniques, non-variational techniques, Hamilton-Jacobi equations, conservation laws. Prerequisite: MATH 7373B with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373G. Spectral Methods.**

This course covers the essentials of spectral collocation methods with an emphasis on numerically implementing algorithms. The problems studied will include ordinary and partial differential equations connected with fluid mechanics, quantum mechanics, waves, and other fields. The techniques used will include both Fourier and Chebyshev methods. Prerequisite: MATH 7363E with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**MATH 7375C. Time Series Analysis.**

A study of the theory of time-dependent data. The analysis includes modeling, estimation, and testing; alternating between the time domain; using autoregressive and moving average models and the frequency domain; and using spectral analysis. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375D. Advanced linear Modeling.**

The course provides an extension of regression methodology to more general settings where standard assumptions for ordinary least squares are violated. Topics include generalized least squares, robust regression, bootstrap, regression in the presence of autocorrelated errors, generalized linear models, and logistic and Poisson regression. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375E. Computational Statistics.**

This course focuses on commonly used sampling and optimization algorithms in statistics. Topics include accept-reject method, importance sampling, Markov Chain Monte Carlo algorithms, Fisher scoring algorithm, expectation-maximization algorithm, and minorization-maximization algorithm. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375F. Multivariate Data Analysis.**

This course focuses on statistical methodologies based on multivariate analysis. Topics include multivariate normal distribution, tests of hypothesis on means, multivariate analysis of variance, discriminant analysis, principal component analysis, factor analysis and canonical correlation analysis. Prerequisite: MATH 5305 and (MATH 3376 or MATH 3377) with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375G. Bayesian Methods.**

This course focuses on Bayesian statistical analysis and associated theories. Topics include one-parameter and multi-parameter Bayesian models, choices of priors, formulation of regression models in the Bayesian framework, and related data analysis. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375I. Advanced Statistical Learning.**

This course covers the theoretical foundations in statistical learning and deep learning. Topics include the framework of empirical risk minimization, metric entropy, Vapnik-Chervonenkis dimension, Rademacher and Gaussian complexity, symmetrization and chaining techniques, contraction principle, uniform law of large numbers, sample complexity, and neural networks. Prerequisite: MATH 7337 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378A. Problem Solving, Reasoning, and Proof.**

A study of the fundamental concepts of problem solving, logic, set theory, and mathematical proof and applications of these concepts in mathematics curriculum for grades P-20. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378B. Connecting and Communicating Math.**

This course examines one of the basic principles involved in mathematics education: Connecting and Communicating Mathematics. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378C. Representing Fundamental Math Ideas (Function, Data Analysis, and Enumeration).**

This course examines the basic principles involved in mathematics education. The process of representing fundamental mathematical ideas will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378D. Math Technologies.**

This course examines the basic principles involved in mathematics education: Technology. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378E. Developmental Mathematics Perspectives.**

This course examines developmental mathematics-specific strands including technological course support and placement tools/decisions. Issues related to the first mathematics core course required of undergraduates will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378F. Research on Mathematical Problem Solving in Secondary Schools.**

In this course a careful study is made of elementary techniques for problem solving in a variety of domains, including algebra, number theory, combinatorics, geometry, and logic puzzles. Students will learn these techniques by actually working on a collection of problems in each of these areas. Students will read and examine research about various aspects of problem solving and research in math education that includes both teacher training and student learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378G. Discourse Processes, Traditions, and Analysis in Mathematics Education.**

Discourse and discourse analysis have been used to answer research questions across disciplines throughout the humanities and social sciences. This course will focus on theory and methods for the analysis of discourse in mathematical settings. We will learn how different approaches to discourse are used to understand mathematics learning. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378H. Equity in Mathematics Education.**

Equity in Mathematics Education is a course examining research on equity issues in mathematics education. These equity issues will range from race, culture, class, and gender as they relate to the teaching, learning, and schooling of mathematics education. We will look at how equity is framed within the field of mathematics education, what has been addressed, and what has not been conceptualized. The course will help students understand the literature in the field, critique the extant research literature, design research, and consider important facets of teaching for various student groups. Prerequisite: MATH 7306 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7385. Independent Study in Mathematics.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of mathematics. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7386. Independent Study in Mathematics Education.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of Mathematics Education. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7389. Internship.**

In this course, students will work under the supervision of a faculty member to gain practical knowledge in their field. Student experience can come from industry, government agencies, or other sources but must directly apply to furthering knowledge of applications of mathematics or mathematics education.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7396. Mathematics Education Research Seminar.**

Collaborative research projects with faculty through identifying an educational issue, reviewing literature, creating a research question, designing a methodology, analyzing data, drawing conclusions, implications, and creating a draft of a publishable paper. Prerequisite: MATH 7356, and ED 7352 or MATH 7346, all with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7399A. Dissertation.**

This course represents a Mathematics or Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MATH 7599A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7699A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7999A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**3 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 7301. Theory and Research of Literacy.**

This course examines the current theories and basic research of literacy development from psychological, cultural, linguistic, educational, and epistemological frameworks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7302. Theory and Research of College Basic Literacy.**

This course examines basic literacy needs and instructional strategies for students within postsecondary institutions. Topics include comparison of basic and academic literacy, research and theory relevant to literacy development in college contexts, analyses of historical and current curricular approaches, and evaluation of instructional strategies and materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7303. Theory and Research of College Academic Literacy.**

This course examines academic literacy needs and instructional strategies for students in college. Topics include comparisons of academic, workplace, and new literacies and instructional strategies and materials for developing vocabulary, comprehension, and critical and strategic reading in multiple sources of information.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7304. Theory and Research of Literacy Instruction for Culturally and Linguistically Diverse Readers.**

This course examines the historical and contemporary understandings of language acquisition and instruction; foundational knowledge of literacy research and cultural and linguistic difference; instructional practices, including culturally responsive instruction, linguistic differences, and creating supportive literacy environments; curriculum, assessment, and evaluation; and critical literacy perspectives. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 7305. Theory and Research of College Literacy Assessment.**

This course reviews literacy assessment theory, research, policy, and practice in postsecondary contexts. Topics include accountability, standards-based curricula, cultural and linguistic effects, assessment-driven instruction, reliability and validity, interpretation, and different types of instruments (high-stakes, placement, diagnostic, classroom tests, and qualitative instruments).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7306. Literacy Research Seminar.**

This course explores research and policy papers in literacy and literacy education, examines methodology and conclusions, and considers additional research questions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7307D. Multimodal Critical Discourse Studies.**

This course introduces students to multimodal critical discourse analysis as both a theoretical framework stemming from multimodal semiotics and a set of analytic tools for uncovering dominant ideologies in print language and visual representations. Through a survey of critical discourse analysis approaches and methods including transitivity analysis, deixis, multimodal metonymy and metaphor analysis, and visual analysis, students will examine underlying assumptions perpetuated by representations of developmental education from external policy-driving organizations. Additionally, students will explore the potential for developmental educators to harness multimodal representations of their students and practice in order to reclaim the narrative of developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7307E. Theory, Research, and Practice of Disciplinary Literacies.**

This course examines core principles of disciplinary literacies. Students will examine the theory, research, and pedagogical practices of literacies across the disciplines with an emphasis on understanding the potential for postsecondary learners and Developmental Education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7307F. Curriculum Design in Developmental Education.**

This course focuses on principles and processes of curriculum design and implementation in developmental education contexts, including examination of emerging research and issues. The course pedagogy also engages students in independent curriculum research, planning, and problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

### **RDG 7371. Theory and Research of Postsecondary Integrated Reading and Writing.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **RDG 7372. Theory and Research of New Literacies Studies in Developmental Education.**

This course focuses on the theory and research of New Literacies Studies, which affects instructional practice in postsecondary Developmental Education. It includes an examination of diverse theories and models of multiple digital technology literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **RDG 7373. Community Literacies.**

This course focuses on exploring, understanding, refining, and reflecting on literacy as social practices within a community that informs effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

## **Program Overview**

The Department of Curriculum and Instruction in the College of Education at Texas State offers a Ph.D. in Postsecondary Student Success in Learning, Literacy, and Mathematics that produces researchers, university faculty, and scholars focused on building strong research and theoretical base for postsecondary student success. The Ph.D. is designed to fill the urgent need for advanced research in an emerging field that serves those who are underprepared for postsecondary education.

### **Mission Statement**

The doctoral program in Postsecondary Student Success in Learning, Literacy, and Mathematics within the Department of Curriculum and Instruction prepares future scholars, researchers, leaders, administrators, instructors, and practitioners in the field of postsecondary student success. Both rigorous and supportive, the program aims to advance theory, research, and practice in multiple areas of postsecondary student success — including learning, literacy, and mathematics — by actively engaging students in teaching, scholarship, and professional service. As a multidisciplinary program, the faculty, staff, and students work collaboratively across various academic disciplines, diverse communities, and geographic boundaries.

### **Educational Goal**

Major educational objectives for the programs include the following:

- To prepare postsecondary student success professionals who engage in divergent and critical thinking, are culturally competent,

and are skilled in maximizing technology applications for learning and communication;

- To prepare postsecondary student success professionals who understand and can respond to the nature and needs of students who enroll in postsecondary programs; the complexities of motivation, teaching, learning, and assessment in postsecondary student success settings; the cultural, political, and social systems that create inequities in educational settings; and the structure and management of academic support programs;
- To prepare postsecondary student success professionals with sophisticated research skills that will enable them to critically evaluate postsecondary programs and practices and implement research agendas that will inform practice and policy;
- To prepare postsecondary student success professionals who will serve as leaders in postsecondary educational settings who can engage in institutional leadership, program administration, and innovative program development and evaluation that will promote systemic change and improvement.

## **Advising**

Advising takes three forms: the initial advisor, the program mentor, and the dissertation advisor. When students are first admitted, they are assigned an initial advisor who mentors them from entry through their first year benchmarks in the program. By the end of the first year, students formally ask a faculty member to be their program mentor who advises them from the end of their first year until their comprehensive exams. At a time no later than the completion of their comprehensive exams, students then select a dissertation advisor who is the chair of their dissertation committee, which must be formed at that time. These advising roles can be assumed by the same faculty member or different faculty members depending on students' research interests and foci.

In their first term, students will construct a program plan with the assistance of their initial advisor. The program plan is a focused, detailed description of the doctoral student's proposed course work, specialization, and goals for the doctoral program. The program plan will be submitted to the doctoral program plan committee for approval and suggestions. The program plan must include the following:

- goal statement that includes doctoral study goals (including specialization) and future professional goals
- professional curriculum vitae
- course work plan. This is the appropriate place for petitioning for course transfer for graduate work done previously (there is a 5-year time limit on any course work counting toward candidacy).

The student should work with their advisor for direction while completing the program plan prior to submitting it to the program plan committee. It is due to the program plan committee by November 15 in the fall term of the student's first year of study. After the program plan committee reviews the student's program plan, a meeting may be scheduled with the student for further review of the plan.

## **Application Requirements**

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review

the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - master's degree from a regionally accredited university or demonstrated success in graduate-level studies or professional experience in a field relevant to postsecondary student success in learning, literacy, or mathematics
  - The Postsecondary Student Success in Learning, Literacy, and Mathematics doctorate (both Ph.D. and Ed.D. tracks) requires 96 semester credit hours for students admitted with a bachelor's degree. Students admitted with a bachelor's degree will follow the same program of study as students admitted with a master's degree (66 semester credit hours), but with an additional 30 semester credit hours of open electives.
  - official transcripts from **each institution** where course credit was granted
  - minimum 3.0 GPA (on a 4.0 scale) in all completed graduate course work
  - resume/CV
  - statement of purpose (approximately 500-1000 words) demonstrating the student's research interest and goals as a postsecondary student success professional and potential to contribute to the advancement of scholarly work in the field of postsecondary student success. Students should discuss relevant teaching, research, and/or policy experience as well as provide clear evidence of a commitment to research and scholarship.
  - three letters of recommendation addressing the student's professional and academic background
  - interviews with the admissions committee will be arranged, following the initial screening using the admissions criteria listed above, for qualified applicants

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in [Postsecondary Student Success in Learning, Literacy, and Mathematics](#) concentration in Learning Support requires 66 semester credit hours or 96 semester credit hours for students admitted with a bachelor's degree. Students admitted with a bachelor's degree will follow the same program of study as students admitted with a master's degree (66 semester credit hours), but with an additional 30 semester credit hours of open electives.

### Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
DE 7301	Understanding Learners in Developmental Education Contexts	3
DE 7302	Policy and Politics in Developmental Education	3
DE 7303	Teaching and Learning in Developmental Education	3
DE 7305	Diversity in P-16 Educational Contexts	3
CI 7101	Introduction to the Research Experience (Taken three times)	3
CI 7302	Research Methods and Measurement in Education	3
CI 7351	Beginning Quantitative Research Design and Analysis	3
CI 7352	Beginning Qualitative Design and Analysis	3
CI 7386	Directed Research	3
Choose 9 hours from the following:		9
CI 7353	Intermediate Quantitative Research Design and Analysis	
CI 7354	Intermediate Qualitative Design and Analysis	
CI 7358	Theoretical and Conceptual Frameworks in Qualitative Research	
CI 7359	Seminar in Quantitative Research	
<b>Concentration</b>		
Choose 15 hours from the following:		15
DE 7321	The Community College	
DE 7322	Learning Support Centers in Postsecondary Settings	
DE 7323	Academic Support for Students with Learning Disabilities	
DE 7324	Teaching Learning Strategies and Critical Thinking in Postsecondary Contexts	
DE 7325	Advising, Coaching, and Mentoring Learners in Postsecondary Education	
CI 7326	Grant Development and Management	
DE 7327	Student Motivation and Self-Regulation	
<b>Prescribed Electives</b>		
Choose 3 hours from the following:		3
CI 7303	Educational and Psychological Measurement and Assessment	
CI 7355	Mixed Methods in Research and Evaluation	
CI 7360	Designing Educational Research	
DE 7304A	Curriculum Design in Developmental Education	
DE 7304B	Theory and Research of Digital Literacies	



DE 7380	Managing Developmental Education Programs
ENG 7300	Language Problems in a Multicultural Environment
ENG 7316	Foundations in Rhetoric and Composition
ENG 7317	Specializations in Rhetoric and Composition
ENG 7326	Contemporary Composition Theory
ENG 7383	Studies in Rhetorical Theory
MATH 7188	Seminar in Mathematics Education
MATH 7302	History of Mathematics
MATH 7306	Current Research in Math Education
MATH 7366A	Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors)
MATH 7366E	Developmental Mathematics Curriculum
MATH 7378E	Developmental Mathematics Perspectives
MATH 7396	Mathematics Education Research Seminar
RDG 7301	Theory and Research of Literacy
RDG 7302	Theory and Research of College Basic Literacy
RDG 7303	Theory and Research of College Academic Literacy
RDG 7304	Theory and Research of Literacy Instruction for Culturally and Linguistically Diverse Readers
RDG 7305	Theory and Research of College Literacy Assessment
RDG 7306	Literacy Research Seminar
RDG 7372	Theory and Research of New Literacies Studies in Developmental Education
RDG 7373	Community Literacies
<b>Dissertation</b>	
Choose a minimum of 12 hours from the following:	
DE 7199	Dissertation
DE 7299	Dissertation
DE 7399	Dissertation
DE 7599	Dissertation
DE 7699	Dissertation
DE 7999	Dissertation
<b>Total Hours</b>	<b>66</b>

## Advancement to Candidacy

### Application for Advancement to Candidacy

Once all course work (except for dissertation course work) has been completed, the comprehensive exams have been passed, and the dissertation proposal has been successfully defended, doctoral students will apply for advancement to candidacy. Candidacy must be achieved within five (5) years of initiating program course work. No credit will be applied toward the doctoral degree for course work completed more than five (5) years before the date on which the student is advanced to candidacy. This time limit applies toward credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions. Requests for a time extension must be made to the program, which in turn submits a recommendation to The Graduate College. Achieving doctoral candidacy allows the student to begin doctoral dissertation research. Candidacy forms are found here: [http://www.gradcollege.txstate.edu/Fac\\_Resources/Forms.html](http://www.gradcollege.txstate.edu/Fac_Resources/Forms.html).

## Grade-Point Requirements for Advancement to Candidacy

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.0. No grade earned below a "B" on any graduate course may apply toward a doctorate at Texas State. Incomplete grades must be cleared through The Graduate College before a student can be approved for advancement to candidacy.

## Comprehensive Exams

All students in the Doctoral Program in Postsecondary Student Success in Learning, Literacy, and Mathematics are required to pass a Comprehensive Examination at the conclusion of coursework, prior to moving into the dissertation phase of the program. The purposes of this exam are to demonstrate mastery of the coursework content and preparation for independent research. Ideally, this process will begin during students' last semester of coursework, and will be completed the same semester.

Students will first discuss their ideas for the comprehensive examination with their advisor. Students will then form a comprehensive exam committee that is comprised of, at least, their advisor (as Chair) and two other faculty members from the Postsecondary Student Success in Learning, Literacy, and Mathematics program.

After stating their intention to take the comprehensive exam at the beginning of the semester, students will submit written responses to three foreknown items and participate in an oral defense of their work that includes a student presentation about their written responses to the items and fielding of faculty questions. Committee evaluations will be either pass, needs revisions, or does not pass. If applicable, students will have two weeks to make revisions, and committee evaluations of the revised work will be either pass or does not pass. Students who do not pass, will have two more attempts to pass the comprehensive exam before being discontinued from the program.

## Dissertation Proposal

At a time no later than the completion of their comprehensive exams, students must select a dissertation advisor. After selecting their dissertation advisor, and before beginning their dissertation proposal, students will form a dissertation committee that will provide technical support for the inception, conduct, and completion of the dissertation research study and evaluate the final product. The student will undertake the research and write the dissertation under the guidance of their dissertation advisor. The dissertation proposal must be successfully defended and approved by the dean of The Graduate College before a student can be advanced to candidacy. Information about the dissertation procedures can be found in the Dissertation tab.

Students must submit the dissertation proposal and one copy of the official "Dissertation Proposal form" (available on The Graduate College website) to the dissertation advisor. After obtaining committee members' signatures, the student must submit the dissertation proposal and dissertation proposal form to the program director for signature. The form also requires evidence of the IRB approval for any research involving human subjects. The program director will then forward the dissertation proposal and form through the department chair to the dean of The Graduate College for final approval. Final approval must be received before proceeding with the defense of the dissertation proposal. The Dissertation Proposal form may be obtained from The Graduate College website.

## Defense of the Dissertation Proposal

Students must defend the dissertation proposal in a meeting that begins with a public presentation and continues with an oral examination by the dissertation committee. The examination will address the proposed dissertation topic (problem definition and scope), relevant literature, and research method. The dissertation committee must sign the "Defense of the Dissertation Proposal form" to indicate approval and then submit the form for the signature of the doctoral program director and the department chair. The approved Defense of the Dissertation Proposal form must be forwarded to the dean of The Graduate College. The dissertation proposal must be approved and the Defense of the Dissertation Proposal form must be on file in the office of The Graduate College before any student can advance to candidacy and begin dissertation research.

## Recommendation for Advancement to Candidacy

The dissertation committee recommends the applicant for advancement to candidacy to the doctoral program director, the department chair, and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been met. To be eligible for admission to candidacy the student must have successfully completed the comprehensive exam, completed all course work, and successfully defended the dissertation proposal.

## Dissertation Research and Writing

All doctoral students are required to complete a dissertation. The dissertation must be an original contribution to scholarship and the result of independent investigation in a significant area. Preparation of the dissertation must follow the latest edition of the *Publication Manual of the American Psychological Association*.

## Dissertation Enrollment Requirements

Any time a student is receiving official guidance on the dissertation, the student must be enrolled in a dissertation course. A student must maintain continuous enrollment in dissertation hours every term from the time they advance to candidacy until the dissertation is defended and approved. If a student is receiving supervision on the dissertation during the summer or the student is graduating during the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred. Students must enroll in a minimum of 12 dissertation credit hours.

## Dissertation Time Limit

Students must complete the dissertation within five (5) years of advancement to candidacy. The student's dissertation advisor, with the student's dissertation committee, will review the student's progress annually.

## Dissertation Advisor and Dissertation Committee

The dissertation committee must be composed of four approved doctoral graduate faculty members. The doctoral student must select a minimum of four committee members, one of which must be outside the program. The chair of the dissertation committee must be from the program. All committee members must hold at least associate doctoral faculty status, and chairs must hold core doctoral faculty status. To form the dissertation committee, the "Dissertation Committee Request form"

must be completed and signed by the student, committee members, committee chair, doctoral program director, and the department chair and then forwarded to the dean of The Graduate College for approval and signature. The required Dissertation Committee Request form may be obtained from The Graduate College website.

## Committee Changes

Any changes to the dissertation committee must be submitted for approval to the dissertation advisor, the doctoral program director, the department chair, and the dean of The Graduate College. Changes must be submitted no less than sixty (60) days before the final dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be obtained from The Graduate College website.

## Defense of the Dissertation

All dissertations must meet the following requirements as judged by the student's dissertation committee:

1. a systematic investigation of a problem,
2. informed by previous theory and research,
3. that adds to the body of knowledge in the area of investigation, and
4. is presented in a form capable of dissemination to scholars and practitioners.

Students must pass the final oral examination that covers the dissertation and the general field of the dissertation. Students must defend the dissertation in a meeting that begins with a public presentation and continues with an oral exam by the dissertation committee. Before scheduling the final oral exam, the student must have received approval of the dissertation advisor. A completed "Dissertation Defense Report form" must be submitted according to the schedule posted by the dean of The Graduate College and no later than ten days before the date of graduation. The student must complete all aspects of the dissertation, including successful defense and submission of the dissertation to The Graduate College, within five (5) years of advancement to candidacy.

## Approval and Submission of the Dissertation and Abstract

The approval of the dissertation requires positive votes from the dissertation advisor and from a majority of the dissertation committee members. Once the committee has approved the dissertation, one copy of the dissertation and the signed "Committee Approval form" must be submitted to the dean of The Graduate College for final approval. Refer to the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation* for specific guidelines.

Doctoral level courses in Developmental Education: CI (p. 1254), DE (p. 1255), ENG (p. 1257), MATH (p. 1258), RDG (p. 1265)

## Courses Offered

### Curriculum and Instruction (CI)

#### **CI 7101. Introduction to the Research Experience.**

This course is designed to introduce students to the program and to the ongoing research activities of its faculty. Emphasis is placed on identifying and coordinating opportunities for joint research and scholarship among faculty and students. Students must enroll in the course for three semesters before dissertation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### **CI 7302. Research Methods and Measurement in Education.**

This course provides a comprehensive introduction to educational research with a focus on research design, research methods and methodology, and fundamental measurement issues in quantitative, qualitative, and mixed-methods research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7303. Educational and Psychological Measurement and Assessment.**

Philosophical and empirical foundations of measurement, assessment, testing, and evaluation. Topics include philosophical and mathematical foundations in research; empirical levels and measurement description; test construction; observational rating scales; measurement interpretation; social, legal, and ethical implications; item analysis/refinement for scale performance; reliability and validity evidence; and standardized and placement tests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7310. Teaching in College.**

Teaching strategies for teaching/instructional assistants focused on creating syllabi, adapting to diverse student populations, collaborating with colleagues and staff, implementing active learning strategies, fostering assigned reading, assessing learning, and integrating technology. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **CI 7326. Grant Development and Management.**

This course focuses on developing competitive grant proposals and understanding grant management resources. Strategies will encompass locating funding sources, evaluating proposals, developing proposals and budgets, and methods of meeting accountability requirements.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7351. Beginning Quantitative Research Design and Analysis.**

This course introduces students to quantitative research design and analysis. Topics include descriptive statistics; sampling techniques; statistical inference, including the null hypothesis, significance tests, and confidence intervals; and causal-comparative analyses, including t-test and ANOVA. Corequisite: CI 7302 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

#### **CI 7352. Beginning Qualitative Design and Analysis.**

This course introduces students to the qualitative paradigm. Topics include distinctive features, alternative qualitative traditions, purposeful sampling, common data collection methods, inductive analysis, the role of the researcher, and evaluation of qualitative research. Corequisite: CI 7302 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7353. Intermediate Quantitative Research Design and Analysis.**

This course focuses on intermediate quantitative research design and statistical methods of data analysis related to problems in education, psychology, sociology, and biological sciences. The general linear model based univariate and selected multivariate statistical techniques are examined including theory/purpose, logic, practical implications, and interpretation of various analytic techniques. Prerequisite: CI 7351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7354. Intermediate Qualitative Design and Analysis.**

This course focuses on issues in design and implementation of qualitative research. Topics include influence of alternative traditions, literature in qualitative research, access to the field and ethical issues, researcher-participant relationships, purposeful sampling strategies, inductive analysis procedures, developing theory, and reporting research. Prerequisite: CI 7352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7355. Mixed Methods in Research and Evaluation.**

This course will cover mixed methods research designs that can be used in the evaluation of educational interventions and programs. Topics include mixed methods research designs, program evaluation models, quantitative and qualitative data analysis and interpretation, reading mixed methods research articles, and writing mixed methods research proposals and evaluation reports. Prerequisite: CI 7351 and CI 7352 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7358. Theoretical and Conceptual Frameworks in Qualitative Research.**

This course is intended for those versed in current paradigmatic and epistemological states of human inquiry and presents an opportunity to design a research project and address the major issues of a research career. Prerequisite: CI 7352 and CI 7354 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7359. Seminar in Quantitative Research.**

This course is a small-group seminar that focuses on analytic strategies specific to the doctoral student's dissertation topic. Examples include structural equation modeling, hierarchical linear modeling, log linear modeling, non-parametric analyses, factor analysis, factorial analysis of variance, and other multivariate statistical methods. Prerequisite: CI 7351 and CI 7353 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7360. Designing Educational Research.**

Students identify problems in Developmental Education, develop a strategic proposal to apply to these problems, and create an evaluation plan to assess the implementation of their proposal. Students also develop skills in critiquing research reports and in synthesizing research from Developmental Education. Prerequisite: CI 7353 or CI 7354 or CI 7355 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7378. Independent Study.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in the Department of Curriculum and Instruction. May be repeated for additional credit at the discretion of the program coordinator.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7386. Directed Research.**

Students will participate in an authentic research experience, either by working as part of a doctoral faculty member's research team or developing an original research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 7388. Educational Leadership for Social Justice.**

This course provides an in-depth study of the theories and practices related to educational leadership in PreK-12 educational contexts through a social justice lens. Students will examine current social justice issues in schools and develop strategies for conceptualizing and implementing institutional change that works toward a more equitable education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7389A. Topics in Instructional Technology.**

This topic offers an in-depth study of systematic instructional design emphasizing the selection and use of appropriate media for delivering instruction to maximize student learning. Special emphasis in this topic is on the leader's role in influencing the use of technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**CI 7389C. Special Topics: Race Theory in Educational Research.**

This course will explore racial theories and paradigms applicable to the study of race in K-20 educational settings. Students will analyze foundational scholarship in the formation of racial theories, research methodology, key tenets of race research, and literature pertinent to current trends in educational research regarding race. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**Developmental Education (DE)****DE 7199. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7299. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7301. Understanding Learners in Developmental Education Contexts.**

This course identifies the evolution, characteristics, demographics, and needs of learners in Developmental Education contexts. Emphasis is placed on understanding internal factors, including the cognitive, affective, and psychosocial needs of students, as well as on analyzing external factors, including the social, political and institutional forces that impact learners' educational experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7302. Policy and Politics in Developmental Education.**

This course addresses the policy and politics of planning, funding, implementing, and evaluating Developmental Education programs in postsecondary education. Readings and discussions focus on current and historical issues relevant to addressing the academic needs of educationally disadvantaged students from the perspective of researchers, program directors, policy analysts, and instructors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7303. Teaching and Learning in Developmental Education.**

The course focuses on the institutional development, intellectual development, learner development, and self-development for effective teaching and learning in developmental education. Topics include instructional and learner theories, pedagogies, assessment and evaluation techniques, and best practices for instruction and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7304A. Curriculum Design in Developmental Education.**

This course focuses on principles and processes of curriculum design and implementation in developmental education contexts, including examination of emerging research and issues. The course pedagogy also engages students in independent curriculum research, planning, and problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**DE 7304B. Theory and Research of Digital Literacies.**

This course focuses on understanding the complex relationships between technology, teaching, and learning in varied developmental education environments. Tools and strategies for planning, integrating, and assessing technology-supported instruction are explored within frameworks linking theory to practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**DE 7304D. Transformative Learning.**

This course introduces students to the core principles of transformative learning. The course is a theory-driven, project-based advanced class designed to enable students to develop theoretical perspectives, engage in intensive practice, and understand the use of transformative learning for applications with postsecondary individuals, groups, and organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7304E. Current Topics in Motivation Intervention Research.**

This course focuses on analyzing, synthesizing, discussing, and applying cutting-edge research on various types of motivation interventions in education. Emphasis will be placed on theory, research, and practice in postsecondary educational settings and Developmental Education contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7304F. Current Topics in Strategic and Self-Regulated Learning Intervention Research.**

This course examines cutting-edge research on strategic and self-regulated learning interventions. Emphasis will be placed on theory, research, and practice relevant to postsecondary educational settings, however, students will be encouraged to apply course content to their areas of interest which may be outside of postsecondary educational settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7305. Diversity in P-16 Educational Contexts.**

This course uses critical multicultural frameworks to trace the evolution of learners in a P-16 educational system. Students in this course examine school practices and policies in an attempt to map the educational trajectory and improve the educational experiences of P-16 students who are underrepresented and underserved. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7321. The Community College.**

Introduction to community college and to its roles and functions in American education. Special attention will be directed to evolution, development and patterns of organization, purposes, programs, personnel and current issues of the community college.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7322. Learning Support Centers in Postsecondary Settings.**

The course explores the learning assistance movement in postsecondary settings including its history, leaders, and current research. Topics include program planning; leadership, organization, and management; human and financial resources; facilities and equipment; legal responsibilities; equal opportunity and access; diversity; ethics; campus and community relations; and assessment and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**DE 7323. Academic Support for Students with Learning Disabilities.**

The course focuses on Learning Disabilities (LD) and Executive Function (EF) Disorders and their nature, prevalence, and significance in postsecondary environments. Topics include theories about the origins and nature of LD and EF, development across the lifespan, characteristics of individuals, and approaches to service, delivery and teaching. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7324. Teaching Learning Strategies and Critical Thinking in Postsecondary Contexts.**

This course explores theory and pedagogy of learning strategies, problem solving, and critical thinking skills in postsecondary contexts. Topics include variables in teaching and learning, methods of assessment, and approaches to instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7325. Advising, Coaching, and Mentoring Learners in Postsecondary Education.**

The course will focus on theories and techniques of academic advising, coaching, and mentoring skills for learners enrolled in postsecondary education. Didactic and experiential activities will provide students enrolled in the course with opportunities to learn and practice skill development within these academic support programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7380. Managing Developmental Education Programs.**

This course focuses on the theoretical and practical elements of management of Developmental Education programs in higher education. Readings and discussions focus generally on best practices in higher education leadership and specifically on best practices in leadership and management in Developmental Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7381. Practicum.**

A 150-clock hour, one-semester practical experience in an institution or agency other than one's own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities to include program planning, management, budgeting, and/or evaluation.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 7399. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7599. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7699. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7999. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**English (ENG)****ENG 7300. Language Problems in a Multicultural Environment.**

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7314. Specializations in Professional and Technical Communication Topics.**

Provides theoretical and practical information for specialized types of technical and professional communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7316. Foundations in Rhetoric and Composition.**

A course providing students with theoretical, pedagogical, and/or methodological foundations in the field of rhetoric and composition. Emphases vary but may include Contemporary Composition Pedagogy, Basic Writing Theory and Practice, and Writing Assessment. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7317. Specializations in Rhetoric and Composition.**

A course providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Across the Curriculum, Service Learning, Writing Center Theory and Practice, Computers and Writing, Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## **Mathematics (MATH)**

**MATH 7111. Seminar in Teaching.**

Seminar on individual study projects concerned with selected problems in the teaching of mathematics. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MATH 7188. Seminar in Mathematics Education.**

Students are required to attend weekly research seminars in Mathematics Education and to give at least one research presentation in the seminar during the semester. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7199A. Dissertation.**

Original research and writing in Mathematics Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7299A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7301. Studies in Mathematics.**

This course provides basic foundations in Mathematics for students entering the doctoral program in Mathematics or Mathematics Education. This course may be repeated. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 7302. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7303. Analysis I.**

This course covers foundations of modern analysis. Topics include: sequences,  $\limsup$ ,  $\liminf$ , Sigma Algebras of sets that include open and closed sets, sequences of functions, pointwise and uniform convergence, lower and upper semi-continuity, Borel sets, outer measure, and Lebesgue measure. Prerequisite: MATH 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7306. Current Research in Math Education.**

This course surveys the various current social, political, and economic trends in local, state, national, and international settings that are related to research in Mathematics Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7307. Algebra I.**

Applications of Algebra and topics in modern algebra, including permutation groups, symmetry groups, Sylow theorems, and select topics from Ring Theory. Prerequisite: MATH 4307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7309. Topology I.**

A course in point-set topology emphasizing topological spaces, continuous functions, connectedness, compactness, countability, separability, metrizability, CW-complexes, simplicial complexes, nerves, and dimension theory. Prerequisite: MATH 4330.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7313. Analysis II.**

This course covers the theory of integration with special emphasis on Lebesgue integrals. Topics include: Lebesgue integral, Bounded Convergence theorem, differentiation and integration, absolute continuity, and  $L_p$  spaces. Prerequisite: Math 7303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7317. Algebra II.**

A study of the important algebraic structures of rings and fields. Topics covered include rings, ideals, modules, polynomial rings, Euclidean algorithm, finite fields, and field extensions. Topics also include an introduction to Galois Theory with an emphasis on the geometric applications. Prerequisite: MATH 7307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7319. Topology II: Algebraic Topology.**

This course covers the fundamental concepts and tools of algebraic topology. Topics include the fundamental group, covering spaces, homotopy type, the higher homotopy groups, singular homology theory, and the computation of homology groups via exact sequences and applications. Prerequisite: MATH 7307 and MATH 7309.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7321. Graph Theory.**

Topics in this course include trees, connectivity of graphs, Eulerian graphs, Hamiltonian graphs, planar graphs, graph coloring, matchings, factorizations, digraphs, networks, and network flow problems. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7323. Theories of Knowing and Learning in Mathematics Education.**

This course surveys the major theories of knowing and learning that have influenced mathematics education. These theories include behaviorism, constructivism, sociocultural theories, situated cognition, and others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7324. Curriculum Design & Analysis.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques that are related to curriculum design in Mathematics Education for grade levels P-16.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7325. Statistics 1.**

A study of the mathematical and probabilistic underpinnings of the techniques used in statistical inference. Topics covered include sampling, sampling distributions, confidence intervals, and hypothesis testing with an emphasis on both simulations and derivations. Prerequisite: Math 2321 and Math 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7328. Instructional Techniques & Assessments.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques of instruction in Mathematics Education and the related assessment procedures for each for grade levels P-20.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7331. Combinatorics.**

This course is a study of fundamental principles of combinatorics. Topics include: permutations and combinations, the Pigeonhole principle, the principle of inclusion-exclusion, binomial and multinomial theorems, special counting sequences, partitions, posets, extremal set theory, generating functions, recurrence relations, and the Polya theory of counting. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7335. Statistics II: Linear Modeling.**

A study of the formulation and statistical methodologies for fitting linear models. Topics include the general linear hypothesis, least-squares estimation, Gauss-Markov theorem, assessment of model fit, effects of departures from assumptions, model design, and criteria for selection of optimal regression models. Prerequisite: MATH 3377 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7346. Quantitative Research Analysis in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and use of appropriate design methodologies to achieve the strongest possible evidence to support or refute a knowledge claim. Prerequisite: MATH 7306 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7354. Advanced Qualitative Research.**

This course encompasses the techniques and tools needed for the development, investigation, and demonstration of competence in conducting qualitative research in mathematics education. Principles of qualitative data analysis are a significant focus of the course, with particular attention given to specific methods used to code and analyze data. Prerequisite: ED 7352 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356B. Advanced Qualitative Research.**

This course encompasses investigation, development, and demonstration of competence, design, and execution for mathematics education problems in qualitative research. Prerequisite: ED 7352 or CI 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356C. Action Research in Mathematics Education.**

This course examines underlying theory and issues in action research model and the development of action research projects. Prerequisites: MATH 7346 or ED 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7358. Advanced Quantitative Research in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and the use of appropriate design methodologies to achieve the most substantial evidence to support or refute a knowledge claim. Prerequisite: MATH 7346 with a grade of "B" or better or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7361. Seminar in Advanced Mathematics.**

Material in course will vary with the interest of students and faculty. A detailed study of subject matter may be chosen from advanced areas of analysis; algebra; topology and geometry; applied mathematics; and probability and statistics. This course is repeatable for credit when subject matter varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7363A. COMPLEX ANALYSIS.**

This course is a brief introduction to the complex number system and basic point-set topology of the complex plane, followed by a proof-based and rigorous study of the principal results of the analysis of functions of a single complex variable. Prerequisite: MATH 4315 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363B. NUMERICAL ANALYSIS.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using computer algebra systems. Symbolic, numerical, and graphical techniques will be studied. Applications will be drawn from the sciences, engineering, and mathematics. Prerequisite: MATH 3323 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363C. FUNCTNL ANALYSIS.**

This course presents the three basic fundamentals theorems of functional analysis: the Hanh-Banach theorem, the uniform boundedness theorem, and the open mapping theorem. Prerequisite: MATH 7303 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363E. Numerical Analysis II.**

This course will involve the analysis and numerical implementation of algorithms to solve partial differential equations. Applications will be drawn from science, engineering, and mathematics. Topics include the numerical solution of linear partial differential equations and the related linear systems of equations. Prerequisite: MATH 7363B with a letter grade of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363F. Functional Analysis II.**

This course will involve the analysis of infinite dimensional vector spaces including spaces of functions, measures, and distributions. Topics include Fourier transforms, theory of Banach spaces, and operator theory. Prerequisite: MATH 7363C with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366A. Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors).**

This course examines how to develop and teach post-secondary students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisites: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366B. Teaching K-12 Students (Elementary, Middle School, and High School).**

This course examines how to develop and teach K-12 students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366C. Teaching Teachers (In-Service; Pre-Service).**

This course examines how to prepare teachers of mathematics. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366D. Teaching Specialized Content.**

This course will be an in-depth study of a specialized content area in mathematics with an emphasis on teaching. The specific content area will vary by instructor. Examples include Euclidean Simplex Geometry and Discrete Probability Spaces with Implications for Public School Curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366E. Developmental Mathematics Curriculum.**

This course surveys the research, development, and evaluation of the scope and sequence of developmental mathematics curriculum. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366F. Research in Undergraduate Mathematics Education I.**

Students will develop the requisite knowledge to become a good consumer of Research in Undergraduate Mathematics Education (RUME) research. The course will cover the theoretical underpinnings of current and historic RUME research. Students will develop the knowledge to understand relevant theoretical stances and the role they play in research. Prerequisite: Math 7306 or permission from the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366G. Research in Undergraduate Mathematics Education II.**

In this course, students will develop necessary knowledge to design/conduct RUME research via a topic-driven look at current RUME research. Core topics include proof, analysis/calculus, abstract algebra, linear algebra, and differential equations. Students will develop a depth of knowledge related to these topics and engage in research design and development. Prerequisite: MATH7306 and MATH7366F.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7367B. ADV GROUP THEORY.**

This course covers topics including properties of solvable, p-solvable and nilpotent groups, group actions, transfer theorems, simple groups and composition series, the generalized Fitting subgroup, automorphism groups, classical groups and linear representations of groups. Prerequisite: MATH 7307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369C. Low-dimensional topology.**

This course is an introduction to low-dimensional topology. Topics include surfaces, 3-manifolds, knots, and 4-manifolds. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369D. Characteristic Classes.**

This course is an introduction to vector bundles and characteristic classes. Topics covered include Stiefel-Whitney classes, Chern classes, Euler class, Pontrjagin classes, and their computation. Additional topics may include manifold immersion problems. Prerequisite: MATH 7317 and MATH 7319 both with grades of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**MATH 7369E. Differential Geometry.**

This course is an introduction to modern tools of differential geometry. Topics covered include manifolds, Riemannian metrics, connections, covariant derivatives, geodesics, curvatures, extrinsic and intrinsic computations. Other possible topics include hyperbolic geometry, Lie groups, Chern-Weil theory, surfaces of prescribed mean curvature, the Gauss-Bonnet theorem, and the Cartan-Hadamard theorem. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7371A. Advanced Graph Theory.**

Topics in this course include Turan's problems, Ramsey theory, random graph theory, extremal graph theory, algebraic graph theory, domination of graphs, distance problems, and applications. Prerequisite: MATH 7321.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371B. Advanced Combinatorics.**

Topics in this course include Block designs, Latin squares, combinatorial optimization problems, coding theory, matroids, difference sets, and finite geometry. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371C. Combinatorial Number Theory.**

A study of fundamental techniques in combinatorial number theory. Topics will include Waring's problem, additive number theory, and probabilistic methods in number theory. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371D. Discrete Optimization.**

A study of some fundamental techniques in discrete optimization. Topics include discrete optimization, linear programming, integer programming, integer nonlinear programming, dynamic programming, location problem, scheduling problem, transportation problem, postman problem, traveling salesman problem, matroids, and NP-completeness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371E. Algorithms and Complexity.**

A study of some fundamental concepts of computability and complexity. Topics include polynomially bounded problems, NP-complete problems, exponentially hard problems, undecidable problems, and reducibility. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371F. Probabilistic Methods in Discrete Mathematics.**

A study of some fundamental probabilistic techniques used to solve problems in graph theory, combinatorics, combinatorial number theory, combinatorial geometry, and algorithm. Topics include linearity of expectation, alterations, second moment, local lemma, correlation inequalities, martingales, Poisson paradigm, and pseudo-randomness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371G. Applied Discrete Mathematics.**

This course introduces fundamental concepts in logic, Boolean algebra, and binomial coefficients; and applications in different fields such as complexity of algorithms and network theory. Prerequisites: MATH 2472 and MATH 4307, all with a grade of "C" or better, or with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371H. Combinatorial Networks.**

Combinatorial Networks is an area of study of certain types of networks using combinatorial methods extensively. This course introduces fundamental basics as well as the latest development in this area of research. Prerequisite: MATH 5307/7307 with a grade of "C" or higher.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7373B. Partial Differential Equations I.**

This course covers the theory and application of partial differential equations, typical equations of mathematical physics, Cauchy problem for equations of the first order, classification of second-order equations, Cauchy problem for second-order hyperbolic equations, Duhamel's principle, potential theory and elliptic equations, maximum principle, and parabolic equations. Prerequisite: MATH 3323, 3373 and 3380 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373C. Partial Differential Equations II.**

This course covers the existence and uniqueness theory for boundary value problems of partial differential equations (PDE) including the topics linear evolution equations, variational techniques, non-variational techniques, Hamilton-Jacobi equations, conservation laws. Prerequisite: MATH 7373B with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373G. Spectral Methods.**

This course covers the essentials of spectral collocation methods with an emphasis on numerically implementing algorithms. The problems studied will include ordinary and partial differential equations connected with fluid mechanics, quantum mechanics, waves, and other fields. The techniques used will include both Fourier and Chebychev methods.

Prerequisite: MATH 7363E with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375C. Time Series Analysis.**

A study of the theory of time-dependent data. The analysis includes modeling, estimation, and testing; alternating between the time domain; using autoregressive and moving average models and the frequency domain; and using spectral analysis. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375D. Advanced linear Modeling.**

The course provides an extension of regression methodology to more general settings where standard assumptions for ordinary least squares are violated. Topics include generalized least squares, robust regression, bootstrap, regression in the presence of autocorrelated errors, generalized linear models, and logistic and Poisson regression. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375E. Computational Statistics.**

This course focuses on commonly used sampling and optimization algorithms in statistics. Topics include accept-reject method, importance sampling, Markov Chain Monte Carlo algorithms, Fisher scoring algorithm, expectation-maximization algorithm, and minorization-maximization algorithm. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375F. Multivariate Data Analysis.**

This course focuses on statistical methodologies based on multivariate analysis. Topics include multivariate normal distribution, tests of hypothesis on means, multivariate analysis of variance, discriminant analysis, principal component analysis, factor analysis and canonical correlation analysis. Prerequisite: MATH 5305 and (MATH 3376 or MATH 3377) with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375G. Bayesian Methods.**

This course focuses on Bayesian statistical analysis and associated theories. Topics include one-parameter and multi-parameter Bayesian models, choices of priors, formulation of regression models in the Bayesian framework, and related data analysis. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375I. Advanced Statistical Learning.**

This course covers the theoretical foundations in statistical learning and deep learning. Topics include the framework of empirical risk minimization, metric entropy, Vapnik-Chervonenkis dimension, Rademacher and Gaussian complexity, symmetrization and chaining techniques, contraction principle, uniform law of large numbers, sample complexity, and neural networks. Prerequisite: MATH 7337 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378A. Problem Solving, Reasoning, and Proof.**

A study of the fundamental concepts of problem solving, logic, set theory, and mathematical proof and applications of these concepts in mathematics curriculum for grades P-20. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378B. Connecting and Communicating Math.**

This course examines one of the basic principles involved in mathematics education: Connecting and Communicating Mathematics. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378C. Representing Fundamental Math Ideas (Function, Data Analysis, and Enumeration).**

This course examines the basic principles involved in mathematics education. The process of representing fundamental mathematical ideas will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378D. Math Technologies.**

This course examines the basic principles involved in mathematics education: Technology. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378E. Developmental Mathematics Perspectives.**

This course examines developmental mathematics-specific strands including technological course support and placement tools/decisions. Issues related to the first mathematics core course required of undergraduates will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378F. Research on Mathematical Problem Solving in Secondary Schools.**

In this course a careful study is made of elementary techniques for problem solving in a variety of domains, including algebra, number theory, combinatorics, geometry, and logic puzzles. Students will learn these techniques by actually working on a collection of problems in each of these areas. Students will read and examine research about various aspects of problem solving and research in math education that includes both teacher training and student learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378G. Discourse Processes, Traditions, and Analysis in Mathematics Education.**

Discourse and discourse analysis have been used to answer research questions across disciplines throughout the humanities and social sciences. This course will focus on theory and methods for the analysis of discourse in mathematical settings. We will learn how different approaches to discourse are used to understand mathematics learning. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378H. Equity in Mathematics Education.**

Equity in Mathematics Education is a course examining research on equity issues in mathematics education. These equity issues will range from race, culture, class, and gender as they relate to the teaching, learning, and schooling of mathematics education. We will look at how equity is framed within the field of mathematics education, what has been addressed, and what has not been conceptualized. The course will help students understand the literature in the field, critique the extant research literature, design research, and consider important facets of teaching for various student groups. Prerequisite: MATH 7306 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7385. Independent Study in Mathematics.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of mathematics. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7386. Independent Study in Mathematics Education.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of Mathematics Education. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7389. Internship.**

In this course, students will work under the supervision of a faculty member to gain practical knowledge in their field. Student experience can come from industry, government agencies, or other sources but must directly apply to furthering knowledge of applications of mathematics or mathematics education.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7396. Mathematics Education Research Seminar.**

Collaborative research projects with faculty through identifying an educational issue, reviewing literature, creating a research question, designing a methodology, analyzing data, drawing conclusions, implications, and creating a draft of a publishable paper. Prerequisite: MATH 7356, and ED 7352 or MATH 7346, all with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7399A. Dissertation.**

This course represents a Mathematics or Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MATH 7599A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7699A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7999A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Reading (RDG)

**RDG 7301. Theory and Research of Literacy.**

This course examines the current theories and basic research of literacy development from psychological, cultural, linguistic, educational, and epistemological frameworks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7302. Theory and Research of College Basic Literacy.**

This course examines basic literacy needs and instructional strategies for students within postsecondary institutions. Topics include comparison of basic and academic literacy, research and theory relevant to literacy development in college contexts, analyses of historical and current curricular approaches, and evaluation of instructional strategies and materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7303. Theory and Research of College Academic Literacy.**

This course examines academic literacy needs and instructional strategies for students in college. Topics include comparisons of academic, workplace, and new literacies and instructional strategies and materials for developing vocabulary, comprehension, and critical and strategic reading in multiple sources of information.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7304. Theory and Research of Literacy Instruction for Culturally and Linguistically Diverse Readers.**

This course examines the historical and contemporary understandings of language acquisition and instruction; foundational knowledge of literacy research and cultural and linguistic difference; instructional practices, including culturally responsive instruction, linguistic differences, and creating supportive literacy environments; curriculum, assessment, and evaluation; and critical literacy perspectives. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 7305. Theory and Research of College Literacy Assessment.**

This course reviews literacy assessment theory, research, policy, and practice in postsecondary contexts. Topics include accountability, standards-based curricula, cultural and linguistic effects, assessment-driven instruction, reliability and validity, interpretation, and different types of instruments (high-stakes, placement, diagnostic, classroom tests, and qualitative instruments).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7306. Literacy Research Seminar.**

This course explores research and policy papers in literacy and literacy education, examines methodology and conclusions, and considers additional research questions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7307D. Multimodal Critical Discourse Studies.**

This course introduces students to multimodal critical discourse analysis as both a theoretical framework stemming from multimodal semiotics and a set of analytic tools for uncovering dominant ideologies in print language and visual representations. Through a survey of critical discourse analysis approaches and methods including transitivity analysis, deixis, multimodal metonymy and metaphor analysis, and visual analysis, students will examine underlying assumptions perpetuated by representations of developmental education from external policy-driving organizations. Additionally, students will explore the potential for developmental educators to harness multimodal representations of their students and practice in order to reclaim the narrative of developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7307E. Theory, Research, and Practice of Disciplinary Literacies.**

This course examines core principles of disciplinary literacies. Students will examine the theory, research, and pedagogical practices of literacies across the disciplines with an emphasis on understanding the potential for postsecondary learners and Developmental Education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7307F. Curriculum Design in Developmental Education.**

This course focuses on principles and processes of curriculum design and implementation in developmental education contexts, including examination of emerging research and issues. The course pedagogy also engages students in independent curriculum research, planning, and problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7371. Theory and Research of Postsecondary Integrated Reading and Writing.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7372. Theory and Research of New Literacies Studies in Developmental Education.**

This course focuses on the theory and research of New Literacies Studies, which affects instructional practice in postsecondary Developmental Education. It includes an examination of diverse theories and models of multiple digital technology literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7373. Community Literacies.**

This course focuses on exploring, understanding, refining, and reflecting on literacy as social practices within a community that informs effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

## Program Overview

The Department of Curriculum and Instruction in the College of Education at Texas State offers a Ed.D. in Postsecondary Student Success in Learning, Literacy, and Mathematics that produces highly-qualified program leaders and practitioners in postsecondary student success programs. The Ed.D. is designed to fill the urgent need for advanced research in an emerging field that serves those who are underprepared for postsecondary education.

## Mission Statement

The Doctoral program in Postsecondary Student Success in Learning, Literacy, and Mathematics within the Department of Curriculum and Instruction prepares future scholars, researchers, leaders, administrators, instructors, and practitioners in the field of postsecondary student success. Both rigorous and supportive, the program aims to advance theory, research, and practice in multiple areas of postsecondary student success — including learning, literacy, mathematics — by actively engaging students in teaching, scholarship, and professional service. As a multidisciplinary program, the faculty, staff, and students work collaboratively across various academic disciplines, diverse communities, and geographic boundaries.

## Educational Goal

Major educational objectives for the programs include the following:

- To prepare postsecondary student success professionals who engage in divergent and critical thinking, are culturally competent, and are skilled in maximizing technology applications for learning and communication;
- To prepare postsecondary student success professionals who understand and can respond to the nature and needs of students who enroll in postsecondary programs; the complexities of motivation, teaching, learning, and assessment in postsecondary settings; the cultural, political, and social systems that create inequities in educational settings; and the structure and management of academic support programs;
- To prepare postsecondary student success professionals with sophisticated research skills that will enable them to critically evaluate postsecondary programs and practices and implement research agendas that will inform practice and policy;
- To prepare postsecondary student success professionals who will serve as leaders in the postsecondary educational settings who can engage in institutional leadership, program administration, and innovative program development and evaluation that will promote systemic change and improvement.



## Advising

Advising takes three forms: the initial advisor, the program mentor, and the dissertation advisor. When students are first admitted, they are assigned an initial advisor who mentors them from entry through their first year benchmarks in the program. By the end of the first year, students formally ask a faculty member to be their program mentor who advises them from the end of their first year until their comprehensive exams. At a time no later than the completion of their comprehensive exams, students then select a dissertation advisor who is the chair of their dissertation committee, which must be formed at that time. These advising roles can be assumed by the same faculty member or different faculty members depending on students' research interests and foci.

In their first term, students will construct a program plan with the assistance of their initial advisor. The program plan is a focused, detailed description of the doctoral student's proposed course work, specialization, and goals for the doctoral program. The program plan will be submitted to the doctoral program plan committee for approval and suggestions. The program plan must include the following:

- goal statement that includes doctoral study goals (including specialization) and future professional goals
- professional curriculum vitae
- course work plan. This is the appropriate place for petitioning for course transfer for graduate work done previously (there is a 5-year time limit on any course work counting toward candidacy).

The student should work with their advisor for direction while completing the program plan prior to submitting it to the program plan committee. It is **due to the program plan committee by November 15** in the fall term of the student's first year of study. After the program plan committee reviews the student's program plan, a meeting may be scheduled with the student for further review of the plan.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- master's degree from a regionally accredited university or demonstrated success in graduate-level studies or professional experience in a field relevant to postsecondary student success in learning, literacy, or mathematics.

- The Postsecondary Student Success in Learning, Literacy, and Mathematics doctorate (both Ph.D. and Ed.D. tracks) requires 96 semester credit hours for students admitted with a bachelor's degree. Students admitted with a bachelor's degree will follow the same program of study as students admitted with a master's degree (66 semester credit hours), but with an additional 30 semester credit hours of open electives.
- official transcripts from **each institution** where course credit was granted
- minimum 3.0 GPA (on a 4.0 scale) in all completed graduate course work
- resume/CV
- statement of purpose (approximately 500-1000 words) demonstrating the student's research interest and goals as a postsecondary student success professional and potential to contribute to the advancement of scholarly work in the field of postsecondary student success. Students should discuss relevant teaching, research, and/or policy experience as well as provide clear evidence of a commitment to research and scholarship.
- three letters of recommendation addressing the student's professional and academic background
- interviews with the admissions committee will be arranged, following the initial screening using the admissions criteria listed above, for qualified applicants

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Education (Ed.D) degree with a major in Postsecondary Student Success in Learning, Literacy, and Mathematics concentration in Developmental Literacy requires 66 semester credit hours or 96 semester credit hours for students admitted with a bachelor's degree. Students admitted with a bachelor's degree will follow the same program of study as students admitted with a master's degree (66 semester credit hours), but with an additional 30 semester credit hours of open electives.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
DE 7301	Understanding Learners in Developmental Education Contexts	3
DE 7302	Policy and Politics in Developmental Education	3

DE 7303	Teaching and Learning in Developmental Education	3
DE 7305	Diversity in P-16 Educational Contexts	3
CI 7101	Introduction to the Research Experience	1
CI 7101	Introduction to the Research Experience	1
CI 7101	Introduction to the Research Experience	1
CI 7302	Research Methods and Measurement in Education	3
CI 7351	Beginning Quantitative Research Design and Analysis	3
CI 7352	Beginning Qualitative Design and Analysis	3
<b>Concentration</b>		
Choose 21 hours from the following:		21
RDG 7301	Theory and Research of Literacy	
RDG 7302	Theory and Research of College Basic Literacy	
RDG 7303	Theory and Research of College Academic Literacy	
RDG 7304	Theory and Research of Literacy Instruction for Culturally and Linguistically Diverse Readers	
RDG 7305	Theory and Research of College Literacy Assessment	
RDG 7306	Literacy Research Seminar	
RDG 7372	Theory and Research of New Literacies Studies in Developmental Education	
RDG 7373	Community Literacies	
ENG 7300	Language Problems in a Multicultural Environment	
ENG 7316	Foundations in Rhetoric and Composition	
ENG 7317	Specializations in Rhetoric and Composition	
ENG 7326	Contemporary Composition Theory	
ENG 7383	Studies in Rhetorical Theory	
DE 7380	Managing Developmental Education Programs	
DE 7381	Practicum	
CI 7303	Educational and Psychological Measurement and Assessment	
CI 7360	Designing Educational Research	
<b>Prescribed Elective</b>		
Choose 3 hours from the following:		3
CI 7353	Intermediate Quantitative Research Design and Analysis	
CI 7354	Intermediate Qualitative Design and Analysis	
<b>Electives</b>		
Choose 6 hours of advisor-approved electives		6
<b>Dissertation</b>		
Choose a minimum of 12 hours from the following:		12
DE 7199	Dissertation	
DE 7299	Dissertation	
DE 7399	Dissertation	
DE 7599	Dissertation	
DE 7699	Dissertation	
DE 7999	Dissertation	
<b>Total Hours</b>		<b>66</b>

## Advancement to Candidacy

### Application for Advancement to Candidacy

Once all course work (except for dissertation course work) has been completed, the comprehensive exams have been passed, and the dissertation proposal has been successfully defended, doctoral students will apply for advancement to candidacy. Candidacy must be achieved within five (5) years of initiating program course work. No credit will be applied toward the doctoral degree for course work completed more than five (5) years before the date on which the student is advanced to candidacy. This time limit applies toward credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions. Requests for a time extension must be made to the program, which in turn submits a recommendation to The Graduate College. Achieving doctoral candidacy allows the student to begin doctoral dissertation research. Candidacy forms are found here: [http://www.gradcollege.txstate.edu/Fac\\_Resources/Forms.html](http://www.gradcollege.txstate.edu/Fac_Resources/Forms.html).

### Grade-Point Requirements for Advancement to Candidacy

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.0. No grade earned below a "B" on any graduate course may apply toward a doctorate at Texas State. Incomplete grades must be cleared through The Graduate College before a student can be approved for advancement to candidacy.

### Comprehensive Exams

All students in the Doctoral Program in Postsecondary Student Success in Learning, Literacy, and Mathematics are required to pass a Comprehensive Examination at the conclusion of coursework, prior to moving into the dissertation phase of the program. The purposes of this exam are to demonstrate mastery of the coursework content and preparation for independent research. Ideally, this process will begin during students' last semester of coursework, and will be completed the same semester.

Students will first discuss their ideas for the comprehensive examination with their advisor. Students will then form a comprehensive exam committee that is comprised of, at least, their advisor (as Chair) and two other faculty members from the Postsecondary Student Success in Learning, Literacy, and Mathematics program.

After stating their intention to take the comprehensive exam at the beginning of the semester, students will submit written responses to three foreknown items and participate in an oral defense of their work that includes a student presentation about their written responses to the items and fielding of faculty questions. Committee evaluations will be either pass, needs revisions, or does not pass. If applicable, students will have two weeks to make revisions, and committee evaluations of the revised work will be either pass or does not pass. Students who do not pass, will have two more attempts to pass the comprehensive exam before being discontinued from the program.

### Dissertation Proposal

At a time no later than the completion of their Comprehensive Exams, students must select a dissertation advisor. After selecting their dissertation advisor, and before beginning their dissertation proposal, students will form a dissertation committee that will provide technical support for the inception, conduct, and completion of the dissertation research study and evaluate the final product. The student will undertake the research and write the dissertation under the guidance of their dissertation advisor. The dissertation proposal must be successfully

defended and approved by the dean of The Graduate College before a student can be advanced to candidacy. Information about the dissertation procedures can be found in the Dissertation tab.

Students must submit the dissertation proposal and one copy of the official "Dissertation Proposal form" (available on The Graduate College website) to the dissertation advisor. After obtaining committee members' signatures, the student must submit the dissertation proposal and dissertation proposal form to the program director for signature. The form also requires evidence of the IRB approval for any research involving human subjects. The program director will then forward the dissertation proposal and form through the department chair to the dean of The Graduate College for final approval. Final approval must be received before proceeding with the defense of the dissertation proposal. The Dissertation Proposal form may be obtained from The Graduate College website.

### Defense of the Dissertation Proposal

Students must defend the dissertation proposal in a meeting that begins with a public presentation and continues with an oral examination by the dissertation committee. The examination will address the proposed dissertation topic (problem definition and scope), relevant literature, and research method. The dissertation committee must sign the "Defense of the Dissertation Proposal form" to indicate approval and then submit the form for the signature of the doctoral program director and the department chair. The approved Defense of the Dissertation Proposal form must be forwarded to the dean of The Graduate College. The dissertation proposal must be approved and the Defense of the Dissertation Proposal form must be on file in The Graduate College before any student can advance to candidacy and begin dissertation research.

### Recommendation for Advancement to Candidacy

The dissertation committee recommends the applicant for advancement to candidacy to the doctoral program director, the department chair, and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been met. To be eligible for admission to candidacy the student must have successfully completed the comprehensive exam, completed all course work, and successfully defended the dissertation proposal.

## Dissertation Research and Writing

All doctoral students are required to complete a dissertation. The dissertation must be an original contribution to scholarship and the result of independent investigation in a significant area. Preparation of the dissertation must follow the latest edition of the *Publication Manual of the American Psychological Association*.

## Dissertation Enrollment Requirements

Any time a student is receiving official guidance on the dissertation, the student must be enrolled in a dissertation course. A student must maintain continuous enrollment in dissertation hours every term from the time they advance to candidacy until the dissertation is defended and approved. If a student is receiving supervision on the dissertation during the summer or the student is graduating during the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred. Students must enroll in a minimum of 12 dissertation credit hours.

## Dissertation Time Limit

Students must complete the dissertation within five (5) years of advancement to candidacy. The student's dissertation advisor, with the student's dissertation committee, will review the student's progress annually.

## Dissertation Advisor and dissertation committee

The dissertation committee must be composed of four approved doctoral graduate faculty members. The doctoral student must select a minimum of four committee members, one of which must be outside the program. The chair of the dissertation committee must be from the program. All committee members must hold at least associate doctoral faculty status, and chairs must hold core doctoral faculty status. To form the dissertation committee, the "Dissertation Committee Request form" must be completed and signed by the student, committee members, committee chair, doctoral program director, and the department chair and then forwarded to the dean of The Graduate College for approval and signature. The required Dissertation Committee Request form may be obtained from The Graduate College website.

### Committee Changes

Any changes to the dissertation committee must be submitted for approval to the dissertation advisor, the doctoral program director, the department chair, and the dean of The Graduate College. Changes must be submitted no less than sixty (60) days before the final dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be obtained from The Graduate College website.

## Defense of the Dissertation

All dissertations must meet the following requirements as judged by the student's dissertation committee:

1. a systematic investigation of a problem,
2. informed by previous theory and research,
3. that adds to the body of knowledge in the area of investigation, and
4. is presented in a form capable of dissemination to scholars and practitioners.

Students must pass the final oral examination that covers the dissertation and the general field of the dissertation. Students must defend the dissertation in a meeting that begins with a public presentation and continues with an oral exam by the dissertation committee. Before scheduling the final oral exam, the student must have received approval of the dissertation advisor. A completed dissertation defense report must be submitted according to the schedule posted by the dean of The Graduate College and no later than ten days before the date of graduation. The student must complete all aspects of the dissertation, including successful defense and submission of the dissertation to The Graduate College, within five (5) years of advancement to candidacy.

## Approval and Submission of the Dissertation and Abstract

The approval of the dissertation and abstract requires positive votes from the dissertation advisor and from a majority of the dissertation committee members. Once the committee has approved the dissertation, one copy of the dissertation and the signed "Committee Approval

form" must be submitted to the dean of The Graduate College for final approval. Refer to the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation* for specific guidelines.

Doctoral level courses in Developmental Education: CI (p. 1270), DE (p. 1271), ENG (p. 1273), MATH (p. 1274), RDG (p. 1281)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 7101. Introduction to the Research Experience.

This course is designed to introduce students to the program and to the ongoing research activities of its faculty. Emphasis is placed on identifying and coordinating opportunities for joint research and scholarship among faculty and students. Students must enroll in the course for three semesters before dissertation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### CI 7302. Research Methods and Measurement in Education.

This course provides a comprehensive introduction to educational research with a focus on research design, research methods and methodology, and fundamental measurement issues in quantitative, qualitative, and mixed-methods research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 7303. Educational and Psychological Measurement and Assessment.

Philosophical and empirical foundations of measurement, assessment, testing, and evaluation. Topics include philosophical and mathematical foundations in research; empirical levels and measurement description; test construction; observational rating scales; measurement interpretation; social, legal, and ethical implications; item analysis/refinement for scale performance; reliability and validity evidence; and standardized and placement tests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 7310. Teaching in College.

Teaching strategies for teaching/instructional assistants focused on creating syllabi, adapting to diverse student populations, collaborating with colleagues and staff, implementing active learning strategies, fostering assigned reading, assessing learning, and integrating technology. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CI 7326. Grant Development and Management.

This course focuses on developing competitive grant proposals and understanding grant management resources. Strategies will encompass locating funding sources, evaluating proposals, developing proposals and budgets, and methods of meeting accountability requirements.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 7351. Beginning Quantitative Research Design and Analysis.

This course introduces students to quantitative research design and analysis. Topics include descriptive statistics; sampling techniques; statistical inference, including the null hypothesis, significance tests, and confidence intervals; and causal-comparative analyses, including t-test and ANOVA. Corequisite: CI 7302 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

#### CI 7352. Beginning Qualitative Design and Analysis.

This course introduces students to the qualitative paradigm. Topics include distinctive features, alternative qualitative traditions, purposeful sampling, common data collection methods, inductive analysis, the role of the researcher, and evaluation of qualitative research. Corequisite: CI 7302 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 7353. Intermediate Quantitative Research Design and Analysis.

This course focuses on intermediate quantitative research design and statistical methods of data analysis related to problems in education, psychology, sociology, and biological sciences. The general linear model based univariate and selected multivariate statistical techniques are examined including theory/purpose, logic, practical implications, and interpretation of various analytic techniques. Prerequisite: CI 7351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 7354. Intermediate Qualitative Design and Analysis.

This course focuses on issues in design and implementation of qualitative research. Topics include influence of alternative traditions, literature in qualitative research, access to the field and ethical issues, researcher-participant relationships, purposeful sampling strategies, inductive analysis procedures, developing theory, and reporting research. Prerequisite: CI 7352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 7355. Mixed Methods in Research and Evaluation.

This course will cover mixed methods research designs that can be used in the evaluation of educational interventions and programs. Topics include mixed methods research designs, program evaluation models, quantitative and qualitative data analysis and interpretation, reading mixed methods research articles, and writing mixed methods research proposals and evaluation reports. Prerequisite: CI 7351 and CI 7352 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 7358. Theoretical and Conceptual Frameworks in Qualitative Research.**

This course is intended for those versed in current paradigmatic and epistemological states of human inquiry and presents an opportunity to design a research project and address the major issues of a research career. Prerequisite: CI 7352 and CI 7354 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7359. Seminar in Quantitative Research.**

This course is a small-group seminar that focuses on analytic strategies specific to the doctoral student's dissertation topic. Examples include structural equation modeling, hierarchical linear modeling, log linear modeling, non-parametric analyses, factor analysis, factorial analysis of variance, and other multivariate statistical methods. Prerequisite: CI 7351 and CI 7353 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7360. Designing Educational Research.**

Students identify problems in Developmental Education, develop a strategic proposal to apply to these problems, and create an evaluation plan to assess the implementation of their proposal. Students also develop skills in critiquing research reports and in synthesizing research from Developmental Education. Prerequisite: CI 7353 or CI 7354 or CI 7355 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7378. Independent Study.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in the Department of Curriculum and Instruction. May be repeated for additional credit at the discretion of the program coordinator.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7386. Directed Research.**

Students will participate in an authentic research experience, either by working as part of a doctoral faculty member's research team or developing an original research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 7388. Educational Leadership for Social Justice.**

This course provides an in-depth study of the theories and practices related to educational leadership in PreK-12 educational contexts through a social justice lens. Students will examine current social justice issues in schools and develop strategies for conceptualizing and implementing institutional change that works toward a more equitable education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7389A. Topics in Instructional Technology.**

This topic offers an in-depth study of systematic instructional design emphasizing the selection and use of appropriate media for delivering instruction to maximize student learning. Special emphasis in this topic is on the leader's role in influencing the use of technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**CI 7389C. Special Topics: Race Theory in Educational Research.**

This course will explore racial theories and paradigms applicable to the study of race in K-20 educational settings. Students will analyze foundational scholarship in the formation of racial theories, research methodology, key tenets of race research, and literature pertinent to current trends in educational research regarding race. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**Developmental Education (DE)****DE 7199. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7299. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7301. Understanding Learners in Developmental Education Contexts.**

This course identifies the evolution, characteristics, demographics, and needs of learners in Developmental Education contexts. Emphasis is placed on understanding internal factors, including the cognitive, affective, and psychosocial needs of students, as well as on analyzing external factors, including the social, political and institutional forces that impact learners' educational experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**DE 7302. Policy and Politics in Developmental Education.**

This course addresses the policy and politics of planning, funding, implementing, and evaluating Developmental Education programs in postsecondary education. Readings and discussions focus on current and historical issues relevant to addressing the academic needs of educationally disadvantaged students from the perspective of researchers, program directors, policy analysts, and instructors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7303. Teaching and Learning in Developmental Education.**

The course focuses on the institutional development, intellectual development, learner development, and self-development for effective teaching and learning in developmental education. Topics include instructional and learner theories, pedagogies, assessment and evaluation techniques, and best practices for instruction and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7304A. Curriculum Design in Developmental Education.**

This course focuses on principles and processes of curriculum design and implementation in developmental education contexts, including examination of emerging research and issues. The course pedagogy also engages students in independent curriculum research, planning, and problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**DE 7304B. Theory and Research of Digital Literacies.**

This course focuses on understanding the complex relationships between technology, teaching, and learning in varied developmental education environments. Tools and strategies for planning, integrating, and assessing technology-supported instruction are explored within frameworks linking theory to practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**DE 7304D. Transformative Learning.**

This course introduces students to the core principles of transformative learning. The course is a theory-driven, project-based advanced class designed to enable students to develop theoretical perspectives, engage in intensive practice, and understand the use of transformative learning for applications with postsecondary individuals, groups, and organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7304E. Current Topics in Motivation Intervention Research.**

This course focuses on analyzing, synthesizing, discussing, and applying cutting-edge research on various types of motivation interventions in education. Emphasis will be placed on theory, research, and practice in postsecondary educational settings and Developmental Education contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7304F. Current Topics in Strategic and Self-Regulated Learning Intervention Research.**

This course examines cutting-edge research on strategic and self-regulated learning interventions. Emphasis will be placed on theory, research, and practice relevant to postsecondary educational settings, however, students will be encouraged to apply course content to their areas of interest which may be outside of postsecondary educational settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7305. Diversity in P-16 Educational Contexts.**

This course uses critical multicultural frameworks to trace the evolution of learners in a P-16 educational system. Students in this course examine school practices and policies in an attempt to map the educational trajectory and improve the educational experiences of P-16 students who are underrepresented and underserved. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7321. The Community College.**

Introduction to community college and to its roles and functions in American education. Special attention will be directed to evolution, development and patterns of organization, purposes, programs, personnel and current issues of the community college.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7322. Learning Support Centers in Postsecondary Settings.**

The course explores the learning assistance movement in postsecondary settings including its history, leaders, and current research. Topics include program planning; leadership, organization, and management; human and financial resources; facilities and equipment; legal responsibilities; equal opportunity and access; diversity; ethics; campus and community relations; and assessment and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7323. Academic Support for Students with Learning Disabilities.**

The course focuses on Learning Disabilities (LD) and Executive Function (EF) Disorders and their nature, prevalence, and significance in postsecondary environments. Topics include theories about the origins and nature of LD and EF, development across the lifespan, characteristics of individuals, and approaches to service, delivery and teaching. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7324. Teaching Learning Strategies and Critical Thinking in Postsecondary Contexts.**

This course explores theory and pedagogy of learning strategies, problem solving, and critical thinking skills in postsecondary contexts. Topics include variables in teaching and learning, methods of assessment, and approaches to instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7325. Advising, Coaching, and Mentoring Learners in Postsecondary Education.**

The course will focus on theories and techniques of academic advising, coaching, and mentoring skills for learners enrolled in postsecondary education. Didactic and experiential activities will provide students enrolled in the course with opportunities to learn and practice skill development within these academic support programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7380. Managing Developmental Education Programs.**

This course focuses on the theoretical and practical elements of management of Developmental Education programs in higher education. Readings and discussions focus generally on best practices in higher education leadership and specifically on best practices in leadership and management in Developmental Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7381. Practicum.**

A 150-clock hour, one-semester practical experience in an institution or agency other than one's own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities to include program planning, management, budgeting, and/or evaluation.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 7399. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7599. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7699. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7999. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**English (ENG)****ENG 7300. Language Problems in a Multicultural Environment.**

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7314. Specializations in Professional and Technical Communication Topics.**

Provides theoretical and practical information for specialized types of technical and professional communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7316. Foundations in Rhetoric and Composition.**

A course providing students with theoretical, pedagogical, and/or methodological foundations in the field of rhetoric and composition. Emphases vary but may include Contemporary Composition Pedagogy, Basic Writing Theory and Practice, and Writing Assessment. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7317. Specializations in Rhetoric and Composition.**

A course providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Across the Curriculum, Service Learning, Writing Center Theory and Practice, Computers and Writing, Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## **Mathematics (MATH)**

**MATH 7111. Seminar in Teaching.**

Seminar on individual study projects concerned with selected problems in the teaching of mathematics. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MATH 7188. Seminar in Mathematics Education.**

Students are required to attend weekly research seminars in Mathematics Education and to give at least one research presentation in the seminar during the semester. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7199A. Dissertation.**

Original research and writing in Mathematics Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7299A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7301. Studies in Mathematics.**

This course provides basic foundations in Mathematics for students entering the doctoral program in Mathematics or Mathematics Education. This course may be repeated. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 7302. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7303. Analysis I.**

This course covers foundations of modern analysis. Topics include: sequences,  $\limsup$ ,  $\liminf$ , Sigma Algebras of sets that include open and closed sets, sequences of functions, pointwise and uniform convergence, lower and upper semi-continuity, Borel sets, outer measure, and Lebesgue measure. Prerequisite: MATH 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7306. Current Research in Math Education.**

This course surveys the various current social, political, and economic trends in local, state, national, and international settings that are related to research in Mathematics Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7307. Algebra I.**

Applications of Algebra and topics in modern algebra, including permutation groups, symmetry groups, Sylow theorems, and select topics from Ring Theory. Prerequisite: MATH 4307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7309. Topology I.**

A course in point-set topology emphasizing topological spaces, continuous functions, connectedness, compactness, countability, separability, metrizability, CW-complexes, simplicial complexes, nerves, and dimension theory. Prerequisite: MATH 4330.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7313. Analysis II.**

This course covers the theory of integration with special emphasis on Lebesgue integrals. Topics include: Lebesgue integral, Bounded Convergence theorem, differentiation and integration, absolute continuity, and  $L_p$  spaces. Prerequisite: Math 7303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7317. Algebra II.**

A study of the important algebraic structures of rings and fields. Topics covered include rings, ideals, modules, polynomial rings, Euclidean algorithm, finite fields, and field extensions. Topics also include an introduction to Galois Theory with an emphasis on the geometric applications. Prerequisite: MATH 7307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7319. Topology II: Algebraic Topology.**

This course covers the fundamental concepts and tools of algebraic topology. Topics include the fundamental group, covering spaces, homotopy type, the higher homotopy groups, singular homology theory, and the computation of homology groups via exact sequences and applications. Prerequisite: MATH 7307 and MATH 7309.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7321. Graph Theory.**

Topics in this course include trees, connectivity of graphs, Eulerian graphs, Hamiltonian graphs, planar graphs, graph coloring, matchings, factorizations, digraphs, networks, and network flow problems. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7323. Theories of Knowing and Learning in Mathematics Education.**

This course surveys the major theories of knowing and learning that have influenced mathematics education. These theories include behaviorism, constructivism, sociocultural theories, situated cognition, and others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7324. Curriculum Design & Analysis.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques that are related to curriculum design in Mathematics Education for grade levels P-16.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7325. Statistics 1.**

A study of the mathematical and probabilistic underpinnings of the techniques used in statistical inference. Topics covered include sampling, sampling distributions, confidence intervals, and hypothesis testing with an emphasis on both simulations and derivations. Prerequisite: Math 2321 and Math 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7328. Instructional Techniques & Assessments.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques of instruction in Mathematics Education and the related assessment procedures for each for grade levels P-20.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7331. Combinatorics.**

This course is a study of fundamental principles of combinatorics. Topics include: permutations and combinations, the Pigeonhole principle, the principle of inclusion-exclusion, binomial and multinomial theorems, special counting sequences, partitions, posets, extremal set theory, generating functions, recurrence relations, and the Polya theory of counting. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7335. Statistics II: Linear Modeling.**

A study of the formulation and statistical methodologies for fitting linear models. Topics include the general linear hypothesis, least-squares estimation, Gauss-Markov theorem, assessment of model fit, effects of departures from assumptions, model design, and criteria for selection of optimal regression models. Prerequisite: MATH 3377 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7346. Quantitative Research Analysis in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and use of appropriate design methodologies to achieve the strongest possible evidence to support or refute a knowledge claim. Prerequisite: MATH 7306 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7354. Advanced Qualitative Research.**

This course encompasses the techniques and tools needed for the development, investigation, and demonstration of competence in conducting qualitative research in mathematics education. Principles of qualitative data analysis are a significant focus of the course, with particular attention given to specific methods used to code and analyze data. Prerequisite: ED 7352 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356B. Advanced Qualitative Research.**

This course encompasses investigation, development, and demonstration of competence, design, and execution for mathematics education problems in qualitative research. Prerequisite: ED 7352 or CI 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356C. Action Research in Mathematics Education.**

This course examines underlying theory and issues in action research model and the development of action research projects. Prerequisites: MATH 7346 or ED 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7358. Advanced Quantitative Research in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and the use of appropriate design methodologies to achieve the most substantial evidence to support or refute a knowledge claim. Prerequisite: MATH 7346 with a grade of "B" or better or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7361. Seminar in Advanced Mathematics.**

Material in course will vary with the interest of students and faculty. A detailed study of subject matter may be chosen from advanced areas of analysis; algebra; topology and geometry; applied mathematics; and probability and statistics. This course is repeatable for credit when subject matter varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7363A. COMPLEX ANALYSIS.**

This course is a brief introduction to the complex number system and basic point-set topology of the complex plane, followed by a proof-based and rigorous study of the principal results of the analysis of functions of a single complex variable. Prerequisite: MATH 4315 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363B. NUMERICAL ANALYSIS.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using computer algebra systems. Symbolic, numerical, and graphical techniques will be studied. Applications will be drawn from the sciences, engineering, and mathematics. Prerequisite: MATH 3323 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363C. FUNCTNL ANALYSIS.**

This course presents the three basic fundamentals theorems of functional analysis: the Hanh-Banach theorem, the uniform boundedness theorem, and the open mapping theorem. Prerequisite: MATH 7303 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363E. Numerical Analysis II.**

This course will involve the analysis and numerical implementation of algorithms to solve partial differential equations. Applications will be drawn from science, engineering, and mathematics. Topics include the numerical solution of linear partial differential equations and the related linear systems of equations. Prerequisite: MATH 7363B with a letter grade of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363F. Functional Analysis II.**

This course will involve the analysis of infinite dimensional vector spaces including spaces of functions, measures, and distributions. Topics include Fourier transforms, theory of Banach spaces, and operator theory. Prerequisite: MATH 7363C with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**MATH 7366A. Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors).**

This course examines how to develop and teach post-secondary students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisites: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366B. Teaching K-12 Students (Elementary, Middle School, and High School).**

This course examines how to develop and teach K-12 students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366C. Teaching Teachers (In-Service; Pre-Service).**

This course examines how to prepare teachers of mathematics. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366D. Teaching Specialized Content.**

This course will be an in-depth study of a specialized content area in mathematics with an emphasis on teaching. The specific content area will vary by instructor. Examples include Euclidean Simplex Geometry and Discrete Probability Spaces with Implications for Public School Curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366E. Developmental Mathematics Curriculum.**

This course surveys the research, development, and evaluation of the scope and sequence of developmental mathematics curriculum. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366F. Research in Undergraduate Mathematics Education I.**

Students will develop the requisite knowledge to become a good consumer of Research in Undergraduate Mathematics Education (RUME) research. The course will cover the theoretical underpinnings of current and historic RUME research. Students will develop the knowledge to understand relevant theoretical stances and the role they play in research. Prerequisite: Math 7306 or permission from the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366G. Research in Undergraduate Mathematics Education II.**

In this course, students will develop necessary knowledge to design/conduct RUME research via a topic-driven look at current RUME research. Core topics include proof, analysis/calculus, abstract algebra, linear algebra, and differential equations. Students will develop a depth of knowledge related to these topics and engage in research design and development. Prerequisite: MATH7306 and MATH7366F.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7367B. ADV GROUP THEORY.**

This course covers topics including properties of solvable, p-solvable and nilpotent groups, group actions, transfer theorems, simple groups and composition series, the generalized Fitting subgroup, automorphism groups, classical groups and linear representations of groups. Prerequisite: MATH 7307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369C. Low-dimensional topology.**

This course is an introduction to low-dimensional topology. Topics include surfaces, 3-manifolds, knots, and 4-manifolds. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369D. Characteristic Classes.**

This course is an introduction to vector bundles and characteristic classes. Topics covered include Stiefel-Whitney classes, Chern classes, Euler class, Pontrjagin classes, and their computation. Additional topics may include manifold immersion problems. Prerequisite: MATH 7317 and MATH 7319 both with grades of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369E. Differential Geometry.**

This course is an introduction to modern tools of differential geometry. Topics covered include manifolds, Riemannian metrics, connections, covariant derivatives, geodesics, curvatures, extrinsic and intrinsic computations. Other possible topics include hyperbolic geometry, Lie groups, Chern-Weil theory, surfaces of prescribed mean curvature, the Gauss-Bonnet theorem, and the Cartan-Hadamard theorem. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7371A. Advanced Graph Theory.**

Topics in this course include Turan's problems, Ramsey theory, random graph theory, extremal graph theory, algebraic graph theory, domination of graphs, distance problems, and applications. Prerequisite: MATH 7321.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371B. Advanced Combinatorics.**

Topics in this course include Block designs, Latin squares, combinatorial optimization problems, coding theory, matroids, difference sets, and finite geometry. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371C. Combinatorial Number Theory.**

A study of fundamental techniques in combinatorial number theory. Topics will include Waring's problem, additive number theory, and probabilistic methods in number theory. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371D. Discrete Optimization.**

A study of some fundamental techniques in discrete optimization. Topics include discrete optimization, linear programming, integer programming, integer nonlinear programming, dynamic programming, location problem, scheduling problem, transportation problem, postman problem, traveling salesman problem, matroids, and NP-completeness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371E. Algorithms and Complexity.**

A study of some fundamental concepts of computability and complexity. Topics include polynomially bounded problems, NP-complete problems, exponentially hard problems, undecidable problems, and reducibility. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371F. Probabilistic Methods in Discrete Mathematics.**

A study of some fundamental probabilistic techniques used to solve problems in graph theory, combinatorics, combinatorial number theory, combinatorial geometry, and algorithm. Topics include linearity of expectation, alterations, second moment, local lemma, correlation inequalities, martingales, Poisson paradigm, and pseudo-randomness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371G. Applied Discrete Mathematics.**

This course introduces fundamental concepts in logic, Boolean algebra, and binomial coefficients; and applications in different fields such as complexity of algorithms and network theory. Prerequisites: MATH 2472 and MATH 4307, all with a grade of "C" or better, or with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371H. Combinatorial Networks.**

Combinatorial Networks is an area of study of certain types of networks using combinatorial methods extensively. This course introduces fundamental basics as well as the latest development in this area of research. Prerequisite: MATH 5307/7307 with a grade of "C" or higher.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7373B. Partial Differential Equations I.**

This course covers the theory and application of partial differential equations, typical equations of mathematical physics, Cauchy problem for equations of the first order, classification of second-order equations, Cauchy problem for second-order hyperbolic equations, Duhamel's principle, potential theory and elliptic equations, maximum principle, and parabolic equations. Prerequisite: MATH 3323, 3373 and 3380 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373C. Partial Differential Equations II.**

This course covers the existence and uniqueness theory for boundary value problems of partial differential equations (PDE) including the topics linear evolution equations, variational techniques, non-variational techniques, Hamilton-Jacobi equations, conservation laws. Prerequisite: MATH 7373B with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373G. Spectral Methods.**

This course covers the essentials of spectral collocation methods with an emphasis on numerically implementing algorithms. The problems studied will include ordinary and partial differential equations connected with fluid mechanics, quantum mechanics, waves, and other fields. The techniques used will include both Fourier and Chebychev methods.

Prerequisite: MATH 7363E with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375C. Time Series Analysis.**

A study of the theory of time-dependent data. The analysis includes modeling, estimation, and testing; alternating between the time domain; using autoregressive and moving average models and the frequency domain; and using spectral analysis. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375D. Advanced linear Modeling.**

The course provides an extension of regression methodology to more general settings where standard assumptions for ordinary least squares are violated. Topics include generalized least squares, robust regression, bootstrap, regression in the presence of autocorrelated errors, generalized linear models, and logistic and Poisson regression. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375E. Computational Statistics.**

This course focuses on commonly used sampling and optimization algorithms in statistics. Topics include accept-reject method, importance sampling, Markov Chain Monte Carlo algorithms, Fisher scoring algorithm, expectation-maximization algorithm, and minorization-maximization algorithm. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375F. Multivariate Data Analysis.**

This course focuses on statistical methodologies based on multivariate analysis. Topics include multivariate normal distribution, tests of hypothesis on means, multivariate analysis of variance, discriminant analysis, principal component analysis, factor analysis and canonical correlation analysis. Prerequisite: MATH 5305 and (MATH 3376 or MATH 3377) with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375G. Bayesian Methods.**

This course focuses on Bayesian statistical analysis and associated theories. Topics include one-parameter and multi-parameter Bayesian models, choices of priors, formulation of regression models in the Bayesian framework, and related data analysis. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375I. Advanced Statistical Learning.**

This course covers the theoretical foundations in statistical learning and deep learning. Topics include the framework of empirical risk minimization, metric entropy, Vapnik-Chervonenkis dimension, Rademacher and Gaussian complexity, symmetrization and chaining techniques, contraction principle, uniform law of large numbers, sample complexity, and neural networks. Prerequisite: MATH 7337 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378A. Problem Solving, Reasoning, and Proof.**

A study of the fundamental concepts of problem solving, logic, set theory, and mathematical proof and applications of these concepts in mathematics curriculum for grades P-20. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378B. Connecting and Communicating Math.**

This course examines one of the basic principles involved in mathematics education: Connecting and Communicating Mathematics. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378C. Representing Fundamental Math Ideas (Function, Data Analysis, and Enumeration).**

This course examines the basic principles involved in mathematics education. The process of representing fundamental mathematical ideas will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378D. Math Technologies.**

This course examines the basic principles involved in mathematics education: Technology. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378E. Developmental Mathematics Perspectives.**

This course examines developmental mathematics-specific strands including technological course support and placement tools/decisions. Issues related to the first mathematics core course required of undergraduates will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378F. Research on Mathematical Problem Solving in Secondary Schools.**

In this course a careful study is made of elementary techniques for problem solving in a variety of domains, including algebra, number theory, combinatorics, geometry, and logic puzzles. Students will learn these techniques by actually working on a collection of problems in each of these areas. Students will read and examine research about various aspects of problem solving and research in math education that includes both teacher training and student learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378G. Discourse Processes, Traditions, and Analysis in Mathematics Education.**

Discourse and discourse analysis have been used to answer research questions across disciplines throughout the humanities and social sciences. This course will focus on theory and methods for the analysis of discourse in mathematical settings. We will learn how different approaches to discourse are used to understand mathematics learning. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378H. Equity in Mathematics Education.**

Equity in Mathematics Education is a course examining research on equity issues in mathematics education. These equity issues will range from race, culture, class, and gender as they relate to the teaching, learning, and schooling of mathematics education. We will look at how equity is framed within the field of mathematics education, what has been addressed, and what has not been conceptualized. The course will help students understand the literature in the field, critique the extant research literature, design research, and consider important facets of teaching for various student groups. Prerequisite: MATH 7306 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7385. Independent Study in Mathematics.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of mathematics. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7386. Independent Study in Mathematics Education.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of Mathematics Education. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7389. Internship.**

In this course, students will work under the supervision of a faculty member to gain practical knowledge in their field. Student experience can come from industry, government agencies, or other sources but must directly apply to furthering knowledge of applications of mathematics or mathematics education.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7396. Mathematics Education Research Seminar.**

Collaborative research projects with faculty through identifying an educational issue, reviewing literature, creating a research question, designing a methodology, analyzing data, drawing conclusions, implications, and creating a draft of a publishable paper. Prerequisite: MATH 7356, and ED 7352 or MATH 7346, all with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7399A. Dissertation.**

This course represents a Mathematics or Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MATH 7599A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7699A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7999A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 7301. Theory and Research of Literacy.**

This course examines the current theories and basic research of literacy development from psychological, cultural, linguistic, educational, and epistemological frameworks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7302. Theory and Research of College Basic Literacy.**

This course examines basic literacy needs and instructional strategies for students within postsecondary institutions. Topics include comparison of basic and academic literacy, research and theory relevant to literacy development in college contexts, analyses of historical and current curricular approaches, and evaluation of instructional strategies and materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7303. Theory and Research of College Academic Literacy.**

This course examines academic literacy needs and instructional strategies for students in college. Topics include comparisons of academic, workplace, and new literacies and instructional strategies and materials for developing vocabulary, comprehension, and critical and strategic reading in multiple sources of information.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7304. Theory and Research of Literacy Instruction for Culturally and Linguistically Diverse Readers.**

This course examines the historical and contemporary understandings of language acquisition and instruction; foundational knowledge of literacy research and cultural and linguistic difference; instructional practices, including culturally responsive instruction, linguistic differences, and creating supportive literacy environments; curriculum, assessment, and evaluation; and critical literacy perspectives. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 7305. Theory and Research of College Literacy Assessment.**

This course reviews literacy assessment theory, research, policy, and practice in postsecondary contexts. Topics include accountability, standards-based curricula, cultural and linguistic effects, assessment-driven instruction, reliability and validity, interpretation, and different types of instruments (high-stakes, placement, diagnostic, classroom tests, and qualitative instruments).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7306. Literacy Research Seminar.**

This course explores research and policy papers in literacy and literacy education, examines methodology and conclusions, and considers additional research questions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**RDG 7307D. Multimodal Critical Discourse Studies.**

This course introduces students to multimodal critical discourse analysis as both a theoretical framework stemming from multimodal semiotics and a set of analytic tools for uncovering dominant ideologies in print language and visual representations. Through a survey of critical discourse analysis approaches and methods including transitivity analysis, deixis, multimodal metonymy and metaphor analysis, and visual analysis, students will examine underlying assumptions perpetuated by representations of developmental education from external policy-driving organizations. Additionally, students will explore the potential for developmental educators to harness multimodal representations of their students and practice in order to reclaim the narrative of developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7307E. Theory, Research, and Practice of Disciplinary Literacies.**

This course examines core principles of disciplinary literacies. Students will examine the theory, research, and pedagogical practices of literacies across the disciplines with an emphasis on understanding the potential for postsecondary learners and Developmental Education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7307F. Curriculum Design in Developmental Education.**

This course focuses on principles and processes of curriculum design and implementation in developmental education contexts, including examination of emerging research and issues. The course pedagogy also engages students in independent curriculum research, planning, and problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7371. Theory and Research of Postsecondary Integrated Reading and Writing.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7372. Theory and Research of New Literacies Studies in Developmental Education.**

This course focuses on the theory and research of New Literacies Studies, which affects instructional practice in postsecondary Developmental Education. It includes an examination of diverse theories and models of multiple digital technology literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7373. Community Literacies.**

This course focuses on exploring, understanding, refining, and reflecting on literacy as social practices within a community that informs effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

The Department of Curriculum and Instruction in the College of Education at Texas State offers a Ed.D. in Postsecondary Student Success in Learning, Literacy, and Mathematics that produces highly-qualified program leaders and practitioners in postsecondary student success programs. The Ed.D. is designed to fill the urgent need for advanced research in an emerging field that serves those who are underprepared for postsecondary education.

## Mission Statement

The doctoral program in Postsecondary Student Success in Learning, Literacy, and Mathematics within the Department of Curriculum and Instruction prepares future scholars, researchers, leaders, administrators, instructors, and practitioners in the field of postsecondary student success. Both rigorous and supportive, the program aims to advance theory, research, and practice in multiple areas of postsecondary student success — including learning, literacy, and mathematics — by actively engaging students in teaching, scholarship, and professional service. As a multidisciplinary program, the faculty, staff, and students work collaboratively across various academic disciplines, diverse communities, and geographic boundaries.

## Educational Goal

Major educational objectives for the programs include the following:

- To prepare postsecondary student success professionals who engage in divergent and critical thinking, are culturally competent, and are skilled in maximizing technology applications for learning and communication;
- To prepare postsecondary student success professionals who understand and can respond to the nature and needs of students who enroll in postsecondary programs; the complexities of motivation, teaching, learning, and assessment in postsecondary settings; the cultural, political, and social systems that create inequities in educational settings; and the structure and management of academic support programs programs;
- To prepare postsecondary student success professionals with sophisticated research skills that will enable them to critically evaluate postsecondary programs and practices and implement research agendas that will inform practice and policy;
- To prepare postsecondary student success professionals who will serve as leaders in the postsecondary student success profession who can engage in institutional leadership, program administration, and innovative program development and evaluation that will promote systemic change and improvement.

## Advising

Advising takes three forms: the initial advisor, the program mentor, and the dissertation advisor. When students are first admitted, they

are assigned an initial advisor who mentors them from entry through their first year benchmarks in the program. By the end of the first year, students formally ask a faculty member to be their program mentor who advises them from the end of their first year until their comprehensive exams. At a time no later than the completion of their comprehensive exams, students then select a dissertation advisor who is the chair of their dissertation committee, which must be formed at that time. These advising roles can be assumed by the same faculty member or different faculty members depending on students' research interests and foci.

In their first term, students will construct a program plan with the assistance of their initial advisor. The program plan is a focused, detailed description of the doctoral student's proposed course work, specialization, and goals for the doctoral program. The program plan will be submitted to the doctoral program plan committee for approval and suggestions. The program plan must include the following:

- goal statement that includes doctoral study goals (including specialization) and future professional goals
- professional curriculum vitae
- course work plan. This is the appropriate place for petitioning for course transfer for graduate work done previously (there is a 5-year time limit on any course work counting toward candidacy).

The student should work with their advisor for direction while completing the program plan prior to submitting it to the program plan committee. It is **due to the program plan committee by November 15** in the fall term of the student's first year of study. After the program plan committee reviews the student's program plan, a meeting may be scheduled with the student for further review of the plan.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- master's degree from a regionally accredited university or demonstrated success in graduate-level studies or professional experience in a field relevant to postsecondary student success in learning, literacy, or mathematics.
- The Postsecondary Student Success in Learning, Literacy, and Mathematics doctorate (both Ph.D. and Ed.D. tracks) requires 96 semester credit hours for students admitted with a bachelor's degree. Students admitted with a bachelor's degree will follow the same program of study as students admitted with a master's degree (66

semester credit hours), but with an additional 30 semester credit hours of open electives.

- official transcripts from **each institution** where course credit was granted
- minimum 3.0 GPA (on a 4.0 scale) in all completed graduate course work
- resume/CV
- statement of purpose (approximately 500-1000 words) demonstrating the student's research interest and goals as a postsecondary student success professional and potential to contribute to the advancement of scholarly work in the field of postsecondary student success. Students should discuss relevant teaching, research, and/or policy experience as well as provide clear evidence of a commitment to research and scholarship.
- three letters of recommendation addressing the student's professional and academic background
- interviews with the admissions committee will be arranged, following the initial screening using the admissions criteria listed above, for qualified applicants

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Education (Ed.D.) degree with a major in Postsecondary Student Success in Learning, Literacy, and Mathematics concentration in Developmental Mathematics requires 66 semester credit hours or 96 semester credit hours for students admitted with a bachelor's degree. Students admitted with a bachelor's degree will follow the same program of study as students admitted with a master's degree (66 semester credit hours), but with an additional 30 semester credit hours of open electives.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
DE 7301	Understanding Learners in Developmental Education Contexts	3
DE 7302	Policy and Politics in Developmental Education	3
DE 7303	Teaching and Learning in Developmental Education	3
DE 7305	Diversity in P-16 Educational Contexts	3
CI 7101	Introduction to the Research Experience	1
CI 7101	Introduction to the Research Experience	1

CI 7101	Introduction to the Research Experience	1
CI 7302	Research Methods and Measurement in Education	3
CI 7351	Beginning Quantitative Research Design and Analysis	3
CI 7352	Beginning Qualitative Design and Analysis	3
<b>Concentration</b>		
Choose 21 hours from the following:		21
MATH 7111	Seminar in Teaching	
MATH 7188	Seminar in Mathematics Education	
MATH 7302	History of Mathematics	
MATH 7306	Current Research in Math Education	
MATH 7324	Curriculum Design & Analysis	
MATH 7328	Instructional Techniques & Assessments	
MATH 7366A	Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors)	
MATH 7366E	Developmental Mathematics Curriculum	
MATH 7378A	Problem Solving, Reasoning, and Proof	
MATH 7378B	Connecting and Communicating Math	
MATH 7378E	Developmental Mathematics Perspectives	
MATH 7386	Independent Study in Mathematics Education	
MATH 7396	Mathematics Education Research Seminar	
CI 7303	Educational and Psychological Measurement and Assessment	
CI 7360	Designing Educational Research	
DE 7380	Managing Developmental Education Programs	
DE 7381	Practicum	
<b>Prescribed Electives</b>		
Choose 3 hours from the following:		3
CI 7353	Intermediate Quantitative Research Design and Analysis	
CI 7354	Intermediate Qualitative Design and Analysis	
<b>Electives</b>		
Choose 6 hours of advisor-approved electives		6
<b>Dissertation</b>		
Choose a minimum of 12 hours from the following:		12
DE 7199	Dissertation	
DE 7299	Dissertation	
DE 7399	Dissertation	
DE 7599	Dissertation	
DE 7699	Dissertation	
DE 7999	Dissertation	
<b>Total Hours</b>		<b>66</b>

## Advancement to Candidacy

### Application for Advancement to Candidacy

Once all course work (except for dissertation course work) has been completed, the comprehensive exams have been passed, and the dissertation proposal has been successfully defended, doctoral students will apply for advancement to candidacy. Candidacy must be achieved within five (5) years of initiating program course work. No credit will be applied toward the doctoral degree for course work completed more than five (5) years before the date on which the student is advanced to candidacy. This time limit applies toward credit earned at Texas

State as well as credit transferred to Texas State from other accredited institutions. Requests for a time extension must be made to the program, which in turn submits a recommendation to The Graduate College. Achieving doctoral candidacy allows the student to begin doctoral dissertation research. Candidacy forms are found here: [http://www.gradcollege.txstate.edu/Fac\\_Resources/Forms.html](http://www.gradcollege.txstate.edu/Fac_Resources/Forms.html).

### Grade-Point Requirements for Advancement to Candidacy

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.0. No grade earned below a "B" on any graduate course may apply toward a doctorate at Texas State. Incomplete grades must be cleared through The Graduate College before a student can be approved for advancement to candidacy.

### Comprehensive Exams

All students in the Doctoral Program in Postsecondary Student Success in Learning, Literacy, and Mathematics are required to pass a Comprehensive Examination at the conclusion of coursework, prior to moving into the dissertation phase of the program. The purposes of this exam are to demonstrate mastery of the coursework content and preparation for independent research. Ideally, this process will begin during students' last semester of coursework, and will be completed the same semester.

Students will first discuss their ideas for the comprehensive examination with their advisor. Students will then form a comprehensive exam committee that is comprised of, at least, their advisor (as Chair) and two other faculty members from the Postsecondary Student Success in Learning, Literacy, and Mathematics program.

After stating their intention to take the comprehensive exam at the beginning of the semester, students will submit written responses to three foreknown items and participate in an oral defense of their work that includes a student presentation about their written responses to the items and fielding of faculty questions. Committee evaluations will be either pass, needs revisions, or does not pass. If applicable, students will have two weeks to make revisions, and committee evaluations of the revised work will be either pass or does not pass. Students who do not pass, will have two more attempts to pass the comprehensive exam before being discontinued from the program.

### Dissertation Proposal

At a time no later than the completion of their Comprehensive Exams, students must select a dissertation advisor. After selecting their dissertation advisor, and before beginning their dissertation proposal, students will form a dissertation committee that will provide technical support for the inception, conduct, and completion of the dissertation research study and evaluate the final product. The student will undertake the research and write the dissertation under the guidance of their dissertation advisor. The dissertation proposal must be successfully defended and approved by the dean of The Graduate College before a student can be advanced to candidacy. Information about the dissertation procedures can be found in the Dissertation tab.

Students must submit the dissertation proposal and one copy of the official "Dissertation Proposal form" (available on The Graduate College website) to the dissertation advisor. After obtaining committee members' signatures, the student must submit the dissertation proposal and dissertation proposal form to the program director for signature. The form also requires evidence of the IRB approval for any research involving human subjects. The program director will then forward the dissertation

proposal and form through the department chair to the dean of The Graduate College for final approval. Final approval must be received before proceeding with the defense of the dissertation proposal. The Dissertation Proposal form may be obtained from The Graduate College website.

### Defense of the Dissertation Proposal

Students must defend the dissertation proposal in a meeting that begins with a public presentation and continues with an oral examination by the dissertation committee. The examination will address the proposed dissertation topic (problem definition and scope), relevant literature, and research method. The dissertation committee must sign the "Defense of the Dissertation Proposal form" to indicate approval and then submit the form for the signature of the doctoral program director and the department chair. The approved Defense of the Dissertation Proposal form must be forwarded to the dean of The Graduate College. The dissertation proposal must be approved and the Defense of the Dissertation Proposal form must be on file in The Graduate College before any student can advance to candidacy and begin dissertation research.

### Recommendation for Advancement to Candidacy

The dissertation committee recommends the applicant for advancement to candidacy to the doctoral program director, the department chair, and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been met. To be eligible for admission to candidacy the student must have successfully completed the comprehensive exam, completed all course work, and successfully defended the dissertation proposal.

## Dissertation Research and Writing

All doctoral students are required to complete a dissertation. The dissertation must be an original contribution to scholarship and the result of independent investigation in a significant area. Preparation of the dissertation must follow the latest edition of the *Publication Manual of the American Psychological Association*.

## Dissertation Enrollment Requirements

Any time a student is receiving official guidance on the dissertation, the student must be enrolled in a dissertation course. A student must maintain continuous enrollment in dissertation hours every term from the time they advance to candidacy until the dissertation is defended and approved. If a student is receiving supervision on the dissertation during the summer or the student is graduating during the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred. Students must enroll in a minimum of 12 dissertation credit hours.

## Dissertation Time Limit

Students must complete the dissertation within five (5) years of advancement to candidacy. The student's dissertation advisor, with the student's dissertation committee, will review the student's progress annually.

## Dissertation Advisor and dissertation committee

The dissertation committee must be composed of four approved doctoral graduate faculty members. The doctoral student must select a minimum

of four committee members, one of which must be outside the program. The chair of the dissertation committee must be from the program. All committee members must hold at least associate doctoral faculty status, and chairs must hold core doctoral faculty status. To form the dissertation committee, the "Dissertation Committee Request form" must be completed and signed by the student, committee members, committee chair, doctoral program director, and the department chair and then forwarded to the dean of The Graduate College for approval and signature. The required Dissertation Committee Request form may be obtained from The Graduate College website.

### Committee Changes

Any changes to the dissertation committee must be submitted for approval to the dissertation advisor, the doctoral program director, the department chair, and the dean of The Graduate College. Changes must be submitted no less than sixty (60) days before the final dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be obtained from The Graduate College website.

## Defense of the Dissertation

All dissertations must meet the following requirements as judged by the student's dissertation committee:

1. a systematic investigation of a problem,
2. informed by previous theory and research,
3. that adds to the body of knowledge in the area of investigation, and
4. is presented in a form capable of dissemination to scholars and practitioners.

Students must pass the final oral examination that covers the dissertation and the general field of the dissertation. Students must defend the dissertation in a meeting that begins with a public presentation and continues with an oral exam by the dissertation committee. Before scheduling the final oral exam, the student must have received approval of the dissertation advisor. A completed dissertation defense report must be submitted according to the schedule posted by the dean of The Graduate College and no later than ten days before the date of graduation. The student must complete all aspects of the dissertation, including successful defense and submission of the dissertation to The Graduate College, within five (5) years of advancement to candidacy.

## Approval and Submission of the Dissertation and Abstract

The approval of the dissertation and abstract requires positive votes from the dissertation advisor and from a majority of the dissertation committee members. Once the committee has approved the dissertation, one copy of the dissertation and the signed "Committee Approval form" must be submitted to the dean of The Graduate College for final approval. Refer to the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation* for specific guidelines.

Doctoral level courses in Developmental Education: CI (p. 1286), DE (p. 1287), ENG (p. 1289), MATH (p. 1290), RDG (p. 1297)



## Courses Offered

### Curriculum and Instruction (CI)

#### **CI 7101. Introduction to the Research Experience.**

This course is designed to introduce students to the program and to the ongoing research activities of its faculty. Emphasis is placed on identifying and coordinating opportunities for joint research and scholarship among faculty and students. Students must enroll in the course for three semesters before dissertation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### **CI 7302. Research Methods and Measurement in Education.**

This course provides a comprehensive introduction to educational research with a focus on research design, research methods and methodology, and fundamental measurement issues in quantitative, qualitative, and mixed-methods research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7303. Educational and Psychological Measurement and Assessment.**

Philosophical and empirical foundations of measurement, assessment, testing, and evaluation. Topics include philosophical and mathematical foundations in research; empirical levels and measurement description; test construction; observational rating scales; measurement interpretation; social, legal, and ethical implications; item analysis/refinement for scale performance; reliability and validity evidence; and standardized and placement tests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7310. Teaching in College.**

Teaching strategies for teaching/instructional assistants focused on creating syllabi, adapting to diverse student populations, collaborating with colleagues and staff, implementing active learning strategies, fostering assigned reading, assessing learning, and integrating technology. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **CI 7326. Grant Development and Management.**

This course focuses on developing competitive grant proposals and understanding grant management resources. Strategies will encompass locating funding sources, evaluating proposals, developing proposals and budgets, and methods of meeting accountability requirements.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7351. Beginning Quantitative Research Design and Analysis.**

This course introduces students to quantitative research design and analysis. Topics include descriptive statistics; sampling techniques; statistical inference, including the null hypothesis, significance tests, and confidence intervals; and causal-comparative analyses, including t-test and ANOVA. Corequisite: CI 7302 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

#### **CI 7352. Beginning Qualitative Design and Analysis.**

This course introduces students to the qualitative paradigm. Topics include distinctive features, alternative qualitative traditions, purposeful sampling, common data collection methods, inductive analysis, the role of the researcher, and evaluation of qualitative research. Corequisite: CI 7302 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7353. Intermediate Quantitative Research Design and Analysis.**

This course focuses on intermediate quantitative research design and statistical methods of data analysis related to problems in education, psychology, sociology, and biological sciences. The general linear model based univariate and selected multivariate statistical techniques are examined including theory/purpose, logic, practical implications, and interpretation of various analytic techniques. Prerequisite: CI 7351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7354. Intermediate Qualitative Design and Analysis.**

This course focuses on issues in design and implementation of qualitative research. Topics include influence of alternative traditions, literature in qualitative research, access to the field and ethical issues, researcher-participant relationships, purposeful sampling strategies, inductive analysis procedures, developing theory, and reporting research. Prerequisite: CI 7352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7355. Mixed Methods in Research and Evaluation.**

This course will cover mixed methods research designs that can be used in the evaluation of educational interventions and programs. Topics include mixed methods research designs, program evaluation models, quantitative and qualitative data analysis and interpretation, reading mixed methods research articles, and writing mixed methods research proposals and evaluation reports. Prerequisite: CI 7351 and CI 7352 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 7358. Theoretical and Conceptual Frameworks in Qualitative Research.**

This course is intended for those versed in current paradigmatic and epistemological states of human inquiry and presents an opportunity to design a research project and address the major issues of a research career. Prerequisite: CI 7352 and CI 7354 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7359. Seminar in Quantitative Research.**

This course is a small-group seminar that focuses on analytic strategies specific to the doctoral student's dissertation topic. Examples include structural equation modeling, hierarchical linear modeling, log linear modeling, non-parametric analyses, factor analysis, factorial analysis of variance, and other multivariate statistical methods. Prerequisite: CI 7351 and CI 7353 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7360. Designing Educational Research.**

Students identify problems in Developmental Education, develop a strategic proposal to apply to these problems, and create an evaluation plan to assess the implementation of their proposal. Students also develop skills in critiquing research reports and in synthesizing research from Developmental Education. Prerequisite: CI 7353 or CI 7354 or CI 7355 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7378. Independent Study.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in the Department of Curriculum and Instruction. May be repeated for additional credit at the discretion of the program coordinator.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7386. Directed Research.**

Students will participate in an authentic research experience, either by working as part of a doctoral faculty member's research team or developing an original research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 7388. Educational Leadership for Social Justice.**

This course provides an in-depth study of the theories and practices related to educational leadership in PreK-12 educational contexts through a social justice lens. Students will examine current social justice issues in schools and develop strategies for conceptualizing and implementing institutional change that works toward a more equitable education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7389A. Topics in Instructional Technology.**

This topic offers an in-depth study of systematic instructional design emphasizing the selection and use of appropriate media for delivering instruction to maximize student learning. Special emphasis in this topic is on the leader's role in influencing the use of technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**CI 7389C. Special Topics: Race Theory in Educational Research.**

This course will explore racial theories and paradigms applicable to the study of race in K-20 educational settings. Students will analyze foundational scholarship in the formation of racial theories, research methodology, key tenets of race research, and literature pertinent to current trends in educational research regarding race. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**Developmental Education (DE)****DE 7199. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7299. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7301. Understanding Learners in Developmental Education Contexts.**

This course identifies the evolution, characteristics, demographics, and needs of learners in Developmental Education contexts. Emphasis is placed on understanding internal factors, including the cognitive, affective, and psychosocial needs of students, as well as on analyzing external factors, including the social, political and institutional forces that impact learners' educational experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7302. Policy and Politics in Developmental Education.**

This course addresses the policy and politics of planning, funding, implementing, and evaluating Developmental Education programs in postsecondary education. Readings and discussions focus on current and historical issues relevant to addressing the academic needs of educationally disadvantaged students from the perspective of researchers, program directors, policy analysts, and instructors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7303. Teaching and Learning in Developmental Education.**

The course focuses on the institutional development, intellectual development, learner development, and self-development for effective teaching and learning in developmental education. Topics include instructional and learner theories, pedagogies, assessment and evaluation techniques, and best practices for instruction and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7304A. Curriculum Design in Developmental Education.**

This course focuses on principles and processes of curriculum design and implementation in developmental education contexts, including examination of emerging research and issues. The course pedagogy also engages students in independent curriculum research, planning, and problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**DE 7304B. Theory and Research of Digital Literacies.**

This course focuses on understanding the complex relationships between technology, teaching, and learning in varied developmental education environments. Tools and strategies for planning, integrating, and assessing technology-supported instruction are explored within frameworks linking theory to practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**DE 7304D. Transformative Learning.**

This course introduces students to the core principles of transformative learning. The course is a theory-driven, project-based advanced class designed to enable students to develop theoretical perspectives, engage in intensive practice, and understand the use of transformative learning for applications with postsecondary individuals, groups, and organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7304E. Current Topics in Motivation Intervention Research.**

This course focuses on analyzing, synthesizing, discussing, and applying cutting-edge research on various types of motivation interventions in education. Emphasis will be placed on theory, research, and practice in postsecondary educational settings and Developmental Education contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7304F. Current Topics in Strategic and Self-Regulated Learning Intervention Research.**

This course examines cutting-edge research on strategic and self-regulated learning interventions. Emphasis will be placed on theory, research, and practice relevant to postsecondary educational settings, however, students will be encouraged to apply course content to their areas of interest which may be outside of postsecondary educational settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7305. Diversity in P-16 Educational Contexts.**

This course uses critical multicultural frameworks to trace the evolution of learners in a P-16 educational system. Students in this course examine school practices and policies in an attempt to map the educational trajectory and improve the educational experiences of P-16 students who are underrepresented and underserved. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7321. The Community College.**

Introduction to community college and to its roles and functions in American education. Special attention will be directed to evolution, development and patterns of organization, purposes, programs, personnel and current issues of the community college.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7322. Learning Support Centers in Postsecondary Settings.**

The course explores the learning assistance movement in postsecondary settings including its history, leaders, and current research. Topics include program planning; leadership, organization, and management; human and financial resources; facilities and equipment; legal responsibilities; equal opportunity and access; diversity; ethics; campus and community relations; and assessment and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7323. Academic Support for Students with Learning Disabilities.**

The course focuses on Learning Disabilities (LD) and Executive Function (EF) Disorders and their nature, prevalence, and significance in postsecondary environments. Topics include theories about the origins and nature of LD and EF, development across the lifespan, characteristics of individuals, and approaches to service, delivery and teaching. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7324. Teaching Learning Strategies and Critical Thinking in Postsecondary Contexts.**

This course explores theory and pedagogy of learning strategies, problem solving, and critical thinking skills in postsecondary contexts. Topics include variables in teaching and learning, methods of assessment, and approaches to instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7325. Advising, Coaching, and Mentoring Learners in Postsecondary Education.**

The course will focus on theories and techniques of academic advising, coaching, and mentoring skills for learners enrolled in postsecondary education. Didactic and experiential activities will provide students enrolled in the course with opportunities to learn and practice skill development within these academic support programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7380. Managing Developmental Education Programs.**

This course focuses on the theoretical and practical elements of management of Developmental Education programs in higher education. Readings and discussions focus generally on best practices in higher education leadership and specifically on best practices in leadership and management in Developmental Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7381. Practicum.**

A 150-clock hour, one-semester practical experience in an institution or agency other than one's own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities to include program planning, management, budgeting, and/or evaluation.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 7399. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7599. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7699. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7999. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**English (ENG)****ENG 7300. Language Problems in a Multicultural Environment.**

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7314. Specializations in Professional and Technical Communication Topics.**

Provides theoretical and practical information for specialized types of technical and professional communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7316. Foundations in Rhetoric and Composition.**

A course providing students with theoretical, pedagogical, and/or methodological foundations in the field of rhetoric and composition. Emphases vary but may include Contemporary Composition Pedagogy, Basic Writing Theory and Practice, and Writing Assessment. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7317. Specializations in Rhetoric and Composition.**

A course providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Across the Curriculum, Service Learning, Writing Center Theory and Practice, Computers and Writing, Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## **Mathematics (MATH)**

**MATH 7111. Seminar in Teaching.**

Seminar on individual study projects concerned with selected problems in the teaching of mathematics. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MATH 7188. Seminar in Mathematics Education.**

Students are required to attend weekly research seminars in Mathematics Education and to give at least one research presentation in the seminar during the semester. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7199A. Dissertation.**

Original research and writing in Mathematics Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7299A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7301. Studies in Mathematics.**

This course provides basic foundations in Mathematics for students entering the doctoral program in Mathematics or Mathematics Education. This course may be repeated. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 7302. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7303. Analysis I.**

This course covers foundations of modern analysis. Topics include: sequences,  $\limsup$ ,  $\liminf$ , Sigma Algebras of sets that include open and closed sets, sequences of functions, pointwise and uniform convergence, lower and upper semi-continuity, Borel sets, outer measure, and Lebesgue measure. Prerequisite: MATH 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7306. Current Research in Math Education.**

This course surveys the various current social, political, and economic trends in local, state, national, and international settings that are related to research in Mathematics Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7307. Algebra I.**

Applications of Algebra and topics in modern algebra, including permutation groups, symmetry groups, Sylow theorems, and select topics from Ring Theory. Prerequisite: MATH 4307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7309. Topology I.**

A course in point-set topology emphasizing topological spaces, continuous functions, connectedness, compactness, countability, separability, metrizability, CW-complexes, simplicial complexes, nerves, and dimension theory. Prerequisite: MATH 4330.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7313. Analysis II.**

This course covers the theory of integration with special emphasis on Lebesgue integrals. Topics include: Lebesgue integral, Bounded Convergence theorem, differentiation and integration, absolute continuity, and  $L_p$  spaces. Prerequisite: Math 7303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7317. Algebra II.**

A study of the important algebraic structures of rings and fields. Topics covered include rings, ideals, modules, polynomial rings, Euclidean algorithm, finite fields, and field extensions. Topics also include an introduction to Galois Theory with an emphasis on the geometric applications. Prerequisite: MATH 7307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7319. Topology II: Algebraic Topology.**

This course covers the fundamental concepts and tools of algebraic topology. Topics include the fundamental group, covering spaces, homotopy type, the higher homotopy groups, singular homology theory, and the computation of homology groups via exact sequences and applications. Prerequisite: MATH 7307 and MATH 7309.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7321. Graph Theory.**

Topics in this course include trees, connectivity of graphs, Eulerian graphs, Hamiltonian graphs, planar graphs, graph coloring, matchings, factorizations, digraphs, networks, and network flow problems. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7323. Theories of Knowing and Learning in Mathematics Education.**

This course surveys the major theories of knowing and learning that have influenced mathematics education. These theories include behaviorism, constructivism, sociocultural theories, situated cognition, and others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7324. Curriculum Design & Analysis.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques that are related to curriculum design in Mathematics Education for grade levels P-16.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7325. Statistics 1.**

A study of the mathematical and probabilistic underpinnings of the techniques used in statistical inference. Topics covered include sampling, sampling distributions, confidence intervals, and hypothesis testing with an emphasis on both simulations and derivations. Prerequisite: Math 2321 and Math 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7328. Instructional Techniques & Assessments.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques of instruction in Mathematics Education and the related assessment procedures for each for grade levels P-20.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7331. Combinatorics.**

This course is a study of fundamental principles of combinatorics. Topics include: permutations and combinations, the Pigeonhole principle, the principle of inclusion-exclusion, binomial and multinomial theorems, special counting sequences, partitions, posets, extremal set theory, generating functions, recurrence relations, and the Polya theory of counting. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7335. Statistics II: Linear Modeling.**

A study of the formulation and statistical methodologies for fitting linear models. Topics include the general linear hypothesis, least-squares estimation, Gauss-Markov theorem, assessment of model fit, effects of departures from assumptions, model design, and criteria for selection of optimal regression models. Prerequisite: MATH 3377 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MATH 7346. Quantitative Research Analysis in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and use of appropriate design methodologies to achieve the strongest possible evidence to support or refute a knowledge claim. Prerequisite: MATH 7306 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7354. Advanced Qualitative Research.**

This course encompasses the techniques and tools needed for the development, investigation, and demonstration of competence in conducting qualitative research in mathematics education. Principles of qualitative data analysis are a significant focus of the course, with particular attention given to specific methods used to code and analyze data. Prerequisite: ED 7352 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356B. Advanced Qualitative Research.**

This course encompasses investigation, development, and demonstration of competence, design, and execution for mathematics education problems in qualitative research. Prerequisite: ED 7352 or CI 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356C. Action Research in Mathematics Education.**

This course examines underlying theory and issues in action research model and the development of action research projects. Prerequisites: MATH 7346 or ED 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7358. Advanced Quantitative Research in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and the use of appropriate design methodologies to achieve the most substantial evidence to support or refute a knowledge claim. Prerequisite: MATH 7346 with a grade of "B" or better or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7361. Seminar in Advanced Mathematics.**

Material in course will vary with the interest of students and faculty. A detailed study of subject matter may be chosen from advanced areas of analysis; algebra; topology and geometry; applied mathematics; and probability and statistics. This course is repeatable for credit when subject matter varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7363A. COMPLEX ANALYSIS.**

This course is a brief introduction to the complex number system and basic point-set topology of the complex plane, followed by a proof-based and rigorous study of the principal results of the analysis of functions of a single complex variable. Prerequisite: MATH 4315 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363B. NUMERICAL ANALYSIS.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using computer algebra systems. Symbolic, numerical, and graphical techniques will be studied. Applications will be drawn from the sciences, engineering, and mathematics. Prerequisite: MATH 3323 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363C. FUNCTNL ANALYSIS.**

This course presents the three basic fundamentals theorems of functional analysis: the Hanh-Banach theorem, the uniform boundedness theorem, and the open mapping theorem. Prerequisite: MATH 7303 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363E. Numerical Analysis II.**

This course will involve the analysis and numerical implementation of algorithms to solve partial differential equations. Applications will be drawn from science, engineering, and mathematics. Topics include the numerical solution of linear partial differential equations and the related linear systems of equations. Prerequisite: MATH 7363B with a letter grade of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363F. Functional Analysis II.**

This course will involve the analysis of infinite dimensional vector spaces including spaces of functions, measures, and distributions. Topics include Fourier transforms, theory of Banach spaces, and operator theory. Prerequisite: MATH 7363C with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366A. Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors).**

This course examines how to develop and teach post-secondary students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisites: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366B. Teaching K-12 Students (Elementary, Middle School, and High School).**

This course examines how to develop and teach K-12 students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366C. Teaching Teachers (In-Service; Pre-Service).**

This course examines how to prepare teachers of mathematics. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366D. Teaching Specialized Content.**

This course will be an in-depth study of a specialized content area in mathematics with an emphasis on teaching. The specific content area will vary by instructor. Examples include Euclidean Simplex Geometry and Discrete Probability Spaces with Implications for Public School Curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366E. Developmental Mathematics Curriculum.**

This course surveys the research, development, and evaluation of the scope and sequence of developmental mathematics curriculum. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366F. Research in Undergraduate Mathematics Education I.**

Students will develop the requisite knowledge to become a good consumer of Research in Undergraduate Mathematics Education (RUME) research. The course will cover the theoretical underpinnings of current and historic RUME research. Students will develop the knowledge to understand relevant theoretical stances and the role they play in research. Prerequisite: Math 7306 or permission from the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366G. Research in Undergraduate Mathematics Education II.**

In this course, students will develop necessary knowledge to design/conduct RUME research via a topic-driven look at current RUME research. Core topics include proof, analysis/calculus, abstract algebra, linear algebra, and differential equations. Students will develop a depth of knowledge related to these topics and engage in research design and development. Prerequisite: MATH7306 and MATH7366F.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7367B. ADV GROUP THEORY.**

This course covers topics including properties of solvable, p-solvable and nilpotent groups, group actions, transfer theorems, simple groups and composition series, the generalized Fitting subgroup, automorphism groups, classical groups and linear representations of groups. Prerequisite: MATH 7307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369C. Low-dimensional topology.**

This course is an introduction to low-dimensional topology. Topics include surfaces, 3-manifolds, knots, and 4-manifolds. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369D. Characteristic Classes.**

This course is an introduction to vector bundles and characteristic classes. Topics covered include Stiefel-Whitney classes, Chern classes, Euler class, Pontrjagin classes, and their computation. Additional topics may include manifold immersion problems. Prerequisite: MATH 7317 and MATH 7319 both with grades of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369E. Differential Geometry.**

This course is an introduction to modern tools of differential geometry. Topics covered include manifolds, Riemannian metrics, connections, covariant derivatives, geodesics, curvatures, extrinsic and intrinsic computations. Other possible topics include hyperbolic geometry, Lie groups, Chern-Weil theory, surfaces of prescribed mean curvature, the Gauss-Bonnet theorem, and the Cartan-Hadamard theorem. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7371A. Advanced Graph Theory.**

Topics in this course include Turan's problems, Ramsey theory, random graph theory, extremal graph theory, algebraic graph theory, domination of graphs, distance problems, and applications. Prerequisite: MATH 7321.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371B. Advanced Combinatorics.**

Topics in this course include Block designs, Latin squares, combinatorial optimization problems, coding theory, matroids, difference sets, and finite geometry. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371C. Combinatorial Number Theory.**

A study of fundamental techniques in combinatorial number theory. Topics will include Waring's problem, additive number theory, and probabilistic methods in number theory. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371D. Discrete Optimization.**

A study of some fundamental techniques in discrete optimization. Topics include discrete optimization, linear programming, integer programming, integer nonlinear programming, dynamic programming, location problem, scheduling problem, transportation problem, postman problem, traveling salesman problem, matroids, and NP-completeness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371E. Algorithms and Complexity.**

A study of some fundamental concepts of computability and complexity. Topics include polynomially bounded problems, NP-complete problems, exponentially hard problems, undecidable problems, and reducibility. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371F. Probabilistic Methods in Discrete Mathematics.**

A study of some fundamental probabilistic techniques used to solve problems in graph theory, combinatorics, combinatorial number theory, combinatorial geometry, and algorithm. Topics include linearity of expectation, alterations, second moment, local lemma, correlation inequalities, martingales, Poisson paradigm, and pseudo-randomness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371G. Applied Discrete Mathematics.**

This course introduces fundamental concepts in logic, Boolean algebra, and binomial coefficients; and applications in different fields such as complexity of algorithms and network theory. Prerequisites: MATH 2472 and MATH 4307, all with a grade of "C" or better, or with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371H. Combinatorial Networks.**

Combinatorial Networks is an area of study of certain types of networks using combinatorial methods extensively. This course introduces fundamental basics as well as the latest development in this area of research. Prerequisite: MATH 5307/7307 with a grade of "C" or higher.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7373B. Partial Differential Equations I.**

This course covers the theory and application of partial differential equations, typical equations of mathematical physics, Cauchy problem for equations of the first order, classification of second-order equations, Cauchy problem for second-order hyperbolic equations, Duhamel's principle, potential theory and elliptic equations, maximum principle, and parabolic equations. Prerequisite: MATH 3323, 3373 and 3380 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373C. Partial Differential Equations II.**

This course covers the existence and uniqueness theory for boundary value problems of partial differential equations (PDE) including the topics linear evolution equations, variational techniques, non-variational techniques, Hamilton-Jacobi equations, conservation laws. Prerequisite: MATH 7373B with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373G. Spectral Methods.**

This course covers the essentials of spectral collocation methods with an emphasis on numerically implementing algorithms. The problems studied will include ordinary and partial differential equations connected with fluid mechanics, quantum mechanics, waves, and other fields. The techniques used will include both Fourier and Chebychev methods.

Prerequisite: MATH 7363E with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375C. Time Series Analysis.**

A study of the theory of time-dependent data. The analysis includes modeling, estimation, and testing; alternating between the time domain; using autoregressive and moving average models and the frequency domain; and using spectral analysis. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375D. Advanced linear Modeling.**

The course provides an extension of regression methodology to more general settings where standard assumptions for ordinary least squares are violated. Topics include generalized least squares, robust regression, bootstrap, regression in the presence of autocorrelated errors, generalized linear models, and logistic and Poisson regression. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375E. Computational Statistics.**

This course focuses on commonly used sampling and optimization algorithms in statistics. Topics include accept-reject method, importance sampling, Markov Chain Monte Carlo algorithms, Fisher scoring algorithm, expectation-maximization algorithm, and minorization-maximization algorithm. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375F. Multivariate Data Analysis.**

This course focuses on statistical methodologies based on multivariate analysis. Topics include multivariate normal distribution, tests of hypothesis on means, multivariate analysis of variance, discriminant analysis, principal component analysis, factor analysis and canonical correlation analysis. Prerequisite: MATH 5305 and (MATH 3376 or MATH 3377) with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375G. Bayesian Methods.**

This course focuses on Bayesian statistical analysis and associated theories. Topics include one-parameter and multi-parameter Bayesian models, choices of priors, formulation of regression models in the Bayesian framework, and related data analysis. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375I. Advanced Statistical Learning.**

This course covers the theoretical foundations in statistical learning and deep learning. Topics include the framework of empirical risk minimization, metric entropy, Vapnik-Chervonenkis dimension, Rademacher and Gaussian complexity, symmetrization and chaining techniques, contraction principle, uniform law of large numbers, sample complexity, and neural networks. Prerequisite: MATH 7337 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378A. Problem Solving, Reasoning, and Proof.**

A study of the fundamental concepts of problem solving, logic, set theory, and mathematical proof and applications of these concepts in mathematics curriculum for grades P-20. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378B. Connecting and Communicating Math.**

This course examines one of the basic principles involved in mathematics education: Connecting and Communicating Mathematics. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378C. Representing Fundamental Math Ideas (Function, Data Analysis, and Enumeration).**

This course examines the basic principles involved in mathematics education. The process of representing fundamental mathematical ideas will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378D. Math Technologies.**

This course examines the basic principles involved in mathematics education: Technology. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378E. Developmental Mathematics Perspectives.**

This course examines developmental mathematics-specific strands including technological course support and placement tools/decisions. Issues related to the first mathematics core course required of undergraduates will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378F. Research on Mathematical Problem Solving in Secondary Schools.**

In this course a careful study is made of elementary techniques for problem solving in a variety of domains, including algebra, number theory, combinatorics, geometry, and logic puzzles. Students will learn these techniques by actually working on a collection of problems in each of these areas. Students will read and examine research about various aspects of problem solving and research in math education that includes both teacher training and student learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378G. Discourse Processes, Traditions, and Analysis in Mathematics Education.**

Discourse and discourse analysis have been used to answer research questions across disciplines throughout the humanities and social sciences. This course will focus on theory and methods for the analysis of discourse in mathematical settings. We will learn how different approaches to discourse are used to understand mathematics learning. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378H. Equity in Mathematics Education.**

Equity in Mathematics Education is a course examining research on equity issues in mathematics education. These equity issues will range from race, culture, class, and gender as they relate to the teaching, learning, and schooling of mathematics education. We will look at how equity is framed within the field of mathematics education, what has been addressed, and what has not been conceptualized. The course will help students understand the literature in the field, critique the extant research literature, design research, and consider important facets of teaching for various student groups. Prerequisite: MATH 7306 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7385. Independent Study in Mathematics.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of mathematics. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7386. Independent Study in Mathematics Education.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of Mathematics Education. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7389. Internship.**

In this course, students will work under the supervision of a faculty member to gain practical knowledge in their field. Student experience can come from industry, government agencies, or other sources but must directly apply to furthering knowledge of applications of mathematics or mathematics education.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7396. Mathematics Education Research Seminar.**

Collaborative research projects with faculty through identifying an educational issue, reviewing literature, creating a research question, designing a methodology, analyzing data, drawing conclusions, implications, and creating a draft of a publishable paper. Prerequisite: MATH 7356, and ED 7352 or MATH 7346, all with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**MATH 7399A. Dissertation.**

This course represents a Mathematics or Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MATH 7599A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7699A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7999A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Reading (RDG)

**RDG 7301. Theory and Research of Literacy.**

This course examines the current theories and basic research of literacy development from psychological, cultural, linguistic, educational, and epistemological frameworks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7302. Theory and Research of College Basic Literacy.**

This course examines basic literacy needs and instructional strategies for students within postsecondary institutions. Topics include comparison of basic and academic literacy, research and theory relevant to literacy development in college contexts, analyses of historical and current curricular approaches, and evaluation of instructional strategies and materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7303. Theory and Research of College Academic Literacy.**

This course examines academic literacy needs and instructional strategies for students in college. Topics include comparisons of academic, workplace, and new literacies and instructional strategies and materials for developing vocabulary, comprehension, and critical and strategic reading in multiple sources of information.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7304. Theory and Research of Literacy Instruction for Culturally and Linguistically Diverse Readers.**

This course examines the historical and contemporary understandings of language acquisition and instruction; foundational knowledge of literacy research and cultural and linguistic difference; instructional practices, including culturally responsive instruction, linguistic differences, and creating supportive literacy environments; curriculum, assessment, and evaluation; and critical literacy perspectives. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 7305. Theory and Research of College Literacy Assessment.**

This course reviews literacy assessment theory, research, policy, and practice in postsecondary contexts. Topics include accountability, standards-based curricula, cultural and linguistic effects, assessment-driven instruction, reliability and validity, interpretation, and different types of instruments (high-stakes, placement, diagnostic, classroom tests, and qualitative instruments).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7306. Literacy Research Seminar.**

This course explores research and policy papers in literacy and literacy education, examines methodology and conclusions, and considers additional research questions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7307D. Multimodal Critical Discourse Studies.**

This course introduces students to multimodal critical discourse analysis as both a theoretical framework stemming from multimodal semiotics and a set of analytic tools for uncovering dominant ideologies in print language and visual representations. Through a survey of critical discourse analysis approaches and methods including transitivity analysis, deixis, multimodal metonymy and metaphor analysis, and visual analysis, students will examine underlying assumptions perpetuated by representations of developmental education from external policy-driving organizations. Additionally, students will explore the potential for developmental educators to harness multimodal representations of their students and practice in order to reclaim the narrative of developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7307E. Theory, Research, and Practice of Disciplinary Literacies.**

This course examines core principles of disciplinary literacies. Students will examine the theory, research, and pedagogical practices of literacies across the disciplines with an emphasis on understanding the potential for postsecondary learners and Developmental Education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7307F. Curriculum Design in Developmental Education.**

This course focuses on principles and processes of curriculum design and implementation in developmental education contexts, including examination of emerging research and issues. The course pedagogy also engages students in independent curriculum research, planning, and problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7371. Theory and Research of Postsecondary Integrated Reading and Writing.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7372. Theory and Research of New Literacies Studies in Developmental Education.**

This course focuses on the theory and research of New Literacies Studies, which affects instructional practice in postsecondary Developmental Education. It includes an examination of diverse theories and models of multiple digital technology literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7373. Community Literacies.**

This course focuses on exploring, understanding, refining, and reflecting on literacy as social practices within a community that informs effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

## Program Overview

The Department of Curriculum and Instruction in the College of Education at Texas State offers a Ed.D. in Postsecondary Student Success in Learning, Literacy, and Mathematics that produces highly-qualified program leaders and practitioners in postsecondary student success programs. The Ed.D. is designed to fill the urgent need for advanced research in an emerging field that serves those who are underprepared for postsecondary education.

## Mission Statement

The doctoral program in Postsecondary Student Success in Learning, Literacy, and Mathematics within the Department of Curriculum and Instruction prepares future scholars, researchers, leaders, administrators, instructors, and practitioners in the field of postsecondary student success. Both rigorous and supportive, the program aims to advance theory, research, and practice in multiple areas of postsecondary student success — including learning, literacy, and mathematics — by actively engaging students in teaching, scholarship, and professional service. As a multidisciplinary program, the faculty, staff, and students work collaboratively across various academic disciplines, diverse communities, and geographic boundaries.

## Educational Goal

Major educational objectives for the programs include the following:

- To prepare postsecondary student success professionals who engage in divergent and critical thinking, are culturally competent, and are skilled in maximizing technology applications for learning and communication;
- To prepare postsecondary student success professionals who understand and can respond to the nature and needs of students who enroll in postsecondary programs; the complexities of motivation, teaching, learning, and assessment in postsecondary settings; the cultural, political, and social systems that create inequities in educational settings; and the structure and management of academic support programs programs;
- To prepare postsecondary student success professionals with sophisticated research skills that will enable them to critically evaluate postsecondary programs and practices and implement research agendas that will inform practice and policy;
- To prepare postsecondary student success professionals who will serve as leaders in postsecondary educational settings who can engage in institutional leadership, program administration, and innovative program development and evaluation that will promote systemic change and improvement.

## Advising

Advising takes three forms: the initial advisor, the program mentor, and the dissertation advisor. When students are first admitted, they are assigned an initial advisor who mentors them from entry through their first year benchmarks in the program. By the end of the first year, students formally ask a faculty member to be their program mentor who advises them from the end of their first year until their comprehensive exams. At a time no later than the completion of their comprehensive exams, students then select a dissertation advisor who is the chair of their dissertation committee, which must be formed at that time. These advising roles can be assumed by the same faculty member or different faculty members depending on students' research interests and foci.

In their first term, students will construct a program plan with the assistance of their initial advisor. The program plan is a focused, detailed description of the doctoral student's proposed course work, specialization, and goals for the doctoral program. The program plan will be submitted to the doctoral program plan committee for approval and suggestions. The program plan must include the following:

- goal statement that includes doctoral study goals (including specialization) and future professional goals
- professional curriculum vitae
- course work plan. This is the appropriate place for petitioning for course transfer for graduate work done previously (there is a 5-year time limit on any course work counting toward candidacy).

The student should work with their advisor for direction while completing the program plan prior to submitting it to the program plan committee. It is **due to the program plan committee by November 15** in the fall term of the student's first year of study. After the program plan committee reviews the student's program plan, a meeting may be scheduled with the student for further review of the plan.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- master's degree from a regionally accredited university or demonstrated success in graduate-level studies or professional experience in a field relevant to postsecondary student success in learning, literacy, or mathematics

- The Postsecondary Student Success in Learning, Literacy, and Mathematics doctorate (both Ph.D. and Ed.D. tracks) requires 96 semester credit hours for students admitted with a bachelor's degree. Students admitted with a bachelor's degree will follow the same program of study as students admitted with a master's degree (66 semester credit hours), but with an additional 30 semester credit hours of open electives.
- official transcripts from **each institution** where course credit was granted
- minimum 3.0 GPA (on a 4.0 scale) in all completed graduate course work
- resume/CV
- statement of purpose (approximately 500-1000 words) demonstrating the student's research interest and goals as a postsecondary student success professional and potential to contribute to the advancement of scholarly work in the field of postsecondary student success. Students should discuss relevant teaching, research, and/or policy experience as well as provide clear evidence of a commitment to research and scholarship.
- three letters of recommendation addressing the student's professional and academic background
- interviews with the admissions committee will be arranged, following the initial screening using the admissions criteria listed above, for qualified applicants

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Education (Ed.D) degree with a major in Postsecondary Student Success in Learning, Literacy, and Mathematics concentration in Learning Support requires 66 semester credit hours or 96 semester credit hours for students admitted with a bachelor's degree. Students admitted with a bachelor's degree will follow the same program of study as students admitted with a master's degree (66 semester credit hours), but with an additional 30 semester credit hours of open electives.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
DE 7301	Understanding Learners in Developmental Education Contexts	3
DE 7302	Policy and Politics in Developmental Education	3

DE 7303	Teaching and Learning in Developmental Education	3
DE 7305	Diversity in P-16 Educational Contexts	3
CI 7101	Introduction to the Research Experience	1
CI 7101	Introduction to the Research Experience	1
CI 7101	Introduction to the Research Experience	1
CI 7302	Research Methods and Measurement in Education	3
CI 7351	Beginning Quantitative Research Design and Analysis	3
CI 7352	Beginning Qualitative Design and Analysis	3
<b>Concentration</b>		
Choose 21 hours from the following:		21
DE 7321	The Community College	
DE 7322	Learning Support Centers in Postsecondary Settings	
DE 7323	Academic Support for Students with Learning Disabilities	
DE 7324	Teaching Learning Strategies and Critical Thinking in Postsecondary Contexts	
DE 7325	Advising, Coaching, and Mentoring Learners in Postsecondary Education	
DE 7327	Student Motivation and Self-Regulation	
DE 7380	Managing Developmental Education Programs	
DE 7381	Practicum	
CI 7303	Educational and Psychological Measurement and Assessment	
CI 7326	Grant Development and Management	
CI 7360	Designing Educational Research	
<b>Prescribed Elective</b>		
Choose 3 hours from the following:		3
CI 7353	Intermediate Quantitative Research Design and Analysis	
CI 7354	Intermediate Qualitative Design and Analysis	
<b>Electives</b>		
Choose 6 hours of advisor-approved electives		6
<b>Dissertation</b>		
Choose a minimum of 12 hours from the following:		12
DE 7199	Dissertation	
DE 7299	Dissertation	
DE 7399	Dissertation	
DE 7599	Dissertation	
DE 7699	Dissertation	
DE 7999	Dissertation	
<b>Total Hours</b>		<b>66</b>

## Advancement to Candidacy

### Application for Advancement to Candidacy

Once all course work (except for dissertation course work) has been completed, the comprehensive exams have been passed, and the dissertation proposal has been successfully defended, doctoral students will apply for advancement to candidacy. Candidacy must be achieved within five (5) years of initiating program course work. No credit will be applied toward the doctoral degree for course work completed more than five (5) years before the date on which the student is advanced

to candidacy. This time limit applies toward credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions. Requests for a time extension must be made to the program, which in turn submits a recommendation to The Graduate College. Achieving doctoral candidacy allows the student to begin doctoral dissertation research. Candidacy forms are found here: [http://www.gradcollege.txstate.edu/Fac\\_Resources/Forms.html](http://www.gradcollege.txstate.edu/Fac_Resources/Forms.html).

### Grade-Point Requirements for Advancement to Candidacy

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.0. No grade earned below a "B" on any graduate course may apply toward a doctorate at Texas State. Incomplete grades must be cleared through The Graduate College before a student can be approved for advancement to candidacy.

### Comprehensive Exams

All students in the Doctoral Program in Postsecondary Student Success in Learning, Literacy, and Mathematics are required to pass a Comprehensive Examination at the conclusion of coursework, prior to moving into the dissertation phase of the program. The purposes of this exam are to demonstrate mastery of the coursework content and preparation for independent research. Ideally, this process will begin during students' last semester of coursework, and will be completed the same semester.

Students will first discuss their ideas for the comprehensive examination with their advisor. Students will then form a comprehensive exam committee that is comprised of, at least, their advisor (as Chair) and two other faculty members from the Postsecondary Student Success in Learning, Literacy, and Mathematics program.

After stating their intention to take the comprehensive exam at the beginning of the semester, students will submit written responses to three foreknown items and participate in an oral defense of their work that includes a student presentation about their written responses to the items and fielding of faculty questions. Committee evaluations will be either pass, needs revisions, or does not pass. If applicable, students will have two weeks to make revisions, and committee evaluations of the revised work will be either pass or does not pass. Students who do not pass, will have two more attempts to pass the comprehensive exam before being discontinued from the program.

### Dissertation Proposal

At a time no later than the completion of their Comprehensive Exams, students must select a dissertation advisor. After selecting their dissertation advisor, and before beginning their dissertation proposal, students will form a dissertation committee that will provide technical support for the inception, conduct, and completion of the dissertation research study and evaluate the final product. The student will undertake the research and write the dissertation under the guidance of their dissertation advisor. The dissertation proposal must be successfully defended and approved by the dean of The Graduate College before a student can be advanced to candidacy. Information about the dissertation procedures can be found in the Dissertation tab.

Students must submit the dissertation proposal and one copy of the official "Dissertation Proposal form" (available on The Graduate College website) to the dissertation advisor. After obtaining committee members' signatures, the student must submit the dissertation proposal and dissertation proposal form to the program director for signature. The form also requires evidence of the IRB approval for any research involving



human subjects. The program director will then forward the dissertation proposal and form through the department chair to the dean of The Graduate College for final approval. Final approval must be received before proceeding with the defense of the dissertation proposal. The Dissertation Proposal form may be obtained from The Graduate College website.

### Defense of the Dissertation Proposal

Students must defend the dissertation proposal in a meeting that begins with a public presentation and continues with an oral examination by the dissertation committee. The examination will address the proposed dissertation topic (problem definition and scope), relevant literature, and research method. The dissertation committee must sign the "Defense of the Dissertation Proposal form" to indicate approval and then submit the form for the signature of the doctoral program director and the department chair. The approved Defense of the Dissertation Proposal form must be forwarded to the dean of The Graduate College. The dissertation proposal must be approved and the Defense of the Dissertation Proposal form must be on file in The Graduate College before any student can advance to candidacy and begin dissertation research.

### Recommendation for Advancement to Candidacy

The dissertation committee recommends the applicant for advancement to candidacy to the doctoral program director, the department chair, and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been met. To be eligible for admission to candidacy the student must have successfully completed the comprehensive exam, completed all course work, and successfully defended the dissertation proposal.

## Dissertation Research and Writing

All doctoral students are required to complete a dissertation. The dissertation must be an original contribution to scholarship and the result of independent investigation in a significant area. Preparation of the dissertation must follow the latest edition of the *Publication Manual of the American Psychological Association*.

## Dissertation Enrollment Requirements

Any time a student is receiving official guidance on the dissertation, the student must be enrolled in a dissertation course. A student must maintain continuous enrollment in dissertation hours every term from the time they advance to candidacy until the dissertation is defended and approved. If a student is receiving supervision on the dissertation during the summer or the student is graduating during the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred. Students must enroll in a minimum of 12 dissertation credit hours.

## Dissertation Time Limit

Students must complete the dissertation within five (5) years of advancement to candidacy. The student's dissertation advisor, with the student's dissertation committee, will review the student's progress annually.

## Dissertation Advisor and dissertation committee

The dissertation committee must be composed of four approved doctoral graduate faculty members. The doctoral student must select a minimum of four committee members, one of which must be outside the program. The chair of the dissertation committee must be from the program. All committee members must hold at least associate doctoral faculty status, and chairs must hold core doctoral faculty status. To form the dissertation committee, the "Dissertation Committee Request form" must be completed and signed by the student, committee members, committee chair, doctoral program director, and the department chair and then forwarded to the dean of The Graduate College for approval and signature. The required Dissertation Committee Request form may be obtained from The Graduate College website.

### Committee Changes

Any changes to the dissertation committee must be submitted for approval to the dissertation advisor, the doctoral program director, the department chair, and the dean of The Graduate College. Changes must be submitted no less than sixty (60) days before the final dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be obtained from The Graduate College website.

## Defense of the Dissertation

All dissertations must meet the following requirements as judged by the student's dissertation committee:

1. a systematic investigation of a problem,
2. informed by previous theory and research,
3. that adds to the body of knowledge in the area of investigation, and
4. is presented in a form capable of dissemination to scholars and practitioners.

Students must pass the final oral examination that covers the dissertation and the general field of the dissertation. Students must defend the dissertation in a meeting that begins with a public presentation and continues with an oral exam by the dissertation committee. Before scheduling the final oral exam, the student must have received approval of the dissertation advisor. A completed dissertation defense report must be submitted according to the schedule posted by the dean of The Graduate College and no later than ten days before the date of graduation. The student must complete all aspects of the dissertation, including successful defense and submission of the dissertation to The Graduate College, within five (5) years of advancement to candidacy.

## Approval and Submission of the Dissertation and Abstract

The approval of the dissertation and abstract requires positive votes from the dissertation advisor and from a majority of the dissertation committee members. Once the committee has approved the dissertation, one copy of the dissertation and the signed "Committee Approval form" must be submitted to the dean of The Graduate College for final approval. Refer to the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation* for specific guidelines.

Doctoral level courses in Developmental Education: CI (p. 1302), DE (p. 1303), ENG (p. 1305), MATH (p. 1306), RDG (p. 1313)



## Courses Offered

### Curriculum and Instruction (CI)

#### **CI 7101. Introduction to the Research Experience.**

This course is designed to introduce students to the program and to the ongoing research activities of its faculty. Emphasis is placed on identifying and coordinating opportunities for joint research and scholarship among faculty and students. Students must enroll in the course for three semesters before dissertation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### **CI 7302. Research Methods and Measurement in Education.**

This course provides a comprehensive introduction to educational research with a focus on research design, research methods and methodology, and fundamental measurement issues in quantitative, qualitative, and mixed-methods research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7303. Educational and Psychological Measurement and Assessment.**

Philosophical and empirical foundations of measurement, assessment, testing, and evaluation. Topics include philosophical and mathematical foundations in research; empirical levels and measurement description; test construction; observational rating scales; measurement interpretation; social, legal, and ethical implications; item analysis/refinement for scale performance; reliability and validity evidence; and standardized and placement tests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7310. Teaching in College.**

Teaching strategies for teaching/instructional assistants focused on creating syllabi, adapting to diverse student populations, collaborating with colleagues and staff, implementing active learning strategies, fostering assigned reading, assessing learning, and integrating technology. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **CI 7326. Grant Development and Management.**

This course focuses on developing competitive grant proposals and understanding grant management resources. Strategies will encompass locating funding sources, evaluating proposals, developing proposals and budgets, and methods of meeting accountability requirements.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7351. Beginning Quantitative Research Design and Analysis.**

This course introduces students to quantitative research design and analysis. Topics include descriptive statistics; sampling techniques; statistical inference, including the null hypothesis, significance tests, and confidence intervals; and causal-comparative analyses, including t-test and ANOVA. Corequisite: CI 7302 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

#### **CI 7352. Beginning Qualitative Design and Analysis.**

This course introduces students to the qualitative paradigm. Topics include distinctive features, alternative qualitative traditions, purposeful sampling, common data collection methods, inductive analysis, the role of the researcher, and evaluation of qualitative research. Corequisite: CI 7302 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7353. Intermediate Quantitative Research Design and Analysis.**

This course focuses on intermediate quantitative research design and statistical methods of data analysis related to problems in education, psychology, sociology, and biological sciences. The general linear model based univariate and selected multivariate statistical techniques are examined including theory/purpose, logic, practical implications, and interpretation of various analytic techniques. Prerequisite: CI 7351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7354. Intermediate Qualitative Design and Analysis.**

This course focuses on issues in design and implementation of qualitative research. Topics include influence of alternative traditions, literature in qualitative research, access to the field and ethical issues, researcher-participant relationships, purposeful sampling strategies, inductive analysis procedures, developing theory, and reporting research. Prerequisite: CI 7352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CI 7355. Mixed Methods in Research and Evaluation.**

This course will cover mixed methods research designs that can be used in the evaluation of educational interventions and programs. Topics include mixed methods research designs, program evaluation models, quantitative and qualitative data analysis and interpretation, reading mixed methods research articles, and writing mixed methods research proposals and evaluation reports. Prerequisite: CI 7351 and CI 7352 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7358. Theoretical and Conceptual Frameworks in Qualitative Research.**

This course is intended for those versed in current paradigmatic and epistemological states of human inquiry and presents an opportunity to design a research project and address the major issues of a research career. Prerequisite: CI 7352 and CI 7354 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7359. Seminar in Quantitative Research.**

This course is a small-group seminar that focuses on analytic strategies specific to the doctoral student's dissertation topic. Examples include structural equation modeling, hierarchical linear modeling, log linear modeling, non-parametric analyses, factor analysis, factorial analysis of variance, and other multivariate statistical methods. Prerequisite: CI 7351 and CI 7353 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7360. Designing Educational Research.**

Students identify problems in Developmental Education, develop a strategic proposal to apply to these problems, and create an evaluation plan to assess the implementation of their proposal. Students also develop skills in critiquing research reports and in synthesizing research from Developmental Education. Prerequisite: CI 7353 or CI 7354 or CI 7355 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7378. Independent Study.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in the Department of Curriculum and Instruction. May be repeated for additional credit at the discretion of the program coordinator.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7386. Directed Research.**

Students will participate in an authentic research experience, either by working as part of a doctoral faculty member's research team or developing an original research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 7388. Educational Leadership for Social Justice.**

This course provides an in-depth study of the theories and practices related to educational leadership in PreK-12 educational contexts through a social justice lens. Students will examine current social justice issues in schools and develop strategies for conceptualizing and implementing institutional change that works toward a more equitable education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7389A. Topics in Instructional Technology.**

This topic offers an in-depth study of systematic instructional design emphasizing the selection and use of appropriate media for delivering instruction to maximize student learning. Special emphasis in this topic is on the leader's role in influencing the use of technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**CI 7389C. Special Topics: Race Theory in Educational Research.**

This course will explore racial theories and paradigms applicable to the study of race in K-20 educational settings. Students will analyze foundational scholarship in the formation of racial theories, research methodology, key tenets of race research, and literature pertinent to current trends in educational research regarding race. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**Developmental Education (DE)****DE 7199. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7299. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7301. Understanding Learners in Developmental Education Contexts.**

This course identifies the evolution, characteristics, demographics, and needs of learners in Developmental Education contexts. Emphasis is placed on understanding internal factors, including the cognitive, affective, and psychosocial needs of students, as well as on analyzing external factors, including the social, political and institutional forces that impact learners' educational experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7302. Policy and Politics in Developmental Education.**

This course addresses the policy and politics of planning, funding, implementing, and evaluating Developmental Education programs in postsecondary education. Readings and discussions focus on current and historical issues relevant to addressing the academic needs of educationally disadvantaged students from the perspective of researchers, program directors, policy analysts, and instructors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7303. Teaching and Learning in Developmental Education.**

The course focuses on the institutional development, intellectual development, learner development, and self-development for effective teaching and learning in developmental education. Topics include instructional and learner theories, pedagogies, assessment and evaluation techniques, and best practices for instruction and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7304A. Curriculum Design in Developmental Education.**

This course focuses on principles and processes of curriculum design and implementation in developmental education contexts, including examination of emerging research and issues. The course pedagogy also engages students in independent curriculum research, planning, and problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**DE 7304B. Theory and Research of Digital Literacies.**

This course focuses on understanding the complex relationships between technology, teaching, and learning in varied developmental education environments. Tools and strategies for planning, integrating, and assessing technology-supported instruction are explored within frameworks linking theory to practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**DE 7304D. Transformative Learning.**

This course introduces students to the core principles of transformative learning. The course is a theory-driven, project-based advanced class designed to enable students to develop theoretical perspectives, engage in intensive practice, and understand the use of transformative learning for applications with postsecondary individuals, groups, and organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7304E. Current Topics in Motivation Intervention Research.**

This course focuses on analyzing, synthesizing, discussing, and applying cutting-edge research on various types of motivation interventions in education. Emphasis will be placed on theory, research, and practice in postsecondary educational settings and Developmental Education contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7304F. Current Topics in Strategic and Self-Regulated Learning Intervention Research.**

This course examines cutting-edge research on strategic and self-regulated learning interventions. Emphasis will be placed on theory, research, and practice relevant to postsecondary educational settings, however, students will be encouraged to apply course content to their areas of interest which may be outside of postsecondary educational settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7305. Diversity in P-16 Educational Contexts.**

This course uses critical multicultural frameworks to trace the evolution of learners in a P-16 educational system. Students in this course examine school practices and policies in an attempt to map the educational trajectory and improve the educational experiences of P-16 students who are underrepresented and underserved. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7321. The Community College.**

Introduction to community college and to its roles and functions in American education. Special attention will be directed to evolution, development and patterns of organization, purposes, programs, personnel and current issues of the community college.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7322. Learning Support Centers in Postsecondary Settings.**

The course explores the learning assistance movement in postsecondary settings including its history, leaders, and current research. Topics include program planning; leadership, organization, and management; human and financial resources; facilities and equipment; legal responsibilities; equal opportunity and access; diversity; ethics; campus and community relations; and assessment and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7323. Academic Support for Students with Learning Disabilities.**

The course focuses on Learning Disabilities (LD) and Executive Function (EF) Disorders and their nature, prevalence, and significance in postsecondary environments. Topics include theories about the origins and nature of LD and EF, development across the lifespan, characteristics of individuals, and approaches to service, delivery and teaching. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7324. Teaching Learning Strategies and Critical Thinking in Postsecondary Contexts.**

This course explores theory and pedagogy of learning strategies, problem solving, and critical thinking skills in postsecondary contexts. Topics include variables in teaching and learning, methods of assessment, and approaches to instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7325. Advising, Coaching, and Mentoring Learners in Postsecondary Education.**

The course will focus on theories and techniques of academic advising, coaching, and mentoring skills for learners enrolled in postsecondary education. Didactic and experiential activities will provide students enrolled in the course with opportunities to learn and practice skill development within these academic support programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7380. Managing Developmental Education Programs.**

This course focuses on the theoretical and practical elements of management of Developmental Education programs in higher education. Readings and discussions focus generally on best practices in higher education leadership and specifically on best practices in leadership and management in Developmental Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7381. Practicum.**

A 150-clock hour, one-semester practical experience in an institution or agency other than one's own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities to include program planning, management, budgeting, and/or evaluation.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 7399. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7599. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7699. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7999. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**English (ENG)****ENG 7300. Language Problems in a Multicultural Environment.**

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7314. Specializations in Professional and Technical Communication Topics.**

Provides theoretical and practical information for specialized types of technical and professional communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7316. Foundations in Rhetoric and Composition.**

A course providing students with theoretical, pedagogical, and/or methodological foundations in the field of rhetoric and composition. Emphases vary but may include Contemporary Composition Pedagogy, Basic Writing Theory and Practice, and Writing Assessment. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7317. Specializations in Rhetoric and Composition.**

A course providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Across the Curriculum, Service Learning, Writing Center Theory and Practice, Computers and Writing, Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## **Mathematics (MATH)**

**MATH 7111. Seminar in Teaching.**

Seminar on individual study projects concerned with selected problems in the teaching of mathematics. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MATH 7188. Seminar in Mathematics Education.**

Students are required to attend weekly research seminars in Mathematics Education and to give at least one research presentation in the seminar during the semester. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7199A. Dissertation.**

Original research and writing in Mathematics Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7299A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7301. Studies in Mathematics.**

This course provides basic foundations in Mathematics for students entering the doctoral program in Mathematics or Mathematics Education. This course may be repeated. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 7302. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7303. Analysis I.**

This course covers foundations of modern analysis. Topics include: sequences, LimSup, LimInf, Sigma Algebras of sets that include open and closed sets, sequences of functions, pointwise and uniform convergence, lower and upper semi-continuity, Borel sets, outer measure, and Lebesgue measure. Prerequisite: MATH 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7306. Current Research in Math Education.**

This course surveys the various current social, political, and economic trends in local, state, national, and international settings that are related to research in Mathematics Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MATH 7307. Algebra I.**

Applications of Algebra and topics in modern algebra, including permutation groups, symmetry groups, Sylow theorems, and select topics from Ring Theory. Prerequisite: MATH 4307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7309. Topology I.**

A course in point-set topology emphasizing topological spaces, continuous functions, connectedness, compactness, countability, separability, metrizability, CW-complexes, simplicial complexes, nerves, and dimension theory. Prerequisite: MATH 4330.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7313. Analysis II.**

This course covers the theory of integration with special emphasis on Lebesgue integrals. Topics include: Lebesgue integral, Bounded Convergence theorem, differentiation and integration, absolute continuity, and  $L_p$  spaces. Prerequisite: Math 7303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7317. Algebra II.**

A study of the important algebraic structures of rings and fields. Topics covered include rings, ideals, modules, polynomial rings, Euclidean algorithm, finite fields, and field extensions. Topics also include an introduction to Galois Theory with an emphasis on the geometric applications. Prerequisite: MATH 7307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7319. Topology II: Algebraic Topology.**

This course covers the fundamental concepts and tools of algebraic topology. Topics include the fundamental group, covering spaces, homotopy type, the higher homotopy groups, singular homology theory, and the computation of homology groups via exact sequences and applications. Prerequisite: MATH 7307 and MATH 7309.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7321. Graph Theory.**

Topics in this course include trees, connectivity of graphs, Eulerian graphs, Hamiltonian graphs, planar graphs, graph coloring, matchings, factorizations, digraphs, networks, and network flow problems. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7323. Theories of Knowing and Learning in Mathematics Education.**

This course surveys the major theories of knowing and learning that have influenced mathematics education. These theories include behaviorism, constructivism, sociocultural theories, situated cognition, and others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7324. Curriculum Design & Analysis.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques that are related to curriculum design in Mathematics Education for grade levels P-16.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7325. Statistics 1.**

A study of the mathematical and probabilistic underpinnings of the techniques used in statistical inference. Topics covered include sampling, sampling distributions, confidence intervals, and hypothesis testing with an emphasis on both simulations and derivations. Prerequisite: Math 2321 and Math 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7328. Instructional Techniques & Assessments.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques of instruction in Mathematics Education and the related assessment procedures for each for grade levels P-20.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7331. Combinatorics.**

This course is a study of fundamental principles of combinatorics. Topics include: permutations and combinations, the Pigeonhole principle, the principle of inclusion-exclusion, binomial and multinomial theorems, special counting sequences, partitions, posets, extremal set theory, generating functions, recurrence relations, and the Polya theory of counting. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7335. Statistics II: Linear Modeling.**

A study of the formulation and statistical methodologies for fitting linear models. Topics include the general linear hypothesis, least-squares estimation, Gauss-Markov theorem, assessment of model fit, effects of departures from assumptions, model design, and criteria for selection of optimal regression models. Prerequisite: MATH 3377 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7346. Quantitative Research Analysis in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and use of appropriate design methodologies to achieve the strongest possible evidence to support or refute a knowledge claim. Prerequisite: MATH 7306 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7354. Advanced Qualitative Research.**

This course encompasses the techniques and tools needed for the development, investigation, and demonstration of competence in conducting qualitative research in mathematics education. Principles of qualitative data analysis are a significant focus of the course, with particular attention given to specific methods used to code and analyze data. Prerequisite: ED 7352 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356B. Advanced Qualitative Research.**

This course encompasses investigation, development, and demonstration of competence, design, and execution for mathematics education problems in qualitative research. Prerequisite: ED 7352 or CI 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356C. Action Research in Mathematics Education.**

This course examines underlying theory and issues in action research model and the development of action research projects. Prerequisites: MATH 7346 or ED 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7358. Advanced Quantitative Research in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and the use of appropriate design methodologies to achieve the most substantial evidence to support or refute a knowledge claim. Prerequisite: MATH 7346 with a grade of "B" or better or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7361. Seminar in Advanced Mathematics.**

Material in course will vary with the interest of students and faculty. A detailed study of subject matter may be chosen from advanced areas of analysis; algebra; topology and geometry; applied mathematics; and probability and statistics. This course is repeatable for credit when subject matter varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7363A. COMPLEX ANALYSIS.**

This course is a brief introduction to the complex number system and basic point-set topology of the complex plane, followed by a proof-based and rigorous study of the principal results of the analysis of functions of a single complex variable. Prerequisite: MATH 4315 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363B. NUMERICAL ANALYSIS.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using computer algebra systems. Symbolic, numerical, and graphical techniques will be studied. Applications will be drawn from the sciences, engineering, and mathematics. Prerequisite: MATH 3323 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363C. FUNCTNL ANALYSIS.**

This course presents the three basic fundamentals theorems of functional analysis: the Hanh-Banach theorem, the uniform boundedness theorem, and the open mapping theorem. Prerequisite: MATH 7303 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363E. Numerical Analysis II.**

This course will involve the analysis and numerical implementation of algorithms to solve partial differential equations. Applications will be drawn from science, engineering, and mathematics. Topics include the numerical solution of linear partial differential equations and the related linear systems of equations. Prerequisite: MATH 7363B with a letter grade of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363F. Functional Analysis II.**

This course will involve the analysis of infinite dimensional vector spaces including spaces of functions, measures, and distributions. Topics include Fourier transforms, theory of Banach spaces, and operator theory. Prerequisite: MATH 7363C with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366A. Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors).**

This course examines how to develop and teach post-secondary students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisites: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366B. Teaching K-12 Students (Elementary, Middle School, and High School).**

This course examines how to develop and teach K-12 students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366C. Teaching Teachers (In-Service; Pre-Service).**

This course examines how to prepare teachers of mathematics. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366D. Teaching Specialized Content.**

This course will be an in-depth study of a specialized content area in mathematics with an emphasis on teaching. The specific content area will vary by instructor. Examples include Euclidean Simplex Geometry and Discrete Probability Spaces with Implications for Public School Curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366E. Developmental Mathematics Curriculum.**

This course surveys the research, development, and evaluation of the scope and sequence of developmental mathematics curriculum. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366F. Research in Undergraduate Mathematics Education I.**

Students will develop the requisite knowledge to become a good consumer of Research in Undergraduate Mathematics Education (RUME) research. The course will cover the theoretical underpinnings of current and historic RUME research. Students will develop the knowledge to understand relevant theoretical stances and the role they play in research. Prerequisite: Math 7306 or permission from the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366G. Research in Undergraduate Mathematics Education II.**

In this course, students will develop necessary knowledge to design/conduct RUME research via a topic-driven look at current RUME research. Core topics include proof, analysis/calculus, abstract algebra, linear algebra, and differential equations. Students will develop a depth of knowledge related to these topics and engage in research design and development. Prerequisite: MATH7306 and MATH7366F.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7367B. ADV GROUP THEORY.**

This course covers topics including properties of solvable, p-solvable and nilpotent groups, group actions, transfer theorems, simple groups and composition series, the generalized Fitting subgroup, automorphism groups, classical groups and linear representations of groups. Prerequisite: MATH 7307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369C. Low-dimensional topology.**

This course is an introduction to low-dimensional topology. Topics include surfaces, 3-manifolds, knots, and 4-manifolds. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369D. Characteristic Classes.**

This course is an introduction to vector bundles and characteristic classes. Topics covered include Stiefel-Whitney classes, Chern classes, Euler class, Pontrjagin classes, and their computation. Additional topics may include manifold immersion problems. Prerequisite: MATH 7317 and MATH 7319 both with grades of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369E. Differential Geometry.**

This course is an introduction to modern tools of differential geometry. Topics covered include manifolds, Riemannian metrics, connections, covariant derivatives, geodesics, curvatures, extrinsic and intrinsic computations. Other possible topics include hyperbolic geometry, Lie groups, Chern-Weil theory, surfaces of prescribed mean curvature, the Gauss-Bonnet theorem, and the Cartan-Hadamard theorem. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7371A. Advanced Graph Theory.**

Topics in this course include Turan's problems, Ramsey theory, random graph theory, extremal graph theory, algebraic graph theory, domination of graphs, distance problems, and applications. Prerequisite: MATH 7321.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371B. Advanced Combinatorics.**

Topics in this course include Block designs, Latin squares, combinatorial optimization problems, coding theory, matroids, difference sets, and finite geometry. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371C. Combinatorial Number Theory.**

A study of fundamental techniques in combinatorial number theory. Topics will include Waring's problem, additive number theory, and probabilistic methods in number theory. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371D. Discrete Optimization.**

A study of some fundamental techniques in discrete optimization. Topics include discrete optimization, linear programming, integer programming, integer nonlinear programming, dynamic programming, location problem, scheduling problem, transportation problem, postman problem, traveling salesman problem, matroids, and NP-completeness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371E. Algorithms and Complexity.**

A study of some fundamental concepts of computability and complexity. Topics include polynomially bounded problems, NP-complete problems, exponentially hard problems, undecidable problems, and reducibility. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371F. Probabilistic Methods in Discrete Mathematics.**

A study of some fundamental probabilistic techniques used to solve problems in graph theory, combinatorics, combinatorial number theory, combinatorial geometry, and algorithm. Topics include linearity of expectation, alterations, second moment, local lemma, correlation inequalities, martingales, Poisson paradigm, and pseudo-randomness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371G. Applied Discrete Mathematics.**

This course introduces fundamental concepts in logic, Boolean algebra, and binomial coefficients; and applications in different fields such as complexity of algorithms and network theory. Prerequisites: MATH 2472 and MATH 4307, all with a grade of "C" or better, or with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371H. Combinatorial Networks.**

Combinatorial Networks is an area of study of certain types of networks using combinatorial methods extensively. This course introduces fundamental basics as well as the latest development in this area of research. Prerequisite: MATH 5307/7307 with a grade of "C" or higher.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7373B. Partial Differential Equations I.**

This course covers the theory and application of partial differential equations, typical equations of mathematical physics, Cauchy problem for equations of the first order, classification of second-order equations, Cauchy problem for second-order hyperbolic equations, Duhamel's principle, potential theory and elliptic equations, maximum principle, and parabolic equations. Prerequisite: MATH 3323, 3373 and 3380 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373C. Partial Differential Equations II.**

This course covers the existence and uniqueness theory for boundary value problems of partial differential equations (PDE) including the topics linear evolution equations, variational techniques, non-variational techniques, Hamilton-Jacobi equations, conservation laws. Prerequisite: MATH 7373B with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373G. Spectral Methods.**

This course covers the essentials of spectral collocation methods with an emphasis on numerically implementing algorithms. The problems studied will include ordinary and partial differential equations connected with fluid mechanics, quantum mechanics, waves, and other fields. The techniques used will include both Fourier and Chebychev methods.

Prerequisite: MATH 7363E with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375C. Time Series Analysis.**

A study of the theory of time-dependent data. The analysis includes modeling, estimation, and testing; alternating between the time domain; using autoregressive and moving average models and the frequency domain; and using spectral analysis. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375D. Advanced linear Modeling.**

The course provides an extension of regression methodology to more general settings where standard assumptions for ordinary least squares are violated. Topics include generalized least squares, robust regression, bootstrap, regression in the presence of autocorrelated errors, generalized linear models, and logistic and Poisson regression. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375E. Computational Statistics.**

This course focuses on commonly used sampling and optimization algorithms in statistics. Topics include accept-reject method, importance sampling, Markov Chain Monte Carlo algorithms, Fisher scoring algorithm, expectation-maximization algorithm, and minorization-maximization algorithm. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375F. Multivariate Data Analysis.**

This course focuses on statistical methodologies based on multivariate analysis. Topics include multivariate normal distribution, tests of hypothesis on means, multivariate analysis of variance, discriminant analysis, principal component analysis, factor analysis and canonical correlation analysis. Prerequisite: MATH 5305 and (MATH 3376 or MATH 3377) with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375G. Bayesian Methods.**

This course focuses on Bayesian statistical analysis and associated theories. Topics include one-parameter and multi-parameter Bayesian models, choices of priors, formulation of regression models in the Bayesian framework, and related data analysis. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375I. Advanced Statistical Learning.**

This course covers the theoretical foundations in statistical learning and deep learning. Topics include the framework of empirical risk minimization, metric entropy, Vapnik-Chervonenkis dimension, Rademacher and Gaussian complexity, symmetrization and chaining techniques, contraction principle, uniform law of large numbers, sample complexity, and neural networks. Prerequisite: MATH 7337 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378A. Problem Solving, Reasoning, and Proof.**

A study of the fundamental concepts of problem solving, logic, set theory, and mathematical proof and applications of these concepts in mathematics curriculum for grades P-20. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378B. Connecting and Communicating Math.**

This course examines one of the basic principles involved in mathematics education: Connecting and Communicating Mathematics. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter



**MATH 7378C. Representing Fundamental Math Ideas (Function, Data Analysis, and Enumeration).**

This course examines the basic principles involved in mathematics education. The process of representing fundamental mathematical ideas will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378D. Math Technologies.**

This course examines the basic principles involved in mathematics education: Technology. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378E. Developmental Mathematics Perspectives.**

This course examines developmental mathematics-specific strands including technological course support and placement tools/decisions. Issues related to the first mathematics core course required of undergraduates will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378F. Research on Mathematical Problem Solving in Secondary Schools.**

In this course a careful study is made of elementary techniques for problem solving in a variety of domains, including algebra, number theory, combinatorics, geometry, and logic puzzles. Students will learn these techniques by actually working on a collection of problems in each of these areas. Students will read and examine research about various aspects of problem solving and research in math education that includes both teacher training and student learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378G. Discourse Processes, Traditions, and Analysis in Mathematics Education.**

Discourse and discourse analysis have been used to answer research questions across disciplines throughout the humanities and social sciences. This course will focus on theory and methods for the analysis of discourse in mathematical settings. We will learn how different approaches to discourse are used to understand mathematics learning. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378H. Equity in Mathematics Education.**

Equity in Mathematics Education is a course examining research on equity issues in mathematics education. These equity issues will range from race, culture, class, and gender as they relate to the teaching, learning, and schooling of mathematics education. We will look at how equity is framed within the field of mathematics education, what has been addressed, and what has not been conceptualized. The course will help students understand the literature in the field, critique the extant research literature, design research, and consider important facets of teaching for various student groups. Prerequisite: MATH 7306 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7385. Independent Study in Mathematics.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of mathematics. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7386. Independent Study in Mathematics Education.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of Mathematics Education. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7389. Internship.**

In this course, students will work under the supervision of a faculty member to gain practical knowledge in their field. Student experience can come from industry, government agencies, or other sources but must directly apply to furthering knowledge of applications of mathematics or mathematics education.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7396. Mathematics Education Research Seminar.**

Collaborative research projects with faculty through identifying an educational issue, reviewing literature, creating a research question, designing a methodology, analyzing data, drawing conclusions, implications, and creating a draft of a publishable paper. Prerequisite: MATH 7356, and ED 7352 or MATH 7346, all with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7399A. Dissertation.**

This course represents a Mathematics or Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MATH 7599A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7699A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7999A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Reading (RDG)

**RDG 7301. Theory and Research of Literacy.**

This course examines the current theories and basic research of literacy development from psychological, cultural, linguistic, educational, and epistemological frameworks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7302. Theory and Research of College Basic Literacy.**

This course examines basic literacy needs and instructional strategies for students within postsecondary institutions. Topics include comparison of basic and academic literacy, research and theory relevant to literacy development in college contexts, analyses of historical and current curricular approaches, and evaluation of instructional strategies and materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7303. Theory and Research of College Academic Literacy.**

This course examines academic literacy needs and instructional strategies for students in college. Topics include comparisons of academic, workplace, and new literacies and instructional strategies and materials for developing vocabulary, comprehension, and critical and strategic reading in multiple sources of information.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7304. Theory and Research of Literacy Instruction for Culturally and Linguistically Diverse Readers.**

This course examines the historical and contemporary understandings of language acquisition and instruction; foundational knowledge of literacy research and cultural and linguistic difference; instructional practices, including culturally responsive instruction, linguistic differences, and creating supportive literacy environments; curriculum, assessment, and evaluation; and critical literacy perspectives. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 7305. Theory and Research of College Literacy Assessment.**

This course reviews literacy assessment theory, research, policy, and practice in postsecondary contexts. Topics include accountability, standards-based curricula, cultural and linguistic effects, assessment-driven instruction, reliability and validity, interpretation, and different types of instruments (high-stakes, placement, diagnostic, classroom tests, and qualitative instruments).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7306. Literacy Research Seminar.**

This course explores research and policy papers in literacy and literacy education, examines methodology and conclusions, and considers additional research questions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7307D. Multimodal Critical Discourse Studies.**

This course introduces students to multimodal critical discourse analysis as both a theoretical framework stemming from multimodal semiotics and a set of analytic tools for uncovering dominant ideologies in print language and visual representations. Through a survey of critical discourse analysis approaches and methods including transitivity analysis, deixis, multimodal metonymy and metaphor analysis, and visual analysis, students will examine underlying assumptions perpetuated by representations of developmental education from external policy-driving organizations. Additionally, students will explore the potential for developmental educators to harness multimodal representations of their students and practice in order to reclaim the narrative of developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7307E. Theory, Research, and Practice of Disciplinary Literacies.**

This course examines core principles of disciplinary literacies. Students will examine the theory, research, and pedagogical practices of literacies across the disciplines with an emphasis on understanding the potential for postsecondary learners and Developmental Education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7307F. Curriculum Design in Developmental Education.**

This course focuses on principles and processes of curriculum design and implementation in developmental education contexts, including examination of emerging research and issues. The course pedagogy also engages students in independent curriculum research, planning, and problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7371. Theory and Research of Postsecondary Integrated Reading and Writing.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7372. Theory and Research of New Literacies Studies in Developmental Education.**

This course focuses on the theory and research of New Literacies Studies, which affects instructional practice in postsecondary Developmental Education. It includes an examination of diverse theories and models of multiple digital technology literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7373. Community Literacies.**

This course focuses on exploring, understanding, refining, and reflecting on literacy as social practices within a community that informs effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

## Program Overview

The Master of Arts (M.A.) degree with a major in Postsecondary Student Success in Learning, Literacy, and Mathematics focuses on facilitating learner success in postsecondary programs. A 9-hour minor in Developmental Education is also available for majors in other fields who hope to pursue careers in community colleges and postsecondary student success and developmental education settings.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose (approximately 500 words) describing the student's background and professional goals, including the rationale for pursuing the chosen professional degree program, how the student's goals tie into the mission of the graduate program, and the student's philosophy of teaching and learning
- three letters of recommendation from individuals who know the student in academic and/or professional settings

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally

accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

This Master of Arts (M.A.) degree with a major in Postsecondary Student Success in Learning, Literacy, and Mathematics concentration in Developmental Mathematics requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5390	Research Seminar in Education	3
DE 5305	Diversity and Education in a P-16 Context	3
DE 5324	Teaching Learning Strategies and Critical Thinking	3
DE 5339	Assessment and Evaluation in Developmental Education	3
DE 5375	Learners in Developmental Education Contexts	3
<b>Concentration</b>		
Choose 18 hours from the following:		18
DE 5365	Administration of Developmental Education	
MATH 5303	History of Mathematics	
MATH 5304	Topics in Mathematics for the Secondary Teacher	
MATH 5381	Foundations of Set Theory	
MATH 5382	Foundation of Real Analysis	
MATH 5384	Geometric Approach to Abstract Algebra	
MATH 5386	Knots and Surfaces, An Introduction to Low-Dimensional Topology	
MATH 5388	Discrete Mathematics	
MATH 5390	Statistics	
MATH 5392	Survey of Geometries	
<b>Elective</b>		
Choose 3 hours of advisor-approved electives.		3
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The comprehensive examination consists of a portfolio-based exam. If students earn a rating of "do not accept", they can retake the exam once in a later semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1315), DE (p. 1321), ECE (p. 1323), EDTC (p. 1323), RDG (p. 1324), SPED (p. 1326)

## Courses Offered Curriculum and Instruction (CI)

### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Development Education (DE)****DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Early Childhood Education (ECE)

### **ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### **EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Reading (RDG)

**RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

## **Special Education (SPED)**

**SPED 5310. Independent Study in Special Education.**

This course is an in-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Master of Arts (M.A.) degree with a major in Postsecondary Student Success in Learning, Literacy, and Mathematics focuses on facilitating learner success in postsecondary programs. A 9-hour minor in Developmental Education is also available for majors in other fields who hope to pursue careers in community colleges and postsecondary student success and developmental education settings.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose (approximately 500 words) describing the student's background and professional goals, including the rationale for pursuing the chosen professional degree program, how the student's goals tie into the mission of the graduate program, and the student's philosophy of teaching and learning
- three letters of recommendation from individuals who know the student in academic and/or professional settings

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

This Master of Arts (M.A.) degree with a major in Postsecondary Student Success in Learning, Literacy, and Mathematics concentration in Learning Support requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5390	Research Seminar in Education	3
DE 5305	Diversity and Education in a P-16 Context	3
DE 5324	Teaching Learning Strategies and Critical Thinking	3
DE 5339	Assessment and Evaluation in Developmental Education	3
DE 5375	Learners in Developmental Education Contexts	3
<b>Concentration</b>		
Choose 18 hours from the following:		18
DE 5321	The Community College	
DE 5326	Curriculum Design in Postsecondary Developmental Education	
DE 5327	Student Motivation and Self-Regulation	
DE 5365	Administration of Developmental Education	
DE 5373	Grant Development and Management	
DE 5378	Problems in Developmental Education	
DE 5379	Independent Study	
DE 5384	Internship in Developmental Education	
DE 7322	Learning Support Centers in Postsecondary Settings	
DE 7323	Academic Support for Students with Learning Disabilities	
DE 7325	Advising, Coaching, and Mentoring Learners in Postsecondary Education	
<b>Elective</b>		
Choose 3 hours of advisor-approved electives.		3
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The comprehensive examination consists of a portfolio-based exam. If students earn a rating of "do not accept", they can retake the exam once in a later semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1331), DE (p. 1338), ECE (p. 1339), EDTC (p. 1339), RDG (p. 1340), SPED (p. 1343)

## Courses Offered

### Curriculum and Instruction (CI)

**CI 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**CI 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5301. Methods for Teaching Middle School Mathematics.**

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5302. Practical Statistics for Educators.**

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5303. Teaching Math in the Elementary School.**

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.**

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom.

Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development of skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

### DE 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### DE 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### DE 5305. Diversity and Education in a P-16 Context.

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5321. The Community College.

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5324. Teaching Learning Strategies and Critical Thinking.

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5326. Curriculum Design in Postsecondary Developmental Education.

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5327. Student Motivation and Self-Regulation.

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5339. Assessment and Evaluation in Developmental Education.

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5365. Administration of Developmental Education.

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5373. Grant Development and Management.

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5375. Learners in Developmental Education Contexts.

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### DE 5378. Problems in Developmental Education.

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Early Childhood Education (ECE)****ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Educational Technology (EDTC)****EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter



**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Master of Arts (M.A.) degree with a major in Postsecondary Student Success in Learning, Literacy, and Mathematics focuses on facilitating learner success in postsecondary programs. A 9-hour minor in Developmental Education is also available for majors in other fields who hope to pursue careers in community colleges and postsecondary student success and developmental education settings.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose (approximately 500 words) describing the student's background and professional goals, including the rationale for pursuing the chosen professional degree program, how the student's goals tie into the mission of the graduate program, and the student's philosophy of teaching and learning
- three letters of recommendation from individuals who know the student in academic and/or professional settings

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

This Master of Arts (M.A.) degree with a major in Postsecondary Student Success in Learning, Literacy, and Mathematics concentration in Literacy requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5390	Research Seminar in Education	3
DE 5305	Diversity and Education in a P-16 Context	3
DE 5324	Teaching Learning Strategies and Critical Thinking	3
DE 5339	Assessment and Evaluation in Developmental Education	3
DE 5375	Learners in Developmental Education Contexts	3
<b>Concentration</b>		
Choose 18 hours from the following:		18
DE 5365	Administration of Developmental Education	
ENG 5300	Language Problems in a Multicultural Environment	
ENG 5310	Studies in English Language and Linguistics	
ENG 5316	Foundations in Rhetoric and Composition	
ENG 5317	Specializations in Rhetoric and Composition	
ENG 5383	Studies in Rhetorical Theory	
RDG 5335	Basic Academic Literacy	
RDG 5371	Foundations of Postsecondary Integrated Reading & Writing Pedagogy	
RDG 5372	New Literacies Studies in Developmental Education	
RDG 5374	Foundations of Postsecondary Developmental Reading and Writing Theory	
RDG 5375	Postsecondary Developmental Reading and Writing Assessment	
RDG 5376	Postsecondary Disciplinary Literacies	
RDG 5381	Internship in Postsecondary Developmental Literacy Education	
<b>Elective</b>		
Choose 3 hours of advisor-approved electives.		3
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The comprehensive examination consists of a portfolio-based exam. If students earn a rating of "do not accept", they can retake the exam once in a later semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1348), DE (p. 1354), ECE (p. 1356), EDTC (p. 1356), RDG (p. 1357), SPED (p. 1359)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom.

Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Development Education (DE)****DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Early Childhood Education (ECE)

### **ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### **EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****Program Overview**

Texas State has been a top school for educators for over 100 years. Texas State is the ideal choice for teachers seeking to improve their performance and for career changers looking for certification with a master's degree. The community of students enrolled in the master's degree programs in elementary education at Texas State are passionate about teaching, learning and making a difference.

**Application Requirements**

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- one-page statement of purpose on why the student wishes to teach
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Elementary Education requires 30 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5390	Research Seminar in Education	3
CI 5327	Principles and Practices in the Elementary School	3
<b>Strategies</b>		
CI 5310	Creativity: Theories, Research, Practices, and Issues	3
<b>Math/Science</b>		
Choose 3 hours from the following:		3
CI 5303	Teaching Math in the Elementary School	
CI 5304	Teaching Mathematics and Science in the Elementary School	
CI 5329	The Elementary School Science Curriculum	
<b>Arts and Social Studies</b>		
Choose 3 hours from the following:		3
CI 5328	Elementary Social Studies: Curriculum Problems	
RDG 5310	Teaching Literacy with Children's and Young Adult Literature	
<b>Thesis</b>		
CI 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
CI 5199B	Thesis	
CI 5299B	Thesis	
CI 5399B	Thesis	
CI 5599B	Thesis	

CI 5999B	Thesis
<b>Minor</b>	
Choose a 9-hour advisor-approved minor	9
<b>Total Hours</b>	<b>30</b>

### Comprehensive Examination Requirement

Students must complete a thesis, which includes an oral defense. This oral defense will serve as the comprehensive examination requirement. At the oral defense of the thesis, the faculty committee may: (a) determine that the student has passed, (b) request corrections or revisions to the document, (c) request revisions and a subsequent oral defense of the revised document, or (d) determine that the student has failed. If a student has been asked to submit revisions and defend again, they may defend the revised document once.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and

assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form

- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Curriculum and Instruction: CI (p. 1361), DE (p. 1367), ECE (p. 1369), EDTC (p. 1369), RDG (p. 1370), SPED (p. 1372)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5303. Teaching Math in the Elementary School.**

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.**

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting.

Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development of skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Development Education (DE)****DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Early Childhood Education (ECE)

**ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

**EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels.

Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State has been a top school for educators for over 100 years. Texas State is the ideal choice for teachers seeking to improve their performance and for career changers looking for certification with a master's degree. The community of students enrolled in the master's degree programs in elementary education at Texas State are passionate about teaching, learning and making a difference.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

[www.gradcollege.txst.edu/international/faqs.html](http://www.gradcollege.txst.edu/international/faqs.html)) for more information.)

- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- one-page statement of purpose on why the student wishes to teach
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit TOEFL scores that meet the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution.

- official TOEFL iBT scores with minimum individual scores of
  - 22 listening
  - 22 reading
  - 24 speaking
  - 21 writing

This program does **not** offer admission if the scores above are not met.

### Additional Information

In addition to the application requirements for the master's degree, the student must also meet the eligibility requirements posted by the Educator Preparation Program.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Elementary Education concentration in Early Childhood Education requires a minimum of 30 semester credit hours, including a minor and thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5390	Research Seminar in Education	3
<b>Concentration</b>		
CI 5327	Principles and Practices in the Elementary School	3
ECE 5318	Advanced Early Child Development: Readiness for Learning and Language Abilities	3
ECE 5319	Curriculum and the Young Child: Early Care and Education	3
ECE 5330	Curriculum and the Young Child, II (Kindergarten)	3
ECE 5380	Independent Study in Early Childhood	3
<b>Thesis</b>		
CI 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
CI 5199B	Thesis	
CI 5299B	Thesis	
CI 5399B	Thesis	
CI 5599B	Thesis	
CI 5999B	Thesis	
<b>Minor</b>		
Choose a 6-hour advisor-approved minor		6
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

Due to the comprehensive nature of the exam, students are to take the exam during the last semester of their coursework. Written comprehensive examinations will be administered twice a year: spring and fall. The date and time for the exam's completion will be posted on the C&I website [generally, mid-semester]. The comp exam is a take-at-home examination. Those taking the exam will be granted access to materials on a website at 12 noon on the opening day of the exam [indicated on the C&I website] and will be expected to upload their carefully edited responses in an anonymous document to a designated website which includes an upload to an internet-based plagiarism-detection service provided by the university and utilizable through the website. Students will respond in essay form to two of several exam item choices. The exam items will be listed in an exam study guide. A grading committee comprised of faculty members in elementary education will assess their responses. Committee members will use assessment rubrics [which will be given to examinees with their study guides to determine whether or not an exam it impasses. Students will receive information about whether or not they passed the exam by e-mail as soon as the chair of the exam committee receives all of the input from the exam committee members. If the committee surmises that an essay does not pass, they will provide written feedback designed to facilitate improvement of the essay, and the student may re-submit the essay. Students who do not pass their resubmission will be able to re-take the assessment the following semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Curriculum and Instruction: CI (p. 1379), DE (p. 1385), ECE (p. 1387), EDTC (p. 1387), RDG (p. 1388), SPED (p. 1390)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom.

Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Development Education (DE)****DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



## Early Childhood Education (ECE)

### **ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### **EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The 30-credit Master of Arts (M.A.) in Elementary Education with a concentration in Creativity, Talent, and Transformation prepares students for advanced teaching, mentoring, and leadership roles in classrooms, educational systems, and communities, with an emphasis on skills, knowledge, and inquiry related to fostering learning, creativity, talent, and transformation. Graduates of this versatile degree program are well-positioned for job opportunities such as:

- mentoring program leader
- talent development coordinator
- academic coordinator or instructional coordinator
- classroom teacher with enhanced creativity and advanced/gifted education skills
- dance, theater, music, or art teacher leader
- teacher of advanced and honors classes
- extra-curricular coach, creativity coach, or instructional coach
- teacher peer mentor
- academic director
- community-based education specialist
- undergraduate university faculty

This degree program, which includes a thesis, also provides a foundation for doctoral studies in education. The program does not require teacher licensure or prior courses in specific areas for admission.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV, including contact information for two references who are familiar with the student's scholarly work and/or relevant work experience
- statement of purpose (one to two double-spaced pages) that includes the student's rationale for pursuing graduate study in this particular program

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Elementary Education concentration in Creativity, Talent, and Transformation requires a minimum of 30 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5310	Creativity: Theories, Research, Practices, and Issues	3
CI 5309	Rethinking Talent and Transformation	3
CI 5383	Mentoring Across the Life Span	3
BILG 5388 or CI 5330	The Politics of Language Multicultural Teaching and Learning	3
CI 5352	Research and Current Topics in Talent Development and Creativity	3
CI 5339 or CI 5373	Project-Based Instruction Professional Development for Teachers: Models, Research, and Theory	3
CI 5390	Research Seminar in Education	3
CI 5308 or CI 5359 or CI 5368	Emerging Frameworks for Gifted and Talented Education Curriculum for Rigor, Depth, and Complexity The Politics and Creativity of Being and Becoming	3
CI 5399A	Thesis	3
Choose a minimum of 3 hours from:		3
CI 5199B	Thesis	
CI 5199B	Thesis	
CI 5399B	Thesis	
CI 5599B	Thesis	
CI 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

Students must complete a thesis, which includes an oral defense. At the oral defense of the thesis, the faculty committee may: (a) determine that the student has passed, (b) request corrections or revisions to the document, (c) request revisions and a subsequent oral defense of the revised document, or (d) determine that the student has failed. If a student has been asked to submit revisions and defend again, they may defend the revised document once.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must

demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Curriculum and Instruction: CI (p. 1397), DE (p. 1403), ECE (p. 1404), EDTC (p. 1404), RDG (p. 1405), SPED (p. 1408)



## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

#### CI 5307. Probability and Statistics Methods for Elementary Math Teachers.

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5308. Emerging Frameworks for Gifted and Talented Education.

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5309. Rethinking Talent and Transformation.

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### CI 5310. Creativity: Theories, Research, Practices, and Issues.

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### CI 5311. Practicum in Talent Development.

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter



**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Early Childhood Education (ECE)****ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Educational Technology (EDTC)****EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter



**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The degree program in Elementary Education Bilingual Bicultural is designed for bilingual and bi-literate (Spanish and English) individuals interested in teaching in bilingual education programs in grades pre-kindergarten through grade six, including two-way dual language immersion programs. Graduate students in the field of bilingual education help meet an area of critical shortage as cited by the Texas Education Agency, and are prepared to teach students from culturally and linguistically diverse backgrounds applying appropriate and sustaining

pedagogical approaches that offer students access to excellence and equity in schooling.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted.
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- interview with the bilingual coordinator to ensure the student's proficiency in written and spoken Spanish
- statement of purpose (one page) describing why the student wishes to teach
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Elementary Education Bilingual/Bicultural requires 30 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
BILG 5374	Bilingual/ESL Academic Content Instruction	3
CI 5306		3
CI 5327	Principles and Practices in the Elementary School	3
CI 5330	Multicultural Teaching and Learning	3
CI 5336	Methods and Materials for Teaching English as a Second Language	3
CI 5387	Bilingual Education: Principles and Practices	3
<b>Thesis</b>		
CI 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
CI 5199B	Thesis	
CI 5299B	Thesis	
CI 5399B	Thesis	
CI 5599B	Thesis	
CI 5999B	Thesis	
<b>Minor</b>		
Choose a 6-hour advisor-approved minor		6
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

Successful completion of a written comprehensive examination is required for graduation with the Master of Education degree in Bilingual/Bicultural Elementary Education (MA and MEd). Due to the comprehensive nature of the exam, students should take the exam during the last semester of their master's program coursework. The exam is intended to be a synthesis of pertinent information, concepts, theories and practices from across the content of a range of coursework; therefore, the exam tests one's ability to take information and ideas from many hours of coursework and synthesize that information and those ideas into cogent, thoughtful reflections, explications, and/or applications. Students who do not pass the exam on the first attempt will be provided written feedback on the first attempt and the opportunity to take the written examination a second time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the

department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Curriculum and Instruction: CI (p. 1414), DE (p. 1420), ECE (p. 1422), EDTC (p. 1422), RDG (p. 1423), SPED (p. 1425)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom.

Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Development Education (DE)****DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



## Early Childhood Education (ECE)

### **ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### **EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an in-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The program develops teacher leaders who will make significant contributions in schools and other educational settings. The department offers paid assistantships, which give students opportunities to help professors conduct research or teach classes while earning a salary.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted.
  - a 3.4 overall GPA or a 3.4 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - GRE not required
  - statement of purpose (one page) identifying and describing the student's research interests. Students should address this question: "What has motivated you to enter the teacher profession, become a dual-credit teacher, and/or want to earn your M.A.?"

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Secondary Education requires 30 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5325	Comparative Education Systems	3
or CI 5372	Philosophical Foundations of Education	

CI 5330	Multicultural Teaching and Learning	3
CI 5339	Project-Based Instruction	3
CI 5390	Research Seminar in Education	3
CI 5395	Capstone for Education Students	3

### Thesis

CI 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
CI 5199B	Thesis	
CI 5299B	Thesis	
CI 5399B	Thesis	
CI 5599B	Thesis	
CI 5999B	Thesis	

### Cognate

Choose 9 hours of advisor-approved courses	9
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<b>Total Hours</b>	<b>30</b>
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## Comprehensive Examination Requirement

All candidates for graduate degrees must pass a capstone course, which serves as the comprehensive exam requirement. Candidates should ask the graduate advisor which capstone course fulfills the requirement for their specific degree.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Curriculum and Instruction: CI (p. 1431), DE (p. 1438), ECE (p. 1439), EDTC (p. 1439), RDG (p. 1440), SPED (p. 1443)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**CI 5301. Methods for Teaching Middle School Mathematics.**

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5302. Practical Statistics for Educators.**

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5303. Teaching Math in the Elementary School.**

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.**

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom.

Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development of skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

### DE 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### DE 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### DE 5305. Diversity and Education in a P-16 Context.

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5321. The Community College.

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5324. Teaching Learning Strategies and Critical Thinking.

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5326. Curriculum Design in Postsecondary Developmental Education.

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5327. Student Motivation and Self-Regulation.

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5339. Assessment and Evaluation in Developmental Education.

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5365. Administration of Developmental Education.

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5373. Grant Development and Management.

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5375. Learners in Developmental Education Contexts.

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### DE 5378. Problems in Developmental Education.

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Early Childhood Education (ECE)****ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Educational Technology (EDTC)****EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter



**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an in-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing | Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Master of Arts (M.A.) **degree with a major** in Secondary Education with Talent Development Concentration fosters and shares skills toward a common world with a spirit of equal flourishing. Faculty, students, and program graduates support and spotlight the diverse pathways and creative actions of young people, families, and communities. They think critically and imaginatively about educational practices, policies, and possibilities. With skills that are useful in various

kinds of creative change efforts, program graduates are in demand for classrooms, school districts, non-profit workplaces, and communities.

The Master of Arts degree program requires a thesis.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university
- official transcripts from **each institution** where course credit was granted
- minimum 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- Effective Spring 2023: resume/CV, including contact information for two references who are familiar with the student's scholarly work and/or relevant work experience
- Effective Spring 2023: statement of purpose (one to two double-spaced pages) that includes the student's rationale for pursuing graduate study in this particular program

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Secondary Education concentration in Talent Development requires 30 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5309	Rethinking Talent and Transformation	3
or CI 5324	Systems and Models for Gifted and Talented Education	
CI 5310	Creativity: Theories, Research, Practices, and Issues	3

or CI 5319	Social, Emotional, and Cultural Contexts of Gifted and Advanced Development	
CI 5368	The Politics and Creativity of Being and Becoming	3
or CI 5383	Mentoring Across the Life Span	
CI 5359	Curriculum for Rigor, Depth, and Complexity	3
or CI 5381	Curiosity, Reimagination, and the Radical Imagination	
CI 5311	Practicum in Talent Development	3
Choose 3 hours from the following:		3
CI 5308	Emerging Frameworks for Gifted and Talented Education	
CI 5339	Project-Based Instruction	
CI 5364	Advanced Instructional Strategies for Secondary Education Teachers	
CI 5372	Philosophical Foundations of Education	
CI 5373	Professional Development for Teachers: Models, Research, and Theory	
CI 7352	Beginning Qualitative Design and Analysis	
EDTC 5310	Introduction to Educational Technology	
RDG 5310	Teaching Literacy with Children's and Young Adult Literature	
Choose 3 hours from the following:		3
CI 5330	Multicultural Teaching and Learning	
BILG 5388	The Politics of Language	
RDG 5331	Literacy Methods for Linguistically and Culturally Diverse Students	
CI 5390	Research Seminar in Education	3
<b>Thesis</b>		
CI 5399A	Thesis	3
Choose a minimum of 3 hours from the following courses:		3
CI 5199B	Thesis	
CI 5299B	Thesis	
CI 5399B	Thesis	
CI 5599B	Thesis	
CI 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

Students must complete a thesis, which includes an oral defense. At the oral defense of the thesis, the faculty committee may: (a) determine that the student has passed, (b) request corrections or revisions to the document, (c) request revisions and a subsequent oral defense of the revised document, or (d) determine that the student has failed. If a student has been asked to submit revisions and defend again, they may defend the revised document once.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until

the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Curriculum and Instruction: CI, DE, ECE, EDTC, RDG, SPED

## Courses Offered Curriculum and Instruction (CI)

### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Developmental Education (DE)****DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



## Early Childhood Education (ECE)

### **ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### **EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Graduates of the Educational Technology program will be prepared to teach technology applications, use technology to support student learning of subject-area content, and provide professional development, mentoring, and basic technical and instructional assistance to other professional educators on their campuses and/or in their districts.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose (approximately 500 words) describing background and career goals including:
  - background in teaching and education
  - experience with using/integrating technology in the classroom
  - how the student's goals tie into the mission of the educational technology graduate program
  - what the student hopes to achieve by completing the program

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waliver>).

- official TOEFL iBT with minimum individual scores of
  - 22 listening
  - 22 reading
  - 24 speaking
  - 21 writing
- This program does not offer admission if the scores above are not met.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Educational Technology requires 30 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5390	Research Seminar in Education <sup>1</sup>	3
EDTC 5310	Introduction to Educational Technology	3
EDTC 5315	Advanced Educational Technology	3
EDTC 5320	Models of Integration of Educational Technology	3
EDTC 5325	Managing Educational Technology	3
EDTC 5330	Implementing Technology in Education	3
EDTC 5335	Instructional Design for Educational Technology	3
EDTC 5340	Issues in Educational Technology	3
<b>Cognate – Educational Technology</b>		
Choose 6 hours from the following:		6
ADED 5321	Adult Learning and Development	
ADED 5344	Multicultural Perspectives in Postsecondary Education and Adult Education	
ADED 5382	Foundations of Adult Education	
CI 5306		
CI 5312	Elementary Language Arts: Current Trends	
CI 5314	Human Growth and Development II	
CI 5333	The Secondary Curriculum	
CI 5363	Strategies for Improving Secondary Teaching	
DE 5324	Teaching Learning Strategies and Critical Thinking	
DE 5375	Learners in Developmental Education Contexts	
EDCL 5339	Understanding Self: Developing a Personal Vision of Leadership	
EDCL 5340	Shaping Organizations and Using Inquiry: Management and Leadership	
EDCL 5345	Understanding People: Professional Development	
EDCL 5348	Supervision of Instruction	
EDTC 5334	Online Learning and Course Design	
EDTC 5341	Digital Fabrication and Simple Electronics	
EDTC 5345	Educational Technology Internship	
RDG 5324	Developing Content Area Literacy in Middle and Secondary Schools	
RDG 5340	Connecting Reading and Writing in the Classroom	
May choose advisor-approved courses from outside the College of Education		
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> CI 5390 must be taken within the first 12 hours of the graduate program.

## Comprehensive Examination Requirement

All students are required to develop a professional portfolio, providing evidence of knowledge and skills related to educational technology. This portfolio must be presented and defended during the student's final semester. A student who fails the portfolio defense must revise their portfolio for a new defense during the next regular semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: ADED (p. 1466), CI (p. 1468), DE (p. 1474), EDTC (p. 1476), RDG (p. 1476)

## Courses Offered

### Adult Education (ADED)

#### **ADED 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **ADED 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **ADED 5314. Community Development for Educators.**

Educators in community organizations and higher education will develop a theoretical and practical understanding of the role of learning, teaching, and leading within a community development framework. They will develop an awareness of self as change agent and community builder, as well as the importance of tapping into community assets.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ADED 5321. Adult Learning and Development.**

This seminar will cover a range of topics of interest of professionals working with adult learners in a variety of settings, including characteristics and motivations of adult learners; theories of adult learning and intelligence; modes of adult cognitive and psychosocial development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ADED 5322. Human Resources and Professional Development.**

This course examines the primary role of human resources development in the organization to help people and organizations effectively manage change. It focuses on strategies for implementing training and organizational development efforts that positively impact the performance of the individual and the work group.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

#### **ADED 5325. Teaching Adults: Principles and Practices.**

This seminar addresses methods and techniques for effective instruction of adults across a variety of settings and content. The emphasis is on concepts, theories, and principles relevant to the selection, use, and evaluation of instructional strategies. Participants will have an opportunity to practice strategies that expand their teaching repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ADED 5330. Planning, Evaluating, and Managing Programs in Adult Education.**

This seminar course introduces skills and concepts needed to plan, evaluate, and manage adult education programs within various settings. This course addresses principles and procedures, utilization of assessment, goal setting, and other effective strategies for developing learning opportunities and programs responsive to human, professional, and community needs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ADED 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ADED 5335. Applied Research in Adult Education.**

An examination of purpose, principles, and methods of current research in adult education. Quantitative, qualitative, and mixed methods research design will be investigated as used in applied research including action research, evaluation research, and needs assessment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ADED 5337. Adult Literacy.**

The course is designed to provide students with a broad foundation about the needs of undereducated adults, including adult English language learners. Students will analyze and evaluate adult literacy legislation, instruction, research, and delivery systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ADED 5338. Applied Linguistics for ESL Teachers of Adults.**

This course is designed to provide language teachers a practical introduction to the elements of the English language as applied to the teaching of ESL in adult settings; specifically, the course covers English syntactic structure, morphology, and phonology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**ADED 5339. Adult Literacy ESL Assessment and Evaluation.**

This course is an introduction to assessment of adult students with emphasis on literacy and ESL populations. It is an overview of assessment constructs and social and historical movements in student literacy assessment and evaluation traditional assessment and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5340. Adult Second Language Acquisition.**

This course covers topics related to contemporary adult second language acquisition practices. It also examines the complexities of adult second language acquisition and the ways in which limited English-proficient adults learn more efficiently. Class readings and projects address a variety of issues dealing with adult second language acquisition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5342. Adult ESL Methods and Materials.**

This course reviews traditional and contemporary adult language teaching methodologies. It focuses on the design of lessons that integrate listening, speaking, reading, writing, culture and all language skills. This course provides strategies for choosing, adopting, and adapting textbooks that integrate teaching material appropriate to different adult language learning settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5343. Organizational Learning and Development.**

The course addresses a range of topics, including the effects of change, methods of organizational change, and factors influencing organizational development success. Students learn the roles of internal and external organizational development consultants, tools and processes for helping organizational members identify problems, gather and analyze information, and implement solutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5344. Multicultural Perspectives in Postsecondary Education and Adult Education.**

This seminar covers a broad range of topics related to diversity within postsecondary and adult education. Course readings and projects relate to a wide variety of settings including colleges and universities, adult literacy programs, the workplace, and community-based organizations. Students taking ADED 5344 may not take ADED 7344 for doctoral level credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ADED 5345. Current Issues in Adult, Continuing and Professional Education.**

A seminar style course focusing on current issues in continuing and professional education including research and professional practice. Specific emphasis will vary depending on changes in contemporary issues. Students taking ADED 5345 may not take ADED 7345 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5346. Adult and Nontraditional Students in Higher Education.**

This seminar focuses on the "nontraditional student" in higher education, with emphasis on undergraduates 25 and older. Also considered are other nontraditional students facing similar challenges to participation in higher education. Topics include student characteristics, motivations, barriers, persistence, and outcomes as well as institutional and programmatic responses to this population.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5357. Advanced Studies in Action Research.**

This course examines underlying theory, practice, skills, and issues in action research. Students will be introduced to various educational research methods used in action research and review the components and processes of action research. They will develop a plan for an action research project focused on a specific educational problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5364. Team Development in Education.**

This course addresses the development and use of educational teams to improve educational organizations, teaching, and learning. Team development instruction focuses on managing teams, identifying leadership roles. Study topics include: the importance of shared leadership, product teams, and team decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5378. Problems in Adult Education.**

This course is designed to examine topical problems faced by practitioners in adult education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5382. Foundations of Adult Education.**

This course will provide an overview of the field of adult education in its various forms and settings. Topics include (1) historical origins of adult education as a field of study and practice, (2) philosophical perspectives, (3) organization and delivery of adult education, and (4) emerging developments and issues in the profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5384. Internship in Adult Education.**

This course is an 80-clock hour internship is required of all Adult Education majors. The experience involves instruction and/or administration in an adult education setting and includes orientation to the roles, responsibilities, and functions of professionals in adult education. Prerequisite: ADED 5321 and ADED 5330 and ED 7324 and ADED 7325 all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Adult Education 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Curriculum and Instruction (CI)****CI 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5301. Methods for Teaching Middle School Mathematics.**

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5302. Practical Statistics for Educators.**

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5303. Teaching Math in the Elementary School.**

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.**

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Development Education (DE)**

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Educational Technology (EDTC)

### EDTC 5310. Introduction to Educational Technology.

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5315. Advanced Educational Technology.

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5320. Models of Integration of Educational Technology.

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5325. Managing Educational Technology.

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5330. Implementing Technology in Education.

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5334. Online Learning and Course Design.

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5335. Instructional Design for Educational Technology.

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5340. Issues in Educational Technology.

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### EDTC 5341. Digital Fabrication and Simple Electronics.

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5345. Educational Technology Internship.

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Reading (RDG)

### RDG 5310. Teaching Literacy with Children's and Young Adult Literature.

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### RDG 5320. Foundations of Literacy Instruction.

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State has been a top school for educators for over 100 years. Texas State is the ideal choice for teachers seeking to improve their performance and for career changers looking for certification with a master's degree. The community of students enrolled in the master's degree programs in elementary education at Texas State are passionate about teaching, learning and making a difference.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic

year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- one-page statement of purpose on why the student wishes to teach
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Elementary Education requires 30 semester credit hours, including the Methods and Materials minor.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5327	Principles and Practices in the Elementary School	3
CI 5390	Research Seminar in Education	3
<b>Strategies</b>		
CI 5310	Creativity: Theories, Research, Practices, and Issues	3
<b>Math/Science</b>		

Choose 3 hours from the following:	3
CI 5303 Teaching Math in the Elementary School	
CI 5304 Teaching Mathematics and Science in the Elementary School	
CI 5329 The Elementary School Science Curriculum	
<b>Language Arts and Social Studies</b>	
Choose 3 hours from the following:	3
CI 5328 Elementary Social Studies: Curriculum Problems	
RDG 5310 Teaching Literacy with Children's and Young Adult Literature	
<b>Schooling and Society</b>	
Choose 3 hours from the following:	3
BILG 5388 The Politics of Language	
CI 5330 Multicultural Teaching and Learning	
<b>Minor</b>	
Choose a 12 hour advisor approved minor	12
<b>Total Hours</b>	<b>30</b>

## Comprehensive Examination Requirement

Due to the comprehensive nature of the exam, students are to take the exam during the last semester of their course work. Written comprehensive examinations will be administered twice a year: spring and fall. The date and time for the exam's completion will be posted on the C&I website [generally, mid-semester].

The comp exam is a take-at-home examination. Those taking the exam will be granted access to materials on a website at 12 noon on the opening day of the exam [indicated on the C&I website] and will be expected to upload their carefully edited responses in an anonymous document to a designated website which includes an upload to an internet-based plagiarism-detection service provided by the university and utilizable through the website. Students will respond in essay form to two of several exam item choices. The exam items will be listed in an exam study guide. A grading committee comprised of faculty members in elementary education will assess their responses. Committee members will use assessment rubrics [which will be given to examinees with their study guides] to determine whether or not an exam it impasses. Students will receive information about whether or not they passed the exam by e-mail as soon as the chair of the exam committee receives all of the input from the exam committee members. If the committee surmises that an essay does not pass, they will provide written feedback designed to facilitate improvement of the essay, and the student may re-submit the essay. Students who do not pass their re-submission will be able to re-take the assessment the following semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1480), DE (p. 1486), ECE (p. 1488), EDTC (p. 1488), RDG (p. 1489), SPED (p. 1491)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Development Education (DE)****DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Early Childhood Education (ECE)

### **ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### **EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an in-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Master of Education (M.Ed.) degree with a major in Elementary Education concentration in Early Childhood offers advanced studies in curriculum, teaching and learning at the levels of early childhood through middle grades education. The community of students enrolled in the master's degree programs in elementary education at Texas State are passionate about teaching, learning and making a difference.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - GRE not required
  - one-page statement of purpose on why the student wishes to teach
  - three letters of recommendation

### TOEFL Scores

Applicants are required to submit TOEFL scores that meet the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution.

- official TOEFL iBT scores with minimum individual scores of
  - 22 listening
  - 22 reading
  - 24 speaking
  - 21 writing

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Elementary Education requires 30 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5327	Principles and Practices in the Elementary School	3
CI 5390	Research Seminar in Education <sup>1</sup>	3
<b>Concentration</b>		
ECE 5318	Advanced Early Child Development: Readiness for Learning and Language Abilities	3
ECE 5319	Curriculum and the Young Child: Early Care and Education	3
ECE 5330	Curriculum and the Young Child, II (Kindergarten)	3

ECE 5380	Independent Study in Early Childhood	3
<b>Minor</b>		
Choose a 12-hour advisor-approved minor		12
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> CI 5390 should be taken in the first semester of attendance.

## Comprehensive Examination Requirement

Due to the comprehensive nature of the exam, students are to take the exam during the last semester of their course work. Written comprehensive examinations will be administered twice a year: spring and fall. The date and time for the exam's completion will be posted on the C&I website [generally, mid-semester].

The comp exam is a take-at-home examination. Those taking the exam will be granted access to materials on a website at 12 noon on the opening day of the exam [indicated on the C&I website] and will be expected to upload their carefully edited responses in an anonymous document to a designated website which includes an upload to an internet-based plagiarism-detection service provided by the university and utilizable through the website. Students will respond in essay form to two of several exam item choices. The exam items will be listed in an exam study guide. A grading committee comprised of faculty members in elementary education will assess their responses. Committee members will use assessment rubrics [which will be given to examinees with their study guides] to determine whether or not an exam it impasses. Students will receive information about whether or not they passed the exam by e-mail as soon as the chair of the exam committee receives all of the input from the exam committee members. If the committee surmises that an essay does not pass, they will provide written feedback designed to facilitate improvement of the essay, and the student may re-submit the essay. Students who do not pass their resubmission will be able to re-take the assessment the following semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1496), DE (p. 1503), ECE (p. 1504), EDTC (p. 1504), RDG (p. 1505), SPED (p. 1508)

## Courses Offered

### Curriculum and Instruction (CI)

**CI 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**CI 5301. Methods for Teaching Middle School Mathematics.**

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5302. Practical Statistics for Educators.**

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5303. Teaching Math in the Elementary School.**

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.**

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom.

Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development of skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

### DE 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### DE 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### DE 5305. Diversity and Education in a P-16 Context.

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5321. The Community College.

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5324. Teaching Learning Strategies and Critical Thinking.

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5326. Curriculum Design in Postsecondary Developmental Education.

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5327. Student Motivation and Self-Regulation.

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5339. Assessment and Evaluation in Developmental Education.

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5365. Administration of Developmental Education.

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5373. Grant Development and Management.

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5375. Learners in Developmental Education Contexts.

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### DE 5378. Problems in Developmental Education.

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Early Childhood Education (ECE)****ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Educational Technology (EDTC)****EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter



**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State has been a top school for educators for over 100 years. Texas State is the ideal choice for teachers seeking to improve their performance and for career changers looking for certification with a master's degree. The community of students enrolled in the master's degree programs in elementary education at Texas State are passionate about teaching, learning and making a difference.

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0)).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$35 nonrefundable Texas Education Agency technology fee (if offered admission)
  - and either
- \$55 nonrefundable application fee
  - or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- one-page statement of purpose on why the student wishes to teach
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores with minimum individual scores of
  - 19 listening
  - 19 reading
  - 26 speaking
  - 19 writing

This program does **not** offer admission if the scores above are not met.

### Eligibility Requirements for Teacher Certification

According to the Texas Education Agency, there are specific requirements for becoming a classroom teacher. In addition to the application requirements for the master's degree, the student must also meet the eligibility requirements posted by the Educator Preparation Program (<https://www.education.txstate.edu/oep/>). If admitted to the master's + certification program, the student must request a certification plan ([https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322\\_ustores%2Fweb%2Fstore\\_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vI36o%2FvntSWrfROMjcDF96%2FDk%2F4%3D&reserved=0](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322_ustores%2Fweb%2Fstore_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vI36o%2FvntSWrfROMjcDF96%2FDk%2F4%3D&reserved=0)) from the Educator Preparation Program.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Elementary Education teacher certification in Early Childhood through Grade Six Generalist Bilingual requires 36 semester credit hours. Additional credit hours may be required to be eligible for teacher certification examinations.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5326	Curriculum & Management in the Elementary & Middle School	3
CI 5328	Elementary Social Studies: Curriculum Problems	3
CI 5329	The Elementary School Science Curriculum	3
CI 5336	Methods and Materials for Teaching English as a Second Language	3
BILG 5374	Bilingual/ESL Academic Content Instruction	3
CI 5387	Bilingual Education: Principles and Practices	3
RDG 5322	Teaching Reading in the Elementary and Middle Schools	3
RDG 5340	Connecting Reading and Writing in the Classroom	3
SPED 5326	Educating Students with Mild Disabilities	3
<b>Concentration</b>		
CI 5303	Teaching Math in the Elementary School	3
CI 5313	Research Seminar in Human Growth and Development <sup>1</sup>	3
CI 5337	Language Acquisition and Development	3
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> CI 5313 should be taken in the first semester of attendance.

## Comprehensive Examination Requirement

Due to the comprehensive nature of the exam, students are to take the exam during the **last semester of their course work**. Written comprehensive examinations will be administered twice a year: spring and fall. The date and time for the exam's completion will be posted on the C&I website [generally, mid-semester].

The comp exam is a take-at-home examination. Those taking the exam will be granted access to materials on a website at 12 noon on the opening day of the exam [indicated on the C&I website] and will be expected to upload their carefully edited responses in an anonymous document to a designated website which includes an upload to an internet-based plagiarism-detection service provided by the university and utilizable through the website.

Students will respond in essay form to two of several exam item choices.

The exam items will be listed in an exam study guide. A grading committee comprised of faculty members in elementary education will assess the responses. Committee members will use assessment rubrics [which will be given to examinees with their study guides] to determine whether or not an exam item passes. Students will receive information about whether or not they passed the exam by e-mail as soon as the chair of the exam committee receives all of the input from the exam committee members. If the committee surmises that an essay does not pass, they will provide written feedback designed to facilitate improvement of the essay, and the student may re-submit the essay. Students who do not pass their resubmission will be able to re-take the assessment the following semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1513), DE (p. 1520), ECE (p. 1521), EDTC (p. 1521), RDG (p. 1522), SPED (p. 1525)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5301. Methods for Teaching Middle School Mathematics.**

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5302. Practical Statistics for Educators.**

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5303. Teaching Math in the Elementary School.**

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.**

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit



**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom.

Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development of skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

### DE 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### DE 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### DE 5305. Diversity and Education in a P-16 Context.

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5321. The Community College.

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5324. Teaching Learning Strategies and Critical Thinking.

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5326. Curriculum Design in Postsecondary Developmental Education.

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5327. Student Motivation and Self-Regulation.

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5339. Assessment and Evaluation in Developmental Education.

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5365. Administration of Developmental Education.

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5373. Grant Development and Management.

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5375. Learners in Developmental Education Contexts.

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### DE 5378. Problems in Developmental Education.

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Early Childhood Education (ECE)****ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Educational Technology (EDTC)****EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State has been a top school for educators for over 100 years. Texas State is the ideal choice for teachers seeking to improve their performance and for career changers looking for certification with a master's degree. The community of students enrolled in the master's degree programs in elementary education at Texas State are passionate about teaching, learning and making a difference.

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0)).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$35 nonrefundable Texas Education Agency technology fee (if offered admission)
  - and either
- \$55 nonrefundable application fee
  - or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university
- official transcripts from **each institution** where course credit was granted
- minimum 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- one-page statement of purpose on why the student wishes to teach
- three letters of recommendation

### TOEFL scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores with minimum individual scores of
  - 19 listening
  - 19 reading
  - 26 speaking
  - 19 writing

This program does **not** offer admission if the scores above are not met.

### Eligibility Requirements for Teacher Certification

According to the Texas Education Agency, there are specific requirements for becoming a classroom teacher. In addition to the application requirements for the master's degree, the student must also meet the eligibility requirements posted by the Educator Preparation Program (<https://www.education.txstate.edu/oep/>). If admitted to the master's + certification program, the student must request a certification plan ([https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322\\_ustores%2Fweb%2Fstore\\_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420194c8cbb%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vI36o%2FvntSWrFROMjcdF96%2FDk%2F4%3D&reserved=0](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322_ustores%2Fweb%2Fstore_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420194c8cbb%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vI36o%2FvntSWrFROMjcdF96%2FDk%2F4%3D&reserved=0)) from the Educator Preparation Program.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Elementary Education teacher certification in Early Childhood through Grade Six Generalist ESL requires 36 semester credit hours. Additional credit hours may be required to be eligible for teacher certification examinations.

CI 5313 should be taken in the first or second semester of attendance.  
CI 5326 should be taken by the end of the second semester.  
RDG 5340, CI 5303, CI 5303, CI 5303, CI 5303, CI 5303, CI 5328, and CI 5329 should be taken during the last 15 hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5303	Teaching Math in the Elementary School	3
CI 5313	Research Seminar in Human Growth and Development	3
CI 5326	Curriculum & Management in the Elementary & Middle School	3
CI 5328	Elementary Social Studies: Curriculum Problems	3
CI 5329	The Elementary School Science Curriculum	3
CI 5336	Methods and Materials for Teaching English as a Second Language	3
CI 5337	Language Acquisition and Development	3
ECE 5318	Advanced Early Child Development: Readiness for Learning and Language Abilities	3
or ECE 5319	Curriculum and the Young Child: Early Care and Education	
RDG 5322	Teaching Reading in the Elementary and Middle Schools	3
RDG 5340	Connecting Reading and Writing in the Classroom	3
SPED 5326	Educating Students with Mild Disabilities	3
Choose 3 hours from the following:		3
CI 5330	Multicultural Teaching and Learning	
BILG 5367	Policy and Practice in Dual Language Immersion Education	
BILG 5388	The Politics of Language	
CI 5387	Bilingual Education: Principles and Practices	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

Due to the comprehensive nature of the exam, students are to take the exam during the **last semester of their course work**. Written comprehensive examinations will be administered twice a year: spring and fall. The date and time for the exam's completion will be posted on the C&I website [generally, mid-semester].

The comp exam is a take-at-home examination. Those taking the exam will be granted access to materials on a website at 12 noon on the opening day of the exam [indicated on the C&I website] and will be expected to upload their carefully edited responses in an anonymous document to a designated website which includes an upload to an internet-based plagiarism-detection service provided by the university and utilizable through the website.

Students will respond in essay form to two of several exam item choices. The exam items will be listed in an exam study guide. A grading committee comprised of faculty members in elementary education will assess the responses. Committee members will use assessment rubrics [which will be given to examinees with their study guides] to determine whether or not an exam item passes. Students will receive information about whether or not they passed the exam by e-mail as soon as the chair of the exam committee receives all of the input from the exam committee members. If the committee surmises that an essay does not pass, they will provide written feedback designed to facilitate improvement of the essay, and the student may re-submit the essay. Students who do not pass their resubmission will be able to re-take the assessment the following semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1530), DE (p. 1537), ECE (p. 1538), EDTC (p. 1538), RDG (p. 1539), SPED (p. 1542)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5301. Methods for Teaching Middle School Mathematics.**

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5302. Practical Statistics for Educators.**

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5303. Teaching Math in the Elementary School.**

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.**

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom.

Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



## Development Education (DE)

### DE 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### DE 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### DE 5305. Diversity and Education in a P-16 Context.

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5321. The Community College.

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5324. Teaching Learning Strategies and Critical Thinking.

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5326. Curriculum Design in Postsecondary Developmental Education.

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5327. Student Motivation and Self-Regulation.

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5339. Assessment and Evaluation in Developmental Education.

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5365. Administration of Developmental Education.

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5373. Grant Development and Management.

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5375. Learners in Developmental Education Contexts.

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### DE 5378. Problems in Developmental Education.

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Early Childhood Education (ECE)

**ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

**EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

- teacher of advanced and honors classes
- talent development coordinator
- teacher peer mentor
- mentoring program leader
- extra-curricular coach, creativity coach, or instructional coach
- academic coach and coordinator
- community-based education specialist
- undergraduate university faculty

This program also provides a foundation for doctoral studies in education. The program does not require teacher licensure or specific prior course work for admission.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV, including contact information for two references who are familiar with the student's scholarly work and/or relevant work experience
- statement of purpose (one to two double-spaced pages) that includes the student's rationale for pursuing graduate study in this particular program

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52

## Program Overview

The 30-credit Master of Education (M.Ed.) in Elementary Education with concentration in Teaching and Transforming Advanced and Gifted Education focuses on knowledge and skills for teaching and transforming advanced and gifted education. Graduates are well-positioned for advanced teaching, mentoring, and leadership roles such as:

- gifted and talented education teacher and coordinator
- classroom teacher with enhanced advanced/gifted education skills



- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Elementary Education concentration in Teaching and Transforming Advanced and Gifted Education requires 30 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5308	Emerging Frameworks for Gifted and Talented Education	3
CI 5309	Rethinking Talent and Transformation	3
CI 5351	Creative Teaching, Learning, and Leading in Advanced/Gifted Education	3
CI 5359	Curriculum for Rigor, Depth, and Complexity	3
CI 5383	Mentoring Across the Life Span	3
CI 5330	Multicultural Teaching and Learning	3
CI 5324	Systems and Models for Gifted and Talented Education	3
CI 5352	Research and Current Topics in Talent Development and Creativity	3
CI 5354	Leadership in Gifted and Talented Education	3
An advisor-approved elective		3
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

Students are required to pass the program's designated capstone course, which fulfills the program's comprehensive examination requirement. Students should ask the advisor which course serves as the capstone course.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1547), DE (p. 1553), ECE (p. 1555), EDTC (p. 1555), RDG (p. 1556), SPED (p. 1558)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom.

Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Development Education (DE)****DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Early Childhood Education (ECE)

### **ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### **EDTC 3300. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of computers, mobile devices, and online applications in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Reading (RDG)

**RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

## **Special Education (SPED)**

**SPED 5310. Independent Study in Special Education.**

This course is an in-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing/Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State University's specialized concentration, referred to as the Teacher Recruitment Program (TRP), began in 2001 as an ideal entry for second-career considerations. Students on this path may receive their certification after two semesters of field-based and academic course work and complete their master's degree while earning a teacher's salary.

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program.

Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0)).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$35 nonrefundable Texas Education Agency technology fee (if offered admission)
  - and either
- \$55 nonrefundable application fee
  - or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV
- one-page statement of purpose on why the student wishes to teach
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt

countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores with minimum individual scores of
  - 19 listening
  - 19 reading
  - 26 speaking
  - 19 writing

This program does **not** offer admission if the scores above are not met.

### Eligibility Requirements for Teacher Certification

According to the Texas Education Agency, there are specific requirements for becoming a classroom teacher. In addition to the application requirements for the master's degree, the student must also meet the eligibility requirements posted by the Educator Preparation Program (<https://www.education.txstate.edu/oep/>). If admitted to the master's + certification program, the student must request a certification plan ([https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322\\_ustores%2Fweb%2Fstore\\_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vl36o%2FvntSWrFROMjcDF96%2FDk%2F4%3D&reserved=0](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322_ustores%2Fweb%2Fstore_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vl36o%2FvntSWrFROMjcDF96%2FDk%2F4%3D&reserved=0)) from the Educator Preparation Program.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Elementary Education (Teacher Certification in Early Childhood through Grade Six ESL) requires 30 semester credit hours. Six hours of student teaching or internship will also be required in order to obtain certification.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5326	Curriculum & Management in the Elementary & Middle School	3
CI 5336	Methods and Materials for Teaching English as a Second Language	3
CI 5329	The Elementary School Science Curriculum	3
CI 5328	Elementary Social Studies: Curriculum Problems	3
CI 5303	Teaching Math in the Elementary School	3
ECE 5318	Advanced Early Child Development: Readiness for Learning and Language Abilities	3
or ECE 5319	Curriculum and the Young Child: Early Care and Education	
RDG 5322	Teaching Reading in the Elementary and Middle Schools	3
RDG 5340	Connecting Reading and Writing in the Classroom	3
SPED 5326	Educating Students with Mild Disabilities	3
Choose from the following:		3
CI 5313	Research Seminar in Human Growth and Development (Choose from the following:)	
CI 5330	Multicultural Teaching and Learning	
CI 5337	Language Acquisition and Development	

BILG 5388 The Politics of Language

Total Hours

30

## Comprehensive Examination Requirement

Due to the comprehensive nature of the exam, students are to take the exam during one of the two last semesters of their master's program coursework. Written comprehensive examinations will be administered twice a year: Spring and Fall. The date and time for the exam's completion will be posted on the C&I website [generally, mid-semester].

Those taking the exam will register for the exam that is specific to their program. Registrants will be granted access to exam instructions, study guide, and grading rubric on a Canvas site at noon on the opening day of the exam, at least two weeks in advance of the submission date of exam essays. By the due date noted, examinees will upload their carefully edited essays as an anonymous document to a specified site, which will automatically submit each essay to an internet-based plagiarism-detection service provided by the university. Students will respond to two of several exam item choices. The exam study guide will list all of the questions, which students will have access to on the opening day of the exam.

A grading committee comprised of faculty members in the elementary education program will assess the essay responses. Grading members will use the rubrics to determine whether or not an exam essay passes. Students will be notified of their exam results as soon as the chair of the exam committee receives all of the input from the exam committee members. If the committee surmises that an essay does not pass, faculty will provide written feedback designed to facilitate improvement of the essay, and the student may re-submit the essay. Students who do not pass their re-submission will be able to re-take the assessment the following semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1564), DE (p. 1570), ECE (p. 1572), EDTC (p. 1572), RDG (p. 1573), SPED (p. 1575)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom.

Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



## Early Childhood Education (ECE)

### **ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### **EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an in-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State has been a top school for educators for over 100 years. Texas State is the ideal choice for teachers seeking to improve their performance and for career changers looking for certification with a master's degree. The community of students enrolled in the master's degree programs in elementary education at Texas State are passionate about teaching, learning and making a difference.

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c88%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c88%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0)).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$35 nonrefundable Texas Education Agency fee (if offered admission) and either
  - \$55 nonrefundable application fee
  - or
  - \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university
- official transcripts from **each institution** where course credit was granted. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- one-page statement of purpose on why the student wishes to teach grades 4-8
- three letters of recommendation, preferably from current/former professors, teachers, supervisors, or employers

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores with minimum individual scores of
  - 19 listening
  - 19 reading
  - 26 speaking
  - 19 writing

This program does **not** offer admission if the scores above are not met.

### Eligibility Requirements for Teacher Certification

According to the Texas Education Agency, there are specific requirements for becoming a classroom teacher. In addition to the application requirements for the master's degree, the student must also meet the eligibility requirements posted by the Educator Preparation Program (<https://www.education.txstate.edu/oep/>). If admitted to the master's + certification program, the student must request a certification plan ([https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322\\_ustores%2Fweb%2Fstore\\_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c88%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vI36o%2FvntSWrFROMjcDF96%2FDk%2F4%3D&reserved=0](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322_ustores%2Fweb%2Fstore_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c88%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vI36o%2FvntSWrFROMjcDF96%2FDk%2F4%3D&reserved=0)) from the Educator Preparation Program.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Elementary Education teacher certification in Core Subjects, Grades Four through Eight, requires 30 semester credit hours. Additional credit hours in student teaching/internship will be required, and additional hours may be required to be eligible for teacher certification examinations.

## Course Requirements

Code	Title	Hours
Required Courses		
CI 5304	Teaching Mathematics and Science in the Elementary School	3
CI 5322	Middle School Instructional Strategies and Practices	3
CI 5323	Middle School Philosophy and Learning	3
CI 5328	Elementary Social Studies: Curriculum Problems	3
CI 5336	Methods and Materials for Teaching English as a Second Language	3
RDG 5322	Teaching Reading in the Elementary and Middle Schools	3
RDG 5331	Literacy Methods for Linguistically and Culturally Diverse Students	3
RDG 5340	Connecting Reading and Writing in the Classroom	3
RDG 5345	Assessment-Driven Literacy Instruction <sup>1</sup> RDG 5322 is a prerequisite for RDG 5345	3
SPED 5326	Educating Students with Mild Disabilities	3
Total Hours		30

## Comprehensive Examination Requirement

Due to the comprehensive nature of the exam, students are to take the exam during the last semester of their coursework. Written comprehensive examinations will be administered twice a year: spring

and fall. The date and time for the exam's completion will be posted on the C&I website [generally, mid-semester].

The comp exam is a take-at-home examination. Those taking the exam will be granted access to materials on a website on the opening day of the exam [indicated on the C&I website] and will be expected to upload their carefully edited responses in an anonymous document to a designated website which includes an upload to an internet-based plagiarism-detection service provided by the university and utilizable through the website.

Students will respond in essay form to several exam item choices. The exam items will be listed in an exam study guide. A grading committee comprised of faculty members in elementary education will assess the responses. Committee members will use assessment rubrics [which will be given to examinees with their study guides] to determine whether or not an exam item passes. Students will receive information about whether or not they passed the exam by e-mail as soon as the chair of the exam committee receives all of the input from the exam committee members. If the committee surmises that an essay does not pass, they will provide written feedback designed to facilitate improvement of the essay, and the student may re-submit the essay. Students who do not pass their re-submission will be able to re-take the assessment the following semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1581), DE (p. 1587), ECE (p. 1588), EDTC (p. 1589), RDG (p. 1589), SPED (p. 1592)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

#### CI 5307. Probability and Statistics Methods for Elementary Math Teachers.

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Early Childhood Education (ECE)****ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### EDTC 5310. Introduction to Educational Technology.

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5315. Advanced Educational Technology.

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5320. Models of Integration of Educational Technology.

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5325. Managing Educational Technology.

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5330. Implementing Technology in Education.

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5334. Online Learning and Course Design.

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5335. Instructional Design for Educational Technology.

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5340. Issues in Educational Technology.

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### EDTC 5341. Digital Fabrication and Simple Electronics.

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5345. Educational Technology Internship.

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Reading (RDG)

### RDG 5310. Teaching Literacy with Children's and Young Adult Literature.

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### RDG 5320. Foundations of Literacy Instruction.

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation.(MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite:

SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

Texas State has been a top school for educators for over 100 years. Texas State is the ideal choice for teachers seeking to improve their performance and for career changers looking for certification with a master's degree. The community of students enrolled in the master's degree programs in elementary education at Texas State are passionate about teaching, learning and making a difference.

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0)).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$35 nonrefundable Texas Education Agency technology fee (if offered admission)



and either

- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- one-page statement of purpose on why the student wishes to teach grades 4-8
- three letters of recommendation, preferably from current/former professors, teachers, supervisors, or employers

### Approved English Proficiency Exam Scores

Applicants are required to submit TOEFL scores that meet the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution.

- official TOEFL iBT scores with minimum individual scores of
  - 19 listening
  - 19 reading
  - 26 speaking
  - 19 writing

This program does **not** offer admission if the scores above are not met.

### Eligibility Requirements for Teacher Certification

According to the Texas Education Agency, there are specific requirements for becoming a classroom teacher. In addition to the application requirements for the master's degree, the student must also meet the eligibility requirements posted by the Educator Preparation Program (<https://www.education.txstate.edu/oep/>). If admitted to the master's + certification program, the student must request a certification plan ([https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322\\_ustores%2Fweb%2Fstore\\_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420704c8b0b%7C0%7C0%7C637224731551251609&sdata=GIvD3SdTSYOPw6m1vI36o%2FvntSWrFROMjcDF96%2FDk%2F4%3D&reserved=0](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322_ustores%2Fweb%2Fstore_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420704c8b0b%7C0%7C0%7C637224731551251609&sdata=GIvD3SdTSYOPw6m1vI36o%2FvntSWrFROMjcDF96%2FDk%2F4%3D&reserved=0)) from the Educator Preparation Program.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Elementary Education teacher certification in English Language Arts and Reading, Grades Four through Eight, requires 30 semester credit hours. Additional credit hours in student teaching/internship will be required, and additional hours may be required to be eligible for teacher certification examinations.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5322	Middle School Instructional Strategies and Practices	3
CI 5323	Middle School Philosophy and Learning	3
CI 5336	Methods and Materials for Teaching English as a Second Language	3
RDG 5310	Teaching Literacy with Children's and Young Adult Literature	3
RDG 5322	Teaching Reading in the Elementary and Middle Schools	3
RDG 5326	Developmental Literacy in the Middle and Secondary Schools	3
RDG 5331	Literacy Methods for Linguistically and Culturally Diverse Students	3
RDG 5340	Connecting Reading and Writing in the Classroom	3
RDG 5345	Assessment-Driven Literacy Instruction	3
SPED 5326	Educating Students with Mild Disabilities	3
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

Due to the comprehensive nature of the exam, students are to take the exam during the last semester of their coursework. Written comprehensive examinations will be administered twice a year: spring and fall. The date and time for the exam's completion will be posted on the C&I website [generally, mid-semester].

The comp exam is a take-at-home examination. Those taking the exam will be granted access to materials on a website on the opening day of the exam [indicated on the C&I website] and will be expected to upload their carefully edited responses in an anonymous document to a designated website which includes an upload to an internet-based plagiarism-detection service provided by the university and utilizable through the website.

Students will respond in essay form to several exam item choices. The exam items will be listed in an exam study guide. A grading committee comprised of faculty members in elementary education will assess the responses. Committee members will use assessment rubrics [which will be given to examinees with their study guides] to determine whether or not an exam item passes. Students will receive information about whether or not they passed the exam by e-mail as soon as the chair of the exam committee receives all of the input from the exam committee members. If the committee surmises that an essay does not pass, they will provide written feedback designed to facilitate improvement of the essay, and the student may re-submit the essay. Students who do not pass their re-submission will be able to re-take the assessment the following semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1598), DE (p. 1604), ECE (p. 1605), EDTC (p. 1605), RDG (p. 1606), SPED (p. 1609)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

#### CI 5307. Probability and Statistics Methods for Elementary Math Teachers.

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5308. Emerging Frameworks for Gifted and Talented Education.

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5309. Rethinking Talent and Transformation.

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### CI 5310. Creativity: Theories, Research, Practices, and Issues.

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### CI 5311. Practicum in Talent Development.

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## **Development Education (DE)**

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Early Childhood Education (ECE)****ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Educational Technology (EDTC)****EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## **Reading (RDG)**

**RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State has been a top school for educators for over 100 years. Texas State is the ideal choice for teachers seeking to improve their performance and for career changers looking for certification with a master's degree. The community of students enrolled in the master's degree programs in elementary education at Texas State are passionate about teaching, learning and making a difference.

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0)).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$35 nonrefundable Texas Education Agency technology fee (if offered admission)
  - and either
- \$55 nonrefundable application fee
  - or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted.
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- one-page statement of purpose on why the student wishes to teach grades 4-8
- three letters of recommendation, preferably from current/former professors, teachers, supervisors, or employers

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores with minimum individual scores of
  - 19 listening
  - 19 reading
  - 26 speaking
  - 19 writing

This program does **not** offer admission if the scores above are not met.

Eligibility Requirements for Teacher Certification

According to the Texas Education Agency, there are specific requirements for becoming a classroom teacher. In addition to the application requirements for the master’s degree, the student must also meet the eligibility requirements posted by the Educator Preparation Program (<https://www.education.txstate.edu/oep/>). If admitted to the master’s + certification program, the student must request a certification plan ([https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322\\_ustores%2Fweb%2Fstore\\_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c42b094c8cb%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vI36o%2FvntSWrFROMjcdF96%2FDk%2F4%3D&reserved=0](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322_ustores%2Fweb%2Fstore_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c42b094c8cb%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vI36o%2FvntSWrFROMjcdF96%2FDk%2F4%3D&reserved=0)) from the Educator Preparation Program.

Degree Requirements

The Master of Education (M.Ed.) degree with a major in Elementary Education teacher certification in English Language Arts and Reading/ Social Studies, Grades Four through Eight, requires 30 semester credit hours. Additional credit hours in student teaching/internship will be required, and additional hours may be required to be eligible for teacher certification examinations.

Course Requirements

Code	Title	Hours
Required Courses		
CI 5322	Middle School Instructional Strategies and Practices	3
CI 5323	Middle School Philosophy and Learning	3
CI 5328	Elementary Social Studies: Curriculum Problems	3
CI 5336	Methods and Materials for Teaching English as a Second Language	3
RDG 5322	Teaching Reading in the Elementary and Middle Schools	3
RDG 5331	Literacy Methods for Linguistically and Culturally Diverse Students	3
RDG 5340	Connecting Reading and Writing in the Classroom	3
RDG 5345	Assessment-Driven Literacy Instruction <sup>1</sup> RDG 5322 is a prerequisite for RDG 5345	3
SPED 5326	Educating Students with Mild Disabilities	3
Choose 3 hours from the following:		3
CI 5340A	Teaching History for Young Learners: Issues, Purposes, and Possibilities	
GEO 5340	Active Learning in Geography	
HIST 5313	Early American History	
HIST 5347	Texas History	
Total Hours		30

Comprehensive Examination Requirement

Due to the comprehensive nature of the exam, students are to take the exam during the last semester of their coursework. Written comprehensive examinations will be administered twice a year: spring and fall. The date and time for the exam’s completion will be posted on the C&I website [generally, mid-semester].

The comp exam is a take-at-home examination. Those taking the exam will be granted access to materials on a website on the opening day of the exam [indicated on the C&I website] and will be expected to upload their carefully edited responses in an anonymous document to a designated website which includes an upload to an internet-based plagiarism-detection service provided by the university and utilizable through the website.

Students will respond in essay form to several exam item choices. The exam items will be listed in an exam study guide. A grading committee comprised of faculty members in elementary education will assess the responses. Committee members will use assessment rubrics [which will be given to examinees with their study guides] to determine whether or not an exam item passes. Students will receive information about whether or not they passed the exam by e-mail as soon as the chair of the exam committee receives all of the input from the exam committee members. If the committee surmises that an essay does not pass, they will provide written feedback designed to facilitate improvement of the essay, and the student may re-submit the essay. Students who do not pass their re-submission will be able to re-take the assessment the following semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master’s level courses in Curriculum and Instruction: CI (p. 1614), DE (p. 1621), ECE (p. 1622), EDTC (p. 1622), RDG (p. 1623), SPED (p. 1626)

Courses Offered

Curriculum and Instruction (CI)

**CI 5199B. Thesis.**  
This course represents a student’s continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.  
**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**CI 5299B. Thesis.**  
This course represents a student’s continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.  
**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**CI 5301. Methods for Teaching Middle School Mathematics.**

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5302. Practical Statistics for Educators.**

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5303. Teaching Math in the Elementary School.**

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.**

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom.

Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development of skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

### DE 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### DE 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### DE 5305. Diversity and Education in a P-16 Context.

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5321. The Community College.

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5324. Teaching Learning Strategies and Critical Thinking.

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5326. Curriculum Design in Postsecondary Developmental Education.

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5327. Student Motivation and Self-Regulation.

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5339. Assessment and Evaluation in Developmental Education.

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5365. Administration of Developmental Education.

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5373. Grant Development and Management.

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5375. Learners in Developmental Education Contexts.

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### DE 5378. Problems in Developmental Education.

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## **Early Childhood Education (ECE)**

**ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## **Educational Technology (EDTC)**

**EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

## **Special Education (SPED)**

**SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State has been a top school for educators for over 100 years. Texas State is the ideal choice for teachers seeking to improve their performance and for career changers looking for certification with a master's degree. The community of students enrolled in the master's degree programs in elementary education at Texas State are passionate about teaching, learning and making a difference.

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0)).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$35 nonrefundable Texas Education Agency technology fee (if offered admission)
  - and either
- \$55 nonrefundable application fee
  - or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted.
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- one-page statement of purpose on why the student wishes to teach grades 4-8
- three letters of recommendation, preferably from current/former professors, teachers, supervisors, or employers

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores with minimum individual scores of
  - 19 listening
  - 19 reading
  - 26 speaking
  - 19 writing

This program does **not** offer admission if the scores above are not met.

### Eligibility Requirements for Teacher Certification

According to the Texas Education Agency, there are specific requirements for becoming a classroom teacher. In addition to the application requirements for the master's degree, the student must also meet the eligibility requirements posted by the Educator Preparation Program (<https://www.education.txstate.edu/oep/>). If admitted to the master's + certification program, the student must request a certification plan ([https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322\\_ustores%2Fweb%2Fstore\\_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420154e8c0%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1v136o%2FvntSWrfROMjcDF96%2FDk%2F4%3D&reserved=0](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322_ustores%2Fweb%2Fstore_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420154e8c0%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1v136o%2FvntSWrfROMjcDF96%2FDk%2F4%3D&reserved=0)) from the Educator Preparation Program.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Elementary Education teacher certification in Mathematics, Grades Four through Eight, requires 30 semester credit hours. Additional credit hours in student teaching/internship will be required, and additional hours may be required to be eligible for teacher certification examinations.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5303	Teaching Math in the Elementary School	3
CI 5304	Teaching Mathematics and Science in the Elementary School	3
CI 5307	Probability and Statistics Methods for Elementary Math Teachers	3
CI 5322	Middle School Instructional Strategies and Practices	3
CI 5323	Middle School Philosophy and Learning	3
CI 5330	Multicultural Teaching and Learning	3
CI 5336	Methods and Materials for Teaching English as a Second Language	3
RDG 5324	Developing Content Area Literacy in Middle and Secondary Schools	3
SPED 5326	Educating Students with Mild Disabilities	3
EDTC 5310	Introduction to Educational Technology	3
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

Due to the comprehensive nature of the exam, students are to take the exam during the last semester of their coursework. Written comprehensive examinations will be administered twice a year: spring

and fall. The date and time for the exam's completion will be posted on the C&I website [generally, mid-semester].

The comp exam is a take-at-home examination. Those taking the exam will be granted access to materials on a website at 12 noon on the opening day of the exam [indicated on the C&I website] and will be expected to upload their carefully edited responses in an anonymous document to a designated website which includes an upload to an internet-based plagiarism-detection service provided by the university and utilizable through the website.

Students will respond in essay form to several exam item choices. The exam items will be listed in an exam study guide. A grading committee comprised of faculty members in elementary education will assess the responses. Committee members will use assessment rubrics [which will be given to examinees with their study guides] to determine whether or not an exam item passes. Students will receive information about whether or not they passed the exam by e-mail as soon as the chair of the exam committee receives all of the input from the exam committee members. If the committee surmises that an essay does not pass, they will provide written feedback designed to facilitate improvement of the essay, and the student may re-submit the essay. Students who do not pass their re-submission will be able to re-take the assessment the following semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1631), DE (p. 1637), ECE (p. 1639), EDTC (p. 1639), RDG (p. 1640), SPED (p. 1642)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5302. Practical Statistics for Educators.**

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5303. Teaching Math in the Elementary School.**

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.**

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development of skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Development Education (DE)****DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Early Childhood Education (ECE)

**ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

**EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels.

Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State has been a top school for educators for over 100 years. Texas State is the ideal choice for teachers seeking to improve their performance and for career changers looking for certification with a master's degree. The community of students enrolled in the master's degree programs in elementary education at Texas State are passionate about teaching, learning and making a difference.

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8bb%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcd1jec7m9A22Vds%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8bb%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcd1jec7m9A22Vds%3D&reserved=0)). This program does **not** offer admission if the scores above are not met.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$35 nonrefundable Texas Education Agency technology fee (if offered admission)
  - and either
- \$55 nonrefundable application fee
  - or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- one-page statement of purpose on why the student wishes to teach grades 4-8
- three letters of recommendation, preferably from current/former professors, teachers, supervisors, or employers

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores with minimum individual scores of
  - 19 listening
  - 19 reading
  - 26 speaking
  - 19 writing

### Eligibility Requirements for Teacher Certification

According to the Texas Education Agency, there are specific requirements for becoming a classroom teacher. In addition to the application requirements for the master's degree, the student must also meet the eligibility requirements posted by the Educator Preparation Program (<https://www.education.txstate.edu/oep/>). If admitted to the master's + certification program, the student must request a certification plan ([https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322\\_ustores%2Fweb%2Fstore\\_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c8bb%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vl36o](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322_ustores%2Fweb%2Fstore_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c8bb%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vl36o)).

%2FvntSWrFROMjcdF96%2FDk%2F4%3D&reserved=0) from the Educator Preparation Program.

## Degree Requirements

The Master of Education (M.Ed.) degree with a Major in Elementary Education teacher certification in Science, Grades Four through Eight, requires 30 semester credit hours. Additional credit hours in student teaching/internship will be required, and additional hours may be required to be eligible for teacher certification examinations.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5304	Teaching Mathematics and Science in the Elementary School	3
CI 5307	Probability and Statistics Methods for Elementary Math Teachers	3
CI 5322	Middle School Instructional Strategies and Practices	3
CI 5323	Middle School Philosophy and Learning	3
CI 5329	The Elementary School Science Curriculum	3
CI 5330	Multicultural Teaching and Learning	3
CI 5336	Methods and Materials for Teaching English as a Second Language	3
CI 5339	Project-Based Instruction	3
RDG 5324	Developing Content Area Literacy in Middle and Secondary Schools	3
SPED 5326	Educating Students with Mild Disabilities	3
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

Due to the comprehensive nature of the exam, students are to take the exam during the last semester of their coursework. Written comprehensive examinations will be administered twice a year: spring and fall. The date and time for the exam's completion will be posted on the C&I website [generally, mid-semester].

The comp exam is a take-at-home examination. Those taking the exam will be granted access to materials on a website at 12 noon on the opening day of the exam [indicated on the C&I website] and will be expected to upload their carefully edited responses in an anonymous document to a designated website which includes an upload to an internet-based plagiarism-detection service provided by the university and utilizable through the website.

Students will respond in essay form to several exam item choices. The exam items will be listed in an exam study guide. A grading committee comprised of faculty members in elementary education will assess the responses. Committee members will use assessment rubrics [which will be given to examinees with their study guides] to determine whether or not an exam item passes. Students will receive information about whether or not they passed the exam by e-mail as soon as the chair of the exam committee receives all of the input from the exam committee members. If the committee surmises that an essay does not pass, they will provide written feedback designed to facilitate improvement of the essay, and the student may re-submit the essay. Students who do not pass their re-submission will be able to re-take the assessment the following semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1648), DE (p. 1654), ECE (p. 1656), EDTC (p. 1656), RDG (p. 1657), SPED (p. 1659)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.**

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting.

Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Development Education (DE)****DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Early Childhood Education (ECE)

### **ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### **EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an in-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

Texas State has been a top school for educators for over 100 years. Texas State is the ideal choice for teachers seeking to improve their performance and for career changers looking for certification with a master's degree. The community of students enrolled in the master's degree programs in elementary education at Texas State are passionate about teaching, learning and making a difference.

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be

ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0)).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$35 nonrefundable Texas Education Agency technology fee (if offered admission)  
  
and either
- \$55 nonrefundable application fee  
  
or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted.
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- one-page statement of purpose on why the student wishes to teach grades 4-8
- three letters of recommendation, preferably from current/former professors, teachers, supervisors, or employers

### Approved English Proficiency Exam Scores

Applicants are required to submit TOEFL scores that meet the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution.

- official TOEFL iBT scores with minimum individual scores of
  - 19 listening
  - 19 reading
  - 26 speaking
  - 19 writing

This program does **not** offer admission if the scores above are not met.

### Eligibility Requirements for Teacher Certification

According to the Texas Education Agency, there are specific requirements for becoming a classroom teacher. In addition to the application requirements for the master's degree, the student must also meet the eligibility requirements posted by the Educator Preparation Program (<https://www.education.txstate.edu/oep/>). If admitted to the master's + certification program, the student must request a certification plan ([https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322\\_ustores%2Fweb%2Fstore\\_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vI36o%2FvntSWrfROMjcDF96%2FDk%2F4%3D&reserved=0](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322_ustores%2Fweb%2Fstore_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vI36o%2FvntSWrfROMjcDF96%2FDk%2F4%3D&reserved=0)) from the Educator Preparation Program.

## Degree Requirements

The Master of Education (M.Ed.) degree in Elementary Education with Teacher Certification in Social Studies, Grades Four through Eight, requires 30 semester credit hours. Additional credit hours in student teaching/internship will be required, and additional hours may be required to be eligible for teacher certification examinations.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5322	Middle School Instructional Strategies and Practices	3
CI 5323	Middle School Philosophy and Learning	3
CI 5328	Elementary Social Studies: Curriculum Problems	3
CI 5330	Multicultural Teaching and Learning	3
CI 5336	Methods and Materials for Teaching English as a Second Language	3
GEO 5340	Active Learning in Geography	3
RDG 5324	Developing Content Area Literacy in Middle and Secondary Schools	3
SPED 5326	Educating Students with Mild Disabilities	3
<b>Prescribed Electives</b>		
Choose six hours from the following:		6
CI 5340A	Teaching History for Young Learners: Issues, Purposes, and Possibilities	
HIST 5313	Early American History	
HIST 5347	Texas History	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

Due to the comprehensive nature of the exam, students are to take the exam during the last semester of their coursework. Written comprehensive examinations will be administered twice a year: spring and fall. The date and time for the exam's completion will be posted on the C&I website [generally, mid-semester].

The comp exam is a take-at-home examination. Those taking the exam will be granted access to materials on a website at 12 noon on the opening day of the exam [indicated on the C&I website] and will be

expected to upload their carefully edited responses in an anonymous document to a designated website which includes an upload to an internet-based plagiarism-detection service provided by the university and utilizable through the website.

Students will respond in essay form to several exam item choices. The exam items will be listed in an exam study guide. A grading committee comprised of faculty members in elementary education will assess the responses. Committee members will use assessment rubrics [which will be given to examinees with their study guides] to determine whether or not an exam item passes. Students will receive information about whether or not they passed the exam by e-mail as soon as the chair of the exam committee receives all of the input from the exam committee members. If the committee surmises that an essay does not pass, they will provide written feedback designed to facilitate improvement of the essay, and the student may re-submit the essay. Students who do not pass their re-submission will be able to re-take the assessment the following semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1665), DE (p. 1671), ECE (p. 1672), EDTC (p. 1673), RDG (p. 1673), SPED (p. 1676)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

#### CI 5307. Probability and Statistics Methods for Elementary Math Teachers.

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content  
**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Perspective|Multicultural Content  
**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Early Childhood Education (ECE)****ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### **EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### **EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Reading (RDG)

### **RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels.

Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation.(MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite:

SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The program provides a supportive professional community for beginning teachers, or fellows, using integrated curriculum focused on principles of constructivist learning, teacher research, project-based learning and performance assessment while immersing fellows in a central Texas school district teaching position. Experienced teachers serve as on-site mentors and provide a variety of support.

## Fitness Statement

Using their professional judgement, members of the faculty associated with the Teacher Fellows Program evaluate students' professional behaviors on an ongoing basis. Students receive information and mentoring related to their professional behaviors from faculty, advisors, campus administrators, and their exchange teachers. The criteria used to evaluate professional behavior include instructors' observations of performance in the courses, a dispositions of teaching rubric, classroom teaching observations using the Danielson Framework for Teaching, administrator feedback, and adherence to the Code of Ethics. Relevant expectations are stated in each course syllabus. Students who are not making satisfactory progress or who are not meeting program standards will be encouraged to withdraw from the program. In this context, the term "unsatisfactory progress in the program" refers to a judgment made regarding the student's professional behavior both in their courses and in their classroom teaching position. It is a judgment that the student has failed to meet academic and professional standards rather than a judgment made on the basis of the student's violation of valid rules of conduct. Disciplinary matters are referred to the Assistant Dean of Students.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://>

www.gradcollege.txstate.edu). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in elementary education from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- background inquiry release
- resume/CV
- statement of purpose (2-3 pages, double-spaced, computer-generated) addressing the following:
  - prior teaching experiences
  - rationale for pursuing graduate study in the teacher fellows program
  - strengths and weaknesses with respect to being admitted into this program
- three forms of recommendation
- valid Texas teaching license/certificate prior to beginning course work (if admitted)

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and
  - minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with a 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Elementary Education (Teacher Fellows) requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5313	Research Seminar in Human Growth and Development	3
CI 5317	Teaching Strategies for Elementary Teachers: Alternative Models	3
CI 5326	Curriculum & Management in the Elementary & Middle School	3
CI 5327	Principles and Practices in the Elementary School	3
CI 5370	Classroom Management, Discipline, and Legal Issues	3
CI 5389	Action Research for Practitioners	3
CI 5390	Research Seminar in Education	3
<b>Minor in Methods and Materials-Teacher Fellows</b>		<b>15</b>
CI 5375	Problems in Elementary Education	
Electives: Choose 12 hours from the following:		
CI 5303	Teaching Math in the Elementary School	
CI 5310	Creativity: Theories, Research, Practices, and Issues	
CI 5312	Elementary Language Arts: Current Trends	
CI 5328	Elementary Social Studies: Curriculum Problems	
CI 5329	The Elementary School Science Curriculum	
CI 5330	Multicultural Teaching and Learning	
CI 5336	Methods and Materials for Teaching English as a Second Language	
ECE 5319	Curriculum and the Young Child: Early Care and Education	
ECE 5330	Curriculum and the Young Child, II (Kindergarten)	
EDCL 5339	Understanding Self: Developing a Personal Vision of Leadership	
EDCL 5340	Shaping Organizations and Using Inquiry: Management and Leadership	
EDTC 5310	Introduction to Educational Technology	
EDTC 5315	Advanced Educational Technology	
ENG 5388	Studies in Literature for Children or Adolescents	
GEO 5340	Active Learning in Geography	
RDG 5322	Teaching Reading in the Elementary and Middle Schools	
RDG 5324	Developing Content Area Literacy in Middle and Secondary Schools	
RDG 5331	Literacy Methods for Linguistically and Culturally Diverse Students	
RDG 5340	Connecting Reading and Writing in the Classroom	
RDG 5380	Independent Study in Reading Research	
SOCI 5370	Seminar in Sociology of Racial and Ethnic Relations	
SPED 5334	Assessment and Evaluation of Students with Disabilities	
SPED 5360	Survey of Exceptionality	
<b>Total Hours</b>		<b>36</b>



## Comprehensive Examination Requirement

The comprehensive examination is the culmination of a year-long action research project with an oral presentation and a portfolio presentation. Students who do not pass the comprehensive examination may retake it one time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1682), DE (p. 1688), ECE (p. 1689), EDTC (p. 1690), RDG (p. 1690), SPED (p. 1693)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

#### CI 5307. Probability and Statistics Methods for Elementary Math Teachers.

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5308. Emerging Frameworks for Gifted and Talented Education.

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5309. Rethinking Talent and Transformation.

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Early Childhood Education (ECE)****ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### EDTC 5310. Introduction to Educational Technology.

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5315. Advanced Educational Technology.

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5320. Models of Integration of Educational Technology.

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5325. Managing Educational Technology.

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5330. Implementing Technology in Education.

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5334. Online Learning and Course Design.

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5335. Instructional Design for Educational Technology.

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5340. Issues in Educational Technology.

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### EDTC 5341. Digital Fabrication and Simple Electronics.

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5345. Educational Technology Internship.

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Reading (RDG)

### RDG 5310. Teaching Literacy with Children's and Young Adult Literature.

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### RDG 5320. Foundations of Literacy Instruction.

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels.

Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation.(MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite:

SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The degree program in Elementary Education Bilingual Bicultural is designed for bilingual and bi-literate (Spanish and English) individuals interested in teaching in bilingual education programs in grades pre-kindergarten through grade six, including two-way dual language immersion programs. Graduate students in the field of bilingual education help meet an area of critical shortage as cited by the Texas Education Agency, and are prepared to teach students from culturally and linguistically diverse backgrounds applying appropriate and sustaining pedagogical approaches that offer students access to excellence and equity in schooling.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted.

- a 2.75 overall GPA 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- interview with the bilingual coordinator to ensure the student's proficiency in written and spoken Spanish
- statement of purpose (one page) describing why the student wishes to teach
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Elementary Education Bilingual/Bicultural requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5327	Principles and Practices in the Elementary School	3
CI 5330	Multicultural Teaching and Learning	3
CI 5336	Methods and Materials for Teaching English as a Second Language	3
CI 5337	Language Acquisition and Development	3
BILG 5367	Policy and Practice in Dual Language Immersion Education	3
BILG 5374	Bilingual/ESL Academic Content Instruction	3
CI 5387	Bilingual Education: Principles and Practices	3
CI 5390	Research Seminar in Education	3
<b>Minor</b>		
Choose a 12-hour advisor-approved minor		12
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

Successful completion of a written comprehensive examination is required for graduation with the Master of Education degree in Bilingual/Bicultural Elementary Education (MA and MEd). Due to the comprehensive nature of the exam, students should take the exam during the last semester of their Master's program coursework. The exam is intended to be a synthesis of pertinent information, concepts, theories and practices from across the content of a range of coursework; therefore, the exam tests one's ability to take information and ideas

from many hours of coursework and synthesize that information and those ideas into cogent, thoughtful reflections, explications, and/or applications. Students who do not pass the exam on the first attempt will be provided written feedback on the first attempt and the opportunity to take the written examination a second time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1698), DE (p. 1704), ECE (p. 1706), EDTC (p. 1706), RDG (p. 1707), SPED (p. 1709)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.**

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting.

Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Development Education (DE)****DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Early Childhood Education (ECE)

### **ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### **EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an in-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Master of Education (M.Ed.) degree with a major in Reading Education consists of course work in language and literacy development, reading and writing theory and research, teaching literacy from PK through grade 16 and in community-based contexts, teaching with children's/young adult/adult literature, teaching reading and writing in a multilingual/multicultural environment, and literacy assessment. Reading Education students are prepared to meet the International Reading

Association professional standards for Reading Specialist/Literacy Coach or the Reading Administrator.

An academic minor in reading education is available for those students majoring in other areas. Neither the major nor the minor leads to initial certification as a teacher.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted.
  - a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - GRE not required
  - statement of purpose (3–5 pages, double-spaced) describing current teaching of literacy, objectives in enrolling in the program, and goals for improving literacy instruction

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

The program does not offer admission if the scores above are not met.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Reading Education requires 30 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
RDG 5310	Teaching Literacy with Children's and Young Adult Literature	3
RDG 5320	Foundations of Literacy Instruction	3
RDG 5322	Teaching Reading in the Elementary and Middle Schools	3
RDG 5326	Developmental Literacy in the Middle and Secondary Schools	3
RDG 5331	Literacy Methods for Linguistically and Culturally Diverse Students	3
RDG 5340	Connecting Reading and Writing in the Classroom	3
RDG 5345	Assessment-Driven Literacy Instruction	3
RDG 6330	Language Acquisition and Development for Literacy Instruction	3
<b>Prescribed Electives</b>		
Choose 6 hours from the following:		6
BILG 5365	Biliteracy Development in the Bilingual Education Classroom	
BILG 5367	Policy and Practice in Dual Language Immersion Education	
BILG 5374	Bilingual/ESL Academic Content Instruction	
BILG 5388	The Politics of Language	
CI 5310	Creativity: Theories, Research, Practices, and Issues	
CI 5312	Elementary Language Arts: Current Trends	
CI 5313	Research Seminar in Human Growth and Development	
CI 5314	Human Growth and Development II	
CI 5317	Teaching Strategies for Elementary Teachers: Alternative Models	
CI 5319	Social, Emotional, and Cultural Contexts of Gifted and Advanced Development	
CI 5322	Middle School Instructional Strategies and Practices	
CI 5323	Middle School Philosophy and Learning	
CI 5325	Comparative Education Systems	
CI 5327	Principles and Practices in the Elementary School	
CI 5328	Elementary Social Studies: Curriculum Problems	
CI 5330	Multicultural Teaching and Learning	
CI 5333	The Secondary Curriculum	
CI 5336	Methods and Materials for Teaching English as a Second Language	
CI 5337	Language Acquisition and Development	
CI 5339	Project-Based Instruction	
CI 5340A	Teaching History for Young Learners: Issues, Purposes, and Possibilities	
CI 5363	Strategies for Improving Secondary Teaching	
CI 5368	The Politics and Creativity of Being and Becoming	
CI 5375	Problems in Elementary Education	
CI 5376	Problems in Secondary Education	
CI 5383	Mentoring Across the Life Span	
CI 5387	Bilingual Education: Principles and Practices	

ECE 5318	Advanced Early Child Development: Readiness for Learning and Language Abilities
ECE 5319	Curriculum and the Young Child: Early Care and Education
ECE 5330	Curriculum and the Young Child, II (Kindergarten)
EDTC 5310	Introduction to Educational Technology
EDTC 5315	Advanced Educational Technology
EDTC 5335	Instructional Design for Educational Technology
EDTC 5340	Issues in Educational Technology
RDG 5324	Developing Content Area Literacy in Middle and Secondary Schools
RDG 5321	Literacy Teaching and Learning in the Early Years: EC-Grade 3
RDG 5334	Family Literacy
RDG 5335	Basic Academic Literacy
RDG 5341	Writing Pedagogy in the P-12 Classroom
RDG 5350	Literacy as Sociocultural Practice
RDG 5370A	New Literacies
RDG 5370B	Social, Cultural, and Political Contexts of Literacy Instruction
RDG 5370C	Foundations of Integrated Reading & Writing Pedagogy
RDG 5370D	Community Literacy
RDG 5380	Independent Study in Reading Research
RDG 6333	Reading Specialist Capstone: Professionalism and Professional Development
SPED 5311	Teaching Language Arts to Students with Disabilities
SPED 5329	Language Development and Intervention for Special Populations
SPED 5360	Survey of Exceptionality

**Total Hours****30**

### Prior Learning Assessment Course Credit

Students in the M.Ed. in Reading Education program are able to complete a maximum of 6 hours of coursework through a prior learning assessment (PLA) evaluation process when they demonstrate mastery of applicable skills and learning outcomes. Students who have recent professional experience or state-required professional development may be able to substitute this experience for course work. Note that the total number of credits earned through PLA and course transfer must not exceed 6 semester credit hours (for criteria and processes for earning transfer credit, see the relevant section in the catalog). Students who apply for PLA credit must meet the following conditions:

- The request for PLA credit must be made in the student's first year in the program.
- The student must have recent (last five years) professional experience or professional development in Reading/Literacy (e.g., HB3 Reading Academies).

A portfolio of written work is used to evaluate a student's work and experience for course credit. The student provides a summary document that includes the course description for each course they are requesting PLA credit for, the course objectives, and a numbered and detailed explanation of how their experience demonstrates expertise in the subject matter. In addition to the summary document, the student should include supporting materials in the form of appendices, which contain

descriptions of professional experience, examples of completed work for professional development, etc. The explanation should include objectives of each course under consideration explicitly mapped to parts of the student's supported materials that demonstrate mastery of the objectives. In addition, if credit for two courses (6 hours) is requested, a single aspect of a student's supporting materials cannot be used for more than course.

The portfolio is evaluated by a PLA evaluation committee, constituted and chaired by the program coordinator and including two additional Reading Education faculty. Approval of the portfolio is required by a majority of the evaluation committee. Once approval is recommended by the committee, the Reading program coordinator submits a written petition to the Dean of The Graduate College to grant course credit for prior learning assessment. The petition must include the courses for which credit is requested. The petition also includes the decision of the evaluating committee and the summary document created by the student. The appendices are made available on request.

### Comprehensive Examination Requirement

Students in the Reading Education Master's Program are required to complete a written portfolio and oral comprehensive exam. The portfolio and comprehensive exam are designed to evaluate students' depth and breadth of literacy learning, instruction and research and are based on the Texas Reading Specialization Standards. Students will take the comprehensive exam in their final long semester of coursework. Students will work with a committee consisting of Reading Program faculty until all areas of the exam are completed successfully.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1715), DE (p. 1722), ECE (p. 1723), EDTC (p. 1723), RDG (p. 1724), SPED (p. 1727)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5301. Methods for Teaching Middle School Mathematics.**

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5302. Practical Statistics for Educators.**

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5303. Teaching Math in the Elementary School.**

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.**

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom.

Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development of skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



## Development Education (DE)

### DE 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### DE 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### DE 5305. Diversity and Education in a P-16 Context.

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5321. The Community College.

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5324. Teaching Learning Strategies and Critical Thinking.

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5326. Curriculum Design in Postsecondary Developmental Education.

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5327. Student Motivation and Self-Regulation.

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5339. Assessment and Evaluation in Developmental Education.

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5365. Administration of Developmental Education.

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5373. Grant Development and Management.

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### DE 5375. Learners in Developmental Education Contexts.

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### DE 5378. Problems in Developmental Education.

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Early Childhood Education (ECE)****ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Educational Technology (EDTC)****EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an in-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing | Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Master of Education (M.Ed.) degree with a major in Reading Education consists of course work in language and literacy development, reading and writing theory and research, teaching literacy from PK through grade 16 and in community-based contexts, teaching with children's/young adult/adult literature, teaching reading and writing in a multilingual/multicultural environment, and literacy assessment. Reading Education students are prepared to meet the International Reading

Association professional standards for Reading Specialist/Literacy Coach or the Reading Administrator.

An academic minor in reading education is available for those students majoring in other areas. Neither the major nor the minor leads to initial certification as a teacher.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$35 nonrefundable Texas Education Agency technology fee (if offered admission)
  - and either
- \$55 nonrefundable application fee
  - or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose (3–5 pages, double-spaced) describing current teaching of literacy, objectives in enrolling in the program, and goals for improving literacy instruction
- copy of official teaching certificate (and preferably at least one year of teaching experience) Note: Texas requires at least two years of teaching experience before teachers are eligible to take the Reading Specialist certification exam.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores with minimum individual scores of
  - 22 listening
  - 22 reading
  - 24 speaking
  - 21 writing



The program does not offer admission if the scores above are not met.

Eligibility Requirements for Teacher Certification

According to the Texas Education Agency, there are specific requirements for becoming a classroom teacher. In addition to the application requirements for the master's degree, the student must also meet the eligibility requirements posted by the Educator Preparation Program (<https://www.education.txstate.edu/oep/>). If admitted to the master's + certification program, the student must request a certification plan ([https://nam04.safelinks.protection.outlook.com?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322\\_ustores%2Fweb%2Fstore\\_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C637224731551251609&sdata=GLVD3dTSYOPw6m1vI36o%2FvntSWrFROMjcDF96%2FDk%2F4%3D&reserved=0](https://nam04.safelinks.protection.outlook.com?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322_ustores%2Fweb%2Fstore_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C637224731551251609&sdata=GLVD3dTSYOPw6m1vI36o%2FvntSWrFROMjcDF96%2FDk%2F4%3D&reserved=0)) from the Educator Preparation Program.

Degree Requirements

The Master of Education (M.Ed.) degree with a major in Reading Education concentration in Reading Specialist, Early Childhood Through Grade Twelve Professional Certification requires 30 semester credit hours, including certification courses. Additional credit hours may be required to be eligible for teacher certification examinations.

For the Reading Specialist certification and the M.Ed. in Reading Education, all students will complete a minimum of 160 clock-hour practicum in a school (according to all appropriate TEA requirements). Students will also be observed in their practicum for 135 minutes, over the course of the practicum semester.

Course Requirements

Code	Title	Hours
Required Courses		
RDG 5310	Teaching Literacy with Children's and Young Adult Literature	3
RDG 5320	Foundations of Literacy Instruction	3
RDG 5321	Literacy Teaching and Learning in the Early Years: EC-Grade 3	3
RDG 5322	Teaching Reading in the Elementary and Middle Schools	3
RDG 5326	Developmental Literacy in the Middle and Secondary Schools	3
RDG 5331	Literacy Methods for Linguistically and Culturally Diverse Students	3
RDG 5340	Connecting Reading and Writing in the Classroom	3
RDG 5345	Assessment-Driven Literacy Instruction	3
RDG 6330	Language Acquisition and Development for Literacy Instruction	3
Internship		
RDG 6333	Reading Specialist Capstone: Professionalism and Professional Development	3
Total Hours		30

Procedures for Prior Learning Assessment Course Credit

Students in the M.Ed. in Reading Education program are able to complete a maximum of 6 hours of coursework through a prior learning assessment (PLA) evaluation process when they demonstrate mastery

of applicable skills and learning outcomes. Students who have recent professional experience or state-required professional development may be able to substitute this experience for course work. Note that the total number of credits earned through PLA and course transfer must not exceed 6 semester credit hours (for criteria and processes for earning transfer credit, see the relevant section in the catalog). Students who apply for PLA credit must meet the following conditions:

- The request for PLA credit must be made in the student's first year in the program.
- The student must have recent (last five years) professional experience or professional development in Reading/Literacy (e.g., HB3 Reading Academies).

A portfolio of written work is used to evaluate a student's work and experience for course credit. The student provides a summary document that includes the course description for each course they are requesting PLA credit for, the course objectives, and a numbered and detailed explanation of how their experience demonstrates expertise in the subject matter. In addition to the summary document, the student should include supporting materials in the form of appendices, which contain descriptions of professional experience, examples of completed work for professional development, etc. The explanation should include objectives of each course under consideration explicitly mapped to parts of the student's supported materials that demonstrate mastery of the objectives. In addition, if credit for two courses (6 hours) is requested, a single aspect of a student's supporting materials cannot be used for more than course.

The portfolio is evaluated by a PLA evaluation committee, constituted and chaired by the program coordinator and including two additional Reading Education faculty. Approval of the portfolio is required by a majority of the evaluation committee. Once approval is recommended by the committee, the Reading program coordinator submits a written petition to the Dean of The Graduate College to grant course credit for prior learning assessment. The petition must include the courses for which credit is requested. The petition also includes the decision of the evaluating committee and the summary document created by the student. The appendices are made available on request.

Comprehensive Examination Requirement

Students in the Reading Education Master's Program are required to complete a written portfolio and oral comprehensive exam. The portfolio and comprehensive exam are designed to evaluate students' depth and breadth of literacy learning, instruction and research and are based on the Texas Reading Specialization Standards. Students take the comprehensive exam in their final semester when enrolled in their second capstone course. Students will work with a committee consisting of Reading Program faculty until all areas of the exam are completed successfully.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1733), DE (p. 1739), ECE (p. 1740), EDTC (p. 1740), RDG (p. 1741), SPED (p. 1744)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

#### CI 5307. Probability and Statistics Methods for Elementary Math Teachers.

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5308. Emerging Frameworks for Gifted and Talented Education.

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5309. Rethinking Talent and Transformation.

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### CI 5310. Creativity: Theories, Research, Practices, and Issues.

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### CI 5311. Practicum in Talent Development.

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## **Early Childhood Education (ECE)**

**ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## **Educational Technology (EDTC)**

**EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

## **Special Education (SPED)**

**SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter



**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The program develops teacher leaders who will make significant contributions in schools and other educational settings. The department offers paid assistantships, which give students opportunities to help professors conduct research or teach classes while earning a salary.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of Purpose: Student should address this question, "What has motivated you to enter the teaching profession, become a dual-credit teacher, and/or want to earn your M.Ed.?"

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with minimum individual scores of
  - 22 listening
  - 22 reading
  - 24 speaking
  - 21 writing

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Secondary Education requires 30 semester credit hours, including a minor. Students who do not have a teaching certificate may be required to complete specific background courses before beginning graduate course work.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5395	Capstone for Education Students	3
CI 5339	Project-Based Instruction	3

CI 5383	Mentoring Across the Life Span	3
CI 5390	Research Seminar in Education	3
CI 5330	Multicultural Teaching and Learning	3
CI 5373	Professional Development for Teachers: Models, Research, and Theory	3
CI 5372 or CI 5325	Philosophical Foundations of Education Comparative Education Systems	3
<b>Electives</b>		
Choose 9 hours of advisor-approved electives:		9
CI 5330	Multicultural Teaching and Learning	
CI 5372	Philosophical Foundations of Education	
CI 5383	Mentoring Across the Life Span	

**Total Hours** 30

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass a capstone course, which serves as the comprehensive exam requirement. Candidates should ask the graduate advisor which capstone course fulfills the requirement for their specific degree.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1749), DE (p. 1755), ECE (p. 1756), EDTC (p. 1757), RDG (p. 1757), SPED (p. 1760)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

#### CI 5307. Probability and Statistics Methods for Elementary Math Teachers.

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Early Childhood Education (ECE)****ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



## Educational Technology (EDTC)

### **EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### **EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Reading (RDG)

### **RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels.

Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation.(MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite:

SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

This degree is designed for students seeking a master's degree, a teaching certificate, and professional development to become a campus-level technology specialist. Graduates of the program are capable of establishing and directing a computer lab, providing in-service training for campus faculty, and developing grant proposals.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txstate.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required

- statement of Purpose: Student should address this question, "What has motivated you to enter the teaching profession, become a dual-credit teacher, and/or want to earn your M.Ed.?"

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Secondary Education concentration in Education Technology requires 30 semester credit hours. Students who do not have a teaching certificate may be required to complete specific background courses before beginning graduate course work.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5339	Project-Based Instruction	3
CI 5373	Professional Development for Teachers: Models, Research, and Theory	3
CI 5390	Research Seminar in Education	3
CI 5395	Capstone for Education Students	3
EDTC 5310	Introduction to Educational Technology	3
EDTC 5320	Models of Integration of Educational Technology	3
or EDTC 5315	Advanced Educational Technology	
or EDTC 5330	Implementing Technology in Education	
EDTC 5325	Managing Educational Technology	3
EDTC 5334	Online Learning and Course Design	3
<b>Composite Electives</b>		<b>6</b>
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass a capstone course, which serves as the comprehensive exam requirement. Candidates should ask the graduate advisor which capstone course fulfills the requirement for their specific degree.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1765), DE (p. 1771), ECE (p. 1773), EDTC (p. 1773), RDG (p. 1774), SPED (p. 1776)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Development Education (DE)****DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Early Childhood Education (ECE)

### **ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### **EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The 30-credit Master of Education (M.Ed.) in Secondary Education with a concentration in Creativity, Talent, and Transformation prepares students for advanced teaching, mentoring, and leadership roles in classrooms, educational systems, and communities, with an emphasis on skills, knowledge, and inquiry related to fostering learning, creativity, talent, and transformation. Graduates of this versatile degree program are well-positioned for job opportunities such as:

- mentoring program leader
- talent development coordinator
- classroom teacher with enhanced creativity and advanced/gifted education skills
- dance, theater, music, or art teacher leader
- teacher of advanced and honors classes
- academic coordinator or instructional coordinator
- extra-curricular coach, creativity coach, or instructional coach
- early college high school teacher leader
- teacher peer mentor
- community-based education specialist
- undergraduate university faculty

This degree program also provides a foundation for doctoral studies in education. The program does not require teacher licensure or prior courses in specific areas for admission.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV, including contact information for two references who are familiar with the student's scholarly work and/or relevant work experience
- statement of purpose (one to two double-spaced pages) that includes the student's rationale for pursuing graduate study in this particular program

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Secondary Education concentration in Creativity, Talent, and Transformation requires 30 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5309	Rethinking Talent and Transformation	3
CI 5383	Mentoring Across the Life Span	3
CI 5310	Creativity: Theories, Research, Practices, and Issues	3
or CI 5351	Creative Teaching, Learning, and Leading in Advanced/Gifted Education	
CI 5352	Research and Current Topics in Talent Development and Creativity	3
CI 5308	Emerging Frameworks for Gifted and Talented Education	3
or CI 5359	Curriculum for Rigor, Depth, and Complexity	
or CI 5368	The Politics and Creativity of Being and Becoming	
CI 5373	Professional Development for Teachers: Models, Research, and Theory	3
or EDCL 5339	Understanding Self: Developing a Personal Vision of Leadership	
CI 5339	Project-Based Instruction	3
or EDTC 5310	Introduction to Educational Technology	
or RDG 5310	Teaching Literacy with Children's and Young Adult Literature	
BILG 5388	The Politics of Language	3
or CI 5330	Multicultural Teaching and Learning	
<b>Cognate Minor</b>		
Advisor-approved hours		6
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

Students are required to pass the program's designated capstone course, which fulfills the program's comprehensive examination requirement. Students should ask the advisor which course serves as the capstone course.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1782), DE (p. 1788), ECE (p. 1789), EDTC (p. 1789), RDG (p. 1790), SPED (p. 1793)



## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

#### CI 5307. Probability and Statistics Methods for Elementary Math Teachers.

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5308. Emerging Frameworks for Gifted and Talented Education.

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5309. Rethinking Talent and Transformation.

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### CI 5310. Creativity: Theories, Research, Practices, and Issues.

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### CI 5311. Practicum in Talent Development.

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter



**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Early Childhood Education (ECE)****ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Educational Technology (EDTC)****EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter



**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

This specialized M.Ed. program in secondary education provides an accelerated pathway for well-qualified post-baccalaureate individuals seeking initial teacher certification. Students on this path may receive their certification after two semesters of field-based and academic course work and complete their master's degree while earning a teacher's salary.

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program.

Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcd1jec7m9A22Vds%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcd1jec7m9A22Vds%3D&reserved=0)).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV
- statement of purpose
- three forms of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores with minimum individual scores of
  - 22 listening
  - 22 reading
  - 24 speaking
  - 21 writing

This program does **not** offer admission if the scores above are not met.

Eligibility Requirements for Teacher Certification

According to the Texas Education Agency, there are specific requirements for becoming a classroom teacher. In addition to the application requirements for the master's degree, the student must also meet the eligibility requirements posted by the Educator Preparation Program (<https://www.education.txstate.edu/oep/>). If admitted to the master's + certification program, the student must request a certification plan ([https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322\\_ustores%2Fweb%2Fstore\\_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C637224731551251609&sdata=GLVD3SdTSYOPw6m1vI36o%2FvntSWrfROMjcDF96%2FDk%2F4%3D&reserved=0](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322_ustores%2Fweb%2Fstore_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C637224731551251609&sdata=GLVD3SdTSYOPw6m1vI36o%2FvntSWrfROMjcDF96%2FDk%2F4%3D&reserved=0)) from the Educator Preparation Program.

Degree Requirements

The Master of Education (M.Ed.) degree with a major in Secondary Education concentration in Teacher Recruitment program requires 30 semester credit hours, including a minor. Students who do not have a teaching certificate may be required to complete specific background courses before beginning graduate course work. Additional credit hours may be required to be eligible for teacher certification examinations.

Course Requirements

Code	Title	Hours
Required Courses		
CI 5390	Research Seminar in Education	3
CI 5314	Human Growth and Development II	3
SPED 5326	Educating Students with Mild Disabilities	3
CI 5395	Capstone for Education Students	3
CI 5333	The Secondary Curriculum	3
CI 5363	Strategies for Improving Secondary Teaching	3
CI 5370	Classroom Management, Discipline, and Legal Issues	3
RDG 5324	Developing Content Area Literacy in Middle and Secondary Schools	3
Composite Electives		6
Total Hours		30

Comprehensive Examination Requirement

All candidates for graduate degrees must pass a capstone course, which serves as the comprehensive exam requirement. Candidates should ask the graduate advisor which capstone course fulfills the requirement for their specific degree.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1798), DE (p. 1804), ECE (p. 1806), EDTC (p. 1806), RDG (p. 1807), SPED (p. 1809)

Courses Offered Curriculum and Instruction (CI)

**CI 5199B. Thesis.**  
This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.  
**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**CI 5299B. Thesis.**  
This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.  
**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**CI 5301. Methods for Teaching Middle School Mathematics.**  
This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5302. Practical Statistics for Educators.**  
This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5303. Teaching Math in the Elementary School.**  
This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.**  
The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Development Education (DE)****DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Early Childhood Education (ECE)

### **ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### **EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an in-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State has been a top school for educators for over 100 years. Texas State is the ideal choice for teachers seeking to improve their performance and for career changers looking for certification with a master's degree. The community of students enrolled in the master's degree programs in education at Texas State are passionate about teaching, learning and making a difference.

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c88b%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c88b%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcD1jec7m9A22Vds%3D&reserved=0)).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - GRE not required
  - statement of Purpose: Student should address this question, "What has motivated you to enter the teaching profession, become a dual-credit teacher, and/or want to earn your M.Ed.?"

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#walver>).

- official TOEFL iBT scores required with minimum individual scores of
  - 22 listening
  - 22 reading
  - 24 speaking
  - 21 writing

- This program does **not** offer admission if the scores above are not met.

This program does **not** offer admission if the scores above are not met.

### Eligibility Requirements for Teacher Certification

According to the Texas Education Agency, there are specific requirements for becoming a classroom teacher. In addition to the application requirements for the master's degree, the student must also meet the eligibility requirements posted by the Educator Preparation Program (<https://www.education.txstate.edu/oep/>). If admitted to the master's + certification program, the student must request a certification plan ([https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322\\_ustores%2Fweb%2Fstore\\_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c88b%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vl36o%2FvntSWrfROMjcdF96%2FDk%2F4%3D&reserved=0](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322_ustores%2Fweb%2Fstore_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c88b%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vl36o%2FvntSWrfROMjcdF96%2FDk%2F4%3D&reserved=0)) from the Educator Preparation Program.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Secondary Education teaching certification requires 30 semester credit hours. Students who do not have a teaching certificate may be required to complete specific background courses before beginning graduate course work. Additional credit hours may be required to be eligible for teacher certification examinations.

## Course Requirements

Code	Title	Hours
Required Courses		
CI 5314	Human Growth and Development II	3
CI 5333	The Secondary Curriculum	3
CI 5363	Strategies for Improving Secondary Teaching	3
CI 5370	Classroom Management, Discipline, and Legal Issues	3
CI 5390	Research Seminar in Education	3
CI 5395	Capstone for Education Students	3
RDG 5324	Developing Content Area Literacy in Middle and Secondary Schools	3
SPED 5326	Educating Students with Mild Disabilities	3
Composite Elective		6
Total Hours		30

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass a capstone course, which serves as the comprehensive exam requirement. Candidates should ask the graduate advisor which capstone course fulfills the requirement for their specific degree.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1815), DE (p. 1821), ECE (p. 1822), EDTC (p. 1822), RDG (p. 1823), SPED (p. 1826)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

#### CI 5307. Probability and Statistics Methods for Elementary Math Teachers.

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5308. Emerging Frameworks for Gifted and Talented Education.

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5309. Rethinking Talent and Transformation.

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### CI 5310. Creativity: Theories, Research, Practices, and Issues.

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### CI 5311. Practicum in Talent Development.

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Early Childhood Education (ECE)

**ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

**EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State has been a top school for educators for over 100 years. Texas State is the ideal choice for teachers seeking to improve their performance and for career changers looking for certification with a master's degree. The community of students enrolled in the master's degree programs in education at Texas State are passionate about teaching, learning and making a difference. This degree is designed for practicing teachers who are seeking an advanced degree and who want

to teach dual-credit courses (e.g., History, Math, English, etc.) at the high school level.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- Statement of Purpose: Student should address this question, "What has motivated you to enter the teaching profession, become a dual-credit teacher, and/or want to earn your M.Ed.?"

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and
  - minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with a 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Secondary Education concentration in teaching advanced academics requires 36 semester credit hours. Students who do not have a teaching certificate may be required to complete specific background courses before beginning graduate course work.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CI 5390	Research Seminar in Education	3
CI 5339	Project-Based Instruction	3
CI 5373	Professional Development for Teachers: Models, Research, and Theory	3
CI 5364	Advanced Instructional Strategies for Secondary Education Teachers	3
DE 5324	Teaching Learning Strategies and Critical Thinking	3
CI 5395	Capstone for Education Students	3
<b>Cognate</b>		
Choose 18 hours of advisor-approved courses		18
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> CI 5390 must be taken in the first 6 hours of enrollment.

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass a capstone course, which serves as the comprehensive exam requirement. Candidates should ask the graduate advisor which capstone course fulfills the requirement for their specific degree.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1831), DE (p. 1837), ECE (p. 1839), EDTC (p. 1839), RDG (p. 1840), SPED (p. 1842)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter



**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom.

Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Development Education (DE)****DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Early Childhood Education (ECE)

### **ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### **EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Master of Education (M.Ed.) with a major in Special Education consists of course work in special education and a cognate or minor, depending upon the program of study. A student may pursue a master's in generic special education, a master's in special education with concentration, or a master's in special education plus teaching certification. Concentration areas include autism/applied behavior analysis, behavioral disorder/positive behavioral supports, and learning disabilities/inclusion. A student pursuing a degree in special education



can seek a Texas State certificate in autism, behavioral disorders/positive behavioral supports, or learning disabilities/inclusion. Certificate programs range from 18-21 semester hours, most of which are included in the master's program.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$20 nonrefundable certificate fee (if applying to one of the certificate programs)\*
  - and either
- \$55 nonrefundable application fee
  - or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- copies of certifications or licensures (if applicable)
- GRE not required
- resume/CV (include licenses or certificates and all previous teaching or other education-related experiences)
- statement of purpose, clear and concise, addressing the following: reasons the applicant chose Texas State University's graduate program in special education and the specific area of special education selected; types of professional and/or personal interactions with people who have learning, behavioral, developmental and/or intellectual disabilities; career goals and professional achievement goals in the next 5 years; attributes the applicant has that will empower the student to excel academically if admitted into the program; and experiences in collaborative professional and/or academic settings and how these experiences have prepared the applicant for the demands of this program.
- two letters of recommendation from persons familiar with the applicant's professional work, including at least one supervisor. The letter should include an assessment of the applicant's potential to meet the academic and professional demands of a rigorous graduate program and ability to manage the social and professional demands of graduate school (e.g., getting along with peers and professors, participating in class discussions and activities, attending class, meeting deadlines, responding to feedback).

## Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## \*Texas State Certificate

The Department of Curriculum and Instruction also offers a Texas State Certificate in autism/applied behavior analysis when applying to this master's program. When choosing this option, the certificate fee is required.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Special Education concentration in Autism/Applied Behavior Analysis requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SPED 5316	Basic Concepts & Principles in Applied Behavior Analysis	3
SPED 5324	Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities	3
SPED 5328	Philosophy of Behaviorism	3
SPED 5333	Measurement and Experimental Design in Applied Behavior Analysis	3
SPED 5336	Behavior Assessment in Applied Behavior Analysis	3
SPED 5378	Personnel & Program Supervision Management for Behavior Analysts	3
SPED 5384	Behavior Change Procedures & Implementing Interventions	3
SPED 5391	Clinical Practicum in Autism Spectrum Disorders	3
<b>Cognate – Special Education Autism</b>		
Choose 12 hours from the following:		12
SPED 5310	Independent Study in Special Education	
SPED 5313	Education Students with Emotional/Behavioral Disorders	
SPED 5314	Advanced Educational Strategies for Students with Autism	
SPED 5317	Introduction to Intervention in Early Childhood	
SPED 5322	Applied Behavior Analysis Professional Seminar	
SPED 5327	Educating Students with Autism and Other Developmental Disabilities	
SPED 5340	Principles and Practices of Effective Instruction	

SPED 5350	Special Education Law
SPED 5355	Characteristics of Students with Learning Disabilities
SPED 5356	Advanced Practices in Learning Disabilities/Inclusion
SPED 5375	Behavior Management: School Application of Applied Behavior Analysis
SPED 5380	Positive Behavior Interventions and Supports in Schools
SPED 5391	Clinical Practicum in Autism Spectrum Disorders
May choose other advisor-approved electives	
<b>Total Hours</b>	<b>36</b>

## Comprehensive Examination Requirement

The comprehensive examination takes the form of modules completed over the course of the student's program. Modules can be repeated as often as necessary to receive a passing score. When all modules are satisfactorily completed, the student will have satisfied the comprehensive examination requirement.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1848), DE (p. 1854), ECE (p. 1855), EDTC (p. 1856), RDG (p. 1856), SPED (p. 1859)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

#### CI 5307. Probability and Statistics Methods for Elementary Math Teachers.

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Early Childhood Education (ECE)****ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### EDTC 5310. Introduction to Educational Technology.

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5315. Advanced Educational Technology.

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5320. Models of Integration of Educational Technology.

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5325. Managing Educational Technology.

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5330. Implementing Technology in Education.

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5334. Online Learning and Course Design.

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5335. Instructional Design for Educational Technology.

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5340. Issues in Educational Technology.

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### EDTC 5341. Digital Fabrication and Simple Electronics.

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5345. Educational Technology Internship.

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Reading (RDG)

### RDG 5310. Teaching Literacy with Children's and Young Adult Literature.

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### RDG 5320. Foundations of Literacy Instruction.

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels.

Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation.(MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite:

SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Master of Education (M.Ed.) with a major in Special Education consists of course work in special education and a cognate or minor, depending upon the program of study. A student may pursue a master's in generic special education, a master's in special education with concentration, or a master's in special education plus teaching certification. Concentration areas include autism/applied behavior analysis, behavioral disorder/positive behavioral supports, and learning disabilities/inclusion. A student pursuing a degree in special education can seek a Texas State certificate in autism, behavioral disorders/positive behavioral supports, or learning disabilities/inclusion. Certificate programs range from 18-21 semester hours, most of which are included in the master's program.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$20 nonrefundable certificate fee (if applying to one of the certificate programs)\*
- and either
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials

- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- copies of certifications or licensures (if applicable)
- resume/CV (include licenses or certificates and all previous teaching or other education-related experiences)
- statement of purpose, clear and concise, addressing the following: reasons the applicant chose Texas State University's graduate program in special education and the specific area of special education selected; types of professional and/or personal interactions with people who have learning, behavioral, developmental and/or intellectual disabilities; career goals and professional achievement goals in the next 5 years; attributes the applicant has that will empower the student to excel academically if admitted into the program; and experiences in collaborative professional and/or academic settings and how these experiences have prepared the applicant for the demands of this program.
- two letters of recommendation from persons familiar with the applicant's professional work, including at least one supervisor. The letter should include an assessment of the applicant's potential to meet the academic and professional demands of a rigorous graduate program and ability to manage the social and professional demands of graduate school (e.g., getting along with peers and professors, participating in class discussions and activities, attending class, meeting deadlines, responding to feedback).

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## \*Texas State Certificate

The Department of Curriculum and Instruction also offers a Texas State Certificate in behavioral disorders/positive behavioral support when applying to this master's program. When choosing this option, an additional certificate fee is required.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Special Education concentration in Behavioral Disorders/Positive Behavior Supports requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SPED 5311	Teaching Language Arts to Students with Disabilities	3
SPED 5313	Education Students with Emotional/Behavioral Disorders	3
SPED 5321	Teaching Mathematics to Students with Disabilities	3
SPED 5327	Educating Students with Autism and Other Developmental Disabilities	3
SPED 5340	Principles and Practices of Effective Instruction	3
SPED 5355	Characteristics of Students with Learning Disabilities	3
SPED 5356	Advanced Practices in Learning Disabilities/Inclusion	3
SPED 5375	Behavior Management: School Application of Applied Behavior Analysis	3
SPED 5380	Positive Behavior Interventions and Supports in Schools	3
SPED 5382	Advanced Practices in Educating Students with Emotional/Behavioral Disorders	3
SPED 5392	Field Based Practicum in Behavior Disorders/Positive Behavior Supports	3
or SPED 5389	Special Education Practicum	
<b>Prescribed Elective</b>		
Choose 3 hours from the following:		3
CDIS 5333	Language Disorders in School-Age and Adolescence	
HDFS 5344	Infant and Early Childhood Mental Health	
PSY 5324	Biological Bases of Behavior	
PSY 5370	Learning, Cognition, and Motivation	
SPSY 5396	Biological Bases of Behavior	
SOWK 5310	Social Welfare Policy and Services	
SOWK 5312	Social Work Intervention in Drug Addiction & Abuse	
SOWK 5315	Social Work Intervention in Child Abuse & Neglect	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

Students will have two opportunities to pass an online comprehensive examination that includes questions from across the curriculum. If the student does not pass the comprehensive examination after two attempts, the student will be given an oral examination.

Students are required to take the written comprehensive examination in their last semester of the program.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1865), DE (p. 1871), ECE (p. 1872), EDTC (p. 1872), RDG (p. 1873), SPED (p. 1876)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

#### CI 5307. Probability and Statistics Methods for Elementary Math Teachers.

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5308. Emerging Frameworks for Gifted and Talented Education.

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5309. Rethinking Talent and Transformation.

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### CI 5310. Creativity: Theories, Research, Practices, and Issues.

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Early Childhood Education (ECE)

**ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

**EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

can seek a Texas State certificate in autism, behavioral disorders/positive behavioral supports, or learning disabilities/inclusion. Certificate programs range from 18-21 semester hours, most of which are included in the master's program.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$20 nonrefundable certificate fee (if applying to one of the certificate programs)\*
  - and either
- \$55 nonrefundable application fee
  - or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- copies of certifications or licensures (if applicable)
- resume/CV (include licenses or certificates and all previous teaching or other education-related experiences)
- statement of purpose, clear and concise, addressing the following: reasons the applicant chose Texas State University's graduate program in special education and the specific area of special education selected; types of professional and/or personal interactions with people who have learning, behavioral, developmental and/or intellectual disabilities; career goals and professional achievement goals in the next 5 years; attributes the applicant has that will empower the student to excel academically if admitted into the program; and experiences in collaborative professional and/or academic settings and how these experiences have prepared the applicant for the demands of this program.
- two letters of recommendation from persons familiar with the applicant's professional work, including at least one supervisor. The letter should include an assessment of the applicant's potential to meet the academic and professional demands of a rigorous graduate program and ability to manage the social and professional demands of graduate school (e.g., getting along with peers and professors, participating in class discussions and activities, attending class, meeting deadlines, responding to feedback).

## Program Overview

The Master of Education (M.Ed.) with a major in Special Education consists of course work in special education and a cognate or minor, depending upon the program of study. A student may pursue a master's in generic special education, a master's in special education with concentration, or a master's in special education plus teaching certification. Concentration areas include autism/applied behavior analysis, behavioral disorder/positive behavioral supports, and learning disabilities/inclusion. A student pursuing a degree in special education

## Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## \*Texas State Certificate

The Department of Curriculum and Instruction also offers a Texas State Certificate in learning disabilities/inclusion when applying to this master's program. When choosing this option, an additional certificate fee is required.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Special Education concentration in Learning Disabilities/Inclusion requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SPED 5311	Teaching Language Arts to Students with Disabilities	3
SPED 5313	Education Students with Emotional/Behavioral Disorders	3
or CI 5340C	Introduction to Specially Designed Instruction for Students with Disabilities	
SPED 5327	Educating Students with Autism and Other Developmental Disabilities	3
or SPED 5321	Teaching Mathematics to Students with Disabilities	
SPED 5334	Assessment and Evaluation of Students with Disabilities	3
SPED 5340	Principles and Practices of Effective Instruction	3
SPED 5355	Characteristics of Students with Learning Disabilities	3
or SPED 5350	Special Education Law	
SPED 5356	Advanced Practices in Learning Disabilities/Inclusion	3
SPED 5375	Behavior Management: School Application of Applied Behavior Analysis	3
SPED 5380	Positive Behavior Interventions and Supports in Schools	3
<b>Prescribed Electives</b>		
Choose 3 courses from the following:		9
SPED 5319	Advanced Specially Designed Instruction for Students with Disabilities	

SPED 5321	Teaching Mathematics to Students with Disabilities
SPED 5327	Educating Students with Autism and Other Developmental Disabilities
SPED 5350	Special Education Law
SPED 5394	Field Based Practicum in Learning Disabilities
SPED 5389	Special Education Practicum
May choose other advisor-approved course	
<b>Total Hours</b>	<b>36</b>

## Comprehensive Examination Requirement

Students will have two opportunities to pass an online comprehensive examination that includes questions from across the curriculum. If the student does not pass the comprehensive examination after two attempts, the student will be given an oral examination. Students are required to take the written comprehensive examination in their last semester of the program.

Students who do not successfully complete the requirements for the degree within the timelines specified by the program will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1881), DE (p. 1887), ECE (p. 1889), EDTC (p. 1889), RDG (p. 1890), SPED (p. 1892)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5302. Practical Statistics for Educators.**

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5303. Teaching Math in the Elementary School.**

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.**

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting.

Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development of skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Development Education (DE)****DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Early Childhood Education (ECE)

**ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

**EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Reading (RDG)****RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels.

Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Master of Education (M.Ed.) with a major in Special Education consists of course work in special education and a cognate or minor, depending upon the program of study. A student may pursue a master's in generic special education, a master's in special education with concentration, or a master's in special education plus teaching certification. Concentration areas include autism/applied behavior analysis, behavioral disorder/positive behavioral supports, and learning disabilities/inclusion. A student pursuing a degree in special education can seek a Texas State certificate in autism, behavioral disorders/positive behavioral supports, or learning disabilities/inclusion. Certificate programs range from 18-21 semester hours, most of which are included in the master's program.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- copies of certifications or licensures (if applicable)
- resume/CV (include licenses or certificates and all previous teaching or other education-related experiences)

- statement of purpose, clear and concise, addressing the following: reasons the applicant chose Texas State University's graduate program in special education and the specific area of special education selected; types of professional and/or personal interactions with people who have learning, behavioral, developmental and/or intellectual disabilities; career goals and professional achievement goals in the next 5 years; attributes the applicant has that will empower the student to excel academically if admitted into the program; and experiences in collaborative professional and/or academic settings and how these experiences have prepared the applicant for the demands of this program.
- two letters of recommendation from persons familiar with the applicant's professional work, including at least one supervisor. The letter should include an assessment of the applicant's potential to meet the academic and professional demands of a rigorous graduate program and ability to manage the social and professional demands of graduate school (e.g., getting along with peers and professors, participating in class discussions and activities, attending class, meeting deadlines, responding to feedback).

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Special Education concentration in Learning and Behavioral Disabilities requires 30 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SPED 5311	Teaching Language Arts to Students with Disabilities	3
SPED 5313	Education Students with Emotional/Behavioral Disorders	3
SPED 5321	Teaching Mathematics to Students with Disabilities	3
SPED 5340	Principles and Practices of Effective Instruction	3
SPED 5355	Characteristics of Students with Learning Disabilities	3
SPED 5356	Advanced Practices in Learning Disabilities/Inclusion	3

SPED 5375	Behavior Management: School Application of Applied Behavior Analysis	3
SPED 5380	Positive Behavior Interventions and Supports in Schools	3
SPED 5382	Advanced Practices in Educating Students with Emotional/Behavioral Disorders	3
<b>Prescribed Elective</b>		
SPED 5392	Field Based Practicum in Behavior Disorders/ Positive Behavior Supports	3
or SPED 5394	Field Based Practicum in Learning Disabilities	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

Students will have two opportunities to pass an online comprehensive examination that includes questions from across the curriculum. If the student does not pass the comprehensive examination after two attempts, the student will be given an oral examination.

Students are required to take the written comprehensive examination in their last semester of the program.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1898), DE (p. 1904), ECE (p. 1905), EDTC (p. 1906), RDG (p. 1906), SPED (p. 1909)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

#### CI 5307. Probability and Statistics Methods for Elementary Math Teachers.

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Early Childhood Education (ECE)****ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### EDTC 5310. Introduction to Educational Technology.

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5315. Advanced Educational Technology.

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5320. Models of Integration of Educational Technology.

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5325. Managing Educational Technology.

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5330. Implementing Technology in Education.

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5334. Online Learning and Course Design.

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5335. Instructional Design for Educational Technology.

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5340. Issues in Educational Technology.

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### EDTC 5341. Digital Fabrication and Simple Electronics.

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5345. Educational Technology Internship.

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Reading (RDG)

### RDG 5310. Teaching Literacy with Children's and Young Adult Literature.

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### RDG 5320. Foundations of Literacy Instruction.

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation.(MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite:

SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Master of Education (M.Ed.) with a major in Special Education consists of course work in special education and a cognate or minor, depending upon the program of study. A student may pursue a master's in generic special education, a master's in special education with concentration, or a master's in special education plus teaching certification. Concentration areas include autism/applied behavior analysis, behavioral disorder/positive behavioral supports, and learning disabilities/inclusion. A student pursuing a degree in special education can seek a Texas State certificate in autism, behavioral disorders/positive behavioral supports, or learning disabilities/inclusion. Certificate programs range from 18-21 semester hours, most of which are included in the master's program.

The Texas Education Agency (TEA) requires multiple background checks for progression through the Educator Preparation Program. Based on information recorded in your criminal history, you may be ineligible for issuance of a teaching certificate upon completion of the Educator Preparation Program. If you have a criminal history, you may obtain a Preliminary Criminal History Evaluation from TEA. For more information, go to: [https://tea.texas.gov/Texas\\_Educators/Investigations/Preliminary\\_Criminal\\_History\\_Evaluation-FAQs/](https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/) ([https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas\\_Educators%2FInvestigations%2FPreliminary\\_Criminal\\_History\\_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcd1jec7m9A22Vds%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftea.texas.gov%2FTexas_Educators%2FInvestigations%2FPreliminary_Criminal_History_Evaluation-FAQs%2F&data=02%7C01%7Cmicky%40txstate.edu%7C2637f9be946a4916ab8c08d65eea2873%7Cb19c134a14c94d4caf65c420f94c8c%7C0%7C0%7C636800758117325714&sdata=R30FcP8kHs%2B1i6U105G70%2B88P%2FWXcd1jec7m9A22Vds%3D&reserved=0)).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://>

www.gradcollege.txstate.edu). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (https://www.gradcollege.txst.edu/international/faqs.html) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - GRE not required
  - copies of certifications or licensures (if applicable)
  - resume/CV (include licenses or certificates and all previous teaching or other education-related experiences)
  - statement of purpose, clear and concise, addressing the following: reasons the applicant chose Texas State University's graduate program in special education and the specific area of special education selected; types of professional and/or personal interactions with people who have learning, behavioral, developmental and/or intellectual disabilities; career goals and professional achievement goals in the next 5 years; attributes the applicant has that will empower the student to excel academically if admitted into the program; and experiences in collaborative professional and/or academic settings and how these experiences have prepared the applicant for the demands of this program.
  - two letters of recommendation from persons familiar with the applicant's professional work, including at least one supervisor. The letter should include an assessment of the applicant's potential to meet the academic and professional demands of a rigorous graduate program and ability to manage the social and professional demands of graduate school (e.g., getting along with peers and professors, participating in class discussions and activities, attending class, meeting deadlines, responding to feedback).

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (http://www.gradcollege.txstate.edu/international/language.html#waveir).

- official TOEFL iBT scores with minimum individual scores of
  - 22 listening
  - 22 reading
  - 24 speaking
  - 21 writing

This program does **not** offer admission if the scores above are not met.

Eligibility Requirements for Teacher Certification

According to the Texas Education Agency, there are specific requirements for becoming a classroom teacher. In addition to the application requirements for the master's degree, the student must also meet the eligibility requirements posted by the Educator Preparation Program (https://www.education.txstate.edu/oep/). If admitted to the master's + certification program, the student must request a certification plan (https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsecure.touchnet.com%2FC24322\_ustores%2Fweb%2Fstore\_main.jsp%3FSTOREID%3D234%26SINGLESTORE%3Dtrue&data=02%7C01%7Cjm36%40txstate.edu%7Cedbe076cd623493c096c08d7e08464b3%7Cb19c134a14c94d4caf65c420f94c8%7C0%7C0%7C637224731551251609&sdata=GIVD3SdTSYOPw6m1vI36o%2FvntSWrfrOMjcDF96%2FDk%2F4%3D&reserved=0) from the Educator Preparation Program.

Degree Requirements

The Master of Education (M.Ed.) degree with a major in Special Education with CASE teacher certification requires 36 semester credit hours. Additional credit hours may be required to be eligible for teacher certification examinations.

Course Requirements

Code	Title	Hours
Required Courses		
SPED 5311	Teaching Language Arts to Students with Disabilities	3
SPED 5313	Education Students with Emotional/Behavioral Disorders	3
or SPED 5355	Characteristics of Students with Learning Disabilities	
SPED 5327	Educating Students with Autism and Other Developmental Disabilities	3
or SPED 5321	Teaching Mathematics to Students with Disabilities	
or SPED 5356	Advanced Practices in Learning Disabilities/Inclusion	
or SPED 5380	Positive Behavior Interventions and Supports in Schools	
SPED 5340	Principles and Practices of Effective Instruction	3
SPED 5360	Survey of Exceptionality	3
SPED 5375	Behavior Management: School Application of Applied Behavior Analysis	3
SPED 5389	Special Education Practicum	3
Cognate Minor		
Choose 9 hours from the following:		9
CI 5303	Teaching Math in the Elementary School	
or CI 5329	The Elementary School Science Curriculum	
CI 5333	The Secondary Curriculum	
CI 5336	Methods and Materials for Teaching English as a Second Language	
CI 5337	Language Acquisition and Development	
SPED 5314	Advanced Educational Strategies for Students with Autism	
SPED 5329	Language Development and Intervention for Special Populations	
SPED 5354	Advanced Studies in School Discipline, Order, and Safety	

SPED 5356	Advanced Practices in Learning Disabilities/Inclusion	
SPED 5376	Advanced Intervention Practices for Challenging Behavior	
SPED 5382	Advanced Practices in Educating Students with Emotional/Behavioral Disorders	
<b>Internship</b>		
EDST 4380	Clinical Teaching All-Level I	3
EDST 4381	Clinical Teaching All-Level II	3
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The comprehensive examination takes the form of modules completed over the course of the student's program. Modules can be repeated as often as necessary to receive a passing score. When all modules are satisfactorily completed, the student will have satisfied the comprehensive examination requirement.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Curriculum and Instruction: CI (p. 1915), DE (p. 1921), ECE (p. 1922), EDTC (p. 1923), RDG (p. 1923), SPED (p. 1926)

## Courses Offered

### Curriculum and Instruction (CI)

#### CI 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CI 5301. Methods for Teaching Middle School Mathematics.

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5302. Practical Statistics for Educators.

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5303. Teaching Math in the Elementary School.

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CI 5305. Methods in Geometry for Elementary Math Teachers.

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

#### CI 5307. Probability and Statistics Methods for Elementary Math Teachers.

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Development Education (DE)

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Early Childhood Education (ECE)****ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Educational Technology (EDTC)

### EDTC 5310. Introduction to Educational Technology.

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5315. Advanced Educational Technology.

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5320. Models of Integration of Educational Technology.

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5325. Managing Educational Technology.

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5330. Implementing Technology in Education.

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5334. Online Learning and Course Design.

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5335. Instructional Design for Educational Technology.

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5340. Issues in Educational Technology.

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### EDTC 5341. Digital Fabrication and Simple Electronics.

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EDTC 5345. Educational Technology Internship.

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Reading (RDG)

### RDG 5310. Teaching Literacy with Children's and Young Adult Literature.

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### RDG 5320. Foundations of Literacy Instruction.

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**Special Education (SPED)****SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment.

Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels.

Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite:

SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

The graduate minor in Creativity Studies in Education requires 6-12 semester credit hours.

Code	Title	Hours
<b>Choose 6 to 12 hours from the following:</b>		
CI 5310	Creativity: Theories, Research, Practices, and Issues	3
CI 5368	The Politics and Creativity of Being and Becoming	3
CI 5381	Curiosity, Reimagination, and the Radical Imagination	3
EDTC 5341	Digital Fabrication and Simple Electronics	3

The graduate minor in Developmental Education requires 9 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
<b>Choose 9 hours from the following:</b>		<b>9</b>
DE 5321	The Community College	
DE 5324	Teaching Learning Strategies and Critical Thinking	
DE 5365	Administration of Developmental Education	
DE 5375	Learners in Developmental Education Contexts	
<b>Total Hours</b>		<b>9</b>

The graduate minor in Elementary Education requires 12 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
CI 5313	Research Seminar in Human Growth and Development	3
CI 5326	Curriculum & Management in the Elementary & Middle School	3

CI 5327	Principles and Practices in the Elementary School	3
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**Prescribed Electives**

Choose 3 hours from the following:	3
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CI 5303	Teaching Math in the Elementary School	
CI 5312	Elementary Language Arts: Current Trends	
CI 5328	Elementary Social Studies: Curriculum Problems	
CI 5329	The Elementary School Science Curriculum	

<b>Total Hours</b>	<b>12</b>
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The graduate minor in Elementary Education Bilingual/Bicultural requires 9 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
BILG 5374	Bilingual/ESL Academic Content Instruction	3
CI 5312	Elementary Language Arts: Current Trends	3
CI 5387	Bilingual Education: Principles and Practices	3
<b>Total Hours</b>	<b>9</b>	

The graduate minor in Gifted and Talented Education requires 6 semester credit hours.

Code	Title	Hours
6 hours of advisor-approved courses		6
<b>Total Hours</b>	<b>6</b>	

The graduate minor in Methods and Materials requires 6-15 semester credit hours of courses depending on the major that should be chosen in consultation with the graduate advisor. This minor is only available for graduate students who are also seeking a major in Elementary Education, Elementary Education Bilingual/Bicultural, Secondary Education, or Special Education.

**Elementary Education majors**

Code	Title	Hours
<b>Required Courses</b>		
Choose 6-12 hours of advisor-approved courses		6-12

**Elementary Education Bilingual/Bicultural majors**

Code	Title	Hours
<b>Required Courses</b>		
ENG 5300	Language Problems in a Multicultural Environment	3
or ENG 5310	Studies in English Language and Linguistics	
SOCI 5370	Seminar in Sociology of Racial and Ethnic Relations	3
SPAN 5318	Advanced Composition and Research Methods	3
<b>Total Hours</b>	<b>9</b>	

**Elementary Education Teacher Fellows majors**

Code	Title	Hours
<b>Required Course</b>		
CI 5375	Problems in Elementary Education	3
<b>Prescribed Electives</b>		
Choose 12 hours from the following:		12
CI 5303	Teaching Math in the Elementary School	

CI 5310	Creativity: Theories, Research, Practices, and Issues	
CI 5312	Elementary Language Arts: Current Trends	
CI 5328	Elementary Social Studies: Curriculum Problems	
CI 5329	The Elementary School Science Curriculum	
CI 5330	Multicultural Teaching and Learning	
CI 5336	Methods and Materials for Teaching English as a Second Language	
ECE 5319	Curriculum and the Young Child: Early Care and Education	
ECE 5330	Curriculum and the Young Child, II (Kindergarten)	
EDCL 5339	Understanding Self: Developing a Personal Vision of Leadership	
EDCL 5340	Shaping Organizations and Using Inquiry: Management and Leadership	
EDTC 5310	Introduction to Educational Technology	
EDTC 5315	Advanced Educational Technology	
ENG 5388	Studies in Literature for Children or Adolescents	
GEO 5340	Active Learning in Geography	
RDG 5322	Teaching Reading in the Elementary and Middle Schools	
RDG 5324	Developing Content Area Literacy in Middle and Secondary Schools	
RDG 5331	Literacy Methods for Linguistically and Culturally Diverse Students	
RDG 5340	Connecting Reading and Writing in the Classroom	
RDG 5380	Independent Study in Reading Research	
SOCI 5370	Seminar in Sociology of Racial and Ethnic Relations	
SPED 5334	Assessment and Evaluation of Students with Disabilities	
<b>Total Hours</b>	<b>15</b>	

**Secondary Education majors**

Code	Title	Hours
<b>Required Courses</b>		
SPED 5313	Education Students with Emotional/Behavioral Disorders	3
SPED 5334	Assessment and Evaluation of Students with Disabilities	3
SPED 5375	Behavior Management: School Application of Applied Behavior Analysis	3
SPED 5380	Positive Behavior Interventions and Supports in Schools	3
<b>Total Hours</b>	<b>12</b>	

**Special Education majors**

Code	Title	Hours
<b>Required Courses</b>		
CI 5303	Teaching Math in the Elementary School	3
or CI 5329	The Elementary School Science Curriculum	
CI 5333	The Secondary Curriculum	3
CI 5336	Methods and Materials for Teaching English as a Second Language	3



CI 5337	Language Acquisition and Development	3
<b>Total Hours</b>		<b>12</b>

The graduate minor in Reading Education requires 12 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
RDG 5322	Teaching Reading in the Elementary and Middle Schools	3
RDG 5326	Developmental Literacy in the Middle and Secondary Schools	3
RDG 5345	Assessment-Driven Literacy Instruction	3
<b>Prescribed Electives</b>		
Choose 1 course from the following:		3
RDG 5310	Teaching Literacy with Children's and Young Adult Literature	
RDG 5320	Foundations of Literacy Instruction	
RDG 5324	Developing Content Area Literacy in Middle and Secondary Schools	
RDG 5331	Literacy Methods for Linguistically and Culturally Diverse Students	
RDG 5340	Connecting Reading and Writing in the Classroom	
RDG 5370A	New Literacies	
RDG 5370B	Social, Cultural, and Political Contexts of Literacy Instruction	
RDG 5370C	Foundations of Integrated Reading & Writing Pedagogy	
RDG 5370D	Community Literacy	
RDG 5395	Teaching Academic Literacy to Adults	
<b>Total Hours</b>		<b>12</b>

The graduate minor in Secondary Education requires 15 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
CI 5333	The Secondary Curriculum	3
CI 5363	Strategies for Improving Secondary Teaching	3
CI 5314	Human Growth and Development II	3
CI 5370	Classroom Management, Discipline, and Legal Issues	3
RDG 5324	Developing Content Area Literacy in Middle and Secondary Schools	3
<b>Total Hours</b>		<b>15</b>

The graduate minor in Special Education requires 15 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
SPED 5313	Education Students with Emotional/Behavioral Disorders	3
or SPED 5355	Characteristics of Students with Learning Disabilities	
SPED 5326	Educating Students with Mild Disabilities	3

or SPED 5327 Educating Students with Autism and Other Developmental Disabilities

SPED 5360	Survey of Exceptionality	3
SPED 5375	Behavior Management: School Application of Applied Behavior Analysis	3
SPED 5380	Positive Behavior Interventions and Supports in Schools	3
or SPED 5354	Advanced Studies in School Discipline, Order, and Safety	
<b>Total Hours</b>		<b>15</b>

## Program Overview

The Special Education Program offers a Certificate in Autism. This certificate is only available for graduate students who are also seeking a Master of Education (M.Ed.) Major in Special Education (Autism/Applied Behavior Analysis Concentration) (p. 1846).

This certificate program requires concurrent enrollment in the Master of Education major in Special Education (Autism/Applied Behavior Analysis Concentration) (p. 1846) at Texas State University.

The post-baccalaureate certificate in Autism requires 24 semester credit hours. This certificate is only available for graduate students who are also seeking a Master of Education (M.Ed.) Major in Special Education (Autism/Applied Behavior Analysis Concentration) (p. 1846).

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SPED 5316	Basic Concepts & Principles in Applied Behavior Analysis	3
SPED 5324	Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities	3
SPED 5328	Philosophy of Behaviorism	3
SPED 5333	Measurement and Experimental Design in Applied Behavior Analysis	3
SPED 5336	Behavior Assessment in Applied Behavior Analysis	3
SPED 5378	Personnel & Program Supervision Management for Behavior Analysts	3
SPED 5384	Behavior Change Procedures & Implementing Interventions	3
<b>Total Hours</b>		<b>21</b>

### Program Overview

The Special Education Program offers a Certificate in Behavioral Disorders/Positive Behavioral Support. This certificate is only available for graduate students who are also seeking a Master of Education (M.Ed.) Major in Special Education (Behavioral Disorders/Positive Behavior Concentration) (p. 1863).

This certificate program requires concurrent enrollment in the Master of Education major in Special Education (Behavioral Disorders/Positive Behavior Supports Concentration) (p. 1863) at Texas State University.

The post-baccalaureate certificate in Behavioral Disorders/Positive Behavioral Supports requires 21 semester credit hours. This certificate is only available for graduate students who are also seeking a Master

of Education (M.Ed.) Major in Special Education (Behavioral Disorders/Positive Behavior Concentration) (p. 1863).

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SPED 5311	Teaching Language Arts to Students with Disabilities	3
SPED 5313	Education Students with Emotional/Behavioral Disorders	3
SPED 5340	Principles and Practices of Effective Instruction	3
SPED 5355	Characteristics of Students with Learning Disabilities	3
or SPED 5356	Advanced Practices in Learning Disabilities/Inclusion	
SPED 5375	Behavior Management: School Application of Applied Behavior Analysis	3
SPED 5380	Positive Behavior Interventions and Supports in Schools	3
SPED 5382	Advanced Practices in Educating Students with Emotional/Behavioral Disorders	3
<b>Total Hours</b>		<b>21</b>

## Program Overview

The Special Education Program offers a Certificate in Learning Disabilities/Inclusion. This certificate is only available for graduate students who are also seeking a Master of Education (M.Ed.) Major in Special Education (Learning Disabilities/Inclusion Concentration) (p. 1880).

This certificate program requires concurrent enrollment in the Master of Education major in Special Education (Learning Disabilities/Inclusion Concentration) (p. 1880) at Texas State University.

The post-baccalaureate certificate in Learning Disabilities/Inclusion requires 18 semester credit hours. This certificate is only available for graduate students who are also seeking a Master of Education (M.Ed.) Major in Special Education (Learning Disabilities/Inclusion Concentration) (p. 1880).

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SPED 5311	Teaching Language Arts to Students with Disabilities	3
SPED 5313	Education Students with Emotional/Behavioral Disorders	3
SPED 5334	Assessment and Evaluation of Students with Disabilities	3
SPED 5340	Principles and Practices of Effective Instruction	3
SPED 5355	Characteristics of Students with Learning Disabilities	3
SPED 5356	Advanced Practices in Learning Disabilities/Inclusion	3
SPED 5375	Behavior Management: School Application of Applied Behavior Analysis	3
<b>Total Hours</b>		<b>21</b>

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<http://www.hhp.txst.edu> (<http://www.hhp.txst.edu/>)

The Department of Health and Human Performance at Texas State offers several master's programs to prepare students for careers and doctoral study in many areas including athletic training, exercise science, public health, health education and promotion, kinesiology, recreation and sport management, recreation therapy, rehabilitation sciences, and strength & conditioning and sport coaching. Our faculty are nationally and internationally known for their research on biomechanics, community health, exercise physiology, fitness, health promotion, heat illness, outdoor recreation, public health programming, motor development, musculoskeletal injury, outdoor recreation, physical education, recreation administration, recreation therapy, rehabilitation sciences, sport and exercise psychology, sexual health, and substance abuse prevention. Recent visiting scholars to the department have come from Brazil, Egypt, England, Korea, Russia, and Spain. The department also offers study abroad opportunities throughout Europe, Australia, and New Zealand, as well as study America opportunities across the United States.

The mission of the Department of Health and Human Performance is to create and disseminate knowledge promoting evidence-based practice in athletic training, exercise science, public health, and recreation professions. We work to directly promote improved health, human performance, and quality of life through creation of knowledge, student-centered instruction in health and performance services, and meaningful community outreach. Our vision is to be a national leader in promoting health, human performance, and quality of life for all.

## Financial Assistance

Because the department offers instructional programming for the general university student, in addition to undergraduate and graduate athletic training, exercise science, public health, and recreation major programs, there are extensive opportunities for graduate assistantships, graduate teaching assistantships, graduate research assistantships, and graduate instructional assistantships. To be considered for positions as graduate assistants, the prospective graduate students must be admitted as a regular, degree-seeking student in graduate studies at Texas State University. Applicants who are interested in these positions should go to <http://www.hhp.txstate.edu> (<http://www.hhp.txstate.edu/>). Additionally, the department offers various program-specific scholarships available through the Bobcat Online Scholarship System.

## Bachelor of Exercise Sports Science (B.E.S.S.) / Master of Science (M.S.)

- Major in Exercise and Sports Science/Major in Athletic Training (p. 241)

## Master of Public Health (M.P.H.)

- Major in Public Health (Community Health & Behavior Concentration) - Accelerated Online Program (p. 1938)
- Major in Public Health (Health Policy & Management Concentration) - Accelerated Online Program (p. 1943)

## Master of Science (M.S.)

- Major in Athletic Training (Professional Master's) (p. 1934)
- Major in Exercise Science (Non-thesis Option) (p. 1958)

- Major in Exercise Science (Health and Rehabilitation Sciences Concentration Non-thesis Option) (p. 1948)
- Major in Exercise Science (Health and Rehabilitation Sciences Concentration Thesis Option) (p. 1952)
- Major in Exercise Science (Sport Coaching Concentration) (<http://mycatalog.txstate.edu/graduate/education/health-human-performance/exercise-science-sport-coaching-ms/>)
- Major in Exercise Science (Strength & Conditioning and Sport Coaching Concentration Non-thesis Option) (p. 1967)
- Major in Exercise Science (Strength & Conditioning and Sport Coaching Concentration Thesis Option) (p. 1972)
- Major in Exercise Science (Thesis Option) (p. 1978)
- Major in Public Health Education and Promotion (Health Equity Non-thesis Concentration) (<http://mycatalog.txstate.edu/graduate/education/health-human-performance/public-health-ed-promo-health-equity-ms/>)
- Major in Public Health Education and Promotion (Non-thesis Option) (p. 1984)
- Major in Public Health Education and Promotion (Thesis Option) (p. 1988)

## Master of Science in Recreation and Leisure Services (M.S.R.L.S.)

- Major in Recreation and Sport Management (Non-thesis Option) (p. 1993)
- Major in Recreation and Sport Management (Thesis Option) (p. 1996)
- Major in Recreational Therapy (Non-thesis Option) (p. 2001)
- Major in Recreational Therapy (Thesis Option) (p. 2005)

## Minors

- Exercise Science (p. 2010)
- Public Health Education and Promotion (p. 2010)
- Recreation and Leisure Services (p. 2010)

## Program Overview

The Master of Science (M.S.) degree with a Major in Athletic Training is designed as an professional master's curriculum for students seeking to become board-certified. To enter the professional master's, students are expected to have completed a bachelor's degree. The program begins in June each year.

Professional athletic training education uses a competency-based approach in both the classroom and clinical settings. Using a medical-based education model, athletic training students are educated to provide comprehensive patient care in five domains of clinical practice: prevention; clinical evaluation and diagnosis; immediate and emergency care; treatment and rehabilitation; and organization and professional health and well-being. The educational requirements for CAATE-accredited athletic training education programs include acquisition of knowledge, skills and clinical abilities along with a broad scope of foundational behaviors of professional practice. Students complete an extensive clinical learning requirement that is embodied in the clinical

integration proficiencies (professional, practice oriented outcomes) as identified in the Athletic Training Education standards.

Athletic trainers treat a range of patients and can work in a variety of settings. Regardless of their practice setting, athletic trainers practice according to their education, scope of practice and state practice act. Athletic Trainers work in:

- Public and private secondary schools, colleges and universities, professional and Olympic sports
- Youth leagues, municipal and independently owned youth sports facilities
- Physician practice, similar to nurses, physician assistants, physical therapists and other professional clinical personnel
- Rural and urban hospitals, hospital emergency rooms, urgent and ambulatory care centers
- Clinics with specialties in sports medicine, cardiac rehab, medical fitness, wellness and physical therapy
- Occupational health departments in commercial settings, which include manufacturing, distribution and offices to assist with ergonomics
- Police and fire departments and academies, municipal departments, branches of the military
- Performing arts including professional and collegiate level dance and music

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from an accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in all background courses. As required background course work, there is a set of 10 pre-requisites that will prepare the student for the rigors of the program. Each of these courses are necessary for a basic understanding of the fundamentals of the various courses that the student will be taking in the professional master's curriculum. The following is the list of pre-requisites that students must have completed in their undergraduate degree or are in progress of completing prior to admission:

Code	Title	Hours
Physics		
Chemistry		
Introduction to Nutrition		
Introduction to Psychology		
Introduction to Statistics		
Exercise Physiology		
Biomechanics		
Medical Terminology		
Anatomy& Physiology w/lab		
Care & Prevention (or equivalent)		

- GRE not required
- Confirmation of 75 observation hours signed by a certified (ATC) and/or licensed (LAT) professional who has guided the observational experiences
- resume
- statement of purpose (maximum two pages) that discusses the student's reasons for pursuing professional master's degree in athletic training at Texas State University
- three forms of recommendation

The program does not offer admission if the above requirements are not met.

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#walver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

The program does not offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Athletic Training (Professional Master's) requires 55 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
AT 5120	Principles in Athletic Training	1
AT 5191	Capstone I	1
AT 5192	Capstone II	1
AT 5230	Clinical Experience I	2
AT 5231	Clinical Experience II	2
AT 5232	Clinical Experience III	2
AT 5320	General Medical Conditions Assessment and Care	3

AT 5333	Internship in Athletic Training	3
AT 5334	Clinical Experience IV	3
AT 5335	Clinical Experience V	3
AT 5340	Research Methods and Evidence Based Practice in Athletic Training	3
AT 5341	Pathopharmacology	3
AT 5342	Administration and Leadership in Athletic Training	3
AT 5343	Interdisciplinary Approach to Athletic Training	3
AT 5344	Advanced Clinical Decision Making	3
AT 5400	Gross Applied Anatomy	4
AT 5300	Musculoskeletal Assessment of the Lower Extremities	3
AT 5301	Musculoskeletal Assessment of the Upper Extremity	3
AT 5305	Musculoskeletal Assessment of Head/Face/Spine and Neurological Systems	3
AT 5313	Therapeutic Interventions I	3
AT 5314	Therapeutic Interventions II	3
<b>Total Hours</b>		<b>55</b>

## Comprehensive Examination Requirement

Students will complete a capstone project (written paper, poster presentation) for this component of the graduate education. They will be able to make any changes needed and re-present to faculty members with changes made based on rubric for the project.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

## Courses Offered

### Athletic Training (AT)

#### AT 5101. Graduate Assistant Development.

This course is required of all graduate assistants and provides regular in-service and planned periodic evaluations of instructional responsibilities. Graduate assistants are required to register for this course in the spring semester of their employment. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### AT 5120. Principles in Athletic Training.

This course builds upon current competence of health and exercise sciences to instill an evidence based, graduate-level proficiency of best practices in athletic training and healthcare.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AT 5191. Capstone I.**

This course is a supervised project to analyze outcomes in a defined area of clinical practice. The course includes patient outcomes data collection in a practice-based research environment. Completion of full research sequence is required for graduation.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5192. Capstone II.**

This course is a continuation of the research sequence that culminates in a supervised project to analyze outcomes in a defined area of clinical practice. The course includes completion of data collection and analysis for an oral presentation and final paper and poster. Completion of this last course is required Prerequisite: AT 5191.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AT 5201. Graduate Assistant Development.**

This course is required of all graduate assistants and provides in-service and planned periodic evaluations of instructional responsibilities. Graduate assistants are required to register for this course in the fall semester of their employment. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**AT 5230. Clinical Experience I.**

This course will integrate topics in athletic injury evaluation, management and intervention into an immersive clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 5320.

**2 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5231. Clinical Experience II.**

This course will integrate topics in athletic injury evaluation, management and intervention into an immersive clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 5230.

**2 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5232. Clinical Experience III.**

This course will integrate topics in athletic injury evaluation, management and intervention into an immersive clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 5230; AT 5231.

**2 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AT 5300. Musculoskeletal Assessment of the Lower Extremities.**

This course will present students with a study and critical analysis of injury and illness signs and symptoms. Specific tests and skills used in the clinical evaluation and assessment involving the lower extremities will be included. Prerequisite: AT 5400 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AT 5301. Musculoskeletal Assessment of the Upper Extremity.**

This course will present students with a study and critical analysis of injury and illness signs and symptoms. Specific tests and skills used in the clinical evaluation and assessment involving the upper extremities will be included. Prerequisite: AT 5400 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AT 5305. Musculoskeletal Assessment of Head/Face/Spine and Neurological Systems.**

This course will enable the student to critically analyze the specific tests and skills used in the clinical evaluation and assessment involving the head, spine and neurological systems. Prerequisite: AT 5300 and AT 5301 and AT 5400 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AT 5313. Therapeutic Interventions I.**

This course is designed to provide both a theoretical and clinical basis for the standardized systems approach to therapeutic modality applications to treat patients with musculoskeletal conditions and injury. Prerequisite: AT 5400 with a grade of "B" or better. Corequisite: AT 5301 and AT 5300 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**AT 5314. Therapeutic Interventions II.**

This course is designed to examine both a theoretical and clinical basis for the standardized systems approach to therapeutic exercise applications to treat patients with musculoskeletal conditions and injury. Prerequisite: AT 5313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AT 5320. General Medical Conditions Assessment and Care.**

This course will enable the student to recognize, evaluate, differentiate and manage common systemic and traumatic conditions and diseases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5333. Internship in Athletic Training.**

This 400-hour internship provides students with professionally related experience. Students may work with diverse clinical populations in varying athletic training settings. Internship is approved and supervised by Program Coordinator or assigned faculty. Prerequisite: Departmental approval.

**3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5334. Clinical Experience IV.**

This course will integrate topics in athletic injury evaluation, management and intervention into an immersive clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 5230; AT 5231; AT 5232; AT 5333.

**3 Credit Hours. 0 Lecture Contact Hours. 30 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5335. Clinical Experience V.**

This course will integrate topics in athletic injury evaluation, management and intervention into an immersive clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 5230; AT 5231; AT 5232; AT 5333; AT 5334.

**3 Credit Hours. 0 Lecture Contact Hours. 30 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5340. Research Methods and Evidence Based Practice in Athletic Training.**

This course is designed to provide the student with an understanding of the statistical terminology when reading and appraising research studies in order to use evidence to inform clinical practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5341. Pathopharmacology.**

This course will examine the physiological responses and progression of injuries, illnesses, and diseases to the physically active individual. Additionally, this course will provide instruction in the principles and issues of the physiological and psychological response to the pharmacological use and/or abuse of substances. Prerequisite: AT 5320.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5342. Administration and Leadership in Athletic Training.**

This course will evaluate administrative aspects of an athletic training program management such as: risk management, medical record keeping, facilities, third-party reimbursement, health informatics and other current professional issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5343. Interdisciplinary Approach to Athletic Training.**

This course will examine the practice and educational implications of effective and efficient interprofessional teamwork and collaboration in patient care.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5344. Advanced Clinical Decision Making.**

This course provides students various settings to explore aspects of patient evaluation, intervention and outcomes in a simulated learning environment. Students will identify issues in patient care including physical and psychosocial characteristics. Students will apply clinical decision-making skills learned in all courses leading up to this final semester class.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5347. Independent Study in Athletic Training.**

This course may be taken by a student who desires to work on a research problem or investigation in Athletic Training. The student gathers and analyzes pertinent data and submits a report of the results of the research. Repeatable once for credit. Prerequisite: ESS 5346 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in AT 5399B. Graded on a credit (CR), progress (PR), no credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AT 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AT 5400. Gross Applied Anatomy.**

This course will examine the structure and function of the human body with emphasis on the skeletal and muscular systems. The course focuses on anatomy and physiology of systems of special interest to students preparing to become athletic trainers. Laboratory study of the human cadaver is included.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Public Health (M.P.H.) degree prepares students for advanced careers in public health. It provides practical training in foundational public health knowledge and core competencies and teaches students how to assess, plan, and deliver public health programs. Graduates can pursue employment in public health departments, state and federal health agencies, nonprofit organizations, and other community health organizations. Students are prepared to sit for the Certified Health Education Specialist exam offered by the National Commission for Health Education Credentialing, Inc. and/or the Certified in Public Health certification offered by the National Board of Public Health Examiners.

## Application Requirements

The items required for admission consideration are:

- Completed online application
- \$55 nonrefundable application fee
- \$90 nonrefundable application fee for applications with international credentials;
- Baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- Official transcript from each institution where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in your last 60 hours of undergraduate course work (plus any completed graduate courses)
- Statement of purpose (500 words, double-spaced, computer-generated) addressing the following:
  - Why public health is an interest area for you
  - How you will use a graduate degree in Public Health to reach your career goals
- Three letters of recommendation from persons best able to assess the student's ability to succeed in graduate school
- Resume

Applicants should refer to the Graduate College website for additional information regarding the admission process.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Public Health (M.H.P.) degree with a major in Public Health (Community Health & Behavior Concentration) requires 42 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
PH 5335	Public Health Leadership	3
PH 5315	Applied Behavioral Statistics in Public Health	3
PH 5320	Foundations of Public Health	3
PH 5303	Social Determinants of Health	3
PH 5350	Advanced Public Health Program Planning and Evaluation	3
PH 5370	Applied Epidemiology	3
HA 5356	Policy Development in Healthcare Arena	3
HA 5640	Administrative Practicum	6
or PH 5660	Internship in Public Health	
PH 5321	Advanced Health Behavior Theory	3
PH 5346	Public Health Research and Population Surveillance	3
PH 5305	Grant Proposal Writing in Public Health	3
PH 5301	Environmental Health Issues	3

PH 5348	Disease Prevention and Health Promotion	3
<b>Total Hours</b>		<b>42</b>

## Courses Offered

Master's level courses in Health and Human Performance: PH (p. 1939) & HA (p. 1941)

### Public Health (PH)

#### PH 1310. Foundations of Personal Health.

This course provides an introduction to personal health and wellness topics including nutrition, mental health, sexual health, and physical fitness with an emphasis on health trends and health behaviors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PHED 1304

#### PH 1320. Introduction to Public Health.

This course provides students a basic understanding of U.S. and global public health systems. Students are also introduced to various public health settings, specific careers in public health, and public health certifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PH 2338. Substance Use and Abuse.

This course explores the impact of substance use and abuse on personal, public, and population health. Course content includes current statistics and information on substance use and abuse issues and substance prevention interventions with a focus on public health prevention strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PHED 1346

#### PH 2340. Community Health.

This course acquaints students with issues, trends, developments, and principles in community health. The course also provides an overview of selected topics, such as epidemiology, community organization, and program planning. Corequisite: PH 1320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PH 3301. Environmental Health.

This course is an examination of the ecological impact resulting from contemporary sociopolitical action and its resulting influence on human health.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PH 3315. Statistics in Public Health.

This course emphasizes analysis and interpretation of health-related data. Descriptive and inferential statistics (including measures of central tendency and variability, estimation, ANOVA, and regression) will be used to understand factors associated with current health-related issues. (WI) Prerequisites: MATH 1312 or MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

#### PH 3321. Health in the School Setting.

This course offers a foundation in health methods and activities to provide resources for the elementary and secondary school teacher. Provides an overview of current school health issues: Whole School, Whole Community, Whole Child model, mental health, personal health, family life, substance abuse, and violence in the school setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PH 3330. Inclusion and Diversity in Women's Health.

This course is designed to explore the health care concerns unique to women and to provide students with opportunities to create strategies to improve women's health. Particular attention will be given to issues that affect women in under-served populations and how to more effectively serve their needs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PH 3348. Prevention of Disease.

This course provides an overview of the etiology of communicable and chronic diseases with special emphasis on health promotion activities to reduce the incidence of disease in communities and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PH 3350. Consumer Health.

This course focuses on consumer health and decision making with regard to the selection of health products and services. Students will learn how to effectively evaluate health information with emphasis on consumer literacy, public policy, and consumer products and services.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PH 3360. Issues in Human Sexuality.

The course provides a study of human sexuality as a lifelong process of acquiring information and forming healthy attitudes, beliefs, and values regarding sexuality. Human sexuality's impact on personal and public health will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3370. Epidemiology.**

This course introduces students to epidemiological concepts including determinants of health and patterns of disease in populations, population health descriptive techniques, use of health indicators and secondary data sources. Students will focus on epidemiology in community health assessment and program evaluation, and development of public health strategies and policy. Prerequisite: MATH 1312 or MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 or HON 2302A or HON 2302B and with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3374. Global Health.**

This course focuses on principles of international health in global populations. Students explore roles of health educators collaborating with providers of health services to diverse populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3376. Worksite Health Promotion.**

The purpose of this course is to introduce students to worksite health promotion. The focus of the course is on planning, implementing, and evaluating worksite health promotion programs. The course addresses other contemporary health issues, policies, and considerations that affect worksite health promotion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 4100. Professional Development in Public Health.**

This course provides the opportunity for students to obtain a community or public health promotion internship and to actively participate in professional development activities including conferences, development of resumes and interaction with health professionals. If a student is planning to complete an internship, this course must be completed during the semester immediately prior.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 4331. Health Disparities.**

This course explores social determinants of health and health disparities in the U.S. and globally. Students explore past and existing public health initiatives to address health disparities in various U.S. and global communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 4335. Public Health Leadership.**

This course allows students to develop discipline-specific leadership skills and a personal leadership philosophy which will help in managing public health and health promotion programs. Topics include leadership philosophy, staffing, programming, budgeting, public relations, facilities, and evaluations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PH 4336. Health Behavior Theory.**

This course introduces students to health behavior theory, including cognitive, operant, and social theories of motivation and behavior, behavior change theory, social marketing, and social ecology. Students will also learn about the role of behavior theory in health promotion practice and public health interventions. (WI) Prerequisites: PH 1320 and PH 2340 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PH 4347. Independent Study in Public Health.**

This course is designed for undergraduate students who display potential for independent research in public health. Students work individually with faculty to develop an independent research study/project in public health. Open on an individual basis by arrangement with the division chair. May be repeated for credit with different emphasis. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PH 4360. Internship in Public Health.**

This part-time internship involves the application of public health concepts to a community or public health setting. Students participate in the work of a health organization/agency and complete a semester-long project. A minimum of 200 contact hours is required. (WI) Prerequisite: PH 4100 with a grade of "C" or better and a minimum 3.0 major GPA and departmental approval. Corequisite: PH 4640 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**PH 4640. Public Health Program Planning and Evaluation.**

Students apply professional knowledge and skills to the development of public health programs. Topics include needs assessment, data gathering techniques, instrument design, data and statistics, and the interpretation, reporting, and application of findings for program development. Cultural competency and communication are covered. (WI) Prerequisite: PH 1320 and PH 2340 both with grades of "C" or better. Corequisite: PH 4336 with a grade of "C" or better.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PH 4660. Internship in Public Health.**

This internship involves the application of public health concepts to a community or public health setting. Students participate in the work of a health organization/agency and complete a semester-long project. A minimum of 400 contact hours is required. (WI) Prerequisites: PH 4100 and PH 4640 both with grades of "C" or better and a minimum 3.0 major GPA and departmental approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

## Health Administration (HA)

**HA 5111. Topics in Health Administration.**

An in-depth study of a singular topic or a related problem being faced by practicing managers in the rapidly changing healthcare industry. Special emphasis will be placed on the topic's current relevance and its utilitarian value to the participant. May be repeated if topic differs.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5191. Field Experience Orientation.**

This course will assist the student to prepare for the field experience and to prepare for the comprehensive exam. An extensive orientation to the field experience will be provided to better enable students to move from the classroom setting to a workplace scenario.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5300. Healthcare Organization and Delivery.**

A survey of the organization and delivery of health services focusing on the history and development of health systems as they relate to the overall health and medical care systems. Major attention is given to governing bodies, patient care organizations, and executive management structures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5301. Healthcare Administration Research Methods.**

A study of research methodology as it pertains to healthcare administration. Included are hypothesis forming, designing research, and the collection, manipulation and analysis of data. Knowledge of numeracy and statistics is essential.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5303. Information Systems Management in Healthcare.**

This course provides a comprehensive introduction to information systems management for healthcare organizations. It covers the determination of information required by whom, design of information flows, procurement of information systems technology resources, assurance of information security, and management of systems integration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5304. Healthcare Economics and Financial Theory.**

A study of economic theories that have an impact on the healthcare industry. Special emphasis will be placed on emerging economic research and its impact on potential policy ramifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5311. Trends in Health Administration.**

An in-depth study of singular trend or a related problem being faced by practicing managers in the rapidly changing healthcare industry. Special emphasis will be placed on the topic's current relevance and its utilitarian value to the participant. Examples of trends, which are typically offered, include trends in rural health, managed care ethical issues, and in total quality management. This course may be repeated for credit with a different subject area.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5316. Healthcare Financial Management.**

An introduction to healthcare financial management including the financial management in healthcare organizations, healthcare payment systems, financing and investment decisions, and financial planning, analysis, and control. Prerequisites: accounting, economics, and statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5321. Healthcare Law.**

An in-depth analysis of healthcare law and its effect on the relationships between the patient, the patient's family, the provider, and other interested third parties. Analysis of cases is the primary method of study.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**HA 5325. Health Care Quality Improvement Concepts and Tools.**

This course teaches the concepts of quality in health care and the use of quality improvement tools. Quality management will be explored using Lean Six Sigma continuous process improvement methodologies. This course is intended to help students learn and translate health care quality management theory, concepts, and knowledge into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5334. Operational Decision Making for Healthcare Managers.**

An introduction to the fundamentals of selected operations research techniques essential to the analysis of healthcare managerial problem situations, the design of new and improved systems, and the implementation of systems to achieve desired systems performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5335. Public Health for Healthcare Administrators.**

This course introduces the healthcare manager to public health and its role in preventing illnesses and improving the health of the community. Students will learn of the role of the manager in disease prevention and how to participate and lead community efforts for the wellness of the community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5346. Healthcare Strategic Management.**

This capstone course examines mission, vision, strategy, and operations from both the formulation and implementation perspectives. Emphasis will be on the role of the manager/leader in strategic management analysis, creativity, and action. This course is available to HA majors only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5355. Human Resource Management in Healthcare Facilities.**

A study of personnel administration in the healthcare facility and the environment in which it functions. Emphasis will be on the role of the Personnel Office in forecasting, developing, and managing human resources, in addition to a review of current legislation affecting the personnel function.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5356. Policy Development in Healthcare Arena.**

Prospective healthcare administrators analyze changing healthcare paradigm to determine decision-points where policies can be affected. Course allows students to apply existing skills to real world policy issues at state and national levels and to analyze policy development from numerous stakeholders' viewpoints.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5362. Healthcare Organizational Behavior/Theory.**

This course is a study of theory and concepts drawn from the behavioral and social sciences. These concepts are applied as a foundation and conceptual framework for the analysis, diagnosis, prediction and guidance of human behavior in healthcare organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5371. Marketing of Health Services.**

A study of marketing functions and principles as they relate to the healthcare delivery system. Analysis of marketing concepts such as market segmentation, marketing planning, marketing audit, marketing positioning, and marketing mix will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5375. Healthcare Accounting.**

An introduction to financial accounting in healthcare with an emphasis on the preparation of non-profit financial statements for healthcare service organizations, control procedures for healthcare entities, and accounting issues unique to the healthcare industry. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**HA 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis, HA 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5450. Administrative Field Placement.**

A one-semester, full-time field experience which allows students to apply their foundational didactic education by means of rotations, experiences, and projects in a healthcare organization. This course is graded on a credit (CR), no-credit (F) basis. Prerequisite: Instructor approval.

**4 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HA 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5640. Administrative Practicum.**

A one-semester, part-time field experience designed for the student already working full-time in healthcare. The practicum provides a broader orientation to the student's organization and exposure to special projects.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5840. Administrative Field Placement.**

A one-semester, full-time field experience which allows students to apply their foundational didactic education by means of rotations, experiences, and projects in a healthcare organization.

**8 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Public Health (M.P.H.) degree prepares students for advanced careers in public health. It provides practical training in foundational public health knowledge and core competencies and teaches students how to assess, plan, and deliver public health programs. Graduates can pursue employment in public health departments, state and federal health agencies, nonprofit organizations, and other community health organizations. Students are prepared to sit for the Certified Health Education Specialist exam offered by the National Commission for Health Education Credentialing, Inc. and/or the Certified in Public Health certification offered by the National Board of Public Health Examiners.

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- Official transcript from each institution where course credit was granted

- a 2.75 overall GPA or a 2.75 GPA in your last 60 hours of undergraduate course work (plus any completed graduate courses)
- Statement of purpose (500 words, double-spaced, computer-generated) addressing the following:
  - Why public health is an interest area for you
  - How you will use a graduate degree in Public Health to reach your career goals
- Three letters of recommendation from persons best able to assess the student's ability to succeed in graduate school
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- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Public Health (M.H.P) degree with a major in Public Health (Health Policy & Management Concentration) requires 42 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Core Courses</b>		
PH 5335	Public Health Leadership	3
PH 5315	Applied Behavioral Statistics in Public Health	3
PH 5320	Foundations of Public Health	3
PH 5303	Social Determinants of Health	3
PH 5350	Advanced Public Health Program Planning and Evaluation	3
PH 5370	Applied Epidemiology	3
HA 5356	Policy Development in Healthcare Arena	3
HA 5640	Administrative Practicum	6
or PH 5660	Internship in Public Health	
HA 5346	Strategic Management and Marketing for Healthcare Organizations	3
HA 5316	Healthcare Financial Management II	3
HA 5321	Healthcare Law and Policy	3
HA 5334	Data-Guided Healthcare Decision-Making	3

HA 5362	Healthcare Organizational Behavior, Theory, and Leadership	3
<b>Total Hours</b>		<b>42</b>

Master's level courses in Health and Human Performance: PH (p. 1944) & HA (p. 1946)

## Courses Offered

### Public Health

#### PH 1310. Foundations of Personal Health.

This course provides an introduction to personal health and wellness topics including nutrition, mental health, sexual health, and physical fitness with an emphasis on health trends and health behaviors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PHED 1304

#### PH 1320. Introduction to Public Health.

This course provides students a basic understanding of U.S. and global public health systems. Students are also introduced to various public health settings, specific careers in public health, and public health certifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PH 2338. Substance Use and Abuse.

This course explores the impact of substance use and abuse on personal, public, and population health. Course content includes current statistics and information on substance use and abuse issues and substance prevention interventions with a focus on public health prevention strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PHED 1346

#### PH 2340. Community Health.

This course acquaints students with issues, trends, developments, and principles in community health. The course also provides an overview of selected topics, such as epidemiology, community organization, and program planning. Corequisite: PH 1320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PH 3301. Environmental Health.

This course is an examination of the ecological impact resulting from contemporary sociopolitical action and its resulting influence on human health.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PH 3315. Statistics in Public Health.

This course emphasizes analysis and interpretation of health-related data. Descriptive and inferential statistics (including measures of central tendency and variability, estimation, ANOVA, and regression) will be used to understand factors associated with current health-related issues. (WI) Prerequisites: MATH 1312 or MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

#### PH 3321. Health in the School Setting.

This course offers a foundation in health methods and activities to provide resources for the elementary and secondary school teacher. Provides an overview of current school health issues: Whole School, Whole Community, Whole Child model, mental health, personal health, family life, substance abuse, and violence in the school setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PH 3330. Inclusion and Diversity in Women's Health.

This course is designed to explore the health care concerns unique to women and to provide students with opportunities to create strategies to improve women's health. Particular attention will be given to issues that affect women in under-served populations and how to more effectively serve their needs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PH 3348. Prevention of Disease.

This course provides an overview of the etiology of communicable and chronic diseases with special emphasis on health promotion activities to reduce the incidence of disease in communities and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PH 3350. Consumer Health.

This course focuses on consumer health and decision making with regard to the selection of health products and services. Students will learn how to effectively evaluate health information with emphasis on consumer literacy, public policy, and consumer products and services.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PH 3360. Issues in Human Sexuality.

The course provides a study of human sexuality as a lifelong process of acquiring information and forming healthy attitudes, beliefs, and values regarding sexuality. Human sexuality's impact on personal and public health will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3370. Epidemiology.**

This course introduces students to epidemiological concepts including determinants of health and patterns of disease in populations, population health descriptive techniques, use of health indicators and secondary data sources. Students will focus on epidemiology in community health assessment and program evaluation, and development of public health strategies and policy. Prerequisite: MATH 1312 or MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 or HON 2302A or HON 2302B and with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3374. Global Health.**

This course focuses on principles of international health in global populations. Students explore roles of health educators collaborating with providers of health services to diverse populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3376. Worksite Health Promotion.**

The purpose of this course is to introduce students to worksite health promotion. The focus of the course is on planning, implementing, and evaluating worksite health promotion programs. The course addresses other contemporary health issues, policies, and considerations that affect worksite health promotion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 4100. Professional Development in Public Health.**

This course provides the opportunity for students to obtain a community or public health promotion internship and to actively participate in professional development activities including conferences, development of resumes and interaction with health professionals. If a student is planning to complete an internship, this course must be completed during the semester immediately prior.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 4331. Health Disparities.**

This course explores social determinants of health and health disparities in the U.S. and globally. Students explore past and existing public health initiatives to address health disparities in various U.S. and global communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 4335. Public Health Leadership.**

This course allows students to develop discipline-specific leadership skills and a personal leadership philosophy which will help in managing public health and health promotion programs. Topics include leadership philosophy, staffing, programming, budgeting, public relations, facilities, and evaluations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PH 4336. Health Behavior Theory.**

This course introduces students to health behavior theory, including cognitive, operant, and social theories of motivation and behavior, behavior change theory, social marketing, and social ecology. Students will also learn about the role of behavior theory in health promotion practice and public health interventions. (WI) Prerequisites: PH 1320 and PH 2340 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PH 4347. Independent Study in Public Health.**

This course is designed for undergraduate students who display potential for independent research in public health. Students work individually with faculty to develop an independent research study/project in public health. Open on an individual basis by arrangement with the division chair. May be repeated for credit with different emphasis. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PH 4360. Internship in Public Health.**

This part-time internship involves the application of public health concepts to a community or public health setting. Students participate in the work of a health organization/agency and complete a semester-long project. A minimum of 200 contact hours is required. (WI) Prerequisite: PH 4100 with a grade of "C" or better and a minimum 3.0 major GPA and departmental approval. Corequisite: PH 4640 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**PH 4640. Public Health Program Planning and Evaluation.**

Students apply professional knowledge and skills to the development of public health programs. Topics include needs assessment, data gathering techniques, instrument design, data and statistics, and the interpretation, reporting, and application of findings for program development. Cultural competency and communication are covered. (WI) Prerequisite: PH 1320 and PH 2340 both with grades of "C" or better. Corequisite: PH 4336 with a grade of "C" or better.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PH 4660. Internship in Public Health.**

This internship involves the application of public health concepts to a community or public health setting. Students participate in the work of a health organization/agency and complete a semester-long project. A minimum of 400 contact hours is required. (WI) Prerequisites: PH 4100 and PH 4640 both with grades of "C" or better and a minimum 3.0 major GPA and departmental approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

## Health Administration

**HA 5111. Topics in Health Administration.**

An in-depth study of a singular topic or a related problem being faced by practicing managers in the rapidly changing healthcare industry. Special emphasis will be placed on the topic's current relevance and its utilitarian value to the participant. May be repeated if topic differs.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5191. Field Experience Orientation.**

This course will assist the student to prepare for the field experience and to prepare for the comprehensive exam. An extensive orientation to the field experience will be provided to better enable students to move from the classroom setting to a workplace scenario.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5300. Healthcare Organization and Delivery.**

A survey of the organization and delivery of health services focusing on the history and development of health systems as they relate to the overall health and medical care systems. Major attention is given to governing bodies, patient care organizations, and executive management structures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5301. Healthcare Administration Research Methods.**

A study of research methodology as it pertains to healthcare administration. Included are hypothesis forming, designing research, and the collection, manipulation and analysis of data. Knowledge of numeracy and statistics is essential.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5303. Information Systems Management in Healthcare.**

This course provides a comprehensive introduction to information systems management for healthcare organizations. It covers the determination of information required by whom, design of information flows, procurement of information systems technology resources, assurance of information security, and management of systems integration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5304. Healthcare Economics and Financial Theory.**

A study of economic theories that have an impact on the healthcare industry. Special emphasis will be placed on emerging economic research and its impact on potential policy ramifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5311. Trends in Health Administration.**

An in-depth study of singular trend or a related problem being faced by practicing managers in the rapidly changing healthcare industry. Special emphasis will be placed on the topic's current relevance and its utilitarian value to the participant. Examples of trends, which are typically offered, include trends in rural health, managed care ethical issues, and in total quality management. This course may be repeated for credit with a different subject area.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5316. Healthcare Financial Management.**

An introduction to healthcare financial management including the financial management in healthcare organizations, healthcare payment systems, financing and investment decisions, and financial planning, analysis, and control. Prerequisites: accounting, economics, and statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5321. Healthcare Law.**

An in-depth analysis of healthcare law and its effect on the relationships between the patient, the patient's family, the provider, and other interested third parties. Analysis of cases is the primary method of study.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**HA 5325. Health Care Quality Improvement Concepts and Tools.**

This course teaches the concepts of quality in health care and the use of quality improvement tools. Quality management will be explored using Lean Six Sigma continuous process improvement methodologies. This course is intended to help students learn and translate health care quality management theory, concepts, and knowledge into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5334. Operational Decision Making for Healthcare Managers.**

An introduction to the fundamentals of selected operations research techniques essential to the analysis of healthcare managerial problem situations, the design of new and improved systems, and the implementation of systems to achieve desired systems performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5335. Public Health for Healthcare Administrators.**

This course introduces the healthcare manager to public health and its role in preventing illnesses and improving the health of the community. Students will learn of the role of the manager in disease prevention and how to participate and lead community efforts for the wellness of the community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5346. Healthcare Strategic Management.**

This capstone course examines mission, vision, strategy, and operations from both the formulation and implementation perspectives. Emphasis will be on the role of the manager/leader in strategic management analysis, creativity, and action. This course is available to HA majors only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5355. Human Resource Management in Healthcare Facilities.**

A study of personnel administration in the healthcare facility and the environment in which it functions. Emphasis will be on the role of the Personnel Office in forecasting, developing, and managing human resources, in addition to a review of current legislation affecting the personnel function.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5356. Policy Development in Healthcare Arena.**

Prospective healthcare administrators analyze changing healthcare paradigm to determine decision-points where policies can be affected. Course allows students to apply existing skills to real world policy issues at state and national levels and to analyze policy development from numerous stakeholders' viewpoints.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5362. Healthcare Organizational Behavior/Theory.**

This course is a study of theory and concepts drawn from the behavioral and social sciences. These concepts are applied as a foundation and conceptual framework for the analysis, diagnosis, prediction and guidance of human behavior in healthcare organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5371. Marketing of Health Services.**

A study of marketing functions and principles as they relate to the healthcare delivery system. Analysis of marketing concepts such as market segmentation, marketing planning, marketing audit, marketing positioning, and marketing mix will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5375. Healthcare Accounting.**

An introduction to financial accounting in healthcare with an emphasis on the preparation of non-profit financial statements for healthcare service organizations, control procedures for healthcare entities, and accounting issues unique to the healthcare industry. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**HA 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis, HA 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5450. Administrative Field Placement.**

A one-semester, full-time field experience which allows students to apply their foundational didactic education by means of rotations, experiences, and projects in a healthcare organization. This course is graded on a credit (CR), no-credit (F) basis. Prerequisite: Instructor approval.

**4 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HA 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5640. Administrative Practicum.**

A one-semester, part-time field experience designed for the student already working full-time in healthcare. The practicum provides a broader orientation to the student's organization and exposure to special projects.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5840. Administrative Field Placement.**

A one-semester, full-time field experience which allows students to apply their foundational didactic education by means of rotations, experiences, and projects in a healthcare organization.

**8 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Exercise Science concentration in Health and Rehabilitation Sciences is a multi-disciplinary program designed to prepare graduates for multiple health-promotion careers. The program focuses on understand and integrating diverse health and rehabilitation research to inform evidence-based practice. This degree supports current allied health professionals and assists recent bachelor's degree graduates with advanced skills to seek admission to competitive health and rehabilitation professional schools.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials

- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work (at least 9 hours of exercise science undergraduate credit hours. Students who do not have these hours may be required to complete leveling courses.)
- GRE not required
- resume/CV
- statement of purpose (approximately 500 words, typed and double-spaced) addressing the following:
  - professional goals
  - reasons for pursuing education and training in exercise science
  - summary of major strengths and weaknesses with respect to being admitted into the program
  - experiences and/or research interests that may contribute to the program
- three letters of recommendation (including at least two academic references) regarding professional competence and character

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Exercise Science concentration in Health and Rehabilitation Sciences requires 36 semester credit hours, including an independent study.

As background prerequisites, an Exercise Science major is expected to have a minimum of 9 semester hours of exercise science course work on the bachelor's degree. Students who do not have these hours may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ESS 5304	Motor Learning and Performance	3
ESS 5309	Biomechanics for Exercise & Sports Science	3

ESS 5346	Research Methods in Health and Human Performance	3
ESS 5347	Independent Study in Exercise Science (Taken twice at the end of a student's degree plan as a culminating experience)	6
ESS 5356	Applied Statistics in Health and Human Performance	3
Choose one of the following:		3
ESS 5306	Advanced Exercise Physiology	
ESS 5310	Cardiopulmonary Exercise Physiology	
ESS 5311	Applied Neuromuscular and Skeletal Muscle Physiology	
<b>Concentration Courses</b>		
PH 5321	Advanced Health Behavior Theory	3
ESS 5313	Proprioception and Neuromuscular Control in Rehabilitation	3
ESS 5314	Biomechanics of Musculoskeletal Injury	3
<b>Prescribed Electives</b>		
Choose two of the following:		6
ESS 5110	Research Seminar (May be repetitive twice)	
ESS 5305	Advanced Fitness Assessment and Exercise Prescription	
ESS 5306	Advanced Exercise Physiology	
ESS 5307	Advanced Resistance Training and Conditioning	
ESS 5308	Physical Activity, Disease Prevention and Treatment	
ESS 5310	Cardiopulmonary Exercise Physiology	
ESS 5311	Applied Neuromuscular and Skeletal Muscle Physiology	
ESS 5312	Applied Exercise Metabolism	
ESS 5322	Inclusion and Diversity in Physical Activity and Sport	
ESS 5327	Application of Strength and Conditioning Principles	
ESS 5328	Principles of Endurance Training	
ESS 5344	The Science of Teaching in Health and Human Performance	
ESS 5398	Internship in Exercise and Sports Science	
ESS 5698	Internship in Exercise and Sports Science	
NUTR 5364	The Science of Nutrition and Exercise	
PH 5320	Foundations of Public Health	
PH 5330A		
PSY 5335	Foundations of Health Psychology	
PT 5400		
REC 5325	Philosophical Foundations of Recreational Therapy	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The comprehensive take-home exam is an independent, individual assignment where students will apply scholarly principles from at least two subdisciplines within Exercise Science for practical use. The final product should demonstrate the student's mastery of content in two subdisciplines and inform practitioners or organizations regarding the efficacy of a set of strategies, lessons, or a program. Examples include

creating an innovative program related to exercise and sports science (e.g., training or fitness program, rehabilitation program), creating a series of teaching lessons for a specific group of students, conducting a program evaluation, creating a website to inform practitioners on a topic related to exercise and sports science, or writing a paper that incorporates practical recommendations based on literature in the field. The oral defense could consist of a question and answer session or a concise presentation followed by questions. If the final product and/or oral defense does not meet requirements, graduation may be delayed until the appropriate work is completed.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Health and Human Performance: ESS

## Courses Offered

### Exercise Science Specialization (ESS)

#### ESS 5101. Graduate Assistant Development.

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

#### ESS 5110. Research Seminar.

The focus of this course engages students in research and professional development in Exercise and Sports Science. This seminar will allow students to gain exposure to a variety of scholarly activities in an interdisciplinary setting.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

#### ESS 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ESS 5201. Graduate Assistant Development.

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

**ESS 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5304. Motor Learning and Performance.**

This course is designed to provide students the foundation for understanding the principles involved in enhancing motor skill acquisition, and physiological, neurological, and psychological factors affecting motor learning and performance. Inquiry is made into the various motor learning theories and concepts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5305. Advanced Fitness Assessment and Exercise Prescription.**

This course provides an intensive study of current scientifically based exercise testing and prescription procedures. Students will learn how to evaluate fitness and prescribe exercise through laboratory experiences.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ESS 5306. Advanced Exercise Physiology.**

This advanced course will provide students with a thorough understanding of the acute responses to exercise and the physiological adaptations that occur in response to exercise training. Additional topics to be covered include environmental influences, aging, and sex differences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5307. Advanced Resistance Training and Conditioning.**

This course will include the development, instruction, and evaluation of resistance training exercises and programs for diverse populations and settings. Physiological and mechanical principles related to resistance training will be applied to study human performance, injury prevention, and rehabilitation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5308. Physical Activity, Disease Prevention and Treatment.**

This course will provide students with opportunities to examine the role of physical inactivity in the development of chronic diseases and the benefits of activity in prevention efforts. A special emphasis will be placed on activity assessment and intervention research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5309. Biomechanics for Exercise & Sports Science.**

Review of current research and research techniques in the biomechanics of exercise and sport science. Students will develop skills in reviewing, planning, and conducting biomechanical research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5310. Cardiopulmonary Exercise Physiology.**

The course will provide students with a thorough understanding of the structure, function, neural mechanisms, and integrated responses of the human cardiopulmonary system to acute and chronic exercise. In addition, basic cardiopulmonary pathology, pharmacology, and electrocardiography will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5311. Applied Neuromuscular and Skeletal Muscle Physiology.**

The course will provide students with a thorough understanding of the structure and function of neuromuscular and skeletal muscle physiology. This course will examine mechanisms that regulate skeletal muscle force production and human performance in response to acute and chronic exercise. In addition, advanced laboratory techniques will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5312. Applied Exercise Metabolism.**

This course will provide students a thorough understanding of exercise metabolism. Students will develop advanced knowledge of the influence of various environmental and physiological factors on metabolism during exercise and the impact on physical performance and recovery. Students will also examine the relationships between metabolic factors and chronic diseases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5313. Proprioception and Neuromuscular Control in Rehabilitation.**

This course provides for an advanced study of the concepts, theories, and current research related to proprioception and neuromuscular control as applied to the prevention, diagnosis, and clinical management of sport-related musculoskeletal injuries, neuromuscular disease, and concussions. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5314. Biomechanics of Musculoskeletal Injury.**

This course focuses on the application of biomechanical principles to the pathoetiology, diagnosis, and physiological capacity for healing of injuries to bone, ligament, tendon, cartilage, and other human tissues, with an emphasis on current injury research. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5317. Exercise Physiology.**

This leveling course provides an overview of the acute and chronic physiological responses to exercise. Emphasis is on muscle bioenergetics, muscle contractile properties, optimizing human performance through training and supplementation, as well as cardiopulmonary and endocrine responses to exercise. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent. Corequisite: ESS 5117.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5320. Biomechanics.**

This leveling course provides an introduction to the mechanical foundations of anatomical function and human movement. Qualitative and quantitative biomechanical analyses of human movement are introduced to inform the prescription of technique, equipment, and training interventions. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5322. Inclusion and Diversity in Physical Activity and Sport.**

This course is designed to prepare physical activity and sport educators with knowledge, skills, and strategies to create inclusive learning environments. Culturally responsive teaching strategies that best accommodate the individual needs of children, adolescents, and adults, with diverse ethnic, racial, cultural, socio-economic, physical, and cognitive needs will be emphasized. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ESS 5327. Application of Strength and Conditioning Principles.**

Strength and conditioning programming techniques will be the focus, including appropriate assessment and exercise prescription for improved sport performance and injury prevention. This course will include both classroom instruction and hands-on experience utilizing advanced technologies and traditional and non-traditional equipment in the field of strength and conditioning. This course will also cover methods of evaluating athletic abilities to monitor progress of training that will guide exercise prescription. Prerequisite: ESS 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5328. Principles of Endurance Training.**

This course explores and critiques both established and novel exercise testing and training practices for athletes competing in endurance sports. Emphasis is on demonstrating an ability to develop testing and training procedures using evidence-based methods for endurance athletes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5329. Motor Learning.**

This leveling course provides students with an understanding of the physiological, neurological, and psychological factors affecting performance and acquisition of motor skills. Students will examine the structural components underlying the learning of motor skills and draw upon examples from sport, physical activities, and rehabilitation. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5344. The Science of Teaching in Health and Human Performance.**

This course is designed to enhance instructional skills for professionals working in educational, sport, clinical, and community settings. Students incorporate evidence-based instructional practices and assess teaching using systematic, reliable, and valid measures. Students will be able to apply course concepts to implement effective instruction in diverse venues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5346. Research Methods in Health and Human Performance.**

A study of research methods related to techniques for searching the professional research literature, understanding, planning, and conducting professional research projects, as well as development of skills for writing research proposals related to human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5347. Independent Study in Exercise Science.**

The course allows students to receive individualized instruction while working on a professional project with a supervising faculty member. This course will require students to enhance their writing, research, teaching, and/or presentation skills. Repeatable once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5353. Curriculum Design, Implementation and Evaluation in Diverse Physical Activity Settings.**

This course is designed to explore evidence-based curricula across Exercise and Sport Science settings including, but not limited to clinical, strength and conditioning, community physical activity, and sports. Students will gain knowledge and understanding about the curriculum design process and program evaluation using current theory to practice models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ESS 5354. Developmental Sports Education: Youth Participants.**

This course is designed to provide sport educators with theory, research, and application strategies to implement developmentally appropriate sports programs for youth participants. Social, psychological, pedagogical, philosophical, and physical variables impacting youth in sport are examined. Emphasis is placed on promoting positive youth development by applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5355. Developmental Sports Education: High-Level Athletes and Coaching Effectiveness.**

This course is designed to provide sport educators with theory, research, and practical strategies to implement developmentally appropriate sports programs for high-level athletes. Psychological, social, and physical aspects related to athletes' success and well-being are examined. Research on coaching effectiveness is also explored with emphasis on applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5356. Applied Statistics in Health and Human Performance.**

A study of quantitative statistical methods for planning and conducting experimental and correlational research, as well as techniques for statistical data analysis and interpretation applicable to health and human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5357. Water Safety Instruction for Service Learning.**

This course is designed for students to obtain the Red Cross Water Safety Instruction (WSI) certification, and learn how to teach using a Mastery Motivational Climate/TARGET approach. More than half of the semester will involve providing swim lessons to students grades K-6 from a San Marcos school. Students must be able to perform the following skills: front crawl, back crawl, breaststroke, elementary backstroke and sidestroke for 25 yards; butterfly for 15 yards; back float and tread water for 1 minute. Students with a current WSI certification will be exempt from the required WSI lab at the beginning of the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5398. Internship in Exercise and Sports Science.**

This 240-hour internship provides students with work-related experience with children, adults, older individuals, or athletes in exercise settings. Students are provided an opportunity to prescribe and supervise age- and fitness-appropriate exercise programs and perform exercise tests. Prerequisite: ESS 5306 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis course credit is awarded until the student has completed the entire thesis required in ESS 5399B. Prerequisites: ESS 5346 and ESS 5356 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5698. Internship in Exercise and Sports Science.**

This full-time internship provides students with a minimum of 480 hours of field experience. Students will work with children, adults, older individuals, or athletes in exercise or health care settings, and prescribe and supervise age and fitness appropriate exercise programs and perform comprehensive health-related assessments.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Exercise Science concentration in Health and Rehabilitation Sciences is a multi-disciplinary program designed to prepare graduates for multiple health-promotion careers. The program focuses on understanding and integrating diverse health and rehabilitation research to inform evidence-based practice. This degree supports current allied health professionals and assists recent bachelor's degree graduates with advanced skills to seek admission to competitive health and rehabilitation professional schools.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current

academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work (at least 9 hours of exercise science undergraduate credit hours. Students who do not have these hours may be required to complete leveling courses.)
- GRE not required
- resume/CV
- statement of purpose (approximately 500 words, typed and double-spaced) addressing the following:
  - professional goals
  - reasons for pursuing education and training in exercise science
  - summary of major strengths and weaknesses with respect to being admitted into the program
  - experiences and/or research interests that may contribute to the program
- three letters of recommendation (including at least two academic references) regarding professional competence and character

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Exercise Science concentration in Health and Rehabilitation Sciences requires 36 semester credit hours, including a thesis.

As background prerequisites, an Exercise Science major is expected to have a minimum of 9 semester hours of exercise science course work on the bachelor's degree. Students who do not have these hours may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ESS 5304	Motor Learning and Performance	3
ESS 5309	Biomechanics for Exercise & Sports Science	3
ESS 5346	Research Methods in Health and Human Performance	3
ESS 5356	Applied Statistics in Health and Human Performance	3
Choose one of the following:		3
ESS 5306	Advanced Exercise Physiology	
ESS 5310	Cardiopulmonary Exercise Physiology	
ESS 5311	Applied Neuromuscular and Skeletal Muscle Physiology	
<b>Concentration Courses</b>		
PH 5321	Advanced Health Behavior Theory	3
ESS 5313	Proprioception and Neuromuscular Control in Rehabilitation	3
ESS 5314	Biomechanics of Musculoskeletal Injury	3
<b>Prescribed Electives</b>		
Choose two of the following:		6
ESS 5110	Research Seminar (May be repeated twice)	
ESS 5305	Advanced Fitness Assessment and Exercise Prescription	
ESS 5306	Advanced Exercise Physiology	
ESS 5307	Advanced Resistance Training and Conditioning	
ESS 5308	Physical Activity, Disease Prevention and Treatment	
ESS 5310	Cardiopulmonary Exercise Physiology	
ESS 5311	Applied Neuromuscular and Skeletal Muscle Physiology	
ESS 5312	Applied Exercise Metabolism	
ESS 5322	Inclusion and Diversity in Physical Activity and Sport	
ESS 5327	Application of Strength and Conditioning Principles	
ESS 5328	Principles of Endurance Training	
ESS 5344	The Science of Teaching in Health and Human Performance	
ESS 5347	Independent Study in Exercise Science	
ESS 5398	Internship in Exercise and Sports Science	
or ESS 5698 Internship in Exercise and Sports Science		
NUTR 5364	The Science of Nutrition and Exercise	
PH 5320	Foundations of Public Health	
PH 5330A		
PSY 5335	Foundations of Health Psychology	
PT 5400		
REC 5325	Philosophical Foundations of Recreational Therapy	

Thesis		
ESS 5399A	Thesis	3
Choose a minimum of three hours from the following:		3
ESS 5199B	Thesis	
ESS 5299B	Thesis	
ESS 5399B	Thesis	
ESS 5599B	Thesis	
ESS 5999B	Thesis	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The comprehensive take-home exam is an independent, individual assignment where students will apply scholarly principles from at least two sub-disciplines within Exercise Science for practical use. The final product should demonstrate the student's mastery of content in two sub-disciplines and inform practitioners or organizations regarding the efficacy of a set of strategies, lessons, or a program. Examples include creating an innovative program related to exercise and sports science (e.g., training or fitness program, rehabilitation program), creating a series of teaching lessons for a specific group of students, conducting a program evaluation, creating a website to inform practitioners on a topic related to exercise and sports science, or writing a paper that incorporates practical recommendations based on literature in the field. The oral defense could consist of a question and answer session or a concise presentation followed by questions. If the final product and/or oral defense does not meet requirements, graduation may be delayed until the appropriate work is completed.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College

by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.

2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Health and Human Performance: ESS

## Courses Offered

### Exercise Science Specialization (ESS)

#### ESS 5101. Graduate Assistant Development.

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ESS 5110. Research Seminar.

The focus of this course engages students in research and professional development in Exercise and Sports Science. This seminar will allow students to gain exposure to a variety of scholarly activities in an interdisciplinary setting.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### ESS 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ESS 5201. Graduate Assistant Development.

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ESS 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ESS 5304. Motor Learning and Performance.

This course is designed to provide students the foundation for understanding the principles involved in enhancing motor skill acquisition, and physiological, neurological, and psychological factors affecting motor learning and performance. Inquiry is made into the various motor learning theories and concepts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ESS 5305. Advanced Fitness Assessment and Exercise Prescription.

This course provides an intensive study of current scientifically based exercise testing and prescription procedures. Students will learn how to evaluate fitness and prescribe exercise through laboratory experiences.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### ESS 5306. Advanced Exercise Physiology.

This advanced course will provide students with a thorough understanding of the acute responses to exercise and the physiological adaptations that occur in response to exercise training. Additional topics to be covered include environmental influences, aging, and sex differences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5307. Advanced Resistance Training and Conditioning.**

This course will include the development, instruction, and evaluation of resistance training exercises and programs for diverse populations and settings. Physiological and mechanical principles related to resistance training will be applied to study human performance, injury prevention, and rehabilitation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5308. Physical Activity, Disease Prevention and Treatment.**

This course will provide students with opportunities to examine the role of physical inactivity in the development of chronic diseases and the benefits of activity in prevention efforts. A special emphasis will be placed on activity assessment and intervention research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5309. Biomechanics for Exercise & Sports Science.**

Review of current research and research techniques in the biomechanics of exercise and sport science. Students will develop skills in reviewing, planning, and conducting biomechanical research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5310. Cardiopulmonary Exercise Physiology.**

The course will provide students with a thorough understanding of the structure, function, neural mechanisms, and integrated responses of the human cardiopulmonary system to acute and chronic exercise. In addition, basic cardiopulmonary pathology, pharmacology, and electrocardiography will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5311. Applied Neuromuscular and Skeletal Muscle Physiology.**

The course will provide students with a thorough understanding of the structure and function of neuromuscular and skeletal muscle physiology. This course will examine mechanisms that regulate skeletal muscle force production and human performance in response to acute and chronic exercise. In addition, advanced laboratory techniques will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5312. Applied Exercise Metabolism.**

This course will provide students a thorough understanding of exercise metabolism. Students will develop advanced knowledge of the influence of various environmental and physiological factors on metabolism during exercise and the impact on physical performance and recovery. Students will also examine the relationships between metabolic factors and chronic diseases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5313. Proprioception and Neuromuscular Control in Rehabilitation.**

This course provides for an advanced study of the concepts, theories, and current research related to proprioception and neuromuscular control as applied to the prevention, diagnosis, and clinical management of sport-related musculoskeletal injuries, neuromuscular disease, and concussions. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5314. Biomechanics of Musculoskeletal Injury.**

This course focuses on the application of biomechanical principles to the pathoetiology, diagnosis, and physiological capacity for healing of injuries to bone, ligament, tendon, cartilage, and other human tissues, with an emphasis on current injury research. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5317. Exercise Physiology.**

This leveling course provides an overview of the acute and chronic physiological responses to exercise. Emphasis is on muscle bioenergetics, muscle contractile properties, optimizing human performance through training and supplementation, as well as cardiopulmonary and endocrine responses to exercise. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent. Corequisite: ESS 5117.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5320. Biomechanics.**

This leveling course provides an introduction to the mechanical foundations of anatomical function and human movement. Qualitative and quantitative biomechanical analyses of human movement are introduced to inform the prescription of technique, equipment, and training interventions. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5322. Inclusion and Diversity in Physical Activity and Sport.**

This course is designed to prepare physical activity and sport educators with knowledge, skills, and strategies to create inclusive learning environments. Culturally responsive teaching strategies that best accommodate the individual needs of children, adolescents, and adults, with diverse ethnic, racial, cultural, socio-economic, physical, and cognitive needs will be emphasized. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**ESS 5327. Application of Strength and Conditioning Principles.**

Strength and conditioning programming techniques will be the focus, including appropriate assessment and exercise prescription for improved sport performance and injury prevention. This course will include both classroom instruction and hands-on experience utilizing advanced technologies and traditional and non-traditional equipment in the field of strength and conditioning. This course will also cover methods of evaluating athletic abilities to monitor progress of training that will guide exercise prescription. Prerequisite: ESS 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5328. Principles of Endurance Training.**

This course explores and critiques both established and novel exercise testing and training practices for athletes competing in endurance sports. Emphasis is on demonstrating an ability to develop testing and training procedures using evidence-based methods for endurance athletes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5329. Motor Learning.**

This leveling course provides students with an understanding of the physiological, neurological, and psychological factors affecting performance and acquisition of motor skills. Students will examine the structural components underlying the learning of motor skills and draw upon examples from sport, physical activities, and rehabilitation. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5344. The Science of Teaching in Health and Human Performance.**

This course is designed to enhance instructional skills for professionals working in educational, sport, clinical, and community settings. Students incorporate evidence-based instructional practices and assess teaching using systematic, reliable, and valid measures. Students will be able to apply course concepts to implement effective instruction in diverse venues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5346. Research Methods in Health and Human Performance.**

A study of research methods related to techniques for searching the professional research literature, understanding, planning, and conducting professional research projects, as well as development of skills for writing research proposals related to human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5347. Independent Study in Exercise Science.**

The course allows students to receive individualized instruction while working on a professional project with a supervising faculty member. This course will require students to enhance their writing, research, teaching, and/or presentation skills. Repeatable once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5353. Curriculum Design, Implementation and Evaluation in Diverse Physical Activity Settings.**

This course is designed to explore evidence-based curricula across Exercise and Sport Science settings including, but not limited to clinical, strength and conditioning, community physical activity, and sports. Students will gain knowledge and understanding about the curriculum design process and program evaluation using current theory to practice models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5354. Developmental Sports Education: Youth Participants.**

This course is designed to provide sport educators with theory, research, and application strategies to implement developmentally appropriate sports programs for youth participants. Social, psychological, pedagogical, philosophical, and physical variables impacting youth in sport are examined. Emphasis is placed on promoting positive youth development by applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5355. Developmental Sports Education: High-Level Athletes and Coaching Effectiveness.**

This course is designed to provide sport educators with theory, research, and practical strategies to implement developmentally appropriate sports programs for high-level athletes. Psychological, social, and physical aspects related to athletes' success and well-being are examined. Research on coaching effectiveness is also explored with emphasis on applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5356. Applied Statistics in Health and Human Performance.**

A study of quantitative statistical methods for planning and conducting experimental and correlational research, as well as techniques for statistical data analysis and interpretation applicable to health and human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5357. Water Safety Instruction for Service Learning.**

This course is designed for students to obtain the Red Cross Water Safety Instruction (WSI) certification, and learn how to teach using a Mastery Motivational Climate/TARGET approach. More than half of the semester will involve providing swim lessons to students grades K-6 from a San Marcos school. Students must be able to perform the following skills: front crawl, back crawl, breaststroke, elementary backstroke and sidestroke for 25 yards; butterfly for 15 yards; back float and tread water for 1 minute. Students with a current WSI certification will be exempt from the required WSI lab at the beginning of the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5398. Internship in Exercise and Sports Science.**

This 240-hour internship provides students with work-related experience with children, adults, older individuals, or athletes in exercise settings. Students are provided an opportunity to prescribe and supervise age- and fitness-appropriate exercise programs and perform exercise tests. Prerequisite: ESS 5306 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis course credit is awarded until the student has completed the entire thesis required in ESS 5399B. Prerequisites: ESS 5346 and ESS 5356 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5698. Internship in Exercise and Sports Science.**

This full-time internship provides students with a minimum of 480 hours of field experience. Students will work with children, adults, older individuals, or athletes in exercise or health care settings, and prescribe and supervise age and fitness appropriate exercise programs and perform comprehensive health-related assessments.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

Students seeking a Master of Science (M.S.) degree with a major in Exercise Science will appreciate the value and importance of research-based literature and have the critical thinking, research, and technical skills to:

1. understand research-based literature;
2. use innovative approaches to problem solving;
3. successfully pursue a doctoral degree in exercise science or related discipline;
4. work in athletic, clinical (e.g., cardiopulmonary rehabilitation and diagnostic testing), educational, and fitness settings; and
5. sit for advanced professional certifications (e.g., the American College of Sports Medicine Certified Clinical Exercise Specialist, Certified Health Fitness Specialist, Certified Strength and Conditioning Specialist, or Registered Clinical Exercise Physiologist).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted

- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work (at least 9 hours of exercise science undergraduate credit hours. Students who do not have these hours may be required to complete leveling courses.)
- GRE not required
- resume/CV
- statement of purpose (approximately 500 words, typed and double-spaced) addressing the following:
  - professional goals
  - reasons for pursuing education and training in exercise science
  - summary of major strengths and weaknesses with respect to being admitted into the program
  - experiences and/or research interests that may contribute to the program
- three letters of recommendation (including at least two academic references) regarding professional competence and character

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Exercise Science requires 36 semester credit hours.

As background prerequisites, an Exercise Science major is expected to have a minimum of 9 semester hours of exercise science course work on the bachelor's degree. Students who do not have these hours may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ESS 5304	Motor Learning and Performance	3
ESS 5309	Biomechanics for Exercise & Sports Science	3
ESS 5346	Research Methods in Health and Human Performance	3
ESS 5356	Applied Statistics in Health and Human Performance	3
<b>Prescribed Electives</b>		
Choose 3 hours from the following:		3
ESS 5306	Advanced Exercise Physiology	
ESS 5310	Cardiopulmonary Exercise Physiology	

ESS 5311	Applied Neuromuscular and Skeletal Muscle Physiology	
Choose 15 hours from the following:		15
ESS 5110	Research Seminar (May be repeated twice)	
ESS 5305	Advanced Fitness Assessment and Exercise Prescription	
ESS 5306	Advanced Exercise Physiology	
ESS 5307	Advanced Resistance Training and Conditioning	
ESS 5308	Physical Activity, Disease Prevention and Treatment	
ESS 5310	Cardiopulmonary Exercise Physiology	
ESS 5311	Applied Neuromuscular and Skeletal Muscle Physiology	
ESS 5312	Applied Exercise Metabolism	
ESS 5322	Inclusion and Diversity in Physical Activity and Sport	
ESS 5327	Application of Strength and Conditioning Principles	
ESS 5328	Principles of Endurance Training	
ESS 5344	The Science of Teaching in Health and Human Performance	
ESS 5347	Independent Study in Exercise Science	
ESS 5353	Curriculum Design, Implementation and Evaluation in Diverse Physical Activity Settings	
ESS 5354	Developmental Sports Education: Youth Participants	
ESS 5355	Developmental Sports Education: High-Level Athletes and Coaching Effectiveness	
ESS 5398	Internship in Exercise and Sports Science	
	or ESS 5698 Internship in Exercise and Sports Science	
Choose 6 hours from the following:		6
AT 5310		
AT 5311		
BIO 5441	Cellular Physiology	
NUTR 5302G	Pediatric Obesity	
NUTR 5364	The Science of Nutrition and Exercise	
NUTR 5366	Macronutrient Metabolism	
PH 5321	Advanced Health Behavior Theory	
PHIL 5322	Professional Ethics	
PHIL 5326	Philosophy and Sport	
PHIL 5327	Medical Ethics and Bio-ethics	
PSY 5335	Foundations of Health Psychology	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The comprehensive take-home exam is an independent, individual assignment where students will apply scholarly principles from at least two sub-disciplines within Exercise Science for practical use. The final product should demonstrate the student's mastery of content in two sub-disciplines and inform practitioners or organizations regarding the efficacy of a set of strategies, lessons, or a program. Examples include creating an innovative program related to exercise and sports science (e.g., training or fitness program, rehabilitation program), creating a series of teaching lessons for a specific group of students, conducting a program evaluation, creating a website to inform practitioners on

a topic related to exercise and sports science, or writing a paper that incorporates practical recommendations based on literature in the field. The oral defense could consist of a question and answer session or a concise presentation followed by questions. If the final product and/or oral defense does not meet requirements, graduation may be delayed until the appropriate work is completed.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Health and Human Performance: ESS

## Courses Offered

### Exercise Science Specialization (ESS)

#### ESS 5101. Graduate Assistant Development.

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ESS 5110. Research Seminar.

The focus of this course engages students in research and professional development in Exercise and Sports Science. This seminar will allow students to gain exposure to a variety of scholarly activities in an interdisciplinary setting.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### ESS 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ESS 5201. Graduate Assistant Development.

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ESS 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ESS 5304. Motor Learning and Performance.

This course is designed to provide students the foundation for understanding the principles involved in enhancing motor skill acquisition, and physiological, neurological, and psychological factors affecting motor learning and performance. Inquiry is made into the various motor learning theories and concepts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ESS 5305. Advanced Fitness Assessment and Exercise Prescription.

This course provides an intensive study of current scientifically based exercise testing and prescription procedures. Students will learn how to evaluate fitness and prescribe exercise through laboratory experiences.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### ESS 5306. Advanced Exercise Physiology.

This advanced course will provide students with a thorough understanding of the acute responses to exercise and the physiological adaptations that occur in response to exercise training. Additional topics to be covered include environmental influences, aging, and sex differences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ESS 5307. Advanced Resistance Training and Conditioning.

This course will include the development, instruction, and evaluation of resistance training exercises and programs for diverse populations and settings. Physiological and mechanical principles related to resistance training will be applied to study human performance, injury prevention, and rehabilitation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ESS 5308. Physical Activity, Disease Prevention and Treatment.

This course will provide students with opportunities to examine the role of physical inactivity in the development of chronic diseases and the benefits of activity in prevention efforts. A special emphasis will be placed on activity assessment and intervention research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ESS 5309. Biomechanics for Exercise & Sports Science.

Review of current research and research techniques in the biomechanics of exercise and sport science. Students will develop skills in reviewing, planning, and conducting biomechanical research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5310. Cardiopulmonary Exercise Physiology.**

The course will provide students with a thorough understanding of the structure, function, neural mechanisms, and integrated responses of the human cardiopulmonary system to acute and chronic exercise. In addition, basic cardiopulmonary pathology, pharmacology, and electrocardiography will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5311. Applied Neuromuscular and Skeletal Muscle Physiology.**

The course will provide students with a thorough understanding of the structure and function of neuromuscular and skeletal muscle physiology. This course will examine mechanisms that regulate skeletal muscle force production and human performance in response to acute and chronic exercise. In addition, advanced laboratory techniques will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5312. Applied Exercise Metabolism.**

This course will provide students a thorough understanding of exercise metabolism. Students will develop advanced knowledge of the influence of various environmental and physiological factors on metabolism during exercise and the impact on physical performance and recovery. Students will also examine the relationships between metabolic factors and chronic diseases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5313. Proprioception and Neuromuscular Control in Rehabilitation.**

This course provides for an advanced study of the concepts, theories, and current research related to proprioception and neuromuscular control as applied to the prevention, diagnosis, and clinical management of sport-related musculoskeletal injuries, neuromuscular disease, and concussions. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5314. Biomechanics of Musculoskeletal Injury.**

This course focuses on the application of biomechanical principles to the pathoetiology, diagnosis, and physiological capacity for healing of injuries to bone, ligament, tendon, cartilage, and other human tissues, with an emphasis on current injury research. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5317. Exercise Physiology.**

This leveling course provides an overview of the acute and chronic physiological responses to exercise. Emphasis is on muscle bioenergetics, muscle contractile properties, optimizing human performance through training and supplementation, as well as cardiopulmonary and endocrine responses to exercise. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent. Corequisite: ESS 5117.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5320. Biomechanics.**

This leveling course provides an introduction to the mechanical foundations of anatomical function and human movement. Qualitative and quantitative biomechanical analyses of human movement are introduced to inform the prescription of technique, equipment, and training interventions. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5322. Inclusion and Diversity in Physical Activity and Sport.**

This course is designed to prepare physical activity and sport educators with knowledge, skills, and strategies to create inclusive learning environments. Culturally responsive teaching strategies that best accommodate the individual needs of children, adolescents, and adults, with diverse ethnic, racial, cultural, socio-economic, physical, and cognitive needs will be emphasized. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ESS 5327. Application of Strength and Conditioning Principles.**

Strength and conditioning programming techniques will be the focus, including appropriate assessment and exercise prescription for improved sport performance and injury prevention. This course will include both classroom instruction and hands-on experience utilizing advanced technologies and traditional and non-traditional equipment in the field of strength and conditioning. This course will also cover methods of evaluating athletic abilities to monitor progress of training that will guide exercise prescription. Prerequisite: ESS 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5328. Principles of Endurance Training.**

This course explores and critiques both established and novel exercise testing and training practices for athletes competing in endurance sports. Emphasis is on demonstrating an ability to develop testing and training procedures using evidence-based methods for endurance athletes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ESS 5329. Motor Learning.**

This leveling course provides students with an understanding of the physiological, neurological, and psychological factors affecting performance and acquisition of motor skills. Students will examine the structural components underlying the learning of motor skills and draw upon examples from sport, physical activities, and rehabilitation. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5344. The Science of Teaching in Health and Human Performance.**

This course is designed to enhance instructional skills for professionals working in educational, sport, clinical, and community settings. Students incorporate evidence-based instructional practices and assess teaching using systematic, reliable, and valid measures. Students will be able to apply course concepts to implement effective instruction in diverse venues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5346. Research Methods in Health and Human Performance.**

A study of research methods related to techniques for searching the professional research literature, understanding, planning, and conducting professional research projects, as well as development of skills for writing research proposals related to human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5347. Independent Study in Exercise Science.**

The course allows students to receive individualized instruction while working on a professional project with a supervising faculty member. This course will require students to enhance their writing, research, teaching, and/or presentation skills. Repeatable once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5353. Curriculum Design, Implementation and Evaluation in Diverse Physical Activity Settings.**

This course is designed to explore evidence-based curricula across Exercise and Sport Science settings including, but not limited to clinical, strength and conditioning, community physical activity, and sports. Students will gain knowledge and understanding about the curriculum design process and program evaluation using current theory to practice models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5354. Developmental Sports Education: Youth Participants.**

This course is designed to provide sport educators with theory, research, and application strategies to implement developmentally appropriate sports programs for youth participants. Social, psychological, pedagogical, philosophical, and physical variables impacting youth in sport are examined. Emphasis is placed on promoting positive youth development by applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5355. Developmental Sports Education: High-Level Athletes and Coaching Effectiveness.**

This course is designed to provide sport educators with theory, research, and practical strategies to implement developmentally appropriate sports programs for high-level athletes. Psychological, social, and physical aspects related to athletes' success and well-being are examined. Research on coaching effectiveness is also explored with emphasis on applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5356. Applied Statistics in Health and Human Performance.**

A study of quantitative statistical methods for planning and conducting experimental and correlational research, as well as techniques for statistical data analysis and interpretation applicable to health and human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5357. Water Safety Instruction for Service Learning.**

This course is designed for students to obtain the Red Cross Water Safety Instruction (WSI) certification, and learn how to teach using a Mastery Motivational Climate/TARGET approach. More than half of the semester will involve providing swim lessons to students grades K-6 from a San Marcos school. Students must be able to perform the following skills: front crawl, back crawl, breaststroke, elementary backstroke and sidestroke for 25 yards; butterfly for 15 yards; back float and tread water for 1 minute. Students with a current WSI certification will be exempt from the required WSI lab at the beginning of the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5398. Internship in Exercise and Sports Science.**

This 240-hour internship provides students with work-related experience with children, adults, older individuals, or athletes in exercise settings. Students are provided an opportunity to prescribe and supervise age- and fitness-appropriate exercise programs and perform exercise tests. Prerequisite: ESS 5306 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis course credit is awarded until the student has completed the entire thesis required in ESS 5399B. Prerequisites: ESS 5346 and ESS 5356 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5698. Internship in Exercise and Sports Science.**

This full-time internship provides students with a minimum of 480 hours of field experience. Students will work with children, adults, older individuals, or athletes in exercise or health care settings, and prescribe and supervise age and fitness appropriate exercise programs and perform comprehensive health-related assessments.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Exercise Science concentration in Sport Coaching is designed for those graduate students who seek to pursue careers promoting physical activity in community and sport settings.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work (at least 9 hours of exercise science undergraduate credit hours. Students who do not have these hours may be required to complete leveling courses.)
- GRE not required
- resume/CV
- statement of purpose (approximately 500 words, typed and double-spaced) addressing the following:
  - professional goals
  - reasons for pursuing education and training in physical education
  - summary of major strengths and weaknesses with respect to being admitted into the program
  - experiences and/or research interests that may contribute to the program
- three letters of recommendation (including at least two academic references) regarding professional competence and character

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Exercise Science concentration in Sport Coaching requires 36 semester credit hours.

As background prerequisites, an Exercise Science major is expected to have a minimum of 9 semester hours of exercise science course work on the bachelor's degree. Students who do not have these hours may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ESS 5304	Motor Learning and Performance	3
ESS 5309	Biomechanics for Exercise & Sports Science	3
ESS 5346	Research Methods in Health and Human Performance	3
ESS 5356	Applied Statistics in Health and Human Performance	3
Choose one of the following:		3
ESS 5306	Advanced Exercise Physiology	
ESS 5310	Cardiopulmonary Exercise Physiology	
ESS 5311	Applied Neuromuscular and Skeletal Muscle Physiology	
<b>Concentration Courses</b>		
ESS 5344	The Science of Teaching in Health and Human Performance	3
ESS 5353	Curriculum Design, Implementation and Evaluation in Diverse Physical Activity Settings	3
<b>Prescribed Electives</b>		
Choose 15 hours from the following:		15
ESS 5110	Research Seminar (can be taken up to 3 times)	
ESS 5305	Advanced Fitness Assessment and Exercise Prescription	
ESS 5306	Advanced Exercise Physiology	
ESS 5307	Advanced Resistance Training and Conditioning	
ESS 5308	Physical Activity, Disease Prevention and Treatment	
ESS 5310	Cardiopulmonary Exercise Physiology	
ESS 5311	Applied Neuromuscular and Skeletal Muscle Physiology	
ESS 5312	Applied Exercise Metabolism	
ESS 5322	Inclusion and Diversity in Physical Activity and Sport	
ESS 5327	Application of Strength and Conditioning Principles	
ESS 5328	Principles of Endurance Training	
ESS 5347	Independent Study in Exercise Science	
ESS 5354	Developmental Sports Education: Youth Participants	
ESS 5355	Developmental Sports Education: High-Level Athletes and Coaching Effectiveness	
PH 5310	History and Philosophy of Public Health Education and Promotion	
PH 5320	Foundations of Public Health	
PH 5321	Advanced Health Behavior Theory	
PHIL 5322	Professional Ethics	
PHIL 5326	Philosophy and Sport	
REC 5330	Organizational Leadership in Recreation and Sport Management	
REC 5340	Social Psychology of Recreation and Sport	
REC 5380	Organizational Planning in Recreation and Sport Management	

REC 5381	Outdoor Program Leadership and Administration
<b>Total Hours</b>	<b>36</b>

## Comprehensive Examination Requirement

The comprehensive take-home exam is an independent, individual assignment where students will apply scholarly principles from at least two sub-disciplines within Exercise Science for practical use. The final product should demonstrate the student's mastery of content in two sub-disciplines and inform practitioners or organizations regarding the efficacy of a set of strategies, lessons, or a program. Examples include creating an innovative program related to exercise and sports science (e.g., training or fitness program, rehabilitation program), creating a series of teaching lessons for a specific group of students, conducting a program evaluation, creating a website to inform practitioners on a topic related to exercise and sports science, or writing a paper that incorporates practical recommendations based on literature in the field. The oral defense could consist of a question and answer session or a concise presentation followed by questions. If the final product and/or oral defense does not meet requirements, graduation may be delayed until the appropriate work is completed.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Health and Human Performance: ESS

## Courses Offered

### Exercise Science Specialization (ESS)

#### ESS 5101. Graduate Assistant Development.

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ESS 5110. Research Seminar.

The focus of this course engages students in research and professional development in Exercise and Sports Science. This seminar will allow students to gain exposure to a variety of scholarly activities in an interdisciplinary setting.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### ESS 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5201. Graduate Assistant Development.**

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ESS 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5304. Motor Learning and Performance.**

This course is designed to provide students the foundation for understanding the principles involved in enhancing motor skill acquisition, and physiological, neurological, and psychological factors affecting motor learning and performance. Inquiry is made into the various motor learning theories and concepts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5305. Advanced Fitness Assessment and Exercise Prescription.**

This course provides an intensive study of current scientifically based exercise testing and prescription procedures. Students will learn how to evaluate fitness and prescribe exercise through laboratory experiences.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ESS 5306. Advanced Exercise Physiology.**

This advanced course will provide students with a thorough understanding of the acute responses to exercise and the physiological adaptations that occur in response to exercise training. Additional topics to be covered include environmental influences, aging, and sex differences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5307. Advanced Resistance Training and Conditioning.**

This course will include the development, instruction, and evaluation of resistance training exercises and programs for diverse populations and settings. Physiological and mechanical principles related to resistance training will be applied to study human performance, injury prevention, and rehabilitation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5308. Physical Activity, Disease Prevention and Treatment.**

This course will provide students with opportunities to examine the role of physical inactivity in the development of chronic diseases and the benefits of activity in prevention efforts. A special emphasis will be placed on activity assessment and intervention research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5309. Biomechanics for Exercise & Sports Science.**

Review of current research and research techniques in the biomechanics of exercise and sport science. Students will develop skills in reviewing, planning, and conducting biomechanical research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5310. Cardiopulmonary Exercise Physiology.**

The course will provide students with a thorough understanding of the structure, function, neural mechanisms, and integrated responses of the human cardiopulmonary system to acute and chronic exercise. In addition, basic cardiopulmonary pathology, pharmacology, and electrocardiography will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5311. Applied Neuromuscular and Skeletal Muscle Physiology.**

The course will provide students with a thorough understanding of the structure and function of neuromuscular and skeletal muscle physiology. This course will examine mechanisms that regulate skeletal muscle force production and human performance in response to acute and chronic exercise. In addition, advanced laboratory techniques will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5312. Applied Exercise Metabolism.**

This course will provide students a thorough understanding of exercise metabolism. Students will develop advanced knowledge of the influence of various environmental and physiological factors on metabolism during exercise and the impact on physical performance and recovery. Students will also examine the relationships between metabolic factors and chronic diseases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5313. Proprioception and Neuromuscular Control in Rehabilitation.**

This course provides for an advanced study of the concepts, theories, and current research related to proprioception and neuromuscular control as applied to the prevention, diagnosis, and clinical management of sport-related musculoskeletal injuries, neuromuscular disease, and concussions. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5314. Biomechanics of Musculoskeletal Injury.**

This course focuses on the application of biomechanical principles to the pathoetiology, diagnosis, and physiological capacity for healing of injuries to bone, ligament, tendon, cartilage, and other human tissues, with an emphasis on current injury research. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5317. Exercise Physiology.**

This leveling course provides an overview of the acute and chronic physiological responses to exercise. Emphasis is on muscle bioenergetics, muscle contractile properties, optimizing human performance through training and supplementation, as well as cardiopulmonary and endocrine responses to exercise. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent.

Corequisite: ESS 5117.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5320. Biomechanics.**

This leveling course provides an introduction to the mechanical foundations of anatomical function and human movement. Qualitative and quantitative biomechanical analyses of human movement are introduced to inform the prescription of technique, equipment, and training interventions. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5322. Inclusion and Diversity in Physical Activity and Sport.**

This course is designed to prepare physical activity and sport educators with knowledge, skills, and strategies to create inclusive learning environments. Culturally responsive teaching strategies that best accommodate the individual needs of children, adolescents, and adults, with diverse ethnic, racial, cultural, socio-economic, physical, and cognitive needs will be emphasized. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ESS 5327. Application of Strength and Conditioning Principles.**

Strength and conditioning programming techniques will be the focus, including appropriate assessment and exercise prescription for improved sport performance and injury prevention. This course will include both classroom instruction and hands-on experience utilizing advanced technologies and traditional and non-traditional equipment in the field of strength and conditioning. This course will also cover methods of evaluating athletic abilities to monitor progress of training that will guide exercise prescription. Prerequisite: ESS 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5328. Principles of Endurance Training.**

This course explores and critiques both established and novel exercise testing and training practices for athletes competing in endurance sports. Emphasis is on demonstrating an ability to develop testing and training procedures using evidence-based methods for endurance athletes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5329. Motor Learning.**

This leveling course provides students with an understanding of the physiological, neurological, and psychological factors affecting performance and acquisition of motor skills. Students will examine the structural components underlying the learning of motor skills and draw upon examples from sport, physical activities, and rehabilitation. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5344. The Science of Teaching in Health and Human Performance.**

This course is designed to enhance instructional skills for professionals working in educational, sport, clinical, and community settings. Students incorporate evidence-based instructional practices and assess teaching using systematic, reliable, and valid measures. Students will be able to apply course concepts to implement effective instruction in diverse venues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5346. Research Methods in Health and Human Performance.**

A study of research methods related to techniques for searching the professional research literature, understanding, planning, and conducting professional research projects, as well as development of skills for writing research proposals related to human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5347. Independent Study in Exercise Science.**

The course allows students to receive individualized instruction while working on a professional project with a supervising faculty member. This course will require students to enhance their writing, research, teaching, and/or presentation skills. Repeatable once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ESS 5353. Curriculum Design, Implementation and Evaluation in Diverse Physical Activity Settings.**

This course is designed to explore evidence-based curricula across Exercise and Sport Science settings including, but not limited to clinical, strength and conditioning, community physical activity, and sports. Students will gain knowledge and understanding about the curriculum design process and program evaluation using current theory to practice models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5354. Developmental Sports Education: Youth Participants.**

This course is designed to provide sport educators with theory, research, and application strategies to implement developmentally appropriate sports programs for youth participants. Social, psychological, pedagogical, philosophical, and physical variables impacting youth in sport are examined. Emphasis is placed on promoting positive youth development by applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5355. Developmental Sports Education: High-Level Athletes and Coaching Effectiveness.**

This course is designed to provide sport educators with theory, research, and practical strategies to implement developmentally appropriate sports programs for high-level athletes. Psychological, social, and physical aspects related to athletes' success and well-being are examined. Research on coaching effectiveness is also explored with emphasis on applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5356. Applied Statistics in Health and Human Performance.**

A study of quantitative statistical methods for planning and conducting experimental and correlational research, as well as techniques for statistical data analysis and interpretation applicable to health and human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5357. Water Safety Instruction for Service Learning.**

This course is designed for students to obtain the Red Cross Water Safety Instruction (WSI) certification, and learn how to teach using a Mastery Motivational Climate/TARGET approach. More than half of the semester will involve providing swim lessons to students grades K-6 from a San Marcos school. Students must be able to perform the following skills: front crawl, back crawl, breaststroke, elementary backstroke and sidestroke for 25 yards; butterfly for 15 yards; back float and tread water for 1 minute. Students with a current WSI certification will be exempt from the required WSI lab at the beginning of the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5398. Internship in Exercise and Sports Science.**

This 240-hour internship provides students with work-related experience with children, adults, older individuals, or athletes in exercise settings. Students are provided an opportunity to prescribe and supervise age- and fitness-appropriate exercise programs and perform exercise tests. Prerequisite: ESS 5306 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis course credit is awarded until the student has completed the entire thesis required in ESS 5399B. Prerequisites: ESS 5346 and ESS 5356 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5698. Internship in Exercise and Sports Science.**

This full-time internship provides students with a minimum of 480 hours of field experience. Students will work with children, adults, older individuals, or athletes in exercise or health care settings, and prescribe and supervise age and fitness appropriate exercise programs and perform comprehensive health-related assessments.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Exercise Science concentration in Strength & Conditioning and Sport Coaching will meet the needs of graduate students pursuing careers in diverse sport and athletic settings. Graduate students will gain an understanding of the scientific principles of physical training, as well as the psychological and social factors that impact participation in sports from early adolescence

to adulthood. Graduates will also be prepared to seek advanced professional certifications (e.g., NSCA Certified Strength and Conditioning Specialist, ASEP American Sports Education Program) and/or pursue a doctoral degree in various sport studies.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work (at least 9 hours of exercise science undergraduate credit hours. Students who do not have these hours may be required to complete leveling courses.)
- GRE not required
- resume/CV
- statement of purpose (approximately 500 words, typed and double-spaced) addressing the following:
  - professional goals
  - reasons for pursuing education and training in exercise science
  - summary of major strengths and weaknesses with respect to being admitted into the program
  - experiences and/or research interests that may contribute to the program
- three letters of recommendation (including at least two academic references) regarding professional competence and character

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official
- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52

- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Exercise Science concentration in Strength & Conditioning and Sport Coaching requires 36 semester credit hours.

As background prerequisites, an Exercise Science major is expected to have a minimum of 9 semester hours of exercise science course work on the bachelor's degree. Students who do not have these hours may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ESS 5304	Motor Learning and Performance	3
ESS 5309	Biomechanics for Exercise & Sports Science	3
ESS 5346	Research Methods in Health and Human Performance	3
ESS 5356	Applied Statistics in Health and Human Performance	3
Choose one of the following:		3
ESS 5306	Advanced Exercise Physiology	
ESS 5310	Cardiopulmonary Exercise Physiology	
ESS 5311	Applied Neuromuscular and Skeletal Muscle Physiology	
<b>Concentration Courses</b>		
ESS 5307	Advanced Resistance Training and Conditioning	3
ESS 5327	Application of Strength and Conditioning Principles	3
ESS 5354	Developmental Sports Education: Youth Participants	3
ESS 5355	Developmental Sports Education: High-Level Athletes and Coaching Effectiveness	3
<b>Prescribed Electives</b>		
Choose 9 hours from the following:		9
CI 5314	Human Growth and Development II	
ESS 5110	Research Seminar (May be repeated twice)	
ESS 5305	Advanced Fitness Assessment and Exercise Prescription	
ESS 5306	Advanced Exercise Physiology	
ESS 5308	Physical Activity, Disease Prevention and Treatment	
ESS 5310	Cardiopulmonary Exercise Physiology	
ESS 5311	Applied Neuromuscular and Skeletal Muscle Physiology	
ESS 5312	Applied Exercise Metabolism	
ESS 5322	Inclusion and Diversity in Physical Activity and Sport	
ESS 5328	Principles of Endurance Training	

ESS 5344	The Science of Teaching in Health and Human Performance
ESS 5347	Independent Study in Exercise Science
ESS 5353	Curriculum Design, Implementation and Evaluation in Diverse Physical Activity Settings
ESS 5398	Internship in Exercise and Sports Science
or ESS 5698	Internship in Exercise and Sports Science
PHIL 5322	Professional Ethics
PHIL 5326	Philosophy and Sport
REC 5330	Organizational Leadership in Recreation and Sport Management
REC 5380	Organizational Planning in Recreation and Sport Management

Total Hours

36

## Comprehensive Examination Requirement

The comprehensive take-home exam is an independent, individual assignment where students will apply scholarly principles from at least two sub-disciplines within Exercise Science for practical use. The final product should demonstrate the student's mastery of content in two sub-disciplines and inform practitioners or organizations regarding the efficacy of a set of strategies, lessons, or a program. Examples include creating an innovative program related to exercise and sports science (e.g., training or fitness program, rehabilitation program), creating a series of teaching lessons for a specific group of students, conducting a program evaluation, creating a website to inform practitioners on a topic related to exercise and sports science, or writing a paper that incorporates practical recommendations based on literature in the field. The oral defense could consist of a question and answer session or a concise presentation followed by questions. If the final product and/or oral defense does not meet requirements, graduation may be delayed until the appropriate work is completed.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Health and Human Performance: ESS

## Courses Offered

### Exercise Science Specialization (ESS)

#### ESS 5101. Graduate Assistant Development.

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ESS 5110. Research Seminar.

The focus of this course engages students in research and professional development in Exercise and Sports Science. This seminar will allow students to gain exposure to a variety of scholarly activities in an interdisciplinary setting.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### ESS 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ESS 5201. Graduate Assistant Development.

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ESS 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ESS 5304. Motor Learning and Performance.

This course is designed to provide students the foundation for understanding the principles involved in enhancing motor skill acquisition, and physiological, neurological, and psychological factors affecting motor learning and performance. Inquiry is made into the various motor learning theories and concepts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ESS 5305. Advanced Fitness Assessment and Exercise Prescription.

This course provides an intensive study of current scientifically based exercise testing and prescription procedures. Students will learn how to evaluate fitness and prescribe exercise through laboratory experiences.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ESS 5306. Advanced Exercise Physiology.**

This advanced course will provide students with a thorough understanding of the acute responses to exercise and the physiological adaptations that occur in response to exercise training. Additional topics to be covered include environmental influences, aging, and sex differences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5307. Advanced Resistance Training and Conditioning.**

This course will include the development, instruction, and evaluation of resistance training exercises and programs for diverse populations and settings. Physiological and mechanical principles related to resistance training will be applied to study human performance, injury prevention, and rehabilitation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5308. Physical Activity, Disease Prevention and Treatment.**

This course will provide students with opportunities to examine the role of physical inactivity in the development of chronic diseases and the benefits of activity in prevention efforts. A special emphasis will be placed on activity assessment and intervention research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5309. Biomechanics for Exercise & Sports Science.**

Review of current research and research techniques in the biomechanics of exercise and sport science. Students will develop skills in reviewing, planning, and conducting biomechanical research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5310. Cardiopulmonary Exercise Physiology.**

The course will provide students with a thorough understanding of the structure, function, neural mechanisms, and integrated responses of the human cardiopulmonary system to acute and chronic exercise. In addition, basic cardiopulmonary pathology, pharmacology, and electrocardiography will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5311. Applied Neuromuscular and Skeletal Muscle Physiology.**

The course will provide students with a thorough understanding of the structure and function of neuromuscular and skeletal muscle physiology. This course will examine mechanisms that regulate skeletal muscle force production and human performance in response to acute and chronic exercise. In addition, advanced laboratory techniques will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5312. Applied Exercise Metabolism.**

This course will provide students a thorough understanding of exercise metabolism. Students will develop advanced knowledge of the influence of various environmental and physiological factors on metabolism during exercise and the impact on physical performance and recovery. Students will also examine the relationships between metabolic factors and chronic diseases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5313. Proprioception and Neuromuscular Control in Rehabilitation.**

This course provides for an advanced study of the concepts, theories, and current research related to proprioception and neuromuscular control as applied to the prevention, diagnosis, and clinical management of sport-related musculoskeletal injuries, neuromuscular disease, and concussions. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5314. Biomechanics of Musculoskeletal Injury.**

This course focuses on the application of biomechanical principles to the pathoetiology, diagnosis, and physiological capacity for healing of injuries to bone, ligament, tendon, cartilage, and other human tissues, with an emphasis on current injury research. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5317. Exercise Physiology.**

This leveling course provides an overview of the acute and chronic physiological responses to exercise. Emphasis is on muscle bioenergetics, muscle contractile properties, optimizing human performance through training and supplementation, as well as cardiopulmonary and endocrine responses to exercise. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent. Corequisite: ESS 5117.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5320. Biomechanics.**

This leveling course provides an introduction to the mechanical foundations of anatomical function and human movement. Qualitative and quantitative biomechanical analyses of human movement are introduced to inform the prescription of technique, equipment, and training interventions. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5322. Inclusion and Diversity in Physical Activity and Sport.**

This course is designed to prepare physical activity and sport educators with knowledge, skills, and strategies to create inclusive learning environments. Culturally responsive teaching strategies that best accommodate the individual needs of children, adolescents, and adults, with diverse ethnic, racial, cultural, socio-economic, physical, and cognitive needs will be emphasized. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ESS 5327. Application of Strength and Conditioning Principles.**

Strength and conditioning programming techniques will be the focus, including appropriate assessment and exercise prescription for improved sport performance and injury prevention. This course will include both classroom instruction and hands-on experience utilizing advanced technologies and traditional and non-traditional equipment in the field of strength and conditioning. This course will also cover methods of evaluating athletic abilities to monitor progress of training that will guide exercise prescription. Prerequisite: ESS 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5328. Principles of Endurance Training.**

This course explores and critiques both established and novel exercise testing and training practices for athletes competing in endurance sports. Emphasis is on demonstrating an ability to develop testing and training procedures using evidence-based methods for endurance athletes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5329. Motor Learning.**

This leveling course provides students with an understanding of the physiological, neurological, and psychological factors affecting performance and acquisition of motor skills. Students will examine the structural components underlying the learning of motor skills and draw upon examples from sport, physical activities, and rehabilitation. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5344. The Science of Teaching in Health and Human Performance.**

This course is designed to enhance instructional skills for professionals working in educational, sport, clinical, and community settings. Students incorporate evidence-based instructional practices and assess teaching using systematic, reliable, and valid measures. Students will be able to apply course concepts to implement effective instruction in diverse venues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5346. Research Methods in Health and Human Performance.**

A study of research methods related to techniques for searching the professional research literature, understanding, planning, and conducting professional research projects, as well as development of skills for writing research proposals related to human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5347. Independent Study in Exercise Science.**

The course allows students to receive individualized instruction while working on a professional project with a supervising faculty member. This course will require students to enhance their writing, research, teaching, and/or presentation skills. Repeatable once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5353. Curriculum Design, Implementation and Evaluation in Diverse Physical Activity Settings.**

This course is designed to explore evidence-based curricula across Exercise and Sport Science settings including, but not limited to clinical, strength and conditioning, community physical activity, and sports. Students will gain knowledge and understanding about the curriculum design process and program evaluation using current theory to practice models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5354. Developmental Sports Education: Youth Participants.**

This course is designed to provide sport educators with theory, research, and application strategies to implement developmentally appropriate sports programs for youth participants. Social, psychological, pedagogical, philosophical, and physical variables impacting youth in sport are examined. Emphasis is placed on promoting positive youth development by applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5355. Developmental Sports Education: High-Level Athletes and Coaching Effectiveness.**

This course is designed to provide sport educators with theory, research, and practical strategies to implement developmentally appropriate sports programs for high-level athletes. Psychological, social, and physical aspects related to athletes' success and well-being are examined. Research on coaching effectiveness is also explored with emphasis on applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ESS 5356. Applied Statistics in Health and Human Performance.**

A study of quantitative statistical methods for planning and conducting experimental and correlational research, as well as techniques for statistical data analysis and interpretation applicable to health and human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5357. Water Safety Instruction for Service Learning.**

This course is designed for students to obtain the Red Cross Water Safety Instruction (WSI) certification, and learn how to teach using a Mastery Motivational Climate/TARGET approach. More than half of the semester will involve providing swim lessons to students grades K-6 from a San Marcos school. Students must be able to perform the following skills: front crawl, back crawl, breaststroke, elementary backstroke and sidestroke for 25 yards; butterfly for 15 yards; back float and tread water for 1 minute. Students with a current WSI certification will be exempt from the required WSI lab at the beginning of the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5398. Internship in Exercise and Sports Science.**

This 240-hour internship provides students with work-related experience with children, adults, older individuals, or athletes in exercise settings. Students are provided an opportunity to prescribe and supervise age- and fitness-appropriate exercise programs and perform exercise tests. Prerequisite: ESS 5306 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis course credit is awarded until the student has completed the entire thesis required in ESS 5399B. Prerequisites: ESS 5346 and ESS 5356 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5698. Internship in Exercise and Sports Science.**

This full-time internship provides students with a minimum of 480 hours of field experience. Students will work with children, adults, older individuals, or athletes in exercise or health care settings, and prescribe and supervise age and fitness appropriate exercise programs and perform comprehensive health-related assessments.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Exercise Science concentration in Strength & Conditioning and Sport Coaching will meet the needs of graduate students pursuing careers in diverse sport and athletic settings. Graduate students will gain an understanding of the scientific principles of physical training, as well as the psychological and social factors that impact participation in sports from early adolescence to adulthood. Graduates will also be prepared to seek advanced professional certifications (e.g., NSCA Certified Strength and Conditioning Specialist, ASEP American Sports Education Program) and/or pursue a doctoral degree in various sport studies.

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- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fees for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work (at least 9 hours of exercise science undergraduate credit hours. Students who do not have these hours may be required to complete leveling courses.)

- GRE not required
- resume/CV
- statement of purpose (approximately 500 words, typed and double-spaced) addressing the following:
  - professional goals
  - reasons for pursuing education and training in exercise science
  - summary of major strengths and weaknesses with respect to being admitted into the program
  - experiences and/or research interests that may contribute to the program
- three letters of recommendation (including at least two academic references) regarding professional competence and character

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Exercise Science concentration in Strength & Conditioning and Sport Coaching requires 36 semester credit hours, including a thesis.

As background prerequisites, an Exercise Science major is expected to have a minimum of 9 semester hours of exercise science course work on the bachelor's degree. Students who do not have these hours may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ESS 5304	Motor Learning and Performance	3
ESS 5309	Biomechanics for Exercise & Sports Science	3
ESS 5346	Research Methods in Health and Human Performance	3
ESS 5356	Applied Statistics in Health and Human Performance	3
Choose one of the following:		
ESS 5306	Advanced Exercise Physiology	
ESS 5310	Cardiopulmonary Exercise Physiology	
ESS 5311	Applied Neuromuscular and Skeletal Muscle Physiology	
<b>Concentration Courses</b>		
ESS 5307	Advanced Resistance Training and Conditioning	3

ESS 5327	Application of Strength and Conditioning Principles	3
ESS 5354	Developmental Sports Education: Youth Participants	3
ESS 5355	Developmental Sports Education: High-Level Athletes and Coaching Effectiveness	3
<b>Prescribed Electives</b>		
Choose one of the following:		3
CI 5314	Human Growth and Development II	
ESS 5110	Research Seminar (May be repeated twice)	
ESS 5305	Advanced Fitness Assessment and Exercise Prescription	
ESS 5306	Advanced Exercise Physiology	
ESS 5308	Physical Activity, Disease Prevention and Treatment	
ESS 5311	Applied Neuromuscular and Skeletal Muscle Physiology	
ESS 5312	Applied Exercise Metabolism	
ESS 5322	Inclusion and Diversity in Physical Activity and Sport	
ESS 5328	Principles of Endurance Training	
ESS 5344	The Science of Teaching in Health and Human Performance	
ESS 5347	Independent Study in Exercise Science	
ESS 5353	Curriculum Design, Implementation and Evaluation in Diverse Physical Activity Settings	
ESS 5398	Internship in Exercise and Sports Science	
	or ESS 5698 Internship in Exercise and Sports Science	
PHIL 5322	Professional Ethics	
PHIL 5326	Philosophy and Sport	
REC 5330	Organizational Leadership in Recreation and Sport Management	
REC 5380	Organizational Planning in Recreation and Sport Management	

<b>Thesis</b>		
ESS 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
ESS 5199B	Thesis	
ESS 5299B	Thesis	
ESS 5399B	Thesis	
ESS 5599B	Thesis	
ESS 5999B	Thesis	

**Total Hours** **36**

## Comprehensive Examination Requirement

The comprehensive take-home exam is an independent, individual assignment where students will apply scholarly principles from at least two sub-disciplines within Exercise Science for practical use. The final product should demonstrate the student's mastery of content in two sub-disciplines and inform practitioners or organizations regarding the efficacy of a set of strategies, lessons, or a program. Examples include creating an innovative program related to exercise and sports science (e.g., training or fitness program, rehabilitation program), creating a series of teaching lessons for a specific group of students, conducting a program evaluation, creating a website to inform practitioners on

a topic related to exercise and sports science, or writing a paper that incorporates practical recommendations based on literature in the field. The oral defense could consist of a question and answer session or a concise presentation followed by questions. If the final product and/or oral defense does not meet requirements, graduation may be delayed until the appropriate work is completed.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision

is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Health and Human Performance: ESS

## Courses Offered

### Exercise Science Specialization (ESS)

#### ESS 5101. Graduate Assistant Development.

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ESS 5110. Research Seminar.

The focus of this course engages students in research and professional development in Exercise and Sports Science. This seminar will allow students to gain exposure to a variety of scholarly activities in an interdisciplinary setting.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### ESS 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ESS 5201. Graduate Assistant Development.

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ESS 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ESS 5304. Motor Learning and Performance.

This course is designed to provide students the foundation for understanding the principles involved in enhancing motor skill acquisition, and physiological, neurological, and psychological factors affecting motor learning and performance. Inquiry is made into the various motor learning theories and concepts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ESS 5305. Advanced Fitness Assessment and Exercise Prescription.

This course provides an intensive study of current scientifically based exercise testing and prescription procedures. Students will learn how to evaluate fitness and prescribe exercise through laboratory experiences.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### ESS 5306. Advanced Exercise Physiology.

This advanced course will provide students with a thorough understanding of the acute responses to exercise and the physiological adaptations that occur in response to exercise training. Additional topics to be covered include environmental influences, aging, and sex differences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ESS 5307. Advanced Resistance Training and Conditioning.

This course will include the development, instruction, and evaluation of resistance training exercises and programs for diverse populations and settings. Physiological and mechanical principles related to resistance training will be applied to study human performance, injury prevention, and rehabilitation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ESS 5308. Physical Activity, Disease Prevention and Treatment.

This course will provide students with opportunities to examine the role of physical inactivity in the development of chronic diseases and the benefits of activity in prevention efforts. A special emphasis will be placed on activity assessment and intervention research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ESS 5309. Biomechanics for Exercise & Sports Science.

Review of current research and research techniques in the biomechanics of exercise and sport science. Students will develop skills in reviewing, planning, and conducting biomechanical research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5310. Cardiopulmonary Exercise Physiology.**

The course will provide students with a thorough understanding of the structure, function, neural mechanisms, and integrated responses of the human cardiopulmonary system to acute and chronic exercise. In addition, basic cardiopulmonary pathology, pharmacology, and electrocardiography will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5311. Applied Neuromuscular and Skeletal Muscle Physiology.**

The course will provide students with a thorough understanding of the structure and function of neuromuscular and skeletal muscle physiology. This course will examine mechanisms that regulate skeletal muscle force production and human performance in response to acute and chronic exercise. In addition, advanced laboratory techniques will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5312. Applied Exercise Metabolism.**

This course will provide students a thorough understanding of exercise metabolism. Students will develop advanced knowledge of the influence of various environmental and physiological factors on metabolism during exercise and the impact on physical performance and recovery. Students will also examine the relationships between metabolic factors and chronic diseases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5313. Proprioception and Neuromuscular Control in Rehabilitation.**

This course provides for an advanced study of the concepts, theories, and current research related to proprioception and neuromuscular control as applied to the prevention, diagnosis, and clinical management of sport-related musculoskeletal injuries, neuromuscular disease, and concussions. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5314. Biomechanics of Musculoskeletal Injury.**

This course focuses on the application of biomechanical principles to the pathoetiology, diagnosis, and physiological capacity for healing of injuries to bone, ligament, tendon, cartilage, and other human tissues, with an emphasis on current injury research. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5317. Exercise Physiology.**

This leveling course provides an overview of the acute and chronic physiological responses to exercise. Emphasis is on muscle bioenergetics, muscle contractile properties, optimizing human performance through training and supplementation, as well as cardiopulmonary and endocrine responses to exercise. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent. Corequisite: ESS 5117.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5320. Biomechanics.**

This leveling course provides an introduction to the mechanical foundations of anatomical function and human movement. Qualitative and quantitative biomechanical analyses of human movement are introduced to inform the prescription of technique, equipment, and training interventions. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5322. Inclusion and Diversity in Physical Activity and Sport.**

This course is designed to prepare physical activity and sport educators with knowledge, skills, and strategies to create inclusive learning environments. Culturally responsive teaching strategies that best accommodate the individual needs of children, adolescents, and adults, with diverse ethnic, racial, cultural, socio-economic, physical, and cognitive needs will be emphasized. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ESS 5327. Application of Strength and Conditioning Principles.**

Strength and conditioning programming techniques will be the focus, including appropriate assessment and exercise prescription for improved sport performance and injury prevention. This course will include both classroom instruction and hands-on experience utilizing advanced technologies and traditional and non-traditional equipment in the field of strength and conditioning. This course will also cover methods of evaluating athletic abilities to monitor progress of training that will guide exercise prescription. Prerequisite: ESS 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5328. Principles of Endurance Training.**

This course explores and critiques both established and novel exercise testing and training practices for athletes competing in endurance sports. Emphasis is on demonstrating an ability to develop testing and training procedures using evidence-based methods for endurance athletes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ESS 5329. Motor Learning.**

This leveling course provides students with an understanding of the physiological, neurological, and psychological factors affecting performance and acquisition of motor skills. Students will examine the structural components underlying the learning of motor skills and draw upon examples from sport, physical activities, and rehabilitation. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5344. The Science of Teaching in Health and Human Performance.**

This course is designed to enhance instructional skills for professionals working in educational, sport, clinical, and community settings. Students incorporate evidence-based instructional practices and assess teaching using systematic, reliable, and valid measures. Students will be able to apply course concepts to implement effective instruction in diverse venues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5346. Research Methods in Health and Human Performance.**

A study of research methods related to techniques for searching the professional research literature, understanding, planning, and conducting professional research projects, as well as development of skills for writing research proposals related to human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5347. Independent Study in Exercise Science.**

The course allows students to receive individualized instruction while working on a professional project with a supervising faculty member. This course will require students to enhance their writing, research, teaching, and/or presentation skills. Repeatable once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5353. Curriculum Design, Implementation and Evaluation in Diverse Physical Activity Settings.**

This course is designed to explore evidence-based curricula across Exercise and Sport Science settings including, but not limited to clinical, strength and conditioning, community physical activity, and sports. Students will gain knowledge and understanding about the curriculum design process and program evaluation using current theory to practice models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5354. Developmental Sports Education: Youth Participants.**

This course is designed to provide sport educators with theory, research, and application strategies to implement developmentally appropriate sports programs for youth participants. Social, psychological, pedagogical, philosophical, and physical variables impacting youth in sport are examined. Emphasis is placed on promoting positive youth development by applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5355. Developmental Sports Education: High-Level Athletes and Coaching Effectiveness.**

This course is designed to provide sport educators with theory, research, and practical strategies to implement developmentally appropriate sports programs for high-level athletes. Psychological, social, and physical aspects related to athletes' success and well-being are examined. Research on coaching effectiveness is also explored with emphasis on applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5356. Applied Statistics in Health and Human Performance.**

A study of quantitative statistical methods for planning and conducting experimental and correlational research, as well as techniques for statistical data analysis and interpretation applicable to health and human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5357. Water Safety Instruction for Service Learning.**

This course is designed for students to obtain the Red Cross Water Safety Instruction (WSI) certification, and learn how to teach using a Mastery Motivational Climate/TARGET approach. More than half of the semester will involve providing swim lessons to students grades K-6 from a San Marcos school. Students must be able to perform the following skills: front crawl, back crawl, breaststroke, elementary backstroke and sidestroke for 25 yards; butterfly for 15 yards; back float and tread water for 1 minute. Students with a current WSI certification will be exempt from the required WSI lab at the beginning of the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5398. Internship in Exercise and Sports Science.**

This 240-hour internship provides students with work-related experience with children, adults, older individuals, or athletes in exercise settings. Students are provided an opportunity to prescribe and supervise age- and fitness-appropriate exercise programs and perform exercise tests. Prerequisite: ESS 5306 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis course credit is awarded until the student has completed the entire thesis required in ESS 5399B. Prerequisites: ESS 5346 and ESS 5356 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5698. Internship in Exercise and Sports Science.**

This full-time internship provides students with a minimum of 480 hours of field experience. Students will work with children, adults, older individuals, or athletes in exercise or health care settings, and prescribe and supervise age and fitness appropriate exercise programs and perform comprehensive health-related assessments.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

Students seeking a Master of Science (M.S.) degree with a major in Exercise Science will appreciate the value and importance of research-based literature and have the critical thinking, research, and technical skills to:

1. understand research-based literature;
2. use innovative approaches to problem solving;
3. successfully pursue a doctoral degree in exercise science or related discipline;
4. work in athletic, clinical (e.g., cardiopulmonary rehabilitation and diagnostic testing), educational, and fitness settings; and
5. sit for advanced professional certifications (e.g., the American College of Sports Medicine Certified Clinical Exercise Specialist,

Certified Health Fitness Specialist, Certified Strength and Conditioning Specialist, or Registered Clinical Exercise Physiologist).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)\*
- background course work (at least 9 hours of exercise science undergraduate credit hours. Students who do not have these hours may be required to complete leveling courses.)
- GRE not required
- resume/CV
- statement of purpose (approximately 500 words, typed and double-spaced) addressing the following:
  - professional goals
  - reasons for pursuing education and training in exercise science
  - summary of major strengths and weaknesses with respect to being admitted into the program
  - experiences and/or research interests that may contribute to the program
- three letters of recommendation (including at least two academic references) regarding professional competence and character

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally

accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Exercise Science requires 36 semester credit hours, including a thesis.

As background prerequisites, an Exercise Science major is expected to have a minimum of 9 semester hours of exercise science course work on the bachelor's degree. Students who do not have these hours may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ESS 5304	Motor Learning and Performance	3
ESS 5309	Biomechanics for Exercise & Sports Science	3
ESS 5346	Research Methods in Health and Human Performance	3
ESS 5356	Applied Statistics in Health and Human Performance	3
<b>Prescribed Electives</b>		
Choose 3 hours from the following:		3
ESS 5306	Advanced Exercise Physiology	
ESS 5310	Cardiopulmonary Exercise Physiology	
ESS 5311	Applied Neuromuscular and Skeletal Muscle Physiology	
Choose 12 hours from the following:		12
ESS 5110	Research Seminar (May be repeated twice)	
ESS 5305	Advanced Fitness Assessment and Exercise Prescription	
ESS 5306	Advanced Exercise Physiology	
ESS 5307	Advanced Resistance Training and Conditioning	
ESS 5308	Physical Activity, Disease Prevention and Treatment	
ESS 5310	Cardiopulmonary Exercise Physiology	
ESS 5311	Applied Neuromuscular and Skeletal Muscle Physiology	
ESS 5312	Applied Exercise Metabolism	
ESS 5322	Inclusion and Diversity in Physical Activity and Sport	
ESS 5327	Application of Strength and Conditioning Principles	
ESS 5328	Principles of Endurance Training	
ESS 5344	The Science of Teaching in Health and Human Performance	

ESS 5347	Independent Study in Exercise Science	
ESS 5353	Curriculum Design, Implementation and Evaluation in Diverse Physical Activity Settings	
ESS 5354	Developmental Sports Education: Youth Participants	
ESS 5355	Developmental Sports Education: High-Level Athletes and Coaching Effectiveness	
ESS 5398	Internship in Exercise and Sports Science	
or ESS 5698	Internship in Exercise and Sports Science	
Choose 3 hours from the following:		3
AT 5310		
AT 5311		
BIO 5441	Cellular Physiology	
NUTR 5302G	Pediatric Obesity	
NUTR 5364	The Science of Nutrition and Exercise	
NUTR 5366	Macronutrient Metabolism	
PH 5321	Advanced Health Behavior Theory	
PHIL 5322	Professional Ethics	
PHIL 5326	Philosophy and Sport	
PHIL 5327	Medical Ethics and Bio-ethics	
PSY 5335	Foundations of Health Psychology	
<b>Thesis</b>		
ESS 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
ESS 5199B	Thesis	
ESS 5299B	Thesis	
ESS 5399B	Thesis	
ESS 5599B	Thesis	
ESS 5999B	Thesis	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The comprehensive take-home exam is an independent, individual assignment where students will apply scholarly principles from at least two sub-disciplines within Exercise Science for practical use. The final product should demonstrate the student's mastery of content in two sub-disciplines and inform practitioners or organizations regarding the efficacy of a set of strategies, lessons, or a program. Examples include creating an innovative program related to exercise and sports science (e.g., training or fitness program, rehabilitation program), creating a series of teaching lessons for a specific group of students, conducting a program evaluation, creating a website to inform practitioners on a topic related to exercise and sports science, or writing a paper that incorporates practical recommendations based on literature in the field. The oral defense could consist of a question and answer session or a concise presentation followed by questions. If the final product and/or oral defense does not meet requirements, graduation may be delayed until the appropriate work is completed.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with

the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being

made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Health and Human Performance: ESS

# Courses Offered

## Exercise Science Specialization (ESS)

### ESS 5101. Graduate Assistant Development.

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### ESS 5110. Research Seminar.

The focus of this course engages students in research and professional development in Exercise and Sports Science. This seminar will allow students to gain exposure to a variety of scholarly activities in an interdisciplinary setting.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### ESS 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### ESS 5201. Graduate Assistant Development.

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### ESS 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### ESS 5304. Motor Learning and Performance.

This course is designed to provide students the foundation for understanding the principles involved in enhancing motor skill acquisition, and physiological, neurological, and psychological factors affecting motor learning and performance. Inquiry is made into the various motor learning theories and concepts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ESS 5305. Advanced Fitness Assessment and Exercise Prescription.

This course provides an intensive study of current scientifically based exercise testing and prescription procedures. Students will learn how to evaluate fitness and prescribe exercise through laboratory experiences.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

### ESS 5306. Advanced Exercise Physiology.

This advanced course will provide students with a thorough understanding of the acute responses to exercise and the physiological adaptations that occur in response to exercise training. Additional topics to be covered include environmental influences, aging, and sex differences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ESS 5307. Advanced Resistance Training and Conditioning.

This course will include the development, instruction, and evaluation of resistance training exercises and programs for diverse populations and settings. Physiological and mechanical principles related to resistance training will be applied to study human performance, injury prevention, and rehabilitation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ESS 5308. Physical Activity, Disease Prevention and Treatment.

This course will provide students with opportunities to examine the role of physical inactivity in the development of chronic diseases and the benefits of activity in prevention efforts. A special emphasis will be placed on activity assessment and intervention research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ESS 5309. Biomechanics for Exercise & Sports Science.

Review of current research and research techniques in the biomechanics of exercise and sport science. Students will develop skills in reviewing, planning, and conducting biomechanical research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ESS 5310. Cardiopulmonary Exercise Physiology.

The course will provide students with a thorough understanding of the structure, function, neural mechanisms, and integrated responses of the human cardiopulmonary system to acute and chronic exercise. In addition, basic cardiopulmonary pathology, pharmacology, and electrocardiography will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ESS 5311. Applied Neuromuscular and Skeletal Muscle Physiology.**

The course will provide students with a thorough understanding of the structure and function of neuromuscular and skeletal muscle physiology. This course will examine mechanisms that regulate skeletal muscle force production and human performance in response to acute and chronic exercise. In addition, advanced laboratory techniques will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5312. Applied Exercise Metabolism.**

This course will provide students a thorough understanding of exercise metabolism. Students will develop advanced knowledge of the influence of various environmental and physiological factors on metabolism during exercise and the impact on physical performance and recovery. Students will also examine the relationships between metabolic factors and chronic diseases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5313. Proprioception and Neuromuscular Control in Rehabilitation.**

This course provides for an advanced study of the concepts, theories, and current research related to proprioception and neuromuscular control as applied to the prevention, diagnosis, and clinical management of sport-related musculoskeletal injuries, neuromuscular disease, and concussions. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5314. Biomechanics of Musculoskeletal Injury.**

This course focuses on the application of biomechanical principles to the pathoetiology, diagnosis, and physiological capacity for healing of injuries to bone, ligament, tendon, cartilage, and other human tissues, with an emphasis on current injury research. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5317. Exercise Physiology.**

This leveling course provides an overview of the acute and chronic physiological responses to exercise. Emphasis is on muscle bioenergetics, muscle contractile properties, optimizing human performance through training and supplementation, as well as cardiopulmonary and endocrine responses to exercise. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent. Corequisite: ESS 5117.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5320. Biomechanics.**

This leveling course provides an introduction to the mechanical foundations of anatomical function and human movement. Qualitative and quantitative biomechanical analyses of human movement are introduced to inform the prescription of technique, equipment, and training interventions. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5322. Inclusion and Diversity in Physical Activity and Sport.**

This course is designed to prepare physical activity and sport educators with knowledge, skills, and strategies to create inclusive learning environments. Culturally responsive teaching strategies that best accommodate the individual needs of children, adolescents, and adults, with diverse ethnic, racial, cultural, socio-economic, physical, and cognitive needs will be emphasized. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ESS 5327. Application of Strength and Conditioning Principles.**

Strength and conditioning programming techniques will be the focus, including appropriate assessment and exercise prescription for improved sport performance and injury prevention. This course will include both classroom instruction and hands-on experience utilizing advanced technologies and traditional and non-traditional equipment in the field of strength and conditioning. This course will also cover methods of evaluating athletic abilities to monitor progress of training that will guide exercise prescription. Prerequisite: ESS 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5328. Principles of Endurance Training.**

This course explores and critiques both established and novel exercise testing and training practices for athletes competing in endurance sports. Emphasis is on demonstrating an ability to develop testing and training procedures using evidence-based methods for endurance athletes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5329. Motor Learning.**

This leveling course provides students with an understanding of the physiological, neurological, and psychological factors affecting performance and acquisition of motor skills. Students will examine the structural components underlying the learning of motor skills and draw upon examples from sport, physical activities, and rehabilitation. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5344. The Science of Teaching in Health and Human Performance.**

This course is designed to enhance instructional skills for professionals working in educational, sport, clinical, and community settings. Students incorporate evidence-based instructional practices and assess teaching using systematic, reliable, and valid measures. Students will be able to apply course concepts to implement effective instruction in diverse venues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5346. Research Methods in Health and Human Performance.**

A study of research methods related to techniques for searching the professional research literature, understanding, planning, and conducting professional research projects, as well as development of skills for writing research proposals related to human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5347. Independent Study in Exercise Science.**

The course allows students to receive individualized instruction while working on a professional project with a supervising faculty member. This course will require students to enhance their writing, research, teaching, and/or presentation skills. Repeatable once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5353. Curriculum Design, Implementation and Evaluation in Diverse Physical Activity Settings.**

This course is designed to explore evidence-based curricula across Exercise and Sport Science settings including, but not limited to clinical, strength and conditioning, community physical activity, and sports. Students will gain knowledge and understanding about the curriculum design process and program evaluation using current theory to practice models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5354. Developmental Sports Education: Youth Participants.**

This course is designed to provide sport educators with theory, research, and application strategies to implement developmentally appropriate sports programs for youth participants. Social, psychological, pedagogical, philosophical, and physical variables impacting youth in sport are examined. Emphasis is placed on promoting positive youth development by applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5355. Developmental Sports Education: High-Level Athletes and Coaching Effectiveness.**

This course is designed to provide sport educators with theory, research, and practical strategies to implement developmentally appropriate sports programs for high-level athletes. Psychological, social, and physical aspects related to athletes' success and well-being are examined. Research on coaching effectiveness is also explored with emphasis on applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5356. Applied Statistics in Health and Human Performance.**

A study of quantitative statistical methods for planning and conducting experimental and correlational research, as well as techniques for statistical data analysis and interpretation applicable to health and human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5357. Water Safety Instruction for Service Learning.**

This course is designed for students to obtain the Red Cross Water Safety Instruction (WSI) certification, and learn how to teach using a Mastery Motivational Climate/TARGET approach. More than half of the semester will involve providing swim lessons to students grades K-6 from a San Marcos school. Students must be able to perform the following skills: front crawl, back crawl, breaststroke, elementary backstroke and sidestroke for 25 yards; butterfly for 15 yards; back float and tread water for 1 minute. Students with a current WSI certification will be exempt from the required WSI lab at the beginning of the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5398. Internship in Exercise and Sports Science.**

This 240-hour internship provides students with work-related experience with children, adults, older individuals, or athletes in exercise settings. Students are provided an opportunity to prescribe and supervise age- and fitness-appropriate exercise programs and perform exercise tests. Prerequisite: ESS 5306 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis course credit is awarded until the student has completed the entire thesis required in ESS 5399B. Prerequisites: ESS 5346 and ESS 5356 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5698. Internship in Exercise and Sports Science.**

This full-time internship provides students with a minimum of 480 hours of field experience. Students will work with children, adults, older individuals, or athletes in exercise or health care settings, and prescribe and supervise age and fitness appropriate exercise programs and perform comprehensive health-related assessments.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Program Overview**

The Master of Science (M.S.) degree with a major in Public Health Education and Promotion prepares students for advanced careers in community and public health education settings in one of the fastest growing career sectors in the U.S. Graduates can pursue employment in public health departments, state and federal health agencies, nonprofit organizations, and other community health organizations working in areas including disease prevention, substance abuse prevention, adolescent health, and many other areas. Students are prepared to sit for the Certified Health Education Specialist exam offered by the National Commission for Health Education Credentialing, Inc.

**Application Requirements**

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcript from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- statement of purpose (500 words, double-spaced, computer-generated) addressing the following:
  - Why public health education and promotion is an interest area for the applicant
  - How will the applicant use a graduate degree in Public Health Education and Promotion to reach career goals
- Three letters of recommendation from persons best able to assess the student's ability to succeed in graduate school
- Resume

Applicants should refer to the Graduate College website for additional information regarding the admission process.

**Approved English Proficiency Exam Scores**

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

**Degree Requirements**

The Master of Science (M.S.) degree with a major in Public Health Education and Promotion requires 30 semester credit hours.

**Course Requirements**

Code	Title	Hours
<b>Required Courses</b>		<b>15</b>
PH 5315	Applied Behavioral Statistics in Public Health	
PH 5320	Foundations of Public Health	
PH 5321	Advanced Health Behavior Theory	
PH 5346	Public Health Research and Population Surveillance	
PH 5350	Advanced Public Health Program Planning and Evaluation	
<b>Prescribed Public Health Electives</b>		<b>12</b>

Choose 12 hours from the following:

PH 5301	Environmental Health Issues
PH 5302	Current Issues in Public Health
PH 5303	Social Determinants of Health
PH 5305	Grant Proposal Writing in Public Health
PH 5310	History and Philosophy of Public Health Education and Promotion
PH 5312	Writing for Public Health Professionals
PH 5325	Ethical Principles in Public Health
PH 5331	Health Disparities
PH 5335	Public Health Leadership
PH 5345	Public Health Issues in Human Sexuality
PH 5347	Independent Study in Public Health
PH 5348	Disease Prevention and Health Promotion
PH 5360	Internship in Public Health
PH 5370	Applied Epidemiology
PH 5374	Global Public Health
PH 5376	Health Promotion in the Workplace

**Prescribed Electives****3**

Choose 3 hours from the following:

COMM 5318	Interpersonal Communication
COMM 5319	Organizational Communication
COMM 5325	Seminar in Human Communication Theory
COMM 5333	Health Communication
ESS 5308	Physical Activity, Disease Prevention and Treatment
ESS 5344	The Science of Teaching in Health and Human Performance
HA 5300	Healthcare Organization and Delivery
HA 5321	Healthcare Law and Policy
HA 5362	Healthcare Organizational Behavior, Theory, and Leadership
PH 5301	Environmental Health Issues
PH 5302	Current Issues in Public Health
PH 5303	Social Determinants of Health
PH 5305	Grant Proposal Writing in Public Health
PH 5310	History and Philosophy of Public Health Education and Promotion
PH 5312	Writing for Public Health Professionals
PH 5325	Ethical Principles in Public Health
PH 5330A	
PH 5335	Public Health Leadership
PH 5345	Public Health Issues in Human Sexuality
PH 5347	Independent Study in Public Health
PH 5348	Disease Prevention and Health Promotion
PH 5360	Internship in Public Health
PH 5370	Applied Epidemiology
PH 5374	Global Public Health
PH 5376	Health Promotion in the Workplace
PSY 5335	Foundations of Health Psychology
REC 5310	Philosophical Foundations of Recreation and Sport Management
REC 5340	Social Psychology of Recreation and Sport

REC 5350 Legal and Ethical Issues in Recreation and Sport Management

SOCI 5350 Seminar on the Sociology of Gender

SOCI 5353 Seminar in the Community

SOCI 5357 Gender and Aging in Society

SOCI 5359 Seminar in Drugs and Society

SOCI 5361 Aging and Dementia: Racial and Ethnic Minorities

SOCI 5362 Rural Aging and Dementia

SOCI 5363 Seminar in Medical Sociology

SOCI 5388F Seminar in Poverty

SOCI 5388G Seminar in Food and Society

**Total Hours****30**

## Comprehensive Examination Requirement

All students must complete a comprehensive examination during their last semester in the program. Students may choose to complete a written comprehensive examination or an oral comprehensive examination. The examination will cover content explored in the core PH courses in the major. Students must satisfactorily pass the comprehensive examination during their last semester in the program. If a student does not pass the examination, the student must retake the comprehensive examination during the next regular semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Public Health: PH

## Courses Offered

### Public Health (PH)

#### PH 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### PH 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### PH 5301. Environmental Health Issues.

This course is an examination of the ecological impact on the environment resulting from contemporary sociopolitical action and its resulting influence on human health. Students will be guided to research and interpret evidence-based information on major current environmental issues facing local, national, and global communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5302. Current Issues in Public Health.**

This course will investigate the contemporary issues impacting public health on the local and national levels. Particular attention will be paid to the goals and objectives of the U.S. Healthy People Initiative and the ten essential public health services. Topics will focus on emerging trends in morbidity and mortality as identified by public health governing institutions, while exploring historical and current perspectives on public health practice. Students will examine the impact of current issues on the roles and responsibilities of the Certified Health Education Specialist.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5303. Social Determinants of Health.**

This course explores the social ecological conditions which impact health and quality of life among various communities. Public health impact of socioeconomic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context will be analyzed. The link between social determinants and the U.S. Healthy People Initiative will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5305. Grant Proposal Writing in Public Health.**

This course provides the fundamentals of writing grant proposals in the social sciences. Instruction covers how to package a successful proposal from start to finish, including defining program objectives, selecting approaches and a plan, and preparing a program evaluation and budget.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5310. History and Philosophy of Public Health Education and Promotion.**

This course is an intensive study of historical and philosophical contributions to public health education and promotion program development. Current political issues, public health issues, and influential cultural changes are examined. Focus is placed on developing a professional philosophy of practice in public health education and promotion practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5312. Writing for Public Health Professionals.**

This course provides a systematic approach to improve technical and professional writing skills. Specifically, theory-based methods for establishing a productive writing habit, generating and editing text, and self-identifying and self-correcting writing problems are presented. Writing for and application of public health research are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5315. Applied Behavioral Statistics in Public Health.**

This course focuses on the study of introductory and intermediate statistics and procedures commonly used in public health practice and research. Emphasis will be placed on application of statistical models, analysis software, and interpretation of findings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5320. Foundations of Public Health.**

This course is an in-depth study of past and current public health programs. The course focuses on the examination of public health programs, policies, and systems that have impacted health status in different populations. A collection of current case-studies will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5321. Advanced Health Behavior Theory.**

This course focuses on the presentation and critical analysis of the role of theory in health behavior, the description of different theories being utilized in health research and interventions, and the application of these theories to interventions and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5325. Ethical Principles in Public Health.**

This course provides an in-depth analysis of ethical standards, principles, and behaviors related to the field of public health. Students will explore how to apply, monitor, and model ethical standards in the profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5331. Health Disparities.**

This course explores social determinants of health and health disparities in the U.S. and globally. Students explore past and existing public health initiatives to address health disparities in various U.S. and global communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5335. Public Health Leadership.**

This course covers structured experiences for developing administrative leadership for public health programs. Included are leadership philosophy, staffing, programming, budgeting, public relations, facilities, and evaluations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**PH 5345. Public Health Issues in Human Sexuality.**

This course provides for an in-depth study of human sexuality as a lifelong process of acquiring information and forming healthy attitudes, beliefs, values, and practices regarding sexuality. Students analyze information and resources for implementing and advocating for quality inclusive instruction, policies, and evidence based approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5346. Public Health Research and Population Surveillance.**

This course focuses on research models used in public health and population surveillance. Students learn how to design data collection strategies for research and program evaluation in the social and behavioral sciences and public health initiatives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5347. Independent Study in Public Health.**

This course allows for independent study of one or more problems in public health that hold special interest for a student or offers opportunity for professional improvement and growth. Open on an individual basis by special arrangement with the Program Coordinator. Repeatable once with a different emphasis. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PH 5348. Disease Prevention and Health Promotion.**

This course provides an overview of the etiology of communicable and noncommunicable diseases with special emphasis on public health initiatives and health promotion activities which reduce the incidence and burdens of disease in both individuals and communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5350. Advanced Public Health Program Planning and Evaluation.**

Students examine social ecological influences on population health in the context of public health program development. Students explore the use of epidemiological data to assist in developing health education and health promotion programs. Concepts include needs assessment, strategy selection, coalition development, implementation plans, and evaluation approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5360. Internship in Public Health.**

This 200-hour internship provides students with professionally related experience. Students may work with diverse target audiences in public health settings. The internship is approved and supervised by a Program Coordinator or assigned faculty. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PH 5370. Applied Epidemiology.**

Applied epidemiology is the science of tracking diseases and disease determinants in populations. Students will explore principles of epidemiology and biostatistics, as well as methods of disease and behavior surveillance. This course highlights the use of surveillance data to develop public health interventions and prevention programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5374. Global Public Health.**

This advanced course focuses on principles of international health with global populations. Emphasis is placed on assessing, planning, implementing, and evaluating prevention strategies. Students explore roles of health educators collaborating with providers of health services to diverse populations. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5376. Health Promotion in the Workplace.**

In this course, students will learn the standard approaches of developing and implementing evidence-based workplace health promotion programs. The course will focus on practical methods for needs assessment, intervention development, and program evaluation in various workplace settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in PH 5399B. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PH 5660. Internship in Public Health.**

This course requires students to complete a 400-hour internship to gain professional experiences. Students may work with diverse target audiences in public health settings. The internship is approved and supervised by a Program Coordinator or assigned faculty. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Program Overview**

The Master of Science (M.S.) degree with a major in Public Health Education and Promotion prepares students for advanced careers in community and public health education settings in one of the fastest growing career sectors in the U.S. Graduates can pursue employment in public health departments, state and federal health agencies, nonprofit organizations, and other community health organizations working in areas including disease prevention, substance abuse prevention, adolescent health, and many other areas. Students are prepared to sit for the Certified Health Education Specialist exam offered by the National Commission for Health Education Credentialing, Inc.

**Application Requirements**

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcript from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- Statement of purpose (500 words, double-spaced, computer-generated) addressing the following:

- Why public health education and promotion is an interest area for the applicant
- How will the applicant use a graduate degree in Public Health Education and Promotion to reach career goals
- Three letters of recommendation from persons best able to assess the student's ability to succeed in graduate school
- Resume

**Approved English Proficiency Exam Scores**

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

**Degree Requirements**

The Master of Science (M.S.) degree with a major in Public Health Education and Promotion requires 30 semester credit hours, including a thesis.

**Course Requirements**

Code	Title	Hours
<b>Required Courses</b>		<b>15</b>
PH 5315	Applied Behavioral Statistics in Public Health	
PH 5320	Foundations of Public Health	
PH 5321	Advanced Health Behavior Theory	
PH 5346	Public Health Research and Population Surveillance	
PH 5350	Advanced Public Health Program Planning and Evaluation	
<b>Prescribed Public Health Electives</b>		<b>6</b>
Choose 6 hours from the following:		
PH 5301	Environmental Health Issues	
PH 5302	Current Issues in Public Health	
PH 5303	Social Determinants of Health	
PH 5305	Grant Proposal Writing in Public Health	
PH 5310	History and Philosophy of Public Health Education and Promotion	
PH 5312	Writing for Public Health Professionals	
PH 5325	Ethical Principles in Public Health	
PH 5331	Health Disparities	
PH 5335	Public Health Leadership	
PH 5345	Public Health Issues in Human Sexuality	
PH 5347	Independent Study in Public Health	
PH 5348	Disease Prevention and Health Promotion	
PH 5360	Internship in Public Health	

PH 5370	Applied Epidemiology
PH 5374	Global Public Health
PH 5376	Health Promotion in the Workplace

**Prescribed Electives 3**

Choose 3 hours from the following:

COMM 5318	Interpersonal Communication
COMM 5319	Organizational Communication
COMM 5325	Seminar in Human Communication Theory
COMM 5333	Health Communication
ESS 5308	Physical Activity, Disease Prevention and Treatment
ESS 5344	The Science of Teaching in Health and Human Performance
HA 5300	Healthcare Organization and Delivery
HA 5321	Healthcare Law and Policy
HA 5362	Healthcare Organizational Behavior, Theory, and Leadership
PH 5301	Environmental Health Issues
PH 5302	Current Issues in Public Health
PH 5303	Social Determinants of Health
PH 5305	Grant Proposal Writing in Public Health
PH 5310	History and Philosophy of Public Health Education and Promotion
PH 5312	Writing for Public Health Professionals
PH 5325	Ethical Principles in Public Health
PH 5331	Health Disparities
PH 5335	Public Health Leadership
PH 5345	Public Health Issues in Human Sexuality
PH 5347	Independent Study in Public Health
PH 5348	Disease Prevention and Health Promotion
PH 5360	Internship in Public Health
PH 5370	Applied Epidemiology
PH 5374	Global Public Health
PH 5376	Health Promotion in the Workplace
PSY 5335	Foundations of Health Psychology
REC 5310	Philosophical Foundations of Recreation and Sport Management
REC 5340	Social Psychology of Recreation and Sport
REC 5350	Legal and Ethical Issues in Recreation and Sport Management
SOCI 5350	Seminar on the Sociology of Gender
SOCI 5353	Seminar in the Community
SOCI 5357	Gender and Aging in Society
SOCI 5359	Seminar in Drugs and Society
SOCI 5361	Aging and Dementia: Racial and Ethnic Minorities
SOCI 5362	Rural Aging and Dementia
SOCI 5363	Seminar in Medical Sociology
SOCI 5388F	Seminar in Poverty
SOCI 5388G	Seminar in Food and Society

**Thesis**

PH 5399A	Thesis	3
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Choose a minimum of 3 hours from the following: 3

PH 5199B	Thesis
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PH 5299B	Thesis
PH 5399B	Thesis
PH 5599B	Thesis
PH 5999B	Thesis

**Total Hours 30**

## Comprehensive Examination Requirement

All students must complete a comprehensive examination during their last semester in the program. Students may choose to complete a written comprehensive examination or an oral comprehensive examination. The examination will cover content explored in the core PH courses in the major. Students must satisfactorily pass the comprehensive examination during their last semester in the program. If a student does not pass the examination, the student must retake the comprehensive examination during the next regular semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate

College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Public Health: PH

## Courses Offered Public Health (PH)

### PH 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### PH 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### PH 5301. Environmental Health Issues.

This course is an examination of the ecological impact on the environment resulting from contemporary sociopolitical action and its resulting influence on human health. Students will be guided to research and interpret evidence-based information on major current environmental issues facing local, national, and global communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5302. Current Issues in Public Health.**

This course will investigate the contemporary issues impacting public health on the local and national levels. Particular attention will be paid to the goals and objectives of the U.S. Healthy People Initiative and the ten essential public health services. Topics will focus on emerging trends in morbidity and mortality as identified by public health governing institutions, while exploring historical and current perspectives on public health practice. Students will examine the impact of current issues on the roles and responsibilities of the Certified Health Education Specialist.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5303. Social Determinants of Health.**

This course explores the social ecological conditions which impact health and quality of life among various communities. Public health impact of socioeconomic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context will be analyzed. The link between social determinants and the U.S. Healthy People Initiative will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5305. Grant Proposal Writing in Public Health.**

This course provides the fundamentals of writing grant proposals in the social sciences. Instruction covers how to package a successful proposal from start to finish, including defining program objectives, selecting approaches and a plan, and preparing a program evaluation and budget.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5310. History and Philosophy of Public Health Education and Promotion.**

This course is an intensive study of historical and philosophical contributions to public health education and promotion program development. Current political issues, public health issues, and influential cultural changes are examined. Focus is placed on developing a professional philosophy of practice in public health education and promotion practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5312. Writing for Public Health Professionals.**

This course provides a systematic approach to improve technical and professional writing skills. Specifically, theory-based methods for establishing a productive writing habit, generating and editing text, and self-identifying and self-correcting writing problems are presented. Writing for and application of public health research are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5315. Applied Behavioral Statistics in Public Health.**

This course focuses on the study of introductory and intermediate statistics and procedures commonly used in public health practice and research. Emphasis will be placed on application of statistical models, analysis software, and interpretation of findings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5320. Foundations of Public Health.**

This course is an in-depth study of past and current public health programs. The course focuses on the examination of public health programs, policies, and systems that have impacted health status in different populations. A collection of current case-studies will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5321. Advanced Health Behavior Theory.**

This course focuses on the presentation and critical analysis of the role of theory in health behavior, the description of different theories being utilized in health research and interventions, and the application of these theories to interventions and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5325. Ethical Principles in Public Health.**

This course provides an in-depth analysis of ethical standards, principles, and behaviors related to the field of public health. Students will explore how to apply, monitor, and model ethical standards in the profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5331. Health Disparities.**

This course explores social determinants of health and health disparities in the U.S. and globally. Students explore past and existing public health initiatives to address health disparities in various U.S. and global communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5335. Public Health Leadership.**

This course covers structured experiences for developing administrative leadership for public health programs. Included are leadership philosophy, staffing, programming, budgeting, public relations, facilities, and evaluations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**PH 5345. Public Health Issues in Human Sexuality.**

This course provides for an in-depth study of human sexuality as a lifelong process of acquiring information and forming healthy attitudes, beliefs, values, and practices regarding sexuality. Students analyze information and resources for implementing and advocating for quality inclusive instruction, policies, and evidence based approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5346. Public Health Research and Population Surveillance.**

This course focuses on research models used in public health and population surveillance. Students learn how to design data collection strategies for research and program evaluation in the social and behavioral sciences and public health initiatives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5347. Independent Study in Public Health.**

This course allows for independent study of one or more problems in public health that hold special interest for a student or offers opportunity for professional improvement and growth. Open on an individual basis by special arrangement with the Program Coordinator. Repeatable once with a different emphasis. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PH 5348. Disease Prevention and Health Promotion.**

This course provides an overview of the etiology of communicable and noncommunicable diseases with special emphasis on public health initiatives and health promotion activities which reduce the incidence and burdens of disease in both individuals and communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5350. Advanced Public Health Program Planning and Evaluation.**

Students examine social ecological influences on population health in the context of public health program development. Students explore the use of epidemiological data to assist in developing health education and health promotion programs. Concepts include needs assessment, strategy selection, coalition development, implementation plans, and evaluation approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5360. Internship in Public Health.**

This 200-hour internship provides students with professionally related experience. Students may work with diverse target audiences in public health settings. The internship is approved and supervised by a Program Coordinator or assigned faculty. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PH 5370. Applied Epidemiology.**

Applied epidemiology is the science of tracking diseases and disease determinants in populations. Students will explore principles of epidemiology and biostatistics, as well as methods of disease and behavior surveillance. This course highlights the use of surveillance data to develop public health interventions and prevention programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5374. Global Public Health.**

This advanced course focuses on principles of international health with global populations. Emphasis is placed on assessing, planning, implementing, and evaluating prevention strategies. Students explore roles of health educators collaborating with providers of health services to diverse populations. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5376. Health Promotion in the Workplace.**

In this course, students will learn the standard approaches of developing and implementing evidence-based workplace health promotion programs. The course will focus on practical methods for needs assessment, intervention development, and program evaluation in various workplace settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in PH 5399B. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PH 5660. Internship in Public Health.**

This course requires students to complete a 400-hour internship to gain professional experiences. Students may work with diverse target audiences in public health settings. The internship is approved and supervised by a Program Coordinator or assigned faculty. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science in Recreation and Leisure Services (M.S.R.L.S.) degree with a major in Recreation Management is designed to prepare administrators, supervisors, educators, consultants, and researchers to assist people toward richer lives through leisure experiences. Recreation Management encompasses the administration and supervision of recreation and leisure services. Recreational professionals seeking course work for certification as Certified Park & Recreation Professional would enroll in this option.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose (maximum 500 words) detailing the following:
  - experiences leading to graduate studies in recreation management

- qualities, values, characteristics of the student that will help him/her meet the academic rigors of graduate education
- career goals relating to obtaining a master's degree

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Science in Recreation and Leisure Services (M.S.R.L.S.) degree with a major in Recreation and Sport Management requires 36 semester credit hours.

## Course Requirement

Code	Title	Hours
<b>Required Courses</b>		
REC 5310	Philosophical Foundations of Recreation and Sport Management	3
REC 5330	Organizational Leadership in Recreation and Sport Management	3
REC 5340	Social Psychology of Recreation and Sport	3
REC 5346	Literature and Research in Recreation and Sport Management	3
REC 5350	Legal and Ethical Issues in Recreation and Sport Management	3
REC 5360	Financial Management in Recreation and Sport Management	3
REC 5380	Organizational Planning in Recreation and Sport Management	3
REC 5382	Facility Management in Recreation and Sport Services	3
REC 5337	Independent Study in Recreation and Sport Management	3
or REC 5318	Selected Topics in Recreation and Leisure Services	
or REC 5372	Technology-Mediated Places of Leisure: Aspirations towards a life of leisure	
or REC 5373	Innovative Technology Solutions and Applications in Recreation and Leisure	
or REC 5381	Outdoor Program Leadership and Administration	

### Prescribed Electives

Choose 9 hours from the following (other courses may approved by your advisor):		9
REC 5318	Selected Topics in Recreation and Leisure Services	
REC 5372	Technology-Mediated Places of Leisure: Aspirations towards a life of leisure	

REC 5373	Innovative Technology Solutions and Applications in Recreation and Leisure
REC 5381	Outdoor Program Leadership and Administration
COMM 5318	Interpersonal Communication
COMM 5319	Organizational Communication
COMM 5329B	Communication and Negotiation
EDCL 5339	Understanding Self: Developing a Personal Vision of Leadership
EDCL 5345	Understanding People: Professional Development
GEO 5312	Managing Urbanization
GEO 5319	Seminar in Nature and Heritage Tourism
GEO 5339	The Geography of Land Management
MC 5308	Seminar in Strategic Communication
MC 5317	Advanced Digital Media
MGT 5314	Organizational Behavior and Theory
PA 5310	Public Finance Administration
PA 5320	Organizational Theory, Change, and Behavior
SOCI 5370	Seminar in Sociology of Racial and Ethnic Relations

**Total Hours** **36**

## Comprehensive Examination Requirement

Students are required to take a written comprehensive examination in their last semester of the program. Students must pass the comprehensive exam in at most two attempts. If the student fails to pass the comprehensive exam in two attempts, the student will retake the comprehensive exam during the next long semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Health and Human Performance: REC

## Courses Offered

### Recreation (REC)

#### REC 5199B. Thesis.

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### REC 5299B. Thesis.

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### REC 5310. Philosophical Foundations of Recreation and Sport Management.

This course introduces and explores the meanings of recreation, sport, and leisure behaviors and services from historical, philosophical, sociological, and political perspectives. Students will develop a philosophical view of recreation and sport based on exploration of the history as well as consideration of the nature of the individual and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### REC 5318P. Inclusive Recreation for Individuals with Disabilities.

This course engages students to understand the meaning of social inclusion as it pertains to people with disabilities, along with current trends and best practices related to inclusive sport and recreation services for people with disabilities. Course content will prepare students to enhance inclusive service delivery in a variety of settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

### REC 5318Q. Evaluation of Recreation and Sport Programs.

This course will focus on practical applications of program evaluation techniques. Directed readings will cover the history of evaluation as well as methods and approaches designed for different customers, locations and program types. Prerequisite: REC 5380 with a grade of "C" or better or instructor permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

### REC 5321. Issues and Trends in Recreational Therapy.

This is a seminar-style course during which students investigate current trends related to the provision of recreational therapy services, research, education, and professional advocacy. Prerequisite: REC 5328 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### REC 5325. Philosophical Foundations of Recreational Therapy.

This course examines the history, theory, and philosophy of therapeutic recreation such as service models, standards, and legislation. The use of recreational therapy in supporting the attainment and maintenance of well-being of people with differing characteristics and abilities is explored. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5326. Recreational Therapy Planning and Implementation.**

This course provides an advanced examination of the recreational therapy process with a focus on planning and implementation of individualized services and supports for persons with disabling conditions. Students will analyze interventions, modalities, instruction, leadership, supervision, and leisure counseling techniques in relation to program planning and implementation. Prerequisite: REC 5327 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5327. Assessment, Evaluation, and Documentation in Recreational Therapy.**

This course provides an in-depth examination of the assessment and documentation phases used in recreational therapy. Students will select, administer, score, interpret, and report standardized and specialized assessment instruments and documentation methods. Corequisite: REC 5325 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5328. Advanced Principles of Recreational Therapy.**

This course provides an in-depth examination of the principles of organizing, funding, and managing recreational therapy services within a variety of settings. Topics include analysis of professional credentialing, policies, standards of practice, ethical behavior, and regulatory guidelines as they relate to recreational therapy are applied to advancing the profession. Prerequisite: REC 5327 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5329. Evidence-based Practice in Recreational Therapy.**

This course explores the application of research evidence to the planning and delivery of recreational therapy within a variety of service settings. The emphasis is on locating, critically appraising, analyzing, and producing evidence related to treatment modalities and techniques for recreational therapy practice. In addition, the course will apply evidence-based practice in relation to therapeutic facilitation techniques and interventions. Prerequisite: REC 5328 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5330. Organizational Leadership in Recreation and Sport Management.**

This course provides an exploration of management issues related to the role of the leader as a conduit for effectiveness in recreation and sport management service agencies. Content will include practices associated with managing human resources such as hiring, supervising, evaluating, and compensating. Content will include examination of federal and state laws impacting employment and the manager's role in operationalizing both legislative mandates and agency policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5337. Independent Study in Recreation and Sport Management.**

This course includes individual study related to recreational administration or sport management under direct supervision of a faculty member. May be repeated for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**REC 5338. Internship in Recreational Therapy.**

This course provides students the opportunity to complete an intensive, on-site internship under the supervision of a nationally Certified Therapeutic Recreation Specialist. Students will complete a minimum of 560 hours and 14 weeks in a recreational therapy setting. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5340. Social Psychology of Recreation and Sport.**

This course provides an introduction and overview of the personal, social and social-psychological contexts of leisure; utilizing current literature the course will focus on examining sport and recreation behavior from psychological, sociological and social-psychological constructs that are contributing to a contemporary, interdisciplinary understanding of the leisure phenomenon.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5346. Literature and Research in Recreation and Sport Management.**

The course provides an analytical investigation of research techniques and steps necessary to address research questions related to professional practice. Students will examine methods of locating and securing research findings and reports and develop the ability to discuss current literature in the field of recreation and sport.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5350. Legal and Ethical Issues in Recreation and Sport Management.**

This course focuses on legal and ethical issues related to recreation and sport management. Tort law, participant rights, accessibility, credentialing, and others are topics to be addressed in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5360. Financial Management in Recreation and Sport Management.**

This course is a study of financial concepts, principles, and techniques as they relate to recreation and sport delivery systems. These include full cost accounting, pricing, financial management, and alternative funding proposals. Prerequisite: REC 5380 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5372. Technology-Mediated Places of Leisure: Aspirations towards a life of leisure.**

This course focuses on the technology-leisure experience interaction, supported by knowledge of layout, design, and functions of homes, cities, and outdoor environments. Students will develop an understanding of how technology is incorporated into the experience of physical spaces and create proposals for technological enhancements appropriate to these varied places of leisure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5373. Innovative Technology Solutions and Applications in Recreation and Leisure.**

This course is a study of operational competence in selected technologies including the development of research skills in user need articulation and technology augmentation. Students will critically investigate technology usage in leisure service delivery. Students will develop the ability to diagram and write for analytical purposes, fieldwork and experiences, and collaborative work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5380. Organizational Planning in Recreation and Sport Management.**

This course provides students with organizational planning and administration tools developed and tested within the recreation and sport industries. Topics may include the exploration of programming and organizational theory, administrative processes, and the application of the organizational principles to the recreation and sport delivery systems. Emphasis will be placed on various planning functions including strategic, evaluation, and marketing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5381. Outdoor Program Leadership and Administration.**

Within the role of leadership and administration, students will become knowledgeable in the theoretical foundations of outdoor programs, adventure programming, and wilderness travel. The history of thought surrounding natural places and outdoor recreation will be examined throughout the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5382. Facility Management in Recreation and Sport Services.**

The course provides an overview of practice of facility management. Explorations will include the role of facility manager, work management functions, and user interaction. In addition, students will investigate concepts of health and safety, accessibility, environment and sustainability, technologies, sourcing, emergency preparedness, and space interrogation. Basics of design drawing literacy and evaluation will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in REC 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5399B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5599B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5999B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science in Recreation and Leisure Services (M.S.R.L.S.) degree with a major in Recreation Management is designed to prepare administrators, supervisors, educators, consultants, and researchers to assist people toward richer lives through leisure experiences. Recreation Management encompasses the administration and supervision of recreation and leisure services. Recreational professionals seeking course work for certification as Certified Park & Recreation Professional (CPRP) would enroll in this option.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered.



Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose (maximum 500 words) detailing the following:
  - experiences leading to graduate studies in recreation management
  - qualities, values, characteristics of the student that will help him/her meet the academic rigors of graduate education
  - career goals relating to obtaining a master's degree

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Science in Recreation and Leisure Services (M.S.R.L.S.) degree with a major in Recreation and Sport Management requires 30 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
REC 5310	Philosophical Foundations of Recreation and Sport Management	3
REC 5340	Social Psychology of Recreation and Sport	3
REC 5346	Literature and Research in Recreation and Sport Management	3
REC 5350	Legal and Ethical Issues in Recreation and Sport Management	3
REC 5360	Financial Management in Recreation and Sport Management	3
<b>Prescribed Electives</b>		
Choose 9 hours from the following: <sup>1</sup>		9
REC 5318	Selected Topics in Recreation and Leisure Services	
REC 5330	Organizational Leadership in Recreation and Sport Management	
REC 5337	Independent Study in Recreation and Sport Management	
REC 5372	Technology-Mediated Places of Leisure: Aspirations towards a life of leisure	

REC 5373	Innovative Technology Solutions and Applications in Recreation and Leisure	
REC 5380	Organizational Planning in Recreation and Sport Management	
REC 5381	Outdoor Program Leadership and Administration	
REC 5382	Facility Management in Recreation and Sport Services	
<b>Thesis</b>		
REC 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
REC 5199B	Thesis	
REC 5299B	Thesis	
REC 5399B	Thesis	
REC 5599B	Thesis	
REC 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> Other electives may be approved by the student's advisor.

## Comprehensive Examination Requirement

Students are required to take a written comprehensive examination in their last semester of the program. Students must pass the comprehensive exam in at most two attempts. If the student fails to pass the comprehensive exam in two attempts, the student will retake the comprehensive exam during the next long semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College

by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.

2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Health and Human Performance: REC

## Courses Offered Recreation (REC)

### REC 5199B. Thesis.

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### REC 5299B. Thesis.

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### REC 5310. Philosophical Foundations of Recreation and Sport Management.

This course introduces and explores the meanings of recreation, sport, and leisure behaviors and services from historical, philosophical, sociological, and political perspectives. Students will develop a philosophical view of recreation and sport based on exploration of the history as well as consideration of the nature of the individual and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5318P. Inclusive Recreation for Individuals with Disabilities.**

This course engages students to understand the meaning of social inclusion as it pertains to people with disabilities, along with current trends and best practices related to inclusive sport and recreation services for people with disabilities. Course content will prepare students to enhance inclusive service delivery in a variety of settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**REC 5318Q. Evaluation of Recreation and Sport Programs.**

This course will focus on practical applications of program evaluation techniques. Directed readings will cover the history of evaluation as well as methods and approaches designed for different customers, locations and program types. Prerequisite: REC 5380 with a grade of "C" or better or instructor permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**REC 5321. Issues and Trends in Recreational Therapy.**

This is a seminar-style course during which students investigate current trends related to the provision of recreational therapy services, research, education, and professional advocacy. Prerequisite: REC 5328 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5325. Philosophical Foundations of Recreational Therapy.**

This course examines the history, theory, and philosophy of therapeutic recreation such as service models, standards, and legislation. The use of recreational therapy in supporting the attainment and maintenance of well-being of people with differing characteristics and abilities is explored. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5326. Recreational Therapy Planning and Implementation.**

This course provides an advanced examination of the recreational therapy process with a focus on planning and implementation of individualized services and supports for persons with disabling conditions. Students will analyze interventions, modalities, instruction, leadership, supervision, and leisure counseling techniques in relation to program planning and implementation. Prerequisite: REC 5327 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5327. Assessment, Evaluation, and Documentation in Recreational Therapy.**

This course provides an in-depth examination of the assessment and documentation phases used in recreational therapy. Students will select, administer, score, interpret, and report standardized and specialized assessment instruments and documentation methods. Corequisite: REC 5325 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5328. Advanced Principles of Recreational Therapy.**

This course provides an in-depth examination of the principles of organizing, funding, and managing recreational therapy services within a variety of settings. Topics include analysis of professional credentialing, policies, standards of practice, ethical behavior, and regulatory guidelines as they relate to recreational therapy are applied to advancing the profession. Prerequisite: REC 5327 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5329. Evidence-based Practice in Recreational Therapy.**

This course explores the application of research evidence to the planning and delivery of recreational therapy within a variety of service settings. The emphasis is on locating, critically appraising, analyzing, and producing evidence related to treatment modalities and techniques for recreational therapy practice. In addition, the course will apply evidence-based practice in relation to therapeutic facilitation techniques and interventions. Prerequisite: REC 5328 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5330. Organizational Leadership in Recreation and Sport Management.**

This course provides an exploration of management issues related to the role of the leader as a conduit for effectiveness in recreation and sport management service agencies. Content will include practices associated with managing human resources such as hiring, supervising, evaluating, and compensating. Content will include examination of federal and state laws impacting employment and the manager's role in operationalizing both legislative mandates and agency policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5337. Independent Study in Recreation and Sport Management.**

This course includes individual study related to recreational administration or sport management under direct supervision of a faculty member. May be repeated for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**REC 5338. Internship in Recreational Therapy.**

This course provides students the opportunity to complete an intensive, on-site internship under the supervision of a nationally Certified Therapeutic Recreation Specialist. Students will complete a minimum of 560 hours and 14 weeks in a recreational therapy setting. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5340. Social Psychology of Recreation and Sport.**

This course provides an introduction and overview of the personal, social and social-psychological contexts of leisure; utilizing current literature the course will focus on examining sport and recreation behavior from psychological, sociological and social-psychological constructs that are contributing to a contemporary, interdisciplinary understanding of the leisure phenomenon.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5346. Literature and Research in Recreation and Sport Management.**

The course provides an analytical investigation of research techniques and steps necessary to address research questions related to professional practice. Students will examine methods of locating and securing research findings and reports and develop the ability to discuss current literature in the field of recreation and sport.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5350. Legal and Ethical Issues in Recreation and Sport Management.**

This course focuses on legal and ethical issues related to recreation and sport management. Tort law, participant rights, accessibility, credentialing, and others are topics to be addressed in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5360. Financial Management in Recreation and Sport Management.**

This course is a study of financial concepts, principles, and techniques as they relate to recreation and sport delivery systems. These include full cost accounting, pricing, financial management, and alternative funding proposals. Prerequisite: REC 5380 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5372. Technology-Mediated Places of Leisure: Aspirations towards a life of leisure.**

This course focuses on the technology-leisure experience interaction, supported by knowledge of layout, design, and functions of homes, cities, and outdoor environments. Students will develop an understanding of how technology is incorporated into the experience of physical spaces and create proposals for technological enhancements appropriate to these varied places of leisure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5373. Innovative Technology Solutions and Applications in Recreation and Leisure.**

This course is a study of operational competence in selected technologies including the development of research skills in user need articulation and technology augmentation. Students will critically investigate technology usage in leisure service delivery. Students will develop the ability to diagram and write for analytical purposes, fieldwork and experiences, and collaborative work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5380. Organizational Planning in Recreation and Sport Management.**

This course provides students with organizational planning and administration tools developed and tested within the recreation and sport industries. Topics may include the exploration of programming and organizational theory, administrative processes, and the application of the organizational principles to the recreation and sport delivery systems. Emphasis will be placed on various planning functions including strategic, evaluation, and marketing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5381. Outdoor Program Leadership and Administration.**

Within the role of leadership and administration, students will become knowledgeable in the theoretical foundations of outdoor programs, adventure programming, and wilderness travel. The history of thought surrounding natural places and outdoor recreation will be examined throughout the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5382. Facility Management in Recreation and Sport Services.**

The course provides an overview of practice of facility management. Explorations will include the role of facility manager, work management functions, and user interaction. In addition, students will investigate concepts of health and safety, accessibility, environment and sustainability, technologies, sourcing, emergency preparedness, and space interrogation. Basics of design drawing literacy and evaluation will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in REC 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5399B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5599B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5999B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science in Recreation and Leisure Services (M.S.R.L.S.) degree with a major in Therapeutic Recreation is designed to prepare administrators, supervisors, educators, consultants, and researchers to assist people toward richer lives through leisure experiences. Therapeutic Recreation focuses on enabling individuals with special needs to experience the same leisure options as able-bodied individuals through the use of recreation as a treatment and education modality. Individuals seeking to become a Certified Therapeutic Recreation Specialist (CTRS) would enroll in this option.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered.

Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background courses required in:
  - Anatomy & Physiology
  - Abnormal Psychology
  - Human Growth and Development Across the Lifespan
- GRE not required
- statement of purpose (maximum 500 words) addressing the following:
  - experiences leading to graduate studies in therapeutic recreation
  - qualities, values, characteristics of the student that will help him/her meet the academic rigors of graduate education
  - career goals relating to obtaining a master's degree

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science in Recreation and Leisure Services (M.S.R.L.S.) degree with a major in Therapeutic Recreation requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
REC 5321	Issues and Trends in Recreational Therapy	3
REC 5325	Philosophical Foundations of Recreational Therapy	3
REC 5326	Recreational Therapy Planning and Implementation	3
REC 5327	Assessment, Evaluation, and Documentation in Recreational Therapy	3
REC 5328	Advanced Principles of Recreational Therapy	3
REC 5329	Evidence-based Practice in Recreational Therapy	3
REC 5338	Internship in Recreational Therapy	3
<b>Recreation Electives</b>		
Choose 9 hours from the following:		9



REC 5310	Philosophical Foundations of Recreation and Sport Management
REC 5318	Selected Topics in Recreation and Leisure Services
REC 5330	Organizational Leadership in Recreation and Sport Management
REC 5337	Independent Study in Recreation and Sport Management
REC 5340	Social Psychology of Recreation and Sport
REC 5346	Literature and Research in Recreation and Sport Management
REC 5350	Legal and Ethical Issues in Recreation and Sport Management
REC 5360	Financial Management in Recreation and Sport Management
REC 5372	Technology-Mediated Places of Leisure: Aspirations towards a life of leisure
REC 5373	Innovative Technology Solutions and Applications in Recreation and Leisure
REC 5380	Organizational Planning in Recreation and Sport Management
REC 5381	Outdoor Program Leadership and Administration
REC 5382	Facility Management in Recreation and Sport Services

**Prescribed Electives**

Choose 6 hours from the following:

6

ESS 5304	Motor Learning and Performance
ESS 5322	Inclusion and Diversity in Physical Activity and Sport
ESS 5354	Developmental Sports Education: Youth Participants
ESS 5356	Applied Statistics in Health and Human Performance
PH 5305	Grant Proposal Writing in Public Health
PH 5315	Applied Behavioral Statistics in Public Health
PH 5321	Advanced Health Behavior Theory
PH 5350	Advanced Public Health Program Planning and Evaluation
PSY 5310	Advanced Psychopathology
SPED 5326	Educating Students with Mild Disabilities
SPED 5327	Educating Students with Autism and Other Developmental Disabilities

**Total Hours****36**

## Comprehensive Examination Requirement

All candidates must pass a comprehensive examination by completing an in-depth case study, typically done as part of the culminating internship affiliation.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with

the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being

made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Health and Human Performance: REC

## Courses Offered

### Recreation (REC)

#### REC 5199B. Thesis.

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### REC 5299B. Thesis.

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### REC 5310. Philosophical Foundations of Recreation and Sport Management.

This course introduces and explores the meanings of recreation, sport, and leisure behaviors and services from historical, philosophical, sociological, and political perspectives. Students will develop a philosophical view of recreation and sport based on exploration of the history as well as consideration of the nature of the individual and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### REC 5318P. Inclusive Recreation for Individuals with Disabilities.

This course engages students to understand the meaning of social inclusion as it pertains to people with disabilities, along with current trends and best practices related to inclusive sport and recreation services for people with disabilities. Course content will prepare students to enhance inclusive service delivery in a variety of settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### REC 5318Q. Evaluation of Recreation and Sport Programs.

This course will focus on practical applications of program evaluation techniques. Directed readings will cover the history of evaluation as well as methods and approaches designed for different customers, locations and program types. Prerequisite: REC 5380 with a grade of "C" or better or instructor permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### REC 5321. Issues and Trends in Recreational Therapy.

This is a seminar-style course during which students investigate current trends related to the provision of recreational therapy services, research, education, and professional advocacy. Prerequisite: REC 5328 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5325. Philosophical Foundations of Recreational Therapy.**

This course examines the history, theory, and philosophy of therapeutic recreation such as service models, standards, and legislation. The use of recreational therapy in supporting the attainment and maintenance of well-being of people with differing characteristics and abilities is explored. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5326. Recreational Therapy Planning and Implementation.**

This course provides an advanced examination of the recreational therapy process with a focus on planning and implementation of individualized services and supports for persons with disabling conditions. Students will analyze interventions, modalities, instruction, leadership, supervision, and leisure counseling techniques in relation to program planning and implementation. Prerequisite: REC 5327 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5327. Assessment, Evaluation, and Documentation in Recreational Therapy.**

This course provides an in-depth examination of the assessment and documentation phases used in recreational therapy. Students will select, administer, score, interpret, and report standardized and specialized assessment instruments and documentation methods. Corequisite: REC 5325 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5328. Advanced Principles of Recreational Therapy.**

This course provides an in-depth examination of the principles of organizing, funding, and managing recreational therapy services within a variety of settings. Topics include analysis of professional credentialing, policies, standards of practice, ethical behavior, and regulatory guidelines as they relate to recreational therapy are applied to advancing the profession. Prerequisite: REC 5327 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5329. Evidence-based Practice in Recreational Therapy.**

This course explores the application of research evidence to the planning and delivery of recreational therapy within a variety of service settings. The emphasis is on locating, critically appraising, analyzing, and producing evidence related to treatment modalities and techniques for recreational therapy practice. In addition, the course will apply evidence-based practice in relation to therapeutic facilitation techniques and interventions. Prerequisite: REC 5328 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5330. Organizational Leadership in Recreation and Sport Management.**

This course provides an exploration of management issues related to the role of the leader as a conduit for effectiveness in recreation and sport management service agencies. Content will include practices associated with managing human resources such as hiring, supervising, evaluating, and compensating. Content will include examination of federal and state laws impacting employment and the manager's role in operationalizing both legislative mandates and agency policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5337. Independent Study in Recreation and Sport Management.**

This course includes individual study related to recreational administration or sport management under direct supervision of a faculty member. May be repeated for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**REC 5338. Internship in Recreational Therapy.**

This course provides students the opportunity to complete an intensive, on-site internship under the supervision of a nationally Certified Therapeutic Recreation Specialist. Students will complete a minimum of 560 hours and 14 weeks in a recreational therapy setting. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5340. Social Psychology of Recreation and Sport.**

This course provides an introduction and overview of the personal, social and social-psychological contexts of leisure; utilizing current literature the course will focus on examining sport and recreation behavior from psychological, sociological and social-psychological constructs that are contributing to a contemporary, interdisciplinary understanding of the leisure phenomenon.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5346. Literature and Research in Recreation and Sport Management.**

The course provides an analytical investigation of research techniques and steps necessary to address research questions related to professional practice. Students will examine methods of locating and securing research findings and reports and develop the ability to discuss current literature in the field of recreation and sport.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5350. Legal and Ethical Issues in Recreation and Sport Management.**

This course focuses on legal and ethical issues related to recreation and sport management. Tort law, participant rights, accessibility, credentialing, and others are topics to be addressed in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5360. Financial Management in Recreation and Sport Management.**

This course is a study of financial concepts, principles, and techniques as they relate to recreation and sport delivery systems. These include full cost accounting, pricing, financial management, and alternative funding proposals. Prerequisite: REC 5380 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5372. Technology-Mediated Places of Leisure: Aspirations towards a life of leisure.**

This course focuses on the technology-leisure experience interaction, supported by knowledge of layout, design, and functions of homes, cities, and outdoor environments. Students will develop an understanding of how technology is incorporated into the experience of physical spaces and create proposals for technological enhancements appropriate to these varied places of leisure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5373. Innovative Technology Solutions and Applications in Recreation and Leisure.**

This course is a study of operational competence in selected technologies including the development of research skills in user need articulation and technology augmentation. Students will critically investigate technology usage in leisure service delivery. Students will develop the ability to diagram and write for analytical purposes, fieldwork and experiences, and collaborative work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5380. Organizational Planning in Recreation and Sport Management.**

This course provides students with organizational planning and administration tools developed and tested within the recreation and sport industries. Topics may include the exploration of programming and organizational theory, administrative processes, and the application of the organizational principles to the recreation and sport delivery systems. Emphasis will be placed on various planning functions including strategic, evaluation, and marketing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5381. Outdoor Program Leadership and Administration.**

Within the role of leadership and administration, students will become knowledgeable in the theoretical foundations of outdoor programs, adventure programming, and wilderness travel. The history of thought surrounding natural places and outdoor recreation will be examined throughout the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5382. Facility Management in Recreation and Sport Services.**

The course provides an overview of practice of facility management. Explorations will include the role of facility manager, work management functions, and user interaction. In addition, students will investigate concepts of health and safety, accessibility, environment and sustainability, technologies, sourcing, emergency preparedness, and space interrogation. Basics of design drawing literacy and evaluation will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in REC 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5399B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5599B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5999B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science in Recreation and Leisure Services (M.S.R.L.S.) degree with a major in Therapeutic Recreation is designed to prepare administrators, supervisors, educators, consultants, and researchers to assist people toward richer lives through leisure experiences. Therapeutic Recreation focuses on enabling individuals with special needs to experience the same leisure options as able-bodied individuals through the use of recreation as a treatment and education modality. Individuals

seeking to become a Certified Therapeutic Recreation Specialist (CTRS) would enroll in this option.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background courses required in:
  - Anatomy & Physiology
  - Abnormal Psychology
  - Human Growth and Development Across the Lifespan
- GRE not required
- statement of purpose (maximum 500 words) addressing the following:
  - experiences leading to graduate studies in therapeutic recreation
  - qualities, values, characteristics of the student that will help him/her meet the academic rigors of graduate education
  - career goals relating to obtaining a master's degree

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science in Recreation and Leisure Services (M.S.R.L.S.) degree with a major in Therapeutic Recreation requires 30 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
REC 5321	Issues and Trends in Recreational Therapy	3
REC 5329	Evidence-based Practice in Recreational Therapy	3
REC 5346	Literature and Research in Recreation and Sport Management	3
ESS 5356	Applied Statistics in Health and Human Performance	3
<b>Prescribed Electives</b>		
Choose 12 hours from the following (other courses may be approved by your advisor):		12
REC 5310	Philosophical Foundations of Recreation and Sport Management	
REC 5318	Selected Topics in Recreation and Leisure Services	
REC 5325	Philosophical Foundations of Recreational Therapy	
REC 5328	Advanced Principles of Recreational Therapy	
REC 5330	Organizational Leadership in Recreation and Sport Management	
REC 5337	Independent Study in Recreation and Sport Management	
REC 5340	Social Psychology of Recreation and Sport	
REC 5350	Legal and Ethical Issues in Recreation and Sport Management	
REC 5372	Technology-Mediated Places of Leisure: Aspirations towards a life of leisure	
REC 5373	Innovative Technology Solutions and Applications in Recreation and Leisure	
REC 5380	Organizational Planning in Recreation and Sport Management	
REC 5381	Outdoor Program Leadership and Administration	
<b>Thesis</b>		
REC 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
REC 5199B	Thesis	
REC 5299B	Thesis	
REC 5399B	Thesis	
REC 5599B	Thesis	
REC 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

All candidates **for graduate degrees** must pass a written comprehensive examination.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.



If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to

work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Health and Human Performance: REC

## Courses Offered

### Recreation (REC)

#### REC 5199B. Thesis.

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### REC 5299B. Thesis.

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### REC 5310. Philosophical Foundations of Recreation and Sport Management.

This course introduces and explores the meanings of recreation, sport, and leisure behaviors and services from historical, philosophical, sociological, and political perspectives. Students will develop a philosophical view of recreation and sport based on exploration of the history as well as consideration of the nature of the individual and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### REC 5318P. Inclusive Recreation for Individuals with Disabilities.

This course engages students to understand the meaning of social inclusion as it pertains to people with disabilities, along with current trends and best practices related to inclusive sport and recreation services for people with disabilities. Course content will prepare students to enhance inclusive service delivery in a variety of settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### REC 5318Q. Evaluation of Recreation and Sport Programs.

This course will focus on practical applications of program evaluation techniques. Directed readings will cover the history of evaluation as well as methods and approaches designed for different customers, locations and program types. Prerequisite: REC 5380 with a grade of "C" or better or instructor permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### REC 5321. Issues and Trends in Recreational Therapy.

This is a seminar-style course during which students investigate current trends related to the provision of recreational therapy services, research, education, and professional advocacy. Prerequisite: REC 5328 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### REC 5325. Philosophical Foundations of Recreational Therapy.

This course examines the history, theory, and philosophy of therapeutic recreation such as service models, standards, and legislation. The use of recreational therapy in supporting the attainment and maintenance of well-being of people with differing characteristics and abilities is explored. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### REC 5326. Recreational Therapy Planning and Implementation.

This course provides an advanced examination of the recreational therapy process with a focus on planning and implementation of individualized services and supports for persons with disabling conditions. Students will analyze interventions, modalities, instruction, leadership, supervision, and leisure counseling techniques in relation to program planning and implementation. Prerequisite: REC 5327 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### REC 5327. Assessment, Evaluation, and Documentation in Recreational Therapy.

This course provides an in-depth examination of the assessment and documentation phases used in recreational therapy. Students will select, administer, score, interpret, and report standardized and specialized assessment instruments and documentation methods. Corequisite: REC 5325 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### REC 5328. Advanced Principles of Recreational Therapy.

This course provides an in-depth examination of the principles of organizing, funding, and managing recreational therapy services within a variety of settings. Topics include analysis of professional credentialing, policies, standards of practice, ethical behavior, and regulatory guidelines as they relate to recreational therapy are applied to advancing the profession. Prerequisite: REC 5327 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### REC 5329. Evidence-based Practice in Recreational Therapy.

This course explores the application of research evidence to the planning and delivery of recreational therapy within a variety of service settings. The emphasis is on locating, critically appraising, analyzing, and producing evidence related to treatment modalities and techniques for recreational therapy practice. In addition, the course will apply evidence-based practice in relation to therapeutic facilitation techniques and interventions. Prerequisite: REC 5328 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5330. Organizational Leadership in Recreation and Sport Management.**

This course provides an exploration of management issues related to the role of the leader as a conduit for effectiveness in recreation and sport management service agencies. Content will include practices associated with managing human resources such as hiring, supervising, evaluating, and compensating. Content will include examination of federal and state laws impacting employment and the manager's role in operationalizing both legislative mandates and agency policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5337. Independent Study in Recreation and Sport Management.**

This course includes individual study related to recreational administration or sport management under direct supervision of a faculty member. May be repeated for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**REC 5338. Internship in Recreational Therapy.**

This course provides students the opportunity to complete an intensive, on-site internship under the supervision of a nationally Certified Therapeutic Recreation Specialist. Students will complete a minimum of 560 hours and 14 weeks in a recreational therapy setting. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5340. Social Psychology of Recreation and Sport.**

This course provides an introduction and overview of the personal, social and social-psychological contexts of leisure; utilizing current literature the course will focus on examining sport and recreation behavior from psychological, sociological and social-psychological constructs that are contributing to a contemporary, interdisciplinary understanding of the leisure phenomenon.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5346. Literature and Research in Recreation and Sport Management.**

The course provides an analytical investigation of research techniques and steps necessary to address research questions related to professional practice. Students will examine methods of locating and securing research findings and reports and develop the ability to discuss current literature in the field of recreation and sport.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5350. Legal and Ethical Issues in Recreation and Sport Management.**

This course focuses on legal and ethical issues related to recreation and sport management. Tort law, participant rights, accessibility, credentialing, and others are topics to be addressed in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5360. Financial Management in Recreation and Sport Management.**

This course is a study of financial concepts, principles, and techniques as they relate to recreation and sport delivery systems. These include full cost accounting, pricing, financial management, and alternative funding proposals. Prerequisite: REC 5380 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5372. Technology-Mediated Places of Leisure: Aspirations towards a life of leisure.**

This course focuses on the technology-leisure experience interaction, supported by knowledge of layout, design, and functions of homes, cities, and outdoor environments. Students will develop an understanding of how technology is incorporated into the experience of physical spaces and create proposals for technological enhancements appropriate to these varied places of leisure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5373. Innovative Technology Solutions and Applications in Recreation and Leisure.**

This course is a study of operational competence in selected technologies including the development of research skills in user need articulation and technology augmentation. Students will critically investigate technology usage in leisure service delivery. Students will develop the ability to diagram and write for analytical purposes, fieldwork and experiences, and collaborative work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5380. Organizational Planning in Recreation and Sport Management.**

This course provides students with organizational planning and administration tools developed and tested within the recreation and sport industries. Topics may include the exploration of programming and organizational theory, administrative processes, and the application of the organizational principles to the recreation and sport delivery systems. Emphasis will be placed on various planning functions including strategic, evaluation, and marketing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5381. Outdoor Program Leadership and Administration.**

Within the role of leadership and administration, students will become knowledgeable in the theoretical foundations of outdoor programs, adventure programming, and wilderness travel. The history of thought surrounding natural places and outdoor recreation will be examined throughout the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5382. Facility Management in Recreation and Sport Services.**

The course provides an overview of practice of facility management. Explorations will include the role of facility manager, work management functions, and user interaction. In addition, students will investigate concepts of health and safety, accessibility, environment and sustainability, technologies, sourcing, emergency preparedness, and space interrogation. Basics of design drawing literacy and evaluation will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in REC 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5399B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5599B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5999B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

The graduate minor in Exercise Science requires 12 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
ESS 5305	Advanced Fitness Assessment and Exercise Prescription	3
ESS 5306	Advanced Exercise Physiology	3
ESS 5307	Advanced Resistance Training and Conditioning	3

ESS 5308	Physical Activity, Disease Prevention and Treatment	3
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<b>Total Hours</b>	<b>12</b>
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The graduate minor in Public Health Education and Promotion requires 9 semester credit hours.

Code	Title	Hours
Choose 9 hours from the following:		
PH 5301	Environmental Health Issues	9
PH 5302	Current Issues in Public Health	
PH 5303	Social Determinants of Health	
PH 5305	Grant Proposal Writing in Public Health	
PH 5310	History and Philosophy of Public Health Education and Promotion	
PH 5312	Writing for Public Health Professionals	
PH 5315	Applied Behavioral Statistics in Public Health	
PH 5320	Foundations of Public Health	
PH 5321	Advanced Health Behavior Theory	
PH 5325	Ethical Principles in Public Health	
PH 5331	Health Disparities	
PH 5335	Public Health Leadership	
PH 5345	Public Health Issues in Human Sexuality	
PH 5346	Public Health Research and Population Surveillance	
PH 5347	Independent Study in Public Health	
PH 5348	Disease Prevention and Health Promotion	
PH 5350	Advanced Public Health Program Planning and Evaluation	
PH 5370	Applied Epidemiology	
PH 5374	Global Public Health	
PH 5376	Health Promotion in the Workplace	

The graduate minor in Recreation and Leisure Services requires 12 semester credit hours.

Code	Title	Hours
Required Courses		
REC 5310	Philosophical Foundations of Recreation and Sport Management	3
REC 5340	Social Psychology of Recreation and Sport	3
REC 5350	Legal and Ethical Issues in Recreation and Sport Management	3
REC 5380	Organizational Planning in Recreation and Sport Management	3
Total Hours		12

**Dean**

John Fleming, Ph.D.

Old Main Building Room 112

Telephone: 512.245.2308 Fax: 512.245.8386

<http://www.finearts.txstate.edu/>

**Associate Dean**

Laurie H. Fluker, Ph.D.

**Associate Dean**

Lynn M. Brinckmeyer, Ph.D.

**Department Chairs/School Directors**

Art and Design—Beth A. Thomas, Ph.D.

Communication Studies—Marian Houser, Ph.D.

Journalism and Mass Communication—Judith B. Oskam, Ed.D.

Music—Todd Sullivan, Ph.D.

Theatre and Dance—Sarah Maines, M.F.A.

Joann Cole Mitte Building Room 2112

T: 512.245.2611 F: 512.245.7969

<http://www.finearts.txstate.edu/Art/art.html>

The School of Art and Design offers graduate studies within the innovative low residency MFA in Communication Design. MFA Communication Design candidates experience a conceptually rich low-residency program that emphasizes exploration and design research utilizing a wide array of visual communication methods and forms. Our active, diverse faculty create an invigorating creative environment, and each semester visiting artists and designers bring distinctive viewpoints on design and its many contexts. Students cultivate rigorous research practices using independent and collaborative frameworks to create and present work that is critically relevant and socially impactful. Our graduates emerge prepared to make significant contributions to their communities and the communication design field through thoughtful, well-informed, and robust design practices.

## Master of Fine Arts (M.F.A.)

- Major in Communication Design (p. 2011)

## Program Overview

The Master of Fine Arts (M.F.A.) degree with a major in Communication Design is a pioneering low-residency program that emphasizes conceptual thinking, experimentation, and investigation. Students engage in a broad spectrum of visual communication practices, including typography, digital experience, socially engaged design, and design pedagogy, and emerge ready to contribute to the field of communication design as professional practitioners and educators.

Positioned within the School of Art and Design, the MFA in Communication Design offers the advantages of a public research institution, including a diverse and active faculty, opportunities for interdisciplinary study, and affordability. A robust design lecture series promotes the exchange of ideas and perspectives across a wide range of specialties.

Our unique low-residency model arises from a longtime investment in remote learning. Courses are largely online and conducted by faculty experienced in building community and engagement from a distance. Each semester, students and instructors come together on campus for a conference-style residency with critiques, lectures, workshops, and exhibitions. This structure provides flexibility for working professionals and remote students as part of our commitment to inclusivity and equity.

Over 60 credits, students cultivate curiosity and critical thinking and making through a well-rounded, forward-looking curriculum. The MFA in Communication Design brings together interdisciplinary approaches to the discipline across national and global perspectives to form a graduate-level education befitting a terminal degree.

## Communication Design Fitness Statement Program Standards

Students enrolled in the Communication Design B.F.A. or M.F.A. program must maintain high scholastic standards and develop a mastery of the knowledge and methods of their respective discipline. Students are expected to demonstrate emotional and mental fitness in their interactions with others, use skills and methods that are generally accepted in the profession, and conform to the code of ethics of their respective discipline, and the university's honor code. A student's acceptance in any program does not guarantee the student's fitness to remain in that program. The faculty is responsible for verifying that only those students who continue to meet program standards are allowed to continue in any program.

## Evaluation of Student Fitness and Performance

Members of the faculty, using their professional judgments, evaluate student fitness and performance continuously. The criteria used by the faculty to make such judgments include instructors' observations of student performance in class or in activities related to courses. Students who are not making satisfactory progress or who are not meeting program standards should consider withdrawing from the program.

In this context, the term "satisfactory progress" refers to an academic judgment made regarding the student's fitness and performance. It is a judgment that the student has failed to meet program standards rather than a judgment made on the basis of the student's violation of valid rules of conduct. Disciplinary matters are referred to Student Justice.

## Student Review Process

1. When a faculty member believes that a student is not making satisfactory progress or meeting program standards, they will discuss the situation with the student.
2. When the faculty member believes that the student's performance cannot improve to acceptable standards, the faculty member will refer the student to the Communication Design Program Standards Committee. The Committee consists of three Communication Design faculty members appointed by the program Coordinator in consultation with the school's senior faculty.
3. The Committee will notify the student of the reasons that he or she is not making satisfactory progress or meeting program standards. The student will be given an opportunity to meet with the Committee to respond and to present information and witnesses to the Committee. The Committee will also meet with the faculty member who referred the student.
4. After considering the matter, and within ten working days of meeting with the student, the Committee will report its decision to the student and the school Director, stating that the student should either remain in the program, or leave the program. The Committee may make other decisions, such as placing restrictions or conditions on the student's continuance in the program. Within ten working days of receiving the Committee's decision, the student will notify the school Director of the student's acceptance or rejection of the Committee's decision. If the student rejects the Committee's decision, he or she may appeal directly to the school Director.
5. Within ten working days of receiving the student's appeal, the Director will make a decision as to the student's continued presence in the program. Before making the decision, the Director will meet with the student. However, the Director need not meet with the student before making a decision if the student was given a reasonable opportunity



to meet, and the student either failed or refused to meet. The Director will notify the student of the decision.

6. If the student is dissatisfied with the Director's decision, he or she may appeal to the Dean of The College of Fine Arts and Communications. However, in order for the Dean to consider an appeal, the student must submit a written notice of appeal to the Director and the Dean within ten working days of receiving the Director's decision. The Dean will consider the matter based on information compiled by the Director and notify the student of the decision within ten working days of the Dean's receipt of the appeal from the Director. The Dean may meet with the student and give the student an opportunity to address the issues. The Dean's decision is final.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in communication design, advertising art direction and design, digital media design, graphic design, illustration or related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- Academic and professional statement of purpose (500-800 words) addressing the following:
  - current design goals and specific reasons for seeking an MFA in Communication Design at Texas State University
  - experiences that led to this point, and how they may have shaped the student's current visual work
  - achievement expectations during their MFA studies
  - topics in design most interested in studying
- In addition to building a strong MFA community of learners, independent study is an essential feature of the low-residency model. It is important for us to assess the student's ability and potential for managing and defining their own educational direction. Explain other independent educational experiences the student has pursued in design, and beyond.

- Online portfolio (professional and/or student) showcasing 12-20 works in communication design  
Each sample must be clearly identified with a communicative message or project mission, media, and publishing information. Please create a PDF document that includes the portfolio URL. The portfolio will be evaluated on:
  - ideation/design/presentation
  - role and scope of work
  - peer-review (state, regional, national, or international)
- resume/CV
- three letters of recommendation from persons capable of evaluating the student's academic and professional ability

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Fine Arts (M.F.A.) degree with a major in Communication Design requires 60 semester credit hours. In addition to the following required credit hours, the degree requires a Mid-Program Portfolio Review. The review will occur after students successfully complete 30 credit hours. The graduate advisor and select M.F.A. faculty will assess each Mid-Term Portfolio component. Passing Mid-Program Portfolio Review will allow the student to continue with their graduate study. The student with an unsatisfactory Mid-Program Portfolio Review will be allowed to make portfolio work revisions and resubmit (one resubmission only) the portfolio work for reassessment (one time).

This program offers a leveling program on a case-by-case basis to students who submit strong application materials, but lack some communication design skills. Leveling courses do not earn credit towards the MFA Communication Design degree.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ARTC 5340	Contemporary Issues and Criticism	3
ARTC 5341	Modernism and Design	3

ARTC 5342	Postmodernism and Typography	3
ARTC 5343	Communication Design Seminar	3
ARTC 5370	Professional Practice (Taken twice for credit)	6

**Prescribed Electives**

Choose 30 hours from the following: 30

ARTC 5310	
ARTC 5320	Web Design
ARTC 5330	Typography
ARTC 5331	
ARTC 5332	
ARTC 5333	
ARTC 5350	Special Problems in Communication Design
ARTC 5360C	
ARTC 5360D	Typeface Design
ARTC 5360E	
ARTC 5360G	Interaction Design
ARTC 5360H	Mobile and Social Media
ARTC 5360I	Publication
ARTC 5360J	International Perspectives in Design
ARTC 5360N	Alternative Printing Methods
ARTC 5360O	
ARTC 5360U	Design Practice
ARTC 5360V	Research through Making
ARTC 5360W	Exhibitions
ARTC 5360X	Generative Design
ARTC 5371	Design for Motion
ARTC 5372	Social Practice

**Electives**

Choose 6 hours of advisor-approved electives 6

**Thesis**

ARTC 5399A	Thesis	3
Choose a minimum 3 hours from the following:		3
ARTC 5199B	Thesis	
ARTC 5299B	Thesis	
ARTC 5399B	Thesis	
ARTC 5599B	Thesis	
ARTC 5999B	Thesis	

**Total Hours** 60

## Comprehensive Examination Requirement

All students must pass the comprehensive final examination administered by the student's thesis committee and consists of successful defense of their thesis research. The results of the exam should be reported on the "Master's Comprehensive Examination Report" form, which can be downloaded from The Graduate College website and which must be filed in The Graduate College by the deadline listed on the Graduate College website.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with

the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being

made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Art and Design: ARTC (p. 2014), ARTH (p. 2017), ARTS (p. 2017), ARTT (p. 2017)

## Courses Offered

### Communication Design (ARTC)

#### ARTC 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ARTC 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ARTC 5300. Graduate Assistant Development.

This course is required as a condition of employment for graduate teaching and instructional assistants. It will provide in-service training and evaluations of instructional philosophies, techniques and responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ARTC 5301. Communication Design Foundations.

This course may be taken only to fulfill communication design background. Students will acquire knowledge and graphic design skills necessary for advanced studies. This course does not earn graduate degree credit. Repeatable up to 3 times, with different emphases.

**Prerequisite:** Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### ARTC 5320. Web Design.

Students will research, create, and produce advanced online products for Internet. Emphasis is placed on information architecture, interface design, and navigation constructs in order to produce unique online communications. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ARTC 5330. Typography.

This course examines the traditional and experimental advanced usage of type as a visual tool to express meaning. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTC 5340. Contemporary Issues and Criticism.**

This course examines emerging issues in graphic design and design criticism, primarily from the turn of the 21st century to the present. Students will learn to analyze and critique graphic design, and will produce a work of critical writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 5341. Modernism and Design.**

This course explores the modernist movement in design, as it emerged in Europe and America in the early twentieth century. Topics include: visual cultural theory, the origins of modernism, Dada, Constructivism, DeStijl, the Bauhaus, and American modernism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 5342. Postmodernism and Typography.**

In this course, students explore the relationship between form and content through the lens of postmodern graphic design and typography from the 1960s through the early 2000s. The course begins with the emergence of postmodernism and traces its connections to contemporary developments, including: counter-archival, decolonizing, anti-racist, feminist, and queer perspectives in typography. This hybrid studio-seminar course approaches design history through a pluralistic practice of researching, writing, and designing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 5343. Communication Design Seminar.**

In this course students examine communication design research methods, modes of practice, and models of the creative process. Students will engage in individual research inquiries in order to develop the topic for their master's thesis in Communication Design, and to present at the MFA Thesis Forum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTC 5350. Special Problems in Communication Design.**

An independent study requiring complex problem-solving in communication design. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 5360D. Typeface Design.**

This course explores the detailed anatomy of typefaces in order to design custom typefaces through various applications. Students with an advanced knowledge of typography will research detailed type anatomy as well as historical, technological, and cultural typographic contexts. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360G. Interaction Design.**

This course focuses on designing a digital experience by connecting people, place, and technology. Students who are interested in digital placemaking, digital innovations/transformation, mobile technology, and exploring hybrid experiences are encouraged to enroll in the course. The course discusses communication, digital products, environments, and services as an ecosystem and the role a designer plays in a larger context. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360H. Mobile and Social Media.**

In this course, students explore the implications of social networking and mobile communications in contemporary communication design. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360I. Publication.**

This course explores the designer's role in the dissemination of information and examines the history and current practices of independent publishing. There is an emphasis on authorship, typography, and experimentation. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360J. International Perspectives in Design.**

In this course, students explore international perspectives in design. This course requires a field trip abroad and will conclude with one extensive communication design assignment based upon the field trip experience. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360N. Alternative Printing Methods.**

This course will explore hands-on printing methods for designers. Letterpress, screen-printing, and other alternative printing methods will be explored to visually express design concepts. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360S. Design Futures.**

Students will translate technological and socioeconomic issues into the near future. They will explore the role of design in solving or coping with the consequences of today's actions. The course will prepare students to think critically about the role of design in the evolution of humankind.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360U. Design Practice.**

This course introduces students to critical design practice and serves as one of several thesis preparation courses offered. Design Practice sets the foundation for building a significant and cohesive body of creative work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360V. Research through Making.**

This course further examines communication design research methods, modes of practice, and models of the creative process to advance thesis research through making and visualizing abstract ideas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360W. Exhibitions.**

In this course students will explore different methods of exhibition within traditional and alternative settings. They will experiment with collaborative and multidisciplinary strategies to produce speculative proposals for public and professional communities. Students will come away with an in-depth understanding of various exhibition contexts and the ability to analyze and select the exhibition strategies most appropriate to engage a specified inquiry. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360X. Generative Design.**

This course introduces the basics of generative art and design. Utilizing code as a creative medium, students engage in computation through a creative, thoughtful, and transformative approach. Students learn the potential of programming in the field of Communication Design. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360Y. Design History Survey.**

This course surveys movements in design history with a focus on the modern and contemporary eras. Graphic design is situated within the contexts of art, architecture, film, and other design disciplines. Major themes include the rise and fall of the European avant-garde; art and editorial direction in the Interwar Period; and topics in post-WWII modernism and postmodernism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5370. Professional Practice.**

Students are placed in regional and national advertising agencies, digital media studios, or graphic design firms to gain professional practice experience. Repeatable once for credit.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 5371. Design for Motion.**

In this course students are introduced to theories, techniques, and practices of designing for motion. As an essential medium of communication design, this course focuses on the successful integration of images, typography, and sound over time to create nuanced and complex messages. Experimentation, research, critical analysis, and concept development are emphasized. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTC 5372. Social Practice.**

In this course students are introduced to theoretical and conceptual aspects of socially engaged art and design. The course reconsiders the role of the designer in the context of participatory and public practices. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTC 5399A. Thesis.**

The course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in ARTC 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ARTC 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**ARTC 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ARTC 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Art History (ARTH)

**ARTH 5302. Special Problems Advanced.**

An independent study course involved with art history, aesthetics, and criticism. The emphasis of the course is on scholarship, research, and writing. May be repeated with different emphasis for additional credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Studio Art (ARTS)

**ARTS 5301. 2-D Advanced Special Problems.**

An independent study in 2-D studio art, which requires a student to pursue a personal conceptual direction and to develop the technical and critical skills necessary for creating a cohesive body of artwork. May be repeated with different emphasis for additional credit. Permission of instructor required to enroll.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTS 5302. 3-D Advanced Special Problems.**

An independent study in studio art, which requires a student to pursue a personal conceptual direction and to develop the technical and critical skills necessary for creating a cohesive body of artwork. May be repeated with different emphasis for additional credit. Permission of instructor required to enroll.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Art Theory & Practice (ARTT)

**ARTT 5371. Research Foundations, Art Education Theories and Practices.**

In this teacher preparation course, students learn the fundamentals of art education theories and teaching practices. Primary areas of emphasis include: the history of art education, curriculum design, instructional practices focused on equity, diversity, and inclusion, the exploration of art materials and techniques, and art-making.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 5372. Research in Learning and Digital Media.**

This course examines theories and practices of using computational and electronic tools and materials for the creation of art, as well as for enhancement of the art learning process. Students design and conduct an individualized research project investigating the personal and institutional effects of computation in K-12 art and other schooling practices.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 5376. Research in Art Theory and Practice for Children.**

Individualized study focusing on art skill and knowledge development related to children's art learning experiences. May be repeated with different emphasis for additional credit. Teaching experience or admission to graduate degree program and permission of instructor required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 5377. Research in Art Theory and Practice for Adolescents and Adults.**

Individualized study focusing on art skill and knowledge development related to adolescent and/or adult art experiences. May be repeated with different emphasis for additional credit. Teaching experience or admission to graduate degree and permission of instructor required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

Centennial Hall Room 205

Telephone: 512-245-2165 Fax: 512-245-3138

<http://www.finearts.txstate.edu/commstudies> (<http://www.finearts.txstate.edu/commstudies/>)

Communication studies examines the creation, expression, and analysis of messages in our personal, professional, and public lives. Graduate level coursework focuses upon research about how communication is related to social intelligence, critical thinking, and problem-solving skills in personal, professional and civic settings. Students explore interpersonal communication, organizational communication, rhetoric and criticism, health communication, and communication of diversity and inclusion. Alumni excel in diverse cultural, professional, social, and personal settings as influential leaders, solution-oriented collaborators, highly trained researchers, talented writers, and engaging speakers.

Key to our graduate students' and M.A. program's success is our dedicated faculty and staff -- a cohesive team that draws from their unified expertise to help students understand the vital connections between research and teaching inside and outside the classroom. Our faculty members are active in national and international associations; publish their research in books, professional and academic journals; secure funding to support cutting-edge research; create podcasts; win awards for teaching excellence; and serve our communities.

## Facilities

The department is located in Centennial Hall which offers outstanding resources including several graduate assistant office suites, computer labs, conference rooms, classrooms equipped with comprehensive instructional technologies, a state of the art teaching theater, and our new

BioComm laboratory, which focuses upon physiological responses before, during, and after engaging in communication.

## Financial Assistance

Graduate Assistantships offered at competitive stipends with waiver of out-of-state tuition are available to qualified applicants. Assistantship responsibilities include teaching communication fundamentals, assisting the director of forensics, or assisting faculty with research. Most assistantships are assigned in spring to begin in the fall term, but assistantships may be available for students who wish to begin the graduate program in the spring or summer. Students who wish to apply for an assistantship must complete an application form that is found on the department's graduate program website.

The department offers limited scholarships for currently enrolled students. Also, the College of Fine Arts and Communication and The Graduate College provide a variety of scholarships for new and returning graduate students. See the various web sites for details.

Students who wish to travel to professional conferences for presenting research may qualify for travel funding. These funds are often used to offset a portion of the costs associated with travel and lodging at conferences of our state, regional, national, and international professional associations. Additional travel support may be available by applying to The Graduate College.

## Master of Arts (M.A.)

- Major in Communication Studies (Non-thesis Option) (p. 2018)
- Major in Communication Studies (Thesis Option) (p. 2025)

## Minor

- Communication Studies (p. 2034)

## Certificate Program

- Corporate Communication and Training (p. 2034)

## Program Overview

The Master of Arts (M.A.) degree with a major in Communication Studies comprehensive, non-thesis program provides the greatest flexibility and breadth of understanding. The department assigns all communication studies majors to this comprehensive program. After the first term of course work, the student may request the thesis option. Students may elect to take up to six credits of course work outside of the department, with graduate advisor approval.

Students may select communication studies courses that develop expertise in one or more of the following resource areas: organizational communication, rhetorical studies, communication training and development, health communication, interpersonal communication, or instructional communication. Students also may select courses from related disciplines, such as mass communication, education, English, psychology, sociology, and business. The department encourages all students to explore courses that provide a breadth of knowledge about human communication.

## Organizational Communication

Students primarily interested in organizational communication investigate the function, flow, and structure of communication in organizations to enhance organizational effectiveness.

## Rhetorical Studies

Students interested in rhetorical studies investigate how symbols have the power to shape perceptions and alter attitudes. Students may select from courses that offer a broad overview of rhetorical theory and rhetorical methods.

## Communication Training and Development

Students who seek careers as communication trainers or human resource development specialists select from several courses that provide information and prescribe strategies to enhance communication performance.

## Health Communication

Students who focus on health communication investigate the essential role of communication in healthcare through a variety of courses that explore such topics as barriers to patient and provider interactions, health communication leadership, health disparities, healthcare training and assessment, health in relationships and healthcare team effectiveness.

## Interpersonal Communication

Students who emphasize interpersonal communication take courses that focus on the role of communication in the development and maintenance of human relationships. *Seminar in Interpersonal Communication* provides a comprehensive review of theory and research that explores interpersonal relationships.

## Instructional Communication

Students who wish to pursue careers in teaching at the community college level will take courses that will prepare them for a career in education including communication curricula typically found in community colleges (interpersonal communication, small group communication, public speaking, and communication fundamentals). In addition, students may select courses from our outstanding College of Education.

## Facilities

The department is located in the completely renovated Centennial Hall which offers outstanding resources including faculty offices, several graduate assistant office suites, computer labs, conference rooms, classrooms equipped with comprehensive instructional technologies, and a state of the art teaching theatre. The department also has a newly renovated research lab with computer technology and data collection tools.

## Faculty

The department's faculty members are active in state, regional, national, and international associations and widely publish their research in books, professional and academic journals, podcasts, and blogs.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/VITA
- statement of purpose (approx. 1000 words) addressing the following:
  - which area(s) of communication studies are you most interested in pursuing and why
    - Describe at least two communication questions you might like to explore, understand better, or develop an expertise in during your graduate study. These questions are not binding; you do not have to research these questions should you be accepted, but they will help us assess your fit with graduate work, our program, and our faculty.
  - rationale for selecting the M.A. in communication studies at Texas State
  - readiness for graduate study, i.e., how the academic background has prepared the student for graduate study in the Department of Communication Studies at Texas State
  - career goals/plans, including how the student will apply the degree post-graduation
- three letters of recommendation from individuals knowledgeable about your academic ability and promise as a scholar

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Communication Studies requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
Choose 6 hours from the following:		6
COMM 5301	Quantitative Research Methods in Communication	
COMM 5302	Rhetorical Methods	
COMM 5303	Qualitative Research Methods in Communication	
<b>Prescribed Electives</b>		
Choose 30 hours from the following in consultation with graduate advisor:		30
COMM 5304	Work/Life Intersections	
COMM 5307	The Dark Side of Communication	
COMM 5309	Proseminar in Communication Research Methods	
COMM 5312	Intercultural Communication	
COMM 5313	Relational Communication	
COMM 5314	Family Communication	
COMM 5315	Directed Research in Communication Studies	
COMM 5318	Interpersonal Communication	
COMM 5319	Organizational Communication	
COMM 5321	Communication Assessment	
COMM 5324	Seminar in Instructional Communication	
COMM 5325	Seminar in Human Communication Theory	
COMM 5327	Contemporary Rhetorical Theory	
COMM 5329B	Communication and Negotiation	
COMM 5329D	Managing Communication Technologies in the Workplace	
COMM 5329E	Communication and Organizational Culture	
COMM 5329G	Communication and Emotion	
COMM 5329H	Work, Identity, and Difference	
COMM 5329I	Relational Health Communication	
COMM 5329J	LGBTQ+ Rhetoric and Advocacy	
COMM 5329K	End-of-Life Communication	
COMM 5329L	Communicating Diversity and Inclusion	
COMM 5329M	Health Communication Campaigns	
COMM 5329N	Rhetoric of Diversity	
COMM 5330	Nonverbal Communication	
COMM 5331	Persuasive Communication	
COMM 5332	Communication and Technology	
COMM 5333	Health Communication	
COMM 5340A	Rhetorical Movements	
COMM 5340B	Free Speech and Extremism	
COMM 5340C	Rhetoric of Women's Rights	
COMM 5342	Historical Rhetoric and Social Influence	
COMM 5343	Contemporary Rhetoric and Social Influence	
COMM 5344	American Speeches	
COMM 5345	Political Communication	
COMM 5347	Small Group Communication	
COMM 5350	Applied Communication Studies	

COMM 5355	Media Criticism
COMM 5356	Gender and Communication
COMM 5371	Communication Training and Development
COMM 5372	Organizational Communication Analysis and Development
COMM 5374	Organizational Rhetoric
COMM 5395	Capstone Research Project

May choose 6 hours of advisor-approved electives from outside the department

**Total Hours** 36

## Thesis or a Comprehensive Examination Committee

A student must be in good academic standing to apply for a comprehensive exam committee. The student's cumulative GPA in all their graduate classes and in their communication studies classes must be 3.0 or higher. Also, the student should not have any incomplete grades in their classes.

Students must submit departmental forms to the director of graduate studies by November 1 or April 1. Students applying for a comprehensive exam committee must make the request in the term in which they will complete 27 hours of course work. This is the term before they anticipate graduating. The graduate faculty reviews all requests.

## Comprehensive Examination Requirement

Students must complete a professional portfolio, which includes an oral defense. At the defense, the faculty committee may: (a) determine that the student has passed, (b) request corrections or revisions to the written portions, (c) request revisions and a subsequent oral defense of the revised document, or (d) determine that the student has failed. If a student has been asked to submit revisions and defend again, they may do so only once.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Doctoral and Master's level courses in Communication Studies: COMM

## Courses Offered

### Communication Studies (COMM)

#### COMM 5100. Teaching Communication Studies.

An introduction to curriculum, instruction, and assessment methods in the teaching of Communication Studies. Provides an orientation as well as regular in-service training and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### COMM 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### COMM 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### COMM 5301. Quantitative Research Methods in Communication.

This course is an examination of quantitative research methods in speech communication. Measurement procedures, statistics, experimental design, and descriptive research methods are investigated, as well as a consideration of scholarly writing and library research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COMM 5302. Rhetorical Methods.

A study of approaches to the analysis of public discourse directed toward establishing workable perspectives for students conducting rhetorical analysis. Required of communication studies majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COMM 5303. Qualitative Research Methods in Communication.

This course provides an introduction to qualitative methods of inquiry in communication. Students will learn and apply principles of qualitative research designs in data collection, analysis, and integration of narrative and non-numeric data in communication research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COMM 5304. Work/Life Intersections.

This course examines those situations where work and life intersect, and how humans use communication to create, negotiate, and manage work/life intersections.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5307. The Dark Side of Communication.**

This graduate seminar will examine aversive and problematic interactions in interpersonal, organizational, health, and instructional settings. Sample topics include (un)fairness, backstabbing/betrayal, breaking up, end of life communication, deception, teacher misbehaviors, and bullying. Students will take a research-based approach to understanding these undesirable, yet common, messages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5309. Proseminar in Communication Research Methods.**

The goal of this course is to provide students with an overview of the methods used in the discipline of Communication Studies. To that end, we will begin by introducing students to the history of the discipline followed by overviews of rhetorical, quantitative, and qualitative research methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5310. Methods of Teaching Communication Studies.**

A study of the methods of the teaching speech communication principles and skills for secondary school teachers. Prerequisite: Admission to teacher certification program or permission of department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5312. Intercultural Communication.**

This course examines how culture evolves and is maintained through communicative systems of meaning. The many ways in which language, culture, and communication interact with, influence, and manifest in each other in everyday experience are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5313. Relational Communication.**

This course provides a comprehensive overview of relational communication theories and research. Students engage with theory and research frameworks to think critically about relational communication perspectives and contributions, understand the strengths and limitations of those perspectives, and learn to contribute to new knowledge of relational communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5314. Family Communication.**

This course explores the communication processes associated with families. Topic areas for exploration will include: storytelling, intimacy, conflict, rituals, religion, health-illness, and death. The goal is to further understand interdisciplinary research and theory related to family interactions embedded in larger webs of social, cultural, and generational relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5315. Directed Research in Communication Studies.**

A course to be offered to certain graduate students to allow for independent study in a specific area for which a regular course is not available. May be repeated with different emphasis for additional credit. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dual Enrollment Permitted

**Grade Mode:** Standard Letter

**COMM 5318. Interpersonal Communication.**

A review of current research in the area. Includes an examination of contemporary theories and research methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5319. Organizational Communication.**

Examines organizational communication theory and research in applied organizational contexts. Provides communication professionals with an analytical framework for improving communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5320. Directing Communication Studies and Theatre Activities.**

Designed to assist any teacher, whether of speech and drama or some other subject, in directing speech and drama activities. During the course, those in the class will actually direct debate, plays, declamation, and other activities. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 5321. Communication Assessment.**

An in-depth study of communication assessment techniques employed in the field of oral communication. Statistical, experimental, and observational methods of assessing oral communication in interpersonal, group, and classroom settings are included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5324. Seminar in Instructional Communication.**

Examines communication instruction theory and research and their practical applications in various instructional settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**COMM 5325. Seminar in Human Communication Theory.**

This course is an examination of theories of human communication contexts including interpersonal, family, intercultural, organizational, and instructional communication. The course may be repeated with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 5327. Contemporary Rhetorical Theory.**

A survey of the major contemporary theoretical perspectives and conceptual debates in rhetoric. Focuses upon critical interpretations and applications of theory in addition to study of primary theorists' writings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5329B. Communication and Negotiation.**

Examines theory, research, and practice of conflict management and negotiation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329D. Managing Communication Technologies in the Workplace.**

Examines how communication technologies both help and hinder workplace communication. Examines theory, practical applications, key scholars and empirical research. Heavy focus on using case studies that provide context for learning how to thrive in the contemporary organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329E. Communication and Organizational Culture.**

A seminar about communication and organizational culture. Discussion and materials explore communication practices that enable people to identify themselves as members of an organization and bind themselves to each other. Students will have the opportunity to analyze an organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329G. Communication and Emotion.**

This course examines various ways in which interpersonal communication and emotion coexist and impact one another. The goal is to provide opportunities to learn about emotional experience and expression both in an abstract way (class readings and discussions) and in a more concrete fashion (conducting your own analyses and research).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329H. Work, Identity, and Difference.**

Work is influential in our social interactions, our understanding of our own and others' identities, and our navigations of difference. We will explore the communication challenges of contemporary work in the United States through researching the history of work, excessive work, and communication construction of difference at work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329I. Relational Health Communication.**

This course reviews the intersection of interpersonal and health communication theory, highlighting the impact of social involvement and communication processes on health outcomes, as well as the application of health communication theories in close relationship contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329J. LGBTQ+ Rhetoric and Advocacy.**

This course explores historical and contemporary developments in of LGBTQ+ rhetoric and advocacy. In doing so, the course also examines how approaches to the study of LGBTQ+ rhetoric and advocacy, in terms of theory and methodology, has changed and shifted over time.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329K. End-of-Life Communication.**

This course will examine communication at the end-of-life (EOL). Students will discuss how people approach the EOL, and the end of relationships, through communication. Course material will highlight challenges and current issues surrounding EOL communication between terminally ill individuals and their family, friends, and medical professionals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329L. Communicating Diversity and Inclusion.**

This course examines the relationship between communication and power imbalances that deny equal respect, dignity, and rights to inclusion for the socially marginalized. Building upon historical and contemporary research, students will be able to extend principles from the critical paradigm and instructional communication to act ethically when making decisions that impact socially marginalized groups, develop a research project that advances knowledge of diversity and inclusion, and conduct training to advance diversity and inclusion initiatives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329M. Health Communication Campaigns.**

Contemporary theory and research from the field of Communication Studies make it possible to understand how and why health messages may impact future communication and behavior. This course explores how health-focused information can produce shared meaning between message senders and receives. Using a transactional communication framework, students will examine impacts of relationships, organizational roles, and networks of social relationships in relation to health outcomes of patients, families, organizations, and communities. Theoretical and applied research is used to guide the analysis of evidence-based messages that prevent disease and illness, reduce health risks, and promote behaviors that improve health.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329N. Rhetoric of Diversity.**

The course delves into the academic literature on rhetoric, diversity, and inclusion. This course explores how the values of diversity and inclusion are products of rhetorical negotiation and definition, examining how these concepts are used in a variety of context and for a wide array of purposes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329O. Communication in Understudied Close Relationships.**

This course focuses on important relationships that may get 'glossed over' in standard interpersonal communication seminars. More specifically, we will examine the various types of close relationships that comprise modern society, and current issues that affect those bonds. Students will investigate how communication functions to develop, maintain, enrich, or limit these understudied relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329P. Communication & Identity in International Work Cultures.**

This course explores how personal, cultural, organizational, and occupational identities shape workplaces. By traveling to multiple countries abroad, we will explore how different employees make sense of their work identities. Tours across the country will enable students to better understand culture's influence on work, and business site visits will allow students to observe work, communication, and identities in a variety of organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5330. Nonverbal Communication.**

A review of current theory and research of nonverbal communication behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5331. Persuasive Communication.**

An analysis of theories of persuasion. Emphasis placed on understanding established theories of attitude formation and change, contemporary persuasion, research, and the application of persuasion theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5332. Communication and Technology.**

Focuses on research and theories about the relationships between technology and communication behavior in interpersonal, group, and organization contexts. Also considers relationships between communication, technology, and culture.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5333. Health Communication.**

This course provides an overview of health communication theory and research to explore how interpersonal, organizational, and cultural messages shape views of illness and the health care system. Topics will include health literacy, health risk messages, e-health, health disparities, and physician-patient interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5340A. Rhetorical Movements.**

This course examines the unique phenomenon of "rhetorical movements". Unlike rhetorical inquiries that typically focus upon the discourse of those in power, the study of rhetorical movements analyzes how individuals, who often have no other resources but their voices and their bodies, come together to attempt social and political changes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5340B. Free Speech and Extremism.**

One of the most unique and important foundations of American society is the right to free speech. This course will begin with an examination of free speech in historical and contemporary society. Because free speech is often contested (and protected) through extreme controversy, we will also focus on extremist rhetoric.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5340C. Rhetoric of Women's Rights.**

This course examines the rhetoric of women's rights in the United States. We will analyze arguments of the nineteenth century abolitionist, temperance, and women's rights movements, and the public discourse of the twentieth century women's rights movements. We will also consider contemporary issues of gender and power in public argument.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5340D. Argumentation & Public Advocacy.**

This course explores the theory and practice of argumentation and public advocacy. The course provides an overview of contemporary approaches to the study of argumentation and ethics. The course emphasizes the application of theories of argumentation and advocacy to recent examples.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5340E. Science, Health, & Environmental Rhetoric.**

This graduate course explores the history, theories, and applications of rhetoric as it pertains to science, health and the environment. These fields are both interrelated and distinct in rhetorical studies. For instance, while environmental rhetoric includes the rhetorical construction of "wilderness," it also includes studies of environmental justice & health disparities across gendered/classed/racial lines as well as debates over climate science & scientific consensus. Students will gain a broader understanding of rhetorical theory and how to complete rhetorical critique. Students can also expect to read academic articles, lead class discussions, and engage in independent academic research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5342. Historical Rhetoric and Social Influence.**

This course is an analytical study of speeches, speakers, groups, movements, and rhetorical strategies in history. Includes emphasis on the following topics: American Public Address, Rhetoric of Woman's Suffrage, and other historic topics of interest. This course may be repeated with different emphasis or topic for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 5343. Contemporary Rhetoric and Social Influence.**

The analytical study of speeches, speakers, groups, movements, and rhetorical strategies in contemporary society. Includes emphasis on the following topics: rhetoric and culture, rhetorical movements, and rhetorical genres. May be repeated with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 5344. American Speeches.**

This course is a survey of American public address. The class will study significant and representative speeches from different periods of American history. This class will examine what the study of American public address can teach us about history, communication, and social influence.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5345. Political Communication.**

Study of political communication in contemporary times. Course will cover the rhetoric of candidates and politicians, the structure of political campaigns, and campaign practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5347. Small Group Communication.**

An examination of theories and research evidence about communication in the small group.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5350. Applied Communication Studies.**

An application of communication principles and skills. Topics covered may include organizational, interpersonal, nonverbal and group communication, conflict management, communication technology, and persuasion analysis. May not be taken for credit by students pursuing M.A. degree in Communication. May be repeated for additional credit with department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 5355. Media Criticism.**

A rhetorical analysis of media from a Contemporary Cultural Studies perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5356. Gender and Communication.**

An examination of research and theories about gender communication, relationships, and qualitative research methods. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COMM 5360. Introduction to Empirical Research in Communication.**

Introduction to Communication Studies as a behavioral science. Students will learn principles of the scientific method; explore quantitative and qualitative methods; investigate variables across the field (persuasion, interpersonal, organizational, non-verbal, intercultural, and instructional); and analyze and apply research in Communication. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**COMM 5362A. Organizational Communication.**

Introduction to communication concepts in the context of organizations. Students will learn how communication influences contemporary organizations through familiarity with contemporary research. Students will be prepared to understand, investigate, and manage communication processes in organizations. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**COMM 5362B. Organizational Rhetoric.**

Introduction to the study of organizational rhetoric designed for internal and external audiences. Students will analyze and create messages based in theories of organizational rhetoric. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**COMM 5371. Communication Training and Development.**

This course examines the theory and practice of developing and presenting communication training sessions for organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5372. Organizational Communication Analysis and Development.**

This course examines communication problems in organizations and describes effective interventions. Provides communication managers and consultants with a broad range of tools and procedures for diagnosing and changing communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5374. Organizational Rhetoric.**

This course will include an examination of how organizations use symbols to accomplish a variety of functions for internal and external audiences, as well as exploring the concept of organization as rhetorical argument.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5390. Communication Internship.**

Students acquire on-the-job experience in a position with an organization, using skills and knowledge acquired through graduate coursework. The course requires written reports and other projects as specified by the supervising instructor. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5395. Capstone Research Project.**

Under the direction of a graduate faculty member, students develop and submit a research or applied project using knowledge and skills acquired through graduate coursework. Required for students not pursuing the thesis path. May be taken only once for degree credit. Prerequisite: Permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Communication Studies 5399B. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COMM 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COMM 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COMM 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) degree with a major in Communication Studies comprehensive, non-thesis program provides the greatest flexibility and breadth of understanding. The department assigns all communication studies majors to this comprehensive program. After the first term of course work, the student may request the thesis option. Students may elect to take up to six credits of course work outside of the department, with graduate advisor approval.

Students may select communication studies courses that develop expertise in one or more of the following resource areas: organizational communication, rhetorical studies, communication training and development, health communication, interpersonal communication, or instructional communication. Students also may select courses from related disciplines, such as mass communication, education, English,

psychology, sociology, and business. The department encourages all students to explore courses that provide a breadth of knowledge about human communication.

## Organizational Communication

Students primarily interested in organizational communication investigate the function, flow, and structure of communication in organizations to enhance organizational effectiveness.

## Rhetorical Studies

Students interested in rhetorical studies investigate how symbols have the power to shape perceptions and alter attitudes. Students may select from courses that offer a broad overview of rhetorical theory and rhetorical methods.

## Communication Training and Development

Students who seek careers as communication trainers or human resource development specialists select from several courses that provide information and prescribe strategies to enhance communication performance.

## Health Communication

Students who focus on health communication investigate the essential role of communication in healthcare through a variety of courses that explore such topics as barriers to patient and provider interactions, health communication leadership, health disparities, healthcare training and assessment, health in relationships and healthcare team effectiveness.

## Interpersonal Communication

Students who emphasize interpersonal communication take courses that focus on the role of communication in the development and maintenance of human relationships. *Seminar in Interpersonal Communication* provides a comprehensive review of theory and research that explores interpersonal relationships.

## Instructional Communication

Students who wish to pursue careers in teaching at the community college level will take courses that will prepare them for a career in education including communication curricula typically found in community colleges (interpersonal communication, small group communication, public speaking, and communication fundamentals). In addition, students may select courses from our outstanding College of Education.

## Facilities

The department is located in the completely renovated Centennial Hall which offers outstanding resources including faculty offices, several graduate assistant office suites, computer labs, conference rooms, classrooms equipped with comprehensive instructional technologies, and a state of the art teaching theatre. The department also has a newly renovated research lab with computer technology and data collection tools.

## Faculty

The department's faculty members are active in state, regional, national, and international associations and widely publish their research in books, professional and academic journals, podcasts, and blogs.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - GRE not required
  - resume/CV
  - statement of purpose (approx. 1000 words) addressing the following:
    - which area(s) of communication studies are you most interested in pursuing and why
      - Describe at least two communication questions you might like to explore, understand better, or develop an expertise in during your graduate study. These questions are not binding; you do not have to research these questions should you be accepted, but they will help us assess your fit with graduate work, our program, and our faculty.
    - rationale for selecting the M.A. in communication studies at Texas State
    - readiness for graduate study, i.e., how the academic background has prepared the student for graduate study in the Department of Communication Studies at Texas State
    - career goals/plans, including how the student will apply the degree post-graduation
  - three letters of recommendation from individuals knowledgeable about your academic ability and promise as a scholar

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading



- 19 speaking
- 18 writing
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A) degree with a major in Communication Studies requires 30 semester credit hours, including a thesis.

### Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
Choose 6 hours from the following:		6
COMM 5301	Quantitative Research Methods in Communication	
COMM 5302	Rhetorical Methods	
COMM 5303	Qualitative Research Methods in Communication	
<b>Prescribed Electives</b>		
Choose 18 hours from the following in consultation with the graduate advisor:		18
COMM 5304	Work/Life Intersections	
COMM 5307	The Dark Side of Communication	
COMM 5309	Proseminar in Communication Research Methods	
COMM 5312	Intercultural Communication	
COMM 5313	Relational Communication	
COMM 5314	Family Communication	
COMM 5315	Directed Research in Communication Studies	
COMM 5318	Interpersonal Communication	
COMM 5319	Organizational Communication	
COMM 5321	Communication Assessment	
COMM 5324	Seminar in Instructional Communication	
COMM 5325	Seminar in Human Communication Theory	
COMM 5327	Contemporary Rhetorical Theory	
COMM 5329B	Communication and Negotiation	
COMM 5329D	Managing Communication Technologies in the Workplace	
COMM 5329E	Communication and Organizational Culture	
COMM 5329G	Communication and Emotion	
COMM 5329H	Work, Identity, and Difference	
COMM 5329I	Relational Health Communication	
COMM 5329J	LGBTQ+ Rhetoric and Advocacy	
COMM 5329K	End-of-Life Communication	
COMM 5329L	Communicating Diversity and Inclusion	
COMM 5329M	Health Communication Campaigns	
COMM 5329N	Rhetoric of Diversity	
COMM 5330	Nonverbal Communication	
COMM 5331	Persuasive Communication	
COMM 5332	Communication and Technology	
COMM 5333	Health Communication	

COMM 5340A	Rhetorical Movements
COMM 5340B	Free Speech and Extremism
COMM 5340C	Rhetoric of Women's Rights
COMM 5342	Historical Rhetoric and Social Influence
COMM 5343	Contemporary Rhetoric and Social Influence
COMM 5344	American Speeches
COMM 5345	Political Communication
COMM 5347	Small Group Communication
COMM 5350	Applied Communication Studies
COMM 5355	Media Criticism
COMM 5356	Gender and Communication
COMM 5371	Communication Training and Development
COMM 5372	Organizational Communication Analysis and Development
COMM 5374	Organizational Rhetoric
COMM 5395	Capstone Research Project

May choose 6 hours of advisor-approved electives from outside the department

<b>Thesis</b>	
COMM 5399A	Thesis
Select a minimum of 3 hours from the following	
COMM 5199B	Thesis
COMM 5299B	Thesis
COMM 5399B	Thesis
COMM 5599B	Thesis
COMM 5999B	Thesis

**Total Hours** **30**

## Thesis or a Comprehensive Examination Committee

A student must be in good academic standing to apply for a thesis examination committee. The student's cumulative GPA in all their graduate classes and in their communication studies classes must be 3.0 or higher. Also, the student should not have any incomplete grades in their classes.

Students must submit departmental forms to the director of graduate studies by November 1 or April 1. Students must make the request in the term in which they will complete 15 hours of course work. This is generally during the second term of full-time graduate course work since students must complete a thesis over two or more terms. The graduate faculty reviews all requests.

## Comprehensive Examination Requirement

Students must complete a thesis, which includes an oral defense. At the defense, the faculty committee may: (a) determine that the student has passed, (b) request corrections or revisions to the written portions, (c) request revisions and a subsequent oral defense of the revised document, or (d) determine that the student has failed. If a student has been asked to submit revisions and defend again, they may do so only once.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must

demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Doctoral and Master's level courses in Communication Studies: COMM

## Courses Offered

### Communication Studies (COMM)

#### COMM 5100. Teaching Communication Studies.

An introduction to curriculum, instruction, and assessment methods in the teaching of Communication Studies. Provides an orientation as well as regular in-service training and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### COMM 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### COMM 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### COMM 5301. Quantitative Research Methods in Communication.

This course is an examination of quantitative research methods in speech communication. Measurement procedures, statistics, experimental design, and descriptive research methods are investigated, as well as a consideration of scholarly writing and library research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COMM 5302. Rhetorical Methods.

A study of approaches to the analysis of public discourse directed toward establishing workable perspectives for students conducting rhetorical analysis. Required of communication studies majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COMM 5303. Qualitative Research Methods in Communication.

This course provides an introduction to qualitative methods of inquiry in communication. Students will learn and apply principles of qualitative research designs in data collection, analysis, and integration of narrative and non-numeric data in communication research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COMM 5304. Work/Life Intersections.

This course examines those situations where work and life intersect, and how humans use communication to create, negotiate, and manage work/life intersections.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COMM 5307. The Dark Side of Communication.

This graduate seminar will examine aversive and problematic interactions in interpersonal, organizational, health, and instructional settings. Sample topics include (un)fairness, backstabbing/betrayal, breaking up, end of life communication, deception, teacher misbehaviors, and bullying. Students will take a research-based approach to understanding these undesirable, yet common, messages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COMM 5309. Proseminar in Communication Research Methods.

The goal of this course is to provide students with an overview of the methods used in the discipline of Communication Studies. To that end, we will begin by introducing students to the history of the discipline followed by overviews of rhetorical, quantitative, and qualitative research methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COMM 5310. Methods of Teaching Communication Studies.

A study of the methods of the teaching speech communication principles and skills for secondary school teachers. Prerequisite: Admission to teacher certification program or permission of department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COMM 5312. Intercultural Communication.

This course examines how culture evolves and is maintained through communicative systems of meaning. The many ways in which language, culture, and communication interact with, influence, and manifest in each other in everyday experience are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### COMM 5313. Relational Communication.

This course provides a comprehensive overview of relational communication theories and research. Students engage with theory and research frameworks to think critically about relational communication perspectives and contributions, understand the strengths and limitations of those perspectives, and learn to contribute to new knowledge of relational communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5314. Family Communication.**

This course explores the communication processes associated with families. Topic areas for exploration will include: storytelling, intimacy, conflict, rituals, religion, health-illness, and death. The goal is to further understand interdisciplinary research and theory related to family interactions embedded in larger webs of social, cultural, and generational relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**COMM 5315. Directed Research in Communication Studies.**

A course to be offered to certain graduate students to allow for independent study in a specific area for which a regular course is not available. May be repeated with different emphasis for additional credit. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Dual Enrollment Permitted  
**Grade Mode:** Standard Letter

**COMM 5318. Interpersonal Communication.**

A review of current research in the area. Includes an examination of contemporary theories and research methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**COMM 5319. Organizational Communication.**

Examines organizational communication theory and research in applied organizational contexts. Provides communication professionals with an analytical framework for improving communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**COMM 5320. Directing Communication Studies and Theatre Activities.**

Designed to assist any teacher, whether of speech and drama or some other subject, in directing speech and drama activities. During the course, those in the class will actually direct debate, plays, declamation, and other activities. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**COMM 5321. Communication Assessment.**

An in-depth study of communication assessment techniques employed in the field of oral communication. Statistical, experimental, and observational methods of assessing oral communication in interpersonal, group, and classroom settings are included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**COMM 5324. Seminar in Instructional Communication.**

Examines communication instruction theory and research and their practical applications in various instructional settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**COMM 5325. Seminar in Human Communication Theory.**

This course is an examination of theories of human communication contexts including interpersonal, family, intercultural, organizational, and instructional communication. The course may be repeated with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**COMM 5327. Contemporary Rhetorical Theory.**

A survey of the major contemporary theoretical perspectives and conceptual debates in rhetoric. Focuses upon critical interpretations and applications of theory in addition to study of primary theorists' writings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**COMM 5329B. Communication and Negotiation.**

Examines theory, research, and practice of conflict management and negotiation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

**COMM 5329D. Managing Communication Technologies in the Workplace.**

Examines how communication technologies both help and hinder workplace communication. Examines theory, practical applications, key scholars and empirical research. Heavy focus on using case studies that provide context for learning how to thrive in the contemporary organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

**COMM 5329E. Communication and Organizational Culture.**

A seminar about communication and organizational culture. Discussion and materials explore communication practices that enable people to identify themselves as members of an organization and bind themselves to each other. Students will have the opportunity to analyze an organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

**COMM 5329G. Communication and Emotion.**

This course examines various ways in which interpersonal communication and emotion coexist and impact one another. The goal is to provide opportunities to learn about emotional experience and expression both in an abstract way (class readings and discussions) and in a more concrete fashion (conducting your own analyses and research).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329H. Work, Identity, and Difference.**

Work is influential in our social interactions, our understanding of our own and others' identities, and our navigations of difference. We will explore the communication challenges of contemporary work in the United States through researching the history of work, excessive work, and communication construction of difference at work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329I. Relational Health Communication.**

This course reviews the intersection of interpersonal and health communication theory, highlighting the impact of social involvement and communication processes on health outcomes, as well as the application of health communication theories in close relationship contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329J. LGBTQ+ Rhetoric and Advocacy.**

This course explores historical and contemporary developments in of LGBTQ+ rhetoric and advocacy. In doing so, the course also examines how approaches to the study of LGBTQ+ rhetoric and advocacy, in terms of theory and methodology, has changed and shifted over time.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329K. End-of-Life Communication.**

This course will examine communication at the end-of-life (EOL). Students will discuss how people approach the EOL, and the end of relationships, through communication. Course material will highlight challenges and current issues surrounding EOL communication between terminally ill individuals and their family, friends, and medical professionals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329L. Communicating Diversity and Inclusion.**

This course examines the relationship between communication and power imbalances that deny equal respect, dignity, and rights to inclusion for the socially marginalized. Building upon historical and contemporary research, students will be able to extend principles from the critical paradigm and instructional communication to act ethically when making decisions that impact socially marginalized groups, develop a research project that advances knowledge of diversity and inclusion, and conduct training to advance diversity and inclusion initiatives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329M. Health Communication Campaigns.**

Contemporary theory and research from the field of Communication Studies make it possible to understand how and why health messages may impact future communication and behavior. This course explores how health-focused information can produce shared meaning between message senders and receives. Using a transactional communication framework, students will examine impacts of relationships, organizational roles, and networks of social relationships in relation to health outcomes of patients, families, organizations, and communities. Theoretical and applied research is used to guide the analysis of evidence-based messages that prevent disease and illness, reduce health risks, and promote behaviors that improve health.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329N. Rhetoric of Diversity.**

The course delves into the academic literature on rhetoric, diversity, and inclusion. This course explores how the values of diversity and inclusion are products of rhetorical negotiation and definition, examining how these concepts are used in a variety of context and for a wide array of purposes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329O. Communication in Understudied Close Relationships.**

This course focuses on important relationships that may get 'glossed over' in standard interpersonal communication seminars. More specifically, we will examine the various types of close relationships that comprise modern society, and current issues that affect those bonds. Students will investigate how communication functions to develop, maintain, enrich, or limit these understudied relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**COMM 5329P. Communication & Identity in International Work Cultures.**

This course explores how personal, cultural, organizational, and occupational identities shape workplaces. By traveling to multiple countries abroad, we will explore how different employees make sense of their work identities. Tours across the country will enable students to better understand culture's influence on work, and business site visits will allow students to observe work, communication, and identities in a variety of organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5330. Nonverbal Communication.**

A review of current theory and research of nonverbal communication behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5331. Persuasive Communication.**

An analysis of theories of persuasion. Emphasis placed on understanding established theories of attitude formation and change, contemporary persuasion, research, and the application of persuasion theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5332. Communication and Technology.**

Focuses on research and theories about the relationships between technology and communication behavior in interpersonal, group, and organization contexts. Also considers relationships between communication, technology, and culture.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5333. Health Communication.**

This course provides an overview of health communication theory and research to explore how interpersonal, organizational, and cultural messages shape views of illness and the health care system. Topics will include health literacy, health risk messages, e-health, health disparities, and physician-patient interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5340A. Rhetorical Movements.**

This course examines the unique phenomenon of "rhetorical movements". Unlike rhetorical inquiries that typically focus upon the discourse of those in power, the study of rhetorical movements analyzes how individuals, who often have no other resources but their voices and their bodies, come together to attempt social and political changes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5340B. Free Speech and Extremism.**

One of the most unique and important foundations of American society is the right to free speech. This course will begin with an examination of free speech in historical and contemporary society. Because free speech is often contested (and protected) through extreme controversy, we will also focus on extremist rhetoric.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5340C. Rhetoric of Women's Rights.**

This course examines the rhetoric of women's rights in the United States. We will analyze arguments of the nineteenth century abolitionist, temperance, and women's rights movements, and the public discourse of the twentieth century women's rights movements. We will also consider contemporary issues of gender and power in public argument.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5340D. Argumentation & Public Advocacy.**

This course explores the theory and practice of argumentation and public advocacy. The course provides an overview of contemporary approaches to the study of argumentation and ethics. The course emphasizes the application of theories of argumentation and advocacy to recent examples.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5340E. Science, Health, & Environmental Rhetoric.**

This graduate course explores the history, theories, and applications of rhetoric as it pertains to science, health and the environment. These fields are both interrelated and distinct in rhetorical studies. For instance, while environmental rhetoric includes the rhetorical construction of "wilderness," it also includes studies of environmental justice & health disparities across gendered/classed/racial lines as well as debates over climate science & scientific consensus. Students will gain a broader understanding of rhetorical theory and how to complete rhetorical critique. Students can also expect to read academic articles, lead class discussions, and engage in independent academic research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5342. Historical Rhetoric and Social Influence.**

This course is an analytical study of speeches, speakers, groups, movements, and rhetorical strategies in history. Includes emphasis on the following topics: American Public Address, Rhetoric of Woman's Suffrage, and other historic topics of interest. This course may be repeated with different emphasis or topic for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 5343. Contemporary Rhetoric and Social Influence.**

The analytical study of speeches, speakers, groups, movements, and rhetorical strategies in contemporary society. Includes emphasis on the following topics: rhetoric and culture, rhetorical movements, and rhetorical genres. May be repeated with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 5344. American Speeches.**

This course is a survey of American public address. The class will study significant and representative speeches from different periods of American history. This class will examine what the study of American public address can teach us about history, communication, and social influence.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5345. Political Communication.**

Study of political communication in contemporary times. Course will cover the rhetoric of candidates and politicians, the structure of political campaigns, and campaign practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5347. Small Group Communication.**

An examination of theories and research evidence about communication in the small group.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5350. Applied Communication Studies.**

An application of communication principles and skills. Topics covered may include organizational, interpersonal, nonverbal and group communication, conflict management, communication technology, and persuasion analysis. May not be taken for credit by students pursuing M.A. degree in Communication. May be repeated for additional credit with department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 5355. Media Criticism.**

A rhetorical analysis of media from a Contemporary Cultural Studies perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5356. Gender and Communication.**

An examination of research and theories about gender communication, relationships, and qualitative research methods. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COMM 5360. Introduction to Empirical Research in Communication.**

Introduction to Communication Studies as a behavioral science. Students will learn principles of the scientific method; explore quantitative and qualitative methods; investigate variables across the field (persuasion, interpersonal, organizational, non-verbal, intercultural, and instructional); and analyze and apply research in Communication. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**COMM 5362A. Organizational Communication.**

Introduction to communication concepts in the context of organizations. Students will learn how communication influences contemporary organizations through familiarity with contemporary research. Students will be prepared to understand, investigate, and manage communication processes in organizations. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**COMM 5362B. Organizational Rhetoric.**

Introduction to the study of organizational rhetoric designed for internal and external audiences. Students will analyze and create messages based in theories of organizational rhetoric. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**COMM 5371. Communication Training and Development.**

This course examines the theory and practice of developing and presenting communication training sessions for organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5372. Organizational Communication Analysis and Development.**

This course examines communication problems in organizations and describes effective interventions. Provides communication managers and consultants with a broad range of tools and procedures for diagnosing and changing communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5374. Organizational Rhetoric.**

This course will include an examination of how organizations use symbols to accomplish a variety of functions for internal and external audiences, as well as exploring the concept of organization as rhetorical argument.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5390. Communication Internship.**

Students acquire on-the-job experience in a position with an organization, using skills and knowledge acquired through graduate coursework. The course requires written reports and other projects as specified by the supervising instructor. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5395. Capstone Research Project.**

Under the direction of a graduate faculty member, students develop and submit a research or applied project using knowledge and skills acquired through graduate coursework. Required for students not pursuing the thesis path. May be taken only once for degree credit. Prerequisite: Permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Communication Studies 5399B. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COMM 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COMM 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COMM 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

The graduate minor in Communication Studies requires 12 semester credit hours of advisor-approved COMM courses. A student who minors in Communication Studies should have completed at least 18 undergraduate hours of courses in communication studies (COMM). The department encourages communication studies minors to take courses from both rhetorical and behavioral perspectives to gain a broad perspective of the communication studies discipline. Students may take COMM courses as part of a resource or cognate area. Students who wish to take courses in communication studies that is not part of an approved minor should consult with the instructor of the course or the communication studies graduate advisor.

## Program Overview

The nine-hour certificate program in Corporate Communication and Training is designed to provide foundational instruction in organizational communication, communication training, and human resource development and other related course work for individuals interested in corporate communication, training, and human resource development.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$20 nonrefundable application fee

or

- \$60 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work, plus any completed graduate courses
- GRE not required
- essay (maximum of 500 words) addressing the following: reason for seeking the certificate, academic background and preparation for

course work in communication and/or experience as a trainer, plans after completion of the certificate and how it applies to future plans

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waliver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Course Requirements

The certificate requires 9 semester credit hours. All of these elective options will not be available to students completing their certificates via distance learning. Please reach out to the graduate advisor for more information.

Code	Title	Hours
<b>Required Courses</b>		
COMM 5319 or COMM 5374	Organizational Communication Organizational Rhetoric	3
COMM 5371	Communication Training and Development	3
Select one of the following:		3
COMM 5304	Work/Life Intersections	
COMM 5318	Interpersonal Communication	
COMM 5319	Organizational Communication (if not taken as required)	
COMM 5321	Communication Assessment	
COMM 5324	Seminar in Instructional Communication	
COMM 5325	Seminar in Human Communication Theory	
COMM 5329B	Communication and Negotiation	
COMM 5329E	Communication and Organizational Culture	
COMM 5329H	Work, Identity, and Difference	
COMM 5329L	Communicating Diversity and Inclusion	
COMM 5332	Communication and Technology	
COMM 5347	Small Group Communication	
COMM 5350	Applied Communication Studies	
COMM 5372	Organizational Communication Analysis and Development	
COMM 5374	Organizational Rhetoric (if not taken as required)	
<b>Total Hours</b>		<b>9</b>

Old Main Building Room 102  
Telephone: 512-245-2656 Fax: 512-245-7649  
[www.masscomm.txstate.edu](http://www.masscomm.txstate.edu) (<http://www.masscomm.txstate.edu/>)

The School of Journalism and Mass Communication offers opportunities for professionals and recent graduates to expand their education and training in digital media strategy and storytelling by earning a Master of Arts (M.A.) degree with a major in Mass Communication.

The courses offered cultivate strong digital, analytical and storytelling skills that prepare students to advance in digital media and strategic communication careers or to pursue a doctoral degree. The curriculum emphasizes digital and social media competencies across the core and elective classes. The program enables students whose undergraduate major may not have been mass communication and those wishing to advance their careers to gain digital and social media storytelling, critical thinking research and analytical skills for media and communication careers.

Digital media strategy and storytelling are at the heart of our graduate program. Today's media environment relies on analytics and storytelling to engage and communicate with various audiences. In addition to applied research, digital media issues and storytelling across platforms core courses, students can customize their degree by taking major elective courses (such as social media campaigns, digital media design and digital story production), and several experiential learning opportunities such as study abroad., SxState class, internships and community partnering. The degree is accessible to working professionals and full-time students with evening classes, a mix of in-person, hybrid and online courses and summer courses offerings..

### Facilities

The Schools' faculty offices, classrooms, Mi lab, media labs, and administrative offices are located in historic Old Main. Live Oak Hall, our film and television studio, features a state-of-the-art television studio and control room.

### Graduate Assistantships & Scholarships

Graduate assistantships are offered with competitive stipends. A graduate assistantship provides an out-of-state tuition waiver for non-resident students. Out-of-state students who receive a competitive scholarship of at least \$1,000 also receive an out-of-state tuition waiver.

The School of Journalism and Mass Communication offers limited scholarships for currently enrolled students. The College of Fine Arts and Communication and the Graduate College provide a variety of scholarships for new and returning graduate students. See the various web sites for details.

## Master of Arts (M.A.)

- Major in Mass Communication (Professional Project Option) (p. 2035)
- Major in Mass Communication (Thesis Option) (p. 2042)

## Program Overview

The School of Journalism and Mass Communication offers an opportunity for media professionals and recent graduates to expand their education and training within the mass communication field by earning a Master of Arts (M.A.) degree. The program is geared toward working professionals with or without a background in mass communication.

Students in the M.A. program take a variety of skills-based and theory courses. The curriculum provides students with the digital and analytic skills needed for the field of mass communication.

Students complete an 18-hour core as well as electives. Students create a professional project to graduate. Core courses focus on media writing, digital storytelling, law/ethics, digital media issues, mass communication, theory and research. Electives address a variety of

topics such as: human-computer interaction, web design, media design, content management, strategic communication campaigns and crisis communication. Students can earn internship credit and also have the opportunity to study abroad.

Courses are offered face-to-face in the evening, online, or via a hybrid teaching model because a large percentage of students enrolled are working professionals.

Facilities

The Schools' faculty offices, classrooms, Milab, media labs, and administrative offices are located in historic Old Main.

Financial Assistance

Graduate assistantships are offered with competitive stipends. Having a graduate assistantship also provides an out-of-state tuition waiver. Most assistantships are assigned in May for the fall term, but assistantships may be available for students in the spring.

The School offers limited scholarships for currently enrolled students. Also, the College of Fine Arts and Communication and The Graduate College provide a variety of scholarships for new and returning graduate students. See the various web sites for details.

Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV including information on educational background, work experience, and extracurricular activities
- statement of purpose including a professional narrative discussing how the skills learned in the curriculum featured in the M.A. program will be applied in current or future careers. The statement should be no longer than 500 words in length.
- two letters of recommendation from individuals competent to assess the student's capacity to pursue graduate education in mass communication. Students who did not major in mass communication

as an undergraduate student should submit at least one of the two letters from a professor in the student's undergraduate major. Students graduating from another institution, should submit at least one of the two letters from a professor in the previous institution.

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waveir>).

- official TOEFL iBT scores required with a 100 overall
- official PTE scores required with a 68 overall
- official IELTS (academic) scores required with a 7.0 overall and minimum individual module scores of 6.5
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

Degree Requirements

The Master of Arts (M.A.) degree with a major in Mass Communication requires 36 semester credit hours, including a professional project. All students are required to make a minimum 3.0 GPA in the required courses and a minimum 3.0 GPA in the electives.

Code	Title	Hours
Required Courses		
MC 5302	Research Methods in Mass Communication	3
MC 5316	Digital Media Issues	3
MC 5334	Storytelling Across Platforms	3
Advisor may substitute 6 credits of MC coursework.		
Prescribed Electives		
Choose 24 hours from the following:		24
MC 5301	Mass Media and Society	
MC 5303	Theories of Mass Communication	
MC 5304T	Health Communication Campaigns	
MC 5306B	The Psychology of Social Media	
MC 5306F	Content Analysis	
MC 5306H	Foundations For Mass Communication Graduate Studies	
MC 5306I	Collecting, Analyzing and Presenting Data	
MC 5306L	Refugees, Nonprofit Organizations and Strategic Communication	
MC 5306M	Social Media Strategies, Campaigns and Analytics	
MC 5306N	Mass Communication History	
MC 5308	Seminar in Strategic Communication	
MC 5309	Gender, Race, and Class in the Media	
MC 5310	Global Media Issues	
MC 5311	Independent Study	
MC 5312	Digital Media Design	
MC 5313	Media Law and Ethics	
MC 5315	Creative Problem Solving in Mass Communication	
MC 5317	Advanced Digital Media	



MC 5318	Media Ethics
MC 5319	Mass Media and Politics
MC 5321	Latinos and Media
MC 5322	Global Media Strategy in Advertising and Public Relations
MC 5323	Current Issues in Mass Communication
MC 5324	Media Writing
MC 5326	Strategic Communication Campaigns
MC 5327	Visual Communication
MC 5328	Digital Story Production
MC 5329	Media Systems in Latin America
MC 5330	Internship in Mass Communication
MC 5332	SXTXState Project
MC 5333	Digital Media Entrepreneurship
MC 5335	Code Camp I
MC 5336	Code Camp II
MC 5337	Global Media in the Connected World
MC 5338	Ethics and Crisis in Strategic Communication
MC 5339	Managing Digital Content
MC 5340	Media Product Strategy
MC 5341	Feature Writing
MC 5342	Global Media Systems
MC 5343	Global Strategic Communication Practices
May choose 6 hours of advisor-approved electives from outside the school.	

**Project**

MC 5307	Project	3
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The comprehensive exam is an oral defense of the professional project produced. Students who fail the oral defense can reschedule to take it again.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Mass Communications: MC

## Courses Offered

### Mass Communication (MC)

#### MC 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: MC 5399A and completed course work.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### MC 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: MC 5399A and completed course work.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### MC 5300. Teaching Techniques in Mass Communication.

This course is an introduction to curriculum, instruction, and assessment methods in the teaching of Mass Communication. It provides an orientation as well as regular in-service training and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. This course is only open to graduate teaching and instructional assistants.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### MC 5301. Mass Media and Society.

A seminar devoted to analysis and discussion of significant contemporary issues in mass communication, including a study of the history of the development of mass communication media. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### MC 5302. Research Methods in Mass Communication.

Investigation of the tools and techniques of both qualitative and quantitative research methods used in the study of mass communication, including surveys, content analysis, experimental designs and case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### MC 5303. Theories of Mass Communication.

Examination of the literature of mass communication theory and discussion of theoretical approaches and models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### MC 5304T. Health Communication Campaigns.

Provides an overview of the theory and practice of designing, producing and evaluating health-communication campaigns. Examines persuasive approaches to behavioral change as well as audience, message and channel factors in health-campaign development. Emphasizes communication approaches, including mass media, social networking and new media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MC 5306B. The Psychology of Social Media.**

This course reviews social cognitive theories and research about the way social media users both produce and consume social media messages. It will examine clinical psychological and psychiatric effects that take place among social media users who do not have a clinical diagnosis. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306F. Content Analysis.**

Content analysis is a systematic way to analyze the content of documented communications, whether they are written, audio/visual or digital. This course will examine the methodological steps involved in conducting a quantitative content analysis, design and execute a content analysis study. Corequisite: MC 5303 or MC5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306H. Foundations For Mass Communication Graduate Studies.**

This course will familiarize students with the structure of the mass communication discipline, prominent theorists and historical developments, as well as expose them to the process of research and writing in the discipline of mass communication. Corequisites: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306I. Collecting, Analyzing and Presenting Data.**

This course will introduce students to skills for working with data as well as perspectives from which to think critically about the use of data in contemporary society. It will focus on three stages of working with data: collection, analysis and presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306J. Mass Media Design.**

Study and application of advanced principles of media design including: basic design principles, typography, color, photography, video, and digital media. Students will learn production skills for existing and new media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306L. Refugees, Nonprofit Organizations and Strategic Communication.**

This course analyzes strategic communication of nonprofit organizations serving refugees and asylum seekers. Students are introduced to organizations that serve these marginalized populations in Texas and to the problems, challenges and opportunities these organizations face. Students will conduct research and produce a project on an issue related to this topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306M. Social Media Strategies, Campaigns and Analytics.**

This course will expose students to the principles and strategies behind social media campaigns. It will discuss the interactions, channels, SEO, and social media metrics used to gauge the success of a social media campaign. Students will also examine successful social media case studies. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306N. Mass Communication History.**

History of Mass Media is a course that examines the development of the American mass media, including advertising and public relations, from 1690 to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5307. Project.**

A major communication effort to demonstrate command of the skills necessary to work at advanced levels in mass communication. For example, it may be broadcast documentary, advertising or public relations campaign, or a newspaper series. This course is the master's capstone for those on the professional project track. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5308. Seminar in Strategic Communication.**

This course broadens students' understanding of issues related to advertising and public relations through an integrated communication perspective. Students learn the decision-making process, learn what problems real organizations experience and evaluate how they resolve issues in such areas as client-agency relationships, strategic planning/management and globalization. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5309. Gender, Race, and Class in the Media.**

This course takes a theoretical approach to the study of representations of gender, race, and class in the mass media. A historical overview will be followed by an in-depth look at current conditions. (MULT). Corequisite: MC 5303 or MC 5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 5310. Global Media Issues.**

This course examines the media systems worldwide in different socioeconomic contexts and studies the patterns of international information flow. The course includes theories governing international communication. Students learn how and why communication takes place between different nations and the impact of this communication on individual nations. (MULT). Corequisite: MC 5303 or MC 5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 5311. Independent Study.**

Study of a special interest that offers academic or professional improvement and growth in the field of Mass Communication. May be repeated once with different emphasis for additional credit. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 5312. Digital Media Design.**

This course instructs students in Web development and design. Students learn Hypertext Markup Language (HTML) and Cascading Stylesheets (CSS) coding and are introduced to graphics and multimedia programs and web development frameworks. The class addresses the history and social implications of creating for the web. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MC 5313. Media Law and Ethics.**

Study of laws and regulations as they pertain to media operations and the internal and external codes that guide media behavior. Freedom and responsibilities of the mass media practitioners and institutions will also be explored within the framework of ethical theories. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5315. Creative Problem Solving in Mass Communication.**

This class examines the psychology of creativity and its application in mass communication to media management, broadcasting, advertising, and public relations. Students learn a variety of ideation techniques and structured creative problem solving methods to better understand their own creative thinking process and how to facilitate creative thinking in groups. Corequisite: MC 5303 or MC 5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5316. Digital Media Issues.**

This course will examine the role of digital media, including the Internet, Web and mobile technologies. Issues discussed will include social media and cyberculture research, technology diffusion, data journalism, analytics and the effects of digital technologies on society and culture, with a focus on ethics and regulation. Corequisite: MC 5303 or MC 5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5317. Advanced Digital Media.**

This course builds on web development skills to create interactive presentations and data visualizations. Students are introduced to advanced programming and data concepts relevant to communicators. Theoretical and practical considerations of emerging technologies to the media industry will be integrated with production techniques. Prerequisite: MC 5312. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MC 5318. Media Ethics.**

The study of freedom and responsibilities of mass media practitioners and institutions, explored within the framework of ethical theories. Students will learn philosophical constructs as well as contemporary ethicists. Consideration of values, codes of ethics, moral development, professionalism, and institutional constraints as applied to media of information, persuasion and entertainment. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5319. Mass Media and Politics.**

The class will review key literature in the area of mass media and politics. It examines the relationship between the press and the government, as well as how the mass media covers politics at the statewide and national level. Corequisite: MC 5303 or MC 5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5321. Latinos and Media.**

An immersion into the study of Latinos, their representations in media, and media oriented to Latinos. The course will require students to engage in in-depth research about Latinos and media issues. (MULT) Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 5322. Global Media Strategy in Advertising and Public Relations.**

This course provides an in-depth examination of multinational communication organizations, including news media, public relations, and advertising companies. In addition, the course examines organizational roles, impact and strategic functions in a global marketplace. (MULT) Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 5323. Current Issues in Mass Communication.**

This course examines current theoretical and professional issues in mass communication. This course may be repeated once with a different emphasis for credit. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 5324. Media Writing.**

This course is designed to impart media writing skills. Students learn information gathering, interviewing skills, and writing techniques pertinent to different media. Students produce content (e.g., stories and digital pieces) that could be published across a wide variety of media outlets.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5326. Strategic Communication Campaigns.**

This course is a comprehensive study of strategic communication campaign planning with emphasis on public relations and advertising. Students combine theory and practice to develop, coordinate and evaluate advertising/public relations campaigns for key audiences. Prerequisite: MC 5308 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5327. Visual Communication.**

This course examines the principles, theories, and language of visual communication, emphasizing the evaluation and use of images in digital mass media. Students will learn about media influences on their perceptions of reality and their behavior, the elements of visual literacy, and multicultural and global perspectives in visual media. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5328. Digital Story Production.**

This course involves discussion, development and analysis of multimedia stories, documentary video, and digital media. Students explore digital media techniques used in writing and producing multimedia stories. They learn visual aspects of storytelling and how to produce digital stories. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 5329. Media Systems in Latin America.**

Students analyze media systems Latin America within their historical, cultural and political contexts. The course provides a comparative perspective of the role of the media within the region, their national markets and international Latino market. Students will ground these investigations with theories of international communication and information flow. (MULT) Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MC 5330. Internship in Mass Communication.**

Students acquire on-the-job experience in an off-campus media setting where they can apply the skills and knowledge acquired through mass communication graduate course work. Requires 180 hours of work off-campus, a written report, a portfolio of work product, and a supervisor's evaluation. Prerequisite: Departmental and Instructor approval. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MC 5332. SXTXState Project.**

This course involves attendance at and coverage of the South By Southwest Interactive Conference. Students will prepare for the event, attend panels, interview participants and produce digital content about the experience. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5333. Digital Media Entrepreneurship.**

This course explores innovation and creativity associated with digital entrepreneurship. Students will be introduced to important concepts and ideas from thought leaders and innovators at the intersection of media and technology. Students will research and develop their own digital media products. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5334. Storytelling Across Platforms.**

Students learn the tools, channels and techniques available for multimedia storytellers. The course introduces new and emerging ways to tell stories, including social media, photo and video platforms, branding and audience engagement, mobile media and data visualization. Prerequisite: MC 5328. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MC 5335. Code Camp I.**

In this course students are immersed in programming concepts relevant to communicators. Students will practice document object model manipulation using appropriate software to create interactive Web projects. Prerequisite: MC 5312 with a grade of "B" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MC 5336. Code Camp II.**

In this course students are immersed in data and visualization concepts relevant to communicators. Students will create interactive data visualization projects. Prerequisite: MC 5312 with a grade of "B" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MC 5337. Global Media in the Connected World.**

This course critically analyzes the role and use of traditional, digital and social media in a connected world. Students examine the prospects, challenges and applications of global media in areas such as socioeconomic development, political participation, digital divide, strategic communication, global crises and global entertainment.

Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5338. Ethics and Crisis in Strategic Communication.**

In this course students examine strategic communication practices throughout the stages of a crisis and ethical considerations. Special emphasis is placed on the crisis cycle, media relationships, image restoration, ethical responses, and organizational learning. Prerequisite: MC 5308 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5339. Managing Digital Content.**

This course introduces concepts, skills and processes for working with content management systems. Students learn to assess organizations' content needs and to develop appropriate content management solutions. Topics covered in this course include user research, information architecture and content strategy. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MC 5340. Media Product Strategy.**

This course examines current theoretical and professional issues in mass communication. Specifically, this course provides students with practical knowledge of theories of human-computer interaction, and communication design principles and standards. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5341. Feature Writing.**

This course provides an in-depth understanding of the technical expertise, research methods, interviewing skills and narrative techniques pertinent to feature writing. The course also explores how to target a feature story to a specific audience and how to submit feature stories for publication to newspapers and magazines, print and online. Prerequisite: MC 5324 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5342. Global Media Systems.**

This study abroad course prepares students to think critically and analytically about media systems and functions in different countries with emphasis on the location/s of the study abroad program. The course provides students with practical knowledge and insights gained by visiting media organizations abroad. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5343. Global Strategic Communication Practices.**

In this course, students analyze and discuss issues and challenges of contemporary global strategic communication practices and focus on gaining first-hand experience by visiting public relations, advertising and other communication agencies abroad. This course provides professional development and networking opportunities. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Standard Letter



**MC 5344. Data Storytelling in Mass Communication.**

In this course students will be introduced to data-related topics and skills that will further their careers in a variety of communications professions. Data visualization and storytelling tools and techniques are covered as related to journalism, advertising and public relations. Prerequisite: MC 5324 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5345. Advanced Digital Story Production.**

This course examines current theoretical and professional issues in visual digital storytelling. Students explore advanced digital media techniques used in writing and producing multimedia stories. Students produce sophisticated visual digital stories for use across a variety of platforms using differing styles. Prerequisite: MC 5328 with a grade of a "B" or better. Corequisite: MC 5303 and MC 5302 both with a grade of a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5399A. Thesis.**

A scholarly study of communication behavior, the purpose of which is to broaden understanding of what mass media do, how they do it, and with what effects. It may be quantitative, historical or rely upon another appropriate methodology. No thesis credit is awarded until student has completed the thesis in MC 5399B. Prerequisite: Completed course work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MC 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: MC 5399A and completed course work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MC 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: MC 5399A and completed course work.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MC 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: MC 5399A and completed course work.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The School of Journalism and Mass Communication offers an opportunity for media professionals and recent graduates to expand their

education and training within the mass communication field by earning a Master of Arts (M.A.) degree.

The program is geared toward working professionals with or without a background in mass communication.

Students in the M.A. program take a variety of skills-based and theory courses. The curriculum provides students with the digital and analytic skills needed for the field of mass communication.

Students complete an 18-hour core as well as electives and 6 hours of thesis credits. Students write an academic thesis to graduate. Core courses focus on media writing, digital storytelling, law/ethics, digital media issues, mass communication, theory and research. Electives address a variety of topics such as: human-computer interaction, web design, media design, content management, strategic communication campaigns and crisis communication. Students can earn internship credit and also have the opportunity to study abroad.

Courses are offered face-to-face in the evening, online, or via a hybrid teaching model because a large percentage of students enrolled are working professionals.

## Facilities

The Schools' faculty offices, classrooms, Milab, media labs, and administrative offices are located in historic Old Main.

## Financial Assistance

Graduate assistantships are offered with competitive stipends. Having a graduate assistantship also provides an out-of-state tuition waiver. Most assistantships are assigned in May for the fall term, but assistantships may be available for students in the spring.

The School offers limited scholarships for currently enrolled students. Also, the College of Fine Arts and Communication and The Graduate College provide a variety of scholarships for new and returning graduate students. See the various web sites for details.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted

- 2.75 overall GPA or 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV including information about educational background, work experience, and extracurricular activities
- statement of purpose including a professional narrative discussing how the skills learned in the curriculum featured in the M.A. program will be applied in current or future careers. The statement should be no longer than 500 words in length.
- two letters of recommendation from individuals competent to assess the student's capacity to pursue graduate education in mass communication. Students who did not major in mass communication as an undergraduate student should submit at least one of the two letters from a professor in the student's undergraduate major. Students graduating from another institution should submit at least one of the two letters from a professor in the previous institution.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 100 overall
- official PTE scores required with a 68 overall
- official IELTS (academic) scores required with a 7.0 overall and minimum individual module scores of 6.5
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Mass Communication requires 33 semester credit hours, including a thesis. All students are required to make a minimum 3.0 GPA in the required courses and a minimum 3.0 GPA in the electives.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MC 5302	Research Methods in Mass Communication	3
MC 5316	Digital Media Issues	3
Advisor may substitute 6 hours of MC coursework.		
MC 5334	Storytelling Across Platforms	3
<b>Prescribed Electives</b>		
Choose 18 hours from the following:		18
MC 5301	Mass Media and Society	
MC 5303	Theories of Mass Communication	
MC 5304T	Health Communication Campaigns	
MC 5306B	The Psychology of Social Media	
MC 5306F	Content Analysis	
MC 5306H	Foundations For Mass Communication Graduate Studies	
MC 5306I	Collecting, Analyzing and Presenting Data	

MC 5306L	Refugees, Nonprofit Organizations and Strategic Communication
MC 5306M	Social Media Strategies, Campaigns and Analytics
MC 5306N	Mass Communication History
MC 5308	Seminar in Strategic Communication
MC 5309	Gender, Race, and Class in the Media
MC 5310	Global Media Issues
MC 5311	Independent Study
MC 5312	Digital Media Design
MC 5313	Media Law and Ethics
MC 5315	Creative Problem Solving in Mass Communication
MC 5317	Advanced Digital Media
MC 5318	Media Ethics
MC 5319	Mass Media and Politics
MC 5321	Latinos and Media
MC 5322	Global Media Strategy in Advertising and Public Relations
MC 5323	Current Issues in Mass Communication
MC 5324	Media Writing
MC 5326	Strategic Communication Campaigns
MC 5327	Visual Communication
MC 5328	Digital Story Production
MC 5329	Media Systems in Latin America
MC 5330	Internship in Mass Communication
MC 5332	SXTXState Project
MC 5333	Digital Media Entrepreneurship
MC 5335	Code Camp I
MC 5336	Code Camp II
MC 5337	Global Media in the Connected World
MC 5338	Ethics and Crisis in Strategic Communication
MC 5339	Managing Digital Content
MC 5340	Media Product Strategy
MC 5341	Feature Writing
MC 5342	Global Media Systems
MC 5343	Global Strategic Communication Practices
May choose 6 hours of advisor-approved electives from outside the school.	

<b>Thesis</b>		
MC 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
MC 5199B	Thesis	
MC 5299B	Thesis	
MC 5399B	Thesis	
MC 5599B	Thesis	
MC 5999B	Thesis	
<b>Total Hours</b>		<b>33</b>

## Comprehensive Examination Requirement

The comprehensive exam is an oral defense of the thesis produced. Students who fail the oral defense can reschedule to take it again.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to

work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Mass Communications: MC

## Courses Offered

### Mass Communication (MC)

#### MC 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: MC 5399A and completed course work.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### MC 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: MC 5399A and completed course work.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### MC 5300. Teaching Techniques in Mass Communication.

This course is an introduction to curriculum, instruction, and assessment methods in the teaching of Mass Communication. It provides an orientation as well as regular in-service training and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. This course is only open to graduate teaching and instructional assistants.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### MC 5301. Mass Media and Society.

A seminar devoted to analysis and discussion of significant contemporary issues in mass communication, including a study of the history of the development of mass communication media. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### MC 5302. Research Methods in Mass Communication.

Investigation of the tools and techniques of both qualitative and quantitative research methods used in the study of mass communication, including surveys, content analysis, experimental designs and case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### MC 5303. Theories of Mass Communication.

Examination of the literature of mass communication theory and discussion of theoretical approaches and models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### MC 5304T. Health Communication Campaigns.

Provides an overview of the theory and practice of designing, producing and evaluating health-communication campaigns. Examines persuasive approaches to behavioral change as well as audience, message and channel factors in health-campaign development. Emphasizes communication approaches, including mass media, social networking and new media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

#### MC 5306B. The Psychology of Social Media.

This course reviews social cognitive theories and research about the way social media users both produce and consume social media messages. It will examine clinical psychological and psychiatric effects that take place among social media users who do not have a clinical diagnosis.

Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### MC 5306F. Content Analysis.

Content analysis is a systematic way to analyze the content of documented communications, whether they are written, audio/visual or digital. This course will examine the methodological steps involved in conducting a quantitative content analysis, design and execute a content analysis study. Corequisite: MC 5303 or MC5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### MC 5306H. Foundations For Mass Communication Graduate Studies.

This course will familiarize students with the structure of the mass communication discipline, prominent theorists and historical developments, as well as expose them to the process of research and writing in the discipline of mass communication. Corequisites: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### MC 5306I. Collecting, Analyzing and Presenting Data.

This course will introduce students to skills for working with data as well as perspectives from which to think critically about the use of data in contemporary society. It will focus on three stages of working with data: collection, analysis and presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306J. Mass Media Design.**

Study and application of advanced principles of media design including: basic design principles, typography, color, photography, video, and digital media. Students will learn production skills for existing and new media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306L. Refugees, Nonprofit Organizations and Strategic Communication.**

This course analyzes strategic communication of nonprofit organizations serving refugees and asylum seekers. Students are introduced to organizations that serve these marginalized populations in Texas and to the problems, challenges and opportunities these organizations face. Students will conduct research and produce a project on an issue related to this topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306M. Social Media Strategies, Campaigns and Analytics.**

This course will expose students to the principles and strategies behind social media campaigns. It will discuss the interactions, channels, SEO, and social media metrics used to gauge the success of a social media campaign. Students will also examine successful social media case studies. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306N. Mass Communication History.**

History of Mass Media is a course that examines the development of the American mass media, including advertising and public relations, from 1690 to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5307. Project.**

A major communication effort to demonstrate command of the skills necessary to work at advanced levels in mass communication. For example, it may be broadcast documentary, advertising or public relations campaign, or a newspaper series. This course is the master's capstone for those on the professional project track. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5308. Seminar in Strategic Communication.**

This course broadens students' understanding of issues related to advertising and public relations through an integrated communication perspective. Students learn the decision-making process, learn what problems real organizations experience and evaluate how they resolve issues in such areas as client-agency relationships, strategic planning/management and globalization. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5309. Gender, Race, and Class in the Media.**

This course takes a theoretical approach to the study of representations of gender, race, and class in the mass media. A historical overview will be followed by an in-depth look at current conditions. (MULT). Corequisite: MC 5303 or MC 5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 5310. Global Media Issues.**

This course examines the media systems worldwide in different socioeconomic contexts and studies the patterns of international information flow. The course includes theories governing international communication. Students learn how and why communication takes place between different nations and the impact of this communication on individual nations. (MULT). Corequisite: MC 5303 or MC 5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 5311. Independent Study.**

Study of a special interest that offers academic or professional improvement and growth in the field of Mass Communication. May be repeated once with different emphasis for additional credit. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 5312. Digital Media Design.**

This course instructs students in Web development and design. Students learn Hypertext Markup Language (HTML) and Cascading Stylesheets (CSS) coding and are introduced to graphics and multimedia programs and web development frameworks. The class addresses the history and social implications of creating for the web. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter



**MC 5313. Media Law and Ethics.**

Study of laws and regulations as they pertain to media operations and the internal and external codes that guide media behavior. Freedom and responsibilities of the mass media practitioners and institutions will also be explored within the framework of ethical theories. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5315. Creative Problem Solving in Mass Communication.**

This class examines the psychology of creativity and its application in mass communication to media management, broadcasting, advertising, and public relations. Students learn a variety of ideation techniques and structured creative problem solving methods to better understand their own creative thinking process and how to facilitate creative thinking in groups. Corequisite: MC 5303 or MC 5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5316. Digital Media Issues.**

This course will examine the role of digital media, including the Internet, Web and mobile technologies. Issues discussed will include social media and cyberculture research, technology diffusion, data journalism, analytics and the effects of digital technologies on society and culture, with a focus on ethics and regulation. Corequisite: MC 5303 or MC 5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5317. Advanced Digital Media.**

This course builds on web development skills to create interactive presentations and data visualizations. Students are introduced to advanced programming and data concepts relevant to communicators. Theoretical and practical considerations of emerging technologies to the media industry will be integrated with production techniques. Prerequisite: MC 5312. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MC 5318. Media Ethics.**

The study of freedom and responsibilities of mass media practitioners and institutions, explored within the framework of ethical theories. Students will learn philosophical constructs as well as contemporary ethicists. Consideration of values, codes of ethics, moral development, professionalism, and institutional constraints as applied to media of information, persuasion and entertainment. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5319. Mass Media and Politics.**

The class will review key literature in the area of mass media and politics. It examines the relationship between the press and the government, as well as how the mass media covers politics at the statewide and national level. Corequisite: MC 5303 or MC 5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5321. Latinos and Media.**

An immersion into the study of Latinos, their representations in media, and media oriented to Latinos. The course will require students to engage in in-depth research about Latinos and media issues. (MULT) Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 5322. Global Media Strategy in Advertising and Public Relations.**

This course provides an in-depth examination of multinational communication organizations, including news media, public relations, and advertising companies. In addition, the course examines organizational roles, impact and strategic functions in a global marketplace. (MULT) Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 5323. Current Issues in Mass Communication.**

This course examines current theoretical and professional issues in mass communication. This course may be repeated once with a different emphasis for credit. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 5324. Media Writing.**

This course is designed to impart media writing skills. Students learn information gathering, interviewing skills, and writing techniques pertinent to different media. Students produce content (e.g., stories and digital pieces) that could be published across a wide variety of media outlets.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5326. Strategic Communication Campaigns.**

This course is a comprehensive study of strategic communication campaign planning with emphasis on public relations and advertising. Students combine theory and practice to develop, coordinate and evaluate advertising/public relations campaigns for key audiences. Prerequisite: MC 5308 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5327. Visual Communication.**

This course examines the principles, theories, and language of visual communication, emphasizing the evaluation and use of images in digital mass media. Students will learn about media influences on their perceptions of reality and their behavior, the elements of visual literacy, and multicultural and global perspectives in visual media. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 5328. Digital Story Production.**

This course involves discussion, development and analysis of multimedia stories, documentary video, and digital media. Students explore digital media techniques used in writing and producing multimedia stories. They learn visual aspects of storytelling and how to produce digital stories. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**MC 5329. Media Systems in Latin America.**

Students analyze media systems Latin America within their historical, cultural and political contexts. The course provides a comparative perspective of the role of the media within the region, their national markets and international Latino market. Students will ground these investigations with theories of international communication and information flow. (MULT) Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content  
**Grade Mode:** Standard Letter

**MC 5330. Internship in Mass Communication.**

Students acquire on-the-job experience in an off-campus media setting where they can apply the skills and knowledge acquired through mass communication graduate course work. Requires 180 hours of work off-campus, a written report, a portfolio of work product, and a supervisor's evaluation. Prerequisite: Departmental and Instructor approval. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**MC 5332. SXTXState Project.**

This course involves attendance at and coverage of the South By Southwest Interactive Conference. Students will prepare for the event, attend panels, interview participants and produce digital content about the experience. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 5333. Digital Media Entrepreneurship.**

This course explores innovation and creativity associated with digital entrepreneurship. Students will be introduced to important concepts and ideas from thought leaders and innovators at the intersection of media and technology. Students will research and develop their own digital media products. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 5334. Storytelling Across Platforms.**

Students learn the tools, channels and techniques available for multimedia storytellers. The course introduces new and emerging ways to tell stories, including social media, photo and video platforms, branding and audience engagement, mobile media and data visualization. Prerequisite: MC 5328. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**MC 5335. Code Camp I.**

In this course students are immersed in programming concepts relevant to communicators. Students will practice document object model manipulation using appropriate software to create interactive Web projects. Prerequisite: MC 5312 with a grade of "B" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**MC 5336. Code Camp II.**

In this course students are immersed in data and visualization concepts relevant to communicators. Students will create interactive data visualization projects. Prerequisite: MC 5312 with a grade of "B" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**MC 5337. Global Media in the Connected World.**

This course critically analyzes the role and use of traditional, digital and social media in a connected world. Students examine the prospects, challenges and applications of global media in areas such as socioeconomic development, political participation, digital divide, strategic communication, global crises and global entertainment. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 5338. Ethics and Crisis in Strategic Communication.**

In this course students examine strategic communication practices throughout the stages of a crisis and ethical considerations. Special emphasis is placed on the crisis cycle, media relationships, image restoration, ethical responses, and organizational learning. Prerequisite: MC 5308 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 5339. Managing Digital Content.**

This course introduces concepts, skills and processes for working with content management systems. Students learn to assess organizations' content needs and to develop appropriate content management solutions. Topics covered in this course include user research, information architecture and content strategy. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MC 5340. Media Product Strategy.**

This course examines current theoretical and professional issues in mass communication. Specifically, this course provides students with practical knowledge of theories of human-computer interaction, and communication design principles and standards. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5341. Feature Writing.**

This course provides an in-depth understanding of the technical expertise, research methods, interviewing skills and narrative techniques pertinent to feature writing. The course also explores how to target a feature story to a specific audience and how to submit feature stories for publication to newspapers and magazines, print and online. Prerequisite: MC 5324 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5342. Global Media Systems.**

This study abroad course prepares students to think critically and analytically about media systems and functions in different countries with emphasis on the location/s of the study abroad program. The course provides students with practical knowledge and insights gained by visiting media organizations abroad. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5343. Global Strategic Communication Practices.**

In this course, students analyze and discuss issues and challenges of contemporary global strategic communication practices and focus on gaining first-hand experience by visiting public relations, advertising and other communication agencies abroad. This course provides professional development and networking opportunities. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Standard Letter

**MC 5344. Data Storytelling in Mass Communication.**

In this course students will be introduced to data-related topics and skills that will further their careers in a variety of communications professions. Data visualization and storytelling tools and techniques are covered as related to journalism, advertising and public relations. Prerequisite: MC 5324 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5345. Advanced Digital Story Production.**

This course examines current theoretical and professional issues in visual digital storytelling. Students explore advanced digital media techniques used in writing and producing multimedia stories. Students produce sophisticated visual digital stories for use across a variety of platforms using differing styles. Prerequisite: MC 5328 with a grade of a "B" or better. Corequisite: MC 5303 and MC 5302 both with a grade of a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5399A. Thesis.**

A scholarly study of communication behavior, the purpose of which is to broaden understanding of what mass media do, how they do it, and with what effects. It may be quantitative, historical or rely upon another appropriate methodology. No thesis credit is awarded until student has completed the thesis in MC 5399B. Prerequisite: Completed course work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MC 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: MC 5399A and completed course work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MC 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: MC 5399A and completed course work.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MC 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: MC 5399A and completed course work.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Mission Statement

The Texas State University School of Music prepares a diverse student population within a positive and inclusive environment for personal success and evolving careers in music, promotes creative and scholarly activity, and nurtures supportive communities.

We aspire to the highest levels of inclusivity, diversity, excellence, and student success. We nurture curiosity, creativity, passion, and collegiality, while supporting and respecting each other. Our music community strives for excellence and innovation in music making, teaching, and research.

In pursuing excellence, the School of Music strives to be an innovative community that embraces musical and cultural diversity of students, faculty, and curriculum. We seek to become a destination school, while maintaining our student-centered focus.

## Faculty

The music faculty of over 90 individuals includes internationally active performers, conductors, composers, scholars, and teachers. Collectively, they have presented concerts and clinics in more than 30 countries on virtually every continent. Individual faculty members have been recognized through such prestigious prizes as Grammy Awards and the Atlanta Steinway Society Competition, as well as honors and publications in prestigious journals and encyclopedias, such as the *Grove Music Online*, *Musik in Geschichte und Gegenwart*, *Grove Dictionary of American Music*, *Theoria*, *MusikTheorie*, *Musicological Annual*, *New Sound*, *Music in Society*, *Computer Music Journal*, *Facta Universitatis*, *Journal of Research in Music Education*, *Philosophy of Music Education Review*, and *Journal of Musicological Research*. Their artistry can be heard in various movie soundtracks and hundreds of commercial recordings.

## Departmental Policies

Upon review of a candidate's transcript, additional background courses may be required beyond the degree's 36 credits. Students who score less than 70% on the music theory placement test will take a free online course. Students who score less than 70% on the music history placement test will take a free online course.

Vocal and choral applicants: Students who score less than 70% on the diction placement exam will take MU 5130B.

Vocal and Choral applicants: If diction courses were not part of the undergraduate degree program, students must fulfill these requirements by the end of their master's studies. In addition, vocal applicants must have one year each of two of the standard singing languages (French, German, and Italian) at the college level or proof of language proficiency at the Beginner Level I and II as determined by the CLEP test.

Composition/Music Theory applicants: Counterpoint and Orchestration are required background knowledge; if these subjects have not been studied in an undergraduate degree program, or equivalent course of study, students will work with a music theory or composition faculty member to determine a path to study the required content.

These courses would be in addition to the degree requirements listed below.

## Financial Assistance

Scholarships, which may include a waiver of the out-of-state portion of the tuition, and graduate assistantships (with potential teaching duties in the School) are available to qualified applicants. For further information

about financial assistance and the degree programs, please contact the coordinator of graduate studies in music.

## Facilities

As the music program has grown into a large, comprehensive School of Music, so too have the facilities expanded to keep pace with its diversity of ensembles, programs, and students.

### Music Buildings

The Music Building includes classrooms, faculty studios and rehearsal halls. There are separate rehearsal facilities for bands, orchestra, choirs, jazz, and Latin music ensembles, chamber groups, and opera. The facility also contains the 149-seat Music Building Recital Hall, the Schneider Music Library, a black box theater, over thirty practice rooms, an electronic piano laboratory, a multi-station music computer lab, two instrument checkout rooms, faculty offices, and the administrative office suite.

### Performing Arts Center

The Performing Arts Center includes an acoustically superb 312-seat recital hall. Equipped with two Steinway D concert grand pianos and a beautiful custom-built Flemish replica harpsichord, the hall hosts performances by international guest artist, music faculty, and some student ensembles. It is a learning laboratory for student degree recitals. Another venue, the Patti Strickel Harrison Theater, provides a state-of-the-art theater with orchestra pit for TXST Opera Theatre productions.

### Evans Auditorium

Evans Auditorium is the largest performance hall on campus with a seating capacity of 933. The university's wind bands, orchestra, and University Arts events utilize Evans as a performance site. The venue also contains two Steinway concert grand pianos.

### Fire Station Studio

The Fire Station Studio, located near campus is available for both Texas State and non-Texas State persons to rent for commercial purposes. The studio houses the School of Music's sound recording technology program and contains a multipurpose recording facility and television/film sound stage housing four control rooms, three tracking spaces, a large-format fully automated SSL mixing console, CD mastering gear, and numerous professional microphones and outboard devices.

### Colorado Building

Colorado Building houses the TXST Gamelan Lipi Awan (a Balinese ensemble) and sixteen additional practice rooms with digital pianos.

### Lampasas Hall

Offering music an additional five offices and three teaching studios, Lampasas Hall is the second oldest building on campus and was beautifully renovated in 2012.

### Marching Band Field/Storage

The Bobcat Marching Band field includes a standard 100+ yard field, multi-level director's tower, and newly completed equipment storage facility.

### Schneider Music Library

The Schneider Music Library, centrally located in the Music Building, provides convenient access to scores, sound recordings, DVDs, music education materials, and music reference sources.

## Music Computer Center

The Music Computer Center located in the Music Building features twenty-four high-end Mac workstations with MIDI controllers, a teacher station, a scanner workstation, and two administrator stations.

## YouStar Studios

The YouStar Studios, located in the Alkek Library, include a suite of multimedia technologies that enable users to create video and audio content. The YouStar Studios consist of a video recording studio and two audio recording studios.

## Master of Music (M.M.)

- Major in Music (Choral Conducting Concentration) (p. 2051)
- Major in Music (Composition Concentration) (p. 2063)
- Major in Music (Instrumental Conducting Concentration) (p. 2089)
- Major in Music (Jazz Performance Concentration) (p. 2102)
- Major in Music (Keyboard, String, or Guitar Performance Concentration) (p. 2114)
- Major in Music (Latin Music Performance Concentration) (p. 2127)
- Major in Music (Musicology Concentration) (p. 2076)
- Major in Music (Music Theory Concentration) (p. 2139)
- Major in Music (Performance and Pedagogy Concentration) (p. 2153)
- Major in Music (Voice Performance Concentration) (p. 2165)
- Major in Music (Woodwind, Brass, or Percussion Performance Concentration) (p. 2178)
- Major in Music Education (p. 2190)

## Minors

- Music (p. 2204)
- Music Education (p. 2204)

## Certificate

- Music Performance (p. 2204)

## Program Overview

Before prospective graduate students are approved for one of the music specializations, they must audition or complete a portfolio review by the appropriate School of Music area faculty. In addition, they must interview with the Coordinator of Music Graduate Studies or area coordinator. Students must have an undergraduate music degree in order to be considered for admission into the M.M. degree with one of the specializations under music.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in music from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txstate.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in music
- GRE not required
- audition/portfolio and interview (Requirements vary by concentration. Visit the department's website (<http://www.music.txstate.edu/gradprospectivestudents/BecomingaMusicMajor-Grad.html>) for detailed instructions.)
- resume/CV (maximum three pages) including name, address, email address, education (degrees or special certifications), professional experience, scholarship awards, special recognitions, articles or presentations, selected community activity, and other information pertinent to the desired degree and concentration
- statement of purpose (400-600 words with name and email in the header) describing the following:
  - past experiences in choral conducting
  - qualities, values, characteristics, and/or skills that make the student a strong candidate for the choral conducting program
  - the ways in which the personal learning outcomes of the choral conducting program relate to the student's personal and professional goals
  - plans to pursue doctoral studies as well, if applicable
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Music (M.M.) degree with a major in Music concentration in Choral Conducting requires 36 semester credit hours. Students who score less than 70% on the music theory placement test will take MU 5357. Students who score less than 70% on the music history placement test will take MU 5330A. If diction courses were not part of the



undergraduate degree program, students must fulfill these requirements by the end of their master's studies.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MU 5334	Introduction to Graduate Study in Music	3
MU 5350	Musical Styles	3
Choose 6 hours from the following:		6
MU 5310	Music in the Baroque era	
MU 5314	Music in the Twentieth and Twenty-First Centuries	
MU 5315	Music in the Middle Ages and Renaissance	
MU 5316	Music and the Dramatic Arts	
MU 5320	Music in the Eighteenth Century	
MU 5340	Music in the Nineteenth Century	
MU 5341	Jazz Perspectives	
MU 5352	Foundations of Musicology	
MU 5360	Music in the United States	
MU 5367	Music in the Caribbean	
MU 5368	Music in Mexico	
<b>Concentration</b>		
MUSP 5101	Graduate Recital	1
MUSP 5227	Applied Conducting (taken consistently for 3 semesters)	6
MUSP 5337	Advanced Conducting	3
Choose 6 hours from the following:		6
MU 5371	Choral Literature I: Madrigal/Partsong	
MU 5372	Choral Literature II: Oratorio and Other Secular Major Works	
MU 5373	Choral Literature III: Liturgical Year - Motet, Anthem, Cantata	
MU 5374	Choral Literature IV: Missa Brevis, Missa Solemnis, & Requiem	
<b>Electives</b>		
Choose 8 hours from the following:		8
Any advisor approved MU, MUSE, or MUSP courses		
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirements

All candidates within the graduate music program must pass a comprehensive oral (viva voce) examination. The students will be given a maximum of two attempts in order to pass this examination before being eligible for graduation. Candidates who fail to pass the comprehensive oral examination upon the first try may appeal for re-examination. The re-examination will be administered during the term following the first attempt. Exceptions to this policy are rare and must be approved by the director of graduate studies in music and by the director of the school of music. Failure to pass the required comprehensive oral examination upon the second attempt shall prevent the student from being eligible for graduation.

Master's level courses in Music: MU (p. 2052), MUSE (p. 2058), MUSP (p. 2060)

## Courses Offered

### Music (MU)

#### MU 5113. Independent Study in Music.

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### MU 5130A. Writing About Music.

Focusing on basic writing skills, research, and the use and documentation of sources. Course centers on the process of writing about music. Besides written exercises, the assignments include the study of such professional writing samples as concert reviews, program abstracts, and research essays. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

#### MU 5130B. Diction for Singers.

An in-depth study of the pronunciation of singing in Italian, German, English, and French incorporating the International Phonetic Alphabet through the use of lecture and laboratory sessions for practical application. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

#### MU 5135. Exploring 21st Century Music Education.

This course provides music education graduate students a general overview of current issues and questions in music education, techniques for building a better understanding of core issues, and necessary instruction/investigation for thesis/capstone project. Students leave this class with a general knowledge of many current topics and tools to further investigate topics of interest.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5150. Exploring Twenty-first Century Music Education.**

In this course, students will survey current issues and questions in music education while further developing a primary topic of interest for their thesis/capstone project. Topics will be driven by student interest and the discourse within the field but will be centered around: student-centered pedagogies (e.g., democratic education, culturally responsive pedagogy, popular music education, DEI, and social-emotional learning), performance/teacher anxiety (e.g., music performance anxiety, imposter phenomenon, and teacher self-efficacy), teacher experiences and burnout (e.g., early career teacher experiences, expert teacher tendencies, burnout in music education, finances, technology, administrative experiences, and competition), and writing specific content (e.g., refining APA style and.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5192. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5213. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5230A. Music Theory.**

A study of the materials of counterpoint and harmony as evaluated through listening and analysis of literature, and application through composition. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5230B. Aural Learning.**

Development and application of theory concepts through singing, playing, and dictation. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5235. Music Education Capstone.**

This course allows for a wide overview of the field of music education, providing students with a broad scope to facilitate their thesis/capstone project. The course also creates space in the degree for discussions and readings related to the most recent issues and concerns of the field.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5254. Piano Pedagogy I.**

History, methods, and materials of piano pedagogy. Includes the application of technical and musical fundamentals to beginning levels of teaching. Prerequisites: Piano pedagogy or piano performance majors or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5255. Piano Pedagogy II.**

Advanced methods and materials of piano pedagogy. Includes the application of technical and musical fundamentals to intermediate and advanced levels of teaching. Prerequisites: Piano Pedagogy I or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5301. Musicology Seminar in Contemporary Issues.**

This course offers advanced immersion into current trends and literature in the field of musicology, centering a distinct issue and its related frameworks at each time of offering. Sample issues are Music, Gender, and Sexuality; Ecomusicology; Sound Studies; Methods, Methodologies and Frameworks; among others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5310. Music in the Baroque era.**

This course is a study of diverse genres and repertoires from the 1600s to the early 1700s, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5313. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5314. Music in the Twentieth and Twenty-First Centuries.**

In this course the students will study diverse genres and repertoires of the twentieth and twenty-first centuries, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5315. Music in the Middle Ages and Renaissance.**

In this course students will study diverse genres and repertoires from the 450s to the 1600s, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5316. Music and the Dramatic Arts.**

This course covers diverse genres and repertoires in music and the dramatic arts, antiquities through the present, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with such disciplines as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5317. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5318. Song Literature.**

This course is an historical survey of the art song, emphasizing Western European and American repertoires. Students will articulate stylistic differences within the art song repertory, use analytical methods appropriate for a variety of text settings, and develop greater proficiency at writing about music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5320. Music in the Eighteenth Century.**

In this course students will study diverse genres and repertoires in the eighteenth century, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5322. Advanced Instrumental Techniques.**

Evaluation of teaching methods, materials, and literature of wind/percussion or string instruments. Students must have taken instrumental conducting in their undergraduate degree program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5323. Vocal Music Education Methods.**

Study of the anatomy of the human voice and evaluation of the scientific data and historical beliefs concerning voice pedagogy with emphasis in teaching voice in the class, private studio, as well as within a variety of choral settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5325. Research in Music Education I.**

Examination of methodologies, techniques, and procedures for interpreting and conducting research in music education. Relevant studies in music education will be critiqued, with an emphasis on preparation of a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5326. Research in Music Education II.**

A continuation and culmination of a research project in the field of music education as developed and proposed in MU 5325. Prerequisite: MU 5325 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5328. Foundations of Music Education.**

The cognitive psychology, historical perspective, and philosophical issues that provide the basis for contemporary music education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5329. Psychology of Music.**

This course investigates the psychological foundations of music and examines interdisciplinary approaches to the study of music and the human experience. Topics will include music perception, physiological responses to music, music and the brain, musical attributes, music learning, music therapy, and the measurement of musical behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5330A. History and Analysis of Music.**

A comprehensive musicianship approach to the study of music from the earliest times to the present using techniques of stylistic and structural analysis. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5330B. Advanced Theory.**

Principles of form and analysis, counterpoint, orchestration, and contemporary analytic techniques developed through in-depth study of musical repertoire. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5331. Vocal Pedagogy I: Voice Science.**

This course explores the anatomy/physiology of the human voice, the acoustic properties that govern resonance, vocal health, and philosophy of singing and teaching. Co-requisites: MUSP 5120 or MUSP 5220 or MUSP 5320 with a grade of "C" or better, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5332. Vocal Pedagogy II: Methods.**

This is a comparative study of various pedagogical methods and ideas, including historical and contemporary treatises. Students will explore exercises and vocalizes for general voice development, address and correct specific vocal problems, and engage in peer teaching.

Prerequisite: MU 5331 with a grade of "B" or better. Co-requisites: MUSP 5120, MUSP 5220, or MUSP 5320, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5333. Teaching and Learning in the Music Classroom.**

In this course students will examine music content delivery, pedagogy (including lesson planning, instructional design, etc.), assessment, and other aspects of teaching and learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5334. Introduction to Graduate Study in Music.**

Techniques and materials of research, emphasizing bibliography, library usage, collection, and interpretation of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5337. Techniques of Contemporary Music.**

This course surveys a cross-section of important technical innovations and developments in twentieth-century music, with special focus on music since 1945. Students will read documents outlining aesthetics, analyze music written in a variety of styles, write analytical papers, and using a variety of techniques, compose exercises. Enrollment requires a passing grade on the Graduate Music Theory Placement Exam or Instructor approval. Prerequisite: MU 5357 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5340. Music in the Nineteenth Century.**

This course is a study of diverse genres and repertoires in the nineteenth century, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5341. Jazz Perspectives.**

In this course students will study diverse genres, repertoires, discographies, and stylistic trends associated with jazz, with a focus on the Americas. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5342. Jazz Pedagogy.**

Jazz pedagogy is an in-depth study of the history, methodologies, resources, and techniques of jazz pedagogy and the development of jazz ensemble rehearsal skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5343. Jazz Improvisation.**

This course is a detailed study of the evolution of melodic, harmonic, and rhythmic structures used by jazz improvisers and composers from the 1930s to present day.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5344. Jazz Arranging.**

This course provides a comprehensive study of jazz composition, arranging, and improvisation theory, emphasizing writing for jazz ensembles using harmony, scales, and improvisation in a variety of styles, and providing necessary skills to be a successful jazz or commercial composer/arranger.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5345. Piano Literature I.**

This course is designed to expand first-hand familiarity with the literature for the keyboard from the Baroque to Early Romantic era (Bach to Schumann). It will be divided into five chronological segments, discussing the major composers and their contemporaries. Ten composition genres will be discussed during the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5346. Piano Literature II.**

This course is designed to expand first-hand familiarity with the literature for the piano, which will be divided into six chronological segments. These segments will discuss the most significant composers and their contemporaries in the 19th and 20th centuries and their major piano compositions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5350. Musical Styles.**

Developing a broader musical understanding through critical listening, technical analyses, and written assignments in various musical styles, including the late classical, romantic, and present eras. Prerequisite: MU 5357 with a grade of "B" or better, or a passing grade on the Graduate Music Theory Placement Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5351. Schenkerian Analysis.**

An introduction to the techniques and methods of music analysis as developed by Heinrich Schenker (1868-1935). This course will cover reductive analysis, structural levels in tonal music, and graphing techniques. Prerequisite: MU 5357 with a grade of "B" or better, or passing grade on music theory entrance exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5352. Foundations of Musicology.**

This course is an introduction to the concepts, methodologies, and scholarly trends central to the discipline of musicology. Prerequisite: MU 5334 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5353. Ensemble Rehearsal Techniques.**

Course is designed for performance ensemble conductors. Includes supervision, administration, and rehearsal techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5355. Pedagogy of Music Theory.**

Developing teaching methods and broader understanding through critical study of materials, organization, techniques, and problems of music theory and comprehensive musicianship courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5357. Graduate Music Theory.**

Graduate-level studies in music theory and aural skills. The course covers melody, harmony, counterpoint, form, as well as sight-singing, performing, and dictation. This course does not earn graduate degree credit. Consent of the graduate studies coordinator is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MU 5358. Advanced Musicianship.**

This course is designed to develop graduate-level skills in music sight reading, dictation, fundamental keyboard skills, and keyboard harmonization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5359. Post-Tonal Music Analysis.**

This course is the study and application of methodologies and terminology that are used to analyze post-tonal concert music of the 20th and 21st centuries. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5360. Music in the United States.**

This course is a study of genres and repertoires of the United States of America from the 1600s to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5361. Methods and Methodologies of Music Analysis.**

This course will cover the examination of selected analytical techniques, methods and methodologies, critical approaches, or musical repertoires, including semiotic analysis, computer-assisted music analysis, analysis of thematic processes, functional analysis, phrase structure analysis, as well as category and feature analysis. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MU 5362. Instrumental Pedagogy I.**

This course explores instrument-specific pedagogy from the beginner through the advanced levels. Students will peruse instrument-specific pedagogical works, solo literature, and articles, and will complete a teaching assignment requiring them to implement pedagogical techniques, diagnose common performance problems, and suggest solutions. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5363. Instrumental Pedagogy II: Teaching Internship.**

This class provides students with supervised teaching experience. In this capstone course, students will apply pedagogical principles for instruction on their primary instrument in the private lesson setting. Their teaching will be monitored and evaluated by an applied professor throughout the semester. Prerequisite: MU 5362 with a grade of "B" or better. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5364. Intelligent Music Teaching.**

This course focuses on fundamental philosophical principles of effective instrumental music instruction and includes application of those principles in teaching. Students will develop a realistic perspective of their strengths and weaknesses as a developing professional and will develop business skills necessary to create a successful private lesson studio.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5365. Computing in Music.**

Development of concepts and skills related to current computer technology in music. Exploration and use of computer software, MIDI, and other productivity tools for application to music education, music administration, music research, and music composition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5366. Salsa Arranging.**

Analysis and arranging music for a Salsa ensemble. Topics will cover instrument ranges, orchestration techniques, and styles. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5367. Music in the Caribbean.**

In this course students will study diverse genres and repertoires of the Caribbean from pre-colonization to the present, with a focus on the Hispanic Circum-Caribbean. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5368. Music in Mexico.**

In this course students will study diverse genres and repertoires of Mexico and Mexican-American communities of the United States from pre-colonization to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5369. History of Music in Latin America.**

This course is a study of the musical panorama of Latin America; Pre-Columbian, colonial, folk, urban, academic, and transnational genres are introduced and discussed in historical, socio-political, and stylistic context. It also includes an introduction to the scope and methods of research in Latin American music studies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5371. Choral Literature I: Madrigal/Partsong.**

This course is a comprehensive study of madrigals and partsongs from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5372. Choral Literature II: Oratorio and Other Secular Major Works.**

This course is a comprehensive study of oratorios and other secular major works from the Western canon of choral repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5373. Choral Literature III: Liturgical Year - Motet, Anthem, Cantata.**

This course is a comprehensive study of motets, anthems, cantatas, and other genres associated with the liturgical calendar and the Revised Common Lectionary from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5374. Choral Literature IV: Missa Brevis, Missa Solemnis, & Requiem.**

This course is a comprehensive study of the Roman Catholic Mass and Requiem Liturgies as they have been set to music by composers associated with the Western canon of choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5375O. Contemporary Discourse in Music Education.**

This course entails an examination of topics from contemporary music education research. Students examine contemporary research and the potential for application in their future/current classrooms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 5377. Innovation in Music Performance: Sound Lab.**

This course is designed to engage students in listening and in sound creation/composition and to develop skills and the capacity for improvisation that will equip artists for readiness in evolving cultural and performance situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5381. Inclusive Excellence in the Music Classroom.**

This course prepares prospective and practicing music teachers to create an equitable, inclusive, and thriving classroom that meets the needs of all students by incorporating culturally responsive teaching, multicultural education, world music pedagogy, ethnomusicological perspectives, and by addressing the needs of students with exceptionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5382. History of Music Education in the United States.**

This course entails an examination of music education in the United States. The major historical developments and contemporary trends are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5392. Introduction to Music Instruction in Higher Education.**

This course provides techniques for Graduate Teaching/Instructional Assistants concerning selected problems in 1) the teaching of music in the classroom, private instruction and ensemble environments; and 2) the development of a career in field in higher education. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MU 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Music 5399B. Students working toward the M.M. degree with a thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted.

Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted.

Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted.

Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Music Ensemble (MUSE)

**MUSE 5101. Bobcat Basketball Band.**

The Bobcat Basketball Band performs for all home men's and women's basketball games that do not fall over a university break. The group travels for all postseason tournaments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5102. Salsa Del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5103. Mariachi Nueva Generación.**

This course is a performing ensemble specializing in Mexican folk music.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5104. Panorama Steel Drum Band.**

A performing ensemble specializing in Caribbean steel drum band music.

May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5105. VocaLibre.**

A select vocal ensemble specializing in chamber music, including madrigal or jazz literature. May be repeated for credit. Prerequisite:

Enrollment in major choral ensemble.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5106. Opera Workshop.**

Opera Workshop is a skills-based class designed for developing opera singers to learn and apply skills that prepare them for professional performance.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5107. Opera Theatre.**

Students will learn and perform operatic roles, chamber opera pieces, or one-act operas. Concurrent enrollment in Applied Voice is recommended.

Prerequisite: MUSE 5106 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5108. Orquesta del Rio.**

Performing ensemble specializing in Latin and South American music.

May be repeatable for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required| Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5109. Opera Production.**

This course is designed for students to participate as performers in a full opera production or in the production of opera scenes. It will also prepare students for future professional opera performance engagements.

Concurrent enrollment in Applied Voice is recommended. Prerequisite:

MUSE 5106 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5122. Aurora Voce – Auditioned Treble Voice Choir.**

Aurora Voce is a highly selective chamber chorale ensemble that is open by audition to all treble singers across campus. Performing in this ensemble provides the singers opportunities to explore high quality and challenging repertoire that spans across a wide variety of styles, historical periods, and genres.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5123. Concert Band.**

This ensemble provides playing experiences for non-music majors and music majors who want to improve their skills and serve as a lab ensemble for conducting students. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5124. Women's Choir.**

Performing ensemble specializing in choral literature for women's voices. May be repeated for credit.

**1 Credit Hour. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5125. Men's Choir.**

Performing ensemble specializing in choral literature for men's voices. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5126. Chamber Music.**

Small group performing ensembles focusing on chamber literature of mixed and similar instrumental music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5127. Jazz Combo.**

A small performance ensemble designed to develop improvisational skills and individual musical creativity through performance of standard jazz literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5128. Conducting Seminar.**

A seminar based course focusing on conducting technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or permission by the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5129. Afro-Caribbean Lab.**

This course is an experimental ensemble of flexible size and instrumentation that specializes in advanced arranging, performance, and improvisation involving Afro-Caribbean styles and rhythms. An audition is required for placement in this ensemble. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5130. Wind Symphony.**

Major instrumental ensemble comprised of the most outstanding wind and percussion students who are selected by audition. The group is dedicated to the performance of the finest wind repertoire, whether a contemporary works for winds, or transcriptions from the orchestral repertoire. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5131. Symphonic Winds.**

Major instrumental ensemble consisting primarily of music majors and talented non-music majors. This ensemble performs a broad range of full ensemble repertoire, representative of all historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5140. Texas State Chorale.**

Auditioned major choral ensemble specializing in performances of literature from the Renaissance and 20th Century. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5141. University Singers.**

Major choral ensemble that performs a variety of literature, including masterworks from the 17th Century to the present. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5150. Texas State Symphony Orchestra.**

A full symphony orchestra that performs standard orchestra literature, as well as oratorio, concerto, and opera accompaniments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5160. Jazz Ensemble.**

The jazz-based ensemble performs advanced arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5161. Jazz Orchestra.**

The jazz-based ensemble performs intermediate arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5162. Jazz Lab Band.**

The jazz-based ensemble performs beginning arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5170. Accompanying.**

A coaching seminar for pianists to develop reading and accompanying skills. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5180. Mystorium for Contemporary Music Ensemble.**

An ensemble course focusing on the performance and analysis of contemporary music in all styles and media. May be repeated for credit. Prerequisite: Music (Composition Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5190. Guitar Ensemble.**

Chamber guitar ensemble designed to provide interaction with fellow guitarists, develop musicianship as an ensemble performer, and to familiarize the student with music from different periods through a variety of literature. May be repeated for credit. Prerequisite: Music (Guitar Performance Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Music Performance (MUSP)****MUSP 5100. Mariachi Lince de Oro.**

This course provides learning opportunities for students interested in an introduction to the mariachi genre. Traditional mariachi repertoire is distributed, rehearsed, memorized, and performed.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5101. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5127. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5164. Mariachi Melodia Techniques.**

This course provides students with the fundamentals of playing and teaching the melodic instruments associated with the Mariachi ensemble, with specific emphasis on the voice, violin, and trumpet. Topics will cover history, tuning, and stylistic techniques associated with each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5165. Mariachi Armonia Techniques.**

This course provides students with the fundamentals of playing and teaching the rhythm/harmony instruments in the Mariachi ensemble, with specific emphasis in the guitarrón, vihuela/guitar, and the harp. Topics will cover history, tuning, strumming, and stylistic techniques specific to each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5166. Latin Music Methods.**

This course provides students with knowledge that is essential to become effective directors of Mariachi and Salsa ensembles. Instruments, styles, repertory, and resources that are related to these ensembles will be discussed. (MULT).

**1 Credit Hour. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5175. Afro-Cuban Hand Drumming.**

The fundamentals of playing and teaching Afro-Cuban Drums. Topics will cover history and knowledge of styles of the various Afro-Cuban percussion instruments. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter



**MUSP 5180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5185. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5227. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5230. Applied Keyboard.**

In this course students will participate in supervised private coaching and instruction that focuses on technique, musicality, literature, and performance in the keyboard area. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5285. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5320. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5327. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit.

Prerequisite: Conducting Major or consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5330. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5337. Advanced Conducting.**

Music performance class designed for further development of baton technique, score reading, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5340. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5350. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5360. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5370. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5380. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5385. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Program Overview

Before prospective graduate students are approved for one of the music specializations, they must audition or complete a portfolio review by the appropriate School of Music area faculty. In addition, they must interview with the Coordinator of Music Graduate Studies or area coordinator. Students must have an undergraduate music degree in order to be considered for admission into the M.M. degree with one of the specializations under music.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in music from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in music
- GRE not required
- audition/portfolio and interview (Requirements vary by concentration. Visit the department's website (<http://www.music.txstate.edu/gradprospectivestudents/BecomingaMusicMajor-Grad.html>) for detailed instructions.)
- resume/CV (maximum three pages) including name, address, email address, education (degrees or special certifications), professional experience, scholarship awards, special recognitions, articles or presentations, selected community activity, and other information pertinent to the desired degree and concentration
- statement of purpose (400-600 words with name and email in the header) describing the following:
  - past experiences in music composition
  - qualities, values, characteristics, and/or skills that make the student a strong candidate for the composition program
  - the ways in which the personal learning outcomes of the composition program relate to the student's personal and professional goals
  - plans to pursue doctoral studies as well, if applicable
- three letters of recommendation

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Music (M.M.) degree with a major in Music concentration in Composition requires 36 semester credit hours.

Counterpoint and Orchestration are required background knowledge; if these subjects have not been studied in an undergraduate degree program, or equivalent course of study, students will need to take an Independent Study.

Students who score less than 70% on the music theory placement test will take MU 5357. Students who score less than 70% on the music history placement test will take MU 5330A in addition to the degree requirements listed below.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MU 5334	Introduction to Graduate Study in Music	3
MU 5350	Musical Styles	3
Choose 6 hours from the following:		6
MU 5310	Music in the Baroque era	
MU 5314	Music in the Twentieth and Twenty-First Centuries	
MU 5315	Music in the Middle Ages and Renaissance	
MU 5316	Music and the Dramatic Arts	
MU 5320	Music in the Eighteenth Century	
MU 5337	Techniques of Contemporary Music	
MU 5340	Music in the Nineteenth Century	
MU 5341	Jazz Perspectives	
MU 5352	Foundations of Musicology	
MU 5360	Music in the United States	
MU 5367	Music in the Caribbean	
MU 5368	Music in Mexico	
<b>Concentration</b>		
MU 5192	Graduate Recital	1
or MUSP 5101	Graduate Recital	
Choose 14 hours from the following:		14
MU 5337	Techniques of Contemporary Music	
MUSP 5180	Applied Composition	
MUSP 5185	Electronic Music Composition	
MUSP 5280	Applied Composition	
MUSP 5285	Electronic Music Composition	
MUSP 5380	Applied Composition	
MUSP 5385	Electronic Music Composition	
<b>Electives</b>		
Choose 9 hours from the following:		9
Any advisor approved MU, MUSE, or MUSP courses		
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirements

All candidates within the graduate music program must pass a comprehensive oral (viva voce) examination. The students will be given a maximum of two attempts in order to pass this examination before being eligible for graduation. Candidates who fail to pass the comprehensive oral examination upon the first try may appeal for re-examination. The re-examination will be administered during the term following the first attempt. Exceptions to this policy are rare and must be approved by the director of graduate studies in music and by the director of the school of music. Failure to pass the required comprehensive oral examination upon the second attempt shall prevent the student from being eligible for graduation.

## Portfolio

Students are required to submit a portfolio of a minimum 3 compositions completed during their degree studies. These works should represent a range of instrumentation (i.e. solo, chamber, large ensemble, electronic) and should reflect the breadth of the student's compositional technique. The portfolio and CD of corresponding recordings will be submitted at

the comprehensive oral exam and cataloged in the Music Library. Before graduation, a bound copy of the portfolio and CD will be catalogued in the Alkek Library.

Master's level courses in Music: MU (p. 2065), MUSE (p. 2071), MUSP (p. 2073)

## Courses Offered

### Music (MU)

#### **MU 5113. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MU 5130A. Writing About Music.**

Focusing on basic writing skills, research, and the use and documentation of sources. Course centers on the process of writing about music. Besides written exercises, the assignments include the study of such professional writing samples as concert reviews, program abstracts, and research essays. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

#### **MU 5130B. Diction for Singers.**

An in-depth study of the pronunciation of singing in Italian, German, English, and French incorporating the International Phonetic Alphabet through the use of lecture and laboratory sessions for practical application. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

#### **MU 5135. Exploring 21st Century Music Education.**

This course provides music education graduate students a general overview of current issues and questions in music education, techniques for building a better understanding of core issues, and necessary instruction/investigation for thesis/capstone project. Students leave this class with a general knowledge of many current topics and tools to further investigate topics of interest.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### **MU 5150. Exploring Twenty-first Century Music Education.**

In this course, students will survey current issues and questions in music education while further developing a primary topic of interest for their thesis/capstone project. Topics will be driven by student interest and the discourse within the field but will be centered around: student-centered pedagogies (e.g., democratic education, culturally responsive pedagogy, popular music education, DEI, and social-emotional learning), performance/teacher anxiety (e.g., music performance anxiety, imposter phenomenon, and teacher self-efficacy), teacher experiences and burnout (e.g., early career teacher experiences, expert teacher tendencies, burnout in music education, finances, technology, administrative experiences, and competition), and writing specific content (e.g., refining APA style and.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MU 5192. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### **MU 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **MU 5213. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MU 5230A. Music Theory.**

A study of the materials of counterpoint and harmony as evaluated through listening and analysis of literature, and application through composition. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

#### **MU 5230B. Aural Learning.**

Development and application of theory concepts through singing, playing, and dictation. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5235. Music Education Capstone.**

This course allows for a wide overview of the field of music education, providing students with a broad scope to facilitate their thesis/capstone project. The course also creates space in the degree for discussions and readings related to the most recent issues and concerns of the field.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5254. Piano Pedagogy I.**

History, methods, and materials of piano pedagogy. Includes the application of technical and musical fundamentals to beginning levels of teaching. Prerequisites: Piano pedagogy or piano performance majors or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5255. Piano Pedagogy II.**

Advanced methods and materials of piano pedagogy. Includes the application of technical and musical fundamentals to intermediate and advanced levels of teaching. Prerequisites: Piano Pedagogy I or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5301. Musicology Seminar in Contemporary Issues.**

This course offers advanced immersion into current trends and literature in the field of musicology, centering a distinct issue and its related frameworks at each time of offering. Sample issues are Music, Gender, and Sexuality; Ecomusicology; Sound Studies; Methods, Methodologies and Frameworks; among others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5310. Music in the Baroque era.**

This course is a study of diverse genres and repertoires from the 1600s to the early 1700s, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5313. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5314. Music in the Twentieth and Twenty-First Centuries.**

In this course the students will study diverse genres and repertoires of the twentieth and twenty-first centuries, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5315. Music in the Middle Ages and Renaissance.**

In this course students will study diverse genres and repertoires from the 450s to the 1600s, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5316. Music and the Dramatic Arts.**

This course covers diverse genres and repertoires in music and the dramatic arts, antiquities through the present, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with such disciplines as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5317. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5318. Song Literature.**

This course is an historical survey of the art song, emphasizing Western European and American repertoires. Students will articulate stylistic differences within the art song repertory, use analytical methods appropriate for a variety of text settings, and develop greater proficiency at writing about music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MU 5320. Music in the Eighteenth Century.**

In this course students will study diverse genres and repertoires in the eighteenth century, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5322. Advanced Instrumental Techniques.**

Evaluation of teaching methods, materials, and literature of wind/percussion or string instruments. Students must have taken instrumental conducting in their undergraduate degree program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5323. Vocal Music Education Methods.**

Study of the anatomy of the human voice and evaluation of the scientific data and historical beliefs concerning voice pedagogy with emphasis in teaching voice in the class, private studio, as well as within a variety of choral settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5325. Research in Music Education I.**

Examination of methodologies, techniques, and procedures for interpreting and conducting research in music education. Relevant studies in music education will be critiqued, with an emphasis on preparation of a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5326. Research in Music Education II.**

A continuation and culmination of a research project in the field of music education as developed and proposed in MU 5325. Prerequisite: MU 5325 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5328. Foundations of Music Education.**

The cognitive psychology, historical perspective, and philosophical issues that provide the basis for contemporary music education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5329. Psychology of Music.**

This course investigates the psychological foundations of music and examines interdisciplinary approaches to the study of music and the human experience. Topics will include music perception, physiological responses to music, music and the brain, musical attributes, music learning, music therapy, and the measurement of musical behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5330A. History and Analysis of Music.**

A comprehensive musicianship approach to the study of music from the earliest times to the present using techniques of stylistic and structural analysis. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5330B. Advanced Theory.**

Principles of form and analysis, counterpoint, orchestration, and contemporary analytic techniques developed through in-depth study of musical repertoire. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5331. Vocal Pedagogy I: Voice Science.**

This course explores the anatomy/physiology of the human voice, the acoustic properties that govern resonance, vocal health, and philosophy of singing and teaching. Co-requisites: MUSP 5120 or MUSP 5220 or MUSP 5320 with a grade of "C" or better, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5332. Vocal Pedagogy II: Methods.**

This is a comparative study of various pedagogical methods and ideas, including historical and contemporary treatises. Students will explore exercises and vocalizes for general voice development, address and correct specific vocal problems, and engage in peer teaching.

Prerequisite: MU 5331 with a grade of "B" or better. Co-requisites:

MUSP 5120, MUSP 5220, or MUSP 5320, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5333. Teaching and Learning in the Music Classroom.**

In this course students will examine music content delivery, pedagogy (including lesson planning, instructional design, etc.), assessment, and other aspects of teaching and learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5334. Introduction to Graduate Study in Music.**

Techniques and materials of research, emphasizing bibliography, library usage, collection, and interpretation of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5337. Techniques of Contemporary Music.**

This course surveys a cross-section of important technical innovations and developments in twentieth-century music, with special focus on music since 1945. Students will read documents outlining aesthetics, analyze music written in a variety of styles, write analytical papers, and using a variety of techniques, compose exercises. Enrollment requires a passing grade on the Graduate Music Theory Placement Exam or Instructor approval. Prerequisite: MU 5357 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5340. Music in the Nineteenth Century.**

This course is a study of diverse genres and repertoires in the nineteenth century, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5341. Jazz Perspectives.**

In this course students will study diverse genres, repertoires, discographies, and stylistic trends associated with jazz, with a focus on the Americas. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5342. Jazz Pedagogy.**

Jazz pedagogy is an in-depth study of the history, methodologies, resources, and techniques of jazz pedagogy and the development of jazz ensemble rehearsal skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5343. Jazz Improvisation.**

This course is a detailed study of the evolution of melodic, harmonic, and rhythmic structures used by jazz improvisers and composers from the 1930s to present day.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5344. Jazz Arranging.**

This course provides a comprehensive study of jazz composition, arranging, and improvisation theory, emphasizing writing for jazz ensembles using harmony, scales, and improvisation in a variety of styles, and providing necessary skills to be a successful jazz or commercial composer/arranger.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5345. Piano Literature I.**

This course is designed to expand first-hand familiarity with the literature for the keyboard from the Baroque to Early Romantic era (Bach to Schumann). It will be divided into five chronological segments, discussing the major composers and their contemporaries. Ten composition genres will be discussed during the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5346. Piano Literature II.**

This course is designed to expand first-hand familiarity with the literature for the piano, which will be divided into six chronological segments.

These segments will discuss the most significant composers and their contemporaries in the 19th and 20th centuries and their major piano compositions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5350. Musical Styles.**

Developing a broader musical understanding through critical listening, technical analyses, and written assignments in various musical styles, including the late classical, romantic, and present eras. Prerequisite: MU 5357 with a grade of "B" or better, or a passing grade on the Graduate Music Theory Placement Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5351. Schenkerian Analysis.**

An introduction to the techniques and methods of music analysis as developed by Heinrich Schenker (1868-1935). This course will cover reductive analysis, structural levels in tonal music, and graphing techniques. Prerequisite: MU 5357 with a grade of "B" or better, or passing grade on music theory entrance exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5352. Foundations of Musicology.**

This course is an introduction to the concepts, methodologies, and scholarly trends central to the discipline of musicology. Prerequisite: MU 5334 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5353. Ensemble Rehearsal Techniques.**

Course is designed for performance ensemble conductors. Includes supervision, administration, and rehearsal techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5355. Pedagogy of Music Theory.**

Developing teaching methods and broader understanding through critical study of materials, organization, techniques, and problems of music theory and comprehensive musicianship courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5357. Graduate Music Theory.**

Graduate-level studies in music theory and aural skills. The course covers melody, harmony, counterpoint, form, as well as sight-singing, performing, and dictation. This course does not earn graduate degree credit. Consent of the graduate studies coordinator is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MU 5358. Advanced Musicianship.**

This course is designed to develop graduate-level skills in music sight reading, dictation, fundamental keyboard skills, and keyboard harmonization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5359. Post-Tonal Music Analysis.**

This course is the study and application of methodologies and terminology that are used to analyze post-tonal concert music of the 20th and 21st centuries. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5360. Music in the United States.**

This course is a study of genres and repertoires of the United States of America from the 1600s to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5361. Methods and Methodologies of Music Analysis.**

This course will cover the examination of selected analytical techniques, methods and methodologies, critical approaches, or musical repertoires, including semiotic analysis, computer-assisted music analysis, analysis of thematic processes, functional analysis, phrase structure analysis, as well as category and feature analysis. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5362. Instrumental Pedagogy I.**

This course explores instrument-specific pedagogy from the beginner through the advanced levels. Students will peruse instrument-specific pedagogical works, solo literature, and articles, and will complete a teaching assignment requiring them to implement pedagogical techniques, diagnose common performance problems, and suggest solutions. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5363. Instrumental Pedagogy II: Teaching Internship.**

This class provides students with supervised teaching experience. In this capstone course, students will apply pedagogical principles for instruction on their primary instrument in the private lesson setting. Their teaching will be monitored and evaluated by an applied professor throughout the semester. Prerequisite: MU 5362 with a grade of "B" or better. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5364. Intelligent Music Teaching.**

This course focuses on fundamental philosophical principles of effective instrumental music instruction and includes application of those principles in teaching. Students will develop a realistic perspective of their strengths and weaknesses as a developing professional and will develop business skills necessary to create a successful private lesson studio.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5365. Computing in Music.**

Development of concepts and skills related to current computer technology in music. Exploration and use of computer software, MIDI, and other productivity tools for application to music education, music administration, music research, and music composition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5366. Salsa Arranging.**

Analysis and arranging music for a Salsa ensemble. Topics will cover instrument ranges, orchestration techniques, and styles. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5367. Music in the Caribbean.**

In this course students will study diverse genres and repertoires of the Caribbean from pre-colonization to the present, with a focus on the Hispanic Circum-Caribbean. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5368. Music in Mexico.**

In this course students will study diverse genres and repertoires of Mexico and Mexican-American communities of the United States from pre-colonization to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5369. History of Music in Latin America.**

This course is a study of the musical panorama of Latin America; Pre-Columbian, colonial, folk, urban, academic, and transnational genres are introduced and discussed in historical, socio-political, and stylistic context. It also includes an introduction to the scope and methods of research in Latin American music studies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5371. Choral Literature I: Madrigal/Partsong.**

This course is a comprehensive study of madrigals and partsongs from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5372. Choral Literature II: Oratorio and Other Secular Major Works.**

This course is a comprehensive study of oratorios and other secular major works from the Western canon of choral repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5373. Choral Literature III: Liturgical Year - Motet, Anthem, Cantata.**

This course is a comprehensive study of motets, anthems, cantatas, and other genres associated with the liturgical calendar and the Revised Common Lectionary from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5374. Choral Literature IV: Missa Brevis, Missa Solemnis, & Requiem.**

This course is a comprehensive study of the Roman Catholic Mass and Requiem Liturgies as they have been set to music by composers associated with the Western canon of choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 53750. Contemporary Discourse in Music Education.**

This course entails an examination of topics from contemporary music education research. Students examine contemporary research and the potential for application in their future/current classrooms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 5377. Innovation in Music Performance: Sound Lab.**

This course is designed to engage students in listening and in sound creation/composition and to develop skills and the capacity for improvisation that will equip artists for readiness in evolving cultural and performance situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5381. Inclusive Excellence in the Music Classroom.**

This course prepares prospective and practicing music teachers to create an equitable, inclusive, and thriving classroom that meets the needs of all students by incorporating culturally responsive teaching, multicultural education, world music pedagogy, ethnomusicological perspectives, and by addressing the needs of students with exceptionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5382. History of Music Education in the United States.**

This course entails an examination of music education in the United States. The major historical developments and contemporary trends are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5392. Introduction to Music Instruction in Higher Education.**

This course provides techniques for Graduate Teaching/Instructional Assistants concerning selected problems in 1) the teaching of music in the classroom, private instruction and ensemble environments; and 2) the development of a career in field in higher education. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MU 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Music 5399B. Students working toward the M.M. degree with a thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Music Ensemble (MUSE)****MUSE 5101. Bobcat Basketball Band.**

The Bobcat Basketball Band performs for all home men's and women's basketball games that do not fall over a university break. The group travels for all postseason tournaments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5102. Salsa Del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5103. Mariachi Nueva Generación.**

This course is a performing ensemble specializing in Mexican folk music.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5104. Panorama Steel Drum Band.**

A performing ensemble specializing in Caribbean steel drum band music.

May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5105. Vocalibre.**

A select vocal ensemble specializing in chamber music, including madrigal or jazz literature. May be repeated for credit. Prerequisite: Enrollment in major choral ensemble.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5106. Opera Workshop.**

Opera Workshop is a skills-based class designed for developing opera singers to learn and apply skills that prepare them for professional performance.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5107. Opera Theatre.**

Students will learn and perform operatic roles, chamber opera pieces, or one-act operas. Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 5106 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5108. Orquesta del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeatable for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required| Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5109. Opera Production.**

This course is designed for students to participate as performers in a full opera production or in the production of opera scenes. It will also prepare students for future professional opera performance engagements.

Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 5106 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**MUSE 5122. Aurora Voce – Auditioned Treble Voice Choir.**

Aurora Voce is a highly selective chamber chorale ensemble that is open by audition to all treble singers across campus. Performing in this ensemble provides the singers opportunities to explore high quality and challenging repertoire that spans across a wide variety of styles, historical periods, and genres.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5123. Concert Band.**

This ensemble provides playing experiences for non-music majors and music majors who want to improve their skills and serve as a lab ensemble for conducting students. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5124. Women's Choir.**

Performing ensemble specializing in choral literature for women's voices. May be repeated for credit.

**1 Credit Hour. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5125. Men's Choir.**

Performing ensemble specializing in choral literature for men's voices. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5126. Chamber Music.**

Small group performing ensembles focusing on chamber literature of mixed and similar instrumental music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5127. Jazz Combo.**

A small performance ensemble designed to develop improvisational skills and individual musical creativity through performance of standard jazz literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5128. Conducting Seminar.**

A seminar based course focusing on conducting technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or permission by the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5129. Afro-Caribbean Lab.**

This course is an experimental ensemble of flexible size and instrumentation that specializes in advanced arranging, performance, and improvisation involving Afro-Caribbean styles and rhythms. An audition is required for placement in this ensemble. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5130. Wind Symphony.**

Major instrumental ensemble comprised of the most outstanding wind and percussion students who are selected by audition. The group is dedicated to the performance of the finest wind repertoire, whether a contemporary works for winds, or transcriptions from the orchestral repertoire. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5131. Symphonic Winds.**

Major instrumental ensemble consisting primarily of music majors and talented non-music majors. This ensemble performs a broad range of full ensemble repertoire, representative of all historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5140. Texas State Chorale.**

Auditioned major choral ensemble specializing in performances of literature from the Renaissance and 20th Century. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5141. University Singers.**

Major choral ensemble that performs a variety of literature, including masterworks from the 17th Century to the present. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5150. Texas State Symphony Orchestra.**

A full symphony orchestra that performs standard orchestra literature, as well as oratorio, concerto, and opera accompaniments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5160. Jazz Ensemble.**

The jazz-based ensemble performs advanced arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5161. Jazz Orchestra.**

The jazz-based ensemble performs intermediate arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5162. Jazz Lab Band.**

The jazz-based ensemble performs beginning arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5170. Accompanying.**

A coaching seminar for pianists to develop reading and accompanying skills. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5180. Mystery for Contemporary Music Ensemble.**

An ensemble course focusing on the performance and analysis of contemporary music in all styles and media. May be repeated for credit.

Prerequisite: Music (Composition Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5190. Guitar Ensemble.**

Chamber guitar ensemble designed to provide interaction with fellow guitarists, develop musicianship as an ensemble performer, and to familiarize the student with music from different periods through a variety of literature. May be repeated for credit. Prerequisite: Music (Guitar Performance Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Music Performance (MUSP)****MUSP 5100. Mariachi Lince de Oro.**

This course provides learning opportunities for students interested in an introduction to the mariachi genre. Traditional mariachi repertoire is distributed, rehearsed, memorized, and performed.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5101. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5127. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5164. Mariachi Melodia Techniques.**

This course provides students with the fundamentals of playing and teaching the melodic instruments associated with the Mariachi ensemble, with specific emphasis on the voice, violin, and trumpet. Topics will cover history, tuning, and stylistic techniques associated with each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5165. Mariachi Armonia Techniques.**

This course provides students with the fundamentals of playing and teaching the rhythm/harmony instruments in the Mariachi ensemble, with specific emphasis in the guitarrón, vihuela/guitar, and the harp. Topics will cover history, tuning, strumming, and stylistic techniques specific to each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5166. Latin Music Methods.**

This course provides students with knowledge that is essential to become effective directors of Mariachi and Salsa ensembles. Instruments, styles, repertory, and resources that are related to these ensembles will be discussed. (MULT).

**1 Credit Hour. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5175. Afro-Cuban Hand Drumming.**

The fundamentals of playing and teaching Afro-Cuban Drums. Topics will cover history and knowledge of styles of the various Afro-Cuban percussion instruments. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5185. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5227. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5230. Applied Keyboard.**

In this course students will participate in supervised private coaching and instruction that focuses on technique, musicality, literature, and performance in the keyboard area. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5285. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5320. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5327. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5330. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5337. Advanced Conducting.**

Music performance class designed for further development of baton technique, score reading, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5340. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5350. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5360. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5370. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5380. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5385. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Program Overview

Before prospective graduate students are approved for one of the music specializations, they must audition or complete a portfolio review by the appropriate School of Music area faculty. In addition, they must interview with the Coordinator of Music Graduate Studies or area coordinator. Students must have an undergraduate music degree in order to be considered for admission into the M.M. degree with one of the specializations under music.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application for applications with international credentials
- baccalaureate degree in music from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in music
- GRE not required
- research paper or sample of scholarly writing
- resume/CV (maximum three pages) including name, address, email address, education (degrees or special certifications), professional experience, scholarship awards, special recognitions, articles or presentations, selected community activity, and other information pertinent to the desired degree and concentration
- statement of purpose (400-600 words with name and email in the header) describing the following:
  - past experiences in music history and literature
  - qualities, values, characteristics, and/or skills that make the student a strong candidate for the history and literature program
  - the ways in which the personal learning outcomes of the history and literature program relate to the student's personal and professional goals
  - plans to pursue doctoral studies as well, if applicable
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Music (M.M.) degree with a major in Music concentration in Musicology requires 36 semester credit hours, including a thesis. Students who score less than 70% on the music theory placement test will take MU 5357. Students who score less than 70% on the music history placement test will take MU 5330A. These courses would be in addition to the degree requirements listed below. Additional prerequisites: Musicology students must pass a language *reading* proficiency examination in one language other than English. If the student's research does not require a language other than English, the student will choose among Spanish, French, Italian, or German. Students who would benefit from a speaking/listening proficiency examination may petition the area accordingly. The language requirement should be fulfilled by the end of the first year of studies. Students who passed a reading proficiency course in the relevant language within one year of admission may submit transcript evidence in lieu of an examination.



## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MU 5334	Introduction to Graduate Study in Music	3
MU 5350	Musical Styles	3
Choose 6 hours from the following:		6
MU 5310	Music in the Baroque era	
MU 5314	Music in the Twentieth and Twenty-First Centuries	
MU 5315	Music in the Middle Ages and Renaissance	
MU 5316	Music and the Dramatic Arts	
MU 5320	Music in the Eighteenth Century	
MU 5340	Music in the Nineteenth Century	
MU 5341	Jazz Perspectives	
MU 5360	Music in the United States	
MU 5367	Music in the Caribbean	
MU 5368	Music in Mexico	
<b>Concentration</b>		
MU 5352	Foundations of Musicology <sup>1</sup>	3
Choose 3 hours from the following:		3
MU 5310	Music in the Baroque era	
MU 5314	Music in the Twentieth and Twenty-First Centuries	
MU 5315	Music in the Middle Ages and Renaissance	
MU 5316	Music and the Dramatic Arts	
MU 5320	Music in the Eighteenth Century	
MU 5340	Music in the Nineteenth Century	
MU 5341	Jazz Perspectives	
MU 5360	Music in the United States	
MU 5367	Music in the Caribbean	
MU 5368	Music in Mexico	
MU 5301	Musicology Seminar in Contemporary Issues	
<b>Thesis</b>		
MU 5399A	Thesis	3
Choose a minimum of 6 hours from the following:		6
MU 5199B	Thesis	
MU 5299B	Thesis	
MU 5399B	Thesis	
MU 5599B	Thesis	
MU 5999B	Thesis	
<b>Electives</b>		
Choose 9 hours from the following:		9
Any advisor approved MU, MUSE, or MUSP courses		
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> Musicology students may not count this course toward their CORE requirements

## Comprehensive Examination Requirements

All candidates within the graduate music program must pass a comprehensive oral (viva voce) examination. The students will be given a maximum of two attempts in order to pass this examination before being eligible for graduation. Candidates who fail to pass the comprehensive

oral examination upon the first try may appeal for re-examination. The re-examination will be administered during the term following the first attempt. Exceptions to this policy are rare and must be approved by the director of graduate studies in music and by the director of the school of music. Failure to pass the required comprehensive oral examination upon the second attempt shall prevent the student from being eligible for graduation.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B

course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival

quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Music: MU (p. 2078), MUSE (p. 2084), MUSP (p. 2086)

## Courses Offered

### Music (MU)

#### MU 5113. Independent Study in Music.

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### MU 5130A. Writing About Music.

Focusing on basic writing skills, research, and the use and documentation of sources. Course centers on the process of writing about music. Besides written exercises, the assignments include the study of such professional writing samples as concert reviews, program abstracts, and research essays. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

#### MU 5130B. Diction for Singers.

An in-depth study of the pronunciation of singing in Italian, German, English, and French incorporating the International Phonetic Alphabet through the use of lecture and laboratory sessions for practical application. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

#### MU 5135. Exploring 21st Century Music Education.

This course provides music education graduate students a general overview of current issues and questions in music education, techniques for building a better understanding of core issues, and necessary instruction/investigation for thesis/capstone project. Students leave this class with a general knowledge of many current topics and tools to further investigate topics of interest.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5150. Exploring Twenty-first Century Music Education.**

In this course, students will survey current issues and questions in music education while further developing a primary topic of interest for their thesis/capstone project. Topics will be driven by student interest and the discourse within the field but will be centered around: student-centered pedagogies (e.g., democratic education, culturally responsive pedagogy, popular music education, DEI, and social-emotional learning), performance/teacher anxiety (e.g., music performance anxiety, imposter phenomenon, and teacher self-efficacy), teacher experiences and burnout (e.g., early career teacher experiences, expert teacher tendencies, burnout in music education, finances, technology, administrative experiences, and competition), and writing specific content (e.g., refining APA style and.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5192. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5213. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5230A. Music Theory.**

A study of the materials of counterpoint and harmony as evaluated through listening and analysis of literature, and application through composition. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5230B. Aural Learning.**

Development and application of theory concepts through singing, playing, and dictation. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5235. Music Education Capstone.**

This course allows for a wide overview of the field of music education, providing students with a broad scope to facilitate their thesis/capstone project. The course also creates space in the degree for discussions and readings related to the most recent issues and concerns of the field.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5254. Piano Pedagogy I.**

History, methods, and materials of piano pedagogy. Includes the application of technical and musical fundamentals to beginning levels of teaching. Prerequisites: Piano pedagogy or piano performance majors or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5255. Piano Pedagogy II.**

Advanced methods and materials of piano pedagogy. Includes the application of technical and musical fundamentals to intermediate and advanced levels of teaching. Prerequisites: Piano Pedagogy I or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5301. Musicology Seminar in Contemporary Issues.**

This course offers advanced immersion into current trends and literature in the field of musicology, centering a distinct issue and its related frameworks at each time of offering. Sample issues are Music, Gender, and Sexuality; Ecomusicology; Sound Studies; Methods, Methodologies and Frameworks; among others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5310. Music in the Baroque era.**

This course is a study of diverse genres and repertoires from the 1600s to the early 1700s, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5313. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5314. Music in the Twentieth and Twenty-First Centuries.**

In this course the students will study diverse genres and repertoires of the twentieth and twenty-first centuries, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5315. Music in the Middle Ages and Renaissance.**

In this course students will study diverse genres and repertoires from the 450s to the 1600s, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5316. Music and the Dramatic Arts.**

This course covers diverse genres and repertoires in music and the dramatic arts, antiquities through the present, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with such disciplines as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5317. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5318. Song Literature.**

This course is an historical survey of the art song, emphasizing Western European and American repertoires. Students will articulate stylistic differences within the art song repertory, use analytical methods appropriate for a variety of text settings, and develop greater proficiency at writing about music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5320. Music in the Eighteenth Century.**

In this course students will study diverse genres and repertoires in the eighteenth century, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5322. Advanced Instrumental Techniques.**

Evaluation of teaching methods, materials, and literature of wind/percussion or string instruments. Students must have taken instrumental conducting in their undergraduate degree program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5323. Vocal Music Education Methods.**

Study of the anatomy of the human voice and evaluation of the scientific data and historical beliefs concerning voice pedagogy with emphasis in teaching voice in the class, private studio, as well as within a variety of choral settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5325. Research in Music Education I.**

Examination of methodologies, techniques, and procedures for interpreting and conducting research in music education. Relevant studies in music education will be critiqued, with an emphasis on preparation of a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5326. Research in Music Education II.**

A continuation and culmination of a research project in the field of music education as developed and proposed in MU 5325. Prerequisite: MU 5325 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5328. Foundations of Music Education.**

The cognitive psychology, historical perspective, and philosophical issues that provide the basis for contemporary music education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5329. Psychology of Music.**

This course investigates the psychological foundations of music and examines interdisciplinary approaches to the study of music and the human experience. Topics will include music perception, physiological responses to music, music and the brain, musical attributes, music learning, music therapy, and the measurement of musical behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5330A. History and Analysis of Music.**

A comprehensive musicianship approach to the study of music from the earliest times to the present using techniques of stylistic and structural analysis. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5330B. Advanced Theory.**

Principles of form and analysis, counterpoint, orchestration, and contemporary analytic techniques developed through in-depth study of musical repertoire. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5331. Vocal Pedagogy I: Voice Science.**

This course explores the anatomy/physiology of the human voice, the acoustic properties that govern resonance, vocal health, and philosophy of singing and teaching. Co-requisites: MUSP 5120 or MUSP 5220 or MUSP 5320 with a grade of "C" or better, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5332. Vocal Pedagogy II: Methods.**

This is a comparative study of various pedagogical methods and ideas, including historical and contemporary treatises. Students will explore exercises and vocalizes for general voice development, address and correct specific vocal problems, and engage in peer teaching.

Prerequisite: MU 5331 with a grade of "B" or better. Co-requisites: MUSP 5120, MUSP 5220, or MUSP 5320, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5333. Teaching and Learning in the Music Classroom.**

In this course students will examine music content delivery, pedagogy (including lesson planning, instructional design, etc.), assessment, and other aspects of teaching and learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5334. Introduction to Graduate Study in Music.**

Techniques and materials of research, emphasizing bibliography, library usage, collection, and interpretation of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5337. Techniques of Contemporary Music.**

This course surveys a cross-section of important technical innovations and developments in twentieth-century music, with special focus on music since 1945. Students will read documents outlining aesthetics, analyze music written in a variety of styles, write analytical papers, and using a variety of techniques, compose exercises. Enrollment requires a passing grade on the Graduate Music Theory Placement Exam or Instructor approval. Prerequisite: MU 5357 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5340. Music in the Nineteenth Century.**

This course is a study of diverse genres and repertoires in the nineteenth century, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5341. Jazz Perspectives.**

In this course students will study diverse genres, repertoires, discographies, and stylistic trends associated with jazz, with a focus on the Americas. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5342. Jazz Pedagogy.**

Jazz pedagogy is an in-depth study of the history, methodologies, resources, and techniques of jazz pedagogy and the development of jazz ensemble rehearsal skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5343. Jazz Improvisation.**

This course is a detailed study of the evolution of melodic, harmonic, and rhythmic structures used by jazz improvisers and composers from the 1930s to present day.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5344. Jazz Arranging.**

This course provides a comprehensive study of jazz composition, arranging, and improvisation theory, emphasizing writing for jazz ensembles using harmony, scales, and improvisation in a variety of styles, and providing necessary skills to be a successful jazz or commercial composer/arranger.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MU 5345. Piano Literature I.**

This course is designed to expand first-hand familiarity with the literature for the keyboard from the Baroque to Early Romantic era (Bach to Schumann). It will be divided into five chronological segments, discussing the major composers and their contemporaries. Ten composition genres will be discussed during the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5346. Piano Literature II.**

This course is designed to expand first-hand familiarity with the literature for the piano, which will be divided into six chronological segments. These segments will discuss the most significant composers and their contemporaries in the 19th and 20th centuries and their major piano compositions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5350. Musical Styles.**

Developing a broader musical understanding through critical listening, technical analyses, and written assignments in various musical styles, including the late classical, romantic, and present eras. Prerequisite: MU 5357 with a grade of "B" or better, or a passing grade on the Graduate Music Theory Placement Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5351. Schenkerian Analysis.**

An introduction to the techniques and methods of music analysis as developed by Heinrich Schenker (1868-1935). This course will cover reductive analysis, structural levels in tonal music, and graphing techniques. Prerequisite: MU 5357 with a grade of "B" or better, or passing grade on music theory entrance exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5352. Foundations of Musicology.**

This course is an introduction to the concepts, methodologies, and scholarly trends central to the discipline of musicology. Prerequisite: MU 5334 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5353. Ensemble Rehearsal Techniques.**

Course is designed for performance ensemble conductors. Includes supervision, administration, and rehearsal techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5355. Pedagogy of Music Theory.**

Developing teaching methods and broader understanding through critical study of materials, organization, techniques, and problems of music theory and comprehensive musicianship courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5357. Graduate Music Theory.**

Graduate-level studies in music theory and aural skills. The course covers melody, harmony, counterpoint, form, as well as sight-singing, performing, and dictation. This course does not earn graduate degree credit. Consent of the graduate studies coordinator is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MU 5358. Advanced Musicianship.**

This course is designed to develop graduate-level skills in music sight reading, dictation, fundamental keyboard skills, and keyboard harmonization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5359. Post-Tonal Music Analysis.**

This course is the study and application of methodologies and terminology that are used to analyze post-tonal concert music of the 20th and 21st centuries. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5360. Music in the United States.**

This course is a study of genres and repertoires of the United States of America from the 1600s to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5361. Methods and Methodologies of Music Analysis.**

This course will cover the examination of selected analytical techniques, methods and methodologies, critical approaches, or musical repertoires, including semiotic analysis, computer-assisted music analysis, analysis of thematic processes, functional analysis, phrase structure analysis, as well as category and feature analysis. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5362. Instrumental Pedagogy I.**

This course explores instrument-specific pedagogy from the beginner through the advanced levels. Students will peruse instrument-specific pedagogical works, solo literature, and articles, and will complete a teaching assignment requiring them to implement pedagogical techniques, diagnose common performance problems, and suggest solutions. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5363. Instrumental Pedagogy II: Teaching Internship.**

This class provides students with supervised teaching experience. In this capstone course, students will apply pedagogical principles for instruction on their primary instrument in the private lesson setting. Their teaching will be monitored and evaluated by an applied professor throughout the semester. Prerequisite: MU 5362 with a grade of "B" or better. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5364. Intelligent Music Teaching.**

This course focuses on fundamental philosophical principles of effective instrumental music instruction and includes application of those principles in teaching. Students will develop a realistic perspective of their strengths and weaknesses as a developing professional and will develop business skills necessary to create a successful private lesson studio.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5365. Computing in Music.**

Development of concepts and skills related to current computer technology in music. Exploration and use of computer software, MIDI, and other productivity tools for application to music education, music administration, music research, and music composition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5366. Salsa Arranging.**

Analysis and arranging music for a Salsa ensemble. Topics will cover instrument ranges, orchestration techniques, and styles. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5367. Music in the Caribbean.**

In this course students will study diverse genres and repertoires of the Caribbean from pre-colonization to the present, with a focus on the Hispanic Circum-Caribbean. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5368. Music in Mexico.**

In this course students will study diverse genres and repertoires of Mexico and Mexican-American communities of the United States from pre-colonization to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5369. History of Music in Latin America.**

This course is a study of the musical panorama of Latin America; Pre-Columbian, colonial, folk, urban, academic, and transnational genres are introduced and discussed in historical, socio-political, and stylistic context. It also includes an introduction to the scope and methods of research in Latin American music studies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5371. Choral Literature I: Madrigal/Partsong.**

This course is a comprehensive study of madrigals and partsongs from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5372. Choral Literature II: Oratorio and Other Secular Major Works.**

This course is a comprehensive study of oratorios and other secular major works from the Western canon of choral repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5373. Choral Literature III: Liturgical Year - Motet, Anthem, Cantata.**

This course is a comprehensive study of motets, anthems, cantatas, and other genres associated with the liturgical calendar and the Revised Common Lectionary from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5374. Choral Literature IV: Missa Brevis, Missa Solemnis, & Requiem.**

This course is a comprehensive study of the Roman Catholic Mass and Requiem Liturgies as they have been set to music by composers associated with the Western canon of choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5375O. Contemporary Discourse in Music Education.**

This course entails an examination of topics from contemporary music education research. Students examine contemporary research and the potential for application in their future/current classrooms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 5377. Innovation in Music Performance: Sound Lab.**

This course is designed to engage students in listening and in sound creation/composition and to develop skills and the capacity for improvisation that will equip artists for readiness in evolving cultural and performance situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5381. Inclusive Excellence in the Music Classroom.**

This course prepares prospective and practicing music teachers to create an equitable, inclusive, and thriving classroom that meets the needs of all students by incorporating culturally responsive teaching, multicultural education, world music pedagogy, ethnomusicological perspectives, and by addressing the needs of students with exceptionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5382. History of Music Education in the United States.**

This course entails an examination of music education in the United States. The major historical developments and contemporary trends are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5392. Introduction to Music Instruction in Higher Education.**

This course provides techniques for Graduate Teaching/Instructional Assistants concerning selected problems in 1) the teaching of music in the classroom, private instruction and ensemble environments; and 2) the development of a career in field in higher education. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MU 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Music 5399B. Students working toward the M.M. degree with a thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted.

Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted.

Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted.

Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Music Ensemble (MUSE)****MUSE 5101. Bobcat Basketball Band.**

The Bobcat Basketball Band performs for all home men's and women's basketball games that do not fall over a university break. The group travels for all postseason tournaments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5102. Salsa Del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5103. Mariachi Nueva Generación.**

This course is a performing ensemble specializing in Mexican folk music.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5104. Panorama Steel Drum Band.**

A performing ensemble specializing in Caribbean steel drum band music.

May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5105. VocaLibre.**

A select vocal ensemble specializing in chamber music, including madrigal or jazz literature. May be repeated for credit. Prerequisite:

Enrollment in major choral ensemble.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5106. Opera Workshop.**

Opera Workshop is a skills-based class designed for developing opera singers to learn and apply skills that prepare them for professional performance.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5107. Opera Theatre.**

Students will learn and perform operatic roles, chamber opera pieces, or one-act operas. Concurrent enrollment in Applied Voice is recommended.

Prerequisite: MUSE 5106 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5108. Orquesta del Rio.**

Performing ensemble specializing in Latin and South American music.

May be repeatable for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required| Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5109. Opera Production.**

This course is designed for students to participate as performers in a full opera production or in the production of opera scenes. It will also prepare students for future professional opera performance engagements.

Concurrent enrollment in Applied Voice is recommended. Prerequisite:

MUSE 5106 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5122. Aurora Voce – Auditioned Treble Voice Choir.**

Aurora Voce is a highly selective chamber chorale ensemble that is open by audition to all treble singers across campus. Performing in this ensemble provides the singers opportunities to explore high quality and challenging repertoire that spans across a wide variety of styles, historical periods, and genres.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5123. Concert Band.**

This ensemble provides playing experiences for non-music majors and music majors who want to improve their skills and serve as a lab ensemble for conducting students. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5124. Women's Choir.**

Performing ensemble specializing in choral literature for women's voices. May be repeated for credit.

**1 Credit Hour. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5125. Men's Choir.**

Performing ensemble specializing in choral literature for men's voices. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5126. Chamber Music.**

Small group performing ensembles focusing on chamber literature of mixed and similar instrumental music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5127. Jazz Combo.**

A small performance ensemble designed to develop improvisational skills and individual musical creativity through performance of standard jazz literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5128. Conducting Seminar.**

A seminar based course focusing on conducting technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or permission by the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5129. Afro-Caribbean Lab.**

This course is an experimental ensemble of flexible size and instrumentation that specializes in advanced arranging, performance, and improvisation involving Afro-Caribbean styles and rhythms. An audition is required for placement in this ensemble. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5130. Wind Symphony.**

Major instrumental ensemble comprised of the most outstanding wind and percussion students who are selected by audition. The group is dedicated to the performance of the finest wind repertoire, whether a contemporary works for winds, or transcriptions from the orchestral repertoire. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5131. Symphonic Winds.**

Major instrumental ensemble consisting primarily of music majors and talented non-music majors. This ensemble performs a broad range of full ensemble repertoire, representative of all historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5140. Texas State Chorale.**

Auditioned major choral ensemble specializing in performances of literature from the Renaissance and 20th Century. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5141. University Singers.**

Major choral ensemble that performs a variety of literature, including masterworks from the 17th Century to the present. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5150. Texas State Symphony Orchestra.**

A full symphony orchestra that performs standard orchestra literature, as well as oratorio, concerto, and opera accompaniments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5160. Jazz Ensemble.**

The jazz-based ensemble performs advanced arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5161. Jazz Orchestra.**

The jazz-based ensemble performs intermediate arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5162. Jazz Lab Band.**

The jazz-based ensemble performs beginning arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5170. Accompanying.**

A coaching seminar for pianists to develop reading and accompanying skills. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5180. Mysticism for Contemporary Music Ensemble.**

An ensemble course focusing on the performance and analysis of contemporary music in all styles and media. May be repeated for credit. Prerequisite: Music (Composition Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5190. Guitar Ensemble.**

Chamber guitar ensemble designed to provide interaction with fellow guitarists, develop musicianship as an ensemble performer, and to familiarize the student with music from different periods through a variety of literature. May be repeated for credit. Prerequisite: Music (Guitar Performance Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Music Performance (MUSP)****MUSP 5100. Mariachi Lince de Oro.**

This course provides learning opportunities for students interested in an introduction to the mariachi genre. Traditional mariachi repertoire is distributed, rehearsed, memorized, and performed.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**MUSP 5101. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5127. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5164. Mariachi Melodia Techniques.**

This course provides students with the fundamentals of playing and teaching the melodic instruments associated with the Mariachi ensemble, with specific emphasis on the voice, violin, and trumpet. Topics will cover history, tuning, and stylistic techniques associated with each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5165. Mariachi Armonia Techniques.**

This course provides students with the fundamentals of playing and teaching the rhythm/harmony instruments in the Mariachi ensemble, with specific emphasis in the guitarrón, vihuela/guitar, and the harp. Topics will cover history, tuning, strumming, and stylistic techniques specific to each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5166. Latin Music Methods.**

This course provides students with knowledge that is essential to become effective directors of Mariachi and Salsa ensembles. Instruments, styles, repertory, and resources that are related to these ensembles will be discussed. (MULT).

**1 Credit Hour. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5175. Afro-Cuban Hand Drumming.**

The fundamentals of playing and teaching Afro-Cuban Drums. Topics will cover history and knowledge of styles of the various Afro-Cuban percussion instruments. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5185. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5227. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5230. Applied Keyboard.**

In this course students will participate in supervised private coaching and instruction that focuses on technique, musicality, literature, and performance in the keyboard area. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5285. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5320. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5327. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit.

Prerequisite: Conducting Major or consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5330. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5337. Advanced Conducting.**

Music performance class designed for further development of baton technique, score reading, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5340. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5350. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5360. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5370. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5380. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5385. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Program Overview

Before prospective graduate students are approved for one of the music specializations, they must audition or complete a portfolio review by the appropriate School of Music area faculty. In addition, they must interview with the Coordinator of Music Graduate Studies or area coordinator. Students must have an undergraduate music degree in order to be considered for admission into the M.M. degree with one of the specializations under music.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in music from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in music
- GRE not required
- audition/portfolio and interview (Requirements vary by concentration. Visit the department's website (<http://www.music.txstate.edu/gradprospectivestudents/BecomingaMusicMajor-Grad.html>) for detailed instructions.)
- resume/CV (maximum three pages) including name, address, email address, education (degrees or special certifications), professional experience, scholarship awards, special recognitions, articles or presentations, selected community activity, and other information pertinent to the desired degree and concentration
- statement of purpose (400-600 words with name and email in the header) describing the following:
  - past experiences in instrumental conducting
  - qualities, values, characteristics, and/or skills that make the student a strong candidate for the instrumental conducting program
  - the ways in which the personal learning outcomes of the instrumental conducting program relate to the student's personal and professional goals
  - plans to pursue doctoral studies as well, if applicable
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Music (M.M.) degree with a major in Music concentration in Instrumental Conducting requires 36 semester credit hours. Students who score less than 70% on the music theory placement test will take MU 5357. Students who score less than 70% on the music history placement test will take MU 5330A. These courses are in addition to the degree requirements listed below.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MU 5334	Introduction to Graduate Study in Music	3
MU 5350	Musical Styles	3
Choose 6 hours from the following:		6
MU 5310	Music in the Baroque era	

MU 5314	Music in the Twentieth and Twenty-First Centuries	
MU 5315	Music in the Middle Ages and Renaissance	
MU 5316	Music and the Dramatic Arts	
MU 5320	Music in the Eighteenth Century	
MU 5340	Music in the Nineteenth Century	
MU 5341	Jazz Perspectives	
MU 5352	Foundations of Musicology	
MU 5360	Music in the United States	
MU 5367	Music in the Caribbean	
MU 5368	Music in Mexico	
<b>Concentration</b>		
MU 5192	Graduate Recital	1
MUSE 5128	Conducting Seminar (taken three times)	3
MUSP 5127	Applied Conducting	1
MUSP 5227	Applied Conducting (taken twice)	4
MUSP 5337	Advanced Conducting	3
<b>Electives</b>		
Choose 12 hours from the following:		12
Any advisor approved MU, MUSE, or MUSP courses		
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirements

All candidates within the graduate music program must pass a comprehensive oral (viva voce) examination. The students will be given a maximum of two attempts in order to pass this examination before being eligible for graduation. Candidates who fail to pass the comprehensive oral examination upon the first try may appeal for re-examination. The re-examination will be administered during the term following the first attempt. Exceptions to this policy are rare and must be approved by the director of graduate studies in music and by the director of the school of music. Failure to pass the required comprehensive oral examination upon the second attempt shall prevent the student from being eligible for graduation.

Master's level courses in Music: MU (p. 2090), MUSE (p. 2097), MUSP (p. 2099)

## Courses Offered

### Music (MU)

#### MU 5113. Independent Study in Music.

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5130A. Writing About Music.**

Focusing on basic writing skills, research, and the use and documentation of sources. Course centers on the process of writing about music. Besides written exercises, the assignments include the study of such professional writing samples as concert reviews, program abstracts, and research essays. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5130B. Diction for Singers.**

An in-depth study of the pronunciation of singing in Italian, German, English, and French incorporating the International Phonetic Alphabet through the use of lecture and laboratory sessions for practical application. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5135. Exploring 21st Century Music Education.**

This course provides music education graduate students a general overview of current issues and questions in music education, techniques for building a better understanding of core issues, and necessary instruction/investigation for thesis/capstone project. Students leave this class with a general knowledge of many current topics and tools to further investigate topics of interest.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5150. Exploring Twenty-first Century Music Education.**

In this course, students will survey current issues and questions in music education while further developing a primary topic of interest for their thesis/capstone project. Topics will be driven by student interest and the discourse within the field but will be centered around: student-centered pedagogies (e.g., democratic education, culturally responsive pedagogy, popular music education, DEI, and social-emotional learning), performance/teacher anxiety (e.g., music performance anxiety, imposter phenomenon, and teacher self-efficacy), teacher experiences and burnout (e.g., early career teacher experiences, expert teacher tendencies, burnout in music education, finances, technology, administrative experiences, and competition), and writing specific content (e.g., refining APA style and.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5192. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5213. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5230A. Music Theory.**

A study of the materials of counterpoint and harmony as evaluated through listening and analysis of literature, and application through composition. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5230B. Aural Learning.**

Development and application of theory concepts through singing, playing, and dictation. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5235. Music Education Capstone.**

This course allows for a wide overview of the field of music education, providing students with a broad scope to facilitate their thesis/capstone project. The course also creates space in the degree for discussions and readings related to the most recent issues and concerns of the field.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5254. Piano Pedagogy I.**

History, methods, and materials of piano pedagogy. Includes the application of technical and musical fundamentals to beginning levels of teaching. Prerequisites: Piano pedagogy or piano performance majors or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MU 5255. Piano Pedagogy II.**

Advanced methods and materials of piano pedagogy. Includes the application of technical and musical fundamentals to intermediate and advanced levels of teaching. Prerequisites: Piano Pedagogy I or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5301. Musicology Seminar in Contemporary Issues.**

This course offers advanced immersion into current trends and literature in the field of musicology, centering a distinct issue and its related frameworks at each time of offering. Sample issues are Music, Gender, and Sexuality; Ecomusicology; Sound Studies; Methods, Methodologies and Frameworks; among others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5310. Music in the Baroque era.**

This course is a study of diverse genres and repertoires from the 1600s to the early 1700s, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5313. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5314. Music in the Twentieth and Twenty-First Centuries.**

In this course the students will study diverse genres and repertoires of the twentieth and twenty-first centuries, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5315. Music in the Middle Ages and Renaissance.**

In this course students will study diverse genres and repertoires from the 450s to the 1600s, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5316. Music and the Dramatic Arts.**

This course covers diverse genres and repertoires in music and the dramatic arts, antiquities through the present, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with such disciplines as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5317. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5318. Song Literature.**

This course is an historical survey of the art song, emphasizing Western European and American repertoires. Students will articulate stylistic differences within the art song repertory, use analytical methods appropriate for a variety of text settings, and develop greater proficiency at writing about music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5320. Music in the Eighteenth Century.**

In this course students will study diverse genres and repertoires in the eighteenth century, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5322. Advanced Instrumental Techniques.**

Evaluation of teaching methods, materials, and literature of wind/percussion or string instruments. Students must have taken instrumental conducting in their undergraduate degree program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5323. Vocal Music Education Methods.**

Study of the anatomy of the human voice and evaluation of the scientific data and historical beliefs concerning voice pedagogy with emphasis in teaching voice in the class, private studio, as well as within a variety of choral settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5325. Research in Music Education I.**

Examination of methodologies, techniques, and procedures for interpreting and conducting research in music education. Relevant studies in music education will be critiqued, with an emphasis on preparation of a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5326. Research in Music Education II.**

A continuation and culmination of a research project in the field of music education as developed and proposed in MU 5325. Prerequisite: MU 5325 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5328. Foundations of Music Education.**

The cognitive psychology, historical perspective, and philosophical issues that provide the basis for contemporary music education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5329. Psychology of Music.**

This course investigates the psychological foundations of music and examines interdisciplinary approaches to the study of music and the human experience. Topics will include music perception, physiological responses to music, music and the brain, musical attributes, music learning, music therapy, and the measurement of musical behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5330A. History and Analysis of Music.**

A comprehensive musicianship approach to the study of music from the earliest times to the present using techniques of stylistic and structural analysis. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5330B. Advanced Theory.**

Principles of form and analysis, counterpoint, orchestration, and contemporary analytic techniques developed through in-depth study of musical repertoire. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5331. Vocal Pedagogy I: Voice Science.**

This course explores the anatomy/physiology of the human voice, the acoustic properties that govern resonance, vocal health, and philosophy of singing and teaching. Co-requisites: MUSP 5120 or MUSP 5220 or MUSP 5320 with a grade of "C" or better, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5332. Vocal Pedagogy II: Methods.**

This is a comparative study of various pedagogical methods and ideas, including historical and contemporary treatises. Students will explore exercises and vocalizes for general voice development, address and correct specific vocal problems, and engage in peer teaching.

Prerequisite: MU 5331 with a grade of "B" or better. Co-requisites: MUSP 5120, MUSP 5220, or MUSP 5320, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5333. Teaching and Learning in the Music Classroom.**

In this course students will examine music content delivery, pedagogy (including lesson planning, instructional design, etc.), assessment, and other aspects of teaching and learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5334. Introduction to Graduate Study in Music.**

Techniques and materials of research, emphasizing bibliography, library usage, collection, and interpretation of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5337. Techniques of Contemporary Music.**

This course surveys a cross-section of important technical innovations and developments in twentieth-century music, with special focus on music since 1945. Students will read documents outlining aesthetics, analyze music written in a variety of styles, write analytical papers, and using a variety of techniques, compose exercises. Enrollment requires a passing grade on the Graduate Music Theory Placement Exam or Instructor approval. Prerequisite: MU 5357 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5340. Music in the Nineteenth Century.**

This course is a study of diverse genres and repertoires in the nineteenth century, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5341. Jazz Perspectives.**

In this course students will study diverse genres, repertoires, discographies, and stylistic trends associated with jazz, with a focus on the Americas. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5342. Jazz Pedagogy.**

Jazz pedagogy is an in-depth study of the history, methodologies, resources, and techniques of jazz pedagogy and the development of jazz ensemble rehearsal skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5343. Jazz Improvisation.**

This course is a detailed study of the evolution of melodic, harmonic, and rhythmic structures used by jazz improvisers and composers from the 1930s to present day.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5344. Jazz Arranging.**

This course provides a comprehensive study of jazz composition, arranging, and improvisation theory, emphasizing writing for jazz ensembles using harmony, scales, and improvisation in a variety of styles, and providing necessary skills to be a successful jazz or commercial composer/arranger.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5345. Piano Literature I.**

This course is designed to expand first-hand familiarity with the literature for the keyboard from the Baroque to Early Romantic era (Bach to Schumann). It will be divided into five chronological segments, discussing the major composers and their contemporaries. Ten composition genres will be discussed during the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5346. Piano Literature II.**

This course is designed to expand first-hand familiarity with the literature for the piano, which will be divided into six chronological segments. These segments will discuss the most significant composers and their contemporaries in the 19th and 20th centuries and their major piano compositions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5350. Musical Styles.**

Developing a broader musical understanding through critical listening, technical analyses, and written assignments in various musical styles, including the late classical, romantic, and present eras. Prerequisite: MU 5357 with a grade of "B" or better, or a passing grade on the Graduate Music Theory Placement Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5351. Schenkerian Analysis.**

An introduction to the techniques and methods of music analysis as developed by Heinrich Schenker (1868-1935). This course will cover reductive analysis, structural levels in tonal music, and graphing techniques. Prerequisite: MU 5357 with a grade of "B" or better, or passing grade on music theory entrance exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5352. Foundations of Musicology.**

This course is an introduction to the concepts, methodologies, and scholarly trends central to the discipline of musicology. Prerequisite: MU 5334 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5353. Ensemble Rehearsal Techniques.**

Course is designed for performance ensemble conductors. Includes supervision, administration, and rehearsal techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5355. Pedagogy of Music Theory.**

Developing teaching methods and broader understanding through critical study of materials, organization, techniques, and problems of music theory and comprehensive musicianship courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5357. Graduate Music Theory.**

Graduate-level studies in music theory and aural skills. The course covers melody, harmony, counterpoint, form, as well as sight-singing, performing, and dictation. This course does not earn graduate degree credit. Consent of the graduate studies coordinator is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MU 5358. Advanced Musicianship.**

This course is designed to develop graduate-level skills in music sight reading, dictation, fundamental keyboard skills, and keyboard harmonization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5359. Post-Tonal Music Analysis.**

This course is the study and application of methodologies and terminology that are used to analyze post-tonal concert music of the 20th and 21st centuries. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5360. Music in the United States.**

This course is a study of genres and repertoires of the United States of America from the 1600s to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5361. Methods and Methodologies of Music Analysis.**

This course will cover the examination of selected analytical techniques, methods and methodologies, critical approaches, or musical repertoires, including semiotic analysis, computer-assisted music analysis, analysis of thematic processes, functional analysis, phrase structure analysis, as well as category and feature analysis. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5362. Instrumental Pedagogy I.**

This course explores instrument-specific pedagogy from the beginner through the advanced levels. Students will peruse instrument-specific pedagogical works, solo literature, and articles, and will complete a teaching assignment requiring them to implement pedagogical techniques, diagnose common performance problems, and suggest solutions. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 or MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5363. Instrumental Pedagogy II: Teaching Internship.**

This class provides students with supervised teaching experience. In this capstone course, students will apply pedagogical principles for instruction on their primary instrument in the private lesson setting. Their teaching will be monitored and evaluated by an applied professor throughout the semester. Prerequisite: MU 5362 with a grade of "B" or better. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 or MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5364. Intelligent Music Teaching.**

This course focuses on fundamental philosophical principles of effective instrumental music instruction and includes application of those principles in teaching. Students will develop a realistic perspective of their strengths and weaknesses as a developing professional and will develop business skills necessary to create a successful private lesson studio.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5365. Computing in Music.**

Development of concepts and skills related to current computer technology in music. Exploration and use of computer software, MIDI, and other productivity tools for application to music education, music administration, music research, and music composition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5366. Salsa Arranging.**

Analysis and arranging music for a Salsa ensemble. Topics will cover instrument ranges, orchestration techniques, and styles. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5367. Music in the Caribbean.**

In this course students will study diverse genres and repertoires of the Caribbean from pre-colonization to the present, with a focus on the Hispanic Circum-Caribbean. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5368. Music in Mexico.**

In this course students will study diverse genres and repertoires of Mexico and Mexican-American communities of the United States from pre-colonization to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5369. History of Music in Latin America.**

This course is a study of the musical panorama of Latin America; Pre-Columbian, colonial, folk, urban, academic, and transnational genres are introduced and discussed in historical, socio-political, and stylistic context. It also includes an introduction to the scope and methods of research in Latin American music studies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5371. Choral Literature I: Madrigal/Partsong.**

This course is a comprehensive study of madrigals and partsongs from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5372. Choral Literature II: Oratorio and Other Secular Major Works.**

This course is a comprehensive study of oratorios and other secular major works from the Western canon of choral repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5373. Choral Literature III: Liturgical Year - Motet, Anthem, Cantata.**

This course is a comprehensive study of motets, anthems, cantatas, and other genres associated with the liturgical calendar and the Revised Common Lectionary from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5374. Choral Literature IV: Missa Brevis, Missa Solemnis, & Requiem.**

This course is a comprehensive study of the Roman Catholic Mass and Requiem Liturgies as they have been set to music by composers associated with the Western canon of choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 53750. Contemporary Discourse in Music Education.**

This course entails an examination of topics from contemporary music education research. Students examine contemporary research and the potential for application in their future/current classrooms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 5377. Innovation in Music Performance: Sound Lab.**

This course is designed to engage students in listening and in sound creation/composition and to develop skills and the capacity for improvisation that will equip artists for readiness in evolving cultural and performance situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5381. Inclusive Excellence in the Music Classroom.**

This course prepares prospective and practicing music teachers to create an equitable, inclusive, and thriving classroom that meets the needs of all students by incorporating culturally responsive teaching, multicultural education, world music pedagogy, ethnomusicological perspectives, and by addressing the needs of students with exceptionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5382. History of Music Education in the United States.**

This course entails an examination of music education in the United States. The major historical developments and contemporary trends are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5392. Introduction to Music Instruction in Higher Education.**

This course provides techniques for Graduate Teaching/Instructional Assistants concerning selected problems in 1) the teaching of music in the classroom, private instruction and ensemble environments; and 2) the development of a career in field in higher education. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships



**MU 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Music 5399B. Students working toward the M.M. degree with a thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Music Ensemble (MUSE)****MUSE 5101. Bobcat Basketball Band.**

The Bobcat Basketball Band performs for all home men's and women's basketball games that do not fall over a university break. The group travels for all postseason tournaments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5102. Salsa Del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5103. Mariachi Nueva Generación.**

This course is a performing ensemble specializing in Mexican folk music.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5104. Panorama Steel Drum Band.**

A performing ensemble specializing in Caribbean steel drum band music.

May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5105. Vocalibre.**

A select vocal ensemble specializing in chamber music, including madrigal or jazz literature. May be repeated for credit. Prerequisite: Enrollment in major choral ensemble.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5106. Opera Workshop.**

Opera Workshop is a skills-based class designed for developing opera singers to learn and apply skills that prepare them for professional performance.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5107. Opera Theatre.**

Students will learn and perform operatic roles, chamber opera pieces, or one-act operas. Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 5106 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5108. Orquesta del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeatable for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required| Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5109. Opera Production.**

This course is designed for students to participate as performers in a full opera production or in the production of opera scenes. It will also prepare students for future professional opera performance engagements.

Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 5106 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5122. Aurora Voce – Auditioned Treble Voice Choir.**

Aurora Voce is a highly selective chamber chorale ensemble that is open by audition to all treble singers across campus. Performing in this ensemble provides the singers opportunities to explore high quality and challenging repertoire that spans across a wide variety of styles, historical periods, and genres.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5123. Concert Band.**

This ensemble provides playing experiences for non-music majors and music majors who want to improve their skills and serve as a lab ensemble for conducting students. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5124. Women's Choir.**

Performing ensemble specializing in choral literature for women's voices. May be repeated for credit.

**1 Credit Hour. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5125. Men's Choir.**

Performing ensemble specializing in choral literature for men's voices. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5126. Chamber Music.**

Small group performing ensembles focusing on chamber literature of mixed and similar instrumental music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5127. Jazz Combo.**

A small performance ensemble designed to develop improvisational skills and individual musical creativity through performance of standard jazz literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5128. Conducting Seminar.**

A seminar based course focusing on conducting technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or permission by the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5129. Afro-Caribbean Lab.**

This course is an experimental ensemble of flexible size and instrumentation that specializes in advanced arranging, performance, and improvisation involving Afro-Caribbean styles and rhythms. An audition is required for placement in this ensemble. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5130. Wind Symphony.**

Major instrumental ensemble comprised of the most outstanding wind and percussion students who are selected by audition. The group is dedicated to the performance of the finest wind repertoire, whether a contemporary works for winds, or transcriptions from the orchestral repertoire. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5131. Symphonic Winds.**

Major instrumental ensemble consisting primarily of music majors and talented non-music majors. This ensemble performs a broad range of full ensemble repertoire, representative of all historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5140. Texas State Chorale.**

Auditioned major choral ensemble specializing in performances of literature from the Renaissance and 20th Century. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5141. University Singers.**

Major choral ensemble that performs a variety of literature, including masterworks from the 17th Century to the present. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5150. Texas State Symphony Orchestra.**

A full symphony orchestra that performs standard orchestra literature, as well as oratorio, concerto, and opera accompaniments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5160. Jazz Ensemble.**

The jazz-based ensemble performs advanced arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5161. Jazz Orchestra.**

The jazz-based ensemble performs intermediate arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5162. Jazz Lab Band.**

The jazz-based ensemble performs beginning arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5170. Accompanying.**

A coaching seminar for pianists to develop reading and accompanying skills. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5180. Mystery for Contemporary Music Ensemble.**

An ensemble course focusing on the performance and analysis of contemporary music in all styles and media. May be repeated for credit.

Prerequisite: Music (Composition Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5190. Guitar Ensemble.**

Chamber guitar ensemble designed to provide interaction with fellow guitarists, develop musicianship as an ensemble performer, and to familiarize the student with music from different periods through a variety of literature. May be repeated for credit. Prerequisite: Music (Guitar Performance Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Music Performance (MUSP)****MUSP 5100. Mariachi Lince de Oro.**

This course provides learning opportunities for students interested in an introduction to the mariachi genre. Traditional mariachi repertoire is distributed, rehearsed, memorized, and performed.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5101. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5127. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5164. Mariachi Melodia Techniques.**

This course provides students with the fundamentals of playing and teaching the melodic instruments associated with the Mariachi ensemble, with specific emphasis on the voice, violin, and trumpet. Topics will cover history, tuning, and stylistic techniques associated with each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5165. Mariachi Armonia Techniques.**

This course provides students with the fundamentals of playing and teaching the rhythm/harmony instruments in the Mariachi ensemble, with specific emphasis in the guitarrón, vihuela/guitar, and the harp. Topics will cover history, tuning, strumming, and stylistic techniques specific to each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5166. Latin Music Methods.**

This course provides students with knowledge that is essential to become effective directors of Mariachi and Salsa ensembles. Instruments, styles, repertory, and resources that are related to these ensembles will be discussed. (MULT).

**1 Credit Hour. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5175. Afro-Cuban Hand Drumming.**

The fundamentals of playing and teaching Afro-Cuban Drums. Topics will cover history and knowledge of styles of the various Afro-Cuban percussion instruments. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5185. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5227. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5230. Applied Keyboard.**

In this course students will participate in supervised private coaching and instruction that focuses on technique, musicality, literature, and performance in the keyboard area. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5285. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5320. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5327. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5330. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5337. Advanced Conducting.**

Music performance class designed for further development of baton technique, score reading, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5340. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5350. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5360. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter



**MUSP 5370. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5380. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5385. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Program Overview

Before prospective graduate students are approved for one of the music specializations, they must audition or complete a portfolio review by the appropriate School of Music area faculty. In addition, they must interview with the Coordinator of Music Graduate Studies or area coordinator. Students must have an undergraduate music degree in order to be considered for admission into the M.M. degree with one of the specializations under music.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in music from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in music
- GRE not required
- audition/portfolio and interview (Requirements vary by concentration. Visit the department's website (<http://www.music.txstate.edu/gradprospectivestudents/BecomingaMusicMajor-Grad.html>) for detailed instructions.)
- resume/CV (maximum three pages) including name, address, email address, education (degrees or special certifications), professional experience, scholarship awards, special recognitions, articles or presentations, selected community activity, and other information pertinent to the desired degree and concentration
- statement of purpose (400-600 words with name and email in the header) describing the following:
  - past experiences in jazz performance
  - qualities, values, characteristics, and/or skills that make the student a strong candidate for the jazz performance program
  - the ways in which the personal learning outcomes of the jazz performance program relate to the student's personal and professional goals
  - plans to pursue doctoral studies as well, if applicable
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Music (M.M.) degree with a major in Music concentration in Jazz Performance requires 36 semester credit hours. Students who score less than 70% on the music theory placement test will take MU 5357. Students who score less than 70% on the music history placement test will take MU 5330A. These courses would be in addition to the degree requirements listed below.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MU 5334	Introduction to Graduate Study in Music	3
MU 5350	Musical Styles	3
Choose 6 hours from the following:		6
MU 5310	Music in the Baroque era	
MU 5314	Music in the Twentieth and Twenty-First Centuries	

MU 5315	Music in the Middle Ages and Renaissance	
MU 5316	Music and the Dramatic Arts	
MU 5320	Music in the Eighteenth Century	
MU 5340	Music in the Nineteenth Century	
MU 5341	Jazz Perspectives	
MU 5352	Foundations of Musicology	
MU 5360	Music in the United States	
MU 5367	Music in the Caribbean	
MU 5368	Music in Mexico	
<b>Concentration</b>		
MU 5342	Jazz Pedagogy	3
MU 5343	Jazz Improvisation	3
MU 5344	Jazz Arranging	3
MUSE 5127	Jazz Combo	1
MUSP 5101	Graduate Recital	1
MUSP 5130	Applied Keyboard	1
Choose 8 hours from the following:		8
MUSP 5230	Applied Keyboard	
MUSP 5240	Applied Woodwind	
MUSP 5250	Applied Brass	
MUSP 5260	Applied String	
MUSP 5270	Applied Percussion	
Choose 4 hours from the following:		4
MUSE 5160	Jazz Ensemble	
MUSE 5161	Jazz Orchestra	
MUSE 5162	Jazz Lab Band	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirements

All candidates within the graduate music program must pass a comprehensive oral (viva voce) examination. The students will be given a maximum of two attempts in order to pass this examination before being eligible for graduation. Candidates who fail to pass the comprehensive oral examination upon the first try may appeal for re-examination. The re-examination will be administered during the term following the first attempt. Exceptions to this policy are rare and must be approved by the director of graduate studies in music and by the director of the school of music. Failure to pass the required comprehensive oral examination upon the second attempt shall prevent the student from being eligible for graduation.

Master's level courses in Music: MU, MUSE, MUSP

## Courses Offered

### Music (MU)

#### MU 5113. Independent Study in Music.

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### MU 5130A. Writing About Music.

Focusing on basic writing skills, research, and the use and documentation of sources. Course centers on the process of writing about music. Besides written exercises, the assignments include the study of such professional writing samples as concert reviews, program abstracts, and research essays. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

#### MU 5130B. Diction for Singers.

An in-depth study of the pronunciation of singing in Italian, German, English, and French incorporating the International Phonetic Alphabet through the use of lecture and laboratory sessions for practical application. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

#### MU 5135. Exploring 21st Century Music Education.

This course provides music education graduate students a general overview of current issues and questions in music education, techniques for building a better understanding of core issues, and necessary instruction/investigation for thesis/capstone project. Students leave this class with a general knowledge of many current topics and tools to further investigate topics of interest.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### MU 5150. Exploring Twenty-first Century Music Education.

In this course, students will survey current issues and questions in music education while further developing a primary topic of interest for their thesis/capstone project. Topics will be driven by student interest and the discourse within the field but will be centered around: student-centered pedagogies (e.g., democratic education, culturally responsive pedagogy, popular music education, DEI, and social-emotional learning), performance/teacher anxiety (e.g., music performance anxiety, imposter phenomenon, and teacher self-efficacy), teacher experiences and burnout (e.g., early career teacher experiences, expert teacher tendencies, burnout in music education, finances, technology, administrative experiences, and competition), and writing specific content (e.g., refining APA style and.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### MU 5192. Graduate Recital.

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5213. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5230A. Music Theory.**

A study of the materials of counterpoint and harmony as evaluated through listening and analysis of literature, and application through composition. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5230B. Aural Learning.**

Development and application of theory concepts through singing, playing, and dictation. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5235. Music Education Capstone.**

This course allows for a wide overview of the field of music education, providing students with a broad scope to facilitate their thesis/capstone project. The course also creates space in the degree for discussions and readings related to the most recent issues and concerns of the field.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5254. Piano Pedagogy I.**

History, methods, and materials of piano pedagogy. Includes the application of technical and musical fundamentals to beginning levels of teaching. Prerequisites: Piano pedagogy or piano performance majors or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5255. Piano Pedagogy II.**

Advanced methods and materials of piano pedagogy. Includes the application of technical and musical fundamentals to intermediate and advanced levels of teaching. Prerequisites: Piano Pedagogy I or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5301. Musicology Seminar in Contemporary Issues.**

This course offers advanced immersion into current trends and literature in the field of musicology, centering a distinct issue and its related frameworks at each time of offering. Sample issues are Music, Gender, and Sexuality; Ecomusicology; Sound Studies; Methods, Methodologies and Frameworks; among others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5310. Music in the Baroque era.**

This course is a study of diverse genres and repertoires from the 1600s to the early 1700s, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5313. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5314. Music in the Twentieth and Twenty-First Centuries.**

In this course the students will study diverse genres and repertoires of the twentieth and twenty-first centuries, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5315. Music in the Middle Ages and Renaissance.**

In this course students will study diverse genres and repertoires from the 450s to the 1600s, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5316. Music and the Dramatic Arts.**

This course covers diverse genres and repertoires in music and the dramatic arts, antiquities through the present, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with such disciplines as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5317. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5318. Song Literature.**

This course is an historical survey of the art song, emphasizing Western European and American repertoires. Students will articulate stylistic differences within the art song repertory, use analytical methods appropriate for a variety of text settings, and develop greater proficiency at writing about music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5320. Music in the Eighteenth Century.**

In this course students will study diverse genres and repertoires in the eighteenth century, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5322. Advanced Instrumental Techniques.**

Evaluation of teaching methods, materials, and literature of wind/percussion or string instruments. Students must have taken instrumental conducting in their undergraduate degree program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5323. Vocal Music Education Methods.**

Study of the anatomy of the human voice and evaluation of the scientific data and historical beliefs concerning voice pedagogy with emphasis in teaching voice in the class, private studio, as well as within a variety of choral settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5325. Research in Music Education I.**

Examination of methodologies, techniques, and procedures for interpreting and conducting research in music education. Relevant studies in music education will be critiqued, with an emphasis on preparation of a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5326. Research in Music Education II.**

A continuation and culmination of a research project in the field of music education as developed and proposed in MU 5325. Prerequisite: MU 5325 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5328. Foundations of Music Education.**

The cognitive psychology, historical perspective, and philosophical issues that provide the basis for contemporary music education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5329. Psychology of Music.**

This course investigates the psychological foundations of music and examines interdisciplinary approaches to the study of music and the human experience. Topics will include music perception, physiological responses to music, music and the brain, musical attributes, music learning, music therapy, and the measurement of musical behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5330A. History and Analysis of Music.**

A comprehensive musicianship approach to the study of music from the earliest times to the present using techniques of stylistic and structural analysis. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5330B. Advanced Theory.**

Principles of form and analysis, counterpoint, orchestration, and contemporary analytic techniques developed through in-depth study of musical repertoire. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5331. Vocal Pedagogy I: Voice Science.**

This course explores the anatomy/physiology of the human voice, the acoustic properties that govern resonance, vocal health, and philosophy of singing and teaching. Co-requisites: MUSP 5120 or MUSP 5220 or MUSP 5320 with a grade of "C" or better, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5332. Vocal Pedagogy II: Methods.**

This is a comparative study of various pedagogical methods and ideas, including historical and contemporary treatises. Students will explore exercises and vocalizes for general voice development, address and correct specific vocal problems, and engage in peer teaching.

Prerequisite: MU 5331 with a grade of "B" or better. Co-requisites: MUSP 5120, MUSP 5220, or MUSP 5320, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5333. Teaching and Learning in the Music Classroom.**

In this course students will examine music content delivery, pedagogy (including lesson planning, instructional design, etc.), assessment, and other aspects of teaching and learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5334. Introduction to Graduate Study in Music.**

Techniques and materials of research, emphasizing bibliography, library usage, collection, and interpretation of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5337. Techniques of Contemporary Music.**

This course surveys a cross-section of important technical innovations and developments in twentieth-century music, with special focus on music since 1945. Students will read documents outlining aesthetics, analyze music written in a variety of styles, write analytical papers, and using a variety of techniques, compose exercises. Enrollment requires a passing grade on the Graduate Music Theory Placement Exam or Instructor approval. Prerequisite: MU 5357 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5340. Music in the Nineteenth Century.**

This course is a study of diverse genres and repertoires in the nineteenth century, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5341. Jazz Perspectives.**

In this course students will study diverse genres, repertoires, discographies, and stylistic trends associated with jazz, with a focus on the Americas. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5342. Jazz Pedagogy.**

Jazz pedagogy is an in-depth study of the history, methodologies, resources, and techniques of jazz pedagogy and the development of jazz ensemble rehearsal skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5343. Jazz Improvisation.**

This course is a detailed study of the evolution of melodic, harmonic, and rhythmic structures used by jazz improvisers and composers from the 1930s to present day.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5344. Jazz Arranging.**

This course provides a comprehensive study of jazz composition, arranging, and improvisation theory, emphasizing writing for jazz ensembles using harmony, scales, and improvisation in a variety of styles, and providing necessary skills to be a successful jazz or commercial composer/arranger.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5345. Piano Literature I.**

This course is designed to expand first-hand familiarity with the literature for the keyboard from the Baroque to Early Romantic era (Bach to Schumann). It will be divided into five chronological segments, discussing the major composers and their contemporaries. Ten composition genres will be discussed during the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MU 5346. Piano Literature II.**

This course is designed to expand first-hand familiarity with the literature for the piano, which will be divided into six chronological segments. These segments will discuss the most significant composers and their contemporaries in the 19th and 20th centuries and their major piano compositions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5350. Musical Styles.**

Developing a broader musical understanding through critical listening, technical analyses, and written assignments in various musical styles, including the late classical, romantic, and present eras. Prerequisite: MU 5357 with a grade of "B" or better, or a passing grade on the Graduate Music Theory Placement Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5351. Schenkerian Analysis.**

An introduction to the techniques and methods of music analysis as developed by Heinrich Schenker (1868-1935). This course will cover reductive analysis, structural levels in tonal music, and graphing techniques. Prerequisite: MU 5357 with a grade of "B" or better, or passing grade on music theory entrance exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5352. Foundations of Musicology.**

This course is an introduction to the concepts, methodologies, and scholarly trends central to the discipline of musicology. Prerequisite: MU 5334 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5353. Ensemble Rehearsal Techniques.**

Course is designed for performance ensemble conductors. Includes supervision, administration, and rehearsal techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5355. Pedagogy of Music Theory.**

Developing teaching methods and broader understanding through critical study of materials, organization, techniques, and problems of music theory and comprehensive musicianship courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5357. Graduate Music Theory.**

Graduate-level studies in music theory and aural skills. The course covers melody, harmony, counterpoint, form, as well as sight-singing, performing, and dictation. This course does not earn graduate degree credit. Consent of the graduate studies coordinator is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MU 5358. Advanced Musicianship.**

This course is designed to develop graduate-level skills in music sight reading, dictation, fundamental keyboard skills, and keyboard harmonization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5359. Post-Tonal Music Analysis.**

This course is the study and application of methodologies and terminology that are used to analyze post-tonal concert music of the 20th and 21st centuries. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5360. Music in the United States.**

This course is a study of genres and repertoires of the United States of America from the 1600s to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5361. Methods and Methodologies of Music Analysis.**

This course will cover the examination of selected analytical techniques, methods and methodologies, critical approaches, or musical repertoires, including semiotic analysis, computer-assisted music analysis, analysis of thematic processes, functional analysis, phrase structure analysis, as well as category and feature analysis. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5362. Instrumental Pedagogy I.**

This course explores instrument-specific pedagogy from the beginner through the advanced levels. Students will peruse instrument-specific pedagogical works, solo literature, and articles, and will complete a teaching assignment requiring them to implement pedagogical techniques, diagnose common performance problems, and suggest solutions. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5363. Instrumental Pedagogy II: Teaching Internship.**

This class provides students with supervised teaching experience. In this capstone course, students will apply pedagogical principles for instruction on their primary instrument in the private lesson setting. Their teaching will be monitored and evaluated by an applied professor throughout the semester. Prerequisite: MU 5362 with a grade of "B" or better. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5364. Intelligent Music Teaching.**

This course focuses on fundamental philosophical principles of effective instrumental music instruction and includes application of those principles in teaching. Students will develop a realistic perspective of their strengths and weaknesses as a developing professional and will develop business skills necessary to create a successful private lesson studio.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5365. Computing in Music.**

Development of concepts and skills related to current computer technology in music. Exploration and use of computer software, MIDI, and other productivity tools for application to music education, music administration, music research, and music composition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5366. Salsa Arranging.**

Analysis and arranging music for a Salsa ensemble. Topics will cover instrument ranges, orchestration techniques, and styles. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5367. Music in the Caribbean.**

In this course students will study diverse genres and repertoires of the Caribbean from pre-colonization to the present, with a focus on the Hispanic Circum-Caribbean. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5368. Music in Mexico.**

In this course students will study diverse genres and repertoires of Mexico and Mexican-American communities of the United States from pre-colonization to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5369. History of Music in Latin America.**

This course is a study of the musical panorama of Latin America; Pre-Columbian, colonial, folk, urban, academic, and transnational genres are introduced and discussed in historical, socio-political, and stylistic context. It also includes an introduction to the scope and methods of research in Latin American music studies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5371. Choral Literature I: Madrigal/Partsong.**

This course is a comprehensive study of madrigals and partsongs from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5372. Choral Literature II: Oratorio and Other Secular Major Works.**

This course is a comprehensive study of oratorios and other secular major works from the Western canon of choral repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5373. Choral Literature III: Liturgical Year - Motet, Anthem, Cantata.**

This course is a comprehensive study of motets, anthems, cantatas, and other genres associated with the liturgical calendar and the Revised Common Lectionary from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5374. Choral Literature IV: Missa Brevis, Missa Solemnis, & Requiem.**

This course is a comprehensive study of the Roman Catholic Mass and Requiem Liturgies as they have been set to music by composers associated with the Western canon of choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5375O. Contemporary Discourse in Music Education.**

This course entails an examination of topics from contemporary music education research. Students examine contemporary research and the potential for application in their future/current classrooms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 5377. Innovation in Music Performance: Sound Lab.**

This course is designed to engage students in listening and in sound creation/composition and to develop skills and the capacity for improvisation that will equip artists for readiness in evolving cultural and performance situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5381. Inclusive Excellence in the Music Classroom.**

This course prepares prospective and practicing music teachers to create an equitable, inclusive, and thriving classroom that meets the needs of all students by incorporating culturally responsive teaching, multicultural education, world music pedagogy, ethnomusicological perspectives, and by addressing the needs of students with exceptionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5382. History of Music Education in the United States.**

This course entails an examination of music education in the United States. The major historical developments and contemporary trends are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5392. Introduction to Music Instruction in Higher Education.**

This course provides techniques for Graduate Teaching/Instructional Assistants concerning selected problems in 1) the teaching of music in the classroom, private instruction and ensemble environments; and 2) the development of a career in field in higher education. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MU 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Music 5399B. Students working toward the M.M. degree with a thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Music Ensemble (MUSE)****MUSE 5101. Bobcat Basketball Band.**

The Bobcat Basketball Band performs for all home men's and women's basketball games that do not fall over a university break. The group travels for all postseason tournaments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5102. Salsa Del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5103. Mariachi Nueva Generación.**

This course is a performing ensemble specializing in Mexican folk music.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5104. Panorama Steel Drum Band.**

A performing ensemble specializing in Caribbean steel drum band music.

May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5105. VocaLibre.**

A select vocal ensemble specializing in chamber music, including madrigal or jazz literature. May be repeated for credit. Prerequisite:

Enrollment in major choral ensemble.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5106. Opera Workshop.**

Opera Workshop is a skills-based class designed for developing opera singers to learn and apply skills that prepare them for professional performance.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5107. Opera Theatre.**

Students will learn and perform operatic roles, chamber opera pieces, or one-act operas. Concurrent enrollment in Applied Voice is recommended.

Prerequisite: MUSE 5106 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5108. Orquesta del Rio.**

Performing ensemble specializing in Latin and South American music.

May be repeatable for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required| Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5109. Opera Production.**

This course is designed for students to participate as performers in a full opera production or in the production of opera scenes. It will also prepare students for future professional opera performance engagements.

Concurrent enrollment in Applied Voice is recommended. Prerequisite:

MUSE 5106 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5122. Aurora Voce – Auditioned Treble Voice Choir.**

Aurora Voce is a highly selective chamber chorale ensemble that is open by audition to all treble singers across campus. Performing in this ensemble provides the singers opportunities to explore high quality and challenging repertoire that spans across a wide variety of styles, historical periods, and genres.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5123. Concert Band.**

This ensemble provides playing experiences for non-music majors and music majors who want to improve their skills and serve as a lab ensemble for conducting students. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5124. Women's Choir.**

Performing ensemble specializing in choral literature for women's voices. May be repeated for credit.

**1 Credit Hour. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5125. Men's Choir.**

Performing ensemble specializing in choral literature for men's voices. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5126. Chamber Music.**

Small group performing ensembles focusing on chamber literature of mixed and similar instrumental music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5127. Jazz Combo.**

A small performance ensemble designed to develop improvisational skills and individual musical creativity through performance of standard jazz literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5128. Conducting Seminar.**

A seminar based course focusing on conducting technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or permission by the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5129. Afro-Caribbean Lab.**

This course is an experimental ensemble of flexible size and instrumentation that specializes in advanced arranging, performance, and improvisation involving Afro-Caribbean styles and rhythms. An audition is required for placement in this ensemble. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5130. Wind Symphony.**

Major instrumental ensemble comprised of the most outstanding wind and percussion students who are selected by audition. The group is dedicated to the performance of the finest wind repertoire, whether a contemporary works for winds, or transcriptions from the orchestral repertoire. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5131. Symphonic Winds.**

Major instrumental ensemble consisting primarily of music majors and talented non-music majors. This ensemble performs a broad range of full ensemble repertoire, representative of all historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5140. Texas State Chorale.**

Auditioned major choral ensemble specializing in performances of literature from the Renaissance and 20th Century. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5141. University Singers.**

Major choral ensemble that performs a variety of literature, including masterworks from the 17th Century to the present. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5150. Texas State Symphony Orchestra.**

A full symphony orchestra that performs standard orchestra literature, as well as oratorio, concerto, and opera accompaniments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5160. Jazz Ensemble.**

The jazz-based ensemble performs advanced arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5161. Jazz Orchestra.**

The jazz-based ensemble performs intermediate arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5162. Jazz Lab Band.**

The jazz-based ensemble performs beginning arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5170. Accompanying.**

A coaching seminar for pianists to develop reading and accompanying skills. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5180. Mystorium for Contemporary Music Ensemble.**

An ensemble course focusing on the performance and analysis of contemporary music in all styles and media. May be repeated for credit. Prerequisite: Music (Composition Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5190. Guitar Ensemble.**

Chamber guitar ensemble designed to provide interaction with fellow guitarists, develop musicianship as an ensemble performer, and to familiarize the student with music from different periods through a variety of literature. May be repeated for credit. Prerequisite: Music (Guitar Performance Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Music Performance (MUSP)****MUSP 5100. Mariachi Lince de Oro.**

This course provides learning opportunities for students interested in an introduction to the mariachi genre. Traditional mariachi repertoire is distributed, rehearsed, memorized, and performed.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**MUSP 5101. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5127. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5164. Mariachi Melodia Techniques.**

This course provides students with the fundamentals of playing and teaching the melodic instruments associated with the Mariachi ensemble, with specific emphasis on the voice, violin, and trumpet. Topics will cover history, tuning, and stylistic techniques associated with each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5165. Mariachi Armonia Techniques.**

This course provides students with the fundamentals of playing and teaching the rhythm/harmony instruments in the Mariachi ensemble, with specific emphasis in the guitarrón, vihuela/guitar, and the harp. Topics will cover history, tuning, strumming, and stylistic techniques specific to each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5166. Latin Music Methods.**

This course provides students with knowledge that is essential to become effective directors of Mariachi and Salsa ensembles. Instruments, styles, repertory, and resources that are related to these ensembles will be discussed. (MULT).

**1 Credit Hour. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5175. Afro-Cuban Hand Drumming.**

The fundamentals of playing and teaching Afro-Cuban Drums. Topics will cover history and knowledge of styles of the various Afro-Cuban percussion instruments. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5185. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5227. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5230. Applied Keyboard.**

In this course students will participate in supervised private coaching and instruction that focuses on technique, musicality, literature, and performance in the keyboard area. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5285. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5320. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5327. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit.

Prerequisite: Conducting Major or consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5330. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5337. Advanced Conducting.**

Music performance class designed for further development of baton technique, score reading, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5340. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5350. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5360. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5370. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5380. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5385. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Program Overview

Before prospective graduate students are approved for one of the music specializations, they must audition or complete a portfolio review by the appropriate School of Music area faculty. In addition, they must interview with the Coordinator of Music Graduate Studies or area coordinator. Students must have an undergraduate music degree in order to be considered for admission into the M.M. degree with one of the specializations under music.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in music from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in music
- GRE not required
- audition/portfolio and interview (Requirements vary by concentration. Visit the department's website (<http://www.music.txstate.edu/gradprospectivestudents/BecomingaMusicMajor-Grad.html>) for detailed instructions.)
- resume/CV (maximum three pages) including name, address, email address, education (degrees or special certifications), professional experience, scholarship awards, special recognitions, articles or presentations, selected community activity, and other information pertinent to the desired degree and concentration
- statement of purpose (400-600 words with name and email in the header) describing the following:
  - past experiences in keyboard, string, or guitar performance
  - qualities, values, characteristics, and/or skills that make the student a strong candidate for the keyboard, string, or guitar performance program
  - the ways in which the personal learning outcomes of the keyboard, string, or guitar performance program relate to the student's personal and professional goals
  - plans to pursue doctoral studies as well, if applicable
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Music (M.M.) degree with a major in Music concentration in Keyboard, String, or Guitar Performance requires 36 semester credit hours. Students who score less than 70% on the music theory placement test will take MU 5357. Students who score less than 70% on the music history placement test will take MU 5330A. These courses would be in addition to the degree requirements listed below.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MU 5334	Introduction to Graduate Study in Music	3
MU 5350	Musical Styles	3
Choose 6 hours from the following:		6
MU 5310	Music in the Baroque era	

MU 5314	Music in the Twentieth and Twenty-First Centuries	
MU 5315	Music in the Middle Ages and Renaissance	
MU 5316	Music and the Dramatic Arts	
MU 5320	Music in the Eighteenth Century	
MU 5340	Music in the Nineteenth Century	
MU 5341	Jazz Perspectives	
MU 5352	Foundations of Musicology	
MU 5360	Music in the United States	
MU 5367	Music in the Caribbean	
MU 5368	Music in Mexico	
<b>Concentration</b>		
MUSP 5101	Graduate Recital	1
Choose 8 hours from the following:		8
MUSP 5230	Applied Keyboard (Take 4 times)	
MUSP 5260	Applied String (Take 4 times)	
Choose 3 hours from the following:		3
Any MUSE course <sup>1</sup>		
<b>Electives</b>		
Choose 12 hours from the following:		12
Any advisor approved MU, MUSE, or MUSP courses		
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> Students may choose any advisor approved MUSE course(s) to complete the ensemble credits.

## Comprehensive Examination Requirements

All candidates within the graduate music program must pass a comprehensive oral (viva voce) examination. The students will be given a maximum of two attempts in order to pass this examination before being eligible for graduation. Candidates who fail to pass the comprehensive oral examination upon the first try may appeal for re-examination. The re-examination will be administered during the term following the first attempt. Exceptions to this policy are rare and must be approved by the director of graduate studies in music and by the director of the school of music. Failure to pass the required comprehensive oral examination upon the second attempt shall prevent the student from being eligible for graduation.

Master's level courses in Music: MU (p. 2115), MUSE (p. 2122), MUSP (p. 2124)

## Courses Offered

### Music (MU)

#### MU 5113. Independent Study in Music.

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5130A. Writing About Music.**

Focusing on basic writing skills, research, and the use and documentation of sources. Course centers on the process of writing about music. Besides written exercises, the assignments include the study of such professional writing samples as concert reviews, program abstracts, and research essays. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5130B. Diction for Singers.**

An in-depth study of the pronunciation of singing in Italian, German, English, and French incorporating the International Phonetic Alphabet through the use of lecture and laboratory sessions for practical application. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5135. Exploring 21st Century Music Education.**

This course provides music education graduate students a general overview of current issues and questions in music education, techniques for building a better understanding of core issues, and necessary instruction/investigation for thesis/capstone project. Students leave this class with a general knowledge of many current topics and tools to further investigate topics of interest.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5150. Exploring Twenty-first Century Music Education.**

In this course, students will survey current issues and questions in music education while further developing a primary topic of interest for their thesis/capstone project. Topics will be driven by student interest and the discourse within the field but will be centered around: student-centered pedagogies (e.g., democratic education, culturally responsive pedagogy, popular music education, DEI, and social-emotional learning), performance/teacher anxiety (e.g., music performance anxiety, imposter phenomenon, and teacher self-efficacy), teacher experiences and burnout (e.g., early career teacher experiences, expert teacher tendencies, burnout in music education, finances, technology, administrative experiences, and competition), and writing specific content (e.g., refining APA style and.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5192. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5213. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5230A. Music Theory.**

A study of the materials of counterpoint and harmony as evaluated through listening and analysis of literature, and application through composition. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5230B. Aural Learning.**

Development and application of theory concepts through singing, playing, and dictation. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5235. Music Education Capstone.**

This course allows for a wide overview of the field of music education, providing students with a broad scope to facilitate their thesis/capstone project. The course also creates space in the degree for discussions and readings related to the most recent issues and concerns of the field.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5254. Piano Pedagogy I.**

History, methods, and materials of piano pedagogy. Includes the application of technical and musical fundamentals to beginning levels of teaching. Prerequisites: Piano pedagogy or piano performance majors or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MU 5255. Piano Pedagogy II.**

Advanced methods and materials of piano pedagogy. Includes the application of technical and musical fundamentals to intermediate and advanced levels of teaching. Prerequisites: Piano Pedagogy I or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5301. Musicology Seminar in Contemporary Issues.**

This course offers advanced immersion into current trends and literature in the field of musicology, centering a distinct issue and its related frameworks at each time of offering. Sample issues are Music, Gender, and Sexuality; Ecomusicology; Sound Studies; Methods, Methodologies and Frameworks; among others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5310. Music in the Baroque era.**

This course is a study of diverse genres and repertoires from the 1600s to the early 1700s, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5313. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5314. Music in the Twentieth and Twenty-First Centuries.**

In this course the students will study diverse genres and repertoires of the twentieth and twenty-first centuries, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5315. Music in the Middle Ages and Renaissance.**

In this course students will study diverse genres and repertoires from the 450s to the 1600s, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5316. Music and the Dramatic Arts.**

This course covers diverse genres and repertoires in music and the dramatic arts, antiquities through the present, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with such disciplines as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5317. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5318. Song Literature.**

This course is an historical survey of the art song, emphasizing Western European and American repertoires. Students will articulate stylistic differences within the art song repertory, use analytical methods appropriate for a variety of text settings, and develop greater proficiency at writing about music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5320. Music in the Eighteenth Century.**

In this course students will study diverse genres and repertoires in the eighteenth century, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5322. Advanced Instrumental Techniques.**

Evaluation of teaching methods, materials, and literature of wind/percussion or string instruments. Students must have taken instrumental conducting in their undergraduate degree program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5323. Vocal Music Education Methods.**

Study of the anatomy of the human voice and evaluation of the scientific data and historical beliefs concerning voice pedagogy with emphasis in teaching voice in the class, private studio, as well as within a variety of choral settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5325. Research in Music Education I.**

Examination of methodologies, techniques, and procedures for interpreting and conducting research in music education. Relevant studies in music education will be critiqued, with an emphasis on preparation of a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5326. Research in Music Education II.**

A continuation and culmination of a research project in the field of music education as developed and proposed in MU 5325. Prerequisite: MU 5325 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5328. Foundations of Music Education.**

The cognitive psychology, historical perspective, and philosophical issues that provide the basis for contemporary music education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5329. Psychology of Music.**

This course investigates the psychological foundations of music and examines interdisciplinary approaches to the study of music and the human experience. Topics will include music perception, physiological responses to music, music and the brain, musical attributes, music learning, music therapy, and the measurement of musical behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5330A. History and Analysis of Music.**

A comprehensive musicianship approach to the study of music from the earliest times to the present using techniques of stylistic and structural analysis. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5330B. Advanced Theory.**

Principles of form and analysis, counterpoint, orchestration, and contemporary analytic techniques developed through in-depth study of musical repertoire. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5331. Vocal Pedagogy I: Voice Science.**

This course explores the anatomy/physiology of the human voice, the acoustic properties that govern resonance, vocal health, and philosophy of singing and teaching. Co-requisites: MUSP 5120 or MUSP 5220 or MUSP 5320 with a grade of "C" or better, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5332. Vocal Pedagogy II: Methods.**

This is a comparative study of various pedagogical methods and ideas, including historical and contemporary treatises. Students will explore exercises and vocalizes for general voice development, address and correct specific vocal problems, and engage in peer teaching.

Prerequisite: MU 5331 with a grade of "B" or better. Co-requisites: MUSP 5120, MUSP 5220, or MUSP 5320, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5333. Teaching and Learning in the Music Classroom.**

In this course students will examine music content delivery, pedagogy (including lesson planning, instructional design, etc.), assessment, and other aspects of teaching and learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5334. Introduction to Graduate Study in Music.**

Techniques and materials of research, emphasizing bibliography, library usage, collection, and interpretation of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5337. Techniques of Contemporary Music.**

This course surveys a cross-section of important technical innovations and developments in twentieth-century music, with special focus on music since 1945. Students will read documents outlining aesthetics, analyze music written in a variety of styles, write analytical papers, and using a variety of techniques, compose exercises. Enrollment requires a passing grade on the Graduate Music Theory Placement Exam or Instructor approval. Prerequisite: MU 5357 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5340. Music in the Nineteenth Century.**

This course is a study of diverse genres and repertoires in the nineteenth century, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5341. Jazz Perspectives.**

In this course students will study diverse genres, repertoires, discographies, and stylistic trends associated with jazz, with a focus on the Americas. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5342. Jazz Pedagogy.**

Jazz pedagogy is an in-depth study of the history, methodologies, resources, and techniques of jazz pedagogy and the development of jazz ensemble rehearsal skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5343. Jazz Improvisation.**

This course is a detailed study of the evolution of melodic, harmonic, and rhythmic structures used by jazz improvisers and composers from the 1930s to present day.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5344. Jazz Arranging.**

This course provides a comprehensive study of jazz composition, arranging, and improvisation theory, emphasizing writing for jazz ensembles using harmony, scales, and improvisation in a variety of styles, and providing necessary skills to be a successful jazz or commercial composer/arranger.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5345. Piano Literature I.**

This course is designed to expand first-hand familiarity with the literature for the keyboard from the Baroque to Early Romantic era (Bach to Schumann). It will be divided into five chronological segments, discussing the major composers and their contemporaries. Ten composition genres will be discussed during the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5346. Piano Literature II.**

This course is designed to expand first-hand familiarity with the literature for the piano, which will be divided into six chronological segments. These segments will discuss the most significant composers and their contemporaries in the 19th and 20th centuries and their major piano compositions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5350. Musical Styles.**

Developing a broader musical understanding through critical listening, technical analyses, and written assignments in various musical styles, including the late classical, romantic, and present eras. Prerequisite: MU 5357 with a grade of "B" or better, or a passing grade on the Graduate Music Theory Placement Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5351. Schenkerian Analysis.**

An introduction to the techniques and methods of music analysis as developed by Heinrich Schenker (1868-1935). This course will cover reductive analysis, structural levels in tonal music, and graphing techniques. Prerequisite: MU 5357 with a grade of "B" or better, or passing grade on music theory entrance exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5352. Foundations of Musicology.**

This course is an introduction to the concepts, methodologies, and scholarly trends central to the discipline of musicology. Prerequisite: MU 5334 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5353. Ensemble Rehearsal Techniques.**

Course is designed for performance ensemble conductors. Includes supervision, administration, and rehearsal techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5355. Pedagogy of Music Theory.**

Developing teaching methods and broader understanding through critical study of materials, organization, techniques, and problems of music theory and comprehensive musicianship courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5357. Graduate Music Theory.**

Graduate-level studies in music theory and aural skills. The course covers melody, harmony, counterpoint, form, as well as sight-singing, performing, and dictation. This course does not earn graduate degree credit. Consent of the graduate studies coordinator is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA/Leveling

**Grade Mode:** Leveling/Assistantships

**MU 5358. Advanced Musicianship.**

This course is designed to develop graduate-level skills in music sight reading, dictation, fundamental keyboard skills, and keyboard harmonization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5359. Post-Tonal Music Analysis.**

This course is the study and application of methodologies and terminology that are used to analyze post-tonal concert music of the 20th and 21st centuries. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5360. Music in the United States.**

This course is a study of genres and repertoires of the United States of America from the 1600s to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5361. Methods and Methodologies of Music Analysis.**

This course will cover the examination of selected analytical techniques, methods and methodologies, critical approaches, or musical repertoires, including semiotic analysis, computer-assisted music analysis, analysis of thematic processes, functional analysis, phrase structure analysis, as well as category and feature analysis. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5362. Instrumental Pedagogy I.**

This course explores instrument-specific pedagogy from the beginner through the advanced levels. Students will peruse instrument-specific pedagogical works, solo literature, and articles, and will complete a teaching assignment requiring them to implement pedagogical techniques, diagnose common performance problems, and suggest solutions. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 or MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5363. Instrumental Pedagogy II: Teaching Internship.**

This class provides students with supervised teaching experience. In this capstone course, students will apply pedagogical principles for instruction on their primary instrument in the private lesson setting. Their teaching will be monitored and evaluated by an applied professor throughout the semester. Prerequisite: MU 5362 with a grade of "B" or better. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 or MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5364. Intelligent Music Teaching.**

This course focuses on fundamental philosophical principles of effective instrumental music instruction and includes application of those principles in teaching. Students will develop a realistic perspective of their strengths and weaknesses as a developing professional and will develop business skills necessary to create a successful private lesson studio.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5365. Computing in Music.**

Development of concepts and skills related to current computer technology in music. Exploration and use of computer software, MIDI, and other productivity tools for application to music education, music administration, music research, and music composition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5366. Salsa Arranging.**

Analysis and arranging music for a Salsa ensemble. Topics will cover instrument ranges, orchestration techniques, and styles. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5367. Music in the Caribbean.**

In this course students will study diverse genres and repertoires of the Caribbean from pre-colonization to the present, with a focus on the Hispanic Circum-Caribbean. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5368. Music in Mexico.**

In this course students will study diverse genres and repertoires of Mexico and Mexican-American communities of the United States from pre-colonization to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5369. History of Music in Latin America.**

This course is a study of the musical panorama of Latin America; Pre-Columbian, colonial, folk, urban, academic, and transnational genres are introduced and discussed in historical, socio-political, and stylistic context. It also includes an introduction to the scope and methods of research in Latin American music studies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5371. Choral Literature I: Madrigal/Partsong.**

This course is a comprehensive study of madrigals and partsongs from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5372. Choral Literature II: Oratorio and Other Secular Major Works.**

This course is a comprehensive study of oratorios and other secular major works from the Western canon of choral repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5373. Choral Literature III: Liturgical Year - Motet, Anthem, Cantata.**

This course is a comprehensive study of motets, anthems, cantatas, and other genres associated with the liturgical calendar and the Revised Common Lectionary from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5374. Choral Literature IV: Missa Brevis, Missa Solemnis, & Requiem.**

This course is a comprehensive study of the Roman Catholic Mass and Requiem Liturgies as they have been set to music by composers associated with the Western canon of choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 53750. Contemporary Discourse in Music Education.**

This course entails an examination of topics from contemporary music education research. Students examine contemporary research and the potential for application in their future/current classrooms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 5377. Innovation in Music Performance: Sound Lab.**

This course is designed to engage students in listening and in sound creation/composition and to develop skills and the capacity for improvisation that will equip artists for readiness in evolving cultural and performance situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5381. Inclusive Excellence in the Music Classroom.**

This course prepares prospective and practicing music teachers to create an equitable, inclusive, and thriving classroom that meets the needs of all students by incorporating culturally responsive teaching, multicultural education, world music pedagogy, ethnomusicological perspectives, and by addressing the needs of students with exceptionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5382. History of Music Education in the United States.**

This course entails an examination of music education in the United States. The major historical developments and contemporary trends are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5392. Introduction to Music Instruction in Higher Education.**

This course provides techniques for Graduate Teaching/Instructional Assistants concerning selected problems in 1) the teaching of music in the classroom, private instruction and ensemble environments; and 2) the development of a career in field in higher education. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships



**MU 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Music 5399B. Students working toward the M.M. degree with a thesis are expected to enroll in thesis each semester in which faculty supervision is received.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**MU 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**MU 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.  
**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**MU 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.  
**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**Music Ensemble (MUSE)****MUSE 5101. Bobcat Basketball Band.**

The Bobcat Basketball Band performs for all home men's and women's basketball games that do not fall over a university break. The group travels for all postseason tournaments. May be repeated for credit.  
**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**MUSE 5102. Salsa Del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeated for credit.  
**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MUSE 5103. Mariachi Nueva Generación.**

This course is a performing ensemble specializing in Mexican folk music.  
**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**MUSE 5104. Panorama Steel Drum Band.**

A performing ensemble specializing in Caribbean steel drum band music. May be repeated for credit.  
**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MUSE 5105. Vocalibre.**

A select vocal ensemble specializing in chamber music, including madrigal or jazz literature. May be repeated for credit. Prerequisite: Enrollment in major choral ensemble.  
**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MUSE 5106. Opera Workshop.**

Opera Workshop is a skills-based class designed for developing opera singers to learn and apply skills that prepare them for professional performance.  
**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**MUSE 5107. Opera Theatre.**

Students will learn and perform operatic roles, chamber opera pieces, or one-act operas. Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 5106 with a grade of "B" or better.  
**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**MUSE 5108. Orquesta del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeatable for credit. (MULT).  
**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required| Multicultural Content  
**Grade Mode:** Standard Letter

**MUSE 5109. Opera Production.**

This course is designed for students to participate as performers in a full opera production or in the production of opera scenes. It will also prepare students for future professional opera performance engagements. Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 5106 with a grade of "C" or better.  
**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**MUSE 5122. Aurora Voce – Auditioned Treble Voice Choir.**

Aurora Voce is a highly selective chamber chorale ensemble that is open by audition to all treble singers across campus. Performing in this ensemble provides the singers opportunities to explore high quality and challenging repertoire that spans across a wide variety of styles, historical periods, and genres.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5123. Concert Band.**

This ensemble provides playing experiences for non-music majors and music majors who want to improve their skills and serve as a lab ensemble for conducting students. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5124. Women's Choir.**

Performing ensemble specializing in choral literature for women's voices. May be repeated for credit.

**1 Credit Hour. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5125. Men's Choir.**

Performing ensemble specializing in choral literature for men's voices. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5126. Chamber Music.**

Small group performing ensembles focusing on chamber literature of mixed and similar instrumental music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5127. Jazz Combo.**

A small performance ensemble designed to develop improvisational skills and individual musical creativity through performance of standard jazz literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5128. Conducting Seminar.**

A seminar based course focusing on conducting technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or permission by the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5129. Afro-Caribbean Lab.**

This course is an experimental ensemble of flexible size and instrumentation that specializes in advanced arranging, performance, and improvisation involving Afro-Caribbean styles and rhythms. An audition is required for placement in this ensemble. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5130. Wind Symphony.**

Major instrumental ensemble comprised of the most outstanding wind and percussion students who are selected by audition. The group is dedicated to the performance of the finest wind repertoire, whether a contemporary works for winds, or transcriptions from the orchestral repertoire. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5131. Symphonic Winds.**

Major instrumental ensemble consisting primarily of music majors and talented non-music majors. This ensemble performs a broad range of full ensemble repertoire, representative of all historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5140. Texas State Chorale.**

Auditioned major choral ensemble specializing in performances of literature from the Renaissance and 20th Century. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5141. University Singers.**

Major choral ensemble that performs a variety of literature, including masterworks from the 17th Century to the present. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5150. Texas State Symphony Orchestra.**

A full symphony orchestra that performs standard orchestra literature, as well as oratorio, concerto, and opera accompaniments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5160. Jazz Ensemble.**

The jazz-based ensemble performs advanced arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5161. Jazz Orchestra.**

The jazz-based ensemble performs intermediate arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5162. Jazz Lab Band.**

The jazz-based ensemble performs beginning arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5170. Accompanying.**

A coaching seminar for pianists to develop reading and accompanying skills. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5180. Mystery for Contemporary Music Ensemble.**

An ensemble course focusing on the performance and analysis of contemporary music in all styles and media. May be repeated for credit.

Prerequisite: Music (Composition Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5190. Guitar Ensemble.**

Chamber guitar ensemble designed to provide interaction with fellow guitarists, develop musicianship as an ensemble performer, and to familiarize the student with music from different periods through a variety of literature. May be repeated for credit. Prerequisite: Music (Guitar Performance Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Music Performance (MUSP)****MUSP 5100. Mariachi Lince de Oro.**

This course provides learning opportunities for students interested in an introduction to the mariachi genre. Traditional mariachi repertoire is distributed, rehearsed, memorized, and performed.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5101. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5127. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5164. Mariachi Melodia Techniques.**

This course provides students with the fundamentals of playing and teaching the melodic instruments associated with the Mariachi ensemble, with specific emphasis on the voice, violin, and trumpet. Topics will cover history, tuning, and stylistic techniques associated with each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5165. Mariachi Armonia Techniques.**

This course provides students with the fundamentals of playing and teaching the rhythm/harmony instruments in the Mariachi ensemble, with specific emphasis in the guitarrón, vihuela/guitar, and the harp. Topics will cover history, tuning, strumming, and stylistic techniques specific to each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5166. Latin Music Methods.**

This course provides students with knowledge that is essential to become effective directors of Mariachi and Salsa ensembles. Instruments, styles, repertory, and resources that are related to these ensembles will be discussed. (MULT).

**1 Credit Hour. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5175. Afro-Cuban Hand Drumming.**

The fundamentals of playing and teaching Afro-Cuban Drums. Topics will cover history and knowledge of styles of the various Afro-Cuban percussion instruments. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5185. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5227. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5230. Applied Keyboard.**

In this course students will participate in supervised private coaching and instruction that focuses on technique, musicality, literature, and performance in the keyboard area. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5285. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5320. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5327. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5330. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5337. Advanced Conducting.**

Music performance class designed for further development of baton technique, score reading, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5340. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5350. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5360. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter



**MUSP 5370. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5380. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5385. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in music
- GRE not required
- audition/portfolio and interview (Requirements vary by concentration. Visit the department's website (<http://www.music.txstate.edu/gradprospectivestudents/BecomingaMusicMajor-Grad.html>) for detailed instructions.)
- resume/CV (maximum three pages) including name, address, email address, education (degrees or special certifications), professional experience, scholarship awards, special recognitions, articles or presentations, selected community activity, and other information pertinent to the desired degree and concentration
- statement of purpose (400-600 words with name and email in the header) describing the following:
  - past experiences in Latin music performance
  - qualities, values, characteristics, and/or skills that make the student a strong candidate for the Latin music performance program
  - the ways in which the personal learning outcomes of the Latin music performance program relate to the student's personal and professional goals
  - plans to pursue doctoral studies as well, if applicable
- three letters of recommendation

**Approved English Proficiency Exam Scores**

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Program Overview

Before prospective graduate students are approved for one of the music specializations, they must audition or complete a portfolio review by the appropriate School of Music area faculty. In addition, they must interview with the Coordinator of Music Graduate Studies or area coordinator. Students must have an undergraduate music degree in order to be considered for admission into the M.M. degree with one of the specializations under music.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in music from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

## Degree Requirements

The Master of Music (M.M.) degree with a major in Music concentration in Latin Music Performance requires 36 semester credit hours. Students who score less than 70% on the music theory placement test will take MU 5357. Students who score less than 70% on the music history placement test will take MU 5330A. These courses would be in addition to the degree requirements listed below.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MU 5334	Introduction to Graduate Study in Music	3
MU 5350	Musical Styles	3
Choose 6 hours from the following:		6
MU 5310	Music in the Baroque era	

MU 5314	Music in the Twentieth and Twenty-First Centuries	
MU 5315	Music in the Middle Ages and Renaissance	
MU 5316	Music and the Dramatic Arts	
MU 5320	Music in the Eighteenth Century	
MU 5340	Music in the Nineteenth Century	
MU 5341	Jazz Perspectives	
MU 5352	Foundations of Musicology	
MU 5360	Music in the United States	
MU 5367	Music in the Caribbean	
MU 5368	Music in Mexico	
<b>Concentration</b>		
MU 5353	Ensemble Rehearsal Techniques	3
MUSP 5101	Graduate Recital	1
MUSP 5166	Latin Music Methods	1
Choose 8 hours from the following:		8
MUSP 5220	Applied Voice (Take 4 times)	
MUSP 5230	Applied Keyboard (Take 4 times)	
MUSP 5240	Applied Woodwind (Take 4 times)	
MUSP 5250	Applied Brass (Take 4 times)	
MUSP 5260	Applied String (Take 4 times)	
MUSP 5270	Applied Percussion (Take 4 times)	
Choose 4 hours from the following:		4
MUSE 5102	Salsa Del Rio (Take up to 4 times)	
MUSE 5103	Mariachi Nueva Generación (Take 4 times)	
MUSE 5108	Orquesta del Rio (Take up to 4 times)	
Choose 7 hours from the following:		7
<b>Salsa Track</b>		
MU 5366	Salsa Arranging	
MU 5367	Music in the Caribbean	
MUSP 5175	Afro-Cuban Hand Drumming	
<b>Mariachi Track</b>		
MU 5317	Independent Study in Music	
MU 5368	Music in Mexico	
MUSP 5165	Mariachi Armonia Techniques	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirements

All candidates within the graduate music program must pass a comprehensive oral (viva voce) examination. The students will be given a maximum of two attempts in order to pass this examination before being eligible for graduation. Candidates who fail to pass the comprehensive oral examination upon the first try may appeal for re-examination. The re-examination will be administered during the term following the first attempt. Exceptions to this policy are rare and must be approved by the director of graduate studies in music and by the director of the school of music. Failure to pass the required comprehensive oral examination upon the second attempt shall prevent the student from being eligible for graduation.

Master's level courses in Music: MU (p. 2128), MUSE (p. 2134), MUSP (p. 2136)

## Courses Offered Music (MU)

### MU 5113. Independent Study in Music.

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MU 5130A. Writing About Music.

Focusing on basic writing skills, research, and the use and documentation of sources. Course centers on the process of writing about music. Besides written exercises, the assignments include the study of such professional writing samples as concert reviews, program abstracts, and research essays. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

### MU 5130B. Diction for Singers.

An in-depth study of the pronunciation of singing in Italian, German, English, and French incorporating the International Phonetic Alphabet through the use of lecture and laboratory sessions for practical application. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

### MU 5135. Exploring 21st Century Music Education.

This course provides music education graduate students a general overview of current issues and questions in music education, techniques for building a better understanding of core issues, and necessary instruction/investigation for thesis/capstone project. Students leave this class with a general knowledge of many current topics and tools to further investigate topics of interest.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5150. Exploring Twenty-first Century Music Education.**

In this course, students will survey current issues and questions in music education while further developing a primary topic of interest for their thesis/capstone project. Topics will be driven by student interest and the discourse within the field but will be centered around: student-centered pedagogies (e.g., democratic education, culturally responsive pedagogy, popular music education, DEI, and social-emotional learning), performance/teacher anxiety (e.g., music performance anxiety, imposter phenomenon, and teacher self-efficacy), teacher experiences and burnout (e.g., early career teacher experiences, expert teacher tendencies, burnout in music education, finances, technology, administrative experiences, and competition), and writing specific content (e.g., refining APA style and.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5192. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5213. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5230A. Music Theory.**

A study of the materials of counterpoint and harmony as evaluated through listening and analysis of literature, and application through composition. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5230B. Aural Learning.**

Development and application of theory concepts through singing, playing, and dictation. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5235. Music Education Capstone.**

This course allows for a wide overview of the field of music education, providing students with a broad scope to facilitate their thesis/capstone project. The course also creates space in the degree for discussions and readings related to the most recent issues and concerns of the field.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5254. Piano Pedagogy I.**

History, methods, and materials of piano pedagogy. Includes the application of technical and musical fundamentals to beginning levels of teaching. Prerequisites: Piano pedagogy or piano performance majors or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5255. Piano Pedagogy II.**

Advanced methods and materials of piano pedagogy. Includes the application of technical and musical fundamentals to intermediate and advanced levels of teaching. Prerequisites: Piano Pedagogy I or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5301. Musicology Seminar in Contemporary Issues.**

This course offers advanced immersion into current trends and literature in the field of musicology, centering a distinct issue and its related frameworks at each time of offering. Sample issues are Music, Gender, and Sexuality; Ecomusicology; Sound Studies; Methods, Methodologies and Frameworks; among others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5310. Music in the Baroque era.**

This course is a study of diverse genres and repertoires from the 1600s to the early 1700s, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5313. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5314. Music in the Twentieth and Twenty-First Centuries.**

In this course the students will study diverse genres and repertoires of the twentieth and twenty-first centuries, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5315. Music in the Middle Ages and Renaissance.**

In this course students will study diverse genres and repertoires from the 450s to the 1600s, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5316. Music and the Dramatic Arts.**

This course covers diverse genres and repertoires in music and the dramatic arts, antiquities through the present, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with such disciplines as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5317. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5318. Song Literature.**

This course is an historical survey of the art song, emphasizing Western European and American repertoires. Students will articulate stylistic differences within the art song repertory, use analytical methods appropriate for a variety of text settings, and develop greater proficiency at writing about music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5320. Music in the Eighteenth Century.**

In this course students will study diverse genres and repertoires in the eighteenth century, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5322. Advanced Instrumental Techniques.**

Evaluation of teaching methods, materials, and literature of wind/percussion or string instruments. Students must have taken instrumental conducting in their undergraduate degree program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5323. Vocal Music Education Methods.**

Study of the anatomy of the human voice and evaluation of the scientific data and historical beliefs concerning voice pedagogy with emphasis in teaching voice in the class, private studio, as well as within a variety of choral settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5325. Research in Music Education I.**

Examination of methodologies, techniques, and procedures for interpreting and conducting research in music education. Relevant studies in music education will be critiqued, with an emphasis on preparation of a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5326. Research in Music Education II.**

A continuation and culmination of a research project in the field of music education as developed and proposed in MU 5325. Prerequisite: MU 5325 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5328. Foundations of Music Education.**

The cognitive psychology, historical perspective, and philosophical issues that provide the basis for contemporary music education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5329. Psychology of Music.**

This course investigates the psychological foundations of music and examines interdisciplinary approaches to the study of music and the human experience. Topics will include music perception, physiological responses to music, music and the brain, musical attributes, music learning, music therapy, and the measurement of musical behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5330A. History and Analysis of Music.**

A comprehensive musicianship approach to the study of music from the earliest times to the present using techniques of stylistic and structural analysis. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5330B. Advanced Theory.**

Principles of form and analysis, counterpoint, orchestration, and contemporary analytic techniques developed through in-depth study of musical repertoire. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5331. Vocal Pedagogy I: Voice Science.**

This course explores the anatomy/physiology of the human voice, the acoustic properties that govern resonance, vocal health, and philosophy of singing and teaching. Co-requisites: MUSP 5120 or MUSP 5220 or MUSP 5320 with a grade of "C" or better, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5332. Vocal Pedagogy II: Methods.**

This is a comparative study of various pedagogical methods and ideas, including historical and contemporary treatises. Students will explore exercises and vocalizes for general voice development, address and correct specific vocal problems, and engage in peer teaching.

Prerequisite: MU 5331 with a grade of "B" or better. Co-requisites: MUSP 5120, MUSP 5220, or MUSP 5320, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5333. Teaching and Learning in the Music Classroom.**

In this course students will examine music content delivery, pedagogy (including lesson planning, instructional design, etc.), assessment, and other aspects of teaching and learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5334. Introduction to Graduate Study in Music.**

Techniques and materials of research, emphasizing bibliography, library usage, collection, and interpretation of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5337. Techniques of Contemporary Music.**

This course surveys a cross-section of important technical innovations and developments in twentieth-century music, with special focus on music since 1945. Students will read documents outlining aesthetics, analyze music written in a variety of styles, write analytical papers, and using a variety of techniques, compose exercises. Enrollment requires a passing grade on the Graduate Music Theory Placement Exam or Instructor approval. Prerequisite: MU 5357 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5340. Music in the Nineteenth Century.**

This course is a study of diverse genres and repertoires in the nineteenth century, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5341. Jazz Perspectives.**

In this course students will study diverse genres, repertoires, discographies, and stylistic trends associated with jazz, with a focus on the Americas. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5342. Jazz Pedagogy.**

Jazz pedagogy is an in-depth study of the history, methodologies, resources, and techniques of jazz pedagogy and the development of jazz ensemble rehearsal skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5343. Jazz Improvisation.**

This course is a detailed study of the evolution of melodic, harmonic, and rhythmic structures used by jazz improvisers and composers from the 1930s to present day.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5344. Jazz Arranging.**

This course provides a comprehensive study of jazz composition, arranging, and improvisation theory, emphasizing writing for jazz ensembles using harmony, scales, and improvisation in a variety of styles, and providing necessary skills to be a successful jazz or commercial composer/arranger.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MU 5345. Piano Literature I.**

This course is designed to expand first-hand familiarity with the literature for the keyboard from the Baroque to Early Romantic era (Bach to Schumann). It will be divided into five chronological segments, discussing the major composers and their contemporaries. Ten composition genres will be discussed during the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5346. Piano Literature II.**

This course is designed to expand first-hand familiarity with the literature for the piano, which will be divided into six chronological segments. These segments will discuss the most significant composers and their contemporaries in the 19th and 20th centuries and their major piano compositions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5350. Musical Styles.**

Developing a broader musical understanding through critical listening, technical analyses, and written assignments in various musical styles, including the late classical, romantic, and present eras. Prerequisite: MU 5357 with a grade of "B" or better, or a passing grade on the Graduate Music Theory Placement Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5351. Schenkerian Analysis.**

An introduction to the techniques and methods of music analysis as developed by Heinrich Schenker (1868-1935). This course will cover reductive analysis, structural levels in tonal music, and graphing techniques. Prerequisite: MU 5357 with a grade of "B" or better, or passing grade on music theory entrance exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5352. Foundations of Musicology.**

This course is an introduction to the concepts, methodologies, and scholarly trends central to the discipline of musicology. Prerequisite: MU 5334 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5353. Ensemble Rehearsal Techniques.**

Course is designed for performance ensemble conductors. Includes supervision, administration, and rehearsal techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5355. Pedagogy of Music Theory.**

Developing teaching methods and broader understanding through critical study of materials, organization, techniques, and problems of music theory and comprehensive musicianship courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5357. Graduate Music Theory.**

Graduate-level studies in music theory and aural skills. The course covers melody, harmony, counterpoint, form, as well as sight-singing, performing, and dictation. This course does not earn graduate degree credit. Consent of the graduate studies coordinator is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MU 5358. Advanced Musicianship.**

This course is designed to develop graduate-level skills in music sight reading, dictation, fundamental keyboard skills, and keyboard harmonization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5359. Post-Tonal Music Analysis.**

This course is the study and application of methodologies and terminology that are used to analyze post-tonal concert music of the 20th and 21st centuries. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5360. Music in the United States.**

This course is a study of genres and repertoires of the United States of America from the 1600s to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5361. Methods and Methodologies of Music Analysis.**

This course will cover the examination of selected analytical techniques, methods and methodologies, critical approaches, or musical repertoires, including semiotic analysis, computer-assisted music analysis, analysis of thematic processes, functional analysis, phrase structure analysis, as well as category and feature analysis. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5362. Instrumental Pedagogy I.**

This course explores instrument-specific pedagogy from the beginner through the advanced levels. Students will peruse instrument-specific pedagogical works, solo literature, and articles, and will complete a teaching assignment requiring them to implement pedagogical techniques, diagnose common performance problems, and suggest solutions. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5363. Instrumental Pedagogy II: Teaching Internship.**

This class provides students with supervised teaching experience. In this capstone course, students will apply pedagogical principles for instruction on their primary instrument in the private lesson setting. Their teaching will be monitored and evaluated by an applied professor throughout the semester. Prerequisite: MU 5362 with a grade of "B" or better. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5364. Intelligent Music Teaching.**

This course focuses on fundamental philosophical principles of effective instrumental music instruction and includes application of those principles in teaching. Students will develop a realistic perspective of their strengths and weaknesses as a developing professional and will develop business skills necessary to create a successful private lesson studio.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5365. Computing in Music.**

Development of concepts and skills related to current computer technology in music. Exploration and use of computer software, MIDI, and other productivity tools for application to music education, music administration, music research, and music composition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5366. Salsa Arranging.**

Analysis and arranging music for a Salsa ensemble. Topics will cover instrument ranges, orchestration techniques, and styles. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5367. Music in the Caribbean.**

In this course students will study diverse genres and repertoires of the Caribbean from pre-colonization to the present, with a focus on the Hispanic Circum-Caribbean. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5368. Music in Mexico.**

In this course students will study diverse genres and repertoires of Mexico and Mexican-American communities of the United States from pre-colonization to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5369. History of Music in Latin America.**

This course is a study of the musical panorama of Latin America; Pre-Columbian, colonial, folk, urban, academic, and transnational genres are introduced and discussed in historical, socio-political, and stylistic context. It also includes an introduction to the scope and methods of research in Latin American music studies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5371. Choral Literature I: Madrigal/Partsong.**

This course is a comprehensive study of madrigals and partsongs from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5372. Choral Literature II: Oratorio and Other Secular Major Works.**

This course is a comprehensive study of oratorios and other secular major works from the Western canon of choral repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5373. Choral Literature III: Liturgical Year - Motet, Anthem, Cantata.**

This course is a comprehensive study of motets, anthems, cantatas, and other genres associated with the liturgical calendar and the Revised Common Lectionary from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5374. Choral Literature IV: Missa Brevis, Missa Solemnis, & Requiem.**

This course is a comprehensive study of the Roman Catholic Mass and Requiem Liturgies as they have been set to music by composers associated with the Western canon of choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5375O. Contemporary Discourse in Music Education.**

This course entails an examination of topics from contemporary music education research. Students examine contemporary research and the potential for application in their future/current classrooms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 5377. Innovation in Music Performance: Sound Lab.**

This course is designed to engage students in listening and in sound creation/composition and to develop skills and the capacity for improvisation that will equip artists for readiness in evolving cultural and performance situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5381. Inclusive Excellence in the Music Classroom.**

This course prepares prospective and practicing music teachers to create an equitable, inclusive, and thriving classroom that meets the needs of all students by incorporating culturally responsive teaching, multicultural education, world music pedagogy, ethnomusicological perspectives, and by addressing the needs of students with exceptionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5382. History of Music Education in the United States.**

This course entails an examination of music education in the United States. The major historical developments and contemporary trends are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5392. Introduction to Music Instruction in Higher Education.**

This course provides techniques for Graduate Teaching/Instructional Assistants concerning selected problems in 1) the teaching of music in the classroom, private instruction and ensemble environments; and 2) the development of a career in field in higher education. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MU 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Music 5399B. Students working toward the M.M. degree with a thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Music Ensemble (MUSE)****MUSE 5101. Bobcat Basketball Band.**

The Bobcat Basketball Band performs for all home men's and women's basketball games that do not fall over a university break. The group travels for all postseason tournaments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5102. Salsa Del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5103. Mariachi Nueva Generación.**

This course is a performing ensemble specializing in Mexican folk music.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5104. Panorama Steel Drum Band.**

A performing ensemble specializing in Caribbean steel drum band music.

May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5105. VocaLibre.**

A select vocal ensemble specializing in chamber music, including madrigal or jazz literature. May be repeated for credit. Prerequisite:

Enrollment in major choral ensemble.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5106. Opera Workshop.**

Opera Workshop is a skills-based class designed for developing opera singers to learn and apply skills that prepare them for professional performance.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5107. Opera Theatre.**

Students will learn and perform operatic roles, chamber opera pieces, or one-act operas. Concurrent enrollment in Applied Voice is recommended.

Prerequisite: MUSE 5106 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5108. Orquesta del Rio.**

Performing ensemble specializing in Latin and South American music.

May be repeatable for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required| Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5109. Opera Production.**

This course is designed for students to participate as performers in a full opera production or in the production of opera scenes. It will also prepare students for future professional opera performance engagements.

Concurrent enrollment in Applied Voice is recommended. Prerequisite:

MUSE 5106 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5122. Aurora Voce – Auditioned Treble Voice Choir.**

Aurora Voce is a highly selective chamber chorale ensemble that is open by audition to all treble singers across campus. Performing in this ensemble provides the singers opportunities to explore high quality and challenging repertoire that spans across a wide variety of styles, historical periods, and genres.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5123. Concert Band.**

This ensemble provides playing experiences for non-music majors and music majors who want to improve their skills and serve as a lab ensemble for conducting students. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5124. Women's Choir.**

Performing ensemble specializing in choral literature for women's voices. May be repeated for credit.

**1 Credit Hour. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5125. Men's Choir.**

Performing ensemble specializing in choral literature for men's voices. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5126. Chamber Music.**

Small group performing ensembles focusing on chamber literature of mixed and similar instrumental music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5127. Jazz Combo.**

A small performance ensemble designed to develop improvisational skills and individual musical creativity through performance of standard jazz literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5128. Conducting Seminar.**

A seminar based course focusing on conducting technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or permission by the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5129. Afro-Caribbean Lab.**

This course is an experimental ensemble of flexible size and instrumentation that specializes in advanced arranging, performance, and improvisation involving Afro-Caribbean styles and rhythms. An audition is required for placement in this ensemble. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5130. Wind Symphony.**

Major instrumental ensemble comprised of the most outstanding wind and percussion students who are selected by audition. The group is dedicated to the performance of the finest wind repertoire, whether a contemporary works for winds, or transcriptions from the orchestral repertoire. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5131. Symphonic Winds.**

Major instrumental ensemble consisting primarily of music majors and talented non-music majors. This ensemble performs a broad range of full ensemble repertoire, representative of all historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5140. Texas State Chorale.**

Auditioned major choral ensemble specializing in performances of literature from the Renaissance and 20th Century. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5141. University Singers.**

Major choral ensemble that performs a variety of literature, including masterworks from the 17th Century to the present. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5150. Texas State Symphony Orchestra.**

A full symphony orchestra that performs standard orchestra literature, as well as oratorio, concerto, and opera accompaniments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5160. Jazz Ensemble.**

The jazz-based ensemble performs advanced arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5161. Jazz Orchestra.**

The jazz-based ensemble performs intermediate arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5162. Jazz Lab Band.**

The jazz-based ensemble performs beginning arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5170. Accompanying.**

A coaching seminar for pianists to develop reading and accompanying skills. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5180. Mystorium for Contemporary Music Ensemble.**

An ensemble course focusing on the performance and analysis of contemporary music in all styles and media. May be repeated for credit. Prerequisite: Music (Composition Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5190. Guitar Ensemble.**

Chamber guitar ensemble designed to provide interaction with fellow guitarists, develop musicianship as an ensemble performer, and to familiarize the student with music from different periods through a variety of literature. May be repeated for credit. Prerequisite: Music (Guitar Performance Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Music Performance (MUSP)****MUSP 5100. Mariachi Lince de Oro.**

This course provides learning opportunities for students interested in an introduction to the mariachi genre. Traditional mariachi repertoire is distributed, rehearsed, memorized, and performed.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**MUSP 5101. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5127. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5164. Mariachi Melodia Techniques.**

This course provides students with the fundamentals of playing and teaching the melodic instruments associated with the Mariachi ensemble, with specific emphasis on the voice, violin, and trumpet. Topics will cover history, tuning, and stylistic techniques associated with each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5165. Mariachi Armonia Techniques.**

This course provides students with the fundamentals of playing and teaching the rhythm/harmony instruments in the Mariachi ensemble, with specific emphasis in the guitarrón, vihuela/guitar, and the harp. Topics will cover history, tuning, strumming, and stylistic techniques specific to each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5166. Latin Music Methods.**

This course provides students with knowledge that is essential to become effective directors of Mariachi and Salsa ensembles. Instruments, styles, repertory, and resources that are related to these ensembles will be discussed. (MULT).

**1 Credit Hour. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5175. Afro-Cuban Hand Drumming.**

The fundamentals of playing and teaching Afro-Cuban Drums. Topics will cover history and knowledge of styles of the various Afro-Cuban percussion instruments. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5185. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5227. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5230. Applied Keyboard.**

In this course students will participate in supervised private coaching and instruction that focuses on technique, musicality, literature, and performance in the keyboard area. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5285. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5320. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5327. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit.

Prerequisite: Conducting Major or consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5330. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5337. Advanced Conducting.**

Music performance class designed for further development of baton technique, score reading, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5340. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5350. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5360. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5370. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5380. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5385. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Program Overview

Before prospective graduate students are approved for one of the music specializations, they must audition or complete a portfolio review by the appropriate School of Music area faculty. In addition, they must interview with the Coordinator of Music Graduate Studies or area coordinator. Students must have an undergraduate music degree in order to be considered for admission into the M.M. degree with one of the specializations under music.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in music from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in music
- GRE not required
- audition/portfolio and interview (Requirements vary by concentration. Visit the department's website (<http://www.music.txstate.edu/gradprospectivestudents/BecomingaMusicMajor-Grad.html>) for detailed instructions.)
- resume/CV (maximum three pages) including name, address, email address, education (degrees or special certifications), professional experience, scholarship awards, special recognitions, articles or presentations, selected community activity, and other information pertinent to the desired degree and concentration
- statement of purpose (400-600 words with name and email in the header) describing the following:
  - past experiences in music theory
  - qualities, values, characteristics, and/or skills that make the student a strong candidate for the music theory program
  - the ways in which the personal learning outcomes of the music theory program relate to the student's personal and professional goals
  - plans to pursue doctoral studies as well, if applicable
- three letters of recommendation

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

Degree Requirements

The Master of Music (M.M.) degree with a major in Music concentration in Music Theory requires 36 semester credit hours, including a thesis. In addition, opportunities are provided for independent study with professors in their areas of specialization. Students who score less than 70% on the music theory placement test will take MU 5357. Students who score less than 70% on the music history placement test will take MU 5330A. These courses are in addition to the degree requirements listed below. Counterpoint and Orchestration are required background knowledge; if these subjects have not been studied in an undergraduate degree program, equivalent course of study, students will take MU 5330B or an advisor approved course.

Course Requirements

Code	Title	Hours
Required Courses		
MU 5334	Introduction to Graduate Study in Music	3
MU 5350	Musical Styles	3
Choose 6 hours from the following:		6
MU 5310	Music in the Baroque era	
MU 5314	Music in the Twentieth and Twenty-First Centuries	
MU 5315	Music in the Middle Ages and Renaissance	
MU 5316	Music and the Dramatic Arts	
MU 5320	Music in the Eighteenth Century	
MU 5340	Music in the Nineteenth Century	
MU 5341	Jazz Perspectives	
MU 5352	Foundations of Musicology	
MU 5360	Music in the United States	
MU 5367	Music in the Caribbean	
MU 5368	Music in Mexico	
Concentration		
MU 5351	Schenkerian Analysis	3
MU 5355	Pedagogy of Music Theory	3
MU 5359	Post-Tonal Music Analysis	3
Choose 3 hours from the following:		3
MU 5113	Independent Study in Music	
MU 5213	Independent Study in Music	
MU 5313	Independent Study in Music	
MU 5317	Independent Study in Music	
Thesis		
MU 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
MU 5199B	Thesis	
MU 5299B	Thesis	
MU 5399B	Thesis	
MU 5599B	Thesis	
MU 5999B	Thesis	
Electives		
Choose 6 hours from the following:		6
Any advisor approved MU, MUSE, or MUSP courses		
Total Hours		36

Comprehensive Examination Requirements

All candidates within the graduate music program must pass a comprehensive oral (viva voce) examination. The students will be given a maximum of two attempts in order to pass this examination before being eligible for graduation. Candidates who fail to pass the comprehensive oral examination upon the first try may appeal for re-examination. The re-examination will be administered during the term following the first attempt. Exceptions to this policy are rare and must be approved by the director of graduate studies in music and by the director of the school of music. Failure to pass the required comprehensive oral examination upon the second attempt shall prevent the student from being eligible for graduation.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to

work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Music: MU (p. 2142), MUSE (p. 2148), MUSP (p. 2150)



## Courses Offered

### Music (MU)

#### **MU 5113. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MU 5130A. Writing About Music.**

Focusing on basic writing skills, research, and the use and documentation of sources. Course centers on the process of writing about music. Besides written exercises, the assignments include the study of such professional writing samples as concert reviews, program abstracts, and research essays. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

#### **MU 5130B. Diction for Singers.**

An in-depth study of the pronunciation of singing in Italian, German, English, and French incorporating the International Phonetic Alphabet through the use of lecture and laboratory sessions for practical application. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

#### **MU 5135. Exploring 21st Century Music Education.**

This course provides music education graduate students a general overview of current issues and questions in music education, techniques for building a better understanding of core issues, and necessary instruction/investigation for thesis/capstone project. Students leave this class with a general knowledge of many current topics and tools to further investigate topics of interest.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### **MU 5150. Exploring Twenty-first Century Music Education.**

In this course, students will survey current issues and questions in music education while further developing a primary topic of interest for their thesis/capstone project. Topics will be driven by student interest and the discourse within the field but will be centered around: student-centered pedagogies (e.g., democratic education, culturally responsive pedagogy, popular music education, DEI, and social-emotional learning), performance/teacher anxiety (e.g., music performance anxiety, imposter phenomenon, and teacher self-efficacy), teacher experiences and burnout (e.g., early career teacher experiences, expert teacher tendencies, burnout in music education, finances, technology, administrative experiences, and competition), and writing specific content (e.g., refining APA style and.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MU 5192. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### **MU 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **MU 5213. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MU 5230A. Music Theory.**

A study of the materials of counterpoint and harmony as evaluated through listening and analysis of literature, and application through composition. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

#### **MU 5230B. Aural Learning.**

Development and application of theory concepts through singing, playing, and dictation. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5235. Music Education Capstone.**

This course allows for a wide overview of the field of music education, providing students with a broad scope to facilitate their thesis/capstone project. The course also creates space in the degree for discussions and readings related to the most recent issues and concerns of the field.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5254. Piano Pedagogy I.**

History, methods, and materials of piano pedagogy. Includes the application of technical and musical fundamentals to beginning levels of teaching. Prerequisites: Piano pedagogy or piano performance majors or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5255. Piano Pedagogy II.**

Advanced methods and materials of piano pedagogy. Includes the application of technical and musical fundamentals to intermediate and advanced levels of teaching. Prerequisites: Piano Pedagogy I or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5301. Musicology Seminar in Contemporary Issues.**

This course offers advanced immersion into current trends and literature in the field of musicology, centering a distinct issue and its related frameworks at each time of offering. Sample issues are Music, Gender, and Sexuality; Ecomusicology; Sound Studies; Methods, Methodologies and Frameworks; among others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5310. Music in the Baroque era.**

This course is a study of diverse genres and repertoires from the 1600s to the early 1700s, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5313. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5314. Music in the Twentieth and Twenty-First Centuries.**

In this course the students will study diverse genres and repertoires of the twentieth and twenty-first centuries, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5315. Music in the Middle Ages and Renaissance.**

In this course students will study diverse genres and repertoires from the 450s to the 1600s, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5316. Music and the Dramatic Arts.**

This course covers diverse genres and repertoires in music and the dramatic arts, antiquities through the present, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with such disciplines as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5317. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5318. Song Literature.**

This course is an historical survey of the art song, emphasizing Western European and American repertoires. Students will articulate stylistic differences within the art song repertory, use analytical methods appropriate for a variety of text settings, and develop greater proficiency at writing about music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5320. Music in the Eighteenth Century.**

In this course students will study diverse genres and repertoires in the eighteenth century, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5322. Advanced Instrumental Techniques.**

Evaluation of teaching methods, materials, and literature of wind/percussion or string instruments. Students must have taken instrumental conducting in their undergraduate degree program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5323. Vocal Music Education Methods.**

Study of the anatomy of the human voice and evaluation of the scientific data and historical beliefs concerning voice pedagogy with emphasis in teaching voice in the class, private studio, as well as within a variety of choral settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5325. Research in Music Education I.**

Examination of methodologies, techniques, and procedures for interpreting and conducting research in music education. Relevant studies in music education will be critiqued, with an emphasis on preparation of a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5326. Research in Music Education II.**

A continuation and culmination of a research project in the field of music education as developed and proposed in MU 5325. Prerequisite: MU 5325 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5328. Foundations of Music Education.**

The cognitive psychology, historical perspective, and philosophical issues that provide the basis for contemporary music education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5329. Psychology of Music.**

This course investigates the psychological foundations of music and examines interdisciplinary approaches to the study of music and the human experience. Topics will include music perception, physiological responses to music, music and the brain, musical attributes, music learning, music therapy, and the measurement of musical behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5330A. History and Analysis of Music.**

A comprehensive musicianship approach to the study of music from the earliest times to the present using techniques of stylistic and structural analysis. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5330B. Advanced Theory.**

Principles of form and analysis, counterpoint, orchestration, and contemporary analytic techniques developed through in-depth study of musical repertoire. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5331. Vocal Pedagogy I: Voice Science.**

This course explores the anatomy/physiology of the human voice, the acoustic properties that govern resonance, vocal health, and philosophy of singing and teaching. Co-requisites: MUSP 5120 or MUSP 5220 or MUSP 5320 with a grade of "C" or better, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5332. Vocal Pedagogy II: Methods.**

This is a comparative study of various pedagogical methods and ideas, including historical and contemporary treatises. Students will explore exercises and vocalizes for general voice development, address and correct specific vocal problems, and engage in peer teaching.

Prerequisite: MU 5331 with a grade of "B" or better. Co-requisites: MUSP 5120, MUSP 5220, or MUSP 5320, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5333. Teaching and Learning in the Music Classroom.**

In this course students will examine music content delivery, pedagogy (including lesson planning, instructional design, etc.), assessment, and other aspects of teaching and learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5334. Introduction to Graduate Study in Music.**

Techniques and materials of research, emphasizing bibliography, library usage, collection, and interpretation of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5337. Techniques of Contemporary Music.**

This course surveys a cross-section of important technical innovations and developments in twentieth-century music, with special focus on music since 1945. Students will read documents outlining aesthetics, analyze music written in a variety of styles, write analytical papers, and using a variety of techniques, compose exercises. Enrollment requires a passing grade on the Graduate Music Theory Placement Exam or Instructor approval. Prerequisite: MU 5357 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5340. Music in the Nineteenth Century.**

This course is a study of diverse genres and repertoires in the nineteenth century, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5341. Jazz Perspectives.**

In this course students will study diverse genres, repertoires, discographies, and stylistic trends associated with jazz, with a focus on the Americas. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5342. Jazz Pedagogy.**

Jazz pedagogy is an in-depth study of the history, methodologies, resources, and techniques of jazz pedagogy and the development of jazz ensemble rehearsal skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5343. Jazz Improvisation.**

This course is a detailed study of the evolution of melodic, harmonic, and rhythmic structures used by jazz improvisers and composers from the 1930s to present day.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5344. Jazz Arranging.**

This course provides a comprehensive study of jazz composition, arranging, and improvisation theory, emphasizing writing for jazz ensembles using harmony, scales, and improvisation in a variety of styles, and providing necessary skills to be a successful jazz or commercial composer/arranger.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5345. Piano Literature I.**

This course is designed to expand first-hand familiarity with the literature for the keyboard from the Baroque to Early Romantic era (Bach to Schumann). It will be divided into five chronological segments, discussing the major composers and their contemporaries. Ten composition genres will be discussed during the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5346. Piano Literature II.**

This course is designed to expand first-hand familiarity with the literature for the piano, which will be divided into six chronological segments.

These segments will discuss the most significant composers and their contemporaries in the 19th and 20th centuries and their major piano compositions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5350. Musical Styles.**

Developing a broader musical understanding through critical listening, technical analyses, and written assignments in various musical styles, including the late classical, romantic, and present eras. Prerequisite: MU 5357 with a grade of "B" or better, or a passing grade on the Graduate Music Theory Placement Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5351. Schenkerian Analysis.**

An introduction to the techniques and methods of music analysis as developed by Heinrich Schenker (1868-1935). This course will cover reductive analysis, structural levels in tonal music, and graphing techniques. Prerequisite: MU 5357 with a grade of "B" or better, or passing grade on music theory entrance exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5352. Foundations of Musicology.**

This course is an introduction to the concepts, methodologies, and scholarly trends central to the discipline of musicology. Prerequisite: MU 5334 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5353. Ensemble Rehearsal Techniques.**

Course is designed for performance ensemble conductors. Includes supervision, administration, and rehearsal techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5355. Pedagogy of Music Theory.**

Developing teaching methods and broader understanding through critical study of materials, organization, techniques, and problems of music theory and comprehensive musicianship courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5357. Graduate Music Theory.**

Graduate-level studies in music theory and aural skills. The course covers melody, harmony, counterpoint, form, as well as sight-singing, performing, and dictation. This course does not earn graduate degree credit. Consent of the graduate studies coordinator is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MU 5358. Advanced Musicianship.**

This course is designed to develop graduate-level skills in music sight reading, dictation, fundamental keyboard skills, and keyboard harmonization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5359. Post-Tonal Music Analysis.**

This course is the study and application of methodologies and terminology that are used to analyze post-tonal concert music of the 20th and 21st centuries. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5360. Music in the United States.**

This course is a study of genres and repertoires of the United States of America from the 1600s to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5361. Methods and Methodologies of Music Analysis.**

This course will cover the examination of selected analytical techniques, methods and methodologies, critical approaches, or musical repertoires, including semiotic analysis, computer-assisted music analysis, analysis of thematic processes, functional analysis, phrase structure analysis, as well as category and feature analysis. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5362. Instrumental Pedagogy I.**

This course explores instrument-specific pedagogy from the beginner through the advanced levels. Students will peruse instrument-specific pedagogical works, solo literature, and articles, and will complete a teaching assignment requiring them to implement pedagogical techniques, diagnose common performance problems, and suggest solutions. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5363. Instrumental Pedagogy II: Teaching Internship.**

This class provides students with supervised teaching experience. In this capstone course, students will apply pedagogical principles for instruction on their primary instrument in the private lesson setting. Their teaching will be monitored and evaluated by an applied professor throughout the semester. Prerequisite: MU 5362 with a grade of "B" or better. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5364. Intelligent Music Teaching.**

This course focuses on fundamental philosophical principles of effective instrumental music instruction and includes application of those principles in teaching. Students will develop a realistic perspective of their strengths and weaknesses as a developing professional and will develop business skills necessary to create a successful private lesson studio.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5365. Computing in Music.**

Development of concepts and skills related to current computer technology in music. Exploration and use of computer software, MIDI, and other productivity tools for application to music education, music administration, music research, and music composition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5366. Salsa Arranging.**

Analysis and arranging music for a Salsa ensemble. Topics will cover instrument ranges, orchestration techniques, and styles. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**MU 5367. Music in the Caribbean.**

In this course students will study diverse genres and repertoires of the Caribbean from pre-colonization to the present, with a focus on the Hispanic Circum-Caribbean. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5368. Music in Mexico.**

In this course students will study diverse genres and repertoires of Mexico and Mexican-American communities of the United States from pre-colonization to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5369. History of Music in Latin America.**

This course is a study of the musical panorama of Latin America; Pre-Columbian, colonial, folk, urban, academic, and transnational genres are introduced and discussed in historical, socio-political, and stylistic context. It also includes an introduction to the scope and methods of research in Latin American music studies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5371. Choral Literature I: Madrigal/Partsong.**

This course is a comprehensive study of madrigals and partsongs from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5372. Choral Literature II: Oratorio and Other Secular Major Works.**

This course is a comprehensive study of oratorios and other secular major works from the Western canon of choral repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5373. Choral Literature III: Liturgical Year - Motet, Anthem, Cantata.**

This course is a comprehensive study of motets, anthems, cantatas, and other genres associated with the liturgical calendar and the Revised Common Lectionary from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5374. Choral Literature IV: Missa Brevis, Missa Solemnis, & Requiem.**

This course is a comprehensive study of the Roman Catholic Mass and Requiem Liturgies as they have been set to music by composers associated with the Western canon of choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 53750. Contemporary Discourse in Music Education.**

This course entails an examination of topics from contemporary music education research. Students examine contemporary research and the potential for application in their future/current classrooms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 5377. Innovation in Music Performance: Sound Lab.**

This course is designed to engage students in listening and in sound creation/composition and to develop skills and the capacity for improvisation that will equip artists for readiness in evolving cultural and performance situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5381. Inclusive Excellence in the Music Classroom.**

This course prepares prospective and practicing music teachers to create an equitable, inclusive, and thriving classroom that meets the needs of all students by incorporating culturally responsive teaching, multicultural education, world music pedagogy, ethnomusicological perspectives, and by addressing the needs of students with exceptionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5382. History of Music Education in the United States.**

This course entails an examination of music education in the United States. The major historical developments and contemporary trends are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5392. Introduction to Music Instruction in Higher Education.**

This course provides techniques for Graduate Teaching/Instructional Assistants concerning selected problems in 1) the teaching of music in the classroom, private instruction and ensemble environments; and 2) the development of a career in field in higher education. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MU 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Music 5399B. Students working toward the M.M. degree with a thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Music Ensemble (MUSE)

**MUSE 5101. Bobcat Basketball Band.**

The Bobcat Basketball Band performs for all home men's and women's basketball games that do not fall over a university break. The group travels for all postseason tournaments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5102. Salsa Del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5103. Mariachi Nueva Generación.**

This course is a performing ensemble specializing in Mexican folk music.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5104. Panorama Steel Drum Band.**

A performing ensemble specializing in Caribbean steel drum band music.

May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5105. Vocalibre.**

A select vocal ensemble specializing in chamber music, including madrigal or jazz literature. May be repeated for credit. Prerequisite: Enrollment in major choral ensemble.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5106. Opera Workshop.**

Opera Workshop is a skills-based class designed for developing opera singers to learn and apply skills that prepare them for professional performance.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5107. Opera Theatre.**

Students will learn and perform operatic roles, chamber opera pieces, or one-act operas. Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 5106 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5108. Orquesta del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeatable for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required| Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5109. Opera Production.**

This course is designed for students to participate as performers in a full opera production or in the production of opera scenes. It will also prepare students for future professional opera performance engagements.

Concurrent enrollment in Applied Voice is recommended. Prerequisite:

MUSE 5106 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5122. Aurora Voce – Auditioned Treble Voice Choir.**

Aurora Voce is a highly selective chamber chorale ensemble that is open by audition to all treble singers across campus. Performing in this ensemble provides the singers opportunities to explore high quality and challenging repertoire that spans across a wide variety of styles, historical periods, and genres.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5123. Concert Band.**

This ensemble provides playing experiences for non-music majors and music majors who want to improve their skills and serve as a lab ensemble for conducting students. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5124. Women's Choir.**

Performing ensemble specializing in choral literature for women's voices. May be repeated for credit.

**1 Credit Hour. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5125. Men's Choir.**

Performing ensemble specializing in choral literature for men's voices. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5126. Chamber Music.**

Small group performing ensembles focusing on chamber literature of mixed and similar instrumental music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5127. Jazz Combo.**

A small performance ensemble designed to develop improvisational skills and individual musical creativity through performance of standard jazz literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5128. Conducting Seminar.**

A seminar based course focusing on conducting technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or permission by the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5129. Afro-Caribbean Lab.**

This course is an experimental ensemble of flexible size and instrumentation that specializes in advanced arranging, performance, and improvisation involving Afro-Caribbean styles and rhythms. An audition is required for placement in this ensemble. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5130. Wind Symphony.**

Major instrumental ensemble comprised of the most outstanding wind and percussion students who are selected by audition. The group is dedicated to the performance of the finest wind repertoire, whether a contemporary works for winds, or transcriptions from the orchestral repertoire. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5131. Symphonic Winds.**

Major instrumental ensemble consisting primarily of music majors and talented non-music majors. This ensemble performs a broad range of full ensemble repertoire, representative of all historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5140. Texas State Chorale.**

Auditioned major choral ensemble specializing in performances of literature from the Renaissance and 20th Century. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5141. University Singers.**

Major choral ensemble that performs a variety of literature, including masterworks from the 17th Century to the present. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5150. Texas State Symphony Orchestra.**

A full symphony orchestra that performs standard orchestra literature, as well as oratorio, concerto, and opera accompaniments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5160. Jazz Ensemble.**

The jazz-based ensemble performs advanced arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5161. Jazz Orchestra.**

The jazz-based ensemble performs intermediate arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5162. Jazz Lab Band.**

The jazz-based ensemble performs beginning arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5170. Accompanying.**

A coaching seminar for pianists to develop reading and accompanying skills. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5180. Mystery for Contemporary Music Ensemble.**

An ensemble course focusing on the performance and analysis of contemporary music in all styles and media. May be repeated for credit.

Prerequisite: Music (Composition Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5190. Guitar Ensemble.**

Chamber guitar ensemble designed to provide interaction with fellow guitarists, develop musicianship as an ensemble performer, and to familiarize the student with music from different periods through a variety of literature. May be repeated for credit. Prerequisite: Music (Guitar Performance Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Music Performance (MUSP)****MUSP 5100. Mariachi Lince de Oro.**

This course provides learning opportunities for students interested in an introduction to the mariachi genre. Traditional mariachi repertoire is distributed, rehearsed, memorized, and performed.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5101. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5127. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5164. Mariachi Melodia Techniques.**

This course provides students with the fundamentals of playing and teaching the melodic instruments associated with the Mariachi ensemble, with specific emphasis on the voice, violin, and trumpet. Topics will cover history, tuning, and stylistic techniques associated with each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5165. Mariachi Armonia Techniques.**

This course provides students with the fundamentals of playing and teaching the rhythm/harmony instruments in the Mariachi ensemble, with specific emphasis in the guitarrón, vihuela/guitar, and the harp. Topics will cover history, tuning, strumming, and stylistic techniques specific to each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5166. Latin Music Methods.**

This course provides students with knowledge that is essential to become effective directors of Mariachi and Salsa ensembles. Instruments, styles, repertory, and resources that are related to these ensembles will be discussed. (MULT).

**1 Credit Hour. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5175. Afro-Cuban Hand Drumming.**

The fundamentals of playing and teaching Afro-Cuban Drums. Topics will cover history and knowledge of styles of the various Afro-Cuban percussion instruments. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5185. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5227. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5230. Applied Keyboard.**

In this course students will participate in supervised private coaching and instruction that focuses on technique, musicality, literature, and performance in the keyboard area. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**MUSP 5250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5285. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5320. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5327. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5330. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5337. Advanced Conducting.**

Music performance class designed for further development of baton technique, score reading, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5340. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5350. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5360. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5370. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5380. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5385. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in music
- GRE not required
- audition/portfolio and interview (Requirements vary by concentration. Visit the department's website (<http://www.music.txstate.edu/gradprospectivestudents/BecomingaMusicMajor-Grad.html>) for detailed instructions.)
- resume/CV (maximum three pages) including name, address, email address, education (degrees or special certifications), professional experience, scholarship awards, special recognitions, articles or presentations, selected community activity, and other information pertinent to the desired degree and concentration
- statement of purpose (400-600 words with name and email in the header) describing the following:
  - past experiences in performance and pedagogy
  - qualities, values, characteristics, and/or skills that make the student a strong candidate for the performance and pedagogy program
  - the ways in which the personal learning outcomes of the performance and pedagogy program relate to the student's personal and professional goals
  - plans to pursue doctoral studies as well, if applicable
- three letters of recommendation

**Approved English Proficiency Exam Scores**

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Program Overview

Before prospective graduate students are approved for one of the music specializations, they must audition or complete a portfolio review by the appropriate School of Music area faculty. In addition, they must interview with the Coordinator of Music Graduate Studies or area coordinator. Students must have an undergraduate music degree in order to be considered for admission into the M.M. degree with one of the specializations under music.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in music from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

## Degree Requirements

The Master of Music (M.M.) degree with a major in Music concentration in Performance and Pedagogy requires 36 semester credit hours. Students who score less than 70% on the music theory placement test will take MU 5357. Students who score less than 70% on the music history placement test will take MU 5330A in addition to the degree requirements listed below.

Vocal students who score less than 80% on the diction placement exam will take MU 5130B; one year each of TWO of the standard singing languages (French, German, and Italian) is required at the college level or proof of language proficiency at the Beginner Level I and II as determined by the CLEP test.

The courses described above would be in addition to the degree requirements listed below.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MU 5334	Introduction to Graduate Study in Music	3
MU 5350	Musical Styles	3
Choose 6 hours from the following:		6
MU 5310	Music in the Baroque era	
MU 5314	Music in the Twentieth and Twenty-First Centuries	
MU 5315	Music in the Middle Ages and Renaissance	
MU 5316	Music and the Dramatic Arts	
MU 5320	Music in the Eighteenth Century	
MU 5340	Music in the Nineteenth Century	
MU 5341	Jazz Perspectives	
MU 5352	Foundations of Musicology	
MU 5360	Music in the United States	
MU 5367	Music in the Caribbean	
MU 5368	Music in Mexico	
<b>Concentration</b>		
MU 5364	Intelligent Music Teaching	3
MUSP 5101	Graduate Recital	1
Choose 8 hours from the following:		8
MUSP 5220	Applied Voice (Take 4 times)	
MUSP 5230	Applied Keyboard (Take 4 times)	
MUSP 5240	Applied Woodwind (Take 4 times)	
MUSP 5250	Applied Brass (Take 4 times)	
MUSP 5260	Applied String (Take 4 times)	
MUSP 5270	Applied Percussion (Take 4 times)	
Choose 3 hours from the following:		3
Any MUSE course <sup>1</sup>		
Choose 6 hours from the following:		6
MU 5331	Vocal Pedagogy I: Voice Science	
MU 5332	Vocal Pedagogy II: Methods	
MU 5362	Instrumental Pedagogy I	
MU 5363	Instrumental Pedagogy II: Teaching Internship	
<b>Electives</b>		
Choose 3 hours from the following:		3
Any advisor approved MU, MUSE, or MUSP courses		
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> Students may choose any advisor approved MUSE course(s) to complete the ensemble credits.

## Comprehensive Examination Requirements

All candidates within the graduate music program must pass a comprehensive oral (viva voce) examination. Candidates who fail to pass the comprehensive oral examination upon the first try may appeal for re-examination. The re-examination will be administered during the term following the first attempt. Students will be given a maximum of two attempts to pass the exam. Failure to pass the required comprehensive oral examination upon the second attempt shall prevent graduation eligibility.

Master's level courses in Music: MU (p. 2154), MUSE (p. 2160), MUSP (p. 2162)

## Courses Offered

### Music (MU)

#### MU 5113. Independent Study in Music.

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### MU 5130A. Writing About Music.

Focusing on basic writing skills, research, and the use and documentation of sources. Course centers on the process of writing about music. Besides written exercises, the assignments include the study of such professional writing samples as concert reviews, program abstracts, and research essays. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

#### MU 5130B. Diction for Singers.

An in-depth study of the pronunciation of singing in Italian, German, English, and French incorporating the International Phonetic Alphabet through the use of lecture and laboratory sessions for practical application. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

#### MU 5135. Exploring 21st Century Music Education.

This course provides music education graduate students a general overview of current issues and questions in music education, techniques for building a better understanding of core issues, and necessary instruction/investigation for thesis/capstone project. Students leave this class with a general knowledge of many current topics and tools to further investigate topics of interest.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5150. Exploring Twenty-first Century Music Education.**

In this course, students will survey current issues and questions in music education while further developing a primary topic of interest for their thesis/capstone project. Topics will be driven by student interest and the discourse within the field but will be centered around: student-centered pedagogies (e.g., democratic education, culturally responsive pedagogy, popular music education, DEI, and social-emotional learning), performance/teacher anxiety (e.g., music performance anxiety, imposter phenomenon, and teacher self-efficacy), teacher experiences and burnout (e.g., early career teacher experiences, expert teacher tendencies, burnout in music education, finances, technology, administrative experiences, and competition), and writing specific content (e.g., refining APA style and.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5192. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5213. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5230A. Music Theory.**

A study of the materials of counterpoint and harmony as evaluated through listening and analysis of literature, and application through composition. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5230B. Aural Learning.**

Development and application of theory concepts through singing, playing, and dictation. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5235. Music Education Capstone.**

This course allows for a wide overview of the field of music education, providing students with a broad scope to facilitate their thesis/capstone project. The course also creates space in the degree for discussions and readings related to the most recent issues and concerns of the field.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5254. Piano Pedagogy I.**

History, methods, and materials of piano pedagogy. Includes the application of technical and musical fundamentals to beginning levels of teaching. Prerequisites: Piano pedagogy or piano performance majors or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5255. Piano Pedagogy II.**

Advanced methods and materials of piano pedagogy. Includes the application of technical and musical fundamentals to intermediate and advanced levels of teaching. Prerequisites: Piano Pedagogy I or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5301. Musicology Seminar in Contemporary Issues.**

This course offers advanced immersion into current trends and literature in the field of musicology, centering a distinct issue and its related frameworks at each time of offering. Sample issues are Music, Gender, and Sexuality; Ecomusicology; Sound Studies; Methods, Methodologies and Frameworks; among others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5310. Music in the Baroque era.**

This course is a study of diverse genres and repertoires from the 1600s to the early 1700s, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5313. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5314. Music in the Twentieth and Twenty-First Centuries.**

In this course the students will study diverse genres and repertoires of the twentieth and twenty-first centuries, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5315. Music in the Middle Ages and Renaissance.**

In this course students will study diverse genres and repertoires from the 450s to the 1600s, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5316. Music and the Dramatic Arts.**

This course covers diverse genres and repertoires in music and the dramatic arts, antiquities through the present, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with such disciplines as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5317. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5318. Song Literature.**

This course is an historical survey of the art song, emphasizing Western European and American repertoires. Students will articulate stylistic differences within the art song repertory, use analytical methods appropriate for a variety of text settings, and develop greater proficiency at writing about music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5320. Music in the Eighteenth Century.**

In this course students will study diverse genres and repertoires in the eighteenth century, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5322. Advanced Instrumental Techniques.**

Evaluation of teaching methods, materials, and literature of wind/percussion or string instruments. Students must have taken instrumental conducting in their undergraduate degree program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5323. Vocal Music Education Methods.**

Study of the anatomy of the human voice and evaluation of the scientific data and historical beliefs concerning voice pedagogy with emphasis in teaching voice in the class, private studio, as well as within a variety of choral settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5325. Research in Music Education I.**

Examination of methodologies, techniques, and procedures for interpreting and conducting research in music education. Relevant studies in music education will be critiqued, with an emphasis on preparation of a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5326. Research in Music Education II.**

A continuation and culmination of a research project in the field of music education as developed and proposed in MU 5325. Prerequisite: MU 5325 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5328. Foundations of Music Education.**

The cognitive psychology, historical perspective, and philosophical issues that provide the basis for contemporary music education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5329. Psychology of Music.**

This course investigates the psychological foundations of music and examines interdisciplinary approaches to the study of music and the human experience. Topics will include music perception, physiological responses to music, music and the brain, musical attributes, music learning, music therapy, and the measurement of musical behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MU 5330A. History and Analysis of Music.**

A comprehensive musicianship approach to the study of music from the earliest times to the present using techniques of stylistic and structural analysis. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5330B. Advanced Theory.**

Principles of form and analysis, counterpoint, orchestration, and contemporary analytic techniques developed through in-depth study of musical repertoire. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5331. Vocal Pedagogy I: Voice Science.**

This course explores the anatomy/physiology of the human voice, the acoustic properties that govern resonance, vocal health, and philosophy of singing and teaching. Co-requisites: MUSP 5120 or MUSP 5220 or MUSP 5320 with a grade of "C" or better, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5332. Vocal Pedagogy II: Methods.**

This is a comparative study of various pedagogical methods and ideas, including historical and contemporary treatises. Students will explore exercises and vocalizes for general voice development, address and correct specific vocal problems, and engage in peer teaching.

Prerequisite: MU 5331 with a grade of "B" or better. Co-requisites: MUSP 5120, MUSP 5220, or MUSP 5320, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5333. Teaching and Learning in the Music Classroom.**

In this course students will examine music content delivery, pedagogy (including lesson planning, instructional design, etc.), assessment, and other aspects of teaching and learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5334. Introduction to Graduate Study in Music.**

Techniques and materials of research, emphasizing bibliography, library usage, collection, and interpretation of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5337. Techniques of Contemporary Music.**

This course surveys a cross-section of important technical innovations and developments in twentieth-century music, with special focus on music since 1945. Students will read documents outlining aesthetics, analyze music written in a variety of styles, write analytical papers, and using a variety of techniques, compose exercises. Enrollment requires a passing grade on the Graduate Music Theory Placement Exam or Instructor approval. Prerequisite: MU 5357 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5340. Music in the Nineteenth Century.**

This course is a study of diverse genres and repertoires in the nineteenth century, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5341. Jazz Perspectives.**

In this course students will study diverse genres, repertoires, discographies, and stylistic trends associated with jazz, with a focus on the Americas. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5342. Jazz Pedagogy.**

Jazz pedagogy is an in-depth study of the history, methodologies, resources, and techniques of jazz pedagogy and the development of jazz ensemble rehearsal skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5343. Jazz Improvisation.**

This course is a detailed study of the evolution of melodic, harmonic, and rhythmic structures used by jazz improvisers and composers from the 1930s to present day.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5344. Jazz Arranging.**

This course provides a comprehensive study of jazz composition, arranging, and improvisation theory, emphasizing writing for jazz ensembles using harmony, scales, and improvisation in a variety of styles, and providing necessary skills to be a successful jazz or commercial composer/arranger.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5345. Piano Literature I.**

This course is designed to expand first-hand familiarity with the literature for the keyboard from the Baroque to Early Romantic era (Bach to Schumann). It will be divided into five chronological segments, discussing the major composers and their contemporaries. Ten composition genres will be discussed during the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5346. Piano Literature II.**

This course is designed to expand first-hand familiarity with the literature for the piano, which will be divided into six chronological segments. These segments will discuss the most significant composers and their contemporaries in the 19th and 20th centuries and their major piano compositions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5350. Musical Styles.**

Developing a broader musical understanding through critical listening, technical analyses, and written assignments in various musical styles, including the late classical, romantic, and present eras. Prerequisite: MU 5357 with a grade of "B" or better, or a passing grade on the Graduate Music Theory Placement Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5351. Schenkerian Analysis.**

An introduction to the techniques and methods of music analysis as developed by Heinrich Schenker (1868-1935). This course will cover reductive analysis, structural levels in tonal music, and graphing techniques. Prerequisite: MU 5357 with a grade of "B" or better, or passing grade on music theory entrance exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5352. Foundations of Musicology.**

This course is an introduction to the concepts, methodologies, and scholarly trends central to the discipline of musicology. Prerequisite: MU 5334 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5353. Ensemble Rehearsal Techniques.**

Course is designed for performance ensemble conductors. Includes supervision, administration, and rehearsal techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5355. Pedagogy of Music Theory.**

Developing teaching methods and broader understanding through critical study of materials, organization, techniques, and problems of music theory and comprehensive musicianship courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5357. Graduate Music Theory.**

Graduate-level studies in music theory and aural skills. The course covers melody, harmony, counterpoint, form, as well as sight-singing, performing, and dictation. This course does not earn graduate degree credit. Consent of the graduate studies coordinator is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MU 5358. Advanced Musicianship.**

This course is designed to develop graduate-level skills in music sight reading, dictation, fundamental keyboard skills, and keyboard harmonization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5359. Post-Tonal Music Analysis.**

This course is the study and application of methodologies and terminology that are used to analyze post-tonal concert music of the 20th and 21st centuries. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5360. Music in the United States.**

This course is a study of genres and repertoires of the United States of America from the 1600s to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5361. Methods and Methodologies of Music Analysis.**

This course will cover the examination of selected analytical techniques, methods and methodologies, critical approaches, or musical repertoires, including semiotic analysis, computer-assisted music analysis, analysis of thematic processes, functional analysis, phrase structure analysis, as well as category and feature analysis. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5362. Instrumental Pedagogy I.**

This course explores instrument-specific pedagogy from the beginner through the advanced levels. Students will peruse instrument-specific pedagogical works, solo literature, and articles, and will complete a teaching assignment requiring them to implement pedagogical techniques, diagnose common performance problems, and suggest solutions. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5363. Instrumental Pedagogy II: Teaching Internship.**

This class provides students with supervised teaching experience. In this capstone course, students will apply pedagogical principles for instruction on their primary instrument in the private lesson setting. Their teaching will be monitored and evaluated by an applied professor throughout the semester. Prerequisite: MU 5362 with a grade of "B" or better. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5364. Intelligent Music Teaching.**

This course focuses on fundamental philosophical principles of effective instrumental music instruction and includes application of those principles in teaching. Students will develop a realistic perspective of their strengths and weaknesses as a developing professional and will develop business skills necessary to create a successful private lesson studio.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5365. Computing in Music.**

Development of concepts and skills related to current computer technology in music. Exploration and use of computer software, MIDI, and other productivity tools for application to music education, music administration, music research, and music composition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5366. Salsa Arranging.**

Analysis and arranging music for a Salsa ensemble. Topics will cover instrument ranges, orchestration techniques, and styles. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5367. Music in the Caribbean.**

In this course students will study diverse genres and repertoires of the Caribbean from pre-colonization to the present, with a focus on the Hispanic Circum-Caribbean. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5368. Music in Mexico.**

In this course students will study diverse genres and repertoires of Mexico and Mexican-American communities of the United States from pre-colonization to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5369. History of Music in Latin America.**

This course is a study of the musical panorama of Latin America; Pre-Columbian, colonial, folk, urban, academic, and transnational genres are introduced and discussed in historical, socio-political, and stylistic context. It also includes an introduction to the scope and methods of research in Latin American music studies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5371. Choral Literature I: Madrigal/Partsong.**

This course is a comprehensive study of madrigals and partsongs from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5372. Choral Literature II: Oratorio and Other Secular Major Works.**

This course is a comprehensive study of oratorios and other secular major works from the Western canon of choral repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5373. Choral Literature III: Liturgical Year - Motet, Anthem, Cantata.**

This course is a comprehensive study of motets, anthems, cantatas, and other genres associated with the liturgical calendar and the Revised Common Lectionary from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5374. Choral Literature IV: Missa Brevis, Missa Solemnis, & Requiem.**

This course is a comprehensive study of the Roman Catholic Mass and Requiem Liturgies as they have been set to music by composers associated with the Western canon of choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5375O. Contemporary Discourse in Music Education.**

This course entails an examination of topics from contemporary music education research. Students examine contemporary research and the potential for application in their future/current classrooms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 5377. Innovation in Music Performance: Sound Lab.**

This course is designed to engage students in listening and in sound creation/composition and to develop skills and the capacity for improvisation that will equip artists for readiness in evolving cultural and performance situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5381. Inclusive Excellence in the Music Classroom.**

This course prepares prospective and practicing music teachers to create an equitable, inclusive, and thriving classroom that meets the needs of all students by incorporating culturally responsive teaching, multicultural education, world music pedagogy, ethnomusicological perspectives, and by addressing the needs of students with exceptionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5382. History of Music Education in the United States.**

This course entails an examination of music education in the United States. The major historical developments and contemporary trends are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5392. Introduction to Music Instruction in Higher Education.**

This course provides techniques for Graduate Teaching/Instructional Assistants concerning selected problems in 1) the teaching of music in the classroom, private instruction and ensemble environments; and 2) the development of a career in field in higher education. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MU 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Music 5399B. Students working toward the M.M. degree with a thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Music Ensemble (MUSE)****MUSE 5101. Bobcat Basketball Band.**

The Bobcat Basketball Band performs for all home men's and women's basketball games that do not fall over a university break. The group travels for all postseason tournaments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5102. Salsa Del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5103. Mariachi Nueva Generación.**

This course is a performing ensemble specializing in Mexican folk music.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5104. Panorama Steel Drum Band.**

A performing ensemble specializing in Caribbean steel drum band music.

May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5105. VocaLibre.**

A select vocal ensemble specializing in chamber music, including madrigal or jazz literature. May be repeated for credit. Prerequisite:

Enrollment in major choral ensemble.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5106. Opera Workshop.**

Opera Workshop is a skills-based class designed for developing opera singers to learn and apply skills that prepare them for professional performance.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5107. Opera Theatre.**

Students will learn and perform operatic roles, chamber opera pieces, or one-act operas. Concurrent enrollment in Applied Voice is recommended.

Prerequisite: MUSE 5106 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5108. Orquesta del Rio.**

Performing ensemble specializing in Latin and South American music.

May be repeatable for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required| Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5109. Opera Production.**

This course is designed for students to participate as performers in a full opera production or in the production of opera scenes. It will also prepare students for future professional opera performance engagements.

Concurrent enrollment in Applied Voice is recommended. Prerequisite:

MUSE 5106 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5122. Aurora Voce – Auditioned Treble Voice Choir.**

Aurora Voce is a highly selective chamber chorale ensemble that is open by audition to all treble singers across campus. Performing in this ensemble provides the singers opportunities to explore high quality and challenging repertoire that spans across a wide variety of styles, historical periods, and genres.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5123. Concert Band.**

This ensemble provides playing experiences for non-music majors and music majors who want to improve their skills and serve as a lab ensemble for conducting students. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5124. Women's Choir.**

Performing ensemble specializing in choral literature for women's voices. May be repeated for credit.

**1 Credit Hour. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5125. Men's Choir.**

Performing ensemble specializing in choral literature for men's voices. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5126. Chamber Music.**

Small group performing ensembles focusing on chamber literature of mixed and similar instrumental music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5127. Jazz Combo.**

A small performance ensemble designed to develop improvisational skills and individual musical creativity through performance of standard jazz literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5128. Conducting Seminar.**

A seminar based course focusing on conducting technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or permission by the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MUSE 5129. Afro-Caribbean Lab.**

This course is an experimental ensemble of flexible size and instrumentation that specializes in advanced arranging, performance, and improvisation involving Afro-Caribbean styles and rhythms. An audition is required for placement in this ensemble. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5130. Wind Symphony.**

Major instrumental ensemble comprised of the most outstanding wind and percussion students who are selected by audition. The group is dedicated to the performance of the finest wind repertoire, whether a contemporary works for winds, or transcriptions from the orchestral repertoire. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5131. Symphonic Winds.**

Major instrumental ensemble consisting primarily of music majors and talented non-music majors. This ensemble performs a broad range of full ensemble repertoire, representative of all historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5140. Texas State Chorale.**

Auditioned major choral ensemble specializing in performances of literature from the Renaissance and 20th Century. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5141. University Singers.**

Major choral ensemble that performs a variety of literature, including masterworks from the 17th Century to the present. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5150. Texas State Symphony Orchestra.**

A full symphony orchestra that performs standard orchestra literature, as well as oratorio, concerto, and opera accompaniments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5160. Jazz Ensemble.**

The jazz-based ensemble performs advanced arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5161. Jazz Orchestra.**

The jazz-based ensemble performs intermediate arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5162. Jazz Lab Band.**

The jazz-based ensemble performs beginning arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5170. Accompanying.**

A coaching seminar for pianists to develop reading and accompanying skills. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5180. Mystorium for Contemporary Music Ensemble.**

An ensemble course focusing on the performance and analysis of contemporary music in all styles and media. May be repeated for credit. Prerequisite: Music (Composition Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5190. Guitar Ensemble.**

Chamber guitar ensemble designed to provide interaction with fellow guitarists, develop musicianship as an ensemble performer, and to familiarize the student with music from different periods through a variety of literature. May be repeated for credit. Prerequisite: Music (Guitar Performance Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Music Performance (MUSP)****MUSP 5100. Mariachi Lince de Oro.**

This course provides learning opportunities for students interested in an introduction to the mariachi genre. Traditional mariachi repertoire is distributed, rehearsed, memorized, and performed.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5101. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5127. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5164. Mariachi Melodia Techniques.**

This course provides students with the fundamentals of playing and teaching the melodic instruments associated with the Mariachi ensemble, with specific emphasis on the voice, violin, and trumpet. Topics will cover history, tuning, and stylistic techniques associated with each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5165. Mariachi Armonia Techniques.**

This course provides students with the fundamentals of playing and teaching the rhythm/harmony instruments in the Mariachi ensemble, with specific emphasis in the guitarrón, vihuela/guitar, and the harp. Topics will cover history, tuning, strumming, and stylistic techniques specific to each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5166. Latin Music Methods.**

This course provides students with knowledge that is essential to become effective directors of Mariachi and Salsa ensembles. Instruments, styles, repertory, and resources that are related to these ensembles will be discussed. (MULT).

**1 Credit Hour. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5175. Afro-Cuban Hand Drumming.**

The fundamentals of playing and teaching Afro-Cuban Drums. Topics will cover history and knowledge of styles of the various Afro-Cuban percussion instruments. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5185. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5227. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5230. Applied Keyboard.**

In this course students will participate in supervised private coaching and instruction that focuses on technique, musicality, literature, and performance in the keyboard area. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5285. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5320. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5327. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit.

Prerequisite: Conducting Major or consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5330. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5337. Advanced Conducting.**

Music performance class designed for further development of baton technique, score reading, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5340. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5350. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5360. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5370. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5380. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5385. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Program Overview

Before prospective graduate students are approved for one of the music specializations, they must audition or complete a portfolio review by the appropriate School of Music area faculty. In addition, they must interview with the Coordinator of Music Graduate Studies or area coordinator. Students must have an undergraduate music degree in order to be considered for admission into the M.M. degree with one of the specializations under music.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in music from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in music
- GRE not required
- audition/portfolio and interview (Requirements vary by concentration. Visit the department's website (<http://www.music.txstate.edu/gradprospectivestudents/BecomingaMusicMajor-Grad.html>) for detailed instructions.)
- resume/CV (maximum three pages) including name, address, email address, education (degrees or special certifications), professional experience, scholarship awards, special recognitions, articles or presentations, selected community activity, and other information pertinent to the desired degree and concentration
- statement of purpose (400-600 words with name and email in the header) describing the following:
  - past experiences in voice performance
  - qualities, values, characteristics, and/or skills that make the student a strong candidate for the voice performance program
  - the ways in which the personal learning outcomes of the voice performance program relate to the student's personal and professional goals
  - plans to pursue doctoral studies as well, if applicable
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Music (M.M.) degree with a major in Music concentration in Voice Performance requires 36 semester credit hours. Students who score less than 70% on the music theory placement test will take MU 5357. Students who score less than 70% on the music history placement test will take MU 5330A. Students who score less than 80% on the diction placement exam will take MU 5130B. One year each of TWO of the standard singing languages (French, German, and Italian) is required at the college level or proof of language proficiency at the Beginner Level I and II as determined by the CLEP test. These courses would be in addition to the degree requirements listed below.

### Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MU 5334	Introduction to Graduate Study in Music	3

MU 5350	Musical Styles	3
Choose 6 hours from the following:		6
MU 5310	Music in the Baroque era	
MU 5314	Music in the Twentieth and Twenty-First Centuries	
MU 5315	Music in the Middle Ages and Renaissance	
MU 5316	Music and the Dramatic Arts	
MU 5320	Music in the Eighteenth Century	
MU 5340	Music in the Nineteenth Century	
MU 5341	Jazz Perspectives	
MU 5352	Foundations of Musicology	
MU 5360	Music in the United States	
MU 5367	Music in the Caribbean	
MU 5368	Music in Mexico	
<b>Concentration</b>		
MU 5318	Song Literature	3
MU 5331	Vocal Pedagogy I: Voice Science	3
MUSP 5101	Graduate Recital	1
Choose 8 hours from the following:		8
MUSP 5220	Applied Voice (Take 4 times)	
Choose 3 hours from the following:		3
MUSE 5106	Opera Workshop	
MUSE 5107	Opera Theatre	
MUSE 5109	Opera Production	
<b>Electives</b>		
Choose 6 hours from the following:		6
Any advisor approved MU, MUSE, or MUSP courses		
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirements

All candidates within the graduate music program must pass a comprehensive oral (viva voce) examination. The students will be given a maximum of two attempts in order to pass this examination before being eligible for graduation. Candidates who fail to pass the comprehensive oral examination upon the first try may appeal for re-examination. The re-examination will be administered during the term following the first attempt. Exceptions to this policy are rare and must be approved by the director of graduate studies in music and by the director of the school of music. Failure to pass the required comprehensive oral examination upon the second attempt shall prevent the student from being eligible for graduation.

Master's level courses in Music: MU (p. 2166), MUSE (p. 2173), MUSP (p. 2175)

## Courses Offered

### Music (MU)

#### MU 5113. Independent Study in Music.

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MU 5130A. Writing About Music.**

Focusing on basic writing skills, research, and the use and documentation of sources. Course centers on the process of writing about music. Besides written exercises, the assignments include the study of such professional writing samples as concert reviews, program abstracts, and research essays. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5130B. Diction for Singers.**

An in-depth study of the pronunciation of singing in Italian, German, English, and French incorporating the International Phonetic Alphabet through the use of lecture and laboratory sessions for practical application. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5135. Exploring 21st Century Music Education.**

This course provides music education graduate students a general overview of current issues and questions in music education, techniques for building a better understanding of core issues, and necessary instruction/investigation for thesis/capstone project. Students leave this class with a general knowledge of many current topics and tools to further investigate topics of interest.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5150. Exploring Twenty-first Century Music Education.**

In this course, students will survey current issues and questions in music education while further developing a primary topic of interest for their thesis/capstone project. Topics will be driven by student interest and the discourse within the field but will be centered around: student-centered pedagogies (e.g., democratic education, culturally responsive pedagogy, popular music education, DEI, and social-emotional learning), performance/teacher anxiety (e.g., music performance anxiety, imposter phenomenon, and teacher self-efficacy), teacher experiences and burnout (e.g., early career teacher experiences, expert teacher tendencies, burnout in music education, finances, technology, administrative experiences, and competition), and writing specific content (e.g., refining APA style and.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5192. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5213. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5230A. Music Theory.**

A study of the materials of counterpoint and harmony as evaluated through listening and analysis of literature, and application through composition. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5230B. Aural Learning.**

Development and application of theory concepts through singing, playing, and dictation. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5235. Music Education Capstone.**

This course allows for a wide overview of the field of music education, providing students with a broad scope to facilitate their thesis/capstone project. The course also creates space in the degree for discussions and readings related to the most recent issues and concerns of the field.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5254. Piano Pedagogy I.**

History, methods, and materials of piano pedagogy. Includes the application of technical and musical fundamentals to beginning levels of teaching. Prerequisites: Piano pedagogy or piano performance majors or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5255. Piano Pedagogy II.**

Advanced methods and materials of piano pedagogy. Includes the application of technical and musical fundamentals to intermediate and advanced levels of teaching. Prerequisites: Piano Pedagogy I or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5301. Musicology Seminar in Contemporary Issues.**

This course offers advanced immersion into current trends and literature in the field of musicology, centering a distinct issue and its related frameworks at each time of offering. Sample issues are Music, Gender, and Sexuality; Ecomusicology; Sound Studies; Methods, Methodologies and Frameworks; among others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5310. Music in the Baroque era.**

This course is a study of diverse genres and repertoires from the 1600s to the early 1700s, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5313. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5314. Music in the Twentieth and Twenty-First Centuries.**

In this course the students will study diverse genres and repertoires of the twentieth and twenty-first centuries, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5315. Music in the Middle Ages and Renaissance.**

In this course students will study diverse genres and repertoires from the 450s to the 1600s, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5316. Music and the Dramatic Arts.**

This course covers diverse genres and repertoires in music and the dramatic arts, antiquities through the present, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with such disciplines as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5317. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5318. Song Literature.**

This course is an historical survey of the art song, emphasizing Western European and American repertoires. Students will articulate stylistic differences within the art song repertory, use analytical methods appropriate for a variety of text settings, and develop greater proficiency at writing about music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5320. Music in the Eighteenth Century.**

In this course students will study diverse genres and repertoires in the eighteenth century, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5322. Advanced Instrumental Techniques.**

Evaluation of teaching methods, materials, and literature of wind/percussion or string instruments. Students must have taken instrumental conducting in their undergraduate degree program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5323. Vocal Music Education Methods.**

Study of the anatomy of the human voice and evaluation of the scientific data and historical beliefs concerning voice pedagogy with emphasis in teaching voice in the class, private studio, as well as within a variety of choral settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5325. Research in Music Education I.**

Examination of methodologies, techniques, and procedures for interpreting and conducting research in music education. Relevant studies in music education will be critiqued, with an emphasis on preparation of a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5326. Research in Music Education II.**

A continuation and culmination of a research project in the field of music education as developed and proposed in MU 5325. Prerequisite: MU 5325 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5328. Foundations of Music Education.**

The cognitive psychology, historical perspective, and philosophical issues that provide the basis for contemporary music education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5329. Psychology of Music.**

This course investigates the psychological foundations of music and examines interdisciplinary approaches to the study of music and the human experience. Topics will include music perception, physiological responses to music, music and the brain, musical attributes, music learning, music therapy, and the measurement of musical behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5330A. History and Analysis of Music.**

A comprehensive musicianship approach to the study of music from the earliest times to the present using techniques of stylistic and structural analysis. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5330B. Advanced Theory.**

Principles of form and analysis, counterpoint, orchestration, and contemporary analytic techniques developed through in-depth study of musical repertoire. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5331. Vocal Pedagogy I: Voice Science.**

This course explores the anatomy/physiology of the human voice, the acoustic properties that govern resonance, vocal health, and philosophy of singing and teaching. Co-requisites: MUSP 5120 or MUSP 5220 or MUSP 5320 with a grade of "C" or better, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5332. Vocal Pedagogy II: Methods.**

This is a comparative study of various pedagogical methods and ideas, including historical and contemporary treatises. Students will explore exercises and vocalizes for general voice development, address and correct specific vocal problems, and engage in peer teaching.

Prerequisite: MU 5331 with a grade of "B" or better. Co-requisites: MUSP 5120, MUSP 5220, or MUSP 5320, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5333. Teaching and Learning in the Music Classroom.**

In this course students will examine music content delivery, pedagogy (including lesson planning, instructional design, etc.), assessment, and other aspects of teaching and learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5334. Introduction to Graduate Study in Music.**

Techniques and materials of research, emphasizing bibliography, library usage, collection, and interpretation of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5337. Techniques of Contemporary Music.**

This course surveys a cross-section of important technical innovations and developments in twentieth-century music, with special focus on music since 1945. Students will read documents outlining aesthetics, analyze music written in a variety of styles, write analytical papers, and using a variety of techniques, compose exercises. Enrollment requires a passing grade on the Graduate Music Theory Placement Exam or Instructor approval. Prerequisite: MU 5357 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5340. Music in the Nineteenth Century.**

This course is a study of diverse genres and repertoires in the nineteenth century, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5341. Jazz Perspectives.**

In this course students will study diverse genres, repertoires, discographies, and stylistic trends associated with jazz, with a focus on the Americas. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5342. Jazz Pedagogy.**

Jazz pedagogy is an in-depth study of the history, methodologies, resources, and techniques of jazz pedagogy and the development of jazz ensemble rehearsal skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5343. Jazz Improvisation.**

This course is a detailed study of the evolution of melodic, harmonic, and rhythmic structures used by jazz improvisers and composers from the 1930s to present day.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5344. Jazz Arranging.**

This course provides a comprehensive study of jazz composition, arranging, and improvisation theory, emphasizing writing for jazz ensembles using harmony, scales, and improvisation in a variety of styles, and providing necessary skills to be a successful jazz or commercial composer/arranger.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5345. Piano Literature I.**

This course is designed to expand first-hand familiarity with the literature for the keyboard from the Baroque to Early Romantic era (Bach to Schumann). It will be divided into five chronological segments, discussing the major composers and their contemporaries. Ten composition genres will be discussed during the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5346. Piano Literature II.**

This course is designed to expand first-hand familiarity with the literature for the piano, which will be divided into six chronological segments. These segments will discuss the most significant composers and their contemporaries in the 19th and 20th centuries and their major piano compositions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5350. Musical Styles.**

Developing a broader musical understanding through critical listening, technical analyses, and written assignments in various musical styles, including the late classical, romantic, and present eras. Prerequisite: MU 5357 with a grade of "B" or better, or a passing grade on the Graduate Music Theory Placement Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5351. Schenkerian Analysis.**

An introduction to the techniques and methods of music analysis as developed by Heinrich Schenker (1868-1935). This course will cover reductive analysis, structural levels in tonal music, and graphing techniques. Prerequisite: MU 5357 with a grade of "B" or better, or passing grade on music theory entrance exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5352. Foundations of Musicology.**

This course is an introduction to the concepts, methodologies, and scholarly trends central to the discipline of musicology. Prerequisite: MU 5334 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5353. Ensemble Rehearsal Techniques.**

Course is designed for performance ensemble conductors. Includes supervision, administration, and rehearsal techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5355. Pedagogy of Music Theory.**

Developing teaching methods and broader understanding through critical study of materials, organization, techniques, and problems of music theory and comprehensive musicianship courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5357. Graduate Music Theory.**

Graduate-level studies in music theory and aural skills. The course covers melody, harmony, counterpoint, form, as well as sight-singing, performing, and dictation. This course does not earn graduate degree credit. Consent of the graduate studies coordinator is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MU 5358. Advanced Musicianship.**

This course is designed to develop graduate-level skills in music sight reading, dictation, fundamental keyboard skills, and keyboard harmonization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5359. Post-Tonal Music Analysis.**

This course is the study and application of methodologies and terminology that are used to analyze post-tonal concert music of the 20th and 21st centuries. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5360. Music in the United States.**

This course is a study of genres and repertoires of the United States of America from the 1600s to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5361. Methods and Methodologies of Music Analysis.**

This course will cover the examination of selected analytical techniques, methods and methodologies, critical approaches, or musical repertoires, including semiotic analysis, computer-assisted music analysis, analysis of thematic processes, functional analysis, phrase structure analysis, as well as category and feature analysis. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5362. Instrumental Pedagogy I.**

This course explores instrument-specific pedagogy from the beginner through the advanced levels. Students will peruse instrument-specific pedagogical works, solo literature, and articles, and will complete a teaching assignment requiring them to implement pedagogical techniques, diagnose common performance problems, and suggest solutions. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 or MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5363. Instrumental Pedagogy II: Teaching Internship.**

This class provides students with supervised teaching experience. In this capstone course, students will apply pedagogical principles for instruction on their primary instrument in the private lesson setting. Their teaching will be monitored and evaluated by an applied professor throughout the semester. Prerequisite: MU 5362 with a grade of "B" or better. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 or MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5364. Intelligent Music Teaching.**

This course focuses on fundamental philosophical principles of effective instrumental music instruction and includes application of those principles in teaching. Students will develop a realistic perspective of their strengths and weaknesses as a developing professional and will develop business skills necessary to create a successful private lesson studio.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5365. Computing in Music.**

Development of concepts and skills related to current computer technology in music. Exploration and use of computer software, MIDI, and other productivity tools for application to music education, music administration, music research, and music composition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5366. Salsa Arranging.**

Analysis and arranging music for a Salsa ensemble. Topics will cover instrument ranges, orchestration techniques, and styles. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**MU 5367. Music in the Caribbean.**

In this course students will study diverse genres and repertoires of the Caribbean from pre-colonization to the present, with a focus on the Hispanic Circum-Caribbean. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5368. Music in Mexico.**

In this course students will study diverse genres and repertoires of Mexico and Mexican-American communities of the United States from pre-colonization to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5369. History of Music in Latin America.**

This course is a study of the musical panorama of Latin America; Pre-Columbian, colonial, folk, urban, academic, and transnational genres are introduced and discussed in historical, socio-political, and stylistic context. It also includes an introduction to the scope and methods of research in Latin American music studies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5371. Choral Literature I: Madrigal/Partsong.**

This course is a comprehensive study of madrigals and partsongs from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5372. Choral Literature II: Oratorio and Other Secular Major Works.**

This course is a comprehensive study of oratorios and other secular major works from the Western canon of choral repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5373. Choral Literature III: Liturgical Year - Motet, Anthem, Cantata.**

This course is a comprehensive study of motets, anthems, cantatas, and other genres associated with the liturgical calendar and the Revised Common Lectionary from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5374. Choral Literature IV: Missa Brevis, Missa Solemnis, & Requiem.**

This course is a comprehensive study of the Roman Catholic Mass and Requiem Liturgies as they have been set to music by composers associated with the Western canon of choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 53750. Contemporary Discourse in Music Education.**

This course entails an examination of topics from contemporary music education research. Students examine contemporary research and the potential for application in their future/current classrooms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 5377. Innovation in Music Performance: Sound Lab.**

This course is designed to engage students in listening and in sound creation/composition and to develop skills and the capacity for improvisation that will equip artists for readiness in evolving cultural and performance situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5381. Inclusive Excellence in the Music Classroom.**

This course prepares prospective and practicing music teachers to create an equitable, inclusive, and thriving classroom that meets the needs of all students by incorporating culturally responsive teaching, multicultural education, world music pedagogy, ethnomusicological perspectives, and by addressing the needs of students with exceptionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5382. History of Music Education in the United States.**

This course entails an examination of music education in the United States. The major historical developments and contemporary trends are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5392. Introduction to Music Instruction in Higher Education.**

This course provides techniques for Graduate Teaching/Instructional Assistants concerning selected problems in 1) the teaching of music in the classroom, private instruction and ensemble environments; and 2) the development of a career in field in higher education. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MU 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Music 5399B. Students working toward the M.M. degree with a thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Music Ensemble (MUSE)****MUSE 5101. Bobcat Basketball Band.**

The Bobcat Basketball Band performs for all home men's and women's basketball games that do not fall over a university break. The group travels for all postseason tournaments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5102. Salsa Del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5103. Mariachi Nueva Generación.**

This course is a performing ensemble specializing in Mexican folk music.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5104. Panorama Steel Drum Band.**

A performing ensemble specializing in Caribbean steel drum band music.

May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5105. Vocalibre.**

A select vocal ensemble specializing in chamber music, including madrigal or jazz literature. May be repeated for credit. Prerequisite: Enrollment in major choral ensemble.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5106. Opera Workshop.**

Opera Workshop is a skills-based class designed for developing opera singers to learn and apply skills that prepare them for professional performance.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5107. Opera Theatre.**

Students will learn and perform operatic roles, chamber opera pieces, or one-act operas. Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 5106 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5108. Orquesta del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeatable for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required| Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5109. Opera Production.**

This course is designed for students to participate as performers in a full opera production or in the production of opera scenes. It will also prepare students for future professional opera performance engagements.

Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 5106 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5122. Aurora Voce – Auditioned Treble Voice Choir.**

Aurora Voce is a highly selective chamber chorale ensemble that is open by audition to all treble singers across campus. Performing in this ensemble provides the singers opportunities to explore high quality and challenging repertoire that spans across a wide variety of styles, historical periods, and genres.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5123. Concert Band.**

This ensemble provides playing experiences for non-music majors and music majors who want to improve their skills and serve as a lab ensemble for conducting students. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5124. Women's Choir.**

Performing ensemble specializing in choral literature for women's voices. May be repeated for credit.

**1 Credit Hour. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5125. Men's Choir.**

Performing ensemble specializing in choral literature for men's voices. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5126. Chamber Music.**

Small group performing ensembles focusing on chamber literature of mixed and similar instrumental music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5127. Jazz Combo.**

A small performance ensemble designed to develop improvisational skills and individual musical creativity through performance of standard jazz literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5128. Conducting Seminar.**

A seminar based course focusing on conducting technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or permission by the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5129. Afro-Caribbean Lab.**

This course is an experimental ensemble of flexible size and instrumentation that specializes in advanced arranging, performance, and improvisation involving Afro-Caribbean styles and rhythms. An audition is required for placement in this ensemble. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5130. Wind Symphony.**

Major instrumental ensemble comprised of the most outstanding wind and percussion students who are selected by audition. The group is dedicated to the performance of the finest wind repertoire, whether a contemporary works for winds, or transcriptions from the orchestral repertoire. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5131. Symphonic Winds.**

Major instrumental ensemble consisting primarily of music majors and talented non-music majors. This ensemble performs a broad range of full ensemble repertoire, representative of all historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5140. Texas State Chorale.**

Auditioned major choral ensemble specializing in performances of literature from the Renaissance and 20th Century. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5141. University Singers.**

Major choral ensemble that performs a variety of literature, including masterworks from the 17th Century to the present. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5150. Texas State Symphony Orchestra.**

A full symphony orchestra that performs standard orchestra literature, as well as oratorio, concerto, and opera accompaniments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5160. Jazz Ensemble.**

The jazz-based ensemble performs advanced arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5161. Jazz Orchestra.**

The jazz-based ensemble performs intermediate arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5162. Jazz Lab Band.**

The jazz-based ensemble performs beginning arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5170. Accompanying.**

A coaching seminar for pianists to develop reading and accompanying skills. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5180. Mystery for Contemporary Music Ensemble.**

An ensemble course focusing on the performance and analysis of contemporary music in all styles and media. May be repeated for credit.

Prerequisite: Music (Composition Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5190. Guitar Ensemble.**

Chamber guitar ensemble designed to provide interaction with fellow guitarists, develop musicianship as an ensemble performer, and to familiarize the student with music from different periods through a variety of literature. May be repeated for credit. Prerequisite: Music (Guitar Performance Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Music Performance (MUSP)****MUSP 5100. Mariachi Lince de Oro.**

This course provides learning opportunities for students interested in an introduction to the mariachi genre. Traditional mariachi repertoire is distributed, rehearsed, memorized, and performed.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5101. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5127. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5164. Mariachi Melodia Techniques.**

This course provides students with the fundamentals of playing and teaching the melodic instruments associated with the Mariachi ensemble, with specific emphasis on the voice, violin, and trumpet. Topics will cover history, tuning, and stylistic techniques associated with each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5165. Mariachi Armonia Techniques.**

This course provides students with the fundamentals of playing and teaching the rhythm/harmony instruments in the Mariachi ensemble, with specific emphasis in the guitarrón, vihuela/guitar, and the harp. Topics will cover history, tuning, strumming, and stylistic techniques specific to each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5166. Latin Music Methods.**

This course provides students with knowledge that is essential to become effective directors of Mariachi and Salsa ensembles. Instruments, styles, repertory, and resources that are related to these ensembles will be discussed. (MULT).

**1 Credit Hour. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5175. Afro-Cuban Hand Drumming.**

The fundamentals of playing and teaching Afro-Cuban Drums. Topics will cover history and knowledge of styles of the various Afro-Cuban percussion instruments. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5185. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5227. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5230. Applied Keyboard.**

In this course students will participate in supervised private coaching and instruction that focuses on technique, musicality, literature, and performance in the keyboard area. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**MUSP 5250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5285. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5320. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5327. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5330. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5337. Advanced Conducting.**

Music performance class designed for further development of baton technique, score reading, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5340. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5350. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5360. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5370. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5380. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5385. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Program Overview

Before prospective graduate students are approved for one of the music specializations, they must audition or complete a portfolio review by the appropriate School of Music area faculty. In addition, they must interview with the Coordinator of Music Graduate Studies or area coordinator. Students must have an undergraduate music degree in order to be considered for admission into the M.M. degree with one of the specializations under music.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in music from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in music
- GRE not required
- audition/portfolio and interview (Requirements vary by concentration. Visit the department's website (<http://www.music.txstate.edu/gradprospectivestudents/BecomingaMusicMajor-Grad.html>) for detailed instructions.)
- resume/CV (maximum three pages) including name, address, email address, education (degrees or special certifications), professional experience, scholarship awards, special recognitions, articles or presentations, selected community activity, and other information pertinent to the desired degree and concentration
- statement of purpose (400-600 words with name and email in the header) describing the following:
  - past experiences in woodwind, brass, or percussion performance
  - qualities, values, characteristics, and/or skills that make the student a strong candidate for the woodwind, brass, or percussion performance program
  - the ways in which the personal learning outcomes of the woodwind, brass, or percussion performance program relate to the student's personal and professional goals
  - plans to pursue doctoral studies as well, if applicable
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#walver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Music (M.M.) degree with a major in Music concentration in Woodwind, Brass, or Percussion Performance requires 36 semester credit hours. Students who score less than 70% on the music theory placement test will take MU 5357. Students who score less than 70% on the music history placement test will take MU 5330A. These courses would be in addition to the degree requirements listed below.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MU 5334	Introduction to Graduate Study in Music	3
MU 5350	Musical Styles	3
Choose 6 hours from the following:		6
MU 5310	Music in the Baroque era	

MU 5314	Music in the Twentieth and Twenty-First Centuries	
MU 5315	Music in the Middle Ages and Renaissance	
MU 5316	Music and the Dramatic Arts	
MU 5320	Music in the Eighteenth Century	
MU 5340	Music in the Nineteenth Century	
MU 5341	Jazz Perspectives	
MU 5352	Foundations of Musicology	
MU 5360	Music in the United States	
MU 5367	Music in the Caribbean	
MU 5368	Music in Mexico	
<b>Concentration</b>		
MUSP 5101	Graduate Recital	1
Choose 8 hours from the following:		8
MUSP 5240	Applied Woodwind (Take 4 times)	
MUSP 5250	Applied Brass (Take 4 times)	
MUSP 5270	Applied Percussion (Take 4 times)	
Choose 3 hours from the following:		3
Any MUSE course <sup>1</sup>		
<b>Electives</b>		
Choose 12 hours from the following:		12
Any advisor approved MU, MUSE, or MUSP courses		
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> Students may choose any advisor approved MUSE course(s) to complete the ensemble credits.

## Comprehensive Examination Requirements

All candidates within the graduate music program must pass a comprehensive oral (viva voce) examination. The students will be given a maximum of two attempts in order to pass this examination before being eligible for graduation. Candidates who fail to pass the comprehensive oral examination upon the first try may appeal for re-examination. The re-examination will be administered during the term following the first attempt. Exceptions to this policy are rare and must be approved by the director of graduate studies in music and by the director of the school of music. Failure to pass the required comprehensive oral examination upon the second attempt shall prevent the student from being eligible for graduation.

Master's level courses in Music: MU (p. 2179), MUSE (p. 2185), MUSP (p. 2187)

## Courses Offered Music (MU)

### MU 5113. Independent Study in Music.

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MU 5130A. Writing About Music.

Focusing on basic writing skills, research, and the use and documentation of sources. Course centers on the process of writing about music. Besides written exercises, the assignments include the study of such professional writing samples as concert reviews, program abstracts, and research essays. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

### MU 5130B. Diction for Singers.

An in-depth study of the pronunciation of singing in Italian, German, English, and French incorporating the International Phonetic Alphabet through the use of lecture and laboratory sessions for practical application. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

### MU 5135. Exploring 21st Century Music Education.

This course provides music education graduate students a general overview of current issues and questions in music education, techniques for building a better understanding of core issues, and necessary instruction/investigation for thesis/capstone project. Students leave this class with a general knowledge of many current topics and tools to further investigate topics of interest.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### MU 5150. Exploring Twenty-first Century Music Education.

In this course, students will survey current issues and questions in music education while further developing a primary topic of interest for their thesis/capstone project. Topics will be driven by student interest and the discourse within the field but will be centered around: student-centered pedagogies (e.g., democratic education, culturally responsive pedagogy, popular music education, DEI, and social-emotional learning), performance/teacher anxiety (e.g., music performance anxiety, imposter phenomenon, and teacher self-efficacy), teacher experiences and burnout (e.g., early career teacher experiences, expert teacher tendencies, burnout in music education, finances, technology, administrative experiences, and competition), and writing specific content (e.g., refining APA style and.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MU 5192. Graduate Recital.

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5213. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5230A. Music Theory.**

A study of the materials of counterpoint and harmony as evaluated through listening and analysis of literature, and application through composition. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5230B. Aural Learning.**

Development and application of theory concepts through singing, playing, and dictation. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5235. Music Education Capstone.**

This course allows for a wide overview of the field of music education, providing students with a broad scope to facilitate their thesis/capstone project. The course also creates space in the degree for discussions and readings related to the most recent issues and concerns of the field.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5254. Piano Pedagogy I.**

History, methods, and materials of piano pedagogy. Includes the application of technical and musical fundamentals to beginning levels of teaching. Prerequisites: Piano pedagogy or piano performance majors or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5255. Piano Pedagogy II.**

Advanced methods and materials of piano pedagogy. Includes the application of technical and musical fundamentals to intermediate and advanced levels of teaching. Prerequisites: Piano Pedagogy I or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5301. Musicology Seminar in Contemporary Issues.**

This course offers advanced immersion into current trends and literature in the field of musicology, centering a distinct issue and its related frameworks at each time of offering. Sample issues are Music, Gender, and Sexuality; Ecomusicology; Sound Studies; Methods, Methodologies and Frameworks; among others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5310. Music in the Baroque era.**

This course is a study of diverse genres and repertoires from the 1600s to the early 1700s, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5313. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5314. Music in the Twentieth and Twenty-First Centuries.**

In this course the students will study diverse genres and repertoires of the twentieth and twenty-first centuries, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5315. Music in the Middle Ages and Renaissance.**

In this course students will study diverse genres and repertoires from the 450s to the 1600s, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5316. Music and the Dramatic Arts.**

This course covers diverse genres and repertoires in music and the dramatic arts, antiquities through the present, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with such disciplines as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5317. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5318. Song Literature.**

This course is an historical survey of the art song, emphasizing Western European and American repertoires. Students will articulate stylistic differences within the art song repertory, use analytical methods appropriate for a variety of text settings, and develop greater proficiency at writing about music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5320. Music in the Eighteenth Century.**

In this course students will study diverse genres and repertoires in the eighteenth century, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5322. Advanced Instrumental Techniques.**

Evaluation of teaching methods, materials, and literature of wind/percussion or string instruments. Students must have taken instrumental conducting in their undergraduate degree program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5323. Vocal Music Education Methods.**

Study of the anatomy of the human voice and evaluation of the scientific data and historical beliefs concerning voice pedagogy with emphasis in teaching voice in the class, private studio, as well as within a variety of choral settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5325. Research in Music Education I.**

Examination of methodologies, techniques, and procedures for interpreting and conducting research in music education. Relevant studies in music education will be critiqued, with an emphasis on preparation of a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5326. Research in Music Education II.**

A continuation and culmination of a research project in the field of music education as developed and proposed in MU 5325. Prerequisite: MU 5325 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5328. Foundations of Music Education.**

The cognitive psychology, historical perspective, and philosophical issues that provide the basis for contemporary music education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5329. Psychology of Music.**

This course investigates the psychological foundations of music and examines interdisciplinary approaches to the study of music and the human experience. Topics will include music perception, physiological responses to music, music and the brain, musical attributes, music learning, music therapy, and the measurement of musical behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5330A. History and Analysis of Music.**

A comprehensive musicianship approach to the study of music from the earliest times to the present using techniques of stylistic and structural analysis. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships



**MU 5330B. Advanced Theory.**

Principles of form and analysis, counterpoint, orchestration, and contemporary analytic techniques developed through in-depth study of musical repertoire. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5331. Vocal Pedagogy I: Voice Science.**

This course explores the anatomy/physiology of the human voice, the acoustic properties that govern resonance, vocal health, and philosophy of singing and teaching. Co-requisites: MUSP 5120 or MUSP 5220 or MUSP 5320 with a grade of "C" or better, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5332. Vocal Pedagogy II: Methods.**

This is a comparative study of various pedagogical methods and ideas, including historical and contemporary treatises. Students will explore exercises and vocalizes for general voice development, address and correct specific vocal problems, and engage in peer teaching.

Prerequisite: MU 5331 with a grade of "B" or better. Co-requisites: MUSP 5120, MUSP 5220, or MUSP 5320, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5333. Teaching and Learning in the Music Classroom.**

In this course students will examine music content delivery, pedagogy (including lesson planning, instructional design, etc.), assessment, and other aspects of teaching and learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5334. Introduction to Graduate Study in Music.**

Techniques and materials of research, emphasizing bibliography, library usage, collection, and interpretation of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5337. Techniques of Contemporary Music.**

This course surveys a cross-section of important technical innovations and developments in twentieth-century music, with special focus on music since 1945. Students will read documents outlining aesthetics, analyze music written in a variety of styles, write analytical papers, and using a variety of techniques, compose exercises. Enrollment requires a passing grade on the Graduate Music Theory Placement Exam or Instructor approval. Prerequisite: MU 5357 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5340. Music in the Nineteenth Century.**

This course is a study of diverse genres and repertoires in the nineteenth century, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5341. Jazz Perspectives.**

In this course students will study diverse genres, repertoires, discographies, and stylistic trends associated with jazz, with a focus on the Americas. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5342. Jazz Pedagogy.**

Jazz pedagogy is an in-depth study of the history, methodologies, resources, and techniques of jazz pedagogy and the development of jazz ensemble rehearsal skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5343. Jazz Improvisation.**

This course is a detailed study of the evolution of melodic, harmonic, and rhythmic structures used by jazz improvisers and composers from the 1930s to present day.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5344. Jazz Arranging.**

This course provides a comprehensive study of jazz composition, arranging, and improvisation theory, emphasizing writing for jazz ensembles using harmony, scales, and improvisation in a variety of styles, and providing necessary skills to be a successful jazz or commercial composer/arranger.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5345. Piano Literature I.**

This course is designed to expand first-hand familiarity with the literature for the keyboard from the Baroque to Early Romantic era (Bach to Schumann). It will be divided into five chronological segments, discussing the major composers and their contemporaries. Ten composition genres will be discussed during the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5346. Piano Literature II.**

This course is designed to expand first-hand familiarity with the literature for the piano, which will be divided into six chronological segments. These segments will discuss the most significant composers and their contemporaries in the 19th and 20th centuries and their major piano compositions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5350. Musical Styles.**

Developing a broader musical understanding through critical listening, technical analyses, and written assignments in various musical styles, including the late classical, romantic, and present eras. Prerequisite: MU 5357 with a grade of "B" or better, or a passing grade on the Graduate Music Theory Placement Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5351. Schenkerian Analysis.**

An introduction to the techniques and methods of music analysis as developed by Heinrich Schenker (1868-1935). This course will cover reductive analysis, structural levels in tonal music, and graphing techniques. Prerequisite: MU 5357 with a grade of "B" or better, or passing grade on music theory entrance exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5352. Foundations of Musicology.**

This course is an introduction to the concepts, methodologies, and scholarly trends central to the discipline of musicology. Prerequisite: MU 5334 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5353. Ensemble Rehearsal Techniques.**

Course is designed for performance ensemble conductors. Includes supervision, administration, and rehearsal techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5355. Pedagogy of Music Theory.**

Developing teaching methods and broader understanding through critical study of materials, organization, techniques, and problems of music theory and comprehensive musicianship courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5357. Graduate Music Theory.**

Graduate-level studies in music theory and aural skills. The course covers melody, harmony, counterpoint, form, as well as sight-singing, performing, and dictation. This course does not earn graduate degree credit. Consent of the graduate studies coordinator is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MU 5358. Advanced Musicianship.**

This course is designed to develop graduate-level skills in music sight reading, dictation, fundamental keyboard skills, and keyboard harmonization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5359. Post-Tonal Music Analysis.**

This course is the study and application of methodologies and terminology that are used to analyze post-tonal concert music of the 20th and 21st centuries. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5360. Music in the United States.**

This course is a study of genres and repertoires of the United States of America from the 1600s to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5361. Methods and Methodologies of Music Analysis.**

This course will cover the examination of selected analytical techniques, methods and methodologies, critical approaches, or musical repertoires, including semiotic analysis, computer-assisted music analysis, analysis of thematic processes, functional analysis, phrase structure analysis, as well as category and feature analysis. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5362. Instrumental Pedagogy I.**

This course explores instrument-specific pedagogy from the beginner through the advanced levels. Students will peruse instrument-specific pedagogical works, solo literature, and articles, and will complete a teaching assignment requiring them to implement pedagogical techniques, diagnose common performance problems, and suggest solutions. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5363. Instrumental Pedagogy II: Teaching Internship.**

This class provides students with supervised teaching experience. In this capstone course, students will apply pedagogical principles for instruction on their primary instrument in the private lesson setting. Their teaching will be monitored and evaluated by an applied professor throughout the semester. Prerequisite: MU 5362 with a grade of "B" or better. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 pr MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5364. Intelligent Music Teaching.**

This course focuses on fundamental philosophical principles of effective instrumental music instruction and includes application of those principles in teaching. Students will develop a realistic perspective of their strengths and weaknesses as a developing professional and will develop business skills necessary to create a successful private lesson studio.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5365. Computing in Music.**

Development of concepts and skills related to current computer technology in music. Exploration and use of computer software, MIDI, and other productivity tools for application to music education, music administration, music research, and music composition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5366. Salsa Arranging.**

Analysis and arranging music for a Salsa ensemble. Topics will cover instrument ranges, orchestration techniques, and styles. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5367. Music in the Caribbean.**

In this course students will study diverse genres and repertoires of the Caribbean from pre-colonization to the present, with a focus on the Hispanic Circum-Caribbean. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5368. Music in Mexico.**

In this course students will study diverse genres and repertoires of Mexico and Mexican-American communities of the United States from pre-colonization to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5369. History of Music in Latin America.**

This course is a study of the musical panorama of Latin America; Pre-Columbian, colonial, folk, urban, academic, and transnational genres are introduced and discussed in historical, socio-political, and stylistic context. It also includes an introduction to the scope and methods of research in Latin American music studies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5371. Choral Literature I: Madrigal/Partsong.**

This course is a comprehensive study of madrigals and partsongs from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5372. Choral Literature II: Oratorio and Other Secular Major Works.**

This course is a comprehensive study of oratorios and other secular major works from the Western canon of choral repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5373. Choral Literature III: Liturgical Year - Motet, Anthem, Cantata.**

This course is a comprehensive study of motets, anthems, cantatas, and other genres associated with the liturgical calendar and the Revised Common Lectionary from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5374. Choral Literature IV: Missa Brevis, Missa Solemnis, & Requiem.**

This course is a comprehensive study of the Roman Catholic Mass and Requiem Liturgies as they have been set to music by composers associated with the Western canon of choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5375O. Contemporary Discourse in Music Education.**

This course entails an examination of topics from contemporary music education research. Students examine contemporary research and the potential for application in their future/current classrooms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 5377. Innovation in Music Performance: Sound Lab.**

This course is designed to engage students in listening and in sound creation/composition and to develop skills and the capacity for improvisation that will equip artists for readiness in evolving cultural and performance situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5381. Inclusive Excellence in the Music Classroom.**

This course prepares prospective and practicing music teachers to create an equitable, inclusive, and thriving classroom that meets the needs of all students by incorporating culturally responsive teaching, multicultural education, world music pedagogy, ethnomusicological perspectives, and by addressing the needs of students with exceptionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5382. History of Music Education in the United States.**

This course entails an examination of music education in the United States. The major historical developments and contemporary trends are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5392. Introduction to Music Instruction in Higher Education.**

This course provides techniques for Graduate Teaching/Instructional Assistants concerning selected problems in 1) the teaching of music in the classroom, private instruction and ensemble environments; and 2) the development of a career in field in higher education. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MU 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Music 5399B. Students working toward the M.M. degree with a thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Music Ensemble (MUSE)****MUSE 5101. Bobcat Basketball Band.**

The Bobcat Basketball Band performs for all home men's and women's basketball games that do not fall over a university break. The group travels for all postseason tournaments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5102. Salsa Del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5103. Mariachi Nueva Generación.**

This course is a performing ensemble specializing in Mexican folk music.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5104. Panorama Steel Drum Band.**

A performing ensemble specializing in Caribbean steel drum band music.

May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5105. VocaLibre.**

A select vocal ensemble specializing in chamber music, including madrigal or jazz literature. May be repeated for credit. Prerequisite:

Enrollment in major choral ensemble.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5106. Opera Workshop.**

Opera Workshop is a skills-based class designed for developing opera singers to learn and apply skills that prepare them for professional performance.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5107. Opera Theatre.**

Students will learn and perform operatic roles, chamber opera pieces, or one-act operas. Concurrent enrollment in Applied Voice is recommended.

Prerequisite: MUSE 5106 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5108. Orquesta del Rio.**

Performing ensemble specializing in Latin and South American music.

May be repeatable for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required| Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5109. Opera Production.**

This course is designed for students to participate as performers in a full opera production or in the production of opera scenes. It will also prepare students for future professional opera performance engagements.

Concurrent enrollment in Applied Voice is recommended. Prerequisite:

MUSE 5106 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5122. Aurora Voce – Auditioned Treble Voice Choir.**

Aurora Voce is a highly selective chamber chorale ensemble that is open by audition to all treble singers across campus. Performing in this ensemble provides the singers opportunities to explore high quality and challenging repertoire that spans across a wide variety of styles, historical periods, and genres.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5123. Concert Band.**

This ensemble provides playing experiences for non-music majors and music majors who want to improve their skills and serve as a lab ensemble for conducting students. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5124. Women's Choir.**

Performing ensemble specializing in choral literature for women's voices. May be repeated for credit.

**1 Credit Hour. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5125. Men's Choir.**

Performing ensemble specializing in choral literature for men's voices. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5126. Chamber Music.**

Small group performing ensembles focusing on chamber literature of mixed and similar instrumental music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5127. Jazz Combo.**

A small performance ensemble designed to develop improvisational skills and individual musical creativity through performance of standard jazz literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5128. Conducting Seminar.**

A seminar based course focusing on conducting technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or permission by the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MUSE 5129. Afro-Caribbean Lab.**

This course is an experimental ensemble of flexible size and instrumentation that specializes in advanced arranging, performance, and improvisation involving Afro-Caribbean styles and rhythms. An audition is required for placement in this ensemble. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5130. Wind Symphony.**

Major instrumental ensemble comprised of the most outstanding wind and percussion students who are selected by audition. The group is dedicated to the performance of the finest wind repertoire, whether a contemporary works for winds, or transcriptions from the orchestral repertoire. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5131. Symphonic Winds.**

Major instrumental ensemble consisting primarily of music majors and talented non-music majors. This ensemble performs a broad range of full ensemble repertoire, representative of all historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5140. Texas State Chorale.**

Auditioned major choral ensemble specializing in performances of literature from the Renaissance and 20th Century. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5141. University Singers.**

Major choral ensemble that performs a variety of literature, including masterworks from the 17th Century to the present. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5150. Texas State Symphony Orchestra.**

A full symphony orchestra that performs standard orchestra literature, as well as oratorio, concerto, and opera accompaniments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5160. Jazz Ensemble.**

The jazz-based ensemble performs advanced arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5161. Jazz Orchestra.**

The jazz-based ensemble performs intermediate arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5162. Jazz Lab Band.**

The jazz-based ensemble performs beginning arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5170. Accompanying.**

A coaching seminar for pianists to develop reading and accompanying skills. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5180. Mysticism for Contemporary Music Ensemble.**

An ensemble course focusing on the performance and analysis of contemporary music in all styles and media. May be repeated for credit. Prerequisite: Music (Composition Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5190. Guitar Ensemble.**

Chamber guitar ensemble designed to provide interaction with fellow guitarists, develop musicianship as an ensemble performer, and to familiarize the student with music from different periods through a variety of literature. May be repeated for credit. Prerequisite: Music (Guitar Performance Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Music Performance (MUSP)****MUSP 5100. Mariachi Lince de Oro.**

This course provides learning opportunities for students interested in an introduction to the mariachi genre. Traditional mariachi repertoire is distributed, rehearsed, memorized, and performed.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5101. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5127. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5164. Mariachi Melodia Techniques.**

This course provides students with the fundamentals of playing and teaching the melodic instruments associated with the Mariachi ensemble, with specific emphasis on the voice, violin, and trumpet. Topics will cover history, tuning, and stylistic techniques associated with each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5165. Mariachi Armonia Techniques.**

This course provides students with the fundamentals of playing and teaching the rhythm/harmony instruments in the Mariachi ensemble, with specific emphasis in the guitarrón, vihuela/guitar, and the harp. Topics will cover history, tuning, strumming, and stylistic techniques specific to each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5166. Latin Music Methods.**

This course provides students with knowledge that is essential to become effective directors of Mariachi and Salsa ensembles. Instruments, styles, repertory, and resources that are related to these ensembles will be discussed. (MULT).

**1 Credit Hour. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5175. Afro-Cuban Hand Drumming.**

The fundamentals of playing and teaching Afro-Cuban Drums. Topics will cover history and knowledge of styles of the various Afro-Cuban percussion instruments. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5185. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5227. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5230. Applied Keyboard.**

In this course students will participate in supervised private coaching and instruction that focuses on technique, musicality, literature, and performance in the keyboard area. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5285. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5320. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5327. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit.

Prerequisite: Conducting Major or consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5330. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5337. Advanced Conducting.**

Music performance class designed for further development of baton technique, score reading, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5340. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5350. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5360. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5370. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5380. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5385. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

## Program Overview

Before prospective graduate students are approved for one of the music education specializations, they are expected to have certification to teach public school music, to complete a portfolio review, and to interview with the appropriate music education faculty. Those students who do not possess a teacher's certificate must satisfy a deficiency plan in music education if they are to pursue the M.M. degree with one of the specializations under music education.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in music from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- certification to teach public school music (If student does not meet the certification requirement, the student must satisfy a deficiency plan in music education in order to pursue this degree.)
- GRE not required
- audition/portfolio and interview (Requirements vary by concentration. Visit the department's website (<http://www.music.txstate.edu/gradprospectivestudents/BecomingaMusicMajor-Grad.html>) for detailed instructions.)
- resume/CV (maximum three pages) including name, address, email address, education (degrees or special certifications), professional experience, scholarship awards, special recognitions, articles or presentations, selected community activity, and other information pertinent to the desired degree and concentration
- statement of purpose (400-600 words with name and email in the header) describing the following:
  - past experiences in music
  - qualities, values, characteristics, and/or skills that make the student a strong candidate for the program
  - the ways in which the personal learning outcomes of the program relate to the student's personal and professional goals
  - plans to pursue doctoral studies as well, if applicable
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Music (M.M.) degree with a major in Music Education requires 36 semester credit hours. Students who score less than 70% on the music theory placement test on their first attempt will need to retake the exam or take MU 5357 (<http://mycatalog.txstate.edu/search/?P=MU%205357>). Students who fail the music theory placement test on their second attempt will take MU 5357 (<http://mycatalog.txstate.edu/search/?P=MU%205357>).

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MU 5325	Research in Music Education I	3
MU 5328	Foundations of Music Education	3
MU 5329	Psychology of Music	3

MU 5381	Inclusive Excellence in the Music Classroom	3
MU 5135	Exploring 21st Century Music Education	1
MU 5235	Music Education Capstone	2

### Prescribed Electives

Choose 21 hours from the following: <sup>1, 2, 3</sup> 21

MU 5334	Introduction to Graduate Study in Music	
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### Music Education

MU 5322	Advanced Instrumental Techniques	
MU 5323	Vocal Music Education Methods	
MU 5353	Ensemble Rehearsal Techniques	
MU 5382	History of Music Education in the United States	

### Music Theory

MU 5316	Music and the Dramatic Arts	
MU 5350	Musical Styles	
MU 5351	Schenkerian Analysis	
MU 5358	Advanced Musicianship	
MU 5359	Post-Tonal Music Analysis	
MU 5361	Methods and Methodologies of Music Analysis	

### Musiscology

MU 5310	Music in the Baroque era	
MU 5314	Music in the Twentieth and Twenty-First Centuries	
MU 5315	Music in the Middle Ages and Renaissance	
MU 5316	Music and the Dramatic Arts	
MU 5320	Music in the Eighteenth Century	
MU 5340	Music in the Nineteenth Century	
MU 5341	Jazz Perspectives	
MU 5352	Foundations of Musicology	
MU 5360	Music in the United States	
MU 5367	Music in the Caribbean	
MU 5368	Music in Mexico	

### Jazz

MU 5342	Jazz Pedagogy	
MU 5343	Jazz Improvisation	
MU 5344	Jazz Arranging	
MUSE 5127	Jazz Combo	

### Latin Music Studies

MU 5366	Salsa Arranging	
MU 5385	Mariachi Arranging Techniques	
MUSP 5166	Latin Music Methods	

### Conducting

MU 5371	Choral Literature I: Madrigal/Partsong	
MU 5372	Choral Literature II: Oratorio and Other Secular Major Works	
MU 5373	Choral Literature III: Liturgical Year - Motet, Anthem, Cantata	
MU 5374	Choral Literature IV: Missa Brevis, Missa Solemnis, & Requiem	
MUSP 5127	Applied Conducting	
or MUSP 5227	Applied Conducting	
or MUSP 5337	Advanced Conducting	

### Ensembles

MUSE 5102	Salsa Del Rio	
MUSE 5103	Mariachi Nueva Generación	



MUSE 5108	Orquesta del Rio
MUSE 5109	Opera Production
MUSE 5124	Women's Choir
MUSE 5125	Men's Choir
MUSE 5130	Wind Symphony
MUSE 5131	Symphonic Winds
MUSE 5140	Texas State Chorale
MUSE 5141	University Singers
MUSE 5150	Texas State Symphony Orchestra
MUSE 5160	Jazz Ensemble
MUSE 5161	Jazz Orchestra
MUSE 5180	Mysterium for Contemporary Music Ensemble
<b>Composition</b>	
MU 5337	Techniques of Contemporary Music
MU 5377	Innovation in Music Performance: Sound Lab
MUSP 5180	Applied Composition
or MUSP 52	Applied Composition
or MUSP 53	Applied Composition
MUSP 5185	Electronic Music Composition
<b>Applied Instrumental</b>	
MU 5362	Instrumental Pedagogy I
MU 5363	Instrumental Pedagogy II: Teaching Internship
MUSE 5170	Accompanying
MUSP 5130	Applied Keyboard
or MUSP 52	Applied Keyboard
or MUSP 53	Applied Keyboard
MUSP 5140	Applied Woodwind
or MUSP 52	Applied Woodwind
or MUSP 53	Applied Woodwind
MUSP 5150	Applied Brass
or MUSP 52	Applied Brass
or MUSP 53	Applied Brass
MUSP 5160	Applied String
or MUSP 52	Applied String
or MUSP 53	Applied String
MUSP 5170	Applied Percussion
or MUSP 52	Applied Percussion
or MUSP 53	Applied Percussion
MUSP 5175	Afro-Cuban Hand Drumming
<b>Applied Vocal</b>	
MU 5130B	Diction for Singers
MU 5331	Vocal Pedagogy I: Voice Science
MU 5332	Vocal Pedagogy II: Methods
MUSP 5120	Applied Voice
or MUSP 52	Applied Voice
or MUSP 53	Applied Voice
<b>Other</b>	
MU 5365	Computing in Music
May choose other advisor approved gradaute level course(s)	
<b>Total Hours</b>	

- <sup>1</sup> Students must choose 9 hours of any advisor approved MU, MUSE, or MUSP course(s) with a focus **outside music education (one required theory and one required musicology class included)**.
- <sup>2</sup> Students may select electives outside the school of music for substitution, pending advisor approval.
- <sup>3</sup> All elective courses are subject to course offering schedules. Not all courses listed will be available.

## Music Education Project

Students are required to submit a Music Education Project while enrolled in MU 5235 Music Education Capstone. Defending this project will fulfill the comprehensive examination requirements and capstone projects will include a written component.

The students will be given a maximum of two attempts in order to pass this defense before being eligible for graduation. Candidates who fail to pass the defense upon the first try may appeal for re-examination by contacting the Director of Graduate Studies. Second attempts at the defense must occur no less than three weeks after the initial attempt or no later than the end of the following semester and may involve supplementary materials, additional assignments, or meetings with their committee at the discretion of the committee. Failure to pass the required defense upon the second attempt shall prevent the student from being eligible for graduation. Students are encouraged to schedule exams three weeks or more before the final class day of the semester.

Master's level courses in Music: MU (p. 2192), MUSE (p. 2199), MUSP (p. 2201)

## Courses Offered

### Music (MU)

**MU 5113. Independent Study in Music.**  
Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.  
**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MU 5130A. Writing About Music.**  
Focusing on basic writing skills, research, and the use and documentation of sources. Course centers on the process of writing about music. Besides written exercises, the assignments include the study of such professional writing samples as concert reviews, program abstracts, and research essays. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.  
**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics  
**Grade Mode:** Leveling/Assistantships

**MU 5130B. Diction for Singers.**

An in-depth study of the pronunciation of singing in Italian, German, English, and French incorporating the International Phonetic Alphabet through the use of lecture and laboratory sessions for practical application. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5135. Exploring 21st Century Music Education.**

This course provides music education graduate students a general overview of current issues and questions in music education, techniques for building a better understanding of core issues, and necessary instruction/investigation for thesis/capstone project. Students leave this class with a general knowledge of many current topics and tools to further investigate topics of interest.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5150. Exploring Twenty-first Century Music Education.**

In this course, students will survey current issues and questions in music education while further developing a primary topic of interest for their thesis/capstone project. Topics will be driven by student interest and the discourse within the field but will be centered around: student-centered pedagogies (e.g., democratic education, culturally responsive pedagogy, popular music education, DEI, and social-emotional learning), performance/teacher anxiety (e.g., music performance anxiety, imposter phenomenon, and teacher self-efficacy), teacher experiences and burnout (e.g., early career teacher experiences, expert teacher tendencies, burnout in music education, finances, technology, administrative experiences, and competition), and writing specific content (e.g., refining APA style and.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5192. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5213. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5230A. Music Theory.**

A study of the materials of counterpoint and harmony as evaluated through listening and analysis of literature, and application through composition. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5230B. Aural Learning.**

Development and application of theory concepts through singing, playing, and dictation. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5235. Music Education Capstone.**

This course allows for a wide overview of the field of music education, providing students with a broad scope to facilitate their thesis/capstone project. The course also creates space in the degree for discussions and readings related to the most recent issues and concerns of the field.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5254. Piano Pedagogy I.**

History, methods, and materials of piano pedagogy. Includes the application of technical and musical fundamentals to beginning levels of teaching. Prerequisites: Piano pedagogy or piano performance majors or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5255. Piano Pedagogy II.**

Advanced methods and materials of piano pedagogy. Includes the application of technical and musical fundamentals to intermediate and advanced levels of teaching. Prerequisites: Piano Pedagogy I or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5301. Musicology Seminar in Contemporary Issues.**

This course offers advanced immersion into current trends and literature in the field of musicology, centering a distinct issue and its related frameworks at each time of offering. Sample issues are Music, Gender, and Sexuality; Ecomusicology; Sound Studies; Methods, Methodologies and Frameworks; among others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5310. Music in the Baroque era.**

This course is a study of diverse genres and repertoires from the 1600s to the early 1700s, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5313. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5314. Music in the Twentieth and Twenty-First Centuries.**

In this course the students will study diverse genres and repertoires of the twentieth and twenty-first centuries, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5315. Music in the Middle Ages and Renaissance.**

In this course students will study diverse genres and repertoires from the 450s to the 1600s, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5316. Music and the Dramatic Arts.**

This course covers diverse genres and repertoires in music and the dramatic arts, antiquities through the present, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with such disciplines as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5317. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5318. Song Literature.**

This course is an historical survey of the art song, emphasizing Western European and American repertoires. Students will articulate stylistic differences within the art song repertory, use analytical methods appropriate for a variety of text settings, and develop greater proficiency at writing about music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5320. Music in the Eighteenth Century.**

In this course students will study diverse genres and repertoires in the eighteenth century, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5322. Advanced Instrumental Techniques.**

Evaluation of teaching methods, materials, and literature of wind/percussion or string instruments. Students must have taken instrumental conducting in their undergraduate degree program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5323. Vocal Music Education Methods.**

Study of the anatomy of the human voice and evaluation of the scientific data and historical beliefs concerning voice pedagogy with emphasis in teaching voice in the class, private studio, as well as within a variety of choral settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5325. Research in Music Education I.**

Examination of methodologies, techniques, and procedures for interpreting and conducting research in music education. Relevant studies in music education will be critiqued, with an emphasis on preparation of a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5326. Research in Music Education II.**

A continuation and culmination of a research project in the field of music education as developed and proposed in MU 5325. Prerequisite: MU 5325 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5328. Foundations of Music Education.**

The cognitive psychology, historical perspective, and philosophical issues that provide the basis for contemporary music education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5329. Psychology of Music.**

This course investigates the psychological foundations of music and examines interdisciplinary approaches to the study of music and the human experience. Topics will include music perception, physiological responses to music, music and the brain, musical attributes, music learning, music therapy, and the measurement of musical behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5330A. History and Analysis of Music.**

A comprehensive musicianship approach to the study of music from the earliest times to the present using techniques of stylistic and structural analysis. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5330B. Advanced Theory.**

Principles of form and analysis, counterpoint, orchestration, and contemporary analytic techniques developed through in-depth study of musical repertoire. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5331. Vocal Pedagogy I: Voice Science.**

This course explores the anatomy/physiology of the human voice, the acoustic properties that govern resonance, vocal health, and philosophy of singing and teaching. Co-requisites: MUSP 5120 or MUSP 5220 or MUSP 5320 with a grade of "C" or better, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5332. Vocal Pedagogy II: Methods.**

This is a comparative study of various pedagogical methods and ideas, including historical and contemporary treatises. Students will explore exercises and vocalizes for general voice development, address and correct specific vocal problems, and engage in peer teaching.

Prerequisite: MU 5331 with a grade of "B" or better. Co-requisites: MUSP 5120, MUSP 5220, or MUSP 5320, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5333. Teaching and Learning in the Music Classroom.**

In this course students will examine music content delivery, pedagogy (including lesson planning, instructional design, etc.), assessment, and other aspects of teaching and learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5334. Introduction to Graduate Study in Music.**

Techniques and materials of research, emphasizing bibliography, library usage, collection, and interpretation of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5337. Techniques of Contemporary Music.**

This course surveys a cross-section of important technical innovations and developments in twentieth-century music, with special focus on music since 1945. Students will read documents outlining aesthetics, analyze music written in a variety of styles, write analytical papers, and using a variety of techniques, compose exercises. Enrollment requires a passing grade on the Graduate Music Theory Placement Exam or Instructor approval. Prerequisite: MU 5357 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5340. Music in the Nineteenth Century.**

This course is a study of diverse genres and repertoires in the nineteenth century, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5341. Jazz Perspectives.**

In this course students will study diverse genres, repertoires, discographies, and stylistic trends associated with jazz, with a focus on the Americas. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5342. Jazz Pedagogy.**

Jazz pedagogy is an in-depth study of the history, methodologies, resources, and techniques of jazz pedagogy and the development of jazz ensemble rehearsal skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5343. Jazz Improvisation.**

This course is a detailed study of the evolution of melodic, harmonic, and rhythmic structures used by jazz improvisers and composers from the 1930s to present day.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5344. Jazz Arranging.**

This course provides a comprehensive study of jazz composition, arranging, and improvisation theory, emphasizing writing for jazz ensembles using harmony, scales, and improvisation in a variety of styles, and providing necessary skills to be a successful jazz or commercial composer/arranger.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5345. Piano Literature I.**

This course is designed to expand first-hand familiarity with the literature for the keyboard from the Baroque to Early Romantic era (Bach to Schumann). It will be divided into five chronological segments, discussing the major composers and their contemporaries. Ten composition genres will be discussed during the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5346. Piano Literature II.**

This course is designed to expand first-hand familiarity with the literature for the piano, which will be divided into six chronological segments. These segments will discuss the most significant composers and their contemporaries in the 19th and 20th centuries and their major piano compositions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5350. Musical Styles.**

Developing a broader musical understanding through critical listening, technical analyses, and written assignments in various musical styles, including the late classical, romantic, and present eras. Prerequisite: MU 5357 with a grade of "B" or better, or a passing grade on the Graduate Music Theory Placement Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5351. Schenkerian Analysis.**

An introduction to the techniques and methods of music analysis as developed by Heinrich Schenker (1868-1935). This course will cover reductive analysis, structural levels in tonal music, and graphing techniques. Prerequisite: MU 5357 with a grade of "B" or better, or passing grade on music theory entrance exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5352. Foundations of Musicology.**

This course is an introduction to the concepts, methodologies, and scholarly trends central to the discipline of musicology. Prerequisite: MU 5334 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5353. Ensemble Rehearsal Techniques.**

Course is designed for performance ensemble conductors. Includes supervision, administration, and rehearsal techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5355. Pedagogy of Music Theory.**

Developing teaching methods and broader understanding through critical study of materials, organization, techniques, and problems of music theory and comprehensive musicianship courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5357. Graduate Music Theory.**

Graduate-level studies in music theory and aural skills. The course covers melody, harmony, counterpoint, form, as well as sight-singing, performing, and dictation. This course does not earn graduate degree credit. Consent of the graduate studies coordinator is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships



**MU 5358. Advanced Musicianship.**

This course is designed to develop graduate-level skills in music sight reading, dictation, fundamental keyboard skills, and keyboard harmonization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5359. Post-Tonal Music Analysis.**

This course is the study and application of methodologies and terminology that are used to analyze post-tonal concert music of the 20th and 21st centuries. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5360. Music in the United States.**

This course is a study of genres and repertoires of the United States of America from the 1600s to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5361. Methods and Methodologies of Music Analysis.**

This course will cover the examination of selected analytical techniques, methods and methodologies, critical approaches, or musical repertoires, including semiotic analysis, computer-assisted music analysis, analysis of thematic processes, functional analysis, phrase structure analysis, as well as category and feature analysis. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5362. Instrumental Pedagogy I.**

This course explores instrument-specific pedagogy from the beginner through the advanced levels. Students will peruse instrument-specific pedagogical works, solo literature, and articles, and will complete a teaching assignment requiring them to implement pedagogical techniques, diagnose common performance problems, and suggest solutions. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 or MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5363. Instrumental Pedagogy II: Teaching Internship.**

This class provides students with supervised teaching experience. In this capstone course, students will apply pedagogical principles for instruction on their primary instrument in the private lesson setting. Their teaching will be monitored and evaluated by an applied professor throughout the semester. Prerequisite: MU 5362 with a grade of "B" or better. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 or MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5364. Intelligent Music Teaching.**

This course focuses on fundamental philosophical principles of effective instrumental music instruction and includes application of those principles in teaching. Students will develop a realistic perspective of their strengths and weaknesses as a developing professional and will develop business skills necessary to create a successful private lesson studio.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5365. Computing in Music.**

Development of concepts and skills related to current computer technology in music. Exploration and use of computer software, MIDI, and other productivity tools for application to music education, music administration, music research, and music composition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5366. Salsa Arranging.**

Analysis and arranging music for a Salsa ensemble. Topics will cover instrument ranges, orchestration techniques, and styles. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5367. Music in the Caribbean.**

In this course students will study diverse genres and repertoires of the Caribbean from pre-colonization to the present, with a focus on the Hispanic Circum-Caribbean. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5368. Music in Mexico.**

In this course students will study diverse genres and repertoires of Mexico and Mexican-American communities of the United States from pre-colonization to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.(MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5369. History of Music in Latin America.**

This course is a study of the musical panorama of Latin America; Pre-Columbian, colonial, folk, urban, academic, and transnational genres are introduced and discussed in historical, socio-political, and stylistic context. It also includes an introduction to the scope and methods of research in Latin American music studies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5371. Choral Literature I: Madrigal/Partsong.**

This course is a comprehensive study of madrigals and partsongs from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5372. Choral Literature II: Oratorio and Other Secular Major Works.**

This course is a comprehensive study of oratorios and other secular major works from the Western canon of choral repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5373. Choral Literature III: Liturgical Year - Motet, Anthem, Cantata.**

This course is a comprehensive study of motets, anthems, cantatas, and other genres associated with the liturgical calendar and the Revised Common Lectionary from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5374. Choral Literature IV: Missa Brevis, Missa Solemnis, & Requiem.**

This course is a comprehensive study of the Roman Catholic Mass and Requiem Liturgies as they have been set to music by composers associated with the Western canon of choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 53750. Contemporary Discourse in Music Education.**

This course entails an examination of topics from contemporary music education research. Students examine contemporary research and the potential for application in their future/current classrooms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 5377. Innovation in Music Performance: Sound Lab.**

This course is designed to engage students in listening and in sound creation/composition and to develop skills and the capacity for improvisation that will equip artists for readiness in evolving cultural and performance situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5381. Inclusive Excellence in the Music Classroom.**

This course prepares prospective and practicing music teachers to create an equitable, inclusive, and thriving classroom that meets the needs of all students by incorporating culturally responsive teaching, multicultural education, world music pedagogy, ethnomusicological perspectives, and by addressing the needs of students with exceptionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5382. History of Music Education in the United States.**

This course entails an examination of music education in the United States. The major historical developments and contemporary trends are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5392. Introduction to Music Instruction in Higher Education.**

This course provides techniques for Graduate Teaching/Instructional Assistants concerning selected problems in 1) the teaching of music in the classroom, private instruction and ensemble environments; and 2) the development of a career in field in higher education. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MU 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Music 5399B. Students working toward the M.M. degree with a thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Music Ensemble (MUSE)

**MUSE 5101. Bobcat Basketball Band.**

The Bobcat Basketball Band performs for all home men's and women's basketball games that do not fall over a university break. The group travels for all postseason tournaments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5102. Salsa Del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5103. Mariachi Nueva Generación.**

This course is a performing ensemble specializing in Mexican folk music.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5104. Panorama Steel Drum Band.**

A performing ensemble specializing in Caribbean steel drum band music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5105. VocaLibre.**

A select vocal ensemble specializing in chamber music, including madrigal or jazz literature. May be repeated for credit. Prerequisite: Enrollment in major choral ensemble.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5106. Opera Workshop.**

Opera Workshop is a skills-based class designed for developing opera singers to learn and apply skills that prepare them for professional performance.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5107. Opera Theatre.**

Students will learn and perform operatic roles, chamber opera pieces, or one-act operas. Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 5106 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5108. Orquesta del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeatable for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required| Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5109. Opera Production.**

This course is designed for students to participate as performers in a full opera production or in the production of opera scenes. It will also prepare students for future professional opera performance engagements. Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 5106 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5122. Aurora Voce – Auditioned Treble Voice Choir.**

Aurora Voce is a highly selective chamber chorale ensemble that is open by audition to all treble singers across campus. Performing in this ensemble provides the singers opportunities to explore high quality and challenging repertoire that spans across a wide variety of styles, historical periods, and genres.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5123. Concert Band.**

This ensemble provides playing experiences for non-music majors and music majors who want to improve their skills and serve as a lab ensemble for conducting students. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5124. Women's Choir.**

Performing ensemble specializing in choral literature for women's voices. May be repeated for credit.

**1 Credit Hour. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5125. Men's Choir.**

Performing ensemble specializing in choral literature for men's voices. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5126. Chamber Music.**

Small group performing ensembles focusing on chamber literature of mixed and similar instrumental music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5127. Jazz Combo.**

A small performance ensemble designed to develop improvisational skills and individual musical creativity through performance of standard jazz literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5128. Conducting Seminar.**

A seminar based course focusing on conducting technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or permission by the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5129. Afro-Caribbean Lab.**

This course is an experimental ensemble of flexible size and instrumentation that specializes in advanced arranging, performance, and improvisation involving Afro-Caribbean styles and rhythms. An audition is required for placement in this ensemble. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5130. Wind Symphony.**

Major instrumental ensemble comprised of the most outstanding wind and percussion students who are selected by audition. The group is dedicated to the performance of the finest wind repertoire, whether a contemporary works for winds, or transcriptions from the orchestral repertoire. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5131. Symphonic Winds.**

Major instrumental ensemble consisting primarily of music majors and talented non-music majors. This ensemble performs a broad range of full ensemble repertoire, representative of all historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5140. Texas State Chorale.**

Auditioned major choral ensemble specializing in performances of literature from the Renaissance and 20th Century. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5141. University Singers.**

Major choral ensemble that performs a variety of literature, including masterworks from the 17th Century to the present. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5150. Texas State Symphony Orchestra.**

A full symphony orchestra that performs standard orchestra literature, as well as oratorio, concerto, and opera accompaniments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5160. Jazz Ensemble.**

The jazz-based ensemble performs advanced arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5161. Jazz Orchestra.**

The jazz-based ensemble performs intermediate arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5162. Jazz Lab Band.**

The jazz-based ensemble performs beginning arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5170. Accompanying.**

A coaching seminar for pianists to develop reading and accompanying skills. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5180. Mysterium for Contemporary Music Ensemble.**

An ensemble course focusing on the performance and analysis of contemporary music in all styles and media. May be repeated for credit.

Prerequisite: Music (Composition Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5190. Guitar Ensemble.**

Chamber guitar ensemble designed to provide interaction with fellow guitarists, develop musicianship as an ensemble performer, and to familiarize the student with music from different periods through a variety of literature. May be repeated for credit. Prerequisite: Music (Guitar Performance Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Music Performance (MUSP)****MUSP 5100. Mariachi Lince de Oro.**

This course provides learning opportunities for students interested in an introduction to the mariachi genre. Traditional mariachi repertoire is distributed, rehearsed, memorized, and performed.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5101. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5127. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**MUSP 5160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5164. Mariachi Melodia Techniques.**

This course provides students with the fundamentals of playing and teaching the melodic instruments associated with the Mariachi ensemble, with specific emphasis on the voice, violin, and trumpet. Topics will cover history, tuning, and stylistic techniques associated with each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5165. Mariachi Armonia Techniques.**

This course provides students with the fundamentals of playing and teaching the rhythm/harmony instruments in the Mariachi ensemble, with specific emphasis in the guitarrón, vihuela/guitar, and the harp. Topics will cover history, tuning, strumming, and stylistic techniques specific to each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5166. Latin Music Methods.**

This course provides students with knowledge that is essential to become effective directors of Mariachi and Salsa ensembles. Instruments, styles, repertory, and resources that are related to these ensembles will be discussed. (MULT).

**1 Credit Hour. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5175. Afro-Cuban Hand Drumming.**

The fundamentals of playing and teaching Afro-Cuban Drums. Topics will cover history and knowledge of styles of the various Afro-Cuban percussion instruments. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5185. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5227. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5230. Applied Keyboard.**

In this course students will participate in supervised private coaching and instruction that focuses on technique, musicality, literature, and performance in the keyboard area. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5285. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5320. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5327. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5330. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5337. Advanced Conducting.**

Music performance class designed for further development of baton technique, score reading, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5340. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5350. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5360. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

MUSP 5370. Applied Percussion.

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.  
**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

MUSP 5380. Applied Composition.

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.  
**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

MUSP 5385. Electronic Music Composition.

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.  
**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

The graduate minor in Music requires 12 semester credit hours of advisor-approved courses. Graduate students majoring in other departments should meet with the director of graduate studies in music to choose the courses.

The graduate minor in Music Education requires 12 semester credit hours of courses chosen in consultation with the graduate advisor. Graduate students majoring in other departments should meet with the director of graduate studies in music to choose the courses.

Program Overview

The graduate certificate in Music Performance requires 15 semester credit hours.

Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$20 nonrefundable application fee

or

- \$60 nonrefundable application fee for applications with international credentials

- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.5 overall GPA or a 2.5 GPA in the last 60 hours of undergraduate course work
- minimum 3.0 GPA in all completed graduate course work (if applicable)
- GRE not required
- audition: The Graduate College application must be complete before the School of Music will accept audition materials. Candidates will upload audition videos to Accepted (media only).

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

The certificate in Music Performance requires 15 semester credit hours.

Course Requirements

Code	Title	Hours
MU 5192	Graduate Recital	1
Applied Lessons		
Choose 6 hours		6
MUSP 5320	Applied Voice	
MUSP 5330	Applied Keyboard	
MUSP 5340	Applied Woodwind	
MUSP 5350	Applied Brass	
MUSP 5360	Applied String	
MUSP 5370	Applied Percussion	
Music Ensemble Electives		
Choose 2 courses		2
MUSE 5102	Salsa Del Rio	
MUSE 5103	Mariachi Nueva Generación	
MUSE 5104	Panorama Steel Drum Band	
MUSE 5105	VocaLibre	
MUSE 5106	Opera Workshop	
MUSE 5123	Concert Band	
MUSE 5124	Women's Choir	
MUSE 5125	Men's Choir	
MUSE 5126	Chamber Music	
MUSE 5127	Jazz Combo	

MUSE 5130	Wind Symphony
MUSE 5131	Symphonic Winds
MUSE 5140	Texas State Chorale
MUSE 5141	University Singers
MUSE 5150	Texas State Symphony Orchestra
MUSE 5160	Jazz Ensemble
MUSE 5161	Jazz Orchestra
MUSE 5162	Jazz Lab Band
MUSE 5170	Accompanying
MUSE 5180	Mysterium for Contemporary Music Ensemble
MUSE 5190	Guitar Ensemble

#### Additional Graduate Music Electives

Choose 6 hours from MU, MUSE, or MUSP 6

**Total Hours** 15

Theatre Center Room 101

T: 512.245.2147 F: 512.245.8440

[www.theatreanddance.txst.edu](http://www.theatreanddance.txst.edu) (<https://www.theatreanddance.txst.edu/>)

The Department of Theatre and Dance is committed to equity and representation that reflects the student population, builds community, teaches compassion, and condemns intolerance. We are committed to advancing social justice by providing equal opportunity for all students without biases toward race, ethnicity, gender, age, disability, sexual orientation, gender identity, religion, economic status, or political beliefs. As artists, educators and scholars, we strive to achieve a creative collaboration in our classrooms, rehearsal, and performance spaces with a focus and dedication to equitable representation while actively embracing traditionally under-represented groups and their contributions to the canon.

Graduate students at Texas State work closely with professional artist-educators who have earned national and international recognition. Our Faculty have performed on Broadway, starred in television shows, danced in professional companies, worked at Tony-Award winning regional theatres, produced award winning films, choreographed for dance productions and musicals, had designs displayed internationally, presented films at Cannes Film Festival and SXSW, published books and articles, and had their plays produced in New York and abroad. We are large enough to have a full complement of highly qualified specialists, yet small enough to provide personal attention to our students. Specializations include directing, scenic design, lighting design, and costume design with the option to have a dual emphasis in the design areas. There are ample opportunities for graduate students to gain practical experience working on realized productions. Recent production include: *Into the Woods*, *The Curious Incident of the Dog in the Nighttime*, *Mala Hierba*, *Life Sucks*, *Spring Awakening*, *The Tempest*, *Gloria*, *El Nogalar*, *Father Comes Home From the Wars*, *Pippin*, *Macbeth*, *Opening Dorr Dance Theatre*, and *Merge Dance Company*.

We embrace the potential for theatre to create community and change world views. We seek:

- to provide a stimulating, diverse and creative environment in which students deepen their aesthetic experience, while strengthening a broad range of theatre skills,
- to preserve the traditions of dramatic literature, while encouraging experimentation in new theatrical forms, ideas and insights.

- to make a significant cultural impact on the campus and throughout the region served by the university.

## Facilities

Classes take place in the university's distinctive Theatre Center, Performing Arts Center, and new Live Oak Film and TV Studios. Together these spaces include three theatres and a film sound stage that provide students the opportunity to experience a variety of production styles. They house completely equipped scenic, prop, paint, and costume shops, sound recording/foley studio, editing labs, rehearsal rooms, a computer drafting lab, classrooms, and resources for both research and teaching.

## Financial Assistance

Graduate students may qualify for assistantships and scholarships, as well as waivers for out-of-state tuition. Contact the department for more information.

## Master of Arts (M.A.)

- Major in Theatre (Dramaturgy Concentration) (p. 2205)
- Major in Theatre (History and Criticism Concentration) (p. 2212)

## Master of Fine Arts (M.F.A.)

- Major in Theatre (Design Concentration) (<http://mycatalog.txstate.edu/graduate/fine-arts-communication/theatre-dance/theatre-design-mfa/>)
- Major in Theatre (Directing Concentration) (<http://mycatalog.txstate.edu/graduate/fine-arts-communication/theatre-dance/theatre-directing-mfa/>)
- Major in Theatre (Dramatic Writing Concentration) (p. 2232)

## Minor

- Theatre (p. 2239)

## Program Overview

A Master of Arts (M.A.) degree with a major in Theatre offers specializations in history-criticism and dramaturgy. The M.A. will prepare students to teach at the secondary or community college level, to continue graduate education at the doctoral level, or to seek a career in community or professional theatre.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials

- baccalaureate degree (preferably a B.A. or B.F.A. in theatre) from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 24 undergraduate hours in theatre
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
- resume/CV
- statement of purpose indicating the student's proposed area of specialty and detailing past practical experience
- two letters of recommendation
- non-academic practical theatre experience

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

Degree Requirements

The Master of Arts (M.A.) degree with a major in Theatre concentration in Dramaturgy requires 36 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

Course Requirements

Code	Title	Hours
Required Courses		
TH 5301	Drama Research	3
TH 5367	Studies in Dramatic Theory and Criticism	3
Concentration		
TH 5360	Problems in Theatre	3
TH 5365	Backgrounds of Modern Drama	3
TH 5369	Contemporary World Theatre and Drama	3
TH 5371	Classical and Renaissance Drama	3
TH 5372	Theory and Practice of Dramaturgy	3
TH 5398	Final Creative Project	3
Prescribed Electives		
Choose 6 hours from the following:		6

TH 5363	Directing for Film
TH 5364	MFA Directing Seminar I
TH 5366	
Minor	
Choose a 6-hour advisor-approved minor	
Total Hours	
36	

Comprehensive Examination Requirements

All candidates for graduate degrees must pass one or more comprehensive examinations.

Master's level courses in Theatre: TH

Courses Offered Theatre (TH)

**TH 5199B. Thesis.**  
This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.  
**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**TH 5299B. Thesis.**  
This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.  
**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**TH 5301. Drama Research.**  
An examination of problems and research techniques in drama. Historical, critical, descriptive, and experimental research approaches will be surveyed and basic procedures in research report writing will be considered.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**TH 5302. Text Analysis, Research and Interpretation.**  
This course reviews various methods of analysis of a dramatic text. This includes inductive, deductive, structural, and methodical approaches. It also examines techniques for production research and explores issues of interpretation that affect the development of a play's translation into a production on stage.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter



**TH 5303. Devising Theatre.**

This interdisciplinary course will focus on the creation of original work that incorporates a strong visual component. Individual artistic development is addressed along with the particular challenges of devising theatrical work through non-traditional methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5304. Web Series Creation.**

This course focuses on the techniques of creating a web series, script writing and development. It explores the fundamentals of film production and web publication, including marketing and identifying a target audience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5305. Web Series Creation II.**

This course is a continuation of the Web Series course and specifically focuses on production of a web series. Students will write, direct, and produce their own web series for publication on the internet. Prerequisite: TH 5304 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5306. Fundamentals of Environment for the Stage.**

This course is a practical exploration of the processes and techniques for the development of the stage environment by scenic and lighting designers within the context of live production. Theoretical projects provide focus on establishing a common vernacular and emphasize analysis, research, and problem-solving. In-class studio sessions develop efficient presentation techniques and effective graphic skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5307. Fundamentals of Character for the Stage.**

This course is a practical exploration of the processes and techniques for character development from the perspective of a director and costume designer within the context of live production. Theoretical projects provide focus on the development of a common vernacular and emphasize problem-solving skills. In-class studio sessions will develop analysis, research, clear and efficient presentation skills, as well as graphic skill development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5308. Musical Theatre Choreography.**

This course examines the role of choreography in musical theatre and explores the choreographic process. Students study the history and theoretical principles of musical theatre choreography as well as obtain the practical skills needed to create staging and choreography for a musical theatre production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5310. Graduate Assistant Development.**

This course is required as a condition of employment for graduate teaching and instructional assistants. This course covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TH 5312. Collaborative Theory.**

This course examines the nature of collaboration within the context of the live entertainment production processes. Particular attention is focused on understanding psychological/sociological viewpoints in effective collaborative work environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5313. History of Directing and Scenography.**

This course is a historical survey of the work of directors and designers. Particular emphasis will be on seminal production plans for notable directors and designers of the 20th and 21st centuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5314. History of Material Culture - Pre 20th Century.**

This course is an historical survey of material culture and its influence on theatrical production pre-twentieth century. Attention is placed on research of the architecture, interiors, fashion, theatre literature, and technical innovations of seminal periods from Greco-Roman through 19th century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5315. History of Material Culture - 20th and 21st Centuries.**

This course is a historical survey of material culture and its influence on theatrical production in the twentieth- and twenty-first centuries. Along with anthropological research, attention is placed on the influences that shaped seminal practitioners of theatrical production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5316. Artist Brand Development & Management.**

This course focuses on the creation of a professional brand and marketing toolkit for practitioners in the live entertainment industry. Basic principles of business practices including accounting, tax law, networking, and unions are also explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5323. Shakespeare Through Performance.**

This intensive summer study abroad program immerses students in the language and culture of Shakespeare's plays. Incorporating a performance-based approach to the study of Shakespeare, this course includes theatrical workshops taught by professionals at leading international theatres, including the Royal Shakespeare Company.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5324. Shakespeare: Text and Context.**

This intensive study abroad program immerses students in the language and culture of Shakespeare's plays. In Stratford, academic workshops are led by scholars from the Shakespeare Birthplace Trust. Through immersion in the cultural environment in which the plays were produced, students gain insight into the context that shaped Shakespeare's theatre.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5330. Stage Management.**

An in-depth seminar in stage management, including organization, techniques, and practices for managing stage productions from initial planning through performance.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5331. Television Writing.**

This course focuses on the techniques of writing for television, including both half-hour situational comedies and hour-long dramas. Students will pitch story ideas, develop beat sheets, write treatments, and complete written scripts. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5332. Stage Properties.**

This course trains students in the craft, artistry and management of stage properties for careers in theatre, film and the entertainment industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5333. Advanced Television Writing.**

This course focuses on the techniques of creating a television series, including script writing and development, film production, and post-production editing. Students will spin off a character from a network or cable television series and create a new series based on that character. Graduate students will act as co-producers. Prerequisite: TH 5331 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5334. Figure Drawing for Costume Design.**

In this course students will practice drawing the human figure using traditional media, techniques and applications. Intended for the theatre designer, this course places special emphasis on aspects of the relationship between fabric and the human figure.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5338. MFA Lighting Studio.**

This course concentrates primarily on the aesthetics of stage lighting, and covers such topics as viewers' psychological and physiological responses as they pertain to visual perception; color; script analysis; use of light in creating both static and dynamic visual compositions; development and graphic representation of a theatrical lighting design; and creation of materials necessary to communicate design intentions.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5339. Previsualization.**

In this course, students explore software and strategies for discovering and communicating lighting sequences prior to technical rehearsals.

The course assumes proficiency in Vectorworks, Lightwright, and conventional console programming.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5340. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required

**Grade Mode:** Standard Letter

**TH 5341. Dramatization and Adaptation.**

This course focuses on the development of new theatrical scripts based on existing stories and source material. Students will explore a variety of potential source materials, pitch adaptation ideas, and complete a written script. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5342. MFA Studio I.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5343. MFA Studio II.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5345. MFA Costume Studio.**

MFA Costume Studio is a course that explores character design for live entertainment, as well as, topics that pertain to the work of a Costume Designer. Through guided practice, students will master the design process while working from both traditional and non-traditional sources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5346. Historical Costume Research.**

This course is a study of clothing, accessories, and customs of selected theatrical periods as an approach to costuming period plays.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5347. Advanced Costume Construction.**

Advanced studies in the construction of costumes for the stage, techniques in sewing, pattern drafting/design as well as accessories/crafts construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5348. Graphic Representation.**

Students will study and practice drawing and painting techniques, as well as rendering with other media, including markers.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5350. Second Year Project.**

Students in the second year of the MFA in Theatre will direct, design, or write for a departmental production. The course includes a written report of the project that demonstrates an understanding of the creative process of the chosen discipline. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5352. MFA Studio III.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5353. MFA Studio IV.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5354. Playwriting.**

A seminar in the art and craft of playwriting, from initial idea through a completed draft of a play. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5355. Scene Painting.**

Theory and practice of scene and costume painting as developed in the Italian Renaissance and continuing into new media available today. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5356. Theatrical Drafting: Vectorworks.**

This course is a study of computer techniques and procedures used in the preparation of design and technical drawings for theatrical scenery and lighting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5357. MFA Scenic Studio.**

MFA Scenic Studio is a seminar course based on design, emphasizing presentation and justification of executed renderings or models for selected plays. Emphasis is on styles of staging, settings, lighting and properties, and their relationship to the complete production. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5358. Screenwriting.**

This course offers a comprehensive study of the art and craft of writing screenplays. During a semester of intensive writing, readings, script analyses, and critiques, writers complete assignments in storytelling, character, structure, and script development. Each writer completes a full-length screenplay as the capstone project for the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5359. Advanced Screenwriting.**

This course focuses on the development and revision of full-length screenplays. May be repeated for credit with different emphasis.

Prerequisite: TH 5358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5360. Problems in Theatre.**

Designed to give supervised experience to qualified advanced students in theatre history, playwriting, directing, acting, technical, or other theatre problems. Research problems or actual production problems may be chosen. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5361. Oregon Shakespeare Festival Intensive.**

This course examines theatre production with a specific focus on directors and directing at this country's largest Shakespeare theatre, the Oregon Shakespeare Festival. Students will study issues of translating the current seasons' nine plays from script to stage, as well as analyzing the perspectives and choices of each director's production.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5362. Vectorworks II.**

This course is an advanced study of computer techniques and procedures using Vectorworks in the preparation of technical drawings and digital previsualization for theatrical scenic and lighting design

Prerequisite: TH 5356 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5363. Directing for Film.**

An in-depth examination of directing theories and procedures for film with practical filming and editing exercises. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5364. MFA Directing Seminar I.**

In this course students develop their skills in analysis, research, staging, and production.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5365. Backgrounds of Modern Drama.**

An analysis of those developments in dramatic literature that formed the basis of modern drama. Primary emphasis will be on nineteenth- and twentieth-century European and American drama.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5367. Studies in Dramatic Theory and Criticism.**

The study of dramatic theory and criticism from Aristotle to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5369. Contemporary World Theatre and Drama.**

Studies of current trends in world theatre and drama.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5371. Classical and Renaissance Drama.**

Seminar in Greek, French Neoclassical, and English Renaissance theatre, with intensive examination of selected works by Sophocles, Euripides, Shakespeare, and Marlowe. Primary focus will be on analysis of the plays as performance texts, and on the historical cultural environments in which the plays were created and first performed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5372. Theory and Practice of Dramaturgy.**

Study of the practical application of historical research and textual analysis in the production of period plays and new works. Emphasis upon the dramaturg as an instrument of collaboration between members of the artistic team and as a facilitator of audience outreach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5373. Advanced Film Directing.**

An in-depth examination of narrative filmmaking that includes screenplay analysis, storyboarding, scheduling the shoot, directorial techniques, staging actors, camera placement, filming on location, and editing.

Prerequisite: TH 5363 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5375. Advanced Playwriting.**

This course focuses on an in-depth study of the techniques of playwriting and the variety of styles that a playwright might employ. The course culminates with the writing of a full-length play. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5378. Play Development Lab.**

This course provides a laboratory workshop development process for new plays. It provides a structured environment for rigorously revising student-written works. Prerequisite: TH 5375 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5379. Digital Rendering for Theatrical Design.**

This course is a study of computer techniques and procedures used in graphic representation for theatrical design. Students will work primarily with Photoshop, with references to other programs such as Illustrator, Vectorworks, Sketchup, and Painter as necessary. Students will explore and practice techniques to create scenic renderings, costume renderings, lighting sketches, and paper props as well as techniques for editing production photos, creating collages, and producing publicity materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5380. Advanced Scenic Painting.**

Students develop scenic art skills, with an increased emphasis on realized practical production work, and a focus on the planning, sampling, and management of theatrical production paint processes. Prerequisite: TH 5355 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5381. Automated Lighting.**

Automated Lighting will explore and practice methods and approaches for basic uses of multi-attribute lighting technology. We will investigate a variety of moving light and LED technology and control as well as methods of properly documenting and cueing with these complex tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5382. MFA Studio V.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis. This course now has variable content based on the composition of students.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TH 5383. MFA Studio VI.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5384. Non-Theatrical Design.**

This course explores career opportunities in non-theatrical design fields including theatre design, television, corporate events, architectural lighting, and visual management for retail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5385. Lighting Console Programming.**

This course covers the skills and techniques used in modern console programming for a variety of lighting systems used in the entertainment industry. The course includes programming specifics for consoles from a variety of manufacturers. Special focus is placed on execution and presentation of console programming research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5386. Lighting and Projection Design for Dance.**

This course covers the skills and techniques used in lighting and projection design for dance. The students explore innovative choreographers and designers who use both established and emerging technologies in lighting and projection design. Special focus is placed on research presentations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5387. MFA Directing Seminar II.**

In this course students experience choosing, preparing, and directing a theatrical production from analysis to performance. Attention is given to theatre organization and management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5398. Final Creative Project.**

Students write, direct, or design a major university theatre production, demonstrating mastery in their area of emphasis. A written report of the project must be approved by a faculty committee. This requirement for the MFA in Theatre is usually taken in the final year of study.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Theatre 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**TH 5599B. Thesis.**

This course represents a student’s continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5640. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry; it is intended for students who do a full-time internship over the summer or during a regular full semester. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TH 5999B. Thesis.**

This course represents a student’s continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Program Overview**

A Master of Arts (M.A.) degree with a major in Theatre offers specializations in history-criticism and dramaturgy. The M.A. will prepare students to teach at the secondary or community college level, to continue graduate education at the doctoral level, or to seek a career in community or professional theatre.

**Application Requirements**

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College’s website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree (preferably a B.A. or B.F.A. in theatre) from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor’s degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted

- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 24 undergraduate hours in theatre
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
- resume/CV
- statement of purpose indicating the student’s proposed area of specialty and detailing past practical experience
- two letters of recommendation
- non-academic practical theatre experience

**Approved English Proficiency Exam Scores**

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

**Degree Requirements**

The Master of Arts (M.A.) degree with a major in Theatre concentration in history and criticism requires 30 semester credit hours, including a thesis. Students who do not have the appropriate background course work may be required to complete leveling courses.

**Course Requirements**

Code	Title	Hours
<b>Required Courses</b>		
TH 5301	Drama Research	3
TH 5367	Studies in Dramatic Theory and Criticism	3
<b>Concentration</b>		
TH 5365	Backgrounds of Modern Drama	3
TH 5369	Contemporary World Theatre and Drama	3
TH 5371	Classical and Renaissance Drama	3
TH 5372	Theory and Practice of Dramaturgy	3
<b>Thesis</b>		
TH 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
TH 5199B	Thesis	
TH 5299B	Thesis	
TH 5399B	Thesis	
TH 5599B	Thesis	
TH 5999B	Thesis	
<b>Minor</b>		
Choose a 6-hour advisor-approved minor		6
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirements

All candidates for graduate degrees must pass one or more comprehensive examinations.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by

definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival

quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Theatre: TH

## Courses Offered Theatre (TH)

### TH 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### TH 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### TH 5301. Drama Research.

An examination of problems and research techniques in drama. Historical, critical, descriptive, and experimental research approaches will be surveyed and basic procedures in research report writing will be considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### TH 5302. Text Analysis, Research and Interpretation.

This course reviews various methods of analysis of a dramatic text. This includes inductive, deductive, structural, and methodical approaches. It also examines techniques for production research and explores issues of interpretation that affect the development of a play's translation into a production on stage.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### TH 5303. Devising Theatre.

This interdisciplinary course will focus on the creation of original work that incorporates a strong visual component. Individual artistic development is addressed along with the particular challenges of devising theatrical work through non-traditional methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### TH 5304. Web Series Creation.

This course focuses on the techniques of creating a web series, script writing and development. It explores the fundamentals of film production and web publication, including marketing and identifying a target audience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### TH 5305. Web Series Creation II.

This course is a continuation of the Web Series course and specifically focuses on production of a web series. Students will write, direct, and produce their own web series for publication on the internet. Prerequisite: TH 5304 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### TH 5306. Fundamentals of Environment for the Stage.

This course is a practical exploration of the processes and techniques for the development of the stage environment by scenic and lighting designers within the context of live production. Theoretical projects provide focus on establishing a common vernacular and emphasize analysis, research, and problem-solving. In-class studio sessions develop efficient presentation techniques and effective graphic skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### TH 5307. Fundamentals of Character for the Stage.

This course is a practical exploration of the processes and techniques for character development from the perspective of a director and costume designer within the context of live production. Theoretical projects provide focus on the development of a common vernacular and emphasize problem-solving skills. In-class studio sessions will develop analysis, research, clear and efficient presentation skills, as well as graphic skill development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### TH 5308. Musical Theatre Choreography.

This course examines the role of choreography in musical theatre and explores the choreographic process. Students study the history and theoretical principles of musical theatre choreography as well as obtain the practical skills needed to create staging and choreography for a musical theatre production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### TH 5310. Graduate Assistant Development.

This course is required as a condition of employment for graduate teaching and instructional assistants. This course covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### TH 5312. Collaborative Theory.

This course examines the nature of collaboration within the context of the live entertainment production processes. Particular attention is focused on understanding psychological/sociological viewpoints in effective collaborative work environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5313. History of Directing and Scenography.**

This course is a historical survey of the work of directors and designers. Particular emphasis will be on seminal production plans for notable directors and designers of the 20th and 21st centuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5314. History of Material Culture - Pre 20th Century.**

This course is an historical survey of material culture and its influence on theatrical production pre-twentieth century. Attention is placed on research of the architecture, interiors, fashion, theatre literature, and technical innovations of seminal periods from Greco-Roman through 19th century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5315. History of Material Culture - 20th and 21st Centuries.**

This course is a historical survey of material culture and its influence on theatrical production in the twentieth- and twenty-first centuries. Along with anthropological research, attention is placed on the influences that shaped seminal practitioners of theatrical production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5316. Artist Brand Development & Management.**

This course focuses on the creation of a professional brand and marketing toolkit for practitioners in the live entertainment industry. Basic principles of business practices including accounting, tax law, networking, and unions are also explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5323. Shakespeare Through Performance.**

This intensive summer study abroad program immerses students in the language and culture of Shakespeare's plays. Incorporating a performance-based approach to the study of Shakespeare, this course includes theatrical workshops taught by professionals at leading international theatres, including the Royal Shakespeare Company.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5324. Shakespeare: Text and Context.**

This intensive study abroad program immerses students in the language and culture of Shakespeare's plays. In Stratford, academic workshops are led by scholars from the Shakespeare Birthplace Trust. Through immersion in the cultural environment in which the plays were produced, students gain insight into the context that shaped Shakespeare's theatre.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5330. Stage Management.**

An in-depth seminar in stage management, including organization, techniques, and practices for managing stage productions from initial planning through performance.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5331. Television Writing.**

This course focuses on the techniques of writing for television, including both half-hour situational comedies and hour-long dramas. Students will pitch story ideas, develop beat sheets, write treatments, and complete written scripts. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5332. Stage Properties.**

This course trains students in the craft, artistry and management of stage properties for careers in theatre, film and the entertainment industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5333. Advanced Television Writing.**

This course focuses on the techniques of creating a television series, including script writing and development, film production, and post-production editing. Students will spin off a character from a network or cable television series and create a new series based on that character. Graduate students will act as co-producers. Prerequisite: TH 5331 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5334. Figure Drawing for Costume Design.**

In this course students will practice drawing the human figure using traditional media, techniques and applications. Intended for the theatre designer, this course places special emphasis on aspects of the relationship between fabric and the human figure.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5338. MFA Lighting Studio.**

This course concentrates primarily on the aesthetics of stage lighting, and covers such topics as viewers' psychological and physiological responses as they pertain to visual perception; color; script analysis; use of light in creating both static and dynamic visual compositions; development and graphic representation of a theatrical lighting design; and creation of materials necessary to communicate design intentions.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5339. Previsualization.**

In this course, students explore software and strategies for discovering and communicating lighting sequences prior to technical rehearsals. The course assumes proficiency in Vectorworks, Lightwright, and conventional console programming.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5340. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required

**Grade Mode:** Standard Letter

**TH 5341. Dramatization and Adaptation.**

This course focuses on the development of new theatrical scripts based on existing stories and source material. Students will explore a variety of potential source materials, pitch adaptation ideas, and complete a written script. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5342. MFA Studio I.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5343. MFA Studio II.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5345. MFA Costume Studio.**

MFA Costume Studio is a course that explores character design for live entertainment, as well as, topics that pertain to the work of a Costume Designer. Through guided practice, students will master the design process while working from both traditional and non-traditional sources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5346. Historical Costume Research.**

This course is a study of clothing, accessories, and customs of selected theatrical periods as an approach to costuming period plays.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5347. Advanced Costume Construction.**

Advanced studies in the construction of costumes for the stage, techniques in sewing, pattern drafting/design as well as accessories/crafts construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5348. Graphic Representation.**

Students will study and practice drawing and painting techniques, as well as rendering with other media, including markers.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5350. Second Year Project.**

Students in the second year of the MFA in Theatre will direct, design, or write for a departmental production. The course includes a written report of the project that demonstrates an understanding of the creative process of the chosen discipline. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5352. MFA Studio III.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5353. MFA Studio IV.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5354. Playwriting.**

A seminar in the art and craft of playwriting, from initial idea through a completed draft of a play. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5355. Scene Painting.**

Theory and practice of scene and costume painting as developed in the Italian Renaissance and continuing into new media available today. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**TH 5356. Theatrical Drafting: Vectorworks.**

This course is a study of computer techniques and procedures used in the preparation of design and technical drawings for theatrical scenery and lighting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5357. MFA Scenic Studio.**

MFA Scenic Studio is a seminar course based on design, emphasizing presentation and justification of executed renderings or models for selected plays. Emphasis is on styles of staging, settings, lighting and properties, and their relationship to the complete production. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5358. Screenwriting.**

This course offers a comprehensive study of the art and craft of writing screenplays. During a semester of intensive writing, readings, script analyses, and critiques, writers complete assignments in storytelling, character, structure, and script development. Each writer completes a full-length screenplay as the capstone project for the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5359. Advanced Screenwriting.**

This course focuses on the development and revision of full-length screenplays. May be repeated for credit with different emphasis.

Prerequisite: TH 5358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5360. Problems in Theatre.**

Designed to give supervised experience to qualified advanced students in theatre history, playwriting, directing, acting, technical, or other theatre problems. Research problems or actual production problems may be chosen. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5361. Oregon Shakespeare Festival Intensive.**

This course examines theatre production with a specific focus on directors and directing at this country's largest Shakespeare theatre, the Oregon Shakespeare Festival. Students will study issues of translating the current seasons' nine plays from script to stage, as well as analyzing the perspectives and choices of each director's production.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5362. Vectorworks II.**

This course is an advanced study of computer techniques and procedures using Vectorworks in the preparation of technical drawings and digital previsualization for theatrical scenic and lighting design

Prerequisite: TH 5356 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5363. Directing for Film.**

An in-depth examination of directing theories and procedures for film with practical filming and editing exercises. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5364. MFA Directing Seminar I.**

In this course students develop their skills in analysis, research, staging, and production.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5365. Backgrounds of Modern Drama.**

An analysis of those developments in dramatic literature that formed the basis of modern drama. Primary emphasis will be on nineteenth-and twentieth-century European and American drama.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5367. Studies in Dramatic Theory and Criticism.**

The study of dramatic theory and criticism from Aristotle to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5369. Contemporary World Theatre and Drama.**

Studies of current trends in world theatre and drama.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5371. Classical and Renaissance Drama.**

Seminar in Greek, French Neoclassical, and English Renaissance theatre, with intensive examination of selected works by Sophocles, Euripides, Shakespeare, and Marlowe. Primary focus will be on analysis of the plays as performance texts, and on the historical cultural environments in which the plays were created and first performed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5372. Theory and Practice of Dramaturgy.**

Study of the practical application of historical research and textual analysis in the production of period plays and new works. Emphasis upon the dramaturg as an instrument of collaboration between members of the artistic team and as a facilitator of audience outreach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5373. Advanced Film Directing.**

An in-depth examination of narrative filmmaking that includes screenplay analysis, storyboarding, scheduling the shoot, directorial techniques, staging actors, camera placement, filming on location, and editing.

Prerequisite: TH 5363 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5375. Advanced Playwriting.**

This course focuses on an in-depth study of the techniques of playwriting and the variety of styles that a playwright might employ. The course culminates with the writing of a full-length play. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5378. Play Development Lab.**

This course provides a laboratory workshop development process for new plays. It provides a structured environment for rigorously revising student-written works. Prerequisite: TH 5375 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5379. Digital Rendering for Theatrical Design.**

This course is a study of computer techniques and procedures used in graphic representation for theatrical design. Students will work primarily with Photoshop, with references to other programs such as Illustrator, Vectorworks, Sketchup, and Painter as necessary. Students will explore and practice techniques to create scenic renderings, costume renderings, lighting sketches, and paper props as well as techniques for editing production photos, creating collages, and producing publicity materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5380. Advanced Scenic Painting.**

Students develop scenic art skills, with an increased emphasis on realized practical production work, and a focus on the planning, sampling, and management of theatrical production paint processes. Prerequisite: TH 5355 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5381. Automated Lighting.**

Automated Lighting will explore and practice methods and approaches for basic uses of multi-attribute lighting technology. We will investigate a variety of moving light and LED technology and control as well as methods of properly documenting and cueing with these complex tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5382. MFA Studio V.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis. This course now has variable content based on the composition of students.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TH 5383. MFA Studio VI.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5384. Non-Theatrical Design.**

This course explores career opportunities in non-theatrical design fields including theatre design, television, corporate events, architectural lighting, and visual management for retail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5385. Lighting Console Programming.**

This course covers the skills and techniques used in modern console programming for a variety of lighting systems used in the entertainment industry. The course includes programming specifics for consoles from a variety of manufacturers. Special focus is placed on execution and presentation of console programming research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5386. Lighting and Projection Design for Dance.**

This course covers the skills and techniques used in lighting and projection design for dance. The students explore innovative choreographers and designers who use both established and emerging technologies in lighting and projection design. Special focus is placed on research presentations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5387. MFA Directing Seminar II.**

In this course students experience choosing, preparing, and directing a theatrical production from analysis to performance. Attention is given to theatre organization and management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5398. Final Creative Project.**

Students write, direct, or design a major university theatre production, demonstrating mastery in their area of emphasis. A written report of the project must be approved by a faculty committee. This requirement for the MFA in Theatre is usually taken in the final year of study.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Theatre 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5640. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry; it is intended for students who do a full-time internship over the summer or during a regular full semester. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

A Master of Fine Arts (M.F.A.) degree with a major in Theatre will prepare students for the field of theatre, more specifically to direct theatre, lead a theatre, or to teach theatre. This degree will provide students with a strong theoretical and practical education in preparing productions so that they might have long, fruitful careers in theatre or higher education. It will also hone student skills in critical thinking, problem solving, creative analysis, and application of the craft to real world projects so that they might excel in today's quickly changing and ever diverse theatre and academic environments.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree (preferably a B.A. or B.F.A. in theatre) from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 24 undergraduate hours in theatre
- GRE not required
- non-academic practical theatre experience
- resume/CV
- statement of purpose detailing the student's area of specialty, related background information, and goals in pursuing the M.F.A. in theatre
- theatre portfolio (preferably electronic) which may include rehearsal prompt books of past directing projects, design sketches and renderings, production photos, DVDs, reviews, and/or items showing process and aesthetic
- two letters of recommendation
- interview may be required\*

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt

countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

#### \*Additional Information

The M.F.A. in theatre requires students to work together closely; therefore, potential candidates in the directing concentration need to bring skills, temperaments, and goals that are in cohesion with the department and the cohort of students they will join. For this reason, semi-finalists will be invited to on-campus or Skype interviews/auditions.

## Degree Requirements

The Master of Fine Arts (M.F.A.) degree with a major in Theatre concentration in Design requires 60 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
TH 5302	Text Analysis, Research and Interpretation	3
TH 5303	Devising Theatre	3
TH 5306	Fundamentals of Environment for the Stage	3
TH 5307	Fundamentals of Character for the Stage	3
TH 5312	Collaborative Theory	3
TH 5314	History of Material Culture - Pre 20th Century	3
TH 5315	History of Material Culture - 20th and 21st Centuries	3
TH 5316	Artist Brand Development & Management	3
TH 5348	Graphic Representation	3
TH 5379	Digital Rendering for Theatrical Design	3
TH 5384	Non-Theatrical Design	3
<b>Prescribed Electives</b>		
Choose 27 hours from the following:		27
TH 5332	Stage Properties	
TH 5334	Figure Drawing for Costume Design	
TH 5338	MFA Lighting Studio	
TH 5339	Previsualization	
TH 5340	Professional Internship	
TH 5345	MFA Costume Studio	
TH 5346	Historical Costume Research	
TH 5347	Advanced Costume Construction	
TH 5351		
TH 5355	Scene Painting	
TH 5356	Theatrical Drafting: Vectorworks	
TH 5357	MFA Scenic Studio	
TH 5360	Problems in Theatre	
TH 5362	Vectorworks II	
TH 5380	Advanced Scenic Painting	

TH 5381	Automated Lighting
TH 5385	Lighting Console Programming
TH 5386	Lighting and Projection Design for Dance
<b>Total Hours</b>	<b>60</b>

## Comprehensive Examination Requirement

The Comprehensive Exam for the MFA programs in Theatre is an oral defense accompanied by a production book comprised of supportive materials and reflections on the Final Creative Project. Students will be asked to reflect on the project in the context of their time and study in the program.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Theatre: TH

## Courses Offered

### Theatre (TH)

#### TH 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### TH 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### TH 5301. Drama Research.

An examination of problems and research techniques in drama. Historical, critical, descriptive, and experimental research approaches will be surveyed and basic procedures in research report writing will be considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### TH 5302. Text Analysis, Research and Interpretation.

This course reviews various methods of analysis of a dramatic text. This includes inductive, deductive, structural, and methodical approaches. It also examines techniques for production research and explores issues of interpretation that affect the development of a play's translation into a production on stage.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5303. Devising Theatre.**

This interdisciplinary course will focus on the creation of original work that incorporates a strong visual component. Individual artistic development is addressed along with the particular challenges of devising theatrical work through non-traditional methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5304. Web Series Creation.**

This course focuses on the techniques of creating a web series, script writing and development. It explores the fundamentals of film production and web publication, including marketing and identifying a target audience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5305. Web Series Creation II.**

This course is a continuation of the Web Series course and specifically focuses on production of a web series. Students will write, direct, and produce their own web series for publication on the internet. Prerequisite: TH 5304 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5306. Fundamentals of Environment for the Stage.**

This course is a practical exploration of the processes and techniques for the development of the stage environment by scenic and lighting designers within the context of live production. Theoretical projects provide focus on establishing a common vernacular and emphasize analysis, research, and problem-solving. In-class studio sessions develop efficient presentation techniques and effective graphic skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5307. Fundamentals of Character for the Stage.**

This course is a practical exploration of the processes and techniques for character development from the perspective of a director and costume designer within the context of live production. Theoretical projects provide focus on the development of a common vernacular and emphasize problem-solving skills. In-class studio sessions will develop analysis, research, clear and efficient presentation skills, as well as graphic skill development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5308. Musical Theatre Choreography.**

This course examines the role of choreography in musical theatre and explores the choreographic process. Students study the history and theoretical principles of musical theatre choreography as well as obtain the practical skills needed to create staging and choreography for a musical theatre production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5310. Graduate Assistant Development.**

This course is required as a condition of employment for graduate teaching and instructional assistants. This course covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TH 5312. Collaborative Theory.**

This course examines the nature of collaboration within the context of the live entertainment production processes. Particular attention is focused on understanding psychological/sociological viewpoints in effective collaborative work environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5313. History of Directing and Scenography.**

This course is a historical survey of the work of directors and designers. Particular emphasis will be on seminal production plans for notable directors and designers of the 20th and 21st centuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5314. History of Material Culture - Pre 20th Century.**

This course is an historical survey of material culture and its influence on theatrical production pre-twentieth century. Attention is placed on research of the architecture, interiors, fashion, theatre literature, and technical innovations of seminal periods from Greco-Roman through 19th century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5315. History of Material Culture - 20th and 21st Centuries.**

This course is a historical survey of material culture and its influence on theatrical production in the twentieth- and twenty-first centuries. Along with anthropological research, attention is placed on the influences that shaped seminal practitioners of theatrical production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5316. Artist Brand Development & Management.**

This course focuses on the creation of a professional brand and marketing toolkit for practitioners in the live entertainment industry. Basic principles of business practices including accounting, tax law, networking, and unions are also explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**TH 5323. Shakespeare Through Performance.**

This intensive summer study abroad program immerses students in the language and culture of Shakespeare's plays. Incorporating a performance-based approach to the study of Shakespeare, this course includes theatrical workshops taught by professionals at leading international theatres, including the Royal Shakespeare Company.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5324. Shakespeare: Text and Context.**

This intensive study abroad program immerses students in the language and culture of Shakespeare's plays. In Stratford, academic workshops are led by scholars from the Shakespeare Birthplace Trust. Through immersion in the cultural environment in which the plays were produced, students gain insight into the context that shaped Shakespeare's theatre.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5330. Stage Management.**

An in-depth seminar in stage management, including organization, techniques, and practices for managing stage productions from initial planning through performance.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5331. Television Writing.**

This course focuses on the techniques of writing for television, including both half-hour situational comedies and hour-long dramas. Students will pitch story ideas, develop beat sheets, write treatments, and complete written scripts. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5332. Stage Properties.**

This course trains students in the craft, artistry and management of stage properties for careers in theatre, film and the entertainment industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5333. Advanced Television Writing.**

This course focuses on the techniques of creating a television series, including script writing and development, film production, and post-production editing. Students will spin off a character from a network or cable television series and create a new series based on that character. Graduate students will act as co-producers. Prerequisite: TH 5331 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5334. Figure Drawing for Costume Design.**

In this course students will practice drawing the human figure using traditional media, techniques and applications. Intended for the theatre designer, this course places special emphasis on aspects of the relationship between fabric and the human figure.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5338. MFA Lighting Studio.**

This course concentrates primarily on the aesthetics of stage lighting, and covers such topics as viewers' psychological and physiological responses as they pertain to visual perception; color; script analysis; use of light in creating both static and dynamic visual compositions; development and graphic representation of a theatrical lighting design; and creation of materials necessary to communicate design intentions.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5339. Previsualization.**

In this course, students explore software and strategies for discovering and communicating lighting sequences prior to technical rehearsals.

The course assumes proficiency in Vectorworks, Lightwright, and conventional console programming.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5340. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required

**Grade Mode:** Standard Letter

**TH 5341. Dramatization and Adaptation.**

This course focuses on the development of new theatrical scripts based on existing stories and source material. Students will explore a variety of potential source materials, pitch adaptation ideas, and complete a written script. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5342. MFA Studio I.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5343. MFA Studio II.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5345. MFA Costume Studio.**

MFA Costume Studio is a course that explores character design for live entertainment, as well as, topics that pertain to the work of a Costume Designer. Through guided practice, students will master the design process while working from both traditional and non-traditional sources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5346. Historical Costume Research.**

This course is a study of clothing, accessories, and customs of selected theatrical periods as an approach to costuming period plays.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5347. Advanced Costume Construction.**

Advanced studies in the construction of costumes for the stage, techniques in sewing, pattern drafting/design as well as accessories/crafts construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5348. Graphic Representation.**

Students will study and practice drawing and painting techniques, as well as rendering with other media, including markers.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5350. Second Year Project.**

Students in the second year of the MFA in Theatre will direct, design, or write for a departmental production. The course includes a written report of the project that demonstrates an understanding of the creative process of the chosen discipline. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5352. MFA Studio III.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5353. MFA Studio IV.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5354. Playwriting.**

A seminar in the art and craft of playwriting, from initial idea through a completed draft of a play. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5355. Scene Painting.**

Theory and practice of scene and costume painting as developed in the Italian Renaissance and continuing into new media available today. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5356. Theatrical Drafting: Vectorworks.**

This course is a study of computer techniques and procedures used in the preparation of design and technical drawings for theatrical scenery and lighting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5357. MFA Scenic Studio.**

MFA Scenic Studio is a seminar course based on design, emphasizing presentation and justification of executed renderings or models for selected plays. Emphasis is on styles of staging, settings, lighting and properties, and their relationship to the complete production. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5358. Screenwriting.**

This course offers a comprehensive study of the art and craft of writing screenplays. During a semester of intensive writing, readings, script analyses, and critiques, writers complete assignments in storytelling, character, structure, and script development. Each writer completes a full-length screenplay as the capstone project for the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5359. Advanced Screenwriting.**

This course focuses on the development and revision of full-length screenplays. May be repeated for credit with different emphasis.

Prerequisite: TH 5358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5360. Problems in Theatre.**

Designed to give supervised experience to qualified advanced students in theatre history, playwriting, directing, acting, technical, or other theatre problems. Research problems or actual production problems may be chosen. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5361. Oregon Shakespeare Festival Intensive.**

This course examines theatre production with a specific focus on directors and directing at this country's largest Shakespeare theatre, the Oregon Shakespeare Festival. Students will study issues of translating the current seasons' nine plays from script to stage, as well as analyzing the perspectives and choices of each director's production.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5362. Vectorworks II.**

This course is an advanced study of computer techniques and procedures using Vectorworks in the preparation of technical drawings and digital previsualization for theatrical scenic and lighting design

Prerequisite: TH 5356 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5363. Directing for Film.**

An in-depth examination of directing theories and procedures for film with practical filming and editing exercises. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5364. MFA Directing Seminar I.**

In this course students develop their skills in analysis, research, staging, and production.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5365. Backgrounds of Modern Drama.**

An analysis of those developments in dramatic literature that formed the basis of modern drama. Primary emphasis will be on nineteenth-and twentieth-century European and American drama.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5367. Studies in Dramatic Theory and Criticism.**

The study of dramatic theory and criticism from Aristotle to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5369. Contemporary World Theatre and Drama.**

Studies of current trends in world theatre and drama.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5371. Classical and Renaissance Drama.**

Seminar in Greek, French Neoclassical, and English Renaissance theatre, with intensive examination of selected works by Sophocles, Euripides, Shakespeare, and Marlowe. Primary focus will be on analysis of the plays as performance texts, and on the historical cultural environments in which the plays were created and first performed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5372. Theory and Practice of Dramaturgy.**

Study of the practical application of historical research and textual analysis in the production of period plays and new works. Emphasis upon the dramaturg as an instrument of collaboration between members of the artistic team and as a facilitator of audience outreach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5373. Advanced Film Directing.**

An in-depth examination of narrative filmmaking that includes screenplay analysis, storyboarding, scheduling the shoot, directorial techniques, staging actors, camera placement, filming on location, and editing.

Prerequisite: TH 5363 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5375. Advanced Playwriting.**

This course focuses on an in-depth study of the techniques of playwriting and the variety of styles that a playwright might employ. The course culminates with the writing of a full-length play. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5378. Play Development Lab.**

This course provides a laboratory workshop development process for new plays. It provides a structured environment for rigorously revising student-written works. Prerequisite: TH 5375 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5379. Digital Rendering for Theatrical Design.**

This course is a study of computer techniques and procedures used in graphic representation for theatrical design. Students will work primarily with Photoshop, with references to other programs such as Illustrator, Vectorworks, Sketchup, and Painter as necessary. Students will explore and practice techniques to create scenic renderings, costume renderings, lighting sketches, and paper props as well as techniques for editing production photos, creating collages, and producing publicity materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5380. Advanced Scenic Painting.**

Students develop scenic art skills, with an increased emphasis on realized practical production work, and a focus on the planning, sampling, and management of theatrical production paint processes. Prerequisite: TH 5355 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5381. Automated Lighting.**

Automated Lighting will explore and practice methods and approaches for basic uses of multi-attribute lighting technology. We will investigate a variety of moving light and LED technology and control as well as methods of properly documenting and cueing with these complex tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5382. MFA Studio V.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis. This course now has variable content based on the composition of students.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TH 5383. MFA Studio VI.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5384. Non-Theatrical Design.**

This course explores career opportunities in non-theatrical design fields including theatre design, television, corporate events, architectural lighting, and visual management for retail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5385. Lighting Console Programming.**

This course covers the skills and techniques used in modern console programming for a variety of lighting systems used in the entertainment industry. The course includes programming specifics for consoles from a variety of manufacturers. Special focus is placed on execution and presentation of console programming research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5386. Lighting and Projection Design for Dance.**

This course covers the skills and techniques used in lighting and projection design for dance. The students explore innovative choreographers and designers who use both established and emerging technologies in lighting and projection design. Special focus is placed on research presentations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5387. MFA Directing Seminar II.**

In this course students experience choosing, preparing, and directing a theatrical production from analysis to performance. Attention is given to theatre organization and management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5398. Final Creative Project.**

Students write, direct, or design a major university theatre production, demonstrating mastery in their area of emphasis. A written report of the project must be approved by a faculty committee. This requirement for the MFA in Theatre is usually taken in the final year of study.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Theatre 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5640. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry; it is intended for students who do a full-time internship over the summer or during a regular full semester. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

A Master of Fine Arts (M.F.A.) degree with a major in Theatre will prepare students for the field of theatre, more specifically to direct theatre, lead a theatre, or to teach theatre. This degree will provide students with a strong theoretical and practical education in preparing productions so that they might have long, fruitful careers in theatre or higher education. It will also hone student skills in critical thinking, problem solving, creative analysis, and application of the craft to real world projects so that they might excel in today's quickly changing and ever diverse theatre and academic environments.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree (preferably a B.A. or B.F.A. in theatre) from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 24 undergraduate hours in theatre
- GRE not required
- non-academic practical theatre experience
- resume/CV
- statement of purpose detailing the student's area of specialty, related background information, and goals in pursuing the M.F.A. in theatre
- theatre portfolio (preferably electronic) which may include rehearsal prompt books of past directing projects, design sketches and renderings, production photos, DVDs, reviews, and/or items showing process and aesthetic
- two letters of recommendation
- interview with program faculty may be required\*

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

The M.F.A. in theatre requires students to work together closely; therefore, potential candidates in the directing concentration need to bring skills, temperaments, and goals that are in cohesion with the department and the cohort of students they will join. For this reason, semi-finalists will be invited to on-campus or Skype interviews/auditions.

## Degree Requirements

The Master of Fine Arts (M.F.A.) degree with a major in Theatre concentration in Directing requires 60 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
TH 5302	Text Analysis, Research and Interpretation	3
TH 5303	Devising Theatre	3
TH 5306	Fundamentals of Environment for the Stage	3
TH 5307	Fundamentals of Character for the Stage	3
TH 5312	Collaborative Theory	3
TH 5314	History of Material Culture - Pre 20th Century	3
TH 5315	History of Material Culture - 20th and 21st Centuries	3



TH 5316	Artist Brand Development & Management	3
TH 5342	MFA Studio I	3
TH 5343	MFA Studio II	3
TH 5352	MFA Studio III	3
TH 5353	MFA Studio IV	3
TH 5382	MFA Studio V	3
TH 5383	MFA Studio VI	3

#### Prescribed Electives

Choose 18 hours from the following: 18

TH 5323	Shakespeare Through Performance
TH 5324	Shakespeare: Text and Context
TH 5340	Professional Internship
TH 5341	Dramatization and Adaptation
TH 5360	Problems in Theatre
TH 5361	Oregon Shakespeare Festival Intensive
TH 5363	Directing for Film
TH 5364	MFA Directing Seminar I
TH 5373	Advanced Film Directing
TH 5387	MFA Directing Seminar II

**Total Hours** 60

## Comprehensive Examination Requirement

The Comprehensive Exam for the MFA programs in Theatre is an oral defense accompanied by a production book comprised of supportive materials and reflections on the Final Creative Project. Students will be asked to reflect on the project in the context of their time and study in the program.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Theatre: TH

## Courses Offered

### Theatre (TH)

#### TH 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### TH 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### TH 5301. Drama Research.

An examination of problems and research techniques in drama. Historical, critical, descriptive, and experimental research approaches will be surveyed and basic procedures in research report writing will be considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### TH 5302. Text Analysis, Research and Interpretation.

This course reviews various methods of analysis of a dramatic text. This includes inductive, deductive, structural, and methodical approaches. It also examines techniques for production research and explores issues of interpretation that affect the development of a play's translation into a production on stage.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### TH 5303. Devising Theatre.

This interdisciplinary course will focus on the creation of original work that incorporates a strong visual component. Individual artistic development is addressed along with the particular challenges of devising theatrical work through non-traditional methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### TH 5304. Web Series Creation.

This course focuses on the techniques of creating a web series, script writing and development. It explores the fundamentals of film production and web publication, including marketing and identifying a target audience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### TH 5305. Web Series Creation II.

This course is a continuation of the Web Series course and specifically focuses on production of a web series. Students will write, direct, and produce their own web series for publication on the internet. Prerequisite: TH 5304 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### TH 5306. Fundamentals of Environment for the Stage.

This course is a practical exploration of the processes and techniques for the development of the stage environment by scenic and lighting designers within the context of live production. Theoretical projects provide focus on establishing a common vernacular and emphasize analysis, research, and problem-solving. In-class studio sessions develop efficient presentation techniques and effective graphic skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5307. Fundamentals of Character for the Stage.**

This course is a practical exploration of the processes and techniques for character development from the perspective of a director and costume designer within the context of live production. Theoretical projects provide focus on the development of a common vernacular and emphasize problem-solving skills. In-class studio sessions will develop analysis, research, clear and efficient presentation skills, as well as graphic skill development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5308. Musical Theatre Choreography.**

This course examines the role of choreography in musical theatre and explores the choreographic process. Students study the history and theoretical principles of musical theatre choreography as well as obtain the practical skills needed to create staging and choreography for a musical theatre production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5310. Graduate Assistant Development.**

This course is required as a condition of employment for graduate teaching and instructional assistants. This course covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TH 5312. Collaborative Theory.**

This course examines the nature of collaboration within the context of the live entertainment production processes. Particular attention is focused on understanding psychological/sociological viewpoints in effective collaborative work environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5313. History of Directing and Scenography.**

This course is a historical survey of the work of directors and designers. Particular emphasis will be on seminal production plans for notable directors and designers of the 20th and 21st centuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5314. History of Material Culture - Pre 20th Century.**

This course is an historical survey of material culture and its influence on theatrical production pre-twentieth century. Attention is placed on research of the architecture, interiors, fashion, theatre literature, and technical innovations of seminal periods from Greco-Roman through 19th century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5315. History of Material Culture - 20th and 21st Centuries.**

This course is a historical survey of material culture and its influence on theatrical production in the twentieth- and twenty-first centuries. Along with anthropological research, attention is placed on the influences that shaped seminal practitioners of theatrical production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5316. Artist Brand Development & Management.**

This course focuses on the creation of a professional brand and marketing toolkit for practitioners in the live entertainment industry. Basic principles of business practices including accounting, tax law, networking, and unions are also explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5323. Shakespeare Through Performance.**

This intensive summer study abroad program immerses students in the language and culture of Shakespeare's plays. Incorporating a performance-based approach to the study of Shakespeare, this course includes theatrical workshops taught by professionals at leading international theatres, including the Royal Shakespeare Company.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5324. Shakespeare: Text and Context.**

This intensive study abroad program immerses students in the language and culture of Shakespeare's plays. In Stratford, academic workshops are led by scholars from the Shakespeare Birthplace Trust. Through immersion in the cultural environment in which the plays were produced, students gain insight into the context that shaped Shakespeare's theatre.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5330. Stage Management.**

An in-depth seminar in stage management, including organization, techniques, and practices for managing stage productions from initial planning through performance.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5331. Television Writing.**

This course focuses on the techniques of writing for television, including both half-hour situational comedies and hour-long dramas. Students will pitch story ideas, develop beat sheets, write treatments, and complete written scripts. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5332. Stage Properties.**

This course trains students in the craft, artistry and management of stage properties for careers in theatre, film and the entertainment industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5333. Advanced Television Writing.**

This course focuses on the techniques of creating a television series, including script writing and development, film production, and post-production editing. Students will spin off a character from a network or cable television series and create a new series based on that character. Graduate students will act as co-producers. Prerequisite: TH 5331 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5334. Figure Drawing for Costume Design.**

In this course students will practice drawing the human figure using traditional media, techniques and applications. Intended for the theatre designer, this course places special emphasis on aspects of the relationship between fabric and the human figure.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5338. MFA Lighting Studio.**

This course concentrates primarily on the aesthetics of stage lighting, and covers such topics as viewers' psychological and physiological responses as they pertain to visual perception; color; script analysis; use of light in creating both static and dynamic visual compositions; development and graphic representation of a theatrical lighting design; and creation of materials necessary to communicate design intentions.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5339. Previsualization.**

In this course, students explore software and strategies for discovering and communicating lighting sequences prior to technical rehearsals. The course assumes proficiency in Vectorworks, Lightwright, and conventional console programming.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5340. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required

**Grade Mode:** Standard Letter

**TH 5341. Dramatization and Adaptation.**

This course focuses on the development of new theatrical scripts based on existing stories and source material. Students will explore a variety of potential source materials, pitch adaptation ideas, and complete a written script. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5342. MFA Studio I.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5343. MFA Studio II.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5345. MFA Costume Studio.**

MFA Costume Studio is a course that explores character design for live entertainment, as well as, topics that pertain to the work of a Costume Designer. Through guided practice, students will master the design process while working from both traditional and non-traditional sources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5346. Historical Costume Research.**

This course is a study of clothing, accessories, and customs of selected theatrical periods as an approach to costuming period plays.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5347. Advanced Costume Construction.**

Advanced studies in the construction of costumes for the stage, techniques in sewing, pattern drafting/design as well as accessories/crafts construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5348. Graphic Representation.**

Students will study and practice drawing and painting techniques, as well as rendering with other media, including markers.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5350. Second Year Project.**

Students in the second year of the MFA in Theatre will direct, design, or write for a departmental production. The course includes a written report of the project that demonstrates an understanding of the creative process of the chosen discipline. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5352. MFA Studio III.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5353. MFA Studio IV.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5354. Playwriting.**

A seminar in the art and craft of playwriting, from initial idea through a completed draft of a play. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5355. Scene Painting.**

Theory and practice of scene and costume painting as developed in the Italian Renaissance and continuing into new media available today. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5356. Theatrical Drafting: Vectorworks.**

This course is a study of computer techniques and procedures used in the preparation of design and technical drawings for theatrical scenery and lighting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5357. MFA Scenic Studio.**

MFA Scenic Studio is a seminar course based on design, emphasizing presentation and justification of executed renderings or models for selected plays. Emphasis is on styles of staging, settings, lighting and properties, and their relationship to the complete production. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5358. Screenwriting.**

This course offers a comprehensive study of the art and craft of writing screenplays. During a semester of intensive writing, readings, script analyses, and critiques, writers complete assignments in storytelling, character, structure, and script development. Each writer completes a full-length screenplay as the capstone project for the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5359. Advanced Screenwriting.**

This course focuses on the development and revision of full-length screenplays. May be repeated for credit with different emphasis.

Prerequisite: TH 5358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5360. Problems in Theatre.**

Designed to give supervised experience to qualified advanced students in theatre history, playwriting, directing, acting, technical, or other theatre problems. Research problems or actual production problems may be chosen. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5361. Oregon Shakespeare Festival Intensive.**

This course examines theatre production with a specific focus on directors and directing at this country's largest Shakespeare theatre, the Oregon Shakespeare Festival. Students will study issues of translating the current seasons' nine plays from script to stage, as well as analyzing the perspectives and choices of each director's production.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5362. Vectorworks II.**

This course is an advanced study of computer techniques and procedures using Vectorworks in the preparation of technical drawings and digital previsualization for theatrical scenic and lighting design.

Prerequisite: TH 5356 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5363. Directing for Film.**

An in-depth examination of directing theories and procedures for film with practical filming and editing exercises. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5364. MFA Directing Seminar I.**

In this course students develop their skills in analysis, research, staging, and production.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5365. Backgrounds of Modern Drama.**

An analysis of those developments in dramatic literature that formed the basis of modern drama. Primary emphasis will be on nineteenth-and twentieth-century European and American drama.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5367. Studies in Dramatic Theory and Criticism.**

The study of dramatic theory and criticism from Aristotle to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5369. Contemporary World Theatre and Drama.**

Studies of current trends in world theatre and drama.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5371. Classical and Renaissance Drama.**

Seminar in Greek, French Neoclassical, and English Renaissance theatre, with intensive examination of selected works by Sophocles, Euripides, Shakespeare, and Marlowe. Primary focus will be on analysis of the plays as performance texts, and on the historical cultural environments in which the plays were created and first performed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5372. Theory and Practice of Dramaturgy.**

Study of the practical application of historical research and textual analysis in the production of period plays and new works. Emphasis upon the dramaturg as an instrument of collaboration between members of the artistic team and as a facilitator of audience outreach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5373. Advanced Film Directing.**

An in-depth examination of narrative filmmaking that includes screenplay analysis, storyboarding, scheduling the shoot, directorial techniques, staging actors, camera placement, filming on location, and editing.

Prerequisite: TH 5363 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5375. Advanced Playwriting.**

This course focuses on an in-depth study of the techniques of playwriting and the variety of styles that a playwright might employ. The course culminates with the writing of a full-length play. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5378. Play Development Lab.**

This course provides a laboratory workshop development process for new plays. It provides a structured environment for rigorously revising student-written works. Prerequisite: TH 5375 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5379. Digital Rendering for Theatrical Design.**

This course is a study of computer techniques and procedures used in graphic representation for theatrical design. Students will work primarily with Photoshop, with references to other programs such as Illustrator, Vectorworks, Sketchup, and Painter as necessary. Students will explore and practice techniques to create scenic renderings, costume renderings, lighting sketches, and paper props as well as techniques for editing production photos, creating collages, and producing publicity materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5380. Advanced Scenic Painting.**

Students develop scenic art skills, with an increased emphasis on realized practical production work, and a focus on the planning, sampling, and management of theatrical production paint processes. Prerequisite: TH 5355 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5381. Automated Lighting.**

Automated Lighting will explore and practice methods and approaches for basic uses of multi-attribute lighting technology. We will investigate a variety of moving light and LED technology and control as well as methods of properly documenting and cueing with these complex tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5382. MFA Studio V.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis. This course now has variable content based on the composition of students.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter



**TH 5383. MFA Studio VI.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5384. Non-Theatrical Design.**

This course explores career opportunities in non-theatrical design fields including theatre design, television, corporate events, architectural lighting, and visual management for retail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5385. Lighting Console Programming.**

This course covers the skills and techniques used in modern console programming for a variety of lighting systems used in the entertainment industry. The course includes programming specifics for consoles from a variety of manufacturers. Special focus is placed on execution and presentation of console programming research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5386. Lighting and Projection Design for Dance.**

This course covers the skills and techniques used in lighting and projection design for dance. The students explore innovative choreographers and designers who use both established and emerging technologies in lighting and projection design. Special focus is placed on research presentations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5387. MFA Directing Seminar II.**

In this course students experience choosing, preparing, and directing a theatrical production from analysis to performance. Attention is given to theatre organization and management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5398. Final Creative Project.**

Students write, direct, or design a major university theatre production, demonstrating mastery in their area of emphasis. A written report of the project must be approved by a faculty committee. This requirement for the MFA in Theatre is usually taken in the final year of study.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Theatre 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5640. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry; it is intended for students who do a full-time internship over the summer or during a regular full semester. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

A Master of Fine Arts (M.F.A.) degree with a major in Theatre will prepare students for the field of theatre, more specifically to direct theatre, lead a theatre, or to teach theatre. This degree will provide students with a strong theoretical and practical education in preparing productions so that they might have long, fruitful careers in theatre or higher education. It will also hone student skills in critical thinking, problem solving, creative analysis, and application of the craft to real world projects so that they might excel in today's quickly changing and ever diverse theatre and academic environments.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://>

www.gradcollege.txstate.edu). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree (preferably a B.A. or B.F.A. in theatre) from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txstate.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 24 undergraduate hours in theatre
- GRE not required
- non-academic practical theatre experience
- resume/CV
- statement of purpose detailing your area of specialty, related background information, and goals in pursuing the M.F.A. in theatre
- two letters of recommendation
- samples of playwriting or creative writing

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Fine Arts (M.F.A.) degree with a major in Theatre concentration in Dramatic Writing requires 60 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
TH 5302	Text Analysis, Research and Interpretation	3
TH 5331	Television Writing	3
TH 5333	Advanced Television Writing	3
TH 5341	Dramatization and Adaptation	3

TH 5342	MFA Studio I	3
TH 5343	MFA Studio II	3
TH 5352	MFA Studio III	3
TH 5353	MFA Studio IV	3
TH 5354	Playwriting	3
TH 5358	Screenwriting	3
TH 5359	Advanced Screenwriting	3
TH 5367	Studies in Dramatic Theory and Criticism	3
TH 5369	Contemporary World Theatre and Drama	3
TH 5375	Advanced Playwriting	3
TH 5382	MFA Studio V	3
TH 5383	MFA Studio VI	3
TH 5398	Final Creative Project	3

### Prescribed Electives

Choose 9 hours from the following:		9
TH 5304	Web Series Creation	
TH 5305	Web Series Creation II	
TH 5323	Shakespeare Through Performance	
TH 5324	Shakespeare: Text and Context	
TH 5340	Professional Internship	
TH 5357	MFA Scenic Studio	
TH 5360	Problems in Theatre	
TH 5361	Oregon Shakespeare Festival Intensive	
TH 5363	Directing for Film	
TH 5365	Backgrounds of Modern Drama	
TH 5371	Classical and Renaissance Drama	
TH 5372	Theory and Practice of Dramaturgy	
TH 5373	Advanced Film Directing	
TH 5378	Play Development Lab	
Advisor-approved Directing Elective		
Advisor-approved English Elective		

**Total Hours** 60

## Comprehensive Examination Requirement

The Comprehensive Exam for the MFA programs in Theatre is an oral defense accompanied by a production book comprised of supportive materials and reflections on the Final Creative Project. Students will be asked to reflect on the project in the context of their time and study in the program.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Theatre: TH

## Courses Offered

### Theatre (TH)

#### TH 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5301. Drama Research.**

An examination of problems and research techniques in drama. Historical, critical, descriptive, and experimental research approaches will be surveyed and basic procedures in research report writing will be considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5302. Text Analysis, Research and Interpretation.**

This course reviews various methods of analysis of a dramatic text. This includes inductive, deductive, structural, and methodical approaches. It also examines techniques for production research and explores issues of interpretation that affect the development of a play's translation into a production on stage.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5303. Devising Theatre.**

This interdisciplinary course will focus on the creation of original work that incorporates a strong visual component. Individual artistic development is addressed along with the particular challenges of devising theatrical work through non-traditional methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5304. Web Series Creation.**

This course focuses on the techniques of creating a web series, script writing and development. It explores the fundamentals of film production and web publication, including marketing and identifying a target audience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5305. Web Series Creation II.**

This course is a continuation of the Web Series course and specifically focuses on production of a web series. Students will write, direct, and produce their own web series for publication on the internet. Prerequisite: TH 5304 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5306. Fundamentals of Environment for the Stage.**

This course is a practical exploration of the processes and techniques for the development of the stage environment by scenic and lighting designers within the context of live production. Theoretical projects provide focus on establishing a common vernacular and emphasize analysis, research, and problem-solving. In-class studio sessions develop efficient presentation techniques and effective graphic skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5307. Fundamentals of Character for the Stage.**

This course is a practical exploration of the processes and techniques for character development from the perspective of a director and costume designer within the context of live production. Theoretical projects provide focus on the development of a common vernacular and emphasize problem-solving skills. In-class studio sessions will develop analysis, research, clear and efficient presentation skills, as well as graphic skill development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5308. Musical Theatre Choreography.**

This course examines the role of choreography in musical theatre and explores the choreographic process. Students study the history and theoretical principles of musical theatre choreography as well as obtain the practical skills needed to create staging and choreography for a musical theatre production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5310. Graduate Assistant Development.**

This course is required as a condition of employment for graduate teaching and instructional assistants. This course covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TH 5312. Collaborative Theory.**

This course examines the nature of collaboration within the context of the live entertainment production processes. Particular attention is focused on understanding psychological/sociological viewpoints in effective collaborative work environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5313. History of Directing and Scenography.**

This course is a historical survey of the work of directors and designers. Particular emphasis will be on seminal production plans for notable directors and designers of the 20th and 21st centuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5314. History of Material Culture - Pre 20th Century.**

This course is an historical survey of material culture and its influence on theatrical production pre-twentieth century. Attention is placed on research of the architecture, interiors, fashion, theatre literature, and technical innovations of seminal periods from Greco-Roman through 19th century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5315. History of Material Culture - 20th and 21st Centuries.**

This course is a historical survey of material culture and its influence on theatrical production in the twentieth- and twenty-first centuries. Along with anthropological research, attention is placed on the influences that shaped seminal practitioners of theatrical production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5316. Artist Brand Development & Management.**

This course focuses on the creation of a professional brand and marketing toolkit for practitioners in the live entertainment industry. Basic principles of business practices including accounting, tax law, networking, and unions are also explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5323. Shakespeare Through Performance.**

This intensive summer study abroad program immerses students in the language and culture of Shakespeare's plays. Incorporating a performance-based approach to the study of Shakespeare, this course includes theatrical workshops taught by professionals at leading international theatres, including the Royal Shakespeare Company.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5324. Shakespeare: Text and Context.**

This intensive study abroad program immerses students in the language and culture of Shakespeare's plays. In Stratford, academic workshops are led by scholars from the Shakespeare Birthplace Trust. Through immersion in the cultural environment in which the plays were produced, students gain insight into the context that shaped Shakespeare's theatre.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5330. Stage Management.**

An in-depth seminar in stage management, including organization, techniques, and practices for managing stage productions from initial planning through performance.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5331. Television Writing.**

This course focuses on the techniques of writing for television, including both half-hour situational comedies and hour-long dramas. Students will pitch story ideas, develop beat sheets, write treatments, and complete written scripts. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5332. Stage Properties.**

This course trains students in the craft, artistry and management of stage properties for careers in theatre, film and the entertainment industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5333. Advanced Television Writing.**

This course focuses on the techniques of creating a television series, including script writing and development, film production, and post-production editing. Students will spin off a character from a network or cable television series and create a new series based on that character. Graduate students will act as co-producers. Prerequisite: TH 5331 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5334. Figure Drawing for Costume Design.**

In this course students will practice drawing the human figure using traditional media, techniques and applications. Intended for the theatre designer, this course places special emphasis on aspects of the relationship between fabric and the human figure.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5338. MFA Lighting Studio.**

This course concentrates primarily on the aesthetics of stage lighting, and covers such topics as viewers' psychological and physiological responses as they pertain to visual perception; color; script analysis; use of light in creating both static and dynamic visual compositions; development and graphic representation of a theatrical lighting design; and creation of materials necessary to communicate design intentions.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5339. Previsualization.**

In this course, students explore software and strategies for discovering and communicating lighting sequences prior to technical rehearsals. The course assumes proficiency in Vectorworks, Lightwright, and conventional console programming.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5340. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required

**Grade Mode:** Standard Letter

**TH 5341. Dramatization and Adaptation.**

This course focuses on the development of new theatrical scripts based on existing stories and source material. Students will explore a variety of potential source materials, pitch adaptation ideas, and complete a written script. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5342. MFA Studio I.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5343. MFA Studio II.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5345. MFA Costume Studio.**

MFA Costume Studio is a course that explores character design for live entertainment, as well as, topics that pertain to the work of a Costume Designer. Through guided practice, students will master the design process while working from both traditional and non-traditional sources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5346. Historical Costume Research.**

This course is a study of clothing, accessories, and customs of selected theatrical periods as an approach to costuming period plays.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5347. Advanced Costume Construction.**

Advanced studies in the construction of costumes for the stage, techniques in sewing, pattern drafting/design as well as accessories/crafts construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5348. Graphic Representation.**

Students will study and practice drawing and painting techniques, as well as rendering with other media, including markers.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5350. Second Year Project.**

Students in the second year of the MFA in Theatre will direct, design, or write for a departmental production. The course includes a written report of the project that demonstrates an understanding of the creative process of the chosen discipline. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5352. MFA Studio III.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5353. MFA Studio IV.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5354. Playwriting.**

A seminar in the art and craft of playwriting, from initial idea through a completed draft of a play. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5355. Scene Painting.**

Theory and practice of scene and costume painting as developed in the Italian Renaissance and continuing into new media available today. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5356. Theatrical Drafting: Vectorworks.**

This course is a study of computer techniques and procedures used in the preparation of design and technical drawings for theatrical scenery and lighting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**TH 5357. MFA Scenic Studio.**

MFA Scenic Studio is a seminar course based on design, emphasizing presentation and justification of executed renderings or models for selected plays. Emphasis is on styles of staging, settings, lighting and properties, and their relationship to the complete production. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5358. Screenwriting.**

This course offers a comprehensive study of the art and craft of writing screenplays. During a semester of intensive writing, readings, script analyses, and critiques, writers complete assignments in storytelling, character, structure, and script development. Each writer completes a full-length screenplay as the capstone project for the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5359. Advanced Screenwriting.**

This course focuses on the development and revision of full-length screenplays. May be repeated for credit with different emphasis.

Prerequisite: TH 5358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5360. Problems in Theatre.**

Designed to give supervised experience to qualified advanced students in theatre history, playwriting, directing, acting, technical, or other theatre problems. Research problems or actual production problems may be chosen. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5361. Oregon Shakespeare Festival Intensive.**

This course examines theatre production with a specific focus on directors and directing at this country's largest Shakespeare theatre, the Oregon Shakespeare Festival. Students will study issues of translating the current seasons' nine plays from script to stage, as well as analyzing the perspectives and choices of each director's production.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5362. Vectorworks II.**

This course is an advanced study of computer techniques and procedures using Vectorworks in the preparation of technical drawings and digital previsualization for theatrical scenic and lighting design

Prerequisite: TH 5356 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5363. Directing for Film.**

An in-depth examination of directing theories and procedures for film with practical filming and editing exercises. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5364. MFA Directing Seminar I.**

In this course students develop their skills in analysis, research, staging, and production.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5365. Backgrounds of Modern Drama.**

An analysis of those developments in dramatic literature that formed the basis of modern drama. Primary emphasis will be on nineteenth- and twentieth-century European and American drama.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5367. Studies in Dramatic Theory and Criticism.**

The study of dramatic theory and criticism from Aristotle to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5369. Contemporary World Theatre and Drama.**

Studies of current trends in world theatre and drama.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5371. Classical and Renaissance Drama.**

Seminar in Greek, French Neoclassical, and English Renaissance theatre, with intensive examination of selected works by Sophocles, Euripides, Shakespeare, and Marlowe. Primary focus will be on analysis of the plays as performance texts, and on the historical cultural environments in which the plays were created and first performed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5372. Theory and Practice of Dramaturgy.**

Study of the practical application of historical research and textual analysis in the production of period plays and new works. Emphasis upon the dramaturg as an instrument of collaboration between members of the artistic team and as a facilitator of audience outreach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5373. Advanced Film Directing.**

An in-depth examination of narrative filmmaking that includes screenplay analysis, storyboarding, scheduling the shoot, directorial techniques, staging actors, camera placement, filming on location, and editing.

Prerequisite: TH 5363 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5375. Advanced Playwriting.**

This course focuses on an in-depth study of the techniques of playwriting and the variety of styles that a playwright might employ. The course culminates with the writing of a full-length play. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5378. Play Development Lab.**

This course provides a laboratory workshop development process for new plays. It provides a structured environment for rigorously revising student-written works. Prerequisite: TH 5375 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5379. Digital Rendering for Theatrical Design.**

This course is a study of computer techniques and procedures used in graphic representation for theatrical design. Students will work primarily with Photoshop, with references to other programs such as Illustrator, Vectorworks, Sketchup, and Painter as necessary. Students will explore and practice techniques to create scenic renderings, costume renderings, lighting sketches, and paper props as well as techniques for editing production photos, creating collages, and producing publicity materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5380. Advanced Scenic Painting.**

Students develop scenic art skills, with an increased emphasis on realized practical production work, and a focus on the planning, sampling, and management of theatrical production paint processes. Prerequisite: TH 5355 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5381. Automated Lighting.**

Automated Lighting will explore and practice methods and approaches for basic uses of multi-attribute lighting technology. We will investigate a variety of moving light and LED technology and control as well as methods of properly documenting and cueing with these complex tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5382. MFA Studio V.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis. This course now has variable content based on the composition of students.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TH 5383. MFA Studio VI.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5384. Non-Theatrical Design.**

This course explores career opportunities in non-theatrical design fields including theatre design, television, corporate events, architectural lighting, and visual management for retail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5385. Lighting Console Programming.**

This course covers the skills and techniques used in modern console programming for a variety of lighting systems used in the entertainment industry. The course includes programming specifics for consoles from a variety of manufacturers. Special focus is placed on execution and presentation of console programming research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5386. Lighting and Projection Design for Dance.**

This course covers the skills and techniques used in lighting and projection design for dance. The students explore innovative choreographers and designers who use both established and emerging technologies in lighting and projection design. Special focus is placed on research presentations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5387. MFA Directing Seminar II.**

In this course students experience choosing, preparing, and directing a theatrical production from analysis to performance. Attention is given to theatre organization and management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5398. Final Creative Project.**

Students write, direct, or design a major university theatre production, demonstrating mastery in their area of emphasis. A written report of the project must be approved by a faculty committee. This requirement for the MFA in Theatre is usually taken in the final year of study.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Theatre 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5640. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry; it is intended for students who do a full-time internship over the summer or during a regular full semester. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

The graduate minor in Theatre requires 6 semester credit hours of advisor-approved TH courses.

Code	Title	Hours
<b>Electives</b>		
Choose 6 hours from the following:		6
Advisor Approved Graduate Elective in Theatre		
<b>Total Hours</b>		<b>6</b>

**Dean**

M. Gary Sayed, Ph.D.

San Marcos Campus Dean's Office

Encino Hall Room 201

Telephone: 512-245-3300 Fax: 512-245-3791

www.health.txstate.edu (<http://www.health.txstate.edu/>)

Round Rock Campus Dean's Office

Avery 265

Telephone: 512-716-4200

**Associate Dean, San Marcos**

Scott Kruse, Ph.D.

**Senior Associate Dean, Round Rock**

Marla A. Erbin-Roesemann, Ph.D.

**Associate Dean for Research**

Arzu Ari, Ph.D.

**Department Chairs/Program Chairs/School Directors**

Medical Laboratory Science—Rodney E. Rohde, Ph.D.

Communication Disorders—Farzan Irani, Ph.D.

Health Administration—Cristian Lieneck, Ph.D. (Interim Director)

Health Informatics and Information Management—David L. Gibbs, Ph.D.

Health Sciences—Marla Roesemann, Ph.D.

Nursing—Theresa Garcia, Ph.D.

Physical Therapy—Janet Bezner, Ph.D.

Radiation Therapy—Megan L. Trad, Ph.D.

Respiratory Care—S. Gregg Marshall, Ph.D.

The College of Health Professions prepares students for careers in the healthcare field. Through its professional, technical, clinical, and academic programs, the college serves as an advocate for change and technical improvement in the field. The college also serves as a catalyst to expand and improve public perceptions of healthcare.

Graduate programs are offered in communication disorders, healthcare administration, health information management, nursing, physical therapy, and respiratory care. The college has a number of cooperating teaching sites with more than 1200 affiliations with hospitals and other healthcare facilities.

Programs offered in the College of Health Professions have specific admission requirements in addition to Texas State admission requirements. Most programs also have requirements for student liability insurance and immunizations. Background checks and drug testing may be required.

Clinical laboratory science and radiation therapy do not offer a graduate major, minor, or degree.

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a Health Report completed by a physician, and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and the required forms may be obtained through the program/department/school office.

## Background Check and Drug Screening

As a condition for placement in some professional practice sites, students are required to have a background check and/or drug screening

to meet requirements set by individual sites. Information on the drug screening process will be provided by program/department/school. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

Willow Hall, Room 253  
Round Rock Campus

200 Bobcat Way  
Round Rock, TX  
T: 512-716-2624 F: 512-716-2814  
<http://www.health.txstate.edu/CDIS> (<http://www.health.txstate.edu/CDIS/>)

## Mission Statement

The Department of Communication Disorders, located in Round Rock, is dedicated to excellence in teaching, research, and clinical practice in speech-language pathology and audiology. We are committed to innovative instruction, expansion of knowledge, and community-based collaboration to create a vibrant and supportive learning community that engages and inspires students, faculty, staff, and clients. Advanced clinical and educational training, grounded in evidence-based practices (EBP) and practice-based evidence (PBE), prepares students to serve individuals with communication disorders and their families in an ethical and culturally competent manner.

## Vision Statement

The vision of the Department of Communication Disorders is to become the leading program in the State of Texas for educating future speech-language pathologists and audiologists for clinical, research, and leadership roles ready to work successfully with culturally and/or linguistically diverse across the lifespan.

The Department prepares students at the graduate level to diagnose and manage speech, language, communication, swallowing, and hearing impairments in children and adults. A Master's degree is required for state licensure and national certification. The graduate program is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology.

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider, and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and the required forms may be obtained through the department office.

## Background Check and Drug Screening

As a condition for placement in some professional practice sites, some students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the background check/drug screening process will be provided by the department. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Master of Arts (M.A.)

- Major in Communication Disorders (p. 2240)

## Master of Science in Communication Disorders (M.S.C.D.)

- Major in Communication Disorders (Autism Concentration) (p. 2247)
- Major in Communication Disorders (Bilingual Concentration) (p. 2253)
- Major in Communication Disorders (Fluency Concentration) (p. 2259)
- Major in Communication Disorders (Hearing and Related Disorders Concentration) (p. 2265)
- Major in Communication Disorders (Neurogenic, Voice, & Swallowing Concentration) (p. 2271)
- Major in Communication Disorders (Versatility in Practice Concentration) (p. 2277)

## Program Overview

The Master of Arts (M.A.) degree with a major in Communication Disorders is clinically oriented and is designed to prepare clinicians for employment in hospitals, clinics, private practice, and public schools. The program meets the minimum education and clinical requirements for state licensure as a speech-language pathologist and for the Certificate of Clinical Competence in Speech-Language Pathology awarded by the American Speech-Language-Hearing Association (ASHA). The academic program is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of ASHA.

Candidates for the communication disorders master's degree are encouraged to earn a passing score on the Praxis Examination in Speech-Language Pathology before graduation and substitute a passing score for the required departmental graduate comprehensive examination.

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider, and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and the required forms may be obtained through the department office.

## Background Check and Drug Screening

As a condition for placement in some professional practice sites, some students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the background check/drug screening process will be provided by the department. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Facilities

The university operates the Speech-Language-Hearing Clinic on a twelve-month basis and is nationally known as a treatment center for communication disorders. Graduate students utilize the clinic for research in addition to clinical training experiences.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in communication disorders or leveling coursework from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in undergraduate communication disorders courses
- GRE not required
- prerequisite course form
- resume/CV
- statement of purpose addressing the following:
  - which areas of speech pathology practice or research hold the most interest and why
  - the rationale for applying to the Communication Disorders graduate program at Texas State University
  - any distinguishing life experiences, situations, and/or research interests
- three recommendation forms

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Communication Disorders requires 39 semester credit hours.

### Background

The number of hours of background work required is determined in consultation with the communication disorders graduate advisor and is dependent on the courses taken at the undergraduate level. Please refer to the Leveling Course Sequence located on the Department of Communication Disorders website at <https://www.health.txstate.edu/cdis/prospective-students/Admissions/Graduate-Admissions.html>. Upon completion of the required background work (leveling), applicants may apply for admission to the regular graduate sequence for a fall term. **Completion of the background requirements in the Department of Communication Disorders at Texas State DOES NOT GUARANTEE admission to the TWO-YEAR graduate program.**

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CDIS 5331	Stuttering	3
CDIS 5333	Language Disorders in School-Age and Adolescence	3
CDIS 5334	Assessment and Intervention of Speech Sound Disorders	3
CDIS 5336	Motor Speech Disorders	3
CDIS 5337	Voice Disorders	3
CDIS 5339	Dysphagia	3
CDIS 5340	Cognitive Rehabilitation	3
CDIS 5342	Aphasia and Related Disorders	3
CDIS 5363	Language Disorders in the Birth-to-5 Population	3
CDIS 5138	Augmentative & Alternative Communication	1
<b>Concentration<sup>1</sup></b>		
CDIS 5350	Multicultural Issues in Communication Disorders	3
CDIS 5262	Introduction to Research in Communication Disorders	2
<b>Thesis</b>		
CDIS 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
CDIS 5199B	Thesis	
CDIS 5299B	Thesis	
CDIS 5399B	Thesis	
CDIS 5599B	Thesis	
CDIS 5999B	Thesis	
<b>Total Hours</b>		<b>39</b>

### <sup>1</sup> Cognate Requirement and Clinical Practicum

In order to obtain the required 400 clinical hours for certification, students must enroll for clinical practicum each term enrolled for study toward the master's degree and until all clinical hours are completed. Students participating in on-campus clinical practicum in speech-language pathology must enroll in CDIS 5344CDIS 5344, CDIS 5345, CDIS 5346 or CDIS 5347, depending on the semester taken. Students earning supervised clock hours in audiology must enroll in CDIS 5321CDIS 5321. Graduate students earning clinical hours in both speech-language pathology and audiology during the same term



must enroll for both CDIS 5344, CDIS 5345, CDIS 5346 or CDIS 5347, depending on the semester taken, and CDIS 5321 concurrently. Students participating in off-campus clinical practicum must enroll in CDIS 5689 or CDIS 5690. Academic hours for clinical practicum do not count toward the degree.

## Comprehensive Examination Requirement

Graduate students must pass a comprehensive examination in communication disorders in accordance with Graduate College policy.

Students must meet with the Graduate Program Advisor/Coordinator early in the last semester of graduate study to review the required procedures mandated by The Graduate College and the Department. The examination may be written or oral and consists of questions submitted by the faculty. There are two sections to the exam. One section will cover pediatric assessment and treatment and one section will cover adult assessment and treatment. Each section of the comprehensive examination will be graded on a pass/fail scale. Each section must be passed in order to pass the entire departmental comprehensive examination.

In the event a student fails the first attempt at one or both sections of the Comprehensive Exam, faculty will provide the student with specific feedback on areas of weakness and ideas for improving performance. The student will then be given the opportunity to re-take the section they failed within four weeks of the first attempt. The re-take may be a written or oral format. If a student fails the second attempt, they will be provided with detailed feedback and directed study from the faculty and given one more opportunity during the next summer semester to re-take the previously failed section(s) of the Comprehensive Exam. Students will need to enroll in GC 5100: Comprehensive Exam Contingency course during the summer term. Failure to pass the second re-take of the Comprehensive Exam will result in dismissal from the graduate program.

When the student completes all comprehensive examination requirements, the Graduate Program Advisor/Coordinator will provide the information to The Graduate College.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College.

The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

#### Courses Offered

### Communication Disorders (CDIS)

#### CDIS 5138. Augmentative & Alternative Communication.

This course is designed to provide graduate students in Communication Disorders with theory-driven, evidence-based, and clinically oriented knowledge and skills related to augmentative and alternative communication (AAC). This course will meet the core knowledge and skill areas in AAC mandated by the Council of Academic Accreditation in Audiology and Speech-Language Pathology.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CDIS 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CDIS 5262. Introduction to Research in Communication Disorders.

This course is designed to acquaint students with research protocols in the behavioral sciences with an emphasis on speech-language pathology. Topics include critical thinking, research design, data collection, data analysis, research writing, and evidence-based practice. The course will emphasize critical analysis of the professional literature in speech-language pathology.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CDIS 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CDIS 5301. Advanced Independent Study in Communication Disorders.

Discussions of various areas of speech language pathology. Attention to individual needs of the student. Emphasis on independent study in habilitation and rehabilitation of communication disorders. This course is repeatable for credit and can be taught by different faculty covering different topics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CDIS 5312. Neuroanatomy for Communication Disorders.

This is a lecture course that examines the organization of the brain, spinal cord, and peripheral nervous system. Significance of the areas of the nervous system that are primary or secondary for speech, language, and hearing are the main focus of this course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CDIS 5321. Clinical Practicum in Audiology.

Supervised clinical practicum in audiology. Focus is on both diagnostic and rehabilitative audiological management of diverse populations. Must be taken every semester that a student participates in supervised audiology practicum. May be repeated for credit. This course does not earn graduate degree credit. Prerequisites: CDIS 4420 and CDIS 4370 or equivalents; instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required

**Grade Mode:** Leveling/Assistantships

#### CDIS 5325. Anatomy and Physiology of the Speech Production System.

Description of structure and function of the speech production system with emphasis on physical problems in speech, language, and hearing. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5330. Speech and Language Development.**

Course to acquaint students with acquisition of speech and language in children. Basic information from linguistics, psycholinguistics, psychology, and communication are examined for children in various stages of development. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5331. Stuttering.**

This course is designed to describe therapeutic intervention with children and adults who stutter. Techniques of assessment, management, and counseling are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5333. Language Disorders in School-Age and Adolescence.**

This introductory-level course will review assessment and intervention for language disorders in the school-age and adolescent population. The relationship between language and literacy will be discussed. Students will engage in detailed narrative analyses. Evidence-based practice and collaborative models of intervention will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5334. Assessment and Intervention of Speech Sound Disorders.**

This course is designed to study normal, delayed, and disordered child phonology in English and select dialects/languages. Course covers etiologies, characteristics, and anatomic/physiologic bases of delays/disorders, as well as their potential impact on phonological awareness and subsequent development in reading/writing. Prevention, assessment, and treatment of disorders will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5336. Motor Speech Disorders.**

The course reviews the neuroanatomic mechanisms underlying speech production and surveys the etiology, symptomatology, epidemiology, course, and prognosis of speech disorders resulting from impairment of the central and/or peripheral nervous system. Emphasis is placed on apraxia and the dysarthrias. Clinical application in assessment and rehabilitation of patients with neurogenically-based motor speech deficits is stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5337. Voice Disorders.**

This course is designed to describe the assessment of vocal function and disorders and the rehabilitation of the patient with vocal abnormalities due to vocal abuse, psychological, and/or organic etiologies, including laryngectomy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5339. Dysphagia.**

A review of anatomic and physiologic disturbances of swallowing in neurologically impaired and post-surgical head and neck cancer patients will be presented. Instrumentation, techniques of evaluation, and radiograph examination of deglutition will be reviewed. Rehabilitation procedures will be described in detail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5340. Cognitive Rehabilitation.**

This introductory-level course will review neuropathology and neurophysiology of traumatic brain injury and dementia, introduce relevant terms and models in cognitive rehabilitation, provide a framework for assessment and treatment, and discuss the functional impact of cognitive-communicative disorders on the patient and others.

Prerequisites: CDIS 5336 and CDIS 5342 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5342. Aphasia and Related Disorders.**

The course develops an understanding of the etiology, symptomatology, assessment, remediation, and recovery patterns of acquired communication disorders that result from impairment of the central nervous system, with a focus on the aphasia and traumatic brain injuries. Coexisting problems caused by damage to cortical/sub-cortical structures will also be addressed. Recent advances in relevant clinical research and technology will be surveyed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5344. Advanced Clinical Practicum I.**

This course is designed to be the first of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 15-20 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Credit/No Credit

**CDIS 5345. Advanced Clinical Practicum II.**

This course is designed to be the second of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 20-25 clock hours of clinical practicum experience will be accumulated. This course must be completed with a grade of "CR" or higher to advance to CDIS 5346. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 with a grade of a "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship

**Grade Mode:** Credit/No Credit

**CDIS 5346. Advanced Clinical Practicum III.**

This course is designed to be the third of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 both with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5347. Advanced Clinical Practicum IV.**

This course is designed to be the final of four clinical practicum experiences for first-year graduate students. Students will participate in clinical practicum experiences including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 all with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5350. Multicultural Issues in Communication Disorders.**

Addresses the social, cultural, and linguistic factors that impact the clinical service delivery provided to culturally and linguistically diverse populations. A primary focus of the course will be to address general principles of assessment and intervention as they relate to the clinical management of individuals with communication disorders from diverse cultural and language backgrounds. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5353. Phonetics.**

This course is designed to analyze normal and abnormal phonological processes in children and adults. Proficiency in transcription using the International Phonetic Alphabet (IPA) is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5363. Language Disorders in the Birth-to-5 Population.**

This introductory-level course will review assessment and intervention for language disorders in the birth-to-5 population. Use of assessment information to determine language disorders versus language difference will be addressed. Students will engage in detailed language sample analyses. Creating effective intervention plans using assessment data will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5369. Hearing Science.**

This course is designed to provide foundational knowledge in the areas of acoustics, auditory and vestibular anatomy/physiology, psychoacoustics, and speech perception across the lifespan.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CDIS 5370. Aural Rehabilitation.**

Principles and procedures in the habilitation and rehabilitation of hearing-impaired children and adults. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5375. Speech Science.**

This course is designed to provide a conceptual foundation in voice and speech production, speech perception, and acoustic analysis of voice and speech. The course will begin with the math and physics of acoustics, to provide students with a strong foundation in acoustics necessary to master speech science. Content will cover acoustical phonetics, theories of speech production and perception, and clinical application emphasizing acoustic instrumentation and software used in communication disorders. Examples of concepts to be covered include frequency, pitch, intensity, loudness, decibels, waveforms, spectra, spectrograms, filters, vocal tract transfer function, formants, and acoustic software for voice and speech analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5380. Communication and Aging.**

The influx of senior citizens in our population will require preparation for the increased incidence of communication problems due to normal and pathological aging processes. This course will address how aging affects communication, how communication disorders manifest in the aging population, and implications for professionals working with older adults.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5390. Seminar in Communication Disorders.**

Examination of current theoretical and clinical issues in Communication Disorders. Issues may include family management in communication disorders, language and literacy, issues in health care rehabilitation, instrumentation and entrepreneurship. May be repeated for credit.

Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CDIS 5391. Evidence-Based Practice in Second Language Acquisition.**

This course is designed for the discussion of various areas of bilingual speech language pathology with the primary focus on second language acquisition. The assessment and treatment of bilingual individuals diagnosed with communication disorders will also be addressed.

Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5392. Evidence-Based Practice in Autism.**

The course is designed to help students understand how to promote the social aspects of language in children diagnosed with Autism Spectrum Disorders within an evidence-based practice framework. In this course, students will critically examine standardized norm-referenced tests used to diagnose autism. Also addressed will be the broad range of evidence-based language intervention strategies recommended for children with Autism in the early years and once in school. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5393. Evidence-Based Practice in Stuttering.**

This course is designed to examine current evidence-based practice and clinical issues in childhood-onset stuttering. Issues addressed may include counseling approaches and strategies, treatment efficacy across the lifespan and family involvement in the therapy process for childhood-onset stuttering. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5394. Evidence-Based Practice in Neurogenic, Voice, and Swallowing.**

This course examines the current theoretical and clinical issues in communication disorders related to medically-based communication and swallowing disorders (neurogenic, voice, and swallowing disorders). Attention will be given to individual needs of the student in developing practical application of research to clinical practice. This course places emphasis on independent study in the habilitation and rehabilitation of medical-based communication and swallowing disorders and interprofessional practice. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5395. Evidence-Based Practice in Communication Disorders Across the Lifespan.**

This course is designed to examine current theoretical and clinical issues impacting individuals exhibiting communication disorders throughout the lifespan. A variety of topics such as home health, language, literacy, pediatric feeding, entrepreneurship, and professional issues in Communication Disorders will be addressed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5396. Evidence-Based Practice for Language & Literacy in Children Who are Deaf or Hard of Hearing.**

The course is designed to help students understand how to promote the language and literacy of children who are d/Deaf and hard-of-hearing within an evidence-based practice framework. In this course, students will critically examine the broad range of language and literacy treatment approaches that are used with children who are d/Deaf and hard of hearing in the early years and once in school. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Communication Disorders 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5420. Diagnostic Audiology.**

This course is designed to relate anatomy and physiology of the auditory system and the science of acoustics to the study of normal, pathological auditory function. Laboratory experience in administration and interpretation of audiological tests. Discussion of professional opportunities in the field of Audiology and provision of audiological service to special populations will be held. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5462. Speech Sound Disorders.**

This course is designed to provide the principles and procedures for the identification, description, assessment, and treatment of speech sound disorders in children. Students will observe demonstrations of assessment and treatment procedures during lab. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships



**CDIS 5466. Language Disorders.**

This course includes principles and procedures for the identification, description, assessment, and remediation of language disorders in infants, children, and adolescents. Students will observe demonstrations of assessment procedures and types of language disorders within the context of clinical procedures. Describing observed behaviors and analyzing language samples are emphasized. This course does not earn graduate degree credit.

**4 Credit Hours. 4 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5689. Clinical Externship I in Communication Disorders.**

This course is designed to be the first off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit.

**Prerequisite:** CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 all with a grade of "C" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5690. Clinical Externship II in Communication Disorders.**

This course is designed to be the second off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit.

**Prerequisite:** CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 and CDIS 5689 all with a grade of a "CR" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science in Communication Disorders (M.S.C.D.) degree with a major in Communication Disorders is clinically oriented and is designed to prepare clinicians for employment in hospitals, clinics, private practice, and public schools. The program meets the minimum

education and clinical requirements for state licensure as a speech-language pathologist and for the Certificate of Clinical Competence in Speech-Language Pathology awarded by the American Speech-Language-Hearing Association (ASHA). The academic program is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of ASHA.

Candidates for the communication disorders master's degree are encouraged to earn a passing score on the Praxis Examination in Speech-Language Pathology before graduation and substitute a passing score for the required departmental graduate comprehensive examination.

## Autism Concentration

The Autism Concentration provides students with:

- a specialized concentration in the treatment and assessment of individuals of the autism spectrum
- assessment & intervention experiences serving persons on the autism spectrum
- high quality, evidence-based academic and clinical training
- evidence based research experiences for graduate students

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider, and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and the required forms may be obtained through the department office.

## Background Check and Drug Screening

As a condition for placement in some professional practice sites, some students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the background check/drug screening process will be provided by the department. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Facilities

The university operates the Speech-Language-Hearing Clinic on a twelve-month basis and is nationally known as a treatment center for communication disorders. Graduate students utilize the clinic for research in addition to clinical training experiences.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in communication disorders or leveling coursework from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- minimum 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in undergraduate communication disorders courses
- GRE not required
- prerequisite course form
- resume/CV
- statement of purpose addressing the following:
  - which areas of speech pathology practice or research hold the most interest and why
  - the rationale for applying to the Communication Disorders graduate program at Texas State University
  - any distinguishing life experiences, situations, and/or research interests
- three recommendation forms

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met

## Degree Requirements

The Master of Science in Communication Disorders (M.S.C.D.) degree with a major in Communication Disorders and a concentration in Autism requires 36 semester credit hours.

### Background

The number of hours of background work required is determined in consultation with the communication disorders graduate advisor and is dependent on the courses taken at the undergraduate level. Please refer to the Leveling Course Sequence located on the Department of Communication Disorders website at <https://www.health.txstate.edu/cdis/prospective-students/Admissions/Graduate-Admissions.html>. Upon completion of the required background work (leveling), applicants may apply for admission to the regular graduate sequence for a fall term. **Completion of the background requirements in the Department**

**of Communication Disorders at Texas State DOES NOT GUARANTEE admission to the TWO-YEAR graduate program.**

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CDIS 5331	Stuttering	3
CDIS 5333	Language Disorders in School-Age and Adolescence	3
CDIS 5334	Assessment and Intervention of Speech Sound Disorders	3
CDIS 5336	Motor Speech Disorders	3
CDIS 5337	Voice Disorders	3
CDIS 5339	Dysphagia	3
CDIS 5340	Cognitive Rehabilitation	3
CDIS 5342	Aphasia and Related Disorders	3
CDIS 5363	Language Disorders in the Birth-to-5 Population	3
<b>Autism Concentration</b>		
CDIS 5262	Introduction to Research in Communication Disorders	2
CDIS 5350	Multicultural Issues in Communication Disorders	3
CDIS 5392	Evidence-Based Practice in Autism	3
CDIS 5138	Augmentative & Alternative Communication	1
<b>Clinical Practicum<sup>1</sup></b>		
<b>Total Hours</b>		<b>36</b>

### <sup>1</sup> Clinical Practicum

In order to obtain the required 400 clinical hours for certification, students must enroll for clinical practicum each term in which they are enrolled for study toward the master's degree and until all clinical hours are completed. Students participating in on-campus clinical practicum in speech-language pathology must enroll in CDIS 5344 or CDIS 5345, or CDIS 5346, or CDIS 5347 depending on the semester. Students earning supervised clock hours in audiology must enroll in CDIS 5321. Graduate students earning clinical hours in both speech-language pathology and audiology during the same term must enroll for both CDIS 5344, or CDIS 5345, or CDIS 5346, or CDIS 5347 (depending on the semester) and CDIS 5321 concurrently. Students participating in off-campus clinical practicum must enroll in CDIS 5689 or CDIS 5690. Academic hours for clinical practicum do not count toward the degree.

## Comprehensive Examination Requirements

Graduate students must pass a comprehensive examination in communication disorders in accordance with Graduate College policy.

Students must meet with the Graduate Program Advisor/Coordinator early in the last semester of graduate study to review the required procedures mandated by The Graduate College and the Department. The examination may be written or oral and consists of questions submitted by the faculty. There are two sections to the exam. One section will cover pediatric assessment and treatment and one section will cover adult assessment and treatment. Each section of the comprehensive examination will be graded on a pass/fail scale. Each section must be passed in order to pass the entire departmental comprehensive examination.

In the event a student fails the first attempt at one or both sections of the Comprehensive Exam, faculty will provide the student with specific feedback on areas of weakness and ideas for improving performance. The student will then be given the opportunity to re-take the section they failed within four weeks of the first attempt. The re-take may be a written or oral format.

If a student fails the second attempt, they will be provided with detailed feedback and directed study from the faculty and given one more opportunity during the next summer semester to re-take the previously failed section(s) of the Comprehensive Exam. Students will need to enroll in GC 5100: Comprehensive Exam Contingency course during the summer term. Failure to pass the second re-take of the Comprehensive Exam will result in dismissal from the graduate program.

When the student completes all comprehensive examination requirements, the Graduate Program Advisor/Coordinator will provide the information to The Graduate College.

#### **CDIS 5138. Augmentative & Alternative Communication.**

This course is designed to provide graduate students in Communication Disorders with theory-driven, evidence-based, and clinically oriented knowledge and skills related to augmentative and alternative communication (AAC). This course will meet the core knowledge and skill areas in AAC mandated by the Council of Academic Accreditation in Audiology and Speech-Language Pathology.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CDIS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **CDIS 5262. Introduction to Research in Communication Disorders.**

This course is designed to acquaint students with research protocols in the behavioral sciences with an emphasis on speech-language pathology. Topics include critical thinking, research design, data collection, data analysis, research writing, and evidence-based practice. The course will emphasize critical analysis of the professional literature in speech-language pathology.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CDIS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **CDIS 5301. Advanced Independent Study in Communication Disorders.**

Discussions of various areas of speech language pathology. Attention to individual needs of the student. Emphasis on independent study in habilitation and rehabilitation of communication disorders. This course is repeatable for credit and can be taught by different faculty covering different topics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CDIS 5312. Neuroanatomy for Communication Disorders.**

This is a lecture course that examines the organization of the brain, spinal cord, and peripheral nervous system. Significance of the areas of the nervous system that are primary or secondary for speech, language, and hearing are the main focus of this course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### **CDIS 5321. Clinical Practicum in Audiology.**

Supervised clinical practicum in audiology. Focus is on both diagnostic and rehabilitative audiological management of diverse populations.

Must be taken every semester that a student participates in supervised audiology practicum. May be repeated for credit. This course does not earn graduate degree credit. Prerequisites: CDIS 4420 and CDIS 4370 or equivalents; instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required

**Grade Mode:** Leveling/Assistantships

#### **CDIS 5325. Anatomy and Physiology of the Speech Production System.**

Description of structure and function of the speech production system with emphasis on physical problems in speech, language, and hearing. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### **CDIS 5330. Speech and Language Development.**

Course to acquaint students with acquisition of speech and language in children. Basic information from linguistics, psycholinguistics, psychology, and communication are examined for children in various stages of development. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### **CDIS 5331. Stuttering.**

This course is designed to describe therapeutic intervention with children and adults who stutter. Techniques of assessment, management, and counseling are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5333. Language Disorders in School-Age and Adolescence.**

This introductory-level course will review assessment and intervention for language disorders in the school-age and adolescent population. The relationship between language and literacy will be discussed. Students will engage in detailed narrative analyses. Evidence-based practice and collaborative models of intervention will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5334. Assessment and Intervention of Speech Sound Disorders.**

This course is designed to study normal, delayed, and disordered child phonology in English and select dialects/languages. Course covers etiologies, characteristics, and anatomic/physiologic bases of delays/disorders, as well as their potential impact on phonological awareness and subsequent development in reading/writing. Prevention, assessment, and treatment of disorders will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5336. Motor Speech Disorders.**

The course reviews the neuroanatomic mechanisms underlying speech production and surveys the etiology, symptomatology, epidemiology, course, and prognosis of speech disorders resulting from impairment of the central and/or peripheral nervous system. Emphasis is placed on apraxia and the dysarthrias. Clinical application in assessment and rehabilitation of patients with neurogenically-based motor speech deficits is stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5337. Voice Disorders.**

This course is designed to describe the assessment of vocal function and disorders and the rehabilitation of the patient with vocal abnormalities due to vocal abuse, psychological, and/or organic etiologies, including laryngectomy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5339. Dysphagia.**

A review of anatomic and physiologic disturbances of swallowing in neurologically impaired and post-surgical head and neck cancer patients will be presented. Instrumentation, techniques of evaluation, and radiograph examination of deglutition will be reviewed. Rehabilitation procedures will be described in detail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5340. Cognitive Rehabilitation.**

This introductory-level course will review neuropathology and neurophysiology of traumatic brain injury and dementia, introduce relevant terms and models in cognitive rehabilitation, provide a framework for assessment and treatment, and discuss the functional impact of cognitive-communicative disorders on the patient and others. Prerequisites: CDIS 5336 and CDIS 5342 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5342. Aphasia and Related Disorders.**

The course develops an understanding of the etiology, symptomatology, assessment, remediation, and recovery patterns of acquired communication disorders that result from impairment of the central nervous system, with a focus on the aphasia and traumatic brain injuries. Coexisting problems caused by damage to cortical/sub-cortical structures will also be addressed. Recent advances in relevant clinical research and technology will be surveyed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5344. Advanced Clinical Practicum I.**

This course is designed to be the first of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 15-20 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Credit/No Credit

**CDIS 5345. Advanced Clinical Practicum II.**

This course is designed to be the second of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 20-25 clock hours of clinical practicum experience will be accumulated. This course must be completed with a grade of "CR" or higher to advance to CDIS 5346. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 with a grade of a "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship

**Grade Mode:** Credit/No Credit

**CDIS 5346. Advanced Clinical Practicum III.**

This course is designed to be the third of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 both with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5347. Advanced Clinical Practicum IV.**

This course is designed to be the final of four clinical practicum experiences for first-year graduate students. Students will participate in clinical practicum experiences including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 all with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5350. Multicultural Issues in Communication Disorders.**

Addresses the social, cultural, and linguistic factors that impact the clinical service delivery provided to culturally and linguistically diverse populations. A primary focus of the course will be to address general principles of assessment and intervention as they relate to the clinical management of individuals with communication disorders from diverse cultural and language backgrounds. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5353. Phonetics.**

This course is designed to analyze normal and abnormal phonological processes in children and adults. Proficiency in transcription using the International Phonetic Alphabet (IPA) is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5363. Language Disorders in the Birth-to-5 Population.**

This introductory-level course will review assessment and intervention for language disorders in the birth-to-5 population. Use of assessment information to determine language disorders versus language difference will be addressed. Students will engage in detailed language sample analyses. Creating effective intervention plans using assessment data will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5369. Hearing Science.**

This course is designed to provide foundational knowledge in the areas of acoustics, auditory and vestibular anatomy/physiology, psychoacoustics, and speech perception across the lifespan.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CDIS 5370. Aural Rehabilitation.**

Principles and procedures in the habilitation and rehabilitation of hearing-impaired children and adults. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5375. Speech Science.**

This course is designed to provide a conceptual foundation in voice and speech production, speech perception, and acoustic analysis of voice and speech. The course will begin with the math and physics of acoustics, to provide students with a strong foundation in acoustics necessary to master speech science. Content will cover acoustical phonetics, theories of speech production and perception, and clinical application emphasizing acoustic instrumentation and software used in communication disorders. Examples of concepts to be covered include frequency, pitch, intensity, loudness, decibels, waveforms, spectra, spectrograms, filters, vocal tract transfer function, formants, and acoustic software for voice and speech analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5380. Communication and Aging.**

The influx of senior citizens in our population will require preparation for the increased incidence of communication problems due to normal and pathological aging processes. This course will address how aging affects communication, how communication disorders manifest in the aging population, and implications for professionals working with older adults.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5390. Seminar in Communication Disorders.**

Examination of current theoretical and clinical issues in Communication Disorders. Issues may include family management in communication disorders, language and literacy, issues in health care rehabilitation, instrumentation and entrepreneurship. May be repeated for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CDIS 5391. Evidence-Based Practice in Second Language Acquisition.**

This course is designed for the discussion of various areas of bilingual speech language pathology with the primary focus on second language acquisition. The assessment and treatment of bilingual individuals diagnosed with communication disorders will also be addressed.

Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5392. Evidence-Based Practice in Autism.**

The course is designed to help students understand how to promote the social aspects of language in children diagnosed with Autism Spectrum Disorders within an evidence-based practice framework. In this course, students will critically examine standardized norm-referenced tests used to diagnose autism. Also addressed will be the broad range of evidence-based language intervention strategies recommended for children with Autism in the early years and once in school. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CDIS 5393. Evidence-Based Practice in Stuttering.**

This course is designed to examine current evidence-based practice and clinical issues in childhood-onset stuttering. Issues addressed may include counseling approaches and strategies, treatment efficacy across the lifespan and family involvement in the therapy process for childhood-onset stuttering. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5394. Evidence-Based Practice in Neurogenic, Voice, and Swallowing.**

This course examines the current theoretical and clinical issues in communication disorders related to medically-based communication and swallowing disorders (neurogenic, voice, and swallowing disorders). Attention will be given to individual needs of the student in developing practical application of research to clinical practice. This course places emphasis on independent study in the habilitation and rehabilitation of medical-based communication and swallowing disorders and interprofessional practice. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5395. Evidence-Based Practice in Communication Disorders Across the Lifespan.**

This course is designed to examine current theoretical and clinical issues impacting individuals exhibiting communication disorders throughout the lifespan. A variety of topics such as home health, language, literacy, pediatric feeding, entrepreneurship, and professional issues in Communication Disorders will be addressed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5396. Evidence-Based Practice for Language & Literacy in Children Who are Deaf or Hard of Hearing.**

The course is designed to help students understand how to promote the language and literacy of children who are d/Deaf and hard-of-hearing within an evidence-based practice framework. In this course, students will critically examine the broad range of language and literacy treatment approaches that are used with children who are d/Deaf and hard of hearing in the early years and once in school. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Communication Disorders 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5420. Diagnostic Audiology.**

This course is designed to relate anatomy and physiology of the auditory system and the science of acoustics to the study of normal, pathological auditory function. Laboratory experience in administration and interpretation of audiological tests. Discussion of professional opportunities in the field of Audiology and provision of audiological service to special populations will be held. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5462. Speech Sound Disorders.**

This course is designed to provide the principles and procedures for the identification, description, assessment, and treatment of speech sound disorders in children. Students will observe demonstrations of assessment and treatment procedures during lab. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5466. Language Disorders.**

This course includes principles and procedures for the identification, description, assessment, and remediation of language disorders in infants, children, and adolescents. Students will observe demonstrations of assessment procedures and types of language disorders within the context of clinical procedures. Describing observed behaviors and analyzing language samples are emphasized. This course does not earn graduate degree credit.

**4 Credit Hours. 4 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5689. Clinical Externship I in Communication Disorders.**

This course is designed to be the first off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 all with a grade of "C" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5690. Clinical Externship II in Communication Disorders.**

This course is designed to be the second off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 and CDIS 5689 all with a grade of a "CR" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science in Communication Disorders (M.S.C.D.) degree with a major in Communication Disorders is clinically oriented and is designed to prepare clinicians for employment in hospitals, clinics, private practice, and public schools. The program meets the minimum education and clinical requirements for state licensure as a speech-language pathologist and for the Certificate of Clinical Competence in Speech-Language Pathology awarded by the American Speech-Language-Hearing Association (ASHA). The academic program is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of ASHA.

Candidates for the communication disorders master's degree are encouraged to earn a passing score on the Praxis Examination in Speech-Language Pathology before graduation and substitute a passing score for the required departmental graduate comprehensive examination.

## Bilingual Concentration

The Bilingual Concentration provides students with:

- multi-faceted exposure to and experiences with clinical bilingual and bicultural issues including populations other than Spanish-English bilinguals
- interaction with bilingual speech-language pathologists currently serving diverse populations

- community involvement through Bilingual Interest Group student organization providing resources to underserved populations
- providing bilingual and bicultural diagnostic services to local School districts for their students with speech and language disorders.

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider, and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and the required forms may be obtained through the department office.

## Background Check and Drug Screening

As a condition for placement in some professional practice sites, some students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the background check/drug screening process will be provided by the department. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Facilities

The university operates the Speech-Language-Hearing Clinic on a twelve-month basis and is nationally known as a treatment center for communication disorders. Graduate students utilize the clinic for research in addition to clinical training experiences.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in communication disorders or leveling coursework from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- minimum 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in undergraduate communication disorders courses
- GRE not required
- prerequisite course form

- resume/CV
- statement of purpose addressing the following:
  - which areas of speech pathology practice or research hold the most interest and why
  - the rationale for applying to the Communication Disorders graduate program at Texas State University
  - any distinguishing life experiences, situations, and/or research interests
- three recommendation forms

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- [official Duolingo scores required with a 110 overall](#)
- [official TOEFL Essentials scores required with an 8.5 overall](#)

This program does **not** offer admission if the scores above are not met

## Degree Requirements

The Master of Science in Communication Disorders (M.S.C.D.) degree with a major in Communication Disorders and a Bilingual concentration requires 36 semester credit hours.

### Background

The number of hours of background work required is determined in consultation with the communication disorders graduate advisor and is dependent on the courses taken at the undergraduate level. Please refer to the Leveling Course Sequence located on the Department of Communication Disorders website at <https://www.health.txstate.edu/cdis/prospective-students/Admissions/Graduate-Admissions.html>. Upon completion of the required background work (leveling), applicants may apply for admission to the regular graduate sequence for a fall term. **Completion of the background requirements in the Department of Communication Disorders at Texas State DOES NOT GUARANTEE admission to the TWO-YEAR graduate program.**

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CDIS 5331	Stuttering	3
CDIS 5333	Language Disorders in School-Age and Adolescence	3
CDIS 5334	Assessment and Intervention of Speech Sound Disorders	3
CDIS 5336	Motor Speech Disorders	3
CDIS 5337	Voice Disorders	3
CDIS 5339	Dysphagia	3
CDIS 5340	Cognitive Rehabilitation	3
CDIS 5342	Aphasia and Related Disorders	3

CDIS 5363	Language Disorders in the Birth-to-5 Population	3
<b>Bilingual Concentration</b>		
CDIS 5262	Introduction to Research in Communication Disorders	2
CDIS 5350	Multicultural Issues in Communication Disorders	3
CDIS 5391	Evidence-Based Practice in Second Language Acquisition	3
CDIS 5138	Augmentative & Alternative Communication	1
<b>Clinical Practicum<sup>1</sup></b>		
<b>Total Hours</b>		<b>36</b>

### <sup>1</sup> Clinical Practicum

In order to obtain the required 400 clinical hours for certification, students must enroll for clinical practicum each term in which they are enrolled for study toward the master's degree and until all clinical hours are completed. Students participating in on-campus clinical practicum in speech-language pathology must enroll in CDIS 5344, or CDIS 5345, or CDIS 5346, or CDIS 5347, depending on the semester. Students earning supervised clock hours in audiology must enroll in CDIS 5321. Graduate students earning clinical hours in both speech-language pathology and audiology during the same term must enroll for both CDIS 5344 or CDIS 5345, or CDIS 5346, or CDIS 5347 (depending on the semester) and CDIS 5321 concurrently. Students participating in off-campus clinical practicum must enroll in CDIS 5689 or CDIS 5690. Academic hours for clinical practicum do not count toward the degree.

## Comprehensive Examination Requirements

Graduate students must pass a comprehensive examination in communication disorders in accordance with Graduate College policy.

Students must meet with the Graduate Program Advisor/Coordinator early in the last semester of graduate study to review the required procedures mandated by The Graduate College and the Department. The examination may be written or oral and consists of questions submitted by the faculty. There are two sections to the exam. One section will cover pediatric assessment and treatment and one section will cover adult assessment and treatment. Each section of the comprehensive examination will be graded on a pass/fail scale. Each section must be passed in order to pass the entire departmental comprehensive examination.

In the event a student fails the first attempt at one or both sections of the Comprehensive Exam, faculty will provide the student with specific feedback on areas of weakness and ideas for improving performance. The student will then be given the opportunity to re-take the section they failed within four weeks of the first attempt. The re-take may be a written or oral format.

If a student fails the second attempt, they will be provided with detailed feedback and directed study from the faculty and given one more opportunity during the next summer semester to re-take the previously failed section(s) of the Comprehensive Exam. Students will need to enroll in GC 5100: Comprehensive Exam Contingency course during the summer term. Failure to pass the second re-take of the Comprehensive Exam will result in dismissal from the graduate program.

When the student completes all comprehensive examination requirements, the Graduate Program Advisor/Coordinator will provide the information to The Graduate College.

**CDIS 5138. Augmentative & Alternative Communication.**

This course is designed to provide graduate students in Communication Disorders with theory-driven, evidence-based, and clinically oriented knowledge and skills related to augmentative and alternative communication (AAC). This course will meet the core knowledge and skill areas in AAC mandated by the Council of Academic Accreditation in Audiology and Speech-Language Pathology.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5262. Introduction to Research in Communication Disorders.**

This course is designed to acquaint students with research protocols in the behavioral sciences with an emphasis on speech-language pathology. Topics include critical thinking, research design, data collection, data analysis, research writing, and evidence-based practice. The course will emphasize critical analysis of the professional literature in speech-language pathology.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5301. Advanced Independent Study in Communication Disorders.**

Discussions of various areas of speech language pathology. Attention to individual needs of the student. Emphasis on independent study in habilitation and rehabilitation of communication disorders. This course is repeatable for credit and can be taught by different faculty covering different topics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5312. Neuroanatomy for Communication Disorders.**

This is a lecture course that examines the organization of the brain, spinal cord, and peripheral nervous system. Significance of the areas of the nervous system that are primary or secondary for speech, language, and hearing are the main focus of this course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5321. Clinical Practicum in Audiology.**

Supervised clinical practicum in audiology. Focus is on both diagnostic and rehabilitative audiological management of diverse populations. Must be taken every semester that a student participates in supervised audiology practicum. May be repeated for credit. This course does not earn graduate degree credit. Prerequisites: CDIS 4420 and CDIS 4370 or equivalents; instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required

**Grade Mode:** Leveling/Assistantships

**CDIS 5325. Anatomy and Physiology of the Speech Production System.**

Description of structure and function of the speech production system with emphasis on physical problems in speech, language, and hearing. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5330. Speech and Language Development.**

Course to acquaint students with acquisition of speech and language in children. Basic information from linguistics, psycholinguistics, psychology, and communication are examined for children in various stages of development. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5331. Stuttering.**

This course is designed to describe therapeutic intervention with children and adults who stutter. Techniques of assessment, management, and counseling are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5333. Language Disorders in School-Age and Adolescence.**

This introductory-level course will review assessment and intervention for language disorders in the school-age and adolescent population. The relationship between language and literacy will be discussed. Students will engage in detailed narrative analyses. Evidence-based practice and collaborative models of intervention will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5334. Assessment and Intervention of Speech Sound Disorders.**

This course is designed to study normal, delayed, and disordered child phonology in English and select dialects/languages. Course covers etiologies, characteristics, and anatomic/physiologic bases of delays/disorders, as well as their potential impact on phonological awareness and subsequent development in reading/writing. Prevention, assessment, and treatment of disorders will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5336. Motor Speech Disorders.**

The course reviews the neuroanatomic mechanisms underlying speech production and surveys the etiology, symptomatology, epidemiology, course, and prognosis of speech disorders resulting from impairment of the central and/or peripheral nervous system. Emphasis is placed on apraxia and the dysarthrias. Clinical application in assessment and rehabilitation of patients with neurogenically-based motor speech deficits is stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5337. Voice Disorders.**

This course is designed to describe the assessment of vocal function and disorders and the rehabilitation of the patient with vocal abnormalities due to vocal abuse, psychological, and/or organic etiologies, including laryngectomy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5339. Dysphagia.**

A review of anatomic and physiologic disturbances of swallowing in neurologically impaired and post-surgical head and neck cancer patients will be presented. Instrumentation, techniques of evaluation, and radiograph examination of deglutition will be reviewed. Rehabilitation procedures will be described in detail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5340. Cognitive Rehabilitation.**

This introductory-level course will review neuropathology and neurophysiology of traumatic brain injury and dementia, introduce relevant terms and models in cognitive rehabilitation, provide a framework for assessment and treatment, and discuss the functional impact of cognitive-communicative disorders on the patient and others. Prerequisites: CDIS 5336 and CDIS 5342 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5342. Aphasia and Related Disorders.**

The course develops an understanding of the etiology, symptomatology, assessment, remediation, and recovery patterns of acquired communication disorders that result from impairment of the central nervous system, with a focus on the aphasias and traumatic brain injuries. Coexisting problems caused by damage to cortical/sub-cortical structures will also be addressed. Recent advances in relevant clinical research and technology will be surveyed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5344. Advanced Clinical Practicum I.**

This course is designed to be the first of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 15-20 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Credit/No Credit

**CDIS 5345. Advanced Clinical Practicum II.**

This course is designed to be the second of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 20-25 clock hours of clinical practicum experience will be accumulated. This course must be completed with a grade of "CR" or higher to advance to CDIS 5346. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 with a grade of a "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship

**Grade Mode:** Credit/No Credit

**CDIS 5346. Advanced Clinical Practicum III.**

This course is designed to be the third of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 both with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**CDIS 5347. Advanced Clinical Practicum IV.**

This course is designed to be the final of four clinical practicum experiences for first-year graduate students. Students will participate in clinical practicum experiences including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 all with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5350. Multicultural Issues in Communication Disorders.**

Addresses the social, cultural, and linguistic factors that impact the clinical service delivery provided to culturally and linguistically diverse populations. A primary focus of the course will be to address general principles of assessment and intervention as they relate to the clinical management of individuals with communication disorders from diverse cultural and language backgrounds. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5353. Phonetics.**

This course is designed to analyze normal and abnormal phonological processes in children and adults. Proficiency in transcription using the International Phonetic Alphabet (IPA) is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5363. Language Disorders in the Birth-to-5 Population.**

This introductory-level course will review assessment and intervention for language disorders in the birth-to-5 population. Use of assessment information to determine language disorders versus language difference will be addressed. Students will engage in detailed language sample analyses. Creating effective intervention plans using assessment data will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5369. Hearing Science.**

This course is designed to provide foundational knowledge in the areas of acoustics, auditory and vestibular anatomy/physiology, psychoacoustics, and speech perception across the lifespan.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CDIS 5370. Aural Rehabilitation.**

Principles and procedures in the habilitation and rehabilitation of hearing-impaired children and adults. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5375. Speech Science.**

This course is designed to provide a conceptual foundation in voice and speech production, speech perception, and acoustic analysis of voice and speech. The course will begin with the math and physics of acoustics, to provide students with a strong foundation in acoustics necessary to master speech science. Content will cover acoustical phonetics, theories of speech production and perception, and clinical application emphasizing acoustic instrumentation and software used in communication disorders. Examples of concepts to be covered include frequency, pitch, intensity, loudness, decibels, waveforms, spectra, spectrograms, filters, vocal tract transfer function, formants, and acoustic software for voice and speech analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5380. Communication and Aging.**

The influx of senior citizens in our population will require preparation for the increased incidence of communication problems due to normal and pathological aging processes. This course will address how aging affects communication, how communication disorders manifest in the aging population, and implications for professionals working with older adults.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5390. Seminar in Communication Disorders.**

Examination of current theoretical and clinical issues in Communication Disorders. Issues may include family management in communication disorders, language and literacy, issues in health care rehabilitation, instrumentation and entrepreneurship. May be repeated for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CDIS 5391. Evidence-Based Practice in Second Language Acquisition.**

This course is designed for the discussion of various areas of bilingual speech language pathology with the primary focus on second language acquisition. The assessment and treatment of bilingual individuals diagnosed with communication disorders will also be addressed.

Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5392. Evidence-Based Practice in Autism.**

The course is designed to help students understand how to promote the social aspects of language in children diagnosed with Autism Spectrum Disorders within an evidence-based practice framework. In this course, students will critically examine standardized norm-referenced tests used to diagnose autism. Also addressed will be the broad range of evidence-based language intervention strategies recommended for children with Autism in the early years and once in school. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5393. Evidence-Based Practice in Stuttering.**

This course is designed to examine current evidence-based practice and clinical issues in childhood-onset stuttering. Issues addressed may include counseling approaches and strategies, treatment efficacy across the lifespan and family involvement in the therapy process for childhood-onset stuttering. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5394. Evidence-Based Practice in Neurogenic, Voice, and Swallowing.**

This course examines the current theoretical and clinical issues in communication disorders related to medically-based communication and swallowing disorders (neurogenic, voice, and swallowing disorders). Attention will be given to individual needs of the student in developing practical application of research to clinical practice. This course places emphasis on independent study in the habilitation and rehabilitation of medical-based communication and swallowing disorders and interprofessional practice. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5395. Evidence-Based Practice in Communication Disorders Across the Lifespan.**

This course is designed to examine current theoretical and clinical issues impacting individuals exhibiting communication disorders throughout the lifespan. A variety of topics such as home health, language, literacy, pediatric feeding, entrepreneurship, and professional issues in Communication Disorders will be addressed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5396. Evidence-Based Practice for Language & Literacy in Children Who are Deaf or Hard of Hearing.**

The course is designed to help students understand how to promote the language and literacy of children who are d/Deaf and hard-of-hearing within an evidence-based practice framework. In this course, students will critically examine the broad range of language and literacy treatment approaches that are used with children who are d/Deaf and hard of hearing in the early years and once in school. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Communication Disorders 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5420. Diagnostic Audiology.**

This course is designed to relate anatomy and physiology of the auditory system and the science of acoustics to the study of normal, pathological auditory function. Laboratory experience in administration and interpretation of audiological tests. Discussion of professional opportunities in the field of Audiology and provision of audiological service to special populations will be held. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5462. Speech Sound Disorders.**

This course is designed to provide the principles and procedures for the identification, description, assessment, and treatment of speech sound disorders in children. Students will observe demonstrations of assessment and treatment procedures during lab. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5466. Language Disorders.**

This course includes principles and procedures for the identification, description, assessment, and remediation of language disorders in infants, children, and adolescents. Students will observe demonstrations of assessment procedures and types of language disorders within the context of clinical procedures. Describing observed behaviors and analyzing language samples are emphasized. This course does not earn graduate degree credit.

**4 Credit Hours. 4 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5689. Clinical Externship I in Communication Disorders.**

This course is designed to be the first off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 all with a grade of "C" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5690. Clinical Externship II in Communication Disorders.**

This course is designed to be the second off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 and CDIS 5689 all with a grade of a "CR" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science in Communication Disorders (M.S.C.D.) degree with a major in Communication Disorders is clinically oriented and is designed to prepare clinicians for employment in hospitals, clinics, private practice, and public schools. The program meets the minimum education and clinical requirements for state licensure as a speech-language pathologist and for the Certificate of Clinical Competence in Speech-Language Pathology awarded by the American Speech-Language-Hearing Association (ASHA). The academic program is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of ASHA.

Candidates for the communication disorders master's degree are encouraged to earn a passing score on the Praxis Examination in Speech-Language Pathology before graduation and substitute a passing score for the required departmental graduate comprehensive examination.

## Fluency Concentration

The Fluency Concentration provides students with:

- assessment and intervention for people who stutter (PWS) across the life-span
- advanced clinical and academic training for students in assessment and intervention for PWS
- opportunities to utilize telepractice, which is the use of telecommunications technology at a distance by connecting

clinicians to clients who may have difficulty to access of services and provide them with assessment, intervention, and/or consultation.

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider, and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and the required forms may be obtained through the department office.

## Background Check and Drug Screening

As a condition for placement in some professional practice sites, some students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the background check/drug screening process will be provided by the department. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Facilities

The university operates the Speech-Language-Hearing Clinic on a twelve-month basis and is nationally known as a treatment center for communication disorders. Graduate students utilize the clinic for research in addition to clinical training experiences.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in communication disorders or leveling coursework from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- minimum 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in undergraduate communication disorders courses
- GRE not required
- prerequisite course form
- resume/CV
- statement of purpose addressing the following:

- which areas of speech pathology practice or research hold the most interest and why
- the rationale for applying to the Communication Disorders graduate program at Texas State University
- any distinguishing life experiences, situations, and/or research interests
- three recommendation forms

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met

## Degree Requirements

The Master of Science in Communication Disorders (M.S.C.D.) degree with a major in Communication Disorders and a concentration in Fluency requires 36 semester credit hours.

### Background

The number of hours of background work required is determined in consultation with the communication disorders graduate advisor and is dependent on the courses taken at the undergraduate level. Please refer to the Leveling Course Sequence located on the Department of Communication Disorders website at <https://www.health.txstate.edu/cdis/prospective-students/Admissions/Graduate-Admissions.html>. Upon completion of the required background work (leveling), applicants may apply for admission to the regular graduate sequence for a fall term. **Completion of the background requirements in the Department of Communication Disorders at Texas State DOES NOT GUARANTEE admission to the TWO-YEAR graduate program.**

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CDIS 5331	Stuttering	3
CDIS 5333	Language Disorders in School-Age and Adolescence	3
CDIS 5334	Assessment and Intervention of Speech Sound Disorders	3
CDIS 5336	Motor Speech Disorders	3
CDIS 5337	Voice Disorders	3
CDIS 5339	Dysphagia	3
CDIS 5340	Cognitive Rehabilitation	3
CDIS 5342	Aphasia and Related Disorders	3
CDIS 5363	Language Disorders in the Birth-to-5 Population	3

### Fluency Concentration

CDIS 5262	Introduction to Research in Communication Disorders	2
CDIS 5350	Multicultural Issues in Communication Disorders	3
CDIS 5393	Evidence-Based Practice in Stuttering	3
CDIS 5138	Augmentative & Alternative Communication	1
<b>Clinical Practicum<sup>1</sup></b>		
<b>Total Hours</b>		<b>36</b>

### <sup>1</sup> Clinical Practicum

In order to obtain the required 400 clinical hours for certification, students must enroll for clinical practicum each term in which they are enrolled for study toward the master's degree and until all clinical hours are completed. Students participating in on-campus clinical practicum in speech-language pathology must enroll in CDIS 5344, or CDIS 5345, or CDIS 5346, or CDIS 5347, depending on the semester. Students earning supervised clock hours in audiology must enroll in CDIS 5321. Graduate students earning clinical hours in both speech-language pathology and audiology during the same term must enroll for both CDIS 5344 or CDIS 5345, or CDIS 5346, or CDIS 5347 (depending on the semester) and CDIS 5321 concurrently. Students participating in off-campus clinical practicum must enroll in CDIS 5689 or CDIS 5690. Academic hours for clinical practicum do not count toward the degree.

## Comprehensive Examination Requirements

Graduate students must pass a comprehensive examination in communication disorders in accordance with Graduate College policy.

Students must meet with the Graduate Program Advisor/Coordinator early in the last semester of graduate study to review the required procedures mandated by The Graduate College and the Department. The examination may be written or oral and consists of questions submitted by the faculty. There are two sections to the exam. One section will cover pediatric assessment and treatment and one section will cover adult assessment and treatment. Each section of the comprehensive examination will be graded on a pass/fail scale. Each section must be passed in order to pass the entire departmental comprehensive examination.

In the event a student fails the first attempt at one or both sections of the Comprehensive Exam, faculty will provide the student with specific feedback on areas of weakness and ideas for improving performance. The student will then be given the opportunity to re-take the section they failed within four weeks of the first attempt. The re-take may be a written or oral format.

If a student fails the second attempt, they will be provided with detailed feedback and directed study from the faculty and given one more opportunity during the next summer semester to re-take the previously failed section(s) of the Comprehensive Exam. Students will need to enroll in GC 5100: Comprehensive Exam Contingency course during the summer term. Failure to pass the second re-take of the Comprehensive Exam will result in dismissal from the graduate program.

When the student completes all comprehensive examination requirements, the Graduate Program Advisor/Coordinator will provide the information to The Graduate College.

**CDIS 5138. Augmentative & Alternative Communication.**

This course is designed to provide graduate students in Communication Disorders with theory-driven, evidence-based, and clinically oriented knowledge and skills related to augmentative and alternative communication (AAC). This course will meet the core knowledge and skill areas in AAC mandated by the Council of Academic Accreditation in Audiology and Speech-Language Pathology.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5262. Introduction to Research in Communication Disorders.**

This course is designed to acquaint students with research protocols in the behavioral sciences with an emphasis on speech-language pathology. Topics include critical thinking, research design, data collection, data analysis, research writing, and evidence-based practice. The course will emphasize critical analysis of the professional literature in speech-language pathology.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5301. Advanced Independent Study in Communication Disorders.**

Discussions of various areas of speech language pathology. Attention to individual needs of the student. Emphasis on independent study in habilitation and rehabilitation of communication disorders. This course is repeatable for credit and can be taught by different faculty covering different topics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5312. Neuroanatomy for Communication Disorders.**

This is a lecture course that examines the organization of the brain, spinal cord, and peripheral nervous system. Significance of the areas of the nervous system that are primary or secondary for speech, language, and hearing are the main focus of this course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5321. Clinical Practicum in Audiology.**

Supervised clinical practicum in audiology. Focus is on both diagnostic and rehabilitative audiological management of diverse populations. Must be taken every semester that a student participates in supervised audiology practicum. May be repeated for credit. This course does not earn graduate degree credit. Prerequisites: CDIS 4420 and CDIS 4370 or equivalents; instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required

**Grade Mode:** Leveling/Assistantships

**CDIS 5325. Anatomy and Physiology of the Speech Production System.**

Description of structure and function of the speech production system with emphasis on physical problems in speech, language, and hearing. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5330. Speech and Language Development.**

Course to acquaint students with acquisition of speech and language in children. Basic information from linguistics, psycholinguistics, psychology, and communication are examined for children in various stages of development. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5331. Stuttering.**

This course is designed to describe therapeutic intervention with children and adults who stutter. Techniques of assessment, management, and counseling are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5333. Language Disorders in School-Age and Adolescence.**

This introductory-level course will review assessment and intervention for language disorders in the school-age and adolescent population. The relationship between language and literacy will be discussed. Students will engage in detailed narrative analyses. Evidence-based practice and collaborative models of intervention will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5334. Assessment and Intervention of Speech Sound Disorders.**

This course is designed to study normal, delayed, and disordered child phonology in English and select dialects/languages. Course covers etiologies, characteristics, and anatomic/physiologic bases of delays/disorders, as well as their potential impact on phonological awareness and subsequent development in reading/writing. Prevention, assessment, and treatment of disorders will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CDIS 5336. Motor Speech Disorders.**

The course reviews the neuroanatomic mechanisms underlying speech production and surveys the etiology, symptomatology, epidemiology, course, and prognosis of speech disorders resulting from impairment of the central and/or peripheral nervous system. Emphasis is placed on apraxia and the dysarthrias. Clinical application in assessment and rehabilitation of patients with neurogenically-based motor speech deficits is stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5337. Voice Disorders.**

This course is designed to describe the assessment of vocal function and disorders and the rehabilitation of the patient with vocal abnormalities due to vocal abuse, psychological, and/or organic etiologies, including laryngectomy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5339. Dysphagia.**

A review of anatomic and physiologic disturbances of swallowing in neurologically impaired and post-surgical head and neck cancer patients will be presented. Instrumentation, techniques of evaluation, and radiograph examination of deglutition will be reviewed. Rehabilitation procedures will be described in detail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5340. Cognitive Rehabilitation.**

This introductory-level course will review neuropathology and neurophysiology of traumatic brain injury and dementia, introduce relevant terms and models in cognitive rehabilitation, provide a framework for assessment and treatment, and discuss the functional impact of cognitive-communicative disorders on the patient and others. Prerequisites: CDIS 5336 and CDIS 5342 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5342. Aphasia and Related Disorders.**

The course develops an understanding of the etiology, symptomatology, assessment, remediation, and recovery patterns of acquired communication disorders that result from impairment of the central nervous system, with a focus on the aphasia and traumatic brain injuries. Coexisting problems caused by damage to cortical/sub-cortical structures will also be addressed. Recent advances in relevant clinical research and technology will be surveyed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5344. Advanced Clinical Practicum I.**

This course is designed to be the first of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 15-20 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Credit/No Credit

**CDIS 5345. Advanced Clinical Practicum II.**

This course is designed to be the second of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 20-25 clock hours of clinical practicum experience will be accumulated. This course must be completed with a grade of "CR" or higher to advance to CDIS 5346. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 with a grade of a "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship

**Grade Mode:** Credit/No Credit

**CDIS 5346. Advanced Clinical Practicum III.**

This course is designed to be the third of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 both with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5347. Advanced Clinical Practicum IV.**

This course is designed to be the final of four clinical practicum experiences for first-year graduate students. Students will participate in clinical practicum experiences including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 all with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5350. Multicultural Issues in Communication Disorders.**

Addresses the social, cultural, and linguistic factors that impact the clinical service delivery provided to culturally and linguistically diverse populations. A primary focus of the course will be to address general principles of assessment and intervention as they relate to the clinical management of individuals with communication disorders from diverse cultural and language backgrounds. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5353. Phonetics.**

This course is designed to analyze normal and abnormal phonological processes in children and adults. Proficiency in transcription using the International Phonetic Alphabet (IPA) is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5363. Language Disorders in the Birth-to-5 Population.**

This introductory-level course will review assessment and intervention for language disorders in the birth-to-5 population. Use of assessment information to determine language disorders versus language difference will be addressed. Students will engage in detailed language sample analyses. Creating effective intervention plans using assessment data will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5369. Hearing Science.**

This course is designed to provide foundational knowledge in the areas of acoustics, auditory and vestibular anatomy/physiology, psychoacoustics, and speech perception across the lifespan.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CDIS 5370. Aural Rehabilitation.**

Principles and procedures in the habilitation and rehabilitation of hearing-impaired children and adults. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5375. Speech Science.**

This course is designed to provide a conceptual foundation in voice and speech production, speech perception, and acoustic analysis of voice and speech. The course will begin with the math and physics of acoustics, to provide students with a strong foundation in acoustics necessary to master speech science. Content will cover acoustical phonetics, theories of speech production and perception, and clinical application emphasizing acoustic instrumentation and software used in communication disorders. Examples of concepts to be covered include frequency, pitch, intensity, loudness, decibels, waveforms, spectra, spectrograms, filters, vocal tract transfer function, formants, and acoustic software for voice and speech analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5380. Communication and Aging.**

The influx of senior citizens in our population will require preparation for the increased incidence of communication problems due to normal and pathological aging processes. This course will address how aging affects communication, how communication disorders manifest in the aging population, and implications for professionals working with older adults.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5390. Seminar in Communication Disorders.**

Examination of current theoretical and clinical issues in Communication Disorders. Issues may include family management in communication disorders, language and literacy, issues in health care rehabilitation, instrumentation and entrepreneurship. May be repeated for credit.

**Prerequisite:** Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CDIS 5391. Evidence-Based Practice in Second Language Acquisition.**

This course is designed for the discussion of various areas of bilingual speech language pathology with the primary focus on second language acquisition. The assessment and treatment of bilingual individuals diagnosed with communication disorders will also be addressed.

**Prerequisite:** Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5392. Evidence-Based Practice in Autism.**

The course is designed to help students understand how to promote the social aspects of language in children diagnosed with Autism Spectrum Disorders within an evidence-based practice framework. In this course, students will critically examine standardized norm-referenced tests used to diagnose autism. Also addressed will be the broad range of evidence-based language intervention strategies recommended for children with Autism in the early years and once in school. **Prerequisite:** Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5393. Evidence-Based Practice in Stuttering.**

This course is designed to examine current evidence-based practice and clinical issues in childhood-onset stuttering. Issues addressed may include counseling approaches and strategies, treatment efficacy across the lifespan and family involvement in the therapy process for childhood-onset stuttering. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5394. Evidence-Based Practice in Neurogenic, Voice, and Swallowing.**

This course examines the current theoretical and clinical issues in communication disorders related to medically-based communication and swallowing disorders (neurogenic, voice, and swallowing disorders). Attention will be given to individual needs of the student in developing practical application of research to clinical practice. This course places emphasis on independent study in the habilitation and rehabilitation of medical-based communication and swallowing disorders and interprofessional practice. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5395. Evidence-Based Practice in Communication Disorders Across the Lifespan.**

This course is designed to examine current theoretical and clinical issues impacting individuals exhibiting communication disorders throughout the lifespan. A variety of topics such as home health, language, literacy, pediatric feeding, entrepreneurship, and professional issues in Communication Disorders will be addressed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5396. Evidence-Based Practice for Language & Literacy in Children Who are Deaf or Hard of Hearing.**

The course is designed to help students understand how to promote the language and literacy of children who are d/Deaf and hard-of-hearing within an evidence-based practice framework. In this course, students will critically examine the broad range of language and literacy treatment approaches that are used with children who are d/Deaf and hard of hearing in the early years and once in school. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Communication Disorders 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5420. Diagnostic Audiology.**

This course is designed to relate anatomy and physiology of the auditory system and the science of acoustics to the study of normal, pathological auditory function. Laboratory experience in administration and interpretation of audiological tests. Discussion of professional opportunities in the field of Audiology and provision of audiological service to special populations will be held. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5462. Speech Sound Disorders.**

This course is designed to provide the principles and procedures for the identification, description, assessment, and treatment of speech sound disorders in children. Students will observe demonstrations of assessment and treatment procedures during lab. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5466. Language Disorders.**

This course includes principles and procedures for the identification, description, assessment, and remediation of language disorders in infants, children, and adolescents. Students will observe demonstrations of assessment procedures and types of language disorders within the context of clinical procedures. Describing observed behaviors and analyzing language samples are emphasized. This course does not earn graduate degree credit.

**4 Credit Hours. 4 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5689. Clinical Externship I in Communication Disorders.**

This course is designed to be the first off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 all with a grade of "C" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5690. Clinical Externship II in Communication Disorders.**

This course is designed to be the second off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 and CDIS 5689 all with a grade of a "CR" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science in Communication Disorders (M.S.C.D.) degree with a major in Communication Disorders is clinically oriented and is designed to prepare clinicians for employment in hospitals, clinics, private practice, and public schools. The program meets the minimum education and clinical requirements for state licensure as a speech-language pathologist and for the Certificate of Clinical Competence in Speech-Language Pathology awarded by the American Speech-Language-Hearing Association (ASHA). The academic program is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of ASHA.

Candidates for the communication disorders master's degree are encouraged to earn a passing score on the Praxis Examination in Speech-Language Pathology before graduation and substitute a passing score for the required departmental graduate comprehensive examination.

## Hearing and Related Disorders Concentration

The Hearing and Related Disorders Concentration provides students with:

- a specialized concentration in the treatment and assessment of individuals with hearing and related disorders with emphasis on children and young adults.

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider, and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and the required forms may be obtained through the department office.

## Background Check and Drug Screening

As a condition for placement in some professional practice sites, some students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the background check/drug screening process will be provided by the department. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Facilities

The university operates the Speech-Language-Hearing Clinic on a twelve-month basis and is nationally known as a treatment center for communication disorders. Graduate students utilize the clinic for research in addition to clinical training experiences.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in communication disorders or leveling coursework from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- minimum overall 3.0 GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in undergraduate communication disorders courses
- GRE not required
- prerequisite course form
- resume/CV
- statement of purpose addressing the following:
  - which areas of speech pathology practice or research hold the most interest and why

- the rationale for applying to the Communication Disorders graduate program at Texas State University
- any distinguishing life experiences, situations, and/or research interests
- three recommendation forms

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met

## Degree Requirements

The Master of Science in Communication Disorders (M.S.C.D.) degree with a major in Communication Disorders and a concentration in Hearing and Related Disorders requires 36 semester credit hours.

### Background

The number of hours of background work required is determined in consultation with the communication disorders graduate advisor and is dependent on the courses taken at the undergraduate level. Please refer to the Leveling Course Sequence located on the Department of Communication Disorders website at <https://www.health.txstate.edu/cdis/prospective-students/Admissions/Graduate-Admissions.html>. Upon completion of the required background work (leveling), applicants may apply for admission to the regular graduate sequence for a fall term. **Completion of the background requirements in the Department of Communication Disorders at Texas State DOES NOT GUARANTEE admission to the TWO-YEAR graduate program.**

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CDIS 5331	Stuttering	3
CDIS 5333	Language Disorders in School-Age and Adolescence	3
CDIS 5334	Assessment and Intervention of Speech Sound Disorders	3
CDIS 5336	Motor Speech Disorders	3
CDIS 5337	Voice Disorders	3
CDIS 5339	Dysphagia	3
CDIS 5340	Cognitive Rehabilitation	3
CDIS 5342	Aphasia and Related Disorders	3
CDIS 5363	Language Disorders in the Birth-to-5 Population	3
<b>Hearing and Related Disorders Concentration</b>		
CDIS 5262	Introduction to Research in Communication Disorders	2

CDIS 5350	Multicultural Issues in Communication Disorders	3
CDIS 5396	Evidence-Based Practice for Language & Literacy in Children Who are Deaf or Hard of Hearing	3
CDIS 5138	Augmentative & Alternative Communication	1
<b>Clinical Practicum<sup>1</sup></b>		
<b>Total Hours</b>		<b>36</b>

### <sup>1</sup> Clinical Practicum

In order to obtain the required 400 clinical hours for certification, students must enroll for clinical practicum each term in which they are enrolled for study toward the master's degree and until all clinical hours are completed. Students participating in on-campus clinical practicum in speech-language pathology must enroll in CDIS 5344CDIS 5344, or CDIS 5345, or CDIS 5346, or CDIS 5347, depending on the semester. Students earning supervised clock hours in audiology must enroll in CDIS 5321CDIS 5321. Graduate students earning clinical hours in both speech-language pathology and audiology during the same term must enroll for both CDIS 5344CDIS 5344 or CDIS 5345, or CDIS 5346, or CDIS 5347 (depending on the semester) and CDIS 5321 concurrently. Students participating in off-campus clinical practicum must enroll in CDIS 5689CDIS 5689 or CDIS 5690. Academic hours for clinical practicum do not count toward the degree.

## Comprehensive Examination Requirements

Graduate students must pass a comprehensive examination in communication disorders in accordance with Graduate College policy.

Students must meet with the Graduate Program Advisor/Coordinator early in the last semester of graduate study to review the required procedures mandated by The Graduate College and the Department. The examination may be written or oral and consists of questions submitted by the faculty. There are two sections to the exam. One section will cover pediatric assessment and treatment and one section will cover adult assessment and treatment. Each section of the comprehensive examination will be graded on a pass/fail scale. Each section must be passed in order to pass the entire departmental comprehensive examination.

In the event a student fails the first attempt at one or both sections of the Comprehensive Exam, faculty will provide the student with specific feedback on areas of weakness and ideas for improving performance. The student will then be given the opportunity to re-take the section they failed within four weeks of the first attempt. The re-take may be a written or oral format.

If a student fails the second attempt, they will be provided with detailed feedback and directed study from the faculty and given one more opportunity during the next summer semester to re-take the previously failed section(s) of the Comprehensive Exam. Students will need to enroll in GC 5100: Comprehensive Exam Contingency course during the summer term. Failure to pass the second re-take of the Comprehensive Exam will result in dismissal from the graduate program.

When the student completes all comprehensive examination requirements, the Graduate Program Advisor/Coordinator will provide the information to The Graduate College.



**CDIS 5138. Augmentative & Alternative Communication.**

This course is designed to provide graduate students in Communication Disorders with theory-driven, evidence-based, and clinically oriented knowledge and skills related to augmentative and alternative communication (AAC). This course will meet the core knowledge and skill areas in AAC mandated by the Council of Academic Accreditation in Audiology and Speech-Language Pathology.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5262. Introduction to Research in Communication Disorders.**

This course is designed to acquaint students with research protocols in the behavioral sciences with an emphasis on speech-language pathology. Topics include critical thinking, research design, data collection, data analysis, research writing, and evidence-based practice. The course will emphasize critical analysis of the professional literature in speech-language pathology.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5301. Advanced Independent Study in Communication Disorders.**

Discussions of various areas of speech language pathology. Attention to individual needs of the student. Emphasis on independent study in habilitation and rehabilitation of communication disorders. This course is repeatable for credit and can be taught by different faculty covering different topics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5312. Neuroanatomy for Communication Disorders.**

This is a lecture course that examines the organization of the brain, spinal cord, and peripheral nervous system. Significance of the areas of the nervous system that are primary or secondary for speech, language, and hearing are the main focus of this course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5321. Clinical Practicum in Audiology.**

Supervised clinical practicum in audiology. Focus is on both diagnostic and rehabilitative audiological management of diverse populations. Must be taken every semester that a student participates in supervised audiology practicum. May be repeated for credit. This course does not earn graduate degree credit. Prerequisites: CDIS 4420 and CDIS 4370 or equivalents; instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required

**Grade Mode:** Leveling/Assistantships

**CDIS 5325. Anatomy and Physiology of the Speech Production System.**

Description of structure and function of the speech production system with emphasis on physical problems in speech, language, and hearing. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5330. Speech and Language Development.**

Course to acquaint students with acquisition of speech and language in children. Basic information from linguistics, psycholinguistics, psychology, and communication are examined for children in various stages of development. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5331. Stuttering.**

This course is designed to describe therapeutic intervention with children and adults who stutter. Techniques of assessment, management, and counseling are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5333. Language Disorders in School-Age and Adolescence.**

This introductory-level course will review assessment and intervention for language disorders in the school-age and adolescent population. The relationship between language and literacy will be discussed. Students will engage in detailed narrative analyses. Evidence-based practice and collaborative models of intervention will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5334. Assessment and Intervention of Speech Sound Disorders.**

This course is designed to study normal, delayed, and disordered child phonology in English and select dialects/languages. Course covers etiologies, characteristics, and anatomic/physiologic bases of delays/disorders, as well as their potential impact on phonological awareness and subsequent development in reading/writing. Prevention, assessment, and treatment of disorders will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5336. Motor Speech Disorders.**

The course reviews the neuroanatomic mechanisms underlying speech production and surveys the etiology, symptomatology, epidemiology, course, and prognosis of speech disorders resulting from impairment of the central and/or peripheral nervous system. Emphasis is placed on apraxia and the dysarthrias. Clinical application in assessment and rehabilitation of patients with neurogenically-based motor speech deficits is stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5337. Voice Disorders.**

This course is designed to describe the assessment of vocal function and disorders and the rehabilitation of the patient with vocal abnormalities due to vocal abuse, psychological, and/or organic etiologies, including laryngectomy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5339. Dysphagia.**

A review of anatomic and physiologic disturbances of swallowing in neurologically impaired and post-surgical head and neck cancer patients will be presented. Instrumentation, techniques of evaluation, and radiograph examination of deglutition will be reviewed. Rehabilitation procedures will be described in detail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5340. Cognitive Rehabilitation.**

This introductory-level course will review neuropathology and neurophysiology of traumatic brain injury and dementia, introduce relevant terms and models in cognitive rehabilitation, provide a framework for assessment and treatment, and discuss the functional impact of cognitive-communicative disorders on the patient and others. Prerequisites: CDIS 5336 and CDIS 5342 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5342. Aphasia and Related Disorders.**

The course develops an understanding of the etiology, symptomatology, assessment, remediation, and recovery patterns of acquired communication disorders that result from impairment of the central nervous system, with a focus on the aphasia and traumatic brain injuries. Coexisting problems caused by damage to cortical/sub-cortical structures will also be addressed. Recent advances in relevant clinical research and technology will be surveyed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5344. Advanced Clinical Practicum I.**

This course is designed to be the first of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 15-20 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Credit/No Credit

**CDIS 5345. Advanced Clinical Practicum II.**

This course is designed to be the second of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 20-25 clock hours of clinical practicum experience will be accumulated. This course must be completed with a grade of "CR" or higher to advance to CDIS 5346. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 with a grade of a "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship

**Grade Mode:** Credit/No Credit

**CDIS 5346. Advanced Clinical Practicum III.**

This course is designed to be the third of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 both with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5347. Advanced Clinical Practicum IV.**

This course is designed to be the final of four clinical practicum experiences for first-year graduate students. Students will participate in clinical practicum experiences including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 all with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5350. Multicultural Issues in Communication Disorders.**

Addresses the social, cultural, and linguistic factors that impact the clinical service delivery provided to culturally and linguistically diverse populations. A primary focus of the course will be to address general principles of assessment and intervention as they relate to the clinical management of individuals with communication disorders from diverse cultural and language backgrounds. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5353. Phonetics.**

This course is designed to analyze normal and abnormal phonological processes in children and adults. Proficiency in transcription using the International Phonetic Alphabet (IPA) is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5363. Language Disorders in the Birth-to-5 Population.**

This introductory-level course will review assessment and intervention for language disorders in the birth-to-5 population. Use of assessment information to determine language disorders versus language difference will be addressed. Students will engage in detailed language sample analyses. Creating effective intervention plans using assessment data will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5369. Hearing Science.**

This course is designed to provide foundational knowledge in the areas of acoustics, auditory and vestibular anatomy/physiology, psychoacoustics, and speech perception across the lifespan.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CDIS 5370. Aural Rehabilitation.**

Principles and procedures in the habilitation and rehabilitation of hearing-impaired children and adults. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5375. Speech Science.**

This course is designed to provide a conceptual foundation in voice and speech production, speech perception, and acoustic analysis of voice and speech. The course will begin with the math and physics of acoustics, to provide students with a strong foundation in acoustics necessary to master speech science. Content will cover acoustical phonetics, theories of speech production and perception, and clinical application emphasizing acoustic instrumentation and software used in communication disorders. Examples of concepts to be covered include frequency, pitch, intensity, loudness, decibels, waveforms, spectra, spectrograms, filters, vocal tract transfer function, formants, and acoustic software for voice and speech analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5380. Communication and Aging.**

The influx of senior citizens in our population will require preparation for the increased incidence of communication problems due to normal and pathological aging processes. This course will address how aging affects communication, how communication disorders manifest in the aging population, and implications for professionals working with older adults.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5390. Seminar in Communication Disorders.**

Examination of current theoretical and clinical issues in Communication Disorders. Issues may include family management in communication disorders, language and literacy, issues in health care rehabilitation, instrumentation and entrepreneurship. May be repeated for credit.

**Prerequisite:** Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CDIS 5391. Evidence-Based Practice in Second Language Acquisition.**

This course is designed for the discussion of various areas of bilingual speech language pathology with the primary focus on second language acquisition. The assessment and treatment of bilingual individuals diagnosed with communication disorders will also be addressed.

**Prerequisite:** Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5392. Evidence-Based Practice in Autism.**

The course is designed to help students understand how to promote the social aspects of language in children diagnosed with Autism Spectrum Disorders within an evidence-based practice framework. In this course, students will critically examine standardized norm-referenced tests used to diagnose autism. Also addressed will be the broad range of evidence-based language intervention strategies recommended for children with Autism in the early years and once in school. **Prerequisite:** Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5393. Evidence-Based Practice in Stuttering.**

This course is designed to examine current evidence-based practice and clinical issues in childhood-onset stuttering. Issues addressed may include counseling approaches and strategies, treatment efficacy across the lifespan and family involvement in the therapy process for childhood-onset stuttering. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5394. Evidence-Based Practice in Neurogenic, Voice, and Swallowing.**

This course examines the current theoretical and clinical issues in communication disorders related to medically-based communication and swallowing disorders (neurogenic, voice, and swallowing disorders). Attention will be given to individual needs of the student in developing practical application of research to clinical practice. This course places emphasis on independent study in the habilitation and rehabilitation of medical-based communication and swallowing disorders and interprofessional practice. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5395. Evidence-Based Practice in Communication Disorders Across the Lifespan.**

This course is designed to examine current theoretical and clinical issues impacting individuals exhibiting communication disorders throughout the lifespan. A variety of topics such as home health, language, literacy, pediatric feeding, entrepreneurship, and professional issues in Communication Disorders will be addressed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5396. Evidence-Based Practice for Language & Literacy in Children Who are Deaf or Hard of Hearing.**

The course is designed to help students understand how to promote the language and literacy of children who are d/Deaf and hard-of-hearing within an evidence-based practice framework. In this course, students will critically examine the broad range of language and literacy treatment approaches that are used with children who are d/Deaf and hard of hearing in the early years and once in school. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Communication Disorders 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5420. Diagnostic Audiology.**

This course is designed to relate anatomy and physiology of the auditory system and the science of acoustics to the study of normal, pathological auditory function. Laboratory experience in administration and interpretation of audiological tests. Discussion of professional opportunities in the field of Audiology and provision of audiological service to special populations will be held. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5462. Speech Sound Disorders.**

This course is designed to provide the principles and procedures for the identification, description, assessment, and treatment of speech sound disorders in children. Students will observe demonstrations of assessment and treatment procedures during lab. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5466. Language Disorders.**

This course includes principles and procedures for the identification, description, assessment, and remediation of language disorders in infants, children, and adolescents. Students will observe demonstrations of assessment procedures and types of language disorders within the context of clinical procedures. Describing observed behaviors and analyzing language samples are emphasized. This course does not earn graduate degree credit.

**4 Credit Hours. 4 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5689. Clinical Externship I in Communication Disorders.**

This course is designed to be the first off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 all with a grade of "C" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5690. Clinical Externship II in Communication Disorders.**

This course is designed to be the second off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 and CDIS 5689 all with a grade of a "CR" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science in Communication Disorders (M.S.C.D.) degree with a major in Communication Disorders is clinically oriented and is designed to prepare clinicians for employment in hospitals, clinics, private practice, and public schools. The program meets the minimum education and clinical requirements for state licensure as a speech-language pathologist and for the Certificate of Clinical Competence in Speech-Language Pathology awarded by the American Speech-Language-Hearing Association (ASHA). The academic program is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of ASHA.

Candidates for the communication disorders master's degree are encouraged to earn a passing score on the Praxis Examination in Speech-Language Pathology before graduation and substitute a passing score for the required departmental graduate comprehensive examination.

## Neurogenic, Voice, & Swallowing Concentration

The Neurogenic, Voice, & Swallowing Concentration provides students with:

- a special concentration in the treatment and assessment of individuals with medical-based communication/swallowing impairments

- hands-on experience with instrumentation related to the assessment of individuals with communication/swallowing impairments

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider, and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and the required forms may be obtained through the department office.

## Background Check and Drug Screening

As a condition for placement in some professional practice sites, some students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the background check/drug screening process will be provided by the department. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Facilities

The university operates the Speech-Language-Hearing Clinic on a twelve-month basis and is nationally known as a treatment center for communication disorders. Graduate students utilize the clinic for research in addition to clinical training experiences.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
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- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in communication disorders or leveling coursework from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- minimum 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in undergraduate communication disorders courses
- GRE not required
- prerequisite course form
- resume/CV
- statement of purpose addressing the following:



- which areas of speech pathology practice or research hold the most interest and why
- the rationale for applying to the Communication Disorders graduate program at Texas State University
- any distinguishing life experiences, situations, and/or research interests
- three recommendation forms

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- [official Duolingo scores required with a 110 overall](#)
- [official TOEFL Essentials scores required with an 8.5 overall](#)

This program does **not** offer admission if the scores above are not met

## Degree Requirements

The Master of Science in Communication Disorders (M.S.C.D.) degree with a major in Communication Disorders and a concentration in Neurogenic, Voice, & Swallowing requires 36 semester credit hours.

### Background

The number of hours of background work required is determined in consultation with the communication disorders graduate advisor and is dependent on the courses taken at the undergraduate level. Please refer to the Leveling Course Sequence located on the Department of Communication Disorders website at <https://www.health.txstate.edu/cdis/prospective-students/Admissions/Graduate-Admissions.html>. Upon completion of the required background work (leveling), applicants may apply for admission to the regular graduate sequence for a fall term. **Completion of the background requirements in the Department of Communication Disorders at Texas State DOES NOT GUARANTEE admission to the TWO-YEAR graduate program.**

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CDIS 5331	Stuttering	3
CDIS 5333	Language Disorders in School-Age and Adolescence	3
CDIS 5334	Assessment and Intervention of Speech Sound Disorders	3
CDIS 5336	Motor Speech Disorders	3
CDIS 5337	Voice Disorders	3
CDIS 5339	Dysphagia	3
CDIS 5340	Cognitive Rehabilitation	3
CDIS 5342	Aphasia and Related Disorders	3
CDIS 5363	Language Disorders in the Birth-to-5 Population	3

### Neurogenic, Voice, & Swallowing Concentration

CDIS 5262	Introduction to Research in Communication Disorders	2
CDIS 5350	Multicultural Issues in Communication Disorders	3
CDIS 5394	Evidence-Based Practice in Neurogenic, Voice, and Swallowing	3
CDIS 5138	Augmentative & Alternative Communication	1
<b>Clinical Practicum<sup>1</sup></b>		
<b>Total Hours</b>		<b>36</b>

### <sup>1</sup> Clinical Practicum

In order to obtain the required 400 clinical hours for certification, students must enroll for clinical practicum each term in which they are enrolled for study toward the master's degree and until all clinical hours are completed. Students participating in on-campus clinical practicum in speech-language pathology must enroll in CDIS 5344, or CDIS 5345, or CDIS 5346, or CDIS 5347, depending on the semester. Students earning supervised clock hours in audiology must enroll in CDIS 5321. Graduate students earning clinical hours in both speech-language pathology and audiology during the same term must enroll for both CDIS 5344 or CDIS 5345, or CDIS 5346, or CDIS 5347 (depending on the semester) and CDIS 5321 concurrently. Students participating in off-campus clinical practicum must enroll in CDIS 5689 or CDIS 5690. Academic hours for clinical practicum do not count toward the degree. CDIS 5344

## Comprehensive Examination Requirements

Graduate students must pass a comprehensive examination in communication disorders in accordance with Graduate College policy.

Students must meet with the Graduate Program Advisor/Coordinator early in the last semester of graduate study to review the required procedures mandated by The Graduate College and the Department. The examination may be written or oral and consists of questions submitted by the faculty. There are two sections to the exam. One section will cover pediatric assessment and treatment and one section will cover adult assessment and treatment. Each section of the comprehensive examination will be graded on a pass/fail scale. Each section must be passed in order to pass the entire departmental comprehensive examination.

In the event a student fails the first attempt at one or both sections of the Comprehensive Exam, faculty will provide the student with specific feedback on areas of weakness and ideas for improving performance. The student will then be given the opportunity to re-take the section they failed within four weeks of the first attempt. The re-take may be a written or oral format.

If a student fails the second attempt, they will be provided with detailed feedback and directed study from the faculty and given one more opportunity during the next summer semester to re-take the previously failed section(s) of the Comprehensive Exam. Students will need to enroll in GC 5100: Comprehensive Exam Contingency course during the summer term. Failure to pass the second re-take of the Comprehensive Exam will result in dismissal from the graduate program.

When the student completes all comprehensive examination requirements, the Graduate Program Advisor/Coordinator will provide the information to The Graduate College.

**CDIS 5138. Augmentative & Alternative Communication.**

This course is designed to provide graduate students in Communication Disorders with theory-driven, evidence-based, and clinically oriented knowledge and skills related to augmentative and alternative communication (AAC). This course will meet the core knowledge and skill areas in AAC mandated by the Council of Academic Accreditation in Audiology and Speech-Language Pathology.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5262. Introduction to Research in Communication Disorders.**

This course is designed to acquaint students with research protocols in the behavioral sciences with an emphasis on speech-language pathology. Topics include critical thinking, research design, data collection, data analysis, research writing, and evidence-based practice. The course will emphasize critical analysis of the professional literature in speech-language pathology.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5301. Advanced Independent Study in Communication Disorders.**

Discussions of various areas of speech language pathology. Attention to individual needs of the student. Emphasis on independent study in habilitation and rehabilitation of communication disorders. This course is repeatable for credit and can be taught by different faculty covering different topics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5312. Neuroanatomy for Communication Disorders.**

This is a lecture course that examines the organization of the brain, spinal cord, and peripheral nervous system. Significance of the areas of the nervous system that are primary or secondary for speech, language, and hearing are the main focus of this course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5321. Clinical Practicum in Audiology.**

Supervised clinical practicum in audiology. Focus is on both diagnostic and rehabilitative audiological management of diverse populations. Must be taken every semester that a student participates in supervised audiology practicum. May be repeated for credit. This course does not earn graduate degree credit. Prerequisites: CDIS 4420 and CDIS 4370 or equivalents; instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required

**Grade Mode:** Leveling/Assistantships

**CDIS 5325. Anatomy and Physiology of the Speech Production System.**

Description of structure and function of the speech production system with emphasis on physical problems in speech, language, and hearing. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5330. Speech and Language Development.**

Course to acquaint students with acquisition of speech and language in children. Basic information from linguistics, psycholinguistics, psychology, and communication are examined for children in various stages of development. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5331. Stuttering.**

This course is designed to describe therapeutic intervention with children and adults who stutter. Techniques of assessment, management, and counseling are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5333. Language Disorders in School-Age and Adolescence.**

This introductory-level course will review assessment and intervention for language disorders in the school-age and adolescent population. The relationship between language and literacy will be discussed. Students will engage in detailed narrative analyses. Evidence-based practice and collaborative models of intervention will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5334. Assessment and Intervention of Speech Sound Disorders.**

This course is designed to study normal, delayed, and disordered child phonology in English and select dialects/languages. Course covers etiologies, characteristics, and anatomic/physiologic bases of delays/disorders, as well as their potential impact on phonological awareness and subsequent development in reading/writing. Prevention, assessment, and treatment of disorders will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5336. Motor Speech Disorders.**

The course reviews the neuroanatomic mechanisms underlying speech production and surveys the etiology, symptomatology, epidemiology, course, and prognosis of speech disorders resulting from impairment of the central and/or peripheral nervous system. Emphasis is placed on apraxia and the dysarthrias. Clinical application in assessment and rehabilitation of patients with neurogenically-based motor speech deficits is stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5337. Voice Disorders.**

This course is designed to describe the assessment of vocal function and disorders and the rehabilitation of the patient with vocal abnormalities due to vocal abuse, psychological, and/or organic etiologies, including laryngectomy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5339. Dysphagia.**

A review of anatomic and physiologic disturbances of swallowing in neurologically impaired and post-surgical head and neck cancer patients will be presented. Instrumentation, techniques of evaluation, and radiograph examination of deglutition will be reviewed. Rehabilitation procedures will be described in detail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5340. Cognitive Rehabilitation.**

This introductory-level course will review neuropathology and neurophysiology of traumatic brain injury and dementia, introduce relevant terms and models in cognitive rehabilitation, provide a framework for assessment and treatment, and discuss the functional impact of cognitive-communicative disorders on the patient and others. Prerequisites: CDIS 5336 and CDIS 5342 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5342. Aphasia and Related Disorders.**

The course develops an understanding of the etiology, symptomatology, assessment, remediation, and recovery patterns of acquired communication disorders that result from impairment of the central nervous system, with a focus on the aphasia and traumatic brain injuries. Coexisting problems caused by damage to cortical/sub-cortical structures will also be addressed. Recent advances in relevant clinical research and technology will be surveyed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5344. Advanced Clinical Practicum I.**

This course is designed to be the first of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 15-20 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Credit/No Credit

**CDIS 5345. Advanced Clinical Practicum II.**

This course is designed to be the second of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 20-25 clock hours of clinical practicum experience will be accumulated. This course must be completed with a grade of "CR" or higher to advance to CDIS 5346. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 with a grade of a "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship

**Grade Mode:** Credit/No Credit

**CDIS 5346. Advanced Clinical Practicum III.**

This course is designed to be the third of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 both with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5347. Advanced Clinical Practicum IV.**

This course is designed to be the final of four clinical practicum experiences for first-year graduate students. Students will participate in clinical practicum experiences including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 all with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5350. Multicultural Issues in Communication Disorders.**

Addresses the social, cultural, and linguistic factors that impact the clinical service delivery provided to culturally and linguistically diverse populations. A primary focus of the course will be to address general principles of assessment and intervention as they relate to the clinical management of individuals with communication disorders from diverse cultural and language backgrounds. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5353. Phonetics.**

This course is designed to analyze normal and abnormal phonological processes in children and adults. Proficiency in transcription using the International Phonetic Alphabet (IPA) is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5363. Language Disorders in the Birth-to-5 Population.**

This introductory-level course will review assessment and intervention for language disorders in the birth-to-5 population. Use of assessment information to determine language disorders versus language difference will be addressed. Students will engage in detailed language sample analyses. Creating effective intervention plans using assessment data will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5369. Hearing Science.**

This course is designed to provide foundational knowledge in the areas of acoustics, auditory and vestibular anatomy/physiology, psychoacoustics, and speech perception across the lifespan.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CDIS 5370. Aural Rehabilitation.**

Principles and procedures in the habilitation and rehabilitation of hearing-impaired children and adults. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5375. Speech Science.**

This course is designed to provide a conceptual foundation in voice and speech production, speech perception, and acoustic analysis of voice and speech. The course will begin with the math and physics of acoustics, to provide students with a strong foundation in acoustics necessary to master speech science. Content will cover acoustical phonetics, theories of speech production and perception, and clinical application emphasizing acoustic instrumentation and software used in communication disorders. Examples of concepts to be covered include frequency, pitch, intensity, loudness, decibels, waveforms, spectra, spectrograms, filters, vocal tract transfer function, formants, and acoustic software for voice and speech analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5380. Communication and Aging.**

The influx of senior citizens in our population will require preparation for the increased incidence of communication problems due to normal and pathological aging processes. This course will address how aging affects communication, how communication disorders manifest in the aging population, and implications for professionals working with older adults.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5390. Seminar in Communication Disorders.**

Examination of current theoretical and clinical issues in Communication Disorders. Issues may include family management in communication disorders, language and literacy, issues in health care rehabilitation, instrumentation and entrepreneurship. May be repeated for credit.

**Prerequisite:** Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CDIS 5391. Evidence-Based Practice in Second Language Acquisition.**

This course is designed for the discussion of various areas of bilingual speech language pathology with the primary focus on second language acquisition. The assessment and treatment of bilingual individuals diagnosed with communication disorders will also be addressed.

**Prerequisite:** Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5392. Evidence-Based Practice in Autism.**

The course is designed to help students understand how to promote the social aspects of language in children diagnosed with Autism Spectrum Disorders within an evidence-based practice framework. In this course, students will critically examine standardized norm-referenced tests used to diagnose autism. Also addressed will be the broad range of evidence-based language intervention strategies recommended for children with Autism in the early years and once in school. **Prerequisite:** Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5393. Evidence-Based Practice in Stuttering.**

This course is designed to examine current evidence-based practice and clinical issues in childhood-onset stuttering. Issues addressed may include counseling approaches and strategies, treatment efficacy across the lifespan and family involvement in the therapy process for childhood-onset stuttering. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5394. Evidence-Based Practice in Neurogenic, Voice, and Swallowing.**

This course examines the current theoretical and clinical issues in communication disorders related to medically-based communication and swallowing disorders (neurogenic, voice, and swallowing disorders). Attention will be given to individual needs of the student in developing practical application of research to clinical practice. This course places emphasis on independent study in the habilitation and rehabilitation of medical-based communication and swallowing disorders and interprofessional practice. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5395. Evidence-Based Practice in Communication Disorders Across the Lifespan.**

This course is designed to examine current theoretical and clinical issues impacting individuals exhibiting communication disorders throughout the lifespan. A variety of topics such as home health, language, literacy, pediatric feeding, entrepreneurship, and professional issues in Communication Disorders will be addressed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5396. Evidence-Based Practice for Language & Literacy in Children Who are Deaf or Hard of Hearing.**

The course is designed to help students understand how to promote the language and literacy of children who are d/Deaf and hard-of-hearing within an evidence-based practice framework. In this course, students will critically examine the broad range of language and literacy treatment approaches that are used with children who are d/Deaf and hard of hearing in the early years and once in school. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Communication Disorders 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5420. Diagnostic Audiology.**

This course is designed to relate anatomy and physiology of the auditory system and the science of acoustics to the study of normal, pathological auditory function. Laboratory experience in administration and interpretation of audiological tests. Discussion of professional opportunities in the field of Audiology and provision of audiological service to special populations will be held. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5462. Speech Sound Disorders.**

This course is designed to provide the principles and procedures for the identification, description, assessment, and treatment of speech sound disorders in children. Students will observe demonstrations of assessment and treatment procedures during lab. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5466. Language Disorders.**

This course includes principles and procedures for the identification, description, assessment, and remediation of language disorders in infants, children, and adolescents. Students will observe demonstrations of assessment procedures and types of language disorders within the context of clinical procedures. Describing observed behaviors and analyzing language samples are emphasized. This course does not earn graduate degree credit.

**4 Credit Hours. 4 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**CDIS 5689. Clinical Externship I in Communication Disorders.**

This course is designed to be the first off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 all with a grade of "C" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5690. Clinical Externship II in Communication Disorders.**

This course is designed to be the second off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 and CDIS 5689 all with a grade of a "CR" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science in Communication Disorders (M.S.C.D.) degree with a major in Communication Disorders is clinically oriented and is designed to prepare clinicians for employment in hospitals, clinics, private practice, and public schools. The program meets the minimum education and clinical requirements for state licensure as a speech-language pathologist and for the Certificate of Clinical Competence in Speech-Language Pathology awarded by the American Speech-Language-Hearing Association (ASHA). The academic program is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of ASHA.

Candidates for the communication disorders master's degree are encouraged to earn a passing score on the Praxis Examination in Speech-Language Pathology before graduation and substitute a passing score for the required departmental graduate comprehensive examination.

## Versatility in Practice Concentration

The Versatility in Practice Concentration provides students with:

- a specialized concentration in the treatment and assessment of individuals with varied speech and language disorders throughout the lifespan.

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider, and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and the required forms may be obtained through the department office.

## Background Check and Drug Screening

As a condition for placement in some professional practice sites, some students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the background check/drug screening process will be provided by the department. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Facilities

The university operates the Speech-Language-Hearing Clinic on a twelve-month basis and is nationally known as a treatment center for communication disorders. Graduate students utilize the clinic for research in addition to clinical training experiences.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in communication disorders or leveling coursework from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- minimum 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in undergraduate communication disorders courses
- GRE not required
- prerequisite course form
- resume/CV
- statement of purpose addressing the following:
  - which areas of speech pathology practice or research hold the most interest and why

- the rationale for applying to the Communication Disorders graduate program at Texas State University
- any distinguishing life experiences, situations, and/or research interests
- three recommendation forms

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met

## Degree Requirements

The Master of Science in Communication Disorders (M.S.C.D.) degree with a major in Communication Disorders and a concentration in Versatility in Practice requires 36 semester credit hours.

### Background

The number of hours of background work required is determined in consultation with the communication disorders graduate advisor and is dependent on the courses taken at the undergraduate level. Please refer to the Leveling Course Sequence located on the Department of Communication Disorders website at <https://www.health.txstate.edu/cdis/prospective-students/Admissions/Graduate-Admissions.html>. Upon completion of the required background work (leveling), applicants may apply for admission to the regular graduate sequence for a fall term. **Completion of the background requirements in the Department of Communication Disorders at Texas State DOES NOT GUARANTEE admission to the TWO-YEAR graduate program.**

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CDIS 5331	Stuttering	3
CDIS 5333	Language Disorders in School-Age and Adolescence	3
CDIS 5334	Assessment and Intervention of Speech Sound Disorders	3
CDIS 5336	Motor Speech Disorders	3
CDIS 5337	Voice Disorders	3
CDIS 5339	Dysphagia	3
CDIS 5340	Cognitive Rehabilitation	3
CDIS 5342	Aphasia and Related Disorders	3
CDIS 5363	Language Disorders in the Birth-to-5 Population	3
<b>Versatility in Practice Concentration</b>		
CDIS 5262	Introduction to Research in Communication Disorders	2

CDIS 5350	Multicultural Issues in Communication Disorders	3
CDIS 5395	Evidence-Based Practice in Communication Disorders Across the Lifespan	3
CDIS 5138	Augmentative & Alternative Communication	1
<b>Clinical Practicum<sup>1</sup></b>		
<b>Total Hours</b>		<b>36</b>

### <sup>1</sup> Clinical Practicum

In order to obtain the required 400 clinical hours for certification, students must enroll for clinical practicum each term in which they are enrolled for study toward the master's degree and until all clinical hours are completed. Students participating in on-campus clinical practicum in speech-language pathology must enroll in CDIS 5344, or CDIS 5345, or CDIS 5346, or CDIS 5347, depending on the semester. Students earning supervised clock hours in audiology must enroll in CDIS 5321. Graduate students earning clinical hours in both speech-language pathology and audiology during the same term must enroll for both CDIS 5344 or CDIS 5345, or CDIS 5346, or CDIS 5347 (depending on the semester) and CDIS 5344 concurrently. Students participating in off-campus clinical practicum must enroll in CDIS 5689 or CDIS 5690. Academic hours for clinical practicum do not count toward the degree.

## Comprehensive Examination Requirements

Graduate students must pass a comprehensive examination in communication disorders in accordance with Graduate College policy.

Students must meet with the Graduate Program Advisor/Coordinator early in the last semester of graduate study to review the required procedures mandated by The Graduate College and the Department. The examination may be written or oral and consists of questions submitted by the faculty. There are two sections to the exam. One section will cover pediatric assessment and treatment and one section will cover adult assessment and treatment. Each section of the comprehensive examination will be graded on a pass/fail scale. Each section must be passed in order to pass the entire departmental comprehensive examination.

In the event a student fails the first attempt at one or both sections of the Comprehensive Exam, faculty will provide the student with specific feedback on areas of weakness and ideas for improving performance. The student will then be given the opportunity to re-take the section they failed within four weeks of the first attempt. The re-take may be a written or oral format.

If a student fails the second attempt, they will be provided with detailed feedback and directed study from the faculty and given one more opportunity during the next summer semester to re-take the previously failed section(s) of the Comprehensive Exam. Students will need to enroll in GC 5100: Comprehensive Exam Contingency course during the summer term. Failure to pass the second re-take of the Comprehensive Exam will result in dismissal from the graduate program.

When the student completes all comprehensive examination requirements, the Graduate Program Advisor/Coordinator will provide the information to The Graduate College.

**CDIS 5138. Augmentative & Alternative Communication.**

This course is designed to provide graduate students in Communication Disorders with theory-driven, evidence-based, and clinically oriented knowledge and skills related to augmentative and alternative communication (AAC). This course will meet the core knowledge and skill areas in AAC mandated by the Council of Academic Accreditation in Audiology and Speech-Language Pathology.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5262. Introduction to Research in Communication Disorders.**

This course is designed to acquaint students with research protocols in the behavioral sciences with an emphasis on speech-language pathology. Topics include critical thinking, research design, data collection, data analysis, research writing, and evidence-based practice. The course will emphasize critical analysis of the professional literature in speech-language pathology.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5301. Advanced Independent Study in Communication Disorders.**

Discussions of various areas of speech language pathology. Attention to individual needs of the student. Emphasis on independent study in habilitation and rehabilitation of communication disorders. This course is repeatable for credit and can be taught by different faculty covering different topics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5312. Neuroanatomy for Communication Disorders.**

This is a lecture course that examines the organization of the brain, spinal cord, and peripheral nervous system. Significance of the areas of the nervous system that are primary or secondary for speech, language, and hearing are the main focus of this course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5321. Clinical Practicum in Audiology.**

Supervised clinical practicum in audiology. Focus is on both diagnostic and rehabilitative audiological management of diverse populations. Must be taken every semester that a student participates in supervised audiology practicum. May be repeated for credit. This course does not earn graduate degree credit. Prerequisites: CDIS 4420 and CDIS 4370 or equivalents; instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required

**Grade Mode:** Leveling/Assistantships

**CDIS 5325. Anatomy and Physiology of the Speech Production System.**

Description of structure and function of the speech production system with emphasis on physical problems in speech, language, and hearing. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5330. Speech and Language Development.**

Course to acquaint students with acquisition of speech and language in children. Basic information from linguistics, psycholinguistics, psychology, and communication are examined for children in various stages of development. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5331. Stuttering.**

This course is designed to describe therapeutic intervention with children and adults who stutter. Techniques of assessment, management, and counseling are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5333. Language Disorders in School-Age and Adolescence.**

This introductory-level course will review assessment and intervention for language disorders in the school-age and adolescent population. The relationship between language and literacy will be discussed. Students will engage in detailed narrative analyses. Evidence-based practice and collaborative models of intervention will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5334. Assessment and Intervention of Speech Sound Disorders.**

This course is designed to study normal, delayed, and disordered child phonology in English and select dialects/languages. Course covers etiologies, characteristics, and anatomic/physiologic bases of delays/disorders, as well as their potential impact on phonological awareness and subsequent development in reading/writing. Prevention, assessment, and treatment of disorders will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5336. Motor Speech Disorders.**

The course reviews the neuroanatomic mechanisms underlying speech production and surveys the etiology, symptomatology, epidemiology, course, and prognosis of speech disorders resulting from impairment of the central and/or peripheral nervous system. Emphasis is placed on apraxia and the dysarthrias. Clinical application in assessment and rehabilitation of patients with neurogenically-based motor speech deficits is stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5337. Voice Disorders.**

This course is designed to describe the assessment of vocal function and disorders and the rehabilitation of the patient with vocal abnormalities due to vocal abuse, psychological, and/or organic etiologies, including laryngectomy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5339. Dysphagia.**

A review of anatomic and physiologic disturbances of swallowing in neurologically impaired and post-surgical head and neck cancer patients will be presented. Instrumentation, techniques of evaluation, and radiograph examination of deglutition will be reviewed. Rehabilitation procedures will be described in detail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5340. Cognitive Rehabilitation.**

This introductory-level course will review neuropathology and neurophysiology of traumatic brain injury and dementia, introduce relevant terms and models in cognitive rehabilitation, provide a framework for assessment and treatment, and discuss the functional impact of cognitive-communicative disorders on the patient and others. Prerequisites: CDIS 5336 and CDIS 5342 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5342. Aphasia and Related Disorders.**

The course develops an understanding of the etiology, symptomatology, assessment, remediation, and recovery patterns of acquired communication disorders that result from impairment of the central nervous system, with a focus on the aphasia and traumatic brain injuries. Coexisting problems caused by damage to cortical/sub-cortical structures will also be addressed. Recent advances in relevant clinical research and technology will be surveyed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5344. Advanced Clinical Practicum I.**

This course is designed to be the first of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 15-20 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Credit/No Credit

**CDIS 5345. Advanced Clinical Practicum II.**

This course is designed to be the second of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 20-25 clock hours of clinical practicum experience will be accumulated. This course must be completed with a grade of "CR" or higher to advance to CDIS 5346. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 with a grade of a "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship

**Grade Mode:** Credit/No Credit

**CDIS 5346. Advanced Clinical Practicum III.**

This course is designed to be the third of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 both with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5347. Advanced Clinical Practicum IV.**

This course is designed to be the final of four clinical practicum experiences for first-year graduate students. Students will participate in clinical practicum experiences including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 all with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5350. Multicultural Issues in Communication Disorders.**

Addresses the social, cultural, and linguistic factors that impact the clinical service delivery provided to culturally and linguistically diverse populations. A primary focus of the course will be to address general principles of assessment and intervention as they relate to the clinical management of individuals with communication disorders from diverse cultural and language backgrounds. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5353. Phonetics.**

This course is designed to analyze normal and abnormal phonological processes in children and adults. Proficiency in transcription using the International Phonetic Alphabet (IPA) is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5363. Language Disorders in the Birth-to-5 Population.**

This introductory-level course will review assessment and intervention for language disorders in the birth-to-5 population. Use of assessment information to determine language disorders versus language difference will be addressed. Students will engage in detailed language sample analyses. Creating effective intervention plans using assessment data will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5369. Hearing Science.**

This course is designed to provide foundational knowledge in the areas of acoustics, auditory and vestibular anatomy/physiology, psychoacoustics, and speech perception across the lifespan.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CDIS 5370. Aural Rehabilitation.**

Principles and procedures in the habilitation and rehabilitation of hearing-impaired children and adults. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5375. Speech Science.**

This course is designed to provide a conceptual foundation in voice and speech production, speech perception, and acoustic analysis of voice and speech. The course will begin with the math and physics of acoustics, to provide students with a strong foundation in acoustics necessary to master speech science. Content will cover acoustical phonetics, theories of speech production and perception, and clinical application emphasizing acoustic instrumentation and software used in communication disorders. Examples of concepts to be covered include frequency, pitch, intensity, loudness, decibels, waveforms, spectra, spectrograms, filters, vocal tract transfer function, formants, and acoustic software for voice and speech analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5380. Communication and Aging.**

The influx of senior citizens in our population will require preparation for the increased incidence of communication problems due to normal and pathological aging processes. This course will address how aging affects communication, how communication disorders manifest in the aging population, and implications for professionals working with older adults.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5390. Seminar in Communication Disorders.**

Examination of current theoretical and clinical issues in Communication Disorders. Issues may include family management in communication disorders, language and literacy, issues in health care rehabilitation, instrumentation and entrepreneurship. May be repeated for credit.

**Prerequisite:** Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CDIS 5391. Evidence-Based Practice in Second Language Acquisition.**

This course is designed for the discussion of various areas of bilingual speech language pathology with the primary focus on second language acquisition. The assessment and treatment of bilingual individuals diagnosed with communication disorders will also be addressed.

**Prerequisite:** Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5392. Evidence-Based Practice in Autism.**

The course is designed to help students understand how to promote the social aspects of language in children diagnosed with Autism Spectrum Disorders within an evidence-based practice framework. In this course, students will critically examine standardized norm-referenced tests used to diagnose autism. Also addressed will be the broad range of evidence-based language intervention strategies recommended for children with Autism in the early years and once in school. **Prerequisite:** Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CDIS 5393. Evidence-Based Practice in Stuttering.**

This course is designed to examine current evidence-based practice and clinical issues in childhood-onset stuttering. Issues addressed may include counseling approaches and strategies, treatment efficacy across the lifespan and family involvement in the therapy process for childhood-onset stuttering. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5394. Evidence-Based Practice in Neurogenic, Voice, and Swallowing.**

This course examines the current theoretical and clinical issues in communication disorders related to medically-based communication and swallowing disorders (neurogenic, voice, and swallowing disorders). Attention will be given to individual needs of the student in developing practical application of research to clinical practice. This course places emphasis on independent study in the habilitation and rehabilitation of medical-based communication and swallowing disorders and interprofessional practice. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5395. Evidence-Based Practice in Communication Disorders Across the Lifespan.**

This course is designed to examine current theoretical and clinical issues impacting individuals exhibiting communication disorders throughout the lifespan. A variety of topics such as home health, language, literacy, pediatric feeding, entrepreneurship, and professional issues in Communication Disorders will be addressed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5396. Evidence-Based Practice for Language & Literacy in Children Who are Deaf or Hard of Hearing.**

The course is designed to help students understand how to promote the language and literacy of children who are d/Deaf and hard-of-hearing within an evidence-based practice framework. In this course, students will critically examine the broad range of language and literacy treatment approaches that are used with children who are d/Deaf and hard of hearing in the early years and once in school. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Communication Disorders 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5420. Diagnostic Audiology.**

This course is designed to relate anatomy and physiology of the auditory system and the science of acoustics to the study of normal, pathological auditory function. Laboratory experience in administration and interpretation of audiological tests. Discussion of professional opportunities in the field of Audiology and provision of audiological service to special populations will be held. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5462. Speech Sound Disorders.**

This course is designed to provide the principles and procedures for the identification, description, assessment, and treatment of speech sound disorders in children. Students will observe demonstrations of assessment and treatment procedures during lab. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5466. Language Disorders.**

This course includes principles and procedures for the identification, description, assessment, and remediation of language disorders in infants, children, and adolescents. Students will observe demonstrations of assessment procedures and types of language disorders within the context of clinical procedures. Describing observed behaviors and analyzing language samples are emphasized. This course does not earn graduate degree credit.

**4 Credit Hours. 4 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5689. Clinical Externship I in Communication Disorders.**

This course is designed to be the first off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 all with a grade of "C" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5690. Clinical Externship II in Communication Disorders.**

This course is designed to be the second off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 and CDIS 5689 all with a grade of a "CR" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

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[www.health.txstate.edu/HA/](http://www.health.txstate.edu/HA/) (<http://www.health.txstate.edu/HA/>)

Welcome to the School of Health Administration, which has steadily over the last 35+ years assembled one of the best Health Administration (HA) faculties in the nation. The HA faculty have both educational preparation, professional experience, and academic prowess necessary to maintain credibility with both students and employers of our students. The school boasts four faculty with the rank of professor, and seven faculty certified by the American College of Healthcare Executives at the highest level of Fellow, and five faculty members certified in the Healthcare Financial Management Association at the highest level of Fellow.

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a health care provider and must take specific immunizations before the student can be placed in field placement. Information on these requirements and the required forms may be obtained through the program/department/school office.

## Background Check and Drug Screening

As a condition for placement in all professional practice sites, students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the drug screening process will be provided by program/department/school. Previous

misdemeanor or felony convictions under various titles of the Texas Penal Code will affect eligibility for placement in field experience.

## Master of Healthcare Administration (M.H.A.)

- Major in Healthcare Administration (Non-thesis Option) (p. 2283)
- Major in Healthcare Administration (Thesis Option) (p. 2286)
- Major in Healthcare Administration (Executive Concentration) - TXST Global (<http://mycatalog.txstate.edu/graduate/health-professions/administration/executive-concentration-mha/>)

## Master of Healthcare Administration (M.H.A.) / Master of Business Administration (M.B.A.)

- Major in Healthcare Administration / Business Administration (Dual Degree Option) (p. 1056)

## Master of Long Term Care Administration (M.L.T.C.A.)

- Major in Long Term Care Administration (<http://mycatalog.txstate.edu/graduate/health-professions/administration/long-term-care-mltca/>)

## Minors

- Healthcare Administration (p. 2290)

## Certificates

- Long Term Care Administration (p. 2291)

## Program Overview

The Master of Healthcare Administration (M.H.A.) degree with a major in Healthcare Administration offers courses designed to enhance the career mobility of persons currently employed in health professions as well as to provide a solid base of academic and directed experiences for persons who may desire entry into the field of health administration. The primary focus of the curriculum is middle-to senior-level management.

Principal areas of study include health and disease; sociological, economic, legal, and political forces which affect health care; and management organizational behaviors including such specializations as financial management, human resource management, planning, marketing, and data generation and analysis.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in your last 60 hours (<https://www.gradcollege.txst.edu/admissions/policy.html#gpa>) of undergraduate course work (plus any completed graduate courses)
- GRE is not required
- resume/CV including relevant experience (volunteer, research, employment and other)
- statement of purpose indicating the student's ability and interest in completing the degree program in healthcare administration
- three letters of recommendation from professionals or academics competent to assess the student's interest in pursuing a career in healthcare administration

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 85 overall
- official PTE scores required with a 57
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Healthcare Administration (M.H.A.) degree with a major in Healthcare Administration requires 42 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
HA 5300	Healthcare Organization and Delivery	3
HA 5303	Analytics and Information Systems Management in Healthcare	3
HA 5304	Healthcare Financial Management I	3
HA 5316	Healthcare Financial Management II	3
HA 5321	Healthcare Law and Policy	3
HA 5325	Health Care Quality and Operations Improvement	3
HA 5334	Data-Guided Healthcare Decision-Making	3
HA 5335	Public Health for Healthcare Administrators	3

HA 5346	Strategic Management and Marketing for Healthcare Organizations	3
HA 5355	Emerging Trends in Healthcare Human Resources	3
HA 5362	Healthcare Organizational Behavior, Theory, and Leadership	3
HA 5191	Program Competencies Assessments and Integrative Experience Preparation	1
<b>Internship or Practicum</b>		
HA 5840	Administrative Field Placement	8
<b>Total Hours</b>		<b>42</b>

## Comprehensive Examination Requirement

All degree-seeking graduate students must pass a comprehensive examination at the end of the didactic portion of their program. The School of Health Administration administers comprehensive exams at the end of the fall and spring terms. Students with field placements on their degree audits must pass the comprehensive exam before they begin their field placement. Students who fail the comprehensive exam may take the exam again the next term it is offered. Two failures will result in dismissal from the program.

Master's level courses in Health Administration: HA

## Courses Offered

### Health Administration (HA)

#### HA 5111. Topics in Health Administration.

An in-depth study of a singular topic or a related problem being faced by practicing managers in the rapidly changing healthcare industry. Special emphasis will be placed on the topic's current relevance and its utilitarian value to the participant. May be repeated if topic differs.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HA 5191. Field Experience Orientation.

This course will assist the student to prepare for the field experience and to prepare for the comprehensive exam. An extensive orientation to the field experience will be provided to better enable students to move from the classroom setting to a workplace scenario.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### HA 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### HA 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5300. Healthcare Organization and Delivery.**

A survey of the organization and delivery of health services focusing on the history and development of health systems as they relate to the overall health and medical care systems. Major attention is given to governing bodies, patient care organizations, and executive management structures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5301. Healthcare Administration Research Methods.**

A study of research methodology as it pertains to healthcare administration. Included are hypothesis forming, designing research, and the collection, manipulation and analysis of data. Knowledge of numeracy and statistics is essential.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5303. Information Systems Management in Healthcare.**

This course provides a comprehensive introduction to information systems management for healthcare organizations. It covers the determination of information required by whom, design of information flows, procurement of information systems technology resources, assurance of information security, and management of systems integration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5304. Healthcare Economics and Financial Theory.**

A study of economic theories that have an impact on the healthcare industry. Special emphasis will be placed on emerging economic research and its impact on potential policy ramifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5311. Trends in Health Administration.**

An in-depth study of singular trend or a related problem being faced by practicing managers in the rapidly changing healthcare industry. Special emphasis will be placed on the topic's current relevance and its utilitarian value to the participant. Examples of trends, which are typically offered, include trends in rural health, managed care ethical issues, and in total quality management. This course may be repeated for credit with a different subject area.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5316. Healthcare Financial Management.**

An introduction to healthcare financial management including the financial management in healthcare organizations, healthcare payment systems, financing and investment decisions, and financial planning, analysis, and control. Prerequisites: accounting, economics, and statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5321. Healthcare Law.**

An in-depth analysis of healthcare law and its effect on the relationships between the patient, the patient's family, the provider, and other interested third parties. Analysis of cases is the primary method of study.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5325. Health Care Quality Improvement Concepts and Tools.**

This course teaches the concepts of quality in health care and the use of quality improvement tools. Quality management will be explored using Lean Six Sigma continuous process improvement methodologies. This course is intended to help students learn and translate health care quality management theory, concepts, and knowledge into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5334. Operational Decision Making for Healthcare Managers.**

An introduction to the fundamentals of selected operations research techniques essential to the analysis of healthcare managerial problem situations, the design of new and improved systems, and the implementation of systems to achieve desired systems performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5335. Public Health for Healthcare Administrators.**

This course introduces the healthcare manager to public health and its role in preventing illnesses and improving the health of the community. Students will learn of the role of the manager in disease prevention and how to participate and lead community efforts for the wellness of the community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5346. Healthcare Strategic Management.**

This capstone course examines mission, vision, strategy, and operations from both the formulation and implementation perspectives. Emphasis will be on the role of the manager/leader in strategic management analysis, creativity, and action. This course is available to HA majors only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5355. Human Resource Management in Healthcare Facilities.**

A study of personnel administration in the healthcare facility and the environment in which it functions. Emphasis will be on the role of the Personnel Office in forecasting, developing, and managing human resources, in addition to a review of current legislation affecting the personnel function.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5356. Policy Development in Healthcare Arena.**

Prospective healthcare administrators analyze changing healthcare paradigm to determine decision-points where policies can be affected. Course allows students to apply existing skills to real world policy issues at state and national levels and to analyze policy development from numerous stakeholders' viewpoints.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5362. Healthcare Organizational Behavior/Theory.**

This course is a study of theory and concepts drawn from the behavioral and social sciences. These concepts are applied as a foundation and conceptual framework for the analysis, diagnosis, prediction and guidance of human behavior in healthcare organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5371. Marketing of Health Services.**

A study of marketing functions and principles as they relate to the healthcare delivery system. Analysis of marketing concepts such as market segmentation, marketing planning, marketing audit, marketing positioning, and marketing mix will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5375. Healthcare Accounting.**

An introduction to financial accounting in healthcare with an emphasis on the preparation of non-profit financial statements for healthcare service organizations, control procedures for healthcare entities, and accounting issues unique to the healthcare industry. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**HA 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis, HA 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5450. Administrative Field Placement.**

A one-semester, full-time field experience which allows students to apply their foundational didactic education by means of rotations, experiences, and projects in a healthcare organization. This course is graded on a credit (CR), no-credit (F) basis. Prerequisite: Instructor approval.

**4 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HA 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5640. Administrative Practicum.**

A one-semester, part-time field experience designed for the student already working full-time in healthcare. The practicum provides a broader orientation to the student's organization and exposure to special projects.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5840. Administrative Field Placement.**

A one-semester, full-time field experience which allows students to apply their foundational didactic education by means of rotations, experiences, and projects in a healthcare organization.

**8 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Healthcare Administration (M.H.A.) degree with a major in Healthcare Administration offers courses designed to enhance the career mobility of persons currently employed in health professions as well as to provide a solid base of academic and directed experiences for persons who may desire entry into the field of health administration. The primary focus of the curriculum is middle-to senior-level management.

Principal areas of study include health and disease; sociological, economic, legal, and political forces which affect health care; and management organizational behaviors including such specializations as financial management, human resource management, planning, marketing, and data generation and analysis.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic



year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 for the last 60 credit hours
- GRE is not required
- resume/CV including relevant experience (volunteer, research, employment and other)
- statement of purpose indicating the student's ability and interest in completing the degree program in healthcare administration
- three letters of recommendation from professionals or academics competent to assess the student's interest in pursuing a career in healthcare administration

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 85 overall
- official PTE scores required with a 57
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Healthcare Administration (M.H.A.) degree with a major in Healthcare Administration requires 40 semester credit hours, including a thesis.

#### Requirements

Code	Title	Hours
<b>Required Courses</b>		
HA 5300	Healthcare Organization and Delivery	3
HA 5303	Analytics and Information Systems Management in Healthcare	3

HA 5304	Healthcare Financial Management I	3
HA 5316	Healthcare Financial Management II	3
HA 5321	Healthcare Law and Policy	3
HA 5325	Health Care Quality and Operations Improvement	3
HA 5334	Data-Guided Healthcare Decision-Making	3
HA 5335	Public Health for Healthcare Administrators	3
HA 5346	Strategic Management and Marketing for Healthcare Organizations	3
HA 5355	Emerging Trends in Healthcare Human Resources	3
HA 5362	Healthcare Organizational Behavior, Theory, and Leadership	3
HA 5191	Program Competencies Assessments and Integrative Experience Preparation	1

<b>Thesis</b>		
HA 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		
HA 5199B	Thesis	
HA 5299B	Thesis	
HA 5399B	Thesis	
HA 5599B	Thesis	
HA 5999B	Thesis	

**Total Hours** **40**

## Comprehensive Examination Requirement

All degree-seeking graduate students must pass a comprehensive examination at the end of the didactic portion of their program. The School of Health Administration administers comprehensive exams at the end of the fall and spring terms. Students with field placements on their degree audits must pass the comprehensive exam before they begin their field placement. Students who fail the comprehensive exam may take the exam again the next term it is offered. Two failures will result in dismissal from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If

the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Health Administration: HA

## Courses Offered

### Health Administration (HA)

#### HA 5111. Topics in Health Administration.

An in-depth study of a singular topic or a related problem being faced by practicing managers in the rapidly changing healthcare industry. Special emphasis will be placed on the topic's current relevance and its utilitarian value to the participant. May be repeated if topic differs.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HA 5191. Field Experience Orientation.

This course will assist the student to prepare for the field experience and to prepare for the comprehensive exam. An extensive orientation to the field experience will be provided to better enable students to move from the classroom setting to a workplace scenario.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5300. Healthcare Organization and Delivery.**

A survey of the organization and delivery of health services focusing on the history and development of health systems as they relate to the overall health and medical care systems. Major attention is given to governing bodies, patient care organizations, and executive management structures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5301. Healthcare Administration Research Methods.**

A study of research methodology as it pertains to healthcare administration. Included are hypothesis forming, designing research, and the collection, manipulation and analysis of data. Knowledge of numeracy and statistics is essential.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5303. Information Systems Management in Healthcare.**

This course provides a comprehensive introduction to information systems management for healthcare organizations. It covers the determination of information required by whom, design of information flows, procurement of information systems technology resources, assurance of information security, and management of systems integration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5304. Healthcare Economics and Financial Theory.**

A study of economic theories that have an impact on the healthcare industry. Special emphasis will be placed on emerging economic research and its impact on potential policy ramifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5311. Trends in Health Administration.**

An in-depth study of singular trend or a related problem being faced by practicing managers in the rapidly changing healthcare industry. Special emphasis will be placed on the topic's current relevance and its utilitarian value to the participant. Examples of trends, which are typically offered, include trends in rural health, managed care ethical issues, and in total quality management. This course may be repeated for credit with a different subject area.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5316. Healthcare Financial Management.**

An introduction to healthcare financial management including the financial management in healthcare organizations, healthcare payment systems, financing and investment decisions, and financial planning, analysis, and control. Prerequisites: accounting, economics, and statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5321. Healthcare Law.**

An in-depth analysis of healthcare law and its effect on the relationships between the patient, the patient's family, the provider, and other interested third parties. Analysis of cases is the primary method of study.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5325. Health Care Quality Improvement Concepts and Tools.**

This course teaches the concepts of quality in health care and the use of quality improvement tools. Quality management will be explored using Lean Six Sigma continuous process improvement methodologies. This course is intended to help students learn and translate health care quality management theory, concepts, and knowledge into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5334. Operational Decision Making for Healthcare Managers.**

An introduction to the fundamentals of selected operations research techniques essential to the analysis of healthcare managerial problem situations, the design of new and improved systems, and the implementation of systems to achieve desired systems performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5335. Public Health for Healthcare Administrators.**

This course introduces the healthcare manager to public health and its role in preventing illnesses and improving the health of the community. Students will learn of the role of the manager in disease prevention and how to participate and lead community efforts for the wellness of the community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5346. Healthcare Strategic Management.**

This capstone course examines mission, vision, strategy, and operations from both the formulation and implementation perspectives. Emphasis will be on the role of the manager/leader in strategic management analysis, creativity, and action. This course is available to HA majors only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5355. Human Resource Management in Healthcare Facilities.**

A study of personnel administration in the healthcare facility and the environment in which it functions. Emphasis will be on the role of the Personnel Office in forecasting, developing, and managing human resources, in addition to a review of current legislation affecting the personnel function.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5356. Policy Development in Healthcare Arena.**

Prospective healthcare administrators analyze changing healthcare paradigm to determine decision-points where policies can be affected. Course allows students to apply existing skills to real world policy issues at state and national levels and to analyze policy development from numerous stakeholders' viewpoints.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5362. Healthcare Organizational Behavior/Theory.**

This course is a study of theory and concepts drawn from the behavioral and social sciences. These concepts are applied as a foundation and conceptual framework for the analysis, diagnosis, prediction and guidance of human behavior in healthcare organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5371. Marketing of Health Services.**

A study of marketing functions and principles as they relate to the healthcare delivery system. Analysis of marketing concepts such as market segmentation, marketing planning, marketing audit, marketing positioning, and marketing mix will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5375. Healthcare Accounting.**

An introduction to financial accounting in healthcare with an emphasis on the preparation of non-profit financial statements for healthcare service organizations, control procedures for healthcare entities, and accounting issues unique to the healthcare industry. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**HA 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis, HA 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5450. Administrative Field Placement.**

A one-semester, full-time field experience which allows students to apply their foundational didactic education by means of rotations, experiences, and projects in a healthcare organization. This course is graded on a credit (CR), no-credit (F) basis. Prerequisite: Instructor approval.

**4 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HA 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5640. Administrative Practicum.**

A one-semester, part-time field experience designed for the student already working full-time in healthcare. The practicum provides a broader orientation to the student's organization and exposure to special projects.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5840. Administrative Field Placement.**

A one-semester, full-time field experience which allows students to apply their foundational didactic education by means of rotations, experiences, and projects in a healthcare organization.

**8 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

The graduate minor in Healthcare Administration requires 9-15 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
HA 5300	Healthcare Organization and Delivery	3
HA 5321	Healthcare Law and Policy	3
HA 5362	Healthcare Organizational Behavior, Theory, and Leadership	3
<b>Electives</b>		
Choose 6 hours of advisor-approved courses		6
<b>Total Hours</b>		<b>15</b>

For those majors not requiring a 15-hour minor, a 9-hour cognate is available.

Code	Title	Hours
<b>Required Courses</b>		
HA 5300	Healthcare Organization and Delivery	3
HA 5321	Healthcare Law and Policy	3
HA 5362	Healthcare Organizational Behavior, Theory, and Leadership	3
<b>Total Hours</b>		<b>9</b>

#### Program Overview

The graduate certificate in Long Term Care Administration is designed to offer the course work necessary to sit for the Texas licensing exam for nursing facility administrators. The School of Health Administrators also offers an optional field placement. Note: all questions regarding licensure and state exam requirements should be directed to the Texas Department of Aging and Disability Services (DADS) at 512.438.2015.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$20 nonrefundable application fee
- or
- \$60 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - a 2.5 overall GPA or a 2.5 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)

- minimum 3.0 GPA in all completed graduate course work (if applicable)
- GRE not required

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

The graduate certificate in Long Term Care Administration requires 15 semester credit hours.

## Course Requirements

Code	Title	Hours
LTCA 5322	Environmental Management in Long Term Care	3
LTCA 5323	Governance Management in Long Term Care	3
LTCA 5324	Personnel Management in Long Term Care	3
LTCA 5325	Resident Care Management in Long Term Care	3
LTCA 5335	Financial Management in Long Term Care	3
<b>Total Hours</b>		<b>15</b>

In addition to the completion of certificate course work, a minimum of 1,000 internship hours are required to become a Texas licensed nursing facility administrator. Enrollment in LTCA 5681 may be required.

Nursing Building, Suite 204  
Round Rock Campus  
T: 512-716-2840 F: 512-716-2827  
<http://www.health.txstate.edu/HIM> (<http://www.health.txstate.edu/HIM/>)

Health information management (HIM) improves the quality and efficiency of healthcare by ensuring information is available when and where needed to support clinical decisions. HIM professionals manage, analyze, apply, and protect healthcare data and information systems. The profession encompasses services in planning, collecting, aggregating, analyzing, and disseminating individual patient and population clinical data. Health informatics, data analytics, and cybersecurity are growing elements of the rapidly expanding field.

The Master of Health Information Management (MHIM) degree program is both an entry point for those seeking to enter the HIM field and a way for current professionals to advance their careers with a relevant graduate degree. The program is offered entirely online and includes a variety of options and concentrations to address multiple student interests.



Projected by the Bureau of Labor Statistics to be among the fastest growing occupations in the United States, HIM is an excellent career choice for students seeking a healthcare profession that combines interest in computer science, business, management, legal procedures, leadership, and healthcare research. HIM professionals play key roles in making the healthcare system work by performing needed data collection, analysis, protection, and dissemination of information that physicians, nurses, and other clinicians and administrators need to provide quality patient care.

HIM graduates work in a broad range of settings that span the continuum of healthcare, including hospitals, physician practices, nursing homes, home health agencies, mental health facilities, and public health agencies. Other settings include government agencies, insurance companies, research institutions, cybersecurity and information technology firms, and electronic health record software vendors.

The MHIM program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education. Upon completion of the degree, graduates of the program are eligible to sit for the Registered Health Information Administrator (RHIA) examination offered by the American Health Information Management Association (AHIMA).

Applications for the MHIM program may be submitted through The Graduate College at any time and are reviewed on a rolling basis.

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and the required forms may be obtained through the Department of Health Informatics & Information Management.

## Background Check and Drug Screening

As a condition for placement in professional practice sites, students may be required to have a background check and/or drug screening and/or meet other specific requirements as set by individual sites. Information on these requirements may be obtained through the Department of Health Informatics & Information Management.

## Master of Health Information Management (M.H.I.M.)

- Major in Health Information Management (Health Informatics and Data Analytics Concentration) (p. 2292)
- Major in Health Information Management (Healthcare Information Security Concentration) (p. 2295)
- Major in Health Information Management (Non-thesis Option) (p. 2299)
- Major in Health Information Management (Thesis Option) (p. 2302)

## Program Overview

The Master of Health Information Management major in Health Information Management with a concentration in Health Informatics and Analytics emphasizes the education and skills necessary to successfully pursue a career in health informatics and analytics. The curriculum focuses on general health information management education and specific Health Informatics and Analytics courses to meet individual

needs. Students graduating with a master's in health information management degree with a Concentration in Health Informatics and Analytics will work in roles with titles listed above.

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider, and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and the required forms may be obtained through the department office.

## Background Check and Drug Screening

As a condition for placement in some professional practice sites, some students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the background check/drug screening process will be provided by the department. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Online Information

This program is taught exclusively online. For students residing outside of Texas and not planning on relocating to the state, please visit <http://www.distancelearning.txstate.edu/> before applying.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- completed background courses in: statistics, introduction to microcomputer applications, pathophysiology and pharmacology, anatomy and physiology, and medical terminology
- GRE not required

- resume/CV
- statement of purpose indicating the student's ability and interest in completing the degree program
- three letters of recommendation from professionals or academics competent to assess the student's interest in pursuing a career or advancing in the field of study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Health Information Management (M.H.I.M.) degree with a major in Health Information Management concentration in Health Informatics and Data Analytics requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
HIM 5311	Health Informatics and Data Visualization	3
HIM 5320	Research Methods for HIM	3
HIM 5342	Information Systems and Technology	3
HIM 5351	Data Security, Privacy, and Confidentiality	3
HIM 5363	Health Data Content Structure and Standards	3
HIM 5370	Healthcare Finance and Revenue Cycle Management	3
HIM 5380	Assessing Healthcare Quality	3
HIM 5382	Compliance for HIM Topics	3
HIM 5390	Contemporary Leadership Principles for HIM	3
<b>Prescribed Electives</b>		
Choose 9 hours from the following:		9
HIM 5301	Health Information Technology for Managers	
HIM 5340	Healthcare Informatics	
HIM 5341	Healthcare Terminologies and Vocabularies	
HIM 5343	Advanced Data Analytics in Healthcare	
HIM 5344	Healthcare Database Management Systems	
HIM 5397	HIM Directed Practicum	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The student must have completed 9 MHIM core courses with grades of "C" or higher by the time of taking the comprehensive exam or in the last semester when they are taking the core courses. The comprehensive exam contains 3 questions from each core course. The student selects 1 out of 3 questions in each course to answer. The expected length of answer to each question is about 1 page double spaced, 12-point font. The comprehensive exam is distributed to the students on March 1<sup>st</sup> in spring semesters (or October 1<sup>st</sup> in fall semesters), and due on March 21<sup>st</sup> in spring semester (or October 21<sup>st</sup> in fall semester). Faculty will score the exam as either passing or failing. Faculty complete grading by the end of March (or October). Students who fail the exam may retake the section(s) they failed from April 1<sup>st</sup> to April 15<sup>th</sup> (or November 1<sup>st</sup> to November 15<sup>th</sup> in fall semesters). For the second retake students must select different questions from the first attempt for the core courses. Faculty complete the 2<sup>nd</sup> round grading by the end of April (or November).

Students who fail twice are required to take one 3-credit independent study (approved by graduate faculty) to complete their degrees. At the end of the independent study, students take the third (and the last) comprehensive exam. The relevant faculty will decide the specific time of the third comp exam, which can be in December or January. Students who fail the third comprehensive exam will be dismissed from the graduate program.

Master's level courses in Health Information Management: HIM

## Courses Offered

### Health Information Managements (HIM)

#### HIM 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### HIM 5300. Advanced Independent Study in Health Information Management.

This course provides an in-depth independent study of a singular problem or related problem in the rapidly changing field of health information management. Special emphasis will be placed on the problem's current relevance and the value to the participant. May be repeated for credit with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIM 5301. Health Information Technology for Managers.

This course provides an in-depth analysis of the concept of health information technologies. A major focus will be on the analysis of how technology impacts overall hospital operations from both a clinical and administrative perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5302. Clinical Foundations of Health Information Management.**

This course provides clinical foundations for graduate students studying Health Information Management. Course content varies based on academic preparation and may include topics such as pathophysiology and pharmacology, medical terminology, anatomy and physiology, computing and statistics in a modular format. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**HIM 5311. Health Informatics and Data Visualization.**

This course provides an introduction to the fundamental concepts of health informatics, data analytics, data visualization, and decision support. Emphasis will be on quality-driven data-based decision making systems for business intelligence, clinical decision support, and consumer informatics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5320. Research Methods for HIM.**

This course provides an introduction to research study design, methods, descriptive and inferential statistics need to conduct research studies in the Health Information Management domains. The foundation for compiling, analyzing, and displaying healthcare statistics needed to report and monitor healthcare statistics in the workplace will also be covered. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5340. Healthcare Informatics.**

This course provides an overview and introduction to healthcare informatics. Topics in the course will include the information infrastructure, data needs, implementing healthcare information systems, decision making, privacy and security, consumer informatics and emerging technologies. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5341. Healthcare Terminologies and Vocabularies.**

This course will provide an overview of healthcare terminologies, code sets and classification schemes, and associated standards. Mapping and the relationship of Systematized Nomenclature of Medicine (SNOMED) to an administrative classification system such as International Classification of Diseases (ICD) will be explored. The purpose and differences encountered in mapping a terminology to a classification will be examined. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5342. Information Systems and Technology.**

This course provides an introduction to the fundamental concepts of health information technologies and information management strategic planning. A major focus will be design and selection of data-driven systems that offer strategic advantages, facilitate compliance and provide a return on investment. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5343. Advanced Data Analytics in Healthcare.**

This course introduces advanced concepts of healthcare data analytics. Students will explore, visualize, and analyze healthcare data sets. Topics include data manipulations, data transformations, developing data queries, visualizing data, and exploring data relationships with predictive modeling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5344. Healthcare Database Management Systems.**

This course introduces methods for healthcare database management. The focus is on the physical data modeling for healthcare decision making. Topics include database creation, populating databases, data query optimization, enforcing database integrity, designing database security systems, and exploring data relationships with database reporting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5351. Data Security, Privacy, and Confidentiality.**

This course provides a detailed assessment of how state laws and federal regulations influence the development and management of policies and technology to protect data security, privacy, and confidentiality of protected health information. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5352. Introduction to Healthcare Information Security.**

Students are introduced to the concepts, principles, and applications of healthcare information security including privacy, security, and infrastructure necessary to protect health information. Topics will include confidentiality, integrity, availability, authentication, fraud, eavesdropping, traffic analysis, intrusion detection and prevention, hacking, viruses, cryptography, and risk management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5353. Risk Analysis of Healthcare Systems.**

By examining computer systems, network, and security tools designed to discover vulnerabilities, students gain an understanding of how to protect electronic health record systems. In this course, students learn the techniques and methods required to perform computer and network security risk analyses in a healthcare environment. Security best practices and audit requirements for specific environments will be studied. Topics to be covered include internal and external penetration tests, wireless security technology, risk analysis methodology, and security audits.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5363. Health Data Content Structure and Standards.**

This course provides an in-depth study of the components and use of health records. Interoperability and healthcare informatics standards for collecting, maintaining and transferring healthcare data will be examined. The role of the HIM professional in developing an effective information governance program will be analyzed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5370. Healthcare Finance and Revenue Cycle Management.**

This course will focus on healthcare financial and revenue cycle/reimbursement management issues that impact the practice of Health Information Management. Specific topics covered include financial management, coding compliance, case mix index, revenue cycle, and reimbursement methods. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5380. Assessing Healthcare Quality.**

This course provides an in-depth study on quality improvement methodology to include data retrieval, display, outcomes analysis and the aspect of risk management for various sectors of healthcare. Mechanisms for promoting facility-wide participation in achieving optimum patient care as delineated in accreditation and government standards will be analyzed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5382. Compliance for HIM Topics.**

Compliance activities and methods will be covered for HIM topics to include HIPAA, fraud and abuse, coding auditing, severity of illness, data analytics, fraud surveillance, and clinical documentation improvement. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5390. Contemporary Leadership Principles for HIM.**

This course explores the expanded role of the Health Information Management professional in the healthcare environment. Topics include public policy development, executive decision making, strategic business alliances, change management, enterprise wide strategic planning, stakeholder engagement, training and development, information governance, cultural diversity and ethics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5397. HIM Directed Practicum.**

This course provides a one semester, part-time practicum experience in a healthcare or related organization. Included is an orientation to the organization and completion of a project suitable for implementation at the site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIM 5399A. Thesis.**

This course represents a student's initial thesis enrollment to initiate the thesis project. No thesis credit is awarded until completion of HIM 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIM 5399B. Thesis.**

This course is a student's continued enrollment in the thesis. The student continues to enroll in this course until the thesis is submitted for binding. This course is repeatable for credit until the thesis is completed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Health Information Management degree with a concentration in Healthcare Information Security in the College of Health Professions emphasizes the education and skills necessary to successfully pursue a career in Healthcare Security. The curriculum focuses on general health information management education and specific cybersecurity coursework to meet individual needs. Students graduating with a Master of Health Information Management degree with a Concentration in Healthcare Information Security will work as information security officers, computer and information managers, information security analysts, privacy officers, and release of information managers.

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider, and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and the required forms may be obtained through the department office.

## Background Check and Drug Screening

As a condition for placement in some professional practice sites, some students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the background check/drug screening process will be provided by the department. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Online Information

This program is taught exclusively online. For students residing outside of Texas and not planning on relocating to the state, please visit <http://www.distancelearning.txstate.edu/> before applying.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- completed background courses in: statistics, introduction to microcomputer applications, pathophysiology and pharmacology, anatomy and physiology, and medical terminology
- GRE not required
- resume/CV
- statement of purpose indicating the student's ability and interest in completing the degree program
- three letters of recommendation from professionals or academics competent to assess the student's interest in pursuing a career or advancing in the field of study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt

countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Health Information Management (M.H.I.M.) degree with a major in Health Information Management concentration in Healthcare Information Security requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
HIM 5311	Health Informatics and Data Visualization	3
HIM 5320	Research Methods for HIM	3
HIM 5342	Information Systems and Technology	3
HIM 5351	Data Security, Privacy, and Confidentiality	3
HIM 5352	Introduction to Healthcare Information Security	3
HIM 5353	Risk Analysis of Healthcare Systems	3
HIM 5363	Health Data Content Structure and Standards	3
HIM 5370	Healthcare Finance and Revenue Cycle Management	3
HIM 5380	Assessing Healthcare Quality	3
HIM 5382	Compliance for HIM Topics	3
HIM 5390	Contemporary Leadership Principles for HIM	3
<b>Directed Electives</b>		<b>3</b>
Choose 3 hours from the following:		
HIM 5301	Health Information Technology for Managers	
HIM 5340	Healthcare Informatics	
HIM 5341	Healthcare Terminologies and Vocabularies	
HIM 5343	Advanced Data Analytics in Healthcare	
HIM 5344	Healthcare Database Management Systems	
HIM 5397	HIM Directed Practicum	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The student must have completed 9 MHIM core courses with grades of "C" or higher by the time of taking the comprehensive exam or in the last semester when they are taking the core courses. The comprehensive exam contains 3 questions from each core course. The student selects 1 out of 3 questions in each course to answer. The expected length of answer to each question is about 1 page double spaced, 12-point font.

The comprehensive exam is distributed to the students on March 1<sup>st</sup> in spring semesters (or October 1<sup>st</sup> in fall semesters), and due on March 21<sup>st</sup> in spring semester (or October 21<sup>st</sup> in fall semester). Faculty will score the exam as either passing or failing. Faculty complete grading by the end of March (or October). Students who fail the exam may retake the section(s) they failed from April 1<sup>st</sup> to April 15<sup>th</sup> (or November 1<sup>st</sup> to November 15<sup>th</sup> in fall semesters). For the second retake students must



select different questions from the first attempt for the core courses. Faculty complete the 2<sup>nd</sup> round grading by the end of April (or November).

Students who fail twice are required to take one 3-credit independent study (approved by graduate faculty) to complete their degrees. At the end of the independent study, students take the third (and the last) comprehensive exam. The relevant faculty will decide the specific time of the third comp exam, which can be in December or January. Students who fail the third comprehensive exam will be dismissed from the graduate program.

Master's level courses in Health Information Management: HIM

## Courses Offered

### Health Information Management (HIM)

#### HIM 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### HIM 5300. Advanced Independent Study in Health Information Management.

This course provides an in-depth independent study of a singular problem or related problem in the rapidly changing field of health information management. Special emphasis will be placed on the problem's current relevance and the value to the participant. May be repeated for credit with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIM 5301. Health Information Technology for Managers.

This course provides an in-depth analysis of the concept of health information technologies. A major focus will be on the analysis of how technology impacts overall hospital operations from both a clinical and administrative perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIM 5302. Clinical Foundations of Health Information Management.

This course provides clinical foundations for graduate students studying Health Information Management. Course content varies based on academic preparation and may include topics such as pathophysiology and pharmacology, medical terminology, anatomy and physiology, computing and statistics in a modular format. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### HIM 5311. Health Informatics and Data Visualization.

This course provides an introduction to the fundamental concepts of health informatics, data analytics, data visualization, and decision support. Emphasis will be on quality-driven data-based decision making systems for business intelligence, clinical decision support, and consumer informatics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIM 5320. Research Methods for HIM.

This course provides an introduction to research study design, methods, descriptive and inferential statistics need to conduct research studies in the Health Information Management domains. The foundation for compiling, analyzing, and displaying healthcare statistics needed to report and monitor healthcare statistics in the workplace will also be covered. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIM 5340. Healthcare Informatics.

This course provides an overview and introduction to healthcare informatics. Topics in the course will include the information infrastructure, data needs, implementing healthcare information systems, decision making, privacy and security, consumer informatics and emerging technologies. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIM 5341. Healthcare Terminologies and Vocabularies.

This course will provide an overview of healthcare terminologies, code sets and classification schemes, and associated standards. Mapping and the relationship of Systematized Nomenclature of Medicine (SNOMED) to an administrative classification system such as International Classification of Diseases (ICD) will be explored. The purpose and differences encountered in mapping a terminology to a classification will be examined. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIM 5342. Information Systems and Technology.

This course provides an introduction to the fundamental concepts of health information technologies and information management strategic planning. A major focus will be design and selection of data-driven systems that offer strategic advantages, facilitate compliance and provide a return on investment. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5343. Advanced Data Analytics in Healthcare.**

This course introduces advanced concepts of healthcare data analytics. Students will explore, visualize, and analyze healthcare data sets. Topics include data manipulations, data transformations, developing data queries, visualizing data, and exploring data relationships with predictive modeling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5344. Healthcare Database Management Systems.**

This course introduces methods for healthcare database management. The focus is on the physical data modeling for healthcare decision making. Topics include database creation, populating databases, data query optimization, enforcing database integrity, designing database security systems, and exploring data relationships with database reporting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5351. Data Security, Privacy, and Confidentiality.**

This course provides a detailed assessment of how state laws and federal regulations influence the development and management of policies and technology to protect data security, privacy, and confidentiality of protected health information. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5352. Introduction to Healthcare Information Security.**

Students are introduced to the concepts, principles, and applications of healthcare information security including privacy, security, and infrastructure necessary to protect health information. Topics will include confidentiality, integrity, availability, authentication, fraud, eavesdropping, traffic analysis, intrusion detection and prevention, hacking, viruses, cryptography, and risk management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5353. Risk Analysis of Healthcare Systems.**

By examining computer systems, network, and security tools designed to discover vulnerabilities, students gain an understanding of how to protect electronic health record systems. In this course, students learn the techniques and methods required to perform computer and network security risk analyses in a healthcare environment. Security best practices and audit requirements for specific environments will be studied. Topics to be covered include internal and external penetration tests, wireless security technology, risk analysis methodology, and security audits.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5363. Health Data Content Structure and Standards.**

This course provides an in-depth study of the components and use of health records. Interoperability and healthcare informatics standards for collecting, maintaining and transferring healthcare data will be examined. The role of the HIM professional in developing an effective information governance program will be analyzed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5370. Healthcare Finance and Revenue Cycle Management.**

This course will focus on healthcare financial and revenue cycle/reimbursement management issues that impact the practice of Health Information Management. Specific topics covered include financial management, coding compliance, case mix index, revenue cycle, and reimbursement methods. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5380. Assessing Healthcare Quality.**

This course provides an in-depth study on quality improvement methodology to include data retrieval, display, outcomes analysis and the aspect of risk management for various sectors of healthcare. Mechanisms for promoting facility-wide participation in achieving optimum patient care as delineated in accreditation and government standards will be analyzed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5382. Compliance for HIM Topics.**

Compliance activities and methods will be covered for HIM topics to include HIPAA, fraud and abuse, coding auditing, severity of illness, data analytics, fraud surveillance, and clinical documentation improvement. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5390. Contemporary Leadership Principles for HIM.**

This course explores the expanded role of the Health Information Management professional in the healthcare environment. Topics include public policy development, executive decision making, strategic business alliances, change management, enterprise wide strategic planning, stakeholder engagement, training and development, information governance, cultural diversity and ethics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5397. HIM Directed Practicum.**

This course provides a one semester, part-time practicum experience in a healthcare or related organization. Included is an orientation to the organization and completion of a project suitable for implementation at the site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIM 5399A. Thesis.**

This course represents a student's initial thesis enrollment to initiate the thesis project. No thesis credit is awarded until completion of HIM 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIM 5399B. Thesis.**

This course is a student's continued enrollment in the thesis. The student continues to enroll in this course until the thesis is submitted for binding.

This course is repeatable for credit until the thesis is completed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Major in Health Information Management (M.H.I.M.) offers current and emerging content about the evolving health information management field with the expanding reliance on patient data. The educational objectives of the program are:

- to prepare students for the emerging roles and functions within the health information management domain,
- to provide graduate level education that will prepare students to develop problem solving skills with the ability to analyze and evaluate systems, technology, regulations, data needs to assist in creating new methods, and in policy development,
- to provide a broad-based program of coursework that supports the varied aspects of HIM practice focusing on health data management, data analytics, health information technology project management, and compliance with regulations including privacy of patient information,
- to establish a framework for professional behavior and ethical principles to be used to guide decision-making and actions in the expanding role of health information management professionals, and
- to conduct research that will illustrate and define the health information body of knowledge.

The curriculum will help prepare leaders in the areas of information technology, data stewardship, Health Information Exchange information governance, clinical documentation integrity, project management, and quality data analytics.

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider, and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and the required forms may be obtained through the department office.

## Background Check and Drug Screening

As a condition for placement in some professional practice sites, some students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the background check/drug screening process will be provided by the department. Previous misdemeanor or felony convictions under various

titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Online Information

This program is taught exclusively online. For students residing outside of Texas and not planning on relocating to the state, please visit <http://www.distancelearning.txstate.edu/> before applying.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- completed background courses in: statistics, introduction to microcomputer applications, pathophysiology and pharmacology, anatomy and physiology, and medical terminology
- GRE not required
- resume/CV
- statement of purpose indicating the student's ability and interest in completing the degree program
- three letters of recommendation from professionals or academics competent to assess the student's interest in pursuing a career or advancing in the field of study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Health Information Management (M.H.I.M.) degree with a major in Health Information Management requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
HIM 5311	Health Informatics and Data Visualization	3
HIM 5320	Research Methods for HIM	3
HIM 5342	Information Systems and Technology	3
HIM 5351	Data Security, Privacy, and Confidentiality	3
HIM 5363	Health Data Content Structure and Standards	3
HIM 5370	Healthcare Finance and Revenue Cycle Management	3
HIM 5380	Assessing Healthcare Quality	3
HIM 5382	Compliance for HIM Topics	3
HIM 5390	Contemporary Leadership Principles for HIM	3
<b>Prescribed Electives</b>		
Choose 9 hours from the following:		9
HIM 5301	Health Information Technology for Managers	
HIM 5340	Healthcare Informatics	
HIM 5341	Healthcare Terminologies and Vocabularies	
HIM 5343	Advanced Data Analytics in Healthcare	
HIM 5344	Healthcare Database Management Systems	
HIM 5352	Introduction to Healthcare Information Security	
HIM 5353	Risk Analysis of Healthcare Systems	
HIM 5397	HIM Directed Practicum	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The student must have completed 9 MHIM core courses with grades of "C" or higher by the time of taking the comprehensive exam or in the last semester when they are taking the core courses. The comprehensive exam contains 3 questions from each core course. The student selects 1 out of 3 questions in each course to answer. The expected length of answer to each question is about 1 page double spaced, 12-point font. The comprehensive exam is distributed to the students on March 1<sup>st</sup> in spring semesters (or October 1<sup>st</sup> in fall semesters), and due on March 21<sup>st</sup> in spring semester (or October 21<sup>st</sup> in fall semester). Faculty will score the exam as either passing or failing. Faculty complete grading by the end of March (or October). Students who fail the exam may retake the section(s) they failed from April 1<sup>st</sup> to April 15<sup>th</sup> (or November 1<sup>st</sup> to November 15<sup>th</sup> in fall semesters). For the second retake students must select different questions from the first attempt for the core courses.

Faculty complete the 2<sup>nd</sup> round grading by the end of April (or November).

Students who fail twice are required to take one 3-credit independent study (approved by graduate faculty) to complete their degrees. At the end of the independent study, students take the third (and the last) comprehensive exam. The relevant faculty will decide the specific time of the third comp exam, which can be in December or January. Students who fail the third comprehensive exam will be dismissed from the graduate program.

Master's level courses in Health Information Management: HIM

## Courses Offered

### Health Information Management (HIM)

#### HIM 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### HIM 5300. Advanced Independent Study in Health Information Management.

This course provides an in-depth independent study of a singular problem or related problem in the rapidly changing field of health information management. Special emphasis will be placed on the problem's current relevance and the value to the participant. May be repeated for credit with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIM 5301. Health Information Technology for Managers.

This course provides an in-depth analysis of the concept of health information technologies. A major focus will be on the analysis of how technology impacts overall hospital operations from both a clinical and administrative perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIM 5302. Clinical Foundations of Health Information Management.

This course provides clinical foundations for graduate students studying Health Information Management. Course content varies based on academic preparation and may include topics such as pathophysiology and pharmacology, medical terminology, anatomy and physiology, computing and statistics in a modular format. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**HIM 5311. Health Informatics and Data Visualization.**

This course provides an introduction to the fundamental concepts of health informatics, data analytics, data visualization, and decision support. Emphasis will be on quality-driven data-based decision making systems for business intelligence, clinical decision support, and consumer informatics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5320. Research Methods for HIM.**

This course provides an introduction to research study design, methods, descriptive and inferential statistics need to conduct research studies in the Health Information Management domains. The foundation for compiling, analyzing, and displaying healthcare statistics needed to report and monitor healthcare statistics in the workplace will also be covered. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5340. Healthcare Informatics.**

This course provides an overview and introduction to healthcare informatics. Topics in the course will include the information infrastructure, data needs, implementing healthcare information systems, decision making, privacy and security, consumer informatics and emerging technologies. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5341. Healthcare Terminologies and Vocabularies.**

This course will provide an overview of healthcare terminologies, code sets and classification schemes, and associated standards. Mapping and the relationship of Systematized Nomenclature of Medicine (SNOMED) to an administrative classification system such as International Classification of Diseases (ICD) will be explored. The purpose and differences encountered in mapping a terminology to a classification will be examined. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5342. Information Systems and Technology.**

This course provides an introduction to the fundamental concepts of health information technologies and information management strategic planning. A major focus will be design and selection of data-driven systems that offer strategic advantages, facilitate compliance and provide a return on investment. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5343. Advanced Data Analytics in Healthcare.**

This course introduces advanced concepts of healthcare data analytics. Students will explore, visualize, and analyze healthcare data sets. Topics include data manipulations, data transformations, developing data queries, visualizing data, and exploring data relationships with predictive modeling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5344. Healthcare Database Management Systems.**

This course introduces methods for healthcare database management. The focus is on the physical data modeling for healthcare decision making. Topics include database creation, populating databases, data query optimization, enforcing database integrity, designing database security systems, and exploring data relationships with database reporting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5351. Data Security, Privacy, and Confidentiality.**

This course provides a detailed assessment of how state laws and federal regulations influence the development and management of policies and technology to protect data security, privacy, and confidentiality of protected health information. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5352. Introduction to Healthcare Information Security.**

Students are introduced to the concepts, principles, and applications of healthcare information security including privacy, security, and infrastructure necessary to protect health information. Topics will include confidentiality, integrity, availability, authentication, fraud, eavesdropping, traffic analysis, intrusion detection and prevention, hacking, viruses, cryptography, and risk management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5353. Risk Analysis of Healthcare Systems.**

By examining computer systems, network, and security tools designed to discover vulnerabilities, students gain an understanding of how to protect electronic health record systems. In this course, students learn the techniques and methods required to perform computer and network security risk analyses in a healthcare environment. Security best practices and audit requirements for specific environments will be studied. Topics to be covered include internal and external penetration tests, wireless security technology, risk analysis methodology, and security audits.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**HIM 5363. Health Data Content Structure and Standards.**

This course provides an in-depth study of the components and use of health records. Interoperability and healthcare informatics standards for collecting, maintaining and transferring healthcare data will be examined. The role of the HIM professional in developing an effective information governance program will be analyzed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5370. Healthcare Finance and Revenue Cycle Management.**

This course will focus on healthcare financial and revenue cycle/reimbursement management issues that impact the practice of Health Information Management. Specific topics covered include financial management, coding compliance, case mix index, revenue cycle, and reimbursement methods. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5380. Assessing Healthcare Quality.**

This course provides an in-depth study on quality improvement methodology to include data retrieval, display, outcomes analysis and the aspect of risk management for various sectors of healthcare. Mechanisms for promoting facility-wide participation in achieving optimum patient care as delineated in accreditation and government standards will be analyzed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5382. Compliance for HIM Topics.**

Compliance activities and methods will be covered for HIM topics to include HIPAA, fraud and abuse, coding auditing, severity of illness, data analytics, fraud surveillance, and clinical documentation improvement. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5390. Contemporary Leadership Principles for HIM.**

This course explores the expanded role of the Health Information Management professional in the healthcare environment. Topics include public policy development, executive decision making, strategic business alliances, change management, enterprise wide strategic planning, stakeholder engagement, training and development, information governance, cultural diversity and ethics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5397. HIM Directed Practicum.**

This course provides a one semester, part-time practicum experience in a healthcare or related organization. Included is an orientation to the organization and completion of a project suitable for implementation at the site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIM 5399A. Thesis.**

This course represents a student's initial thesis enrollment to initiate the thesis project. No thesis credit is awarded until completion of HIM 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIM 5399B. Thesis.**

This course is a student's continued enrollment in the thesis. The student continues to enroll in this course until the thesis is submitted for binding. This course is repeatable for credit until the thesis is completed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Health Information Management (M.H.I.M.) degree program offers current and emerging content about the evolving health information management field with the expanding reliance on patient data. The educational objectives of the program are:

- to prepare students for the emerging roles and functions withing the health information management domain,
- to provide graduate level education that will prepare students to develop problem solving skills with the ability to analyze and evaluate systems, technology, regulations, data needs to assist in creating new methods, and in policy development,
- to provide a broad-based program of coursework that supports the varied aspects of HIM practice focusing on health data management, data analytics, health information technology project management, and compliance with regulations including privacy of patient information,
- to establish a framework for professional behavior and ethical principles to be used to guide decision-making and actions in the expanding role of health information management professionals, and
- to conduct research that will illustrate and define the health information body of knowledge.

The curriculum will help prepare leaders in the areas of information technology, data stewardship, Health Information Exchange information governance, clinical documentation integrity, project management, and quality data analytics.

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider, and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and the required forms may be obtained through the department office.

## Background Check and Drug Screening

As a condition for placement in some professional practice sites, some students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the background check/drug screening process will be provided by the department. Previous misdemeanor or felony convictions under various

titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Online Information

This program is taught exclusively online. For students residing outside of Texas and not planning on relocating to the state, please visit <http://www.distancelearning.txstate.edu/> before applying.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- completed background courses in: statistics, introduction to microcomputer applications, pathophysiology and pharmacology, anatomy and physiology, and medical terminology
- GRE not required
- resume/CV
- statement of purpose indicating the student's ability and interest in completing the degree program
- three letters of recommendation from professionals or academics competent to assess the student's interest in pursuing a career or advancing in the field of study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Health Information Management (M.H.I.M.) degree with a major in Health Information Management requires 36 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
HIM 5311	Health Informatics and Data Visualization	3
HIM 5320	Research Methods for HIM	3
HIM 5342	Information Systems and Technology	3
HIM 5351	Data Security, Privacy, and Confidentiality	3
HIM 5363	Health Data Content Structure and Standards	3
HIM 5370	Healthcare Finance and Revenue Cycle Management	3
HIM 5380	Assessing Healthcare Quality	3
HIM 5382	Compliance for HIM Topics	3
HIM 5390	Contemporary Leadership Principles for HIM	3
<b>Directed Electives</b>		<b>3</b>
Choose 3 hours from the following:		
HIM 5301	Health Information Technology for Managers	
HIM 5340	Healthcare Informatics	
HIM 5341	Healthcare Terminologies and Vocabularies	
HIM 5343	Advanced Data Analytics in Healthcare	
HIM 5344	Healthcare Database Management Systems	
HIM 5352	Introduction to Healthcare Information Security	
HIM 5397	HIM Directed Practicum	
<b>Thesis</b>		
HIM 5399A	Thesis	3
Choose a minimum 3 hours from the following:		<b>3</b>
HIM 5199B	Thesis	
HIM 5399B	Thesis	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The student must have completed 9 MHIM core courses with grades of "C" or higher by the time of taking the comprehensive exam or in the last semester when they are taking the core courses. The comprehensive exam contains 3 questions from each core course. The student selects 1 out of 3 questions in each course to answer. The expected length of answer to each question is about 1 page double spaced, 12-point font. The comprehensive exam is distributed to the students on March 1<sup>st</sup> in spring semesters (or October 1<sup>st</sup> in fall semesters), and due on March 21<sup>st</sup> in spring semester (or October 21<sup>st</sup> in fall semester). Faculty will

score the exam as either passing or failing. Faculty complete grading by the end of March (or October). Students who fail the exam may retake the section(s) they failed from April 1<sup>st</sup> to April 15<sup>th</sup> (or November 1<sup>st</sup> to November 15<sup>th</sup> in fall semesters). For the second retake students must select different questions from the first attempt for the core courses. Faculty complete the 2<sup>nd</sup> round grading by the end of April (or November).

Students who fail twice are required to take one 3-credit independent study (approved by graduate faculty) to complete their degrees. At the end of the independent study, students take the third (and the last) comprehensive exam. The relevant faculty will decide the specific time of the third comp exam, which can be in December or January. Students who fail the third comprehensive exam will be dismissed from the graduate program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect

the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Health Information Management: HIM

## Courses Offered

### Health Information Management (HIM)

#### HIM 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### HIM 5300. Advanced Independent Study in Health Information Management.

This course provides an in-depth independent study of a singular problem or related problem in the rapidly changing field of health information management. Special emphasis will be placed on the problem's current relevance and the value to the participant. May be repeated for credit with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIM 5301. Health Information Technology for Managers.

This course provides an in-depth analysis of the concept of health information technologies. A major focus will be on the analysis of how technology impacts overall hospital operations from both a clinical and administrative perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIM 5302. Clinical Foundations of Health Information Management.

This course provides clinical foundations for graduate students studying Health Information Management. Course content varies based on academic preparation and may include topics such as pathophysiology and pharmacology, medical terminology, anatomy and physiology, computing and statistics in a modular format. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### HIM 5311. Health Informatics and Data Visualization.

This course provides an introduction to the fundamental concepts of health informatics, data analytics, data visualization, and decision support. Emphasis will be on quality-driven data-based decision making systems for business intelligence, clinical decision support, and consumer informatics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIM 5320. Research Methods for HIM.

This course provides an introduction to research study design, methods, descriptive and inferential statistics need to conduct research studies in the Health Information Management domains. The foundation for compiling, analyzing, and displaying healthcare statistics needed to report and monitor healthcare statistics in the workplace will also be covered. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIM 5340. Healthcare Informatics.

This course provides an overview and introduction to healthcare informatics. Topics in the course will include the information infrastructure, data needs, implementing healthcare information systems, decision making, privacy and security, consumer informatics and emerging technologies. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIM 5341. Healthcare Terminologies and Vocabularies.

This course will provide an overview of healthcare terminologies, code sets and classification schemes, and associated standards. Mapping and the relationship of Systematized Nomenclature of Medicine (SNOMED) to an administrative classification system such as International Classification of Diseases (ICD) will be explored. The purpose and differences encountered in mapping a terminology to a classification will be examined. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIM 5342. Information Systems and Technology.

This course provides an introduction to the fundamental concepts of health information technologies and information management strategic planning. A major focus will be design and selection of data-driven systems that offer strategic advantages, facilitate compliance and provide a return on investment. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5343. Advanced Data Analytics in Healthcare.**

This course introduces advanced concepts of healthcare data analytics. Students will explore, visualize, and analyze healthcare data sets. Topics include data manipulations, data transformations, developing data queries, visualizing data, and exploring data relationships with predictive modeling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5344. Healthcare Database Management Systems.**

This course introduces methods for healthcare database management. The focus is on the physical data modeling for healthcare decision making. Topics include database creation, populating databases, data query optimization, enforcing database integrity, designing database security systems, and exploring data relationships with database reporting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5351. Data Security, Privacy, and Confidentiality.**

This course provides a detailed assessment of how state laws and federal regulations influence the development and management of policies and technology to protect data security, privacy, and confidentiality of protected health information. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5352. Introduction to Healthcare Information Security.**

Students are introduced to the concepts, principles, and applications of healthcare information security including privacy, security, and infrastructure necessary to protect health information. Topics will include confidentiality, integrity, availability, authentication, fraud, eavesdropping, traffic analysis, intrusion detection and prevention, hacking, viruses, cryptography, and risk management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5353. Risk Analysis of Healthcare Systems.**

By examining computer systems, network, and security tools designed to discover vulnerabilities, students gain an understanding of how to protect electronic health record systems. In this course, students learn the techniques and methods required to perform computer and network security risk analyses in a healthcare environment. Security best practices and audit requirements for specific environments will be studied. Topics to be covered include internal and external penetration tests, wireless security technology, risk analysis methodology, and security audits.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5363. Health Data Content Structure and Standards.**

This course provides an in-depth study of the components and use of health records. Interoperability and healthcare informatics standards for collecting, maintaining and transferring healthcare data will be examined. The role of the HIM professional in developing an effective information governance program will be analyzed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5370. Healthcare Finance and Revenue Cycle Management.**

This course will focus on healthcare financial and revenue cycle/reimbursement management issues that impact the practice of Health Information Management. Specific topics covered include financial management, coding compliance, case mix index, revenue cycle, and reimbursement methods. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5380. Assessing Healthcare Quality.**

This course provides an in-depth study on quality improvement methodology to include data retrieval, display, outcomes analysis and the aspect of risk management for various sectors of healthcare. Mechanisms for promoting facility-wide participation in achieving optimum patient care as delineated in accreditation and government standards will be analyzed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5382. Compliance for HIM Topics.**

Compliance activities and methods will be covered for HIM topics to include HIPAA, fraud and abuse, coding auditing, severity of illness, data analytics, fraud surveillance, and clinical documentation improvement. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5390. Contemporary Leadership Principles for HIM.**

This course explores the expanded role of the Health Information Management professional in the healthcare environment. Topics include public policy development, executive decision making, strategic business alliances, change management, enterprise wide strategic planning, stakeholder engagement, training and development, information governance, cultural diversity and ethics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5397. HIM Directed Practicum.**

This course provides a one semester, part-time practicum experience in a healthcare or related organization. Included is an orientation to the organization and completion of a project suitable for implementation at the site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**HIM 5399A. Thesis.**

This course represents a student's initial thesis enrollment to initiate the thesis project. No thesis credit is awarded until completion of HIM 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIM 5399B. Thesis.**

This course is a student's continued enrollment in the thesis. The student continues to enroll in this course until the thesis is submitted for binding.

This course is repeatable for credit until the thesis is completed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

Nursing Building  
Round Rock Campus

100 Bobcat Way

Round Rock, TX

T: 512.716.2900 F: 512.716.2911

[www.nursing.txst.edu](https://www.nursing.txst.edu/) (<https://www.nursing.txst.edu/>)

## Vision

The St. David's School of Nursing at Texas State University will provide supportive and creative educational programs, which inspire those who teach and those who learn, based on mutual respect and a commitment to contribute to the health of individuals, families, populations, communities, and the environment worldwide.

## Mission

### Preparing the next generation of nurses to improve health care.

The St. David's School of Nursing at Texas State University educates and prepares graduates, using innovative teaching strategies and state-of-the-art technology. Graduates provide ethical, safe, and effective, patient-centered care and contribute to present and emerging research and health management practices. Graduates demonstrate competences in clinical judgement, collaborate as members and leaders of interprofessional healthcare teams, and utilize scientifically based interventions. As caring professional nurses, graduates manage illness; promote, maintain, and restore health; and provide end-of-life care for diverse individuals, families, populations, and global communities across the lifespan.

The St. David's School of Nursing offers specialized graduate programs in leadership and administration, family nurse practitioner, and psychiatric mental health nurse practitioner advanced nursing roles. The grad programs are offered online with scheduled on-campus intensive and preceptor-led experiences within the state of Texas. On-campus intensives (OCIs) are immersive learning experiences facilitated by graduate faculty for students to engage in a variety of simulations. learn from expert guest lecturers in the field, and interact one-on-one with faculty. OCI's are a hallmark of our program during which students enjoy peer-to-peer engagement, faculty support, active learning and networking. Our programs offer students flexibility and support to further their nursing education while still working as a Registered Nurse.

## Academic Progression

Students enrolled in the graduate nursing programs are required to earn a grade of at least 80% (B or higher) in all courses in the nursing curriculum. To graduate with a Master of Science in Nursing degree or Post Masters Graduate Certificate, students must have a minimum GPA of 3.0 in their graduate nursing coursework.

Graduate nursing courses are offered in a lock-step sequence. Students must be enrolled in all scheduled nursing courses each semester based on the appropriate degree plan for the program track admitted to. Each course will be offered only once each academic year; therefore, progress in the program will be delayed if the student fails (C or lower) or drops/withdraws from a course. A student may repeat a nursing course only one time. Following a second nursing course failure or withdrawal from a nursing course beyond the census date (12th class day), a student will be dismissed from the nursing program, but not Texas State University.

### Graduation

To graduate with a Master of Science in Nursing, a student must successfully complete all graduate nursing courses and requirements and maintain a 3.0 or higher GPA in the graduate nursing program.

### Immunization and Basic Life Support

It is the policy of the College of Health Professions that each student must provide a Health Certificate and Immunization Form completed and signed by a licensed healthcare provider (MD, DO, PA or NP). Students must stay current on immunizations and any other required vaccinations as well as Basic Life Support for Healthcare Professionals and other admission requirements. Graduate students who fail to keep their clinical requirements (immunizations, CPR, etc.) up to date will not be permitted to attend class, on campus intensives, or clinical, resulting in a student unable to meet course requirements and failure of the course.

## Criminal Background Check and Drug Screen

Graduate nursing students must successfully pass a criminal background check and submit a clean drug screen, consistent with the requirements for our clinical partners, prior to admission. A valid social security number is required by the St. David's School of Nursing's clinical partners for the background check administered through a third-party vendor. All graduate nursing students are subject to random or for cause drug screens throughout the program.

Students will be required to notify the Director of the School of Nursing of any type of arrest, conviction or change in physical or mental health status during their time in the nursing program. The seriousness of the infraction or condition will determine the actions the director will need to implement with respect to our clinical affiliation agreements. Our clinical partners require this oversight by the SON director. Failure to notify will be considered an Honor Code and Nursing Ethics violation.

## Master of Science in Nursing (M.S.N.)

- Major in Family Nurse Practitioner (p. 2319)
- Major in Leadership and Administration in Nursing (p. 2327)
- Major in Leadership and Administration in Nursing (RN to B.S.N. to M.S.N. Concentration) (p. 2308)
- Major in Psychiatric Mental Health Nurse Practitioner (p. 2335)

## Certificates

- Graduate Certificate in Psychiatric Mental Health Nurse Practitioner (p. 2343)

## Program Overview

Leading nursing departments depends on strong relationship building with an emphasis on diversity, a solid knowledge base in healthcare ethics, law and regulatory requirements, and a grounding in analysis of research that supports best practice. All of the courses in the M.S.N.-LAN degree program build knowledge, skills, and competencies in nursing leadership. The blending of the B.S.N. to M.S.N.-LAN is designed to provide a streamlined educational track for registered nurses (RN) and leaders who want to expand their career opportunities and professional contributions. All courses in the M.S.N.-LAN program are specifically designed to address nursing issues where RN nursing service administrators lead and delegate nursing care and processes to other nurses.

## Undergraduate Admission Requirements (RN to B.S.N.)

1. Application for admission to the registered nurse to Bachelor of Science in Nursing online completion program (RN to B.S.N.) must be made to the St. David's School of Nursing in addition to the university admission procedures. The application deadline is April 15th with students admitted each fall. Admission to the RN to B.S.N. online completion program requires admission to the university and admission to the program. For more information visit: <http://www.nursing.txstate.edu/>
2. Students must hold a current, valid unencumbered R.N. license or multi-state privilege to practice as a registered nurse in the state(s) in which the student will complete practicum courses. The license must be printed from the Texas Board of Nursing (BON) website.
3. All applicants must have a nursing school GPA of 2.5 and an overall GPA of 2.5 to apply.
4. Completion of 42 hours of general education core curriculum requirements, including the following major-specific core requirements or field of study coursework:
  - PSY 1300 or SOCI 1310
  - MATH 1315
  - CHEM 1341
5. Completion of 18 hours of support or field of study coursework:
  - BIO 2400 or BIO 2440
  - BIO 2451
  - BIO 2452
  - NUTR 2360
  - PSY 3300 or HDFS 1351
6. Students who earned an Associate in Applied Science major in Nursing degree (ADN) from a regionally accredited community college will be awarded 30 semester credit hours of Nursing coursework toward the B.S.N. online completion.
7. Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.

## Graduate Application Requirements (M.S.N.)

### Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed application using online system
- \$55 nonrefundable application fee or \$90 nonrefundable application fee for applications with international credentials
- official transcripts from **each institution** where course credit was granted
- minimum 3.0 GPA on a 4.0 scale in the last 30 hours of undergraduate course work
- grade of C or better in college level statistics course
- GRE not required
- current, valid unencumbered R.N. license or multi-state privilege to practice as a registered nurse in the state(s) in which the student will complete practicum courses. The license must be printed from the Texas Board of Nursing (BON) website.
- responses to specific essay questions as found in the online application system
- completed professional essay and goals
- resume/CV reflecting a minimum of one year of experience as a Registered Nurse. (Students must have a minimum equivalent of one year of full-time experience as a R.N. prior to the application deadline for this program.)
- three letters of recommendation from professionals competent to assess the applicant's academic capability and interest in pursuing advanced levels of nursing practice
- As part of the application process, applicants are required to participate and complete an interview

### TOEFL, PTE, or IELTS Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

This program does **not** offer admission if the scores above are not met.

## General Requirements

1. Students have 3 years to complete the degree requirements for the RN to B.S.N. program and 5 additional years to complete the MSN-LAN degree requirements.
2. For baccalaureate transfer students, 34 semester credit hours may be transferred from a Texas public institution of higher education for the Nursing Field of Study and be applied to the Bachelor of

Science in Nursing degree with a major in Nursing at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
BIO 2440	Principles of Microbiology	4
TCCN: BIOL 2421 or 2420		
CHEM 1341	General Chemistry I	3
TCCN: Any 4 SCH course including lab (CHEM 1341 + 1 hour ELNA)		
NUTR 2360	Nutrition Science	3
TCCN: BIOL 1322/HECO 1322		
BIO 2451	Human Anatomy and Physiology I	4
TCCN: BIOL 2401		
BIO 2452	Human Anatomy and Physiology II	4
TCCN: BIOL 2402		
PSY 1300	Introduction to Psychology	3
TCCN: PSYC 2301		
PSY 3300	Lifespan Development	3
TCCN: PSYC 2314		
MATH 2328	Elementary Statistics	3
TCCN: MATH 1342		
ENG 1310	College Writing I	3
TCCN: ENGL 1301		
ENG 1320	College Writing II	3
TCCN: ENGL 1302 or ENGL 2311		
Total hours		34

- All upper division Nursing courses must be completed with a grade of "C" or better to progress through the B.S.N. curriculum.
- The Bachelor of Science in Nursing (B.S.N.) major in Nursing requires 120 semester credit hours. The 120 hours are completed by: 1) 30 semester credit hours for the entry-level nursing courses from the associate degree nursing courses; 2) 60 semester credit hours of core and prerequisite courses; and 3) 30 remaining hours of upper-division B.S.N. courses at Texas State to satisfy upper-division, residency, and writing intensive requirements for degree completion.
- The Master of Science in Nursing (M.S.N.) major in Leadership and Administration in Nursing requires 36 semester credit hours.

## Course Requirements for the RN to B.S.N.

Code	Title	Hours
30 semester credit hours for the entry-level nursing courses from the associate degree nursing courses		30
60 semester credit hours of core and prerequisite courses		60
NURS 3110	Health Assessment Across the Life Span Practicum	1
NURS 3230	Healthcare Systems	2
NURS 3250	Health Assessment Across the Life Span	2
NURS 3302	Research and Ethics	3
NURS 3430	Pathophysiology and Pharmacology for Nurses	4

NURS 4204	Policy, Ethics, and Advocacy in Professional Nursing Practice	2
NURS 4205	Healthcare Information Technology in Nursing Practice	2
NURS 4280	Community and Population Health Nursing Practicum	2
NURS 4302	Role Transition to Professional Nursing	3
NURS 4303	Safety and Quality in an Interprofessional Environment	3
NURS 4351	Leadership and Management of Nursing Care	3
NURS 4380	Community and Population Health Nursing	3
Total Hours		120

## Course Requirements for the M.S.N.

Code	Title	Hours
HA 5355	Emerging Trends in Healthcare Human Resources	3
HIM 5342	Information Systems and Technology	3
HS 5315	Principles of Healthcare Finance for Clinical Leaders	3
NURS 5360	Leadership Science: Foundational Thinking Skills, Governance, & Community & Provider Relationships	3
NURS 5361	Leadership Science: Performance and Quality Improvement	3
NURS 5362	Leadership Science: Patient Safety, Risk Management, Legal and Regulatory Requirements	3
NURS 5363	Leadership Science: Evidence-Based Practice for Nurse Leaders	3
NURS 5364	Leadership Science: Health Care Finance and Workforce Planning	3
NURS 5365	Leadership Art: Ethics, Diversity, and Relationship Building	3
NURS 5366	Leadership Art: Health Policy and Advocacy	3
NURS 5367	Leader Within: Professional Accountability, Succession Planning and Reflective Practice I	3
NURS 5368	Leader Within: Professional Accountability, Succession Planning and Reflective Practice II	3
Total Hours		36

Students enrolled in the M.S.N. program are required to earn a grade of at least 80% (B or higher) in all courses in the M.S.N. curriculum. Graduate nursing courses are offered in a lock-step sequence for part-time and full-time options. Each course will be offered only once each academic year; therefore, progress in the program will be delayed if the student fails (C or lower) or drops/withdraws from a course. Students may repeat or withdraw from one nursing course only one time during the duration of the program.

Students who fail to keep their student admission requirements (immunizations, CPR, etc.) up to date cannot attend class or clinical, resulting in a student unable to meet course requirements. Students who do not maintain admission or prevailing requirements within 2 weeks of notification of expiration will be required to meet with the program director and may be subject to withdrawal from their courses. This will alter program progression and counts towards the number of course attempts in the program.

Students who withdraw from the program for more than one semester must petition the Nursing Admission, Progression and Graduation (A-P-G) Committee to reenter. Re-entry is not guaranteed due to faculty-student ratios, accreditation requirements, and other aspects of the program. A student who has been out more than one year will have to reapply to the program through The Graduate College using the standard application process. Students who have been out of the program over one year may be required to retake foundational courses in the NP programs to remain current.

To graduate with a Master of Science in Nursing, a student must successfully complete all graduate nursing courses and requirements and maintain a 3.0 or higher GPA in the graduate nursing program. Students have five (5) years to complete their graduate degree in the School of Nursing.

## Comprehensive Examination Requirements

All candidates for graduate degrees must pass one or more comprehensive examinations. The capstone project is considered the comprehensive examination in the School of Nursing.

Bachelor's and Master's level courses in Nursing: NURS

## Courses Offered Nursing (NURS)

### **NURS 3110. Health Assessment Across the Life Span Practicum.**

This course requires demonstrated competency in the performance and documentation of physical assessments of well individuals and nursing care plans using the nursing process, critical thinking, and evidence-based practice. Apply teaching/learning principles in meeting the education needs of patients and demonstrate measures to maintain confidentiality of personal health information.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

### **NURS 3121. Essentials of Nursing Care Practicum.**

This course requires the use of nursing process and clinical reasoning principles to provide safe, effective, patient-centered care. Evidence-based practices will be used when performing essential nursing skills and procedures to care for patients experiencing acute and chronic alterations in health status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

### **NURS 3221. Essentials of Nursing Care.**

This foundation course focuses on basic concepts related to essential nursing care of patients across the life span. Integration of knowledge of family systems, evidence-based practice, clinical reasoning, and the nursing process to provide safe, effective, patient-centered care will occur.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

### **NURS 3230. Healthcare Systems.**

Access and barriers to healthcare, past and current healthcare policy, and the professional nurse's role in policy and delivery of healthcare, will be emphasized. Qualitative and quantitative research in relation to healthcare systems, evidence based nursing practice, and ethical topics will be discussed.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### **NURS 3240. Nursing Care Across the Life Span Practicum.**

This course uses clinical experiences to apply the nursing process in providing safe, effective, and quality care to patients and families across the life span. Clinical reasoning and judgment will be used to provide ethical, holistic, and patient-centered nursing care, promote health, prevent disease, and manage illness.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

### **NURS 3241. Acute Nursing Care of Adults Practicum.**

This course requires students to use evidence-based and collaborative practice principles in providing safe, effective, and quality care to adult patients experiencing acute, rapidly changing, life-threatening alterations in health status. Clinical reasoning and judgment will be used to provide ethical, holistic, patient-centered nursing care, manage illness, and promote health.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

### **NURS 3250. Health Assessment Across the Life Span.**

Conducting health histories and physical assessments of well individuals and developing nursing care plans that include patient age-specific health promotion, illness prevention, and risk factors will be emphasized. Assessments will encompass cultural domains, diversity, belief systems, and the implications for traditional as well as complementary and alternative healthcare.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

### **NURS 3260. Psychiatric Mental Health Nursing Practicum.**

This course utilizes clinical experiences to promote application of the nursing process in providing quality care to those experiencing mental health issues across the life span. Competency in using evidence-based practices to promote health, prevent disease, and manage illness will be developed.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 3300. Foundations of Professional Nursing Practice.**

This course explores the history of nursing in the context of the evolving healthcare system. Laws, regulations, and ethical guidelines impacting nursing licensure and professional practice will be examined. The delivery of patient and family-centered, evidence-based, and safe quality care will be explored. (WI) (MULP).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Multicultural Perspective|Writing Intensive

**Grade Mode:** Standard Letter

**NURS 3302. Research and Ethics.**

Introduction to critical appraisal of qualitative and quantitative research, and application of research and evidence-based processes used to improve decision-making and patient care outcomes across health settings. Integration of theory, information systems, clinical judgment, interprofessional perspectives and analysis of ethical conduct provide a foundation for learning the research process. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**NURS 3360. Psychiatric Mental Health Nursing.**

This course applies theories, concepts, knowledge, and skills for the comprehensive nursing care of those coping with mental health issues. Building on a liberal education, this course integrates theories of mental illness, psychopathology, and current research findings as they relate to the presentation of symptoms and holistic management of care.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 3430. Pathophysiology and Pharmacology for Nurses.**

Introduction and overview of pathology, clinical pharmacology and pharmacotherapeutics, including how major drugs are used therapeutically for age-specific clients. Other topics to be covered include drug laws and regulations, patient and nurse safety.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 3440. Nursing Care Across the Life Span.**

This foundational course focuses on the use of clinical reasoning and judgment to provide collaborative care to patients across the life span experiencing chronic and acute alterations in health status. Content is presented based on evidence-based practice and the prevalent health needs of patients. Prerequisite: NURS 3430 with a grade of "C" or better.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**NURS 3441. Acute Nursing Care of Adults.**

This course focuses on the use of evidence-based practice and clinical reasoning and judgment to provide collaborative care to adult patients experiencing acute, rapidly changing, life-threatening alterations in health status.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4160. Maternal and Newborn Nursing Practicum.**

This course is the clinical companion to NURS 4260. Concepts, knowledge, and skills taught in NURS 4160 will be applied to both simulation lab and clinical settings. Evidence-based, developmentally and culturally appropriate nursing care in a variety of patient-care settings will be emphasized.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 4170. Pediatric Nursing Practicum.**

This course is the clinical companion to NURS 4270. Concepts, knowledge, and skills taught in NURS 4270 will be applied in the simulation lab and clinical settings. Evidence-based, developmentally and culturally appropriate nursing care in a variety of patient-care settings will be emphasized.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 4201. Professional Growth and Empowerment.**

This course focuses on issues related to professional practice, career planning, personal goal setting, and empowerment of self and others. Factors related to job performance, performance expectations and evaluation, reality orientation, and commitment to lifelong learning will be discussed.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4204. Policy, Ethics, and Advocacy in Professional Nursing Practice.**

This course explores the baccalaureate prepared nurse's role informing the public policy process. Nursing jurisprudence, principles of nursing ethics, patient safety advocacy, standards and scope of nursing practice, professional boundaries, nursing peer review, and whistleblower protections are emphasized to prepare students to influence the U.S. Health Care System and society.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter



**NURS 4205. Healthcare Information Technology in Nursing Practice.**

This course emphasizes nursing informatics and technology used in healthcare settings to research, support and implement safe quality patient care. Nursing administrative applications, pre-care and care support, electronic health records, clinical information systems, telehealth, informatics promoting community and consumer health, HIPAA, and technology to enhance collaboration in healthcare are covered.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4211. Nursing Care in Complex Health Practicum.**

This course focuses on providing care to patients with complex health alterations and life situations. Nursing care to patients in a variety of settings will be provided using the concepts of therapeutic communication and collaborative interventions with a focus on the complexity of the patient's or family's needs.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 4260. Maternal and Newborn Nursing.**

This course applies the nursing process and evidence-based practice to the care of maternal and newborn patients in a variety of healthcare settings. The course emphasizes the use of the nursing process to provide care to individuals and families that is developmentally and culturally focused.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4270. Pediatric Nursing.**

This course applies the nursing process and evidence-based practice to the care of pediatric patients in acute, outpatient and non-acute care settings. The course emphasizes the use of the nursing process to provide care to individuals and families that is developmentally and culturally appropriate.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4280. Community and Population Health Nursing Practicum.**

Clinical experiences will expose students to a variety of community and public health environments, health programs and policies in order to learn how nursing care is delivered to populations in community settings.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 4302. Role Transition to Professional Nursing.**

This didactic course focuses on role responsibility and accountability for transition into baccalaureate nursing practice. Emphasis is given to core professional standards and ethical values fundamental to nursing. Principles of professional communication, critical thinking, and role socialization will be integrated within an organizational context for professional growth. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**NURS 4303. Safety and Quality in an Interprofessional Environment.**

This course emphasizes the professional nurses' role in application of evidence based quality improvement and risk reduction strategies that promote safe environments while maximizing resources and opportunities for positive patient outcomes. Participation in highly effective Interprofessional teams is emphasized with concepts applied to local, national and international health issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4311. Nursing Care in Complex Health.**

This course explores traditional and contemporary nursing concepts related to complex health alterations, compensations, and environments across the life span. Therapeutic communication, education, and collaborative interventions with diverse individuals and groups are emphasized including the use of complementary and alternative modalities to meet the needs of patients.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**NURS 4341. Leadership and Management of Nursing Care Practicum.**

Leadership and management skills in a variety of nursing care situations will be applied. Nursing unit leadership and staff assignments based on assessment of client needs, resources, priorities, and competencies of staff will be covered. Assessment and evaluation of the provision of evidence-based nursing care will be performed.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 4351. Leadership and Management of Nursing Care.**

Students discuss leadership and management theories related to organizational nursing roles, including competencies required for complex change, performance improvement, and transformational leadership. Organizational contexts, structure, processes, and culture, in leading and directing patient centered care are examined, along with relationships between governance structures, practice environments, and positive patient outcomes. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**NURS 4380. Community and Population Health Nursing.**

This course explores concepts of Community-Oriented Nursing Practice with an emphasis on using the nursing process to assess the health of communities and diverse populations. Public Health Nursing Practice and Community-Based Nursing Practice are discussed with an emphasis on health promotion and the prevention of disability and disease.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**NURS 5102. Advanced Health Assessment Practicum.**

This course emphasizes advanced health assessment techniques and skills common to patient evaluation and development of differential diagnoses. Advanced physical assessment skills and identification of common signs and symptoms related to physical examination will be developed. (60 practicum hours) Corequisites: NURS 5202 and NURS 5301 both with grades of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5111. Diagnostic Reasoning and Procedures Practicum.**

This course examines clinical laboratory diagnostics, imaging tests, and procedures commonly practiced in primary care by advanced practice nurses. Students will learn diagnostic reasoning and clinical decision-making skills through virtual and case simulations. Additionally, students will learn procedures in on-campus intensives as part of the clinical requirements of the course. Students complete 45 practicum hours in this course. Corequisite: NURS 5209 and NURS 5210 and NURS 5301 and NURS 5351 all with grades of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5112. Advanced Psychiatric Assessment and Clinical Interview.**

This course provides a foundation for psychiatric assessment and clinical interview techniques to determine mental health status of clients throughout the lifespan. Additionally, psychiatric differential diagnosis, standardized screening tools, and documentation of a psychiatric assessment are emphasized. Prerequisite: NURS 5301 with a grade of "B" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5135. Foundations of Leadership Practicum.**

This course serves as a companion course to NURS 5335. This practicum course provides experiential learning through foundational development in the nursing leader role utilizing leadership theories, frameworks, and best practices based on evidence. Practicum experiences examine leadership styles, organizational designs, and cultures in healthcare. Additionally, self-reflection, relationship-building, and healthcare team dynamics will be examined in the clinical setting. Corequisite: NURS 5335 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5165. Quality Improvement Practicum.**

This course serves as a companion course to NURS 5265. This practicum course provides experiential learning through application of evidence-based practice. Using quality improvement science, students will critically appraise research and apply high quality evidence to improve healthcare processes and systems in the clinical setting. Corequisite: NURS 5265 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5185. Financial Management Practicum.**

This course serves as a companion course to NURS 5285. This practicum course provides experiential learning through application of business and financial concepts in healthcare settings. Students will participate in budget and staffing processes in the healthcare facility. Additionally, using strategic and financial management constructs, students will develop a proposed healthcare business plan. Prerequisite: NURS 5260 and NURS 5262 both with grades of "B" or better. Corequisite: NURS 5285 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5190. Transition to Practice: The Advanced Practice Nurse as Healthcare Provider.**

This course is designed for students preparing for the entry level role of a nurse practitioner. Students will examine a more in-depth view of the nurse practitioner role specific to licensure, malpractice, national certification and exam, and prescriptive authority including controlled substances. Prescriptive delegation, DEA, and other advanced practice nurse role socialization aspects are explored. Prerequisite: NURS 5111 and NURS 5209 and NURS 5210 and NURS 5250 and NURS 5255 and NURS 5256 and NURS 5257 and NURS 5301 and NURS 5303 and NURS 5345 and NURS 5346 and NURS 5351 and NURS 5354 and NURS 5391 all with grades of "B" or better. Corequisite: NURS 5392 and NURS 5393 both with grades of "B" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5195. Nursing Leadership Role Practicum.**

This course serves as a companion course to NURS 5395. This practicum course provides experiential learning in operational, administrative, and strategic competencies related to the nurse leader role. This practicum experience promotes synthesis of leadership theories, quality, and risk management in the healthcare environment. Additionally, resilience, professionalism, and policy development will be examined in the clinical setting. Prerequisite: NURS 5185 and NURS 5165 and NURS 5135 all with grades of "B" or better. Corequisite: NURS 5395 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5205. Healthcare Leadership and Finance for Advanced Nursing Practice.**

This course explores leadership concepts and complexity of changing healthcare systems for the advanced nursing role. Healthcare economics, innovation, and resource stewardship are examined. Change management and leadership theories guide students to create a leadership philosophy. Rich leadership perspectives and diversity from various professional fields are examined through reflective practice. Prerequisite: NURS 5301 and NURS 5351 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5208. Health Policy, Ethics, and Issues in Advanced Nursing Practice.**

This course prepares students as advocates and change agents in health policy development, implementation, and evaluation. Current professional, ethical, and legal issues that influence advanced practice nursing, nursing education and the health care delivery system are presented. The importance of collaborative engagement in health care policy and economics at the local, national, and global levels is emphasized. Prerequisite: NURS 5205 and NURS 5301 and NURS 5303 and NURS 5351 all with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5209. Advanced Health Assessment.**

This course provides the foundation for advanced health assessment techniques and skills common to family practice across the lifespan. Emphasis is placed on interviewing skills, a methodical approach to physical examinations to formulate differential diagnosis. Documentation using informatics and electronic medical records is presented. Content incorporates physiological, psycho-social, spiritual, cultural, diversity, developmental, and integrative components of health. Corequisite: NURS 5111 and NURS 5210 and NURS 5301 all with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5210. Advanced Health Assessment Practicum.**

This course serves as the companion course to NURS 5209. Emphasis is placed on the development of advanced health assessment techniques and skills common to patient evaluation and development of differential diagnoses for patients across the lifespan. Advanced interview skills, physical assessment skills, and identifying common signs and symptoms related to physical examination will be developed through lab, simulation, and clinical practicum experiences. Students complete 90 practicum hours with emphasis in advanced health assessment skills. Corequisite: NURS 5301 and NURS 5209 and NURS 5351 and NURS 5111 with grades of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5230. Psychiatric Mental Health Diagnostics and Clinical Management for Pediatric Clients.**

This course provides a foundation for evidence-based assessment, diagnosis, and clinical management of pediatric and adolescent clients with acute and chronic psychiatric disorders. Psychiatric theories, psychotherapies, health promotion and culturally sensitive interventions are examined. Establishing the provider-client therapeutic partnership is also explored. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 all with grades of "B" or better.

Corequisite: NURS 5233 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5233. PMH Diagnostics and Clinical Management for Pediatric Clients Practicum.**

This course serves as a companion course to NURS 5230. This practicum course applies health promotion, assessment, and diagnostic skills in managing care of pediatric and adolescent clients with acute and chronic psychiatric disorders through integration of evidence-based psychiatric theories, psychotherapy, psychopharmacology, and alternative-based interventions. Working with a preceptor, students will facilitate therapies, create and evaluate treatment plans, and collaborate as part of interprofessional teams to deliver holistic care. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 all with grades of "B" or better. Corequisite: NURS 5230 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5243. PMH Diagnostics and Clinical Management for Adult and Geriatric Clients Practicum.**

This practicum course serves as a companion course to NURS 5340. The course teaches application of health promotion, assessment, and diagnostic skills in managing care of adult and geriatric clients with acute and chronic psychiatric disorders through integration of psychiatric theories, psychotherapy, psychopharmacology, and alternative-based interventions. Working with a preceptor, students will facilitate therapies, create and evaluate treatment plans, and collaborate as part of the interprofessional team to deliver holistic care. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 and NURS 5230 and NURS 5233 all with grades of "B" or better. Corequisite: NURS 5340 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5250. Mental Health Wellness and Illness in Primary Care.**

This course examines behavioral and mental health wellness and illness in the context of family practice. Application of evidence-based knowledge to provide clinical management of patients across the lifespan with common psychiatric-mental health problems is emphasized. Screening, crisis intervention, and various therapies are presented, as well as referrals and interprofessional approaches to care. Prerequisite: NURS 5301 and NURS 5303 and NURS 5351 all with grades of "B" or better. Corequisite: NURS 5111 and NURS 5209 and NURS 5210 all with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5255. Pediatric and Adolescent Primary Care Practicum.**

This course serves as a companion course to NURS5354. Students will apply and refine skills using an evidence-based approach for health promotion, disease prevention, and management of common acute and chronic illnesses for pediatric and adolescent patients using family centered and developmental perspectives. Students complete 120 practicum hours with emphasis in pediatric primary care. Prerequisite: NURS 5111 and NURS 5209 and NURS 5210 and NURS 5250 and NURS 5345 and NURS 5346 all with grades of "B" or better. Corequisite: NURS 5354 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5256. Geriatric Primary Care.**

This course examines holistic assessment, prioritizing differential diagnosis, and integrative clinical management of older adult and geriatric patients using family centered perspectives (ages 65+). Emphasis is placed on health promotion, disease prevention, and management of common acute and chronic illness including polypharmacy and end of life considerations. Prerequisite: NURS 5354 and NURS 5255 both with grades of "B" or better. Corequisite: NURS 5257 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5257. Geriatric Primary Care Practicum.**

This course serves as a companion course to NURS 5256. Students will refine skills using an evidence-based approach for health promotion, disease prevention, and integrative clinical management of common acute and chronic illness for geriatric patients and families. Comprehensive health status assessment, end of life care, and complex chronic health issues are addressed. Students complete a 90 hour practicum for this course. Prerequisite: NURS 5354 and NURS 5255 both with grades of "B" or better. Corequisite: NURS 5256 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5260. Organizational Development: Culture, Communication, & Interprofessional Concepts for Nurse Leaders.**

This course provides students a foundation in organizational theories and dynamics to support the nursing leader's role in improving system-level outcomes in healthcare organizations. The role of patient experience, communication strategies, and interprofessional team dynamics within the context of the organization will be explored. In addition, methods to influence and lead change in healthcare systems will be examined. Prerequisite: NURS 5335 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5261. Informatics and Innovation in Nursing Leadership.**

This course provides students with skills in healthcare informatics in the context of the nursing manager or executive. Utilization of information systems and technology to lead innovative change and quality improvement processes are emphasized. Prerequisite: NURS 5335 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5262. Healthcare Finance and Strategic Management Foundations.**

This course provides students with the foundation in financial acumen of business models and healthcare delivery systems. Students will learn mechanics of strategic management that includes use of standard industry tools and techniques to collect and analyze data to develop components of a strategic plan in the context of healthcare. Prerequisite: NURS 5335 and NURS 5260 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5263. Fostering Human Performance and Systems Thinking.**

This course builds on nursing leadership competencies for effective human resource management within complex, adaptive healthcare environments. Students will learn and integrate into practice concepts associated with human resources management and performance including nature of work, compensation and benefits, workforce planning, recruitment and hiring. Additionally, training and development, employee appraisal, and union-management relations will be explored. Prerequisite: NURS 5335 and NURS 5260 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5264. Health Policy, Law, and Ethics.**

This course prepares students as advocates and change agents in health policy development, implementation, and evaluation. Current professional, ethical, and legal issues that impact nurse leaders and influence health care delivery are presented. The importance of collaborative engagement in health care policy at the local, national, and global levels is emphasized. Prerequisite: NURS 5335 and NURS 5260 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5265. Evidence-Based Practice, Quality Improvement, and Healthcare Systems.**

This course lays a foundation for students to utilize research evidence and its role in supporting evidence-based practice. Content guides students to identify existing problems in clinical practice and healthcare systems through the translation of evidence into practice using quality improvement methods. Critical appraisal of research skills and opportunities to apply high quality evidence to improve healthcare processes and systems will be examined. Corequisite: NURS 5165 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5285. Business and Financial Management in Healthcare.**

This course provides students with business, accounting, and financial concepts in the context of healthcare delivery systems. Emphasis is placed on staffing, budgets, revenue, and cost management for the role of the nurse leader. Additionally, entrepreneurship and business plans are explored. Prerequisite: NURS 5260 and NURS 5262 both with grades of "B" or better. Corequisite: NURS 5185 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5301. Advanced Pathophysiology.**

In preparation for advanced practice, this course will expand understanding of the pathophysiology underlying dysfunctions and interrelatedness of the processes of normal physiology and pathophysiology across the continuum of disease and return to wellness. Applications will be made utilizing lifespan perspectives of the process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5303. Advanced Pharmacotherapeutics.**

This course provides advanced knowledge in selecting pharmacologic agents and specific drugs, based on acute and chronic health problems in diverse populations. Knowledge of pharmacologic groups, indications and contraindications, dosing with special needs groups, adverse effects, and collaborative monitoring of pharmacotherapy and alternative therapies will be developed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5312. Neuroscience, Epigenetics, and Psychopharmacology.**

Building on previous knowledge of advanced pathophysiology and pharmacology, this course presents advanced concepts of neuroscience, epigenetics, and psychopharmacology that contribute to mental health and psychiatric disorders across the lifespan. Clinical management of psychotropic medication in the treatment of psychiatric disorders and mental illness are discussed and emphasis is placed on biologic actions, neurobiology, safe prescribing, and treatment response of psychiatric medication management. Pertinent laboratory diagnostics and neuroimaging related to psychiatric health and illness are also analyzed. Prerequisite: NURS 5301 and NURS 5303 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5335. Foundations of Leadership and Executive Nursing Practice.**

This course emphasizes organizational and systems leadership by synthesizing principles of leadership, management, and change theory. Various leadership styles, organizational designs in healthcare, and leadership sustainability are explored. Corequisite: NURS 5135 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5340. PMH Diagnostics and Clinical Management for Adult and Geriatric Clients.**

This course provides a foundation for evidence-based assessment, diagnosis, and clinical management of adult and geriatric clients with acute and chronic psychiatric disorders. Psychiatric theories, psychotherapies, health promotion and culturally sensitive interventions are examined, and emphasis is placed on the provider-client therapeutic partnership. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 and NURS 5230 and NURS 5233 all with grades of "B" or better. Corequisite: NURS 5243 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5345. Young and Middle Adult Primary Care.**

This course focuses on holistic assessment, formulating differential diagnoses, and integrative clinical management of young and middle adult primary care patients (ages 18-65). Course content includes health promotion and maintenance, including sexual, perinatal, and reproductive considerations of the child-bearing family. Management of common acute and chronic illness in this age group in the context of family centered perspectives and rural considerations are also emphasized. Prerequisite: NURS 5209 and NURS 5210 and NURS 5301 and NURS 5111 and NURS 5351 all with grades of "B" or better.

Corequisite: NURS 5346 and NURS 5303 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**NURS 5346. Young and Middle Adult Primary Care Practicum.**

This course serves as a companion course to NURS5345. Students will apply theory to practice skills using an evidence-based approach for health promotion, sexual, perinatal, and reproductive care for the child-bearing family. This course provides experience to refine diagnostic reasoning skills for management of common acute and chronic illness in young and middle adult aged patients using a family centered approach. Students complete 180 practicum hours with emphasis in young and middle adult primary care. Prerequisite: NURS 5209 and NURS 5210 and NURS 5301 and NURS 5111 and NURS 5351 all with grades of "B" or better. Corequisite: NURS 5345 and NURS 5303 both with grades of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5351. Theoretical Foundations and Role Development of Advanced Integrative Nursing.**

This course explores historical processes and role development in advanced nursing practice. Theories and frameworks that guide and inform advanced nursing practice and scholarly inquiry are examined. Integration of theories from nursing, integrative care, and related disciplines provide a foundation for the graduate student to transition into the advance practice role and form a basis for evidence-based practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5354. Pediatric and Adolescent Primary Care.**

This course emphasizes holistic assessment, formulating differential diagnosis, and integrative clinical management of pediatric and adolescent patients (ages 0-21). Content includes primary care approach health promotion, disease prevention, and managing common acute and chronic illnesses of increasing complexity using family-centered and developmental perspectives. Perspectives of underserved and rural populations in a variety of clinical settings will be explored. Prerequisite: NURS 5345 and NURS 5346 and NURS 5250 all with grades of "B" or better. Corequisite: NURS 5255 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5360. Leadership Science: Foundational Thinking Skills, Governance, & Community & Provider Relationships.**

This course will emphasize leadership skills in communication, leadership styles and organizational theory. Communication will focus on conflict resolution, presentation skills, and relationship building. Delivery systems, leadership styles, and demand for nursing will be examined. Complexity science, systems theory, and diversity required for organizing health care will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5361. Leadership Science: Performance and Quality Improvement.**

This course will articulate performance improvement activities using evidence-based metrics to align patient outcomes with organizational goals. Methods for using quality metrics and action plans will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**NURS 5362. Leadership Science: Patient Safety, Risk Management, Legal and Regulatory Requirements.**

This course will examine areas of risk and liability. Students will develop systems that identify early warning indicators of problems and will explore "just in time" reporting. The concept of sentinel events and root cause analysis will be explored. Accreditation standards, legal regulations, and compliance requirements will be integrated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5363. Leadership Science: Evidence-Based Practice for Nurse Leaders.**

The students will explore evidence-based practice (EBP) for nurse leaders. This EBP course will equip nurses with the skills needed to effectively engage in EBP, to serve as EBP champions and mentors, and to lead projects within healthcare facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5364. Leadership Science: Health Care Finance and Workforce Planning.**

This course will emphasize workforce planning for nursing and the application of general principles of accounting. Twenty hours will be allocated to the development of a department operational and capital budget in collaboration with a nurse director or executive. Negotiation and monitoring of contracts and contract compliance will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**NURS 5365. Leadership Art: Ethics, Diversity, and Relationship Building.**

This course will explore theories of culture and will include legal regulations that govern diversity. The relationship between medical ethics and corporate compliance will be explored. Methods for creating a trusting environment will be evaluated and the need for relationships with providers and academia will be illustrated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5366. Leadership Art: Health Policy and Advocacy.**

This course will focus on the need for leaders to belong to professional organizations to affect policy and advocacy. Participation in legislative activities will be promoted at the state and national levels. The impact of nurse leaders serving on boards that govern health care activities and organizations will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5367. Leader Within: Professional Accountability, Succession Planning and Reflective Practice I.**

This course provides a mentored experience for the synthesis of critical thinking and reflections from didactic work with the practice of nursing leadership. Observational and independent learning activities will result in a Part I of the final capstone project reflecting culmination of program objectives.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**NURS 5368. Leader Within: Professional Accountability, Succession Planning and Reflective Practice II.**

This course is designed to be the culminating mentored experience for the synthesis of critical thinking and reflections from didactic work with the practice of nursing leadership. Students will evaluate and present their final capstone project, reflecting summation of program objectives.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**NURS 5370. Psychiatric Mental Health Integrative Clinical Management Across the Lifespan.**

This course builds on previous courses to further develop competency in the PMHNP role in comprehensive, integrative clinical management for clients with complex psychiatric disorders across the lifespan, while utilizing current evidence-based practice guidelines. Self-directed management, crisis intervention and stabilization, and interprofessional collaboration of care in a variety of settings are emphasized. Additionally, innovative care modalities such as telehealth are explored to reach rural and underserved clients, special populations, and diverse communities. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5102 and NURS 5230 and NURS 5233 and NURS 5340 and NURS 5243 all with grades of "B" or better. Corequisite: NURS 5373 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5371. Clinical Prevention and Population Health.**

Students will examine an overview of global and national population health including social determinants of health, health disparities, cultural diversity, and clinical prevention with an emphasis in evidence-based practice. Resources will be discussed in relation to the availability, barriers, and access in the community and rural areas. Prerequisite: NURS 5301 and NURS 5303 and NURS 5351 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5373. Psychiatric Mental Health Integrative Clinical Management Across the Lifespan Practicum.**

This course serves as a companion course to NURS 5370. This culminating lifespan practicum course provides experiential learning through further development of competency in the PMHNP role in comprehensive, integrative clinical management for special populations and clients with complex psychiatric disorders, utilizing current evidence-based practice guidelines. Practicum experiences emphasize crisis intervention and stabilization, guided self-directed management, and collaboration in an interprofessional environment in a variety of psychiatric settings. Additionally, innovative care modalities such as telehealth are explored to reach rural and underserved clients and diverse communities. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 and NURS 5230 and NURS 5233 and NURS 5340 and NURS 5243 all with grades of "B" or better. Corequisite: NURS 5370 with a grade of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5391. Translational Science for Evidence Based Practice and Innovation Capstone.**

Students will explore evidence-based practice (EBP) for advanced nursing practice professionals. This course will equip graduate nursing students with the skills needed to effectively critique and engage in EBP, to serve as EBP champions and mentors, and to lead projects and innovation within healthcare facilities. Emphasis is placed on completion of a quality improvement or scholarly project, under the direction of a faculty member, which synthesizes advanced practice knowledge and skills to address substantive advanced nursing practice issues. Prerequisite: NURS 5255 and NURS 5354 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5392. Integrative Family Primary Care.**

This course emphasizes health promotion and complex, integrative clinical management of patients and families with co-morbidities utilizing both traditional and complementary or alternative methods based on evidence and research. Integration of complex primary healthcare considerations and clinic-based emergency interventions are examined. Prerequisite: NURS 5256 and NURS 5257 and NURS 5391 all with grades of "B" or better. Corequisite: NURS 5190 and NURS 5393 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5393. Integrative Family Primary Care Practicum.**

This course serves as the companion course to NURS5392. Students will master skills in utilization of holistic assessment, integrative clinical decision making, and designing interventions and treatment plans in a variety of clinical settings as they prepare for entry level into advanced practice nursing. Emphasis is placed on management of co-morbidities and complex patient management for patients across the lifespan integrating both traditional and complementary or alternative methods as part of the treatment plan. Students complete 180 practicum hours in this course. Prerequisite: NURS 5256 and NURS 5257 and NURS 5391 all with grades of "B" or better. Corequisite: NURS 5190 and NURS 5392 both with grades of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5395. Nursing Leadership and Administration Role Development.**

This course provides students the opportunity to synthesize leadership, organizational, and financial skills as they complete preparation for transition to the nurse leader role. Leadership perspectives and diversity from nursing and other professional fields are examined through reflective practice. #Additionally, policy advocacy and development, and disaster management are examined. #Prerequisite: NURS 5335 and NURS 5135 and NURS 5265 and NURS 5165 and NURS 5391 and NURS 5285 and NURS 5185 all with grades of "B" or better. Corequisite: NURS 5195 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Family Nurse Practitioner (FNP) program is a hybrid master's degree program that prepares post-baccalaureate registered nurses to provide high-quality, integrative care for patients across the lifespan in a variety of settings. Graduates will be prepared to skillfully translate research and utilize evidence-based practice knowledge to provide healthcare for individuals, families, and populations with an emphasis on primary care.

The MSN-Family Nurse Practitioner (FNP) program is a 48-credit hour lockstep program in which Registered Nurses with a Bachelor of Science in Nursing degree advance their skills to the entry level for eligibility for certification as a Family Nurse Practitioner and apply for licensure as an Advanced Practice Registered Nurse. Instruction will be an online format with required on campus learning intensives typically scheduled two times per semester at the St. David's School of Nursing in Round Rock. The on-campus learning intensives augment the online course work and allow assessment of students to ensure that advanced level competencies have been met. Of the 48 semester hours required, 13 hours are allotted to practicum courses.

Faculty facilitate practicum course work online and during the on-campus intensives through skills labs and simulations; however, required clinical hours will be spent with individual preceptors in a clinical setting. The total curriculum requires students to log 705 clinical clock hours as a combination of on-campus clinical experiences and preceptors over the course of the program.

The focus of the MSN-Family Nurse Practitioner program is primary care of families and individuals across the lifespan. As a result, graduates will be prepared to treat diverse populations, with knowledge to promote health and to assess patients of all ages. Beyond focusing on the family

as a population, the program emphasizes the primary care environment and recruitment of applicants interested in practicing in rural areas, to mitigate the burgeoning shortage of primary care providers in these areas.

In addition to acquiring the knowledge and skills necessary for certification as a Family Nurse Practitioner, graduates of the program will have developed competence in the theory and techniques of integrative health. MSN-Family Nurse Practitioner graduates are required to meet professional competencies related to their focus area of study and population. The graduates are qualified to apply to take one or more of the following certification examinations:

- American Nurses Credentialing Center (ANCC) Certification Exam (FNP)
- American Academy of Nurse Practitioners (AANP) Certification Exam (FNP).

The MSN-FNP program is offered as a full-time or part-time track, allowing students to determine how best to manage school, work, and lifestyle. The full-time track is completed in 5 semesters. The part-time track can be completed in 8 semesters. Either option is a 48-hour lockstep program, requiring specific sequencing of courses. Students in the full-time or part-time tracks are required to be advised before each semester by a graduate advisor.

**MSN-FNP Program Outcomes**

At the completion of the M.S.N. Family Nurse Practitioner program, a graduate of the St. David's School of Nursing will be able to:

1. Engage in advanced nursing practice through integration of scientific findings from nursing, humanities, and sciences into the delivery of care to diverse patients, families, and communities.
2. Participate in organizational and systems leadership through promotion of high quality, safe patient care which emphasizes ethical decision making, effective working relationships, and a systems-perspective.
3. Lead quality improvement processes to communicate effectively, evaluate health outcomes, and advocate for changes in the care environment to improve health outcomes.
4. Synthesize and critique research to integrate the best evidence to resolve practice problems, work as a change agent, and assist in disseminating findings into clinical practice.
5. Utilize healthcare technologies and informatics to analyze and evaluate data to promote safe practice environments, cost containment and health outcomes.
6. Demonstrate leadership in professional nursing practice through commitment to reflective practice, accountability, and maintaining active roles in health policy and professional organizations.
7. Actively participate as a member and leader of inter-professional teams to promote safety, reduce risk, and address healthcare disparities for patients and populations.
8. Integrate clinical prevention and population health concepts, including global and social determinants of health, into the diverse healthcare care needs of patients, communities, and populations.
9. Lead health education, treatments, and care through incorporation of biocultural perspectives of patients, communities, and populations as they relate to integrative healthcare practices.

10. Practice as an advanced practice nurse using evidence-based, cost effective integrative healthcare approaches to positively influence health outcomes of patients, families, and the global community.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- Bachelor of Science in nursing (B.S.N.) degree from a regionally accredited institution and from a nursing program accredited by the National League for Nursing Accrediting Commission (NLNAC), Commission on Collegiate Nursing Education (CCNE) or other nationally recognized nursing education accrediting body. The student's B.S.N. degree must be reflected on the transcript at the time of application.
- official transcripts from **each institution** where course credit was granted.
- minimum 3.0 GPA on a 4.0 scale in the last 60 hours of undergraduate course work (plus any completed graduate courses).
- minimum 3.0 GPA on a 4.0 scale in nursing courses from an accredited college or university (plus any completed graduate nursing courses).
- completed college course in statistics with a grade of C or higher. The course must be completed at the time of application and reflected on submitted transcripts.
- current, valid, unencumbered Registered Nurse license in Texas with date issued from the Board of Nursing uploaded into the application system. Multistate licenses are accepted as long as Texas is the declared home state.
- written professional essay and goal statements using guidelines provided for the program (in the application system).
- resume or CV showing a minimum of one year **full-time** equivalent experience as a Registered Nurse prior to the application deadline for the program. Employment will be verified.
- three (3) professional letters of recommendation from persons competent to assess the applicant's academic capability, clinical expertise, and interest in pursuing a career for this program. This is a form completed by your identified reference as part of the application system.
- As part of the application process, applicants are required to participate in and complete an interview.
- The GRE is **not** required.

Once a student has been offered admission, additional criteria must be completed and met prior to admission and the required due dates as listed by the School of Nursing.

## TOEFL, PTE, or IELTS Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science in Nursing (M.S.N.) Major in Family Nurse Practitioner requires 48 semester credit hours.

Students enrolled in the Master of Science in Nursing Major in Family Nurse Practitioner (MSN-FNP) program are required to earn a grade of at least 80% ("B" or higher) in all courses in the MSN-FNP curriculum. Graduate nursing courses are offered in a lock-step sequence for part-time and full-time options. Each course will be offered only once each academic year; therefore, progress in the program will be delayed if the student fails ("C" or lower) or drops/withdraws from a course. Students may repeat or withdraw from one nursing course only one time during the duration of the program.

Students who fail to keep their student admission requirements (immunizations, CPR, etc.) up to date cannot attend class or clinical, resulting in a student unable to meet course requirements. Students who do not maintain admission or prevailing requirements within 2 weeks of notification of expiration will be required to meet with the program director and may be subject to withdrawal from their courses. This will alter program progression and counts towards the number of course attempts in the program.

Students who withdraw from the program for more than one semester must petition the Nursing Admission, Progression and Graduation (A-P-G) Committee to reenter. Re-entry is not guaranteed due to faculty-student ratios, accreditation requirements, and other aspects of the program. A student who has been out more than one year will have to reapply to the program through the Graduate College using the standard application process. Students who have been out of the program over one year may be required to retake foundational courses in the NP programs to remain current.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
NURS 5371	Clinical Prevention and Population Health	3
NURS 5208	Health Policy, Ethics, and Issues in Advanced Nursing Practice	2
NURS 5205	Healthcare Leadership and Finance for Advanced Nursing Practice	2
NURS 5351	Theoretical Foundations and Role Development of Advanced Integrative Nursing	3
NURS 5391	Translational Science for Evidence Based Practice and Innovation Capstone	3
NURS 5301	Advanced Pathophysiology	3
NURS 5209	Advanced Health Assessment	2
NURS 5210	Advanced Health Assessment Practicum	2



NURS 5303	Advanced Pharmacotherapeutics	3
NURS 5111	Diagnostic Reasoning and Procedures Practicum	1
NURS 5345	Young and Middle Adult Primary Care	3
NURS 5346	Young and Middle Adult Primary Care Practicum	3
NURS 5250	Mental Health Wellness and Illness in Primary Care	2
NURS 5354	Pediatric and Adolescent Primary Care	3
NURS 5255	Pediatric and Adolescent Primary Care Practicum	2
NURS 5256	Geriatric Primary Care	2
NURS 5257	Geriatric Primary Care Practicum	2
NURS 5392	Integrative Family Primary Care	3
NURS 5393	Integrative Family Primary Care Practicum	3
NURS 5190	Transition to Practice: The Advanced Practice Nurse as Healthcare Provider	1
<b>Total Hours</b>		<b>48</b>

To graduate with a Master of Science in Nursing (MSN), a student must successfully complete all graduate nursing courses and requirements and maintain a 3.0 or higher GPA in the graduate nursing program. Students have five (5) years to complete their MSN-FNP graduate degree in the School of Nursing.

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass one or more comprehensive examinations. The comprehensive exam for MSN-FNP program is a capstone project.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Nursing: NURS

## Courses Offered

### Nursing (NURS)

#### **NURS 5102. Advanced Health Assessment Practicum.**

This course emphasizes advanced health assessment techniques and skills common to patient evaluation and development of differential diagnoses. Advanced physical assessment skills and identification of common signs and symptoms related to physical examination will be developed. (60 practicum hours) Corequisites: NURS 5202 and NURS 5301 both with grades of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **NURS 5111. Diagnostic Reasoning and Procedures Practicum.**

This course examines clinical laboratory diagnostics, imaging tests, and procedures commonly practiced in primary care by advanced practice nurses. Students will learn diagnostic reasoning and clinical decision-making skills through virtual and case simulations. Additionally, students will learn procedures in on-campus intensives as part of the clinical requirements of the course. Students complete 45 practicum hours in this course. Corequisite: NURS 5209 and NURS 5210 and NURS 5301 and NURS 5351 all with grades of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **NURS 5112. Advanced Psychiatric Assessment and Clinical Interview.**

This course provides a foundation for psychiatric assessment and clinical interview techniques to determine mental health status of clients throughout the lifespan. Additionally, psychiatric differential diagnosis, standardized screening tools, and documentation of a psychiatric assessment are emphasized. Prerequisite: NURS 5301 with a grade of "B" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **NURS 5135. Foundations of Leadership Practicum.**

This course serves as a companion course to NURS 5335. This practicum course provides experiential learning through foundational development in the nursing leader role utilizing leadership theories, frameworks, and best practices based on evidence. Practicum experiences examine leadership styles, organizational designs, and cultures in healthcare. Additionally, self-reflection, relationship-building, and healthcare team dynamics will be examined in the clinical setting. Corequisite: NURS 5335 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **NURS 5165. Quality Improvement Practicum.**

This course serves as a companion course to NURS 5265. This practicum course provides experiential learning through application of evidence-based practice. Using quality improvement science, students will critically appraise research and apply high quality evidence to improve healthcare processes and systems in the clinical setting. Corequisite: NURS 5265 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **NURS 5185. Financial Management Practicum.**

This course serves as a companion course to NURS 5285. This practicum course provides experiential learning through application of business and financial concepts in healthcare settings. Students will participate in budget and staffing processes in the healthcare facility. Additionally, using strategic and financial management constructs, students will develop a proposed healthcare business plan. Prerequisite: NURS 5260 and NURS 5262 both with grades of "B" or better. Corequisite: NURS 5285 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**NURS 5190. Transition to Practice: The Advanced Practice Nurse as Healthcare Provider.**

This course is designed for students preparing for the entry level role of a nurse practitioner. Students will examine a more in-depth view of the nurse practitioner role specific to licensure, malpractice, national certification and exam, and prescriptive authority including controlled substances. Prescriptive delegation, DEA, and other advanced practice nurse role socialization aspects are explored. Prerequisite: NURS 5111 and NURS 5209 and NURS 5210 and NURS 5250 and NURS 5255 and NURS 5256 and NURS 5257 and NURS 5301 and NURS 5303 and NURS 5345 and NURS 5346 and NURS 5351 and NURS 5354 and NURS 5391 all with grades of "B" or better. Corequisite: NURS 5392 and NURS 5393 both with grades of "B" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5195. Nursing Leadership Role Practicum.**

This course serves as a companion course to NURS 5395. This practicum course provides experiential learning in operational, administrative, and strategic competencies related to the nurse leader role. This practicum experience promotes synthesis of leadership theories, quality, and risk management in the healthcare environment. Additionally, resilience, professionalism, and policy development will be examined in the clinical setting. Prerequisite: NURS 5185 and NURS 5165 and NURS 5135 all with grades of "B" or better. Corequisite: NURS 5395 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5205. Healthcare Leadership and Finance for Advanced Nursing Practice.**

This course explores leadership concepts and complexity of changing healthcare systems for the advanced nursing role. Healthcare economics, innovation, and resource stewardship are examined. Change management and leadership theories guide students to create a leadership philosophy. Rich leadership perspectives and diversity from various professional fields are examined through reflective practice. Prerequisite: NURS 5301 and NURS 5351 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5208. Health Policy, Ethics, and Issues in Advanced Nursing Practice.**

This course prepares students as advocates and change agents in health policy development, implementation, and evaluation. Current professional, ethical, and legal issues that influence advanced practice nursing, nursing education and the health care delivery system are presented. The importance of collaborative engagement in health care policy and economics at the local, national, and global levels is emphasized. Prerequisite: NURS 5205 and NURS 5301 and NURS 5303 and NURS 5351 all with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5209. Advanced Health Assessment.**

This course provides the foundation for advanced health assessment techniques and skills common to family practice across the lifespan. Emphasis is placed on interviewing skills, a methodical approach to physical examinations to formulate differential diagnosis. Documentation using informatics and electronic medical records is presented. Content incorporates physiological, psycho-social, spiritual, cultural, diversity, developmental, and integrative components of health. Corequisite: NURS 5111 and NURS 5210 and NURS 5301 all with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5210. Advanced Health Assessment Practicum.**

This course serves as the companion course to NURS 5209. Emphasis is placed on the development of advanced health assessment techniques and skills common to patient evaluation and development of differential diagnoses for patients across the lifespan. Advanced interview skills, physical assessment skills, and identifying common signs and symptoms related to physical examination will be developed through lab, simulation, and clinical practicum experiences. Students complete 90 practicum hours with emphasis in advanced health assessment skills. Corequisite: NURS 5301 and NURS 5209 and NURS 5351 and NURS 5111 with grades of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5230. Psychiatric Mental Health Diagnostics and Clinical Management for Pediatric Clients.**

This course provides a foundation for evidence-based assessment, diagnosis, and clinical management of pediatric and adolescent clients with acute and chronic psychiatric disorders. Psychiatric theories, psychotherapies, health promotion and culturally sensitive interventions are examined. Establishing the provider-client therapeutic partnership is also explored. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 all with grades of "B" or better. Corequisite: NURS 5233 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5233. PMH Diagnostics and Clinical Management for Pediatric Clients Practicum.**

This course serves as a companion course to NURS 5230. This practicum course applies health promotion, assessment, and diagnostic skills in managing care of pediatric and adolescent clients with acute and chronic psychiatric disorders through integration of evidence-based psychiatric theories, psychotherapy, psychopharmacology, and alternative-based interventions. Working with a preceptor, students will facilitate therapies, create and evaluate treatment plans, and collaborate as part of interprofessional teams to deliver holistic care. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 all with grades of "B" or better. Corequisite: NURS 5230 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5243. PMH Diagnostics and Clinical Management for Adult and Geriatric Clients Practicum.**

This practicum course serves as a companion course to NURS 5340. The course teaches application of health promotion, assessment, and diagnostic skills in managing care of adult and geriatric clients with acute and chronic psychiatric disorders through integration of psychiatric theories, psychotherapy, psychopharmacology, and alternative-based interventions. Working with a preceptor, students will facilitate therapies, create and evaluate treatment plans, and collaborate as part of the interprofessional team to deliver holistic care. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 and NURS 5230 and NURS 5233 all with grades of "B" or better. Corequisite: NURS 5340 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5250. Mental Health Wellness and Illness in Primary Care.**

This course examines behavioral and mental health wellness and illness in the context of family practice. Application of evidence-based knowledge to provide clinical management of patients across the lifespan with common psychiatric-mental health problems is emphasized. Screening, crisis intervention, and various therapies are presented, as well as referrals and interprofessional approaches to care. Prerequisite: NURS 5301 and NURS 5303 and NURS 5351 all with grades of "B" or better. Corequisite: NURS 5111 and NURS 5209 and NURS 5210 all with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5255. Pediatric and Adolescent Primary Care Practicum.**

This course serves as a companion course to NURS5354. Students will apply and refine skills using an evidence-based approach for health promotion, disease prevention, and management of common acute and chronic illnesses for pediatric and adolescent patients using family centered and developmental perspectives. Students complete 120 practicum hours with emphasis in pediatric primary care. Prerequisite: NURS 5111 and NURS 5209 and NURS 5210 and NURS 5250 and NURS 5345 and NURS 5346 all with grades of "B" or better. Corequisite: NURS 5354 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5256. Geriatric Primary Care.**

This course examines holistic assessment, prioritizing differential diagnosis, and integrative clinical management of older adult and geriatric patients using family centered perspectives (ages 65+). Emphasis is placed on health promotion, disease prevention, and management of common acute and chronic illness including polypharmacy and end of life considerations. Prerequisite: NURS 5354 and NURS 5255 both with grades of "B" or better. Corequisite: NURS 5257 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5257. Geriatric Primary Care Practicum.**

This course serves as a companion course to NURS 5256. Students will refine skills using an evidence-based approach for health promotion, disease prevention, and integrative clinical management of common acute and chronic illness for geriatric patients and families. Comprehensive health status assessment, end of life care, and complex chronic health issues are addressed. Students complete a 90 hour practicum for this course. Prerequisite: NURS 5354 and NURS 5255 both with grades of "B" or better. Corequisite: NURS 5256 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5260. Organizational Development: Culture, Communication, & Interprofessional Concepts for Nurse Leaders.**

This course provides students a foundation in organizational theories and dynamics to support the nursing leader's role in improving system-level outcomes in healthcare organizations. The role of patient experience, communication strategies, and interprofessional team dynamics within the context of the organization will be explored. In addition, methods to influence and lead change in healthcare systems will be examined. Prerequisite: NURS 5335 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5261. Informatics and Innovation in Nursing Leadership.**

This course provides students with skills in healthcare informatics in the context of the nursing manager or executive. Utilization of information systems and technology to lead innovative change and quality improvement processes are emphasized. Prerequisite: NURS 5335 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5262. Healthcare Finance and Strategic Management Foundations.**

This course provides students with the foundation in financial acumen of business models and healthcare delivery systems. Students will learn mechanics of strategic management that includes use of standard industry tools and techniques to collect and analyze data to develop components of a strategic plan in the context of healthcare. Prerequisite: NURS 5335 and NURS 5260 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5263. Fostering Human Performance and Systems Thinking.**

This course builds on nursing leadership competencies for effective human resource management within complex, adaptive healthcare environments. Students will learn and integrate into practice concepts associated with human resources management and performance including nature of work, compensation and benefits, workforce planning, recruitment and hiring. Additionally, training and development, employee appraisal, and union-management relations will be explored. Prerequisite: NURS 5335 and NURS 5260 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5264. Health Policy, Law, and Ethics.**

This course prepares students as advocates and change agents in health policy development, implementation, and evaluation. Current professional, ethical, and legal issues that impact nurse leaders and influence health care delivery are presented. The importance of collaborative engagement in health care policy at the local, national, and global levels is emphasized. Prerequisite: NURS 5335 and NURS 5260 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5265. Evidence-Based Practice, Quality Improvement, and Healthcare Systems.**

This course lays a foundation for students to utilize research evidence and its role in supporting evidence-based practice. Content guides students to identify existing problems in clinical practice and healthcare systems through the translation of evidence into practice using quality improvement methods. Critical appraisal of research skills and opportunities to apply high quality evidence to improve healthcare processes and systems will be examined. Corequisite: NURS 5165 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5285. Business and Financial Management in Healthcare.**

This course provides students with business, accounting, and financial concepts in the context of healthcare delivery systems. Emphasis is placed on staffing, budgets, revenue, and cost management for the role of the nurse leader. Additionally, entrepreneurship and business plans are explored. Prerequisite: NURS 5260 and NURS 5262 both with grades of "B" or better. Corequisite: NURS 5185 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5301. Advanced Pathophysiology.**

In preparation for advanced practice, this course will expand understanding of the pathophysiology underlying dysfunctions and interrelatedness of the processes of normal physiology and pathophysiology across the continuum of disease and return to wellness. Applications will be made utilizing lifespan perspectives of the process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5303. Advanced Pharmacotherapeutics.**

This course provides advanced knowledge in selecting pharmacologic agents and specific drugs, based on acute and chronic health problems in diverse populations. Knowledge of pharmacologic groups, indications and contraindications, dosing with special needs groups, adverse effects, and collaborative monitoring of pharmacotherapy and alternative therapies will be developed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5312. Neuroscience, Epigenetics, and Psychopharmacology.**

Building on previous knowledge of advanced pathophysiology and pharmacology, this course presents advanced concepts of neuroscience, epigenetics, and psychopharmacology that contribute to mental health and psychiatric disorders across the lifespan. Clinical management of psychotropic medication in the treatment of psychiatric disorders and mental illness are discussed and emphasis is placed on biologic actions, neurobiology, safe prescribing, and treatment response of psychiatric medication management. Pertinent laboratory diagnostics and neuroimaging related to psychiatric health and illness are also analyzed. Prerequisite: NURS 5301 and NURS 5303 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5335. Foundations of Leadership and Executive Nursing Practice.**

This course emphasizes organizational and systems leadership by synthesizing principles of leadership, management, and change theory. Various leadership styles, organizational designs in healthcare, and leadership sustainability are explored. Corequisite: NURS 5135 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5340. PMH Diagnostics and Clinical Management for Adult and Geriatric Clients.**

This course provides a foundation for evidence-based assessment, diagnosis, and clinical management of adult and geriatric clients with acute and chronic psychiatric disorders. Psychiatric theories, psychotherapies, health promotion and culturally sensitive interventions are examined, and emphasis is placed on the provider-client therapeutic partnership. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 and NURS 5230 and NURS 5233 all with grades of "B" or better. Corequisite: NURS 5243 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5345. Young and Middle Adult Primary Care.**

This course focuses on holistic assessment, formulating differential diagnoses, and integrative clinical management of young and middle adult primary care patients (ages 18-65). Course content includes health promotion and maintenance, including sexual, perinatal, and reproductive considerations of the child-bearing family. Management of common acute and chronic illness in this age group in the context of family centered perspectives and rural considerations are also emphasized. Prerequisite: NURS 5209 and NURS 5210 and NURS 5301 and NURS 5111 and NURS 5351 all with grades of "B" or better. Corequisite: NURS 5346 and NURS 5303 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5346. Young and Middle Adult Primary Care Practicum.**

This course serves as a companion course to NURS5345. Students will apply theory to practice skills using an evidence-based approach for health promotion, sexual, perinatal, and reproductive care for the child-bearing family. This course provides experience to refine diagnostic reasoning skills for management of common acute and chronic illness in young and middle adult aged patients using a family centered approach. Students complete 180 practicum hours with emphasis in young and middle adult primary care. Prerequisite: NURS 5209 and NURS 5210 and NURS 5301 and NURS 5111 and NURS 5351 all with grades of "B" or better. Corequisite: NURS 5345 and NURS 5303 both with grades of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5351. Theoretical Foundations and Role Development of Advanced Integrative Nursing.**

This course explores historical processes and role development in advanced nursing practice. Theories and frameworks that guide and inform advanced nursing practice and scholarly inquiry are examined. Integration of theories from nursing, integrative care, and related disciplines provide a foundation for the graduate student to transition into the advance practice role and form a basis for evidence-based practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5354. Pediatric and Adolescent Primary Care.**

This course emphasizes holistic assessment, formulating differential diagnosis, and integrative clinical management of pediatric and adolescent patients (ages 0-21). Content includes primary care approach health promotion, disease prevention, and managing common acute and chronic illnesses of increasing complexity using family-centered and developmental perspectives. Perspectives of underserved and rural populations in a variety of clinical settings will be explored. Prerequisite: NURS 5345 and NURS 5346 and NURS 5250 all with grades of "B" or better. Corequisite: NURS 5255 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5360. Leadership Science: Foundational Thinking Skills, Governance, & Community & Provider Relationships.**

This course will emphasize leadership skills in communication, leadership styles and organizational theory. Communication will focus on conflict resolution, presentation skills, and relationship building. Delivery systems, leadership styles, and demand for nursing will be examined. Complexity science, systems theory, and diversity required for organizing health care will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5361. Leadership Science: Performance and Quality Improvement.**

This course will articulate performance improvement activities using evidence-based metrics to align patient outcomes with organizational goals. Methods for using quality metrics and action plans will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**NURS 5362. Leadership Science: Patient Safety, Risk Management, Legal and Regulatory Requirements.**

This course will examine areas of risk and liability. Students will develop systems that identify early warning indicators of problems and will explore "just in time" reporting. The concept of sentinel events and root cause analysis will be explored. Accreditation standards, legal regulations, and compliance requirements will be integrated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5363. Leadership Science: Evidence-Based Practice for Nurse Leaders.**

The students will explore evidence-based practice (EBP) for nurse leaders. This EBP course will equip nurses with the skills needed to effectively engage in EBP, to serve as EBP champions and mentors, and to lead projects within healthcare facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5364. Leadership Science: Health Care Finance and Workforce Planning.**

This course will emphasize workforce planning for nursing and the application of general principles of accounting. Twenty hours will be allocated to the development of a department operational and capital budget in collaboration with a nurse director or executive. Negotiation and monitoring of contracts and contract compliance will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**NURS 5365. Leadership Art: Ethics, Diversity, and Relationship Building.**

This course will explore theories of culture and will include legal regulations that govern diversity. The relationship between medical ethics and corporate compliance will be explored. Methods for creating a trusting environment will be evaluated and the need for relationships with providers and academia will be illustrated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5366. Leadership Art: Health Policy and Advocacy.**

This course will focus on the need for leaders to belong to professional organizations to affect policy and advocacy. Participation in legislative activities will be promoted at the state and national levels. The impact of nurse leaders serving on boards that govern health care activities and organizations will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5367. Leader Within: Professional Accountability, Succession Planning and Reflective Practice I.**

This course provides a mentored experience for the synthesis of critical thinking and reflections from didactic work with the practice of nursing leadership. Observational and independent learning activities will result in a Part I of the final capstone project reflecting culmination of program objectives.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**NURS 5368. Leader Within: Professional Accountability, Succession Planning and Reflective Practice II.**

This course is designed to be the culminating mentored experience for the synthesis of critical thinking and reflections from didactic work with the practice of nursing leadership. Students will evaluate and present their final capstone project, reflecting summation of program objectives.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**NURS 5370. Psychiatric Mental Health Integrative Clinical Management Across the Lifespan.**

This course builds on previous courses to further develop competency in the PMHNP role in comprehensive, integrative clinical management for clients with complex psychiatric disorders across the lifespan, while utilizing current evidence-based practice guidelines. Self-directed management, crisis intervention and stabilization, and interprofessional collaboration of care in a variety of settings are emphasized. Additionally, innovative care modalities such as telehealth are explored to reach rural and underserved clients, special populations, and diverse communities. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5102 and NURS 5230 and NURS 5233 and NURS 5340 and NURS 5243 all with grades of "B" or better. Corequisite: NURS 5373 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5371. Clinical Prevention and Population Health.**

Students will examine an overview of global and national population health including social determinants of health, health disparities, cultural diversity, and clinical prevention with an emphasis in evidence-based practice. Resources will be discussed in relation to the availability, barriers, and access in the community and rural areas. Prerequisite: NURS 5301 and NURS 5303 and NURS 5351 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5373. Psychiatric Mental Health Integrative Clinical Management Across the Lifespan Practicum.**

This course serves as a companion course to NURS 5370. This culminating lifespan practicum course provides experiential learning through further development of competency in the PMHNP role in comprehensive, integrative clinical management for special populations and clients with complex psychiatric disorders, utilizing current evidence-based practice guidelines. Practicum experiences emphasize crisis intervention and stabilization, guided self-directed management, and collaboration in an interprofessional environment in a variety of psychiatric settings. Additionally, innovative care modalities such as telehealth are explored to reach rural and underserved clients and diverse communities. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 and NURS 5230 and NURS 5233 and NURS 5340 and NURS 5243 all with grades of "B" or better. Corequisite: NURS 5370 with a grade of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5391. Translational Science for Evidence Based Practice and Innovation Capstone.**

Students will explore evidence-based practice (EBP) for advanced nursing practice professionals. This course will equip graduate nursing students with the skills needed to effectively critique and engage in EBP, to serve as EBP champions and mentors, and to lead projects and innovation within healthcare facilities. Emphasis is placed on completion of a quality improvement or scholarly project, under the direction of a faculty member, which synthesizes advanced practice knowledge and skills to address substantive advanced nursing practice issues. Prerequisite: NURS 5255 and NURS 5354 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5392. Integrative Family Primary Care.**

This course emphasizes health promotion and complex, integrative clinical management of patients and families with co-morbidities utilizing both traditional and complementary or alternative methods based on evidence and research. Integration of complex primary healthcare considerations and clinic-based emergency interventions are examined. Prerequisite: NURS 5256 and NURS 5257 and NURS 5391 all with grades of "B" or better. Corequisite: NURS 5190 and NURS 5393 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter



**NURS 5393. Integrative Family Primary Care Practicum.**

This course serves as the companion course to NURS5392. Students will master skills in utilization of holistic assessment, integrative clinical decision making, and designing interventions and treatment plans in a variety of clinical settings as they prepare for entry level into advanced practice nursing. Emphasis is placed on management of co-morbidities and complex patient management for patients across the lifespan integrating both traditional and complementary or alternative methods as part of the treatment plan. Students complete 180 practicum hours in this course. Prerequisite: NURS 5256 and NURS 5257 and NURS 5391 all with grades of "B" or better. Corequisite: NURS 5190 and NURS 5392 both with grades of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5395. Nursing Leadership and Administration Role Development.**

This course provides students the opportunity to synthesize leadership, organizational, and financial skills as they complete preparation for transition to the nurse leader role. Leadership perspectives and diversity from nursing and other professional fields are examined through reflective practice. #Additionally, policy advocacy and development, and disaster management are examined. #Prerequisite: NURS 5335 and NURS 5135 and NURS 5265 and NURS 5165 and NURS 5391 and NURS 5285 and NURS 5185 all with grades of "B" or better. Corequisite: NURS 5195 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Program Overview**

The Master of Science in Nursing Leadership and Administration in Nursing (LAN) program is an online post-baccalaureate master's degree program that prepares post-baccalaureate registered nurses to practice in nursing leadership and administrative roles in a variety of healthcare institutions.

The MSN-LAN program was created for Registered Nurses seeking career advancement opportunities through graduate education to be prepared for nurse executive and leadership positions in acute, ambulatory, and population healthcare settings. Graduates will be prepared to effectively translate innovative practice models and direct the delivery of healthcare across organizational models, as well as translate evidence to direct individual and population healthcare.

The MSN-LAN program is a part-time, 30-credit hour lockstep program emphasizing course work based on core management and executive competencies established by the American Organization for Nursing Leadership (AONL) and the American Association of Colleges of Nursing (AACN), the professional and accrediting bodies for leadership and graduate nursing education.

An online format is used as the method of delivery for instruction, along with required on campus learning intensives. The on-campus intensives typically meet one to two times per semester at the St. David's School of Nursing in Round Rock. On-campus learning intensives augment online course work and provide networking, immersive learning opportunities guided by faculty, and leadership simulations. Students complete 500 hours of experiential clinical learning with a preceptor to develop

strategic planning, finance, and executive leadership competencies using evidence-based practice.

Graduates of the MSN-LAN program will earn a master's degree allowing them to apply to take a national certification exam. Other requirements for national certification include a minimum amount of experience in specific leadership positions. Upon meeting all requirements, graduates qualify to take one or more of the following national certification examinations as deemed eligible by the credentialing agencies:

- American Organization of Nurse Executives (AONE) Certification Exam - Executive Nursing Practice (CENP) or Certified Nurse Manager and Leader (CNML)
- American Nurses Credentialing Center (ANCC) Certification Exam - Nurse Executive (NE-BC) or Nurse Executive, Advanced (NEA-BC)

The MSN-LAN program is offered as a part-time program which assists students to balance school, work, and lifestyle. The part-time program can be completed in 5 semesters, however, requires specific course sequencing as not all courses are offered each semester. Students are required to be advised before each semester by a graduate advisor.

**MSN-LAN Program Outcomes**

Graduates of the MSN-LAN program will gain knowledge, skills, and competencies around the following program educational outcomes:

1. Demonstrate leadership skills that promote ethical decision making, fiscal responsibility, and human resource management within a systems perspective.
2. Employ communication strategies to develop community relationships and manage conflict.
3. Synthesize advanced knowledge of nursing and nursing leadership and other disciplines into clinical reasoning to promote and improve healthcare systems and patient outcomes.
4. Integrate diversity and person-centered concepts, based on best evidence, to enhance patient safety, reduce health disparities, and improve global health outcomes.
5. Demonstrate professionalism, advocacy, and interprofessional collaboration through clinical scholarship and application of evidence-based recommendations to advance health and nursing.
6. Utilize systems-based practice concepts to optimize safety and the healthcare environment through application of evidence-based quality improvement processes, strategic planning, and innovation.
7. Incorporate knowledge of informatics and technology systems and processes to enhance interdisciplinary communication, clinical decision support, and quality of care in practice.
8. Advocate for health policy in governance and regulatory healthcare environments to influence and improve outcomes for individuals, populations, and systems.
9. Model accountability, ethical principles, and lifelong learning in accordance with standards of professional nursing practice.

**Application Requirements**

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review

the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- Bachelor of Science in nursing (B.S.N.) degree from a regionally accredited institution and from a nursing program accredited by the National League for Nursing Accrediting Commission (NLNAC), Commission on Collegiate Nursing Education (CCNE) or other nationally recognized nursing education accrediting body. The student's B.S.N. degree must be reflected on the transcript at the time of application.
- official transcripts from **each institution** where course credit was granted.
- a 3.0 overall GPA or 3.0 GPA on a 4.0 scale in the last 60 hours of undergraduate course work (plus any completed graduate courses).
- minimum 3.0 GPA on a 4.0 scale in nursing courses from an accredited college or university (plus any completed graduate nursing courses).
- completed college course in statistics with a grade of C or higher. The course must be completed at the time of application and reflected on submitted transcripts.
- current, valid, unencumbered Registered Nurse license in Texas with date issued from the Board of Nursing and Nursys uploaded into the application system. Multistate licenses are accepted as long as Texas is the declared home state.
- written professional essay and goal statements using guidelines provided for the program (in the application system).
- resume or CV showing a minimum of one year **full-time** equivalent experience as a Registered Nurse prior to the application deadline for the program. Employment will be verified.
- three (3) professional letters of recommendation from persons competent to assess the applicant's academic capability, clinical expertise, and interest in pursuing a career for this program. This is a form completed by your identified reference as part of the application system.
- As part of the application process, applicants are required to participate in and complete an interview.
- The GRE is **not** required.

Once a student has been offered admission, additional criteria must be completed and met prior to admission and the required due dates as listed by the School of Nursing.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52

- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science in Nursing (M.S.N.) degree with a major in Leadership and Administration in Nursing requires 30 semester credit hours.

Students enrolled in the Master of Science in Nursing degree with a major in Leadership and Administration (MSN-LAN) program are required to earn a grade of at least 80% ("B" or higher) in all courses in the curriculum. Graduate nursing courses are offered in a lock-step sequence. Each course will be offered only once each academic year; therefore, progress in the program will be delayed if the student fails ("C" or lower) or drops/withdraws from a course. Students may repeat or withdraw from one nursing course only one time during the duration of the program.

Students who fail to keep their student admission requirements (immunizations, CPR, etc.) up to date cannot attend class or clinical, resulting in a student unable to meet course requirements. Students who do not maintain admission or prevailing requirements within 2 weeks of notification of expiration, will be required to meet with the program director and may be subject to withdrawal from their courses. This will alter program progression and counts towards the number of course attempts in the program.

Students who withdraw from the program for more than one semester must petition the Nursing Admission, Progression and Graduation (A-P-G) Committee to reenter. Re-entry is not guaranteed due to faculty-student ratios, accreditation requirements, and other aspects of the program. A student who has been out more than one year will have to reapply to the program through The Graduate College using the standard application process. Students who have been out of the program over one year may be required to retake foundational courses to remain current.

## Course Requirements

Code	Title	Hours
NURS 5335	Foundations of Leadership and Executive Nursing Practice	3
NURS 5135	Foundations of Leadership Practicum	1
NURS 5260	Organizational Development: Culture, Communication, & Interprofessional Concepts for Nurse Leaders	2
NURS 5265	Evidence-Based Practice, Quality Improvement, and Healthcare Systems	2
NURS 5165	Quality Improvement Practicum	1
NURS 5261	Informatics and Innovation in Nursing Leadership	2
NURS 5262	Healthcare Finance and Strategic Management Foundations	2
NURS 5263	Fostering Human Performance and Systems Thinking	2
NURS 5371	Clinical Prevention and Population Health	3
NURS 5391	Translational Science for Evidence Based Practice and Innovation Capstone	3

NURS 5285	Business and Financial Management in Healthcare	2
NURS 5185	Financial Management Practicum	1
NURS 5367	Leader Within: Professional Accountability, Succession Planning and Reflective Practice I	3
NURS 5368	Leader Within: Professional Accountability, Succession Planning and Reflective Practice II	3
<b>Total Hours</b>		<b>30</b>

To graduate with a Master of Science in Nursing (MSN), a student must successfully complete all graduate nursing courses and requirements and maintain a 3.0 or higher GPA in the graduate nursing program. Students have five (5) years to complete their MSN-LAN graduate degree in the School of Nursing.

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass one or more comprehensive examinations. The comprehensive exam for the MSN-LAN program is a capstone project.

Students who do not successfully complete the requirements for the degree within the timeline specified will be dismissed from the program.

Master's level courses in Nursing: NURS

## Courses Offered

### NURS 5102. Advanced Health Assessment Practicum.

This course emphasizes advanced health assessment techniques and skills common to patient evaluation and development of differential diagnoses. Advanced physical assessment skills and identification of common signs and symptoms related to physical examination will be developed. (60 practicum hours) Corequisites: NURS 5202 and NURS 5301 both with grades of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### NURS 5111. Diagnostic Reasoning and Procedures Practicum.

This course examines clinical laboratory diagnostics, imaging tests, and procedures commonly practiced in primary care by advanced practice nurses. Students will learn diagnostic reasoning and clinical decision-making skills through virtual and case simulations. Additionally, students will learn procedures in on-campus intensives as part of the clinical requirements of the course. Students complete 45 practicum hours in this course. Corequisite: NURS 5209 and NURS 5210 and NURS 5301 and NURS 5351 all with grades of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### NURS 5112. Advanced Psychiatric Assessment and Clinical Interview.

This course provides a foundation for psychiatric assessment and clinical interview techniques to determine mental health status of clients throughout the lifespan. Additionally, psychiatric differential diagnosis, standardized screening tools, and documentation of a psychiatric assessment are emphasized. Prerequisite: NURS 5301 with a grade of "B" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### NURS 5135. Foundations of Leadership Practicum.

This course serves as a companion course to NURS 5335. This practicum course provides experiential learning through foundational development in the nursing leader role utilizing leadership theories, frameworks, and best practices based on evidence. Practicum experiences examine leadership styles, organizational designs, and cultures in healthcare. Additionally, self-reflection, relationship-building, and healthcare team dynamics will be examined in the clinical setting. Corequisite: NURS 5335 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### NURS 5165. Quality Improvement Practicum.

This course serves as a companion course to NURS 5265. This practicum course provides experiential learning through application of evidence-based practice. Using quality improvement science, students will critically appraise research and apply high quality evidence to improve healthcare processes and systems in the clinical setting. Corequisite: NURS 5265 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### NURS 5185. Financial Management Practicum.

This course serves as a companion course to NURS 5285. This practicum course provides experiential learning through application of business and financial concepts in healthcare settings. Students will participate in budget and staffing processes in the healthcare facility. Additionally, using strategic and financial management constructs, students will develop a proposed healthcare business plan. Prerequisite: NURS 5260 and NURS 5262 both with grades of "B" or better. Corequisite: NURS 5285 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### NURS 5190. Transition to Practice: The Advanced Practice Nurse as Healthcare Provider.

This course is designed for students preparing for the entry level role of a nurse practitioner. Students will examine a more in-depth view of the nurse practitioner role specific to licensure, malpractice, national certification and exam, and prescriptive authority including controlled substances. Prescriptive delegation, DEA, and other advanced practice nurse role socialization aspects are explored. Prerequisite: NURS 5111 and NURS 5209 and NURS 5210 and NURS 5250 and NURS 5255 and NURS 5256 and NURS 5257 and NURS 5301 and NURS 5303 and NURS 5345 and NURS 5346 and NURS 5351 and NURS 5354 and NURS 5391 all with grades of "B" or better. Corequisite: NURS 5392 and NURS 5393 both with grades of "B" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5195. Nursing Leadership Role Practicum.**

This course serves as a companion course to NURS 5395. This practicum course provides experiential learning in operational, administrative, and strategic competencies related to the nurse leader role. This practicum experience promotes synthesis of leadership theories, quality, and risk management in the healthcare environment. Additionally, resilience, professionalism, and policy development will be examined in the clinical setting. Prerequisite: NURS 5185 and NURS 5165 and NURS 5135 all with grades of "B" or better. Corequisite: NURS 5395 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5205. Healthcare Leadership and Finance for Advanced Nursing Practice.**

This course explores leadership concepts and complexity of changing healthcare systems for the advanced nursing role. Healthcare economics, innovation, and resource stewardship are examined. Change management and leadership theories guide students to create a leadership philosophy. Rich leadership perspectives and diversity from various professional fields are examined through reflective practice. Prerequisite: NURS 5301 and NURS 5351 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5208. Health Policy, Ethics, and Issues in Advanced Nursing Practice.**

This course prepares students as advocates and change agents in health policy development, implementation, and evaluation. Current professional, ethical, and legal issues that influence advanced practice nursing, nursing education and the health care delivery system are presented. The importance of collaborative engagement in health care policy and economics at the local, national, and global levels is emphasized. Prerequisite: NURS 5205 and NURS 5301 and NURS 5303 and NURS 5351 all with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5209. Advanced Health Assessment.**

This course provides the foundation for advanced health assessment techniques and skills common to family practice across the lifespan. Emphasis is placed on interviewing skills, a methodical approach to physical examinations to formulate differential diagnosis. Documentation using informatics and electronic medical records is presented. Content incorporates physiological, psycho-social, spiritual, cultural, diversity, developmental, and integrative components of health. Corequisite: NURS 5111 and NURS 5210 and NURS 5301 all with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5210. Advanced Health Assessment Practicum.**

This course serves as the companion course to NURS 5209. Emphasis is placed on the development of advanced health assessment techniques and skills common to patient evaluation and development of differential diagnoses for patients across the lifespan. Advanced interview skills, physical assessment skills, and identifying common signs and symptoms related to physical examination will be developed through lab, simulation, and clinical practicum experiences. Students complete 90 practicum hours with emphasis in advanced health assessment skills. Corequisite: NURS 5301 and NURS 5209 and NURS 5351 and NURS 5111 with grades of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5230. Psychiatric Mental Health Diagnostics and Clinical Management for Pediatric Clients.**

This course provides a foundation for evidence-based assessment, diagnosis, and clinical management of pediatric and adolescent clients with acute and chronic psychiatric disorders. Psychiatric theories, psychotherapies, health promotion and culturally sensitive interventions are examined. Establishing the provider-client therapeutic partnership is also explored. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 all with grades of "B" or better. Corequisite: NURS 5233 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5233. PMH Diagnostics and Clinical Management for Pediatric Clients Practicum.**

This course serves as a companion course to NURS 5230. This practicum course applies health promotion, assessment, and diagnostic skills in managing care of pediatric and adolescent clients with acute and chronic psychiatric disorders through integration of evidence-based psychiatric theories, psychotherapy, psychopharmacology, and alternative-based interventions. Working with a preceptor, students will facilitate therapies, create and evaluate treatment plans, and collaborate as part of interprofessional teams to deliver holistic care. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 all with grades of "B" or better. Corequisite: NURS 5230 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**NURS 5243. PMH Diagnostics and Clinical Management for Adult and Geriatric Clients Practicum.**

This practicum course serves as a companion course to NURS 5340. The course teaches application of health promotion, assessment, and diagnostic skills in managing care of adult and geriatric clients with acute and chronic psychiatric disorders through integration of psychiatric theories, psychotherapy, psychopharmacology, and alternative-based interventions. Working with a preceptor, students will facilitate therapies, create and evaluate treatment plans, and collaborate as part of the interprofessional team to deliver holistic care. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 and NURS 5230 and NURS 5233 all with grades of "B" or better. Corequisite: NURS 5340 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5250. Mental Health Wellness and Illness in Primary Care.**

This course examines behavioral and mental health wellness and illness in the context of family practice. Application of evidence-based knowledge to provide clinical management of patients across the lifespan with common psychiatric-mental health problems is emphasized. Screening, crisis intervention, and various therapies are presented, as well as referrals and interprofessional approaches to care. Prerequisite: NURS 5301 and NURS 5303 and NURS 5351 all with grades of "B" or better. Corequisite: NURS 5111 and NURS 5209 and NURS 5210 all with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5255. Pediatric and Adolescent Primary Care Practicum.**

This course serves as a companion course to NURS5354. Students will apply and refine skills using an evidence-based approach for health promotion, disease prevention, and management of common acute and chronic illnesses for pediatric and adolescent patients using family centered and developmental perspectives. Students complete 120 practicum hours with emphasis in pediatric primary care. Prerequisite: NURS 5111 and NURS 5209 and NURS 5210 and NURS 5250 and NURS 5345 and NURS 5346 all with grades of "B" or better. Corequisite: NURS 5354 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5256. Geriatric Primary Care.**

This course examines holistic assessment, prioritizing differential diagnosis, and integrative clinical management of older adult and geriatric patients using family centered perspectives (ages 65+). Emphasis is placed on health promotion, disease prevention, and management of common acute and chronic illness including polypharmacy and end of life considerations. Prerequisite: NURS 5354 and NURS 5255 both with grades of "B" or better. Corequisite: NURS 5257 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5257. Geriatric Primary Care Practicum.**

This course serves as a companion course to NURS 5256. Students will refine skills using an evidence-based approach for health promotion, disease prevention, and integrative clinical management of common acute and chronic illness for geriatric patients and families. Comprehensive health status assessment, end of life care, and complex chronic health issues are addressed. Students complete a 90 hour practicum for this course. Prerequisite: NURS 5354 and NURS 5255 both with grades of "B" or better. Corequisite: NURS 5256 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5260. Organizational Development: Culture, Communication, & Interprofessional Concepts for Nurse Leaders.**

This course provides students a foundation in organizational theories and dynamics to support the nursing leader's role in improving system-level outcomes in healthcare organizations. The role of patient experience, communication strategies, and interprofessional team dynamics within the context of the organization will be explored. In addition, methods to influence and lead change in healthcare systems will be examined. Prerequisite: NURS 5335 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5261. Informatics and Innovation in Nursing Leadership.**

This course provides students with skills in healthcare informatics in the context of the nursing manager or executive. Utilization of information systems and technology to lead innovative change and quality improvement processes are emphasized. Prerequisite: NURS 5335 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5262. Healthcare Finance and Strategic Management Foundations.**

This course provides students with the foundation in financial acumen of business models and healthcare delivery systems. Students will learn mechanics of strategic management that includes use of standard industry tools and techniques to collect and analyze data to develop components of a strategic plan in the context of healthcare. Prerequisite: NURS 5335 and NURS 5260 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5263. Fostering Human Performance and Systems Thinking.**

This course builds on nursing leadership competencies for effective human resource management within complex, adaptive healthcare environments. Students will learn and integrate into practice concepts associated with human resources management and performance including nature of work, compensation and benefits, workforce planning, recruitment and hiring. Additionally, training and development, employee appraisal, and union-management relations will be explored. Prerequisite: NURS 5335 and NURS 5260 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**NURS 5264. Health Policy, Law, and Ethics.**

This course prepares students as advocates and change agents in health policy development, implementation, and evaluation. Current professional, ethical, and legal issues that impact nurse leaders and influence health care delivery are presented. The importance of collaborative engagement in health care policy at the local, national, and global levels is emphasized. Prerequisite: NURS 5335 and NURS 5260 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5265. Evidence-Based Practice, Quality Improvement, and Healthcare Systems.**

This course lays a foundation for students to utilize research evidence and its role in supporting evidence-based practice. Content guides students to identify existing problems in clinical practice and healthcare systems through the translation of evidence into practice using quality improvement methods. Critical appraisal of research skills and opportunities to apply high quality evidence to improve healthcare processes and systems will be examined. Corequisite: NURS 5165 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5285. Business and Financial Management in Healthcare.**

This course provides students with business, accounting, and financial concepts in the context of healthcare delivery systems. Emphasis is placed on staffing, budgets, revenue, and cost management for the role of the nurse leader. Additionally, entrepreneurship and business plans are explored. Prerequisite: NURS 5260 and NURS 5262 both with grades of "B" or better. Corequisite: NURS 5185 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5301. Advanced Pathophysiology.**

In preparation for advanced practice, this course will expand understanding of the pathophysiology underlying dysfunctions and interrelatedness of the processes of normal physiology and pathophysiology across the continuum of disease and return to wellness. Applications will be made utilizing lifespan perspectives of the process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5303. Advanced Pharmacotherapeutics.**

This course provides advanced knowledge in selecting pharmacologic agents and specific drugs, based on acute and chronic health problems in diverse populations. Knowledge of pharmacologic groups, indications and contraindications, dosing with special needs groups, adverse effects, and collaborative monitoring of pharmacotherapy and alternative therapies will be developed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5312. Neuroscience, Epigenetics, and Psychopharmacology.**

Building on previous knowledge of advanced pathophysiology and pharmacology, this course presents advanced concepts of neuroscience, epigenetics, and psychopharmacology that contribute to mental health and psychiatric disorders across the lifespan. Clinical management of psychotropic medication in the treatment of psychiatric disorders and mental illness are discussed and emphasis is placed on biologic actions, neurobiology, safe prescribing, and treatment response of psychiatric medication management. Pertinent laboratory diagnostics and neuroimaging related to psychiatric health and illness are also analyzed. Prerequisite: NURS 5301 and NURS 5303 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5335. Foundations of Leadership and Executive Nursing Practice.**

This course emphasizes organizational and systems leadership by synthesizing principles of leadership, management, and change theory. Various leadership styles, organizational designs in healthcare, and leadership sustainability are explored. Corequisite: NURS 5135 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5340. PMH Diagnostics and Clinical Management for Adult and Geriatric Clients.**

This course provides a foundation for evidence-based assessment, diagnosis, and clinical management of adult and geriatric clients with acute and chronic psychiatric disorders. Psychiatric theories, psychotherapies, health promotion and culturally sensitive interventions are examined, and emphasis is placed on the provider-client therapeutic partnership. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 and NURS 5230 and NURS 5233 all with grades of "B" or better. Corequisite: NURS 5243 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5345. Young and Middle Adult Primary Care.**

This course focuses on holistic assessment, formulating differential diagnoses, and integrative clinical management of young and middle adult primary care patients (ages 18-65). Course content includes health promotion and maintenance, including sexual, perinatal, and reproductive considerations of the child-bearing family. Management of common acute and chronic illness in this age group in the context of family centered perspectives and rural considerations are also emphasized. Prerequisite: NURS 5209 and NURS 5210 and NURS 5301 and NURS 5111 and NURS 5351 all with grades of "B" or better. Corequisite: NURS 5346 and NURS 5303 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5346. Young and Middle Adult Primary Care Practicum.**

This course serves as a companion course to NURS5345. Students will apply theory to practice skills using an evidence-based approach for health promotion, sexual, perinatal, and reproductive care for the child-bearing family. This course provides experience to refine diagnostic reasoning skills for management of common acute and chronic illness in young and middle adult aged patients using a family centered approach. Students complete 180 practicum hours with emphasis in young and middle adult primary care. Prerequisite: NURS 5209 and NURS 5210 and NURS 5301 and NURS 5111 and NURS 5351 all with grades of "B" or better. Corequisite: NURS 5345 and NURS 5303 both with grades of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5351. Theoretical Foundations and Role Development of Advanced Integrative Nursing.**

This course explores historical processes and role development in advanced nursing practice. Theories and frameworks that guide and inform advanced nursing practice and scholarly inquiry are examined. Integration of theories from nursing, integrative care, and related disciplines provide a foundation for the graduate student to transition into the advance practice role and form a basis for evidence-based practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5354. Pediatric and Adolescent Primary Care.**

This course emphasizes holistic assessment, formulating differential diagnosis, and integrative clinical management of pediatric and adolescent patients (ages 0-21). Content includes primary care approach health promotion, disease prevention, and managing common acute and chronic illnesses of increasing complexity using family-centered and developmental perspectives. Perspectives of underserved and rural populations in a variety of clinical settings will be explored. Prerequisite: NURS 5345 and NURS 5346 and NURS 5250 all with grades of "B" or better. Corequisite: NURS 5255 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5360. Leadership Science: Foundational Thinking Skills, Governance, & Community & Provider Relationships.**

This course will emphasize leadership skills in communication, leadership styles and organizational theory. Communication will focus on conflict resolution, presentation skills, and relationship building. Delivery systems, leadership styles, and demand for nursing will be examined. Complexity science, systems theory, and diversity required for organizing health care will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5361. Leadership Science: Performance and Quality Improvement.**

This course will articulate performance improvement activities using evidence-based metrics to align patient outcomes with organizational goals. Methods for using quality metrics and action plans will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**NURS 5362. Leadership Science: Patient Safety, Risk Management, Legal and Regulatory Requirements.**

This course will examine areas of risk and liability. Students will develop systems that identify early warning indicators of problems and will explore "just in time" reporting. The concept of sentinel events and root cause analysis will be explored. Accreditation standards, legal regulations, and compliance requirements will be integrated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5363. Leadership Science: Evidence-Based Practice for Nurse Leaders.**

The students will explore evidence-based practice (EBP) for nurse leaders. This EBP course will equip nurses with the skills needed to effectively engage in EBP, to serve as EBP champions and mentors, and to lead projects within healthcare facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5364. Leadership Science: Health Care Finance and Workforce Planning.**

This course will emphasize workforce planning for nursing and the application of general principles of accounting. Twenty hours will be allocated to the development of a department operational and capital budget in collaboration with a nurse director or executive. Negotiation and monitoring of contracts and contract compliance will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**NURS 5365. Leadership Art: Ethics, Diversity, and Relationship Building.**

This course will explore theories of culture and will include legal regulations that govern diversity. The relationship between medical ethics and corporate compliance will be explored. Methods for creating a trusting environment will be evaluated and the need for relationships with providers and academia will be illustrated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5366. Leadership Art: Health Policy and Advocacy.**

This course will focus on the need for leaders to belong to professional organizations to affect policy and advocacy. Participation in legislative activities will be promoted at the state and national levels. The impact of nurse leaders serving on boards that govern health care activities and organizations will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5367. Leader Within: Professional Accountability, Succession Planning and Reflective Practice I.**

This course provides a mentored experience for the synthesis of critical thinking and reflections from didactic work with the practice of nursing leadership. Observational and independent learning activities will result in a Part I of the final capstone project reflecting culmination of program objectives.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**NURS 5368. Leader Within: Professional Accountability, Succession Planning and Reflective Practice II.**

This course is designed to be the culminating mentored experience for the synthesis of critical thinking and reflections from didactic work with the practice of nursing leadership. Students will evaluate and present their final capstone project, reflecting summation of program objectives.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**NURS 5370. Psychiatric Mental Health Integrative Clinical Management Across the Lifespan.**

This course builds on previous courses to further develop competency in the PMHNP role in comprehensive, integrative clinical management for clients with complex psychiatric disorders across the lifespan, while utilizing current evidence-based practice guidelines. Self-directed management, crisis intervention and stabilization, and interprofessional collaboration of care in a variety of settings are emphasized. Additionally, innovative care modalities such as telehealth are explored to reach rural and underserved clients, special populations, and diverse communities. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5102 and NURS 5230 and NURS 5233 and NURS 5340 and NURS 5243 all with grades of "B" or better. Corequisite: NURS 5373 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5371. Clinical Prevention and Population Health.**

Students will examine an overview of global and national population health including social determinants of health, health disparities, cultural diversity, and clinical prevention with an emphasis in evidence-based practice. Resources will be discussed in relation to the availability, barriers, and access in the community and rural areas. Prerequisite: NURS 5301 and NURS 5303 and NURS 5351 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5373. Psychiatric Mental Health Integrative Clinical Management Across the Lifespan Practicum.**

This course serves as a companion course to NURS 5370. This culminating lifespan practicum course provides experiential learning through further development of competency in the PMHNP role in comprehensive, integrative clinical management for special populations and clients with complex psychiatric disorders, utilizing current evidence-based practice guidelines. Practicum experiences emphasize crisis intervention and stabilization, guided self-directed management, and collaboration in an interprofessional environment in a variety of psychiatric settings. Additionally, innovative care modalities such as telehealth are explored to reach rural and underserved clients and diverse communities. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 and NURS 5230 and NURS 5233 and NURS 5340 and NURS 5243 all with grades of "B" or better. Corequisite: NURS 5370 with a grade of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5391. Translational Science for Evidence Based Practice and Innovation Capstone.**

Students will explore evidence-based practice (EBP) for advanced nursing practice professionals. This course will equip graduate nursing students with the skills needed to effectively critique and engage in EBP, to serve as EBP champions and mentors, and to lead projects and innovation within healthcare facilities. Emphasis is placed on completion of a quality improvement or scholarly project, under the direction of a faculty member, which synthesizes advanced practice knowledge and skills to address substantive advanced nursing practice issues. Prerequisite: NURS 5255 and NURS 5354 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5392. Integrative Family Primary Care.**

This course emphasizes health promotion and complex, integrative clinical management of patients and families with co-morbidities utilizing both traditional and complementary or alternative methods based on evidence and research. Integration of complex primary healthcare considerations and clinic-based emergency interventions are examined. Prerequisite: NURS 5256 and NURS 5257 and NURS 5391 all with grades of "B" or better. Corequisite: NURS 5190 and NURS 5393 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5393. Integrative Family Primary Care Practicum.**

This course serves as the companion course to NURS5392. Students will master skills in utilization of holistic assessment, integrative clinical decision making, and designing interventions and treatment plans in a variety of clinical settings as they prepare for entry level into advanced practice nursing. Emphasis is placed on management of co-morbidities and complex patient management for patients across the lifespan integrating both traditional and complementary or alternative methods as part of the treatment plan. Students complete 180 practicum hours in this course. Prerequisite: NURS 5256 and NURS 5257 and NURS 5391 all with grades of "B" or better. Corequisite: NURS 5190 and NURS 5392 both with grades of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5395. Nursing Leadership and Administration Role Development.**

This course provides students the opportunity to synthesize leadership, organizational, and financial skills as they complete preparation for transition to the nurse leader role. Leadership perspectives and diversity from nursing and other professional fields are examined through reflective practice. #Additionally, policy advocacy and development, and disaster management are examined. #Prerequisite: NURS 5335 and NURS 5135 and NURS 5265 and NURS 5165 and NURS 5391 and NURS 5285 and NURS 5185 all with grades of "B" or better. Corequisite: NURS 5195 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Master of Science in Nursing Psychiatric Mental Health Nurse Practitioner (PMHNP) program is a hybrid master's degree that prepares post-baccalaureate registered nurses to provide high quality psychiatric and mental healthcare for patients across the lifespan in a variety of settings. Graduates of this program will be prepared to work in a rapidly changing field of mental health to provide effective care utilizing evidence-based practice for a growing population with mental and behavioral health needs.

The MSN-Psychiatric Mental Health Nurse Practitioner (PMHNP) program is a 40-credit hour lockstep program in which Registered Nurses with a Bachelor of Science in Nursing degree advance their skills to the entry level for certification as a Psychiatric Mental Health Nurse Practitioner and apply for licensure as an Advanced Practice Registered Nurse. Instruction will be an online format with required on campus learning intensives typically scheduled two times per semester at the St. David's School of Nursing in Round Rock. The on-campus learning intensives augment the online course work and allow assessment of students to ensure that advanced level competencies have been met.

Faculty facilitate practicum course work online and during the on-campus intensives through skills labs and simulations; however, required clinical hours will be spent with individual preceptors in a clinical setting. The curriculum requires students to complete hours with a preceptor and log 605 required clinical hours as a combination of on-campus clinical experiences, simulations, and preceptor-led clinical practicum hours.

The MSN-PMHNP program prepares graduates to assume a healthcare provider role as an advanced practice registered nurse (APRN) to provide healthcare for clients across the lifespan with psychiatric

and mental healthcare needs. The MSN-PMHNP program prepares graduates to assess, diagnose, and provide clinical management through psychotherapy, psychopharmacology, and collaborative interventions to facilitate wellness and treatments for clients and their families in a variety of settings.

Graduates are qualified to apply to take the following certification examination:

- American Nurses Credentialing Center (ANCC) Certification Exam (PMHNP)

The MSN-PMHNP program is offered as a full-time or part-time track, allowing students to determine how best to manage school, work, and lifestyle. Either option is a 40-hour lockstep program, requiring specific sequencing in courses. Students in the full-time or part-time tracks are required to be advised before each semester by a graduate advisor.

### MSN-PMHNP Program Outcomes

Graduates of the MSN-PMHNP program will gain knowledge, skills, and competencies around the following program educational outcomes:

1. Engage in advanced nursing practice through integration of scientific findings from nursing, humanities, and sciences into the delivery of psychiatric and mental healthcare to diverse patients, families, and communities.
2. Participate in organizational and systems leadership through promotion of high quality, safe patient care which emphasizes ethical decision making, effective working relationships, and a systems-perspective.
3. Lead quality improvement processes to communicate effectively, evaluate health outcomes, and advocate for changes in the care environment to improve health outcomes.
4. Synthesize and critique research to integrate the best evidence to resolve practice problems, work as a change agent, and assist in disseminating findings into clinical practice.
5. Utilize healthcare technologies and informatics to analyze and evaluate data to promote safe practice environments, cost containment and health outcomes.
6. Demonstrate leadership in professional nursing practice through commitment to reflective practice, accountability, and maintaining active roles in health policy and professional organizations.
7. Actively participate as a member and leader of interprofessional teams to promote safety, reduce risk, and address healthcare disparities for patients and populations.
8. Integrate clinical prevention and population health concepts, including global and social determinants of health, into the diverse psychiatric and mental healthcare needs of patients, communities, and populations.
9. Lead health education, treatments, and care through incorporation of biocultural perspectives of patients, communities, and populations as they relate to integrative healthcare practices in psychiatric and mental healthcare.
10. Practice as an advanced practice nurse using evidence based, cost effective integrative healthcare approaches to positively influence health outcomes of patients, families, and the global community.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic



year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- Bachelor of Science in nursing (B.S.N.) degree from a regionally accredited institution and from a nursing program accredited by the National League for Nursing Accrediting Commission (NLNAC), Commission on Collegiate Nursing Education (CCNE) or other nationally recognized nursing education accrediting body. The student's B.S.N. degree must be reflected on the transcript at the time of application.
- official transcripts from **each institution** where course credit was granted.
- minimum 3.0 GPA on a 4.0 scale in the last 60 hours of undergraduate course work (plus any completed graduate courses).
- minimum 3.0 GPA on a 4.0 scale in nursing courses from an accredited college or university (plus any completed graduate nursing courses).
- completed college course in statistics with a grade of C or higher. The course must be completed at the time of application and reflected on submitted transcripts.
- current, valid, unencumbered Registered Nurse license in Texas with date issued from the Board of Nursing uploaded into the application system. Multistate licenses are accepted as long as Texas is the declared the home state.
- written professional essay and goal statements using guidelines provided for the program (in the application system).
- resume or CV showing a minimum of one year **full-time** equivalent experience as a Registered Nurse prior to the application deadline for the program. Employment will be verified.
- three (3) professional letters of recommendation from persons competent to assess the applicant's academic capability, clinical expertise, and interest in pursuing a career for this program. This is a form completed by your identified reference as part of the application system.
- As part of the application process, applicants are required to participate in and complete an interview.
- The GRE is **not** required.

Once a student has been offered admission, additional criteria must be completed and met prior to admission and the required due dates as listed by the School of Nursing.

#### TOEFL, PTE, or IELTS Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52

- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science in Nursing (M.S.N.) major in Psychiatric Mental Health Nurse Practitioner requires 40 semester credit hours.

Students enrolled in the Master of Science in Nursing major in Psychiatric Mental Health Nurse Practitioner (MSN-PMHNP) program are required to earn a grade of at least 80% ("B" or higher) in all courses in the MSN-PMHNP curriculum. Graduate nursing courses are offered in a lock-step sequence for part-time and full-time options. Each course will be offered only once each academic year; therefore, progress in the program will be delayed if the student fails ("C" or lower) or drops/withdraws from a course. Students may repeat or withdraw from one nursing course only one time during the duration of the program.

Students who fail to keep their admission requirements (immunizations, CPR, etc.) up to date cannot attend class or clinical, resulting in a student unable to meet course requirements. Students who do not maintain admission or prevailing requirements within 2 weeks of notification of expiration will be required to meet with the program director and may be subject to withdrawal from their courses. This will alter program progression and counts towards the number of course attempts in the program.

Students who withdraw from the program for more than one semester must petition the Nursing Admission, Progression and Graduation (A-P-G) Committee to reenter. Re-entry is not guaranteed due to faculty-student ratios, accreditation requirements, and other aspects of the program. A student who has been out more than one year will have to reapply to the program through The Graduate College using the standard application process. Students who have been out of the program over one year may be required to retake foundational courses in the NP programs to remain current.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
NURS 5301	Advanced Pathophysiology	3
NURS 5351	Theoretical Foundations and Role Development of Advanced Integrative Nursing	3
NURS 5303	Advanced Pharmacotherapeutics	3
NURS 5209	Advanced Health Assessment	2
NURS 5102	Advanced Health Assessment Practicum	1
NURS 5112	Advanced Psychiatric Assessment and Clinical Interview	1
NURS 5312	Neuroscience, Epigenetics, and Psychopharmacology	3
NURS 5371	Clinical Prevention and Population Health	3
NURS 5230	Psychiatric Mental Health Diagnostics and Clinical Management for Pediatric Clients	2
NURS 5233	PMH Diagnostics and Clinical Management for Pediatric Clients Practicum	2
NURS 5340	PMH Diagnostics and Clinical Management for Adult and Geriatric Clients	3



NURS 5243	PMH Diagnostics and Clinical Management for Adult and Geriatric Clients Practicum	2
NURS 5391	Translational Science for Evidence Based Practice and Innovation Capstone	3
NURS 5208	Health Policy, Ethics, and Issues in Advanced Nursing Practice	2
NURS 5370	Psychiatric Mental Health Integrative Clinical Management Across the Lifespan	3
NURS 5373	Psychiatric Mental Health Integrative Clinical Management Across the Lifespan Practicum	3
NURS 5190	Transition to Practice: The Advanced Practice Nurse as Healthcare Provider	1
<b>Total Hours</b>		<b>40</b>

To graduate with a Master of Science in Nursing (MSN), a student must successfully complete all graduate nursing courses and requirements and maintain a 3.0 or higher GPA in the graduate nursing program. Students have five (5) years to complete their MSN-PMHNP degree in the School of Nursing.

### Comprehensive Examination Requirement

All candidates for graduate degrees must pass one or more comprehensive examinations. The comprehensive exam for MSN-PMHNP program is a capstone project.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

## Courses

### Nursing (NURS)

#### NURS 5102. Advanced Health Assessment Practicum.

This course emphasizes advanced health assessment techniques and skills common to patient evaluation and development of differential diagnoses. Advanced physical assessment skills and identification of common signs and symptoms related to physical examination will be developed. (60 practicum hours) Corequisites: NURS 5202 and NURS 5301 both with grades of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### NURS 5111. Diagnostic Reasoning and Procedures Practicum.

This course examines clinical laboratory diagnostics, imaging tests, and procedures commonly practiced in primary care by advanced practice nurses. Students will learn diagnostic reasoning and clinical decision-making skills through virtual and case simulations. Additionally, students will learn procedures in on-campus intensives as part of the clinical requirements of the course. Students complete 45 practicum hours in this course. Corequisite: NURS 5209 and NURS 5210 and NURS 5301 and NURS 5351 all with grades of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### NURS 5112. Advanced Psychiatric Assessment and Clinical Interview.

This course provides a foundation for psychiatric assessment and clinical interview techniques to determine mental health status of clients throughout the lifespan. Additionally, psychiatric differential diagnosis, standardized screening tools, and documentation of a psychiatric assessment are emphasized. Prerequisite: NURS 5301 with a grade of "B" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### NURS 5135. Foundations of Leadership Practicum.

This course serves as a companion course to NURS 5335. This practicum course provides experiential learning through foundational development in the nursing leader role utilizing leadership theories, frameworks, and best practices based on evidence. Practicum experiences examine leadership styles, organizational designs, and cultures in healthcare. Additionally, self-reflection, relationship-building, and healthcare team dynamics will be examined in the clinical setting. Corequisite: NURS 5335 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### NURS 5165. Quality Improvement Practicum.

This course serves as a companion course to NURS 5265. This practicum course provides experiential learning through application of evidence-based practice. Using quality improvement science, students will critically appraise research and apply high quality evidence to improve healthcare processes and systems in the clinical setting. Corequisite: NURS 5265 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### NURS 5185. Financial Management Practicum.

This course serves as a companion course to NURS 5285. This practicum course provides experiential learning through application of business and financial concepts in healthcare settings. Students will participate in budget and staffing processes in the healthcare facility. Additionally, using strategic and financial management constructs, students will develop a proposed healthcare business plan. Prerequisite: NURS 5260 and NURS 5262 both with grades of "B" or better. Corequisite: NURS 5285 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5190. Transition to Practice: The Advanced Practice Nurse as Healthcare Provider.**

This course is designed for students preparing for the entry level role of a nurse practitioner. Students will examine a more in-depth view of the nurse practitioner role specific to licensure, malpractice, national certification and exam, and prescriptive authority including controlled substances. Prescriptive delegation, DEA, and other advanced practice nurse role socialization aspects are explored. Prerequisite: NURS 5111 and NURS 5209 and NURS 5210 and NURS 5250 and NURS 5255 and NURS 5256 and NURS 5257 and NURS 5301 and NURS 5303 and NURS 5345 and NURS 5346 and NURS 5351 and NURS 5354 and NURS 5391 all with grades of "B" or better. Corequisite: NURS 5392 and NURS 5393 both with grades of "B" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5195. Nursing Leadership Role Practicum.**

This course serves as a companion course to NURS 5395. This practicum course provides experiential learning in operational, administrative, and strategic competencies related to the nurse leader role. This practicum experience promotes synthesis of leadership theories, quality, and risk management in the healthcare environment. Additionally, resilience, professionalism, and policy development will be examined in the clinical setting. Prerequisite: NURS 5185 and NURS 5165 and NURS 5135 all with grades of "B" or better. Corequisite: NURS 5395 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5205. Healthcare Leadership and Finance for Advanced Nursing Practice.**

This course explores leadership concepts and complexity of changing healthcare systems for the advanced nursing role. Healthcare economics, innovation, and resource stewardship are examined. Change management and leadership theories guide students to create a leadership philosophy. Rich leadership perspectives and diversity from various professional fields are examined through reflective practice. Prerequisite: NURS 5301 and NURS 5351 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5208. Health Policy, Ethics, and Issues in Advanced Nursing Practice.**

This course prepares students as advocates and change agents in health policy development, implementation, and evaluation. Current professional, ethical, and legal issues that influence advanced practice nursing, nursing education and the health care delivery system are presented. The importance of collaborative engagement in health care policy and economics at the local, national, and global levels is emphasized. Prerequisite: NURS 5205 and NURS 5301 and NURS 5303 and NURS 5351 all with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5209. Advanced Health Assessment.**

This course provides the foundation for advanced health assessment techniques and skills common to family practice across the lifespan. Emphasis is placed on interviewing skills, a methodical approach to physical examinations to formulate differential diagnosis. Documentation using informatics and electronic medical records is presented. Content incorporates physiological, psycho-social, spiritual, cultural, diversity, developmental, and integrative components of health. Corequisite: NURS 5111 and NURS 5210 and NURS 5301 all with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5210. Advanced Health Assessment Practicum.**

This course serves as the companion course to NURS 5209. Emphasis is placed on the development of advanced health assessment techniques and skills common to patient evaluation and development of differential diagnoses for patients across the lifespan. Advanced interview skills, physical assessment skills, and identifying common signs and symptoms related to physical examination will be developed through lab, simulation, and clinical practicum experiences. Students complete 90 practicum hours with emphasis in advanced health assessment skills. Corequisite: NURS 5301 and NURS 5209 and NURS 5351 and NURS 5111 with grades of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5230. Psychiatric Mental Health Diagnostics and Clinical Management for Pediatric Clients.**

This course provides a foundation for evidence-based assessment, diagnosis, and clinical management of pediatric and adolescent clients with acute and chronic psychiatric disorders. Psychiatric theories, psychotherapies, health promotion and culturally sensitive interventions are examined. Establishing the provider-client therapeutic partnership is also explored. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 all with grades of "B" or better. Corequisite: NURS 5233 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5233. PMH Diagnostics and Clinical Management for Pediatric Clients Practicum.**

This course serves as a companion course to NURS 5230. This practicum course applies health promotion, assessment, and diagnostic skills in managing care of pediatric and adolescent clients with acute and chronic psychiatric disorders through integration of evidence-based psychiatric theories, psychotherapy, psychopharmacology, and alternative-based interventions. Working with a preceptor, students will facilitate therapies, create and evaluate treatment plans, and collaborate as part of interprofessional teams to deliver holistic care. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 all with grades of "B" or better. Corequisite: NURS 5230 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5243. PMH Diagnostics and Clinical Management for Adult and Geriatric Clients Practicum.**

This practicum course serves as a companion course to NURS 5340. The course teaches application of health promotion, assessment, and diagnostic skills in managing care of adult and geriatric clients with acute and chronic psychiatric disorders through integration of psychiatric theories, psychotherapy, psychopharmacology, and alternative-based interventions. Working with a preceptor, students will facilitate therapies, create and evaluate treatment plans, and collaborate as part of the interprofessional team to deliver holistic care. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 and NURS 5230 and NURS 5233 all with grades of "B" or better. Corequisite: NURS 5340 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5250. Mental Health Wellness and Illness in Primary Care.**

This course examines behavioral and mental health wellness and illness in the context of family practice. Application of evidence-based knowledge to provide clinical management of patients across the lifespan with common psychiatric-mental health problems is emphasized. Screening, crisis intervention, and various therapies are presented, as well as referrals and interprofessional approaches to care. Prerequisite: NURS 5301 and NURS 5303 and NURS 5351 all with grades of "B" or better. Corequisite: NURS 5111 and NURS 5209 and NURS 5210 all with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5255. Pediatric and Adolescent Primary Care Practicum.**

This course serves as a companion course to NURS5354. Students will apply and refine skills using an evidence-based approach for health promotion, disease prevention, and management of common acute and chronic illnesses for pediatric and adolescent patients using family centered and developmental perspectives. Students complete 120 practicum hours with emphasis in pediatric primary care. Prerequisite: NURS 5111 and NURS 5209 and NURS 5210 and NURS 5250 and NURS 5345 and NURS 5346 all with grades of "B" or better. Corequisite: NURS 5354 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5256. Geriatric Primary Care.**

This course examines holistic assessment, prioritizing differential diagnosis, and integrative clinical management of older adult and geriatric patients using family centered perspectives (ages 65+). Emphasis is placed on health promotion, disease prevention, and management of common acute and chronic illness including polypharmacy and end of life considerations. Prerequisite: NURS 5354 and NURS 5255 both with grades of "B" or better. Corequisite: NURS 5257 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5257. Geriatric Primary Care Practicum.**

This course serves as a companion course to NURS 5256. Students will refine skills using an evidence-based approach for health promotion, disease prevention, and integrative clinical management of common acute and chronic illness for geriatric patients and families. Comprehensive health status assessment, end of life care, and complex chronic health issues are addressed. Students complete a 90 hour practicum for this course. Prerequisite: NURS 5354 and NURS 5255 both with grades of "B" or better. Corequisite: NURS 5256 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5260. Organizational Development: Culture, Communication, & Interprofessional Concepts for Nurse Leaders.**

This course provides students a foundation in organizational theories and dynamics to support the nursing leader's role in improving system-level outcomes in healthcare organizations. The role of patient experience, communication strategies, and interprofessional team dynamics within the context of the organization will be explored. In addition, methods to influence and lead change in healthcare systems will be examined. Prerequisite: NURS 5335 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5261. Informatics and Innovation in Nursing Leadership.**

This course provides students with skills in healthcare informatics in the context of the nursing manager or executive. Utilization of information systems and technology to lead innovative change and quality improvement processes are emphasized. Prerequisite: NURS 5335 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5262. Healthcare Finance and Strategic Management Foundations.**

This course provides students with the foundation in financial acumen of business models and healthcare delivery systems. Students will learn mechanics of strategic management that includes use of standard industry tools and techniques to collect and analyze data to develop components of a strategic plan in the context of healthcare. Prerequisite: NURS 5335 and NURS 5260 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5263. Fostering Human Performance and Systems Thinking.**

This course builds on nursing leadership competencies for effective human resource management within complex, adaptive healthcare environments. Students will learn and integrate into practice concepts associated with human resources management and performance including nature of work, compensation and benefits, workforce planning, recruitment and hiring. Additionally, training and development, employee appraisal, and union-management relations will be explored. Prerequisite: NURS 5335 and NURS 5260 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5264. Health Policy, Law, and Ethics.**

This course prepares students as advocates and change agents in health policy development, implementation, and evaluation. Current professional, ethical, and legal issues that impact nurse leaders and influence health care delivery are presented. The importance of collaborative engagement in health care policy at the local, national, and global levels is emphasized. Prerequisite: NURS 5335 and NURS 5260 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5265. Evidence-Based Practice, Quality Improvement, and Healthcare Systems.**

This course lays a foundation for students to utilize research evidence and its role in supporting evidence-based practice. Content guides students to identify existing problems in clinical practice and healthcare systems through the translation of evidence into practice using quality improvement methods. Critical appraisal of research skills and opportunities to apply high quality evidence to improve healthcare processes and systems will be examined. Corequisite: NURS 5165 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5285. Business and Financial Management in Healthcare.**

This course provides students with business, accounting, and financial concepts in the context of healthcare delivery systems. Emphasis is placed on staffing, budgets, revenue, and cost management for the role of the nurse leader. Additionally, entrepreneurship and business plans are explored. Prerequisite: NURS 5260 and NURS 5262 both with grades of "B" or better. Corequisite: NURS 5185 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5301. Advanced Pathophysiology.**

In preparation for advanced practice, this course will expand understanding of the pathophysiology underlying dysfunctions and interrelatedness of the processes of normal physiology and pathophysiology across the continuum of disease and return to wellness. Applications will be made utilizing lifespan perspectives of the process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5303. Advanced Pharmacotherapeutics.**

This course provides advanced knowledge in selecting pharmacologic agents and specific drugs, based on acute and chronic health problems in diverse populations. Knowledge of pharmacologic groups, indications and contraindications, dosing with special needs groups, adverse effects, and collaborative monitoring of pharmacotherapy and alternative therapies will be developed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5312. Neuroscience, Epigenetics, and Psychopharmacology.**

Building on previous knowledge of advanced pathophysiology and pharmacology, this course presents advanced concepts of neuroscience, epigenetics, and psychopharmacology that contribute to mental health and psychiatric disorders across the lifespan. Clinical management of psychotropic medication in the treatment of psychiatric disorders and mental illness are discussed and emphasis is placed on biologic actions, neurobiology, safe prescribing, and treatment response of psychiatric medication management. Pertinent laboratory diagnostics and neuroimaging related to psychiatric health and illness are also analyzed. Prerequisite: NURS 5301 and NURS 5303 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5335. Foundations of Leadership and Executive Nursing Practice.**

This course emphasizes organizational and systems leadership by synthesizing principles of leadership, management, and change theory. Various leadership styles, organizational designs in healthcare, and leadership sustainability are explored. Corequisite: NURS 5135 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5340. PMH Diagnostics and Clinical Management for Adult and Geriatric Clients.**

This course provides a foundation for evidence-based assessment, diagnosis, and clinical management of adult and geriatric clients with acute and chronic psychiatric disorders. Psychiatric theories, psychotherapies, health promotion and culturally sensitive interventions are examined, and emphasis is placed on the provider-client therapeutic partnership. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 and NURS 5230 and NURS 5233 all with grades of "B" or better. Corequisite: NURS 5243 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5345. Young and Middle Adult Primary Care.**

This course focuses on holistic assessment, formulating differential diagnoses, and integrative clinical management of young and middle adult primary care patients (ages 18-65). Course content includes health promotion and maintenance, including sexual, perinatal, and reproductive considerations of the child-bearing family. Management of common acute and chronic illness in this age group in the context of family centered perspectives and rural considerations are also emphasized. Prerequisite: NURS 5209 and NURS 5210 and NURS 5301 and NURS 5111 and NURS 5351 all with grades of "B" or better. Corequisite: NURS 5346 and NURS 5303 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5346. Young and Middle Adult Primary Care Practicum.**

This course serves as a companion course to NURS5345. Students will apply theory to practice skills using an evidence-based approach for health promotion, sexual, perinatal, and reproductive care for the child-bearing family. This course provides experience to refine diagnostic reasoning skills for management of common acute and chronic illness in young and middle adult aged patients using a family centered approach. Students complete 180 practicum hours with emphasis in young and middle adult primary care. Prerequisite: NURS 5209 and NURS 5210 and NURS 5301 and NURS 5111 and NURS 5351 all with grades of "B" or better. Corequisite: NURS 5345 and NURS 5303 both with grades of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5351. Theoretical Foundations and Role Development of Advanced Integrative Nursing.**

This course explores historical processes and role development in advanced nursing practice. Theories and frameworks that guide and inform advanced nursing practice and scholarly inquiry are examined. Integration of theories from nursing, integrative care, and related disciplines provide a foundation for the graduate student to transition into the advance practice role and form a basis for evidence-based practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5354. Pediatric and Adolescent Primary Care.**

This course emphasizes holistic assessment, formulating differential diagnosis, and integrative clinical management of pediatric and adolescent patients (ages 0-21). Content includes primary care approach health promotion, disease prevention, and managing common acute and chronic illnesses of increasing complexity using family-centered and developmental perspectives. Perspectives of underserved and rural populations in a variety of clinical settings will be explored. Prerequisite: NURS 5345 and NURS 5346 and NURS 5250 all with grades of "B" or better. Corequisite: NURS 5255 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5360. Leadership Science: Foundational Thinking Skills, Governance, & Community & Provider Relationships.**

This course will emphasize leadership skills in communication, leadership styles and organizational theory. Communication will focus on conflict resolution, presentation skills, and relationship building. Delivery systems, leadership styles, and demand for nursing will be examined. Complexity science, systems theory, and diversity required for organizing health care will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5361. Leadership Science: Performance and Quality Improvement.**

This course will articulate performance improvement activities using evidence-based metrics to align patient outcomes with organizational goals. Methods for using quality metrics and action plans will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**NURS 5362. Leadership Science: Patient Safety, Risk Management, Legal and Regulatory Requirements.**

This course will examine areas of risk and liability. Students will develop systems that identify early warning indicators of problems and will explore "just in time" reporting. The concept of sentinel events and root cause analysis will be explored. Accreditation standards, legal regulations, and compliance requirements will be integrated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5363. Leadership Science: Evidence-Based Practice for Nurse Leaders.**

The students will explore evidence-based practice (EBP) for nurse leaders. This EBP course will equip nurses with the skills needed to effectively engage in EBP, to serve as EBP champions and mentors, and to lead projects within healthcare facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5364. Leadership Science: Health Care Finance and Workforce Planning.**

This course will emphasize workforce planning for nursing and the application of general principles of accounting. Twenty hours will be allocated to the development of a department operational and capital budget in collaboration with a nurse director or executive. Negotiation and monitoring of contracts and contract compliance will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**NURS 5365. Leadership Art: Ethics, Diversity, and Relationship Building.**

This course will explore theories of culture and will include legal regulations that govern diversity. The relationship between medical ethics and corporate compliance will be explored. Methods for creating a trusting environment will be evaluated and the need for relationships with providers and academia will be illustrated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5366. Leadership Art: Health Policy and Advocacy.**

This course will focus on the need for leaders to belong to professional organizations to affect policy and advocacy. Participation in legislative activities will be promoted at the state and national levels. The impact of nurse leaders serving on boards that govern health care activities and organizations will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**NURS 5367. Leader Within: Professional Accountability, Succession Planning and Reflective Practice I.**

This course provides a mentored experience for the synthesis of critical thinking and reflections from didactic work with the practice of nursing leadership. Observational and independent learning activities will result in a Part I of the final capstone project reflecting culmination of program objectives.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**NURS 5368. Leader Within: Professional Accountability, Succession Planning and Reflective Practice II.**

This course is designed to be the culminating mentored experience for the synthesis of critical thinking and reflections from didactic work with the practice of nursing leadership. Students will evaluate and present their final capstone project, reflecting summation of program objectives.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**NURS 5370. Psychiatric Mental Health Integrative Clinical Management Across the Lifespan.**

This course builds on previous courses to further develop competency in the PMHNP role in comprehensive, integrative clinical management for clients with complex psychiatric disorders across the lifespan, while utilizing current evidence-based practice guidelines. Self-directed management, crisis intervention and stabilization, and interprofessional collaboration of care in a variety of settings are emphasized. Additionally, innovative care modalities such as telehealth are explored to reach rural and underserved clients, special populations, and diverse communities. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5102 and NURS 5230 and NURS 5233 and NURS 5340 and NURS 5243 all with grades of "B" or better. Corequisite: NURS 5373 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5371. Clinical Prevention and Population Health.**

Students will examine an overview of global and national population health including social determinants of health, health disparities, cultural diversity, and clinical prevention with an emphasis in evidence-based practice. Resources will be discussed in relation to the availability, barriers, and access in the community and rural areas. Prerequisite: NURS 5301 and NURS 5303 and NURS 5351 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5373. Psychiatric Mental Health Integrative Clinical Management Across the Lifespan Practicum.**

This course serves as a companion course to NURS 5370. This culminating lifespan practicum course provides experiential learning through further development of competency in the PMHNP role in comprehensive, integrative clinical management for special populations and clients with complex psychiatric disorders, utilizing current evidence-based practice guidelines. Practicum experiences emphasize crisis intervention and stabilization, guided self-directed management, and collaboration in an interprofessional environment in a variety of psychiatric settings. Additionally, innovative care modalities such as telehealth are explored to reach rural and underserved clients and diverse communities. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 and NURS 5230 and NURS 5233 and NURS 5340 and NURS 5243 all with grades of "B" or better. Corequisite: NURS 5370 with a grade of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5391. Translational Science for Evidence Based Practice and Innovation Capstone.**

Students will explore evidence-based practice (EBP) for advanced nursing practice professionals. This course will equip graduate nursing students with the skills needed to effectively critique and engage in EBP, to serve as EBP champions and mentors, and to lead projects and innovation within healthcare facilities. Emphasis is placed on completion of a quality improvement or scholarly project, under the direction of a faculty member, which synthesizes advanced practice knowledge and skills to address substantive advanced nursing practice issues. Prerequisite: NURS 5255 and NURS 5354 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5392. Integrative Family Primary Care.**

This course emphasizes health promotion and complex, integrative clinical management of patients and families with co-morbidities utilizing both traditional and complementary or alternative methods based on evidence and research. Integration of complex primary healthcare considerations and clinic-based emergency interventions are examined. Prerequisite: NURS 5256 and NURS 5257 and NURS 5391 all with grades of "B" or better. Corequisite: NURS 5190 and NURS 5393 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5393. Integrative Family Primary Care Practicum.**

This course serves as the companion course to NURS5392. Students will master skills in utilization of holistic assessment, integrative clinical decision making, and designing interventions and treatment plans in a variety of clinical settings as they prepare for entry level into advanced practice nursing. Emphasis is placed on management of co-morbidities and complex patient management for patients across the lifespan integrating both traditional and complementary or alternative methods as part of the treatment plan. Students complete 180 practicum hours in this course. Prerequisite: NURS 5256 and NURS 5257 and NURS 5391 all with grades of "B" or better. Corequisite: NURS 5190 and NURS 5392 both with grades of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5395. Nursing Leadership and Administration Role Development.**

This course provides students the opportunity to synthesize leadership, organizational, and financial skills as they complete preparation for transition to the nurse leader role. Leadership perspectives and diversity from nursing and other professional fields are examined through reflective practice. #Additionally, policy advocacy and development, and disaster management are examined. #Prerequisite: NURS 5335 and NURS 5135 and NURS 5265 and NURS 5165 and NURS 5391 and NURS 5285 and NURS 5185 all with grades of "B" or better. Corequisite: NURS 5195 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Psychiatric Mental Health Nurse Practitioner (PMHNP) post-master's certificate is a hybrid graduate certificate program that enables post-masters registered nurses to expand their role to include evaluation, diagnosis, treatment, and management of clients of all ages with psychiatric and mental healthcare needs. Graduates of this program will be prepared to work in a rapidly changing field of mental health to provide quality care utilizing evidence-based practice for a growing population with mental and behavioral health needs.

The Psychiatric Mental Health Nurse Practitioner graduate certificate program is a 20-credit hour lockstep program in which registered nurses with a Master of Science in Nursing degree advance their skills as a Psychiatric Mental Health Nurse Practitioner upon successful completion of the PMHNP national board certification and licensure as an APRN.

After completion of the program, students are eligible to apply for licensure as an Advanced Practice Registered Nurse with a PMHNP specialty.

Instruction will be an online format with required on campus learning intensives typically scheduled two times per semester at the St. David's School of Nursing in Round Rock. The on-campus learning intensives augment the online course work and allow assessment of students to ensure that advanced level competencies have been met.

Faculty facilitate practicum course work online and during the on-campus intensives through skills labs and simulations; however, required clinical hours will be spent with individual preceptors in a clinical setting. The curriculum requires students to complete hours with a preceptor and

log 545 required clinical hours as a combination of on-campus clinical experiences, simulations, and preceptor-led clinical practicums.

The PMHNP graduate certificate program prepares graduates to assume a healthcare provider role as an advanced practice registered nurse (APRN) to provide healthcare for clients across the lifespan with psychiatric and mental healthcare needs. The PMHNP graduate certificate program prepares graduates to assess, diagnose, and provide clinical management through psychotherapy, psychopharmacology, and collaborative interventions to facilitate wellness and treatments for clients and their families in a variety of settings.

Graduates of this certificate program are qualified to apply to take the following certification examination:

- American Nurses Credentialing Center (ANCC) Certification Exam (PMHNP)

The PMHNP certificate program is offered as part-time track to help students manage school, work, and lifestyle. The certificate program requires specific sequencing of courses. Students are required to be advised before each semester by a graduate advisor.

### PMHNP Graduate Certificate Program Outcomes

Graduates of the PMHNP graduate certificate (post-masters) program will gain knowledge, skills, and competencies around the following program educational outcomes:

1. Engage in advanced nursing practice through integration of scientific findings from nursing, humanities, and sciences into the delivery of psychiatric and mental health care to diverse patients, families, and communities.
2. Participate in organizational and systems leadership through promotion of high quality, safe patient care which emphasizes ethical decision making, effective working relationships, and a systems-perspective.
3. Lead quality improvement processes to communicate effectively, evaluate health outcomes, and advocate for changes in the care environment to improve health outcomes.
4. Synthesize and critique research to integrate the best evidence to resolve practice problems, work as a change agent, and assist in disseminating findings into clinical practice.
5. Utilize healthcare technologies and informatics to analyze and evaluate data to promote safe practice environments, cost containment and health outcomes.
6. Demonstrate leadership in professional nursing practice through commitment to reflective practice, accountability, and maintaining active roles in health policy and professional organizations.
7. Actively participate as a member and leader of interprofessional teams to promote safety, reduce risk, and address healthcare disparities for patients and populations.
8. Integrate clinical prevention and population health concepts, including global and social determinants of health, into the diverse psychiatric and mental health care needs of patients, communities, and populations.
9. Lead health education, treatments, and care through incorporation of biocultural perspectives of patients, communities, and populations as they relate to integrative healthcare practices in psychiatric and mental health care.

- 10. Practice as an advanced practice nurse using evidence based, cost effective integrative healthcare approaches to positively influence health outcomes of patients, families, and the global community.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- Completed online application with Texas State University and complete the admissions procedures listed on The Graduate College website (<https://www.gradcollege.txstate.edu/programs/fnp.html>).
- Bachelor of Science in nursing (B.S.N.) degree from a regionally accredited institution and from a nursing program accredited by the Accreditation Commission for Education in Nursing (ACEN), Commission on Collegiate Nursing Education (CCNE) or other nationally recognized nursing education accrediting body. The student's B.S.N. degree must be reflected on the transcript at the time of application.
- Master of Science in Nursing (M.S.N.) degree from a regionally accredited institution and from a nursing program accredited by the Accreditation Commission for Education in Nursing (ACEN), Commission on Collegiate Nursing Education (CCNE) or other nationally recognized nursing education accrediting body. The student's M.S.N. degree must be reflected on the transcript at the time of application.
- Official transcripts from each institution where course credit was granted.
- Minimum cumulative GPA of 3.0 on a 4.0 scale in graduate (masters) nursing courses from an accredited college or university.
- Minimum cumulative GPA of 3.0 on a 4.0 scale in undergraduate and graduate nursing courses from an accredited college or university.
- a 3.0 overall GPA or a 3.0 GPA on a 4.0 scale in the last 60 hours of undergraduate course work (plus any completed graduate courses).
- Completed college course in statistics with a grade of C or higher. Course must be completed at the time of application and reflected on submitted transcripts.
- Current, valid, unencumbered Registered Nurse licensure in Texas. Copy of registered nursing (RN) license with date issued from the Board of Nursing and Nursys must be uploaded into the application system. Multistate licenses are accepted as long as Texas is the declared home state.
- If applicant holds advanced practice registered nursing (APRN) license, applicant must submit copy of current, valid, unencumbered licensure in Texas with date issued from the Board of Nursing and Nursys into the application system.
- Resume or CV showing minimum equivalent of one-year full time experience as in the master's prepared nurse role prepared for (i.e.

- APRN, nurse educator, nurse leader, etc.) prior to the application deadline for the program. Employment will be verified.
- Resume or CV showing minimum three years full-time experience as a RN prior to the application deadline for the program. Employment will be verified.
  - Three (3) professional letters of recommendation from persons competent to assess the applicant's academic capability, clinical expertise, and interest in pursuing a career for this program. This is a form completed by your identified reference as part of the application system.
  - Completed written personal essay and goal statements using guidelines provided for the program.
  - As part of the application process, applicants are required to participate in and complete an interview.

**Note:** Applicants who are not licensed Advanced Practice Registered Nurses or Nurse Practitioners, will be required to take Advanced Pathophysiology, Advanced Pharmacotherapeutics, and Advanced Health Assessments to meet the foundational pre-requisites and requirements of an APRN degree or certificate program.

GRE is not required.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does not offer admission if the scores above are not met.

Once a student has been offered admission, additional criteria specific to the School of Nursing must be completed and met prior to admission and the required due date while in the program.

The Psychiatric Mental Health Nurse Practitioner Graduate Certificate requires 20 semester credit hours and fulfillment of the required practicum hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
NURS 5112	Advanced Psychiatric Assessment and Clinical Interview	1
NURS 5312	Neuroscience, Epigenetics, and Psychopharmacology	3
NURS 5230	Psychiatric Mental Health Diagnostics and Clinical Management for Pediatric Clients	2

NURS 5233	PMH Diagnostics and Clinical Management for Pediatric Clients Practicum	2
NURS 5340	PMH Diagnostics and Clinical Management for Adult and Geriatric Clients	3
NURS 5243	PMH Diagnostics and Clinical Management for Adult and Geriatric Clients Practicum	2
NURS 5370	Psychiatric Mental Health Integrative Clinical Management Across the Lifespan	3
NURS 5373	Psychiatric Mental Health Integrative Clinical Management Across the Lifespan Practicum	3
NURS 5190	Transition to Practice: The Advanced Practice Nurse as Healthcare Provider	1
<b>Total Hours</b>		<b>20</b>

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Physical therapy is a dynamic profession with an established theoretical and scientific base and widespread clinical applications in the restoration, maintenance, and promotion of optimal physical function. Physical therapists are health professionals who help individuals maintain, restore, and improve movement, activity, and functioning, thereby enabling optimal performance and enhancing health, well-being, and quality of life. Physical therapists' services prevent, minimize, or eliminate impairments of body functions and structures, activity limitations, and participation restrictions. Physical therapists diagnose and treat people of all ages, including newborns, children, and elderly individuals to improve mobility. Physical therapists provide care for people in a variety of settings, including hospitals, private practices, outpatient clinics, home health agencies, schools, sports and fitness facilities, work settings, and nursing homes.

Physical therapists play a vital role in today's health care environment and are recognized as essential providers of rehabilitation and habilitation, performance enhancement, and prevention and risk-reduction services. Physical therapists also play important roles both in developing standards for physical therapist practice and in developing health care policy to ensure availability, accessibility, and optimal provision of physical therapist services.

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider and must take specific immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements will be provided once students are enrolled in the program.

## Background Check and Drug Screening

As a condition for placement in most professional practice sites, students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the drug screening process will be provided by the program/department/school. Previous misdemeanor or felony convictions under various titles of the

Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Financial Assistance

Assistantships may be available for qualified applicants in the second and third year of the program. The office of The Graduate College can provide further information regarding scholarships.

## Doctor of Physical Therapy (D.P.T.)

- Major in Physical Therapy (p. 2345)

## Program Overview

The Department of Physical Therapy offers a graduate degree in physical therapy: Doctor of Physical Therapy (D.P.T.). The program admits 40 students per year into a cohort based program. The D.P.T. is a 9-semester, 3-year, full-time graduate program. The program is accredited by the Commission on Accreditation of Physical Therapy Education. Graduates are eligible to take the licensure examination upon completion of the degree.

Physical therapy is defined as the care and services provided by or under the direction and supervision of a physical therapist. Physical therapists provide services to patients/clients who have impairments, functional limitations, disabilities, or changes in physical function and health status resulting from injury, disease, or other causes. They interact and practice in collaboration with a variety of professionals – physicians, dentists, nurses, educators, social workers, occupational therapists, speech-language pathologists, audiologists, and other personnel involved with the patient/client. Physical therapists provide prevention and promote health, wellness, and fitness. In addition they provide consultative services to health facilities, colleagues, business and community organizations, and agencies. Physical therapists provide health care to their patients/clients in a wide variety of settings, including but not limited to, physical therapy office practices, hospitals, rehabilitation facilities, homes, long term care settings, schools, industrial settings, and athletic/fitness centers.

Physical therapist education is built on the knowledge and skills characteristically attributed to completion of a baccalaureate degree – general education that provides students with broad exposure to the humanities, arts, basic science, and social science; requirements that provide students with the opportunity to delve into a discipline at some depth; and electives that provide students with the opportunity to explore other interests. Additionally, admission to physical therapist education programs typically requires students to have completed a set of prerequisite courses in biology, chemistry, physics, statistics, psychology, and human anatomy and physiology.

## Program Standards

Students enrolled in the physical therapy curriculum must maintain high scholastic standards and develop skills necessary to work effectively as a physical therapist with people with diverse needs. Students are expected to demonstrate emotional, mental, and physical fitness in their interactions with others, use skills and techniques that are generally accepted by the professional community and conform to the Code of Ethics of the American Physical Therapy Association and the laws of the State of Texas. A student's acceptance into the program does not guarantee that student's fitness to remain in the program. The faculty is responsible for assuring that only those students who continue to meet



academic and professional behavior standards are allowed to continue in the program.

## Evaluating Student's Professional Behavior

Members of the faculty, using their professional judgment, evaluate student's professional behavior continuously. Students receive information and counseling related to their professional behavior performance from faculty members, their advisors, and their clinical education supervisors. The criteria used by the faculty to make such judgments include instructors' observations of course performance, evaluation of student's performance in simulated practice situations, supervisors' evaluations of student's performance in clinical situations, generic abilities/professional behavior assessment, assessment of clinical skills, and adherence to the Code of Ethics. Relevant expectations are explicit in each course syllabus. Students who are not making satisfactory progress or who are not meeting program standards will be encouraged to withdraw from the program.

In this context, the term "unsatisfactory progress in the program" refers to an academic judgment made regarding the student's professional behavior. It is a judgment that the student has failed to meet academic standards rather than a judgment made on the basis of the student's violation of valid rules of conduct. Disciplinary matters are referred to the assistant dean of students.

## Required Withdrawal from the Program

If a faculty member believes that a student is not making satisfactory progress or meeting program or university standards, they should discuss the situation with the student and the student's advisor.

The department chair, after considering the advisor's recommendations and after meeting with the student will determine whether the student will be allowed to remain in the program. The department chair need not meet with the student before making a decision if the department chair has given the student reasonable opportunity to meet and the student has either failed or refused to meet. The student will be notified of the department chair's decision in writing within ten working days of the department chair's meeting with the student.

If the student is dissatisfied with the department chair's decision, they may appeal to the dean of the College of Health Professions. However, in order for an appeal to be considered, the student must submit a written notice for an appeal to the department chair within 10 working days of receiving the department chair's decision. The dean will consider the matter based on results compiled by the department chair and notify the student of this or her decision within 10 working days of receipt of the appeal from the department chair.

## Clinical Education

All students are required to complete part-time clinical education experiences in physical therapy facilities within the Central Texas area and in the Texas State Physical Therapy Clinic. The full-time clinical experiences may be completed in facilities within or outside of the Central Texas area. The additional costs of travel during the part-time experiences, as well as the cost associated with temporary relocation during the full-time experiences, are the responsibility of the student.

## Immunization Requirements

It is the policy of the College of Health Professions that each student must provide a health report completed by a physician or licensed healthcare provider, and must take specific immunizations before the

student can be placed in a clinical or internship assignment. Information on these will be provided once students are enrolled in the program.

## Background Check and Drug Screening

As a condition for placement in some professional practice sites, some students are required to have a background check and/or drug screening to meet requirements set by individual sites. Information on the background check/drug screening process will be provided by the department. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for practitioner license status following graduation.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application and additional PTCAS application
- separate PTCAS application fee
- and either
- \$80 nonrefundable application fee
- or
- \$115 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted. Transcripts issued by U.S. institutions must be submitted through PTCAS.
- minimum overall 3.0 GPA or 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in all science courses (biology, chemistry, and physics)
- minimum 3.0 GPA in all prerequisite course requirements, completed by the end of spring semester prior to enrollment (<https://www.health.txst.edu/pt/admissions/admissions-requirements.html>)
- PT experience
- PT observation hours highly recommended
- official GRE (general test only) scores with competitive scores in the verbal reasoning and quantitative reasoning section (Send GRE code to 7405)
- three forms of recommendation (2 from a licensed physical therapist)
- background check
- interview (Based on a holistic application review process that considers the applicant's life experience, underrepresented status, and academic record, qualified applicants will be invited for an interview as part of the admissions process. An admission offer will be made only to applicants who participate in an interview.)



## Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Physical Therapy (D.P.T.) degree with a major in Physical Therapy requires 99 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
PT 7114	Professional Issues	1
PT 7116	Health Promotion and Wellness in Physical Therapy I	1
PT 7125	Clinical Decision Making I	1
PT 7135	Clinical Decision Making II	1
PT 7155	Clinical Decision Making III	1
PT 7157	Research in Physical Therapy III	1
PT 7165	Clinical Decision Making IV	1
PT 7176	Health Promotion and Wellness in Physical Therapy II	1
PT 7190	Independent Study in Physical Therapy	1
PT 7197	Research in Physical Therapy IV	1
PT 7211	Anatomy I: Structural Anatomy	2
PT 7231	Anatomy II – Spine	2
PT 7241	Anatomy III - Lower Extremity	2
PT 7251	Anatomy IV - Upper Extremity	2
PT 7263	Body Systems III – Diagnostics	2
PT 7268	Advanced Therapeutic Interventions	2
PT 7274	Current Issues in Physical Therapy	2
PT 7312	Patient Care Skills I	3
PT 7313	Body Systems I – Pathology	3
PT 7326	Neuroscience I: Functional Neuroanatomy	3
PT 7327	Research in Physical Therapy I	3
PT 7328	Examination Techniques	3
PT 7333	Body Systems II – Cardiopulmonary Systems	3
PT 7336	Neuroscience II	3
PT 7346	Neuroscience III	3
PT 7347	Research in Physical Therapy II	3
PT 7356	Neuroscience IV	3
PT 7364	Management Issues	3

PT 7428	Therapeutic Interventions	4
PT 7462	Patient Care Skills II	4
PT 7539	Musculoskeletal I – Spine	5
PT 7549	Musculoskeletal II - Lower Extremity	5
PT 7559	Musculoskeletal III - Upper Extremity	5

### Clinical Education Courses

PT 7130	Clinical Education Orientation	1
PT 7150	Directed Clinical Experience	1
PT 7370	Clinical Education I	3
PT 7480	Clinical Education II	4
PT 7481	Clinical Education III	4
PT 7690	Clinical Education IV	6

**Total Hours** 99

## Comprehensive Examination Requirement

The comprehensive exam requires that students demonstrate competency in all content areas in the physical therapy curriculum. Students are required to take the written comprehensive examination in their last academic year of the program. Students must pass the comprehensive exam in at most two attempts. If the student fails to pass the comprehensive exam in two attempts, the student will retake the comprehensive exam by scheduling according to policy. The student cannot progress in the next semester of the curriculum without passing the exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Doctoral level courses in Physical Therapy:

## Courses Offered

### Physical Therapy (PT)

#### PT 7114. Professional Issues.

This course serves as an introduction to the historical, current, and future issues faced by the physical therapy profession and to the need for lifelong professional development.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PT 7116. Health Promotion and Wellness in Physical Therapy I.

This course will include an in-depth investigation of the concepts of health promotion and wellness and, based on evidence, their relationship to each other and to health and wellness outcomes. The role of, theories of, and interventions for behavior change will be explored as tools to promote health and well-being.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7125. Clinical Decision Making I.**

This course introduces students to a systematic method of clinical decision making for patient management in physical therapist practice, including examination, evaluation, intervention, communication, and documentation in a patient-centered context. Students will consider physical, psychosocial, cultural, environmental, and ethical factors in making decisions for patient case studies including the clinical application of pain neuroscience education.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7130. Clinical Education Orientation.**

This course provides an orientation to the requirements of the clinical education course sequence including patient education as well as the legal, ethical and professional requirements of physical therapy practice.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7135. Clinical Decision Making II.**

In this course, students apply a systematic method of clinical decision making to adult and pediatric patients with a variety of diagnoses using case studies. Students apply a systematic approach to ethical decision-making and gain insight into the physical therapist and physical therapist assistant team. This course includes application of pain science and an introduction to motor behavior.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7150. Directed Clinical Experience.**

This course is a structured clinical experience in which the student will demonstrate the application of knowledge and clinical skills acquired during didactic coursework in the clinical environment. This course is completed in the Texas State Physical Therapy Clinic. This course is repeatable for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PT 7155. Clinical Decision Making III.**

This course prepares students to apply a systematic method of clinical decision making to the geriatric patient. Students will consider physical, psychosocial, cultural, environmental, and ethical factors in making decisions for geriatric patient based on case studies. The course includes application of pain science for chronic pain and discussion of patient-centered end-of-life decisions.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7157. Research in Physical Therapy III.**

This course is a continuation of the DPT research sequence that culminates in a supervised project to analyze outcomes in a defined area of clinical practice. Prerequisite: PT 7327 and PT 7347 and instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**PT 7165. Clinical Decision Making IV.**

This course uses a body systems approach for students to apply previously learned knowledge and skills for differential diagnosis in the context of clinical decisions about when and how a referral to a physician or other healthcare provider is necessary. Students will identify warning signs (red flags) and urgent or life-threatening situations which require a referral to a medical specialist.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7176. Health Promotion and Wellness in Physical Therapy II.**

The role of the physical therapist in health promotion, wellness, and prevention at the community and population levels will be explored. Using the framework of a social ecological model, strategies for community assessment and prevention of disease and disability related to movement will be performed through service learning activities.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7190. Independent Study in Physical Therapy.**

An in-depth independent study of a singular problem or related problem in the dynamic field of physical therapy and health care. Emphasis will be on the relevance of the problem and the value to the participant. May be repeated twice for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PT 7197. Research in Physical Therapy IV.**

This course is a continuation of the DPT research sequence that culminates in a supervised project to analyze outcomes in a defined area of clinical practice. The course includes completion of data collection and analysis for an oral presentation and final paper. Completion of this last course is required for graduation.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7211. Anatomy I: Structural Anatomy.**

This course is an introduction to the structure and function of the human body with emphasis on the skeletal, muscular, nervous, and integumentary systems. Content includes basic neurological screening and an introduction to palpation of the human body, embryology, and vasculature.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7231. Anatomy II – Spine.**

Study of static and dynamic aspects of the vertebral column and skull including bony landmarks, muscular, ligamentous attachments, and blood and nerve supply will be studied through lecture, lab, dissection of human cadavers, and independent study.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7241. Anatomy III - Lower Extremity.**

This course is an in-depth study of the static and dynamic aspects of the lower extremity including bony landmarks, muscular/ligamentous attachments, and blood/nerve supply. These topics will be studied through lecture, lab, dissection of human cadavers, and independent study.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7251. Anatomy IV - Upper Extremity.**

Study of static and dynamic aspects of the upper extremity including bony landmarks, muscular, ligamentous attachments and blood and nerve supply studied through lecture, lab, dissection of human cadavers, and independent study.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7263. Body Systems III – Diagnostics.**

This course presents pharmacology and diagnostic imaging as related to physical therapist practice. Content emphasizes expected and adverse effects of selected medications and documentation of results of medical imaging procedures.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7268. Advanced Therapeutic Interventions.**

This course provides expansion of clinical reasoning and intervention skills for neuromusculoskeletal impairments. Advanced clinical cases, including pediatric, adult neurological and orthopaedic impairments, afford students the opportunity to hone manual and handling skills, utilize advanced forms of exercise and incorporate pain science in comprehensive patient treatment. Prerequisite: PT 7428 with a grade of "C" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7274. Current Issues in Physical Therapy.**

Current issues that are not required by accreditation and/or that are not included in other courses are presented in this course to ensure students are prepared for success in full-time clinical education experiences.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7312. Patient Care Skills I.**

This course introduces students to basic patient care skills in physical therapist practice. Topics include body mechanics, patient positioning, mobility, transfers, patient communication and instruction skills, patient rights, and documentation format.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7313. Body Systems I – Pathology.**

This course presents normal and abnormal organ system function as related to physical therapist practice with emphasis on the musculoskeletal, neuromuscular, cardiovascular/pulmonary, and integumentary systems. Content includes tissue inflammation and repair, infection, degenerative processes, and changes related to processes of aging.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7326. Neuroscience I: Functional Neuroanatomy.**

This course addresses the structure and function of the central, peripheral, and autonomic nervous systems in the context of lifespan human development.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7327. Research in Physical Therapy I.**

Three-course sequence introducing the physical therapy student to research and statistical methodologies. This initial course emphasizes the application of basic principles of the scientific method for: 1) critically reviewing physical therapy literature; 2) developing research proposals; and 3) identifying the tools necessary for analysis and assessment of clinical practice patterns.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7328. Examination Techniques.**

This course introduces foundational physical therapist examination and screening techniques for patients across the lifespan. Students will perform basic orthopedic, neurologic, cardiopulmonary, and integumentary exam and screening techniques, identify and correct or adapt to substitutions, and interpret results. An emphasis will be placed on anatomical structures, body mechanics, handling skills, professional communication, and positioning.

**3 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7333. Body Systems II – Cardiopulmonary Systems.**

This course addresses the concepts of fitness, health, wellness, and normal and abnormal function of the cardiovascular, pulmonary, and metabolic systems in physical therapist practice. Content emphasizes basic principles of care in electrocardiography, exercise testing, exercise prescription, cardiac rehabilitation, and pulmonary rehabilitation.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7336. Neuroscience II.**

This course covers examination and evaluation techniques and rehabilitation interventions for individuals with neurologic diseases, disorders, and dysfunction across the lifespan. Content emphasizes motor development, motor control, motor learning, postural control, and recovery of function in the context of relevant models of practice, models of disablement, hypothesis-oriented clinical practice, and theories of motor control.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7346. Neuroscience III.**

This course continues to cover examination and evaluation techniques and rehabilitation interventions for individuals with neurologic diseases, disorders, and dysfunction across the lifespan. Content builds on topics covered in PT 7326 and PT 7336 including motor development, motor control, motor learning, postural control, and recovery of function in the context of relevant models of practice, models of disablement, hypothesis-oriented clinical practice, and theories of motor control.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7347. Research in Physical Therapy II.**

This course is part of a 3-course sequence introducing the physical therapy student to research and statistical methodologies. This second course emphasizes the proposal writing aspect of research, building on knowledge of research methods and statistics gained in PT 7327. Includes introduction to statistical software packages used for data-analysis and generating bibliographic material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7356. Neuroscience IV.**

This course covers the physical therapy management of individuals with neurologic diseases, disorders, and dysfunction affecting postural control across the lifespan. Content emphasizes the application of relevant neuroanatomy and physiology concepts to specialized populations in rehabilitation.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7364. Management Issues.**

This course is the study of basic management theories, principles, and practices as they relate to the delivery of physical therapist practice, reimbursement resources and issues, and internal and external forces that impact physical therapist practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7370. Clinical Education I.**

This course is a full-time clinical education experience in which the student will apply the theory and clinical skills acquired during previous didactic coursework in the clinical setting.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PT 7428. Therapeutic Interventions.**

This course provides an introduction to therapeutic interventions and their role in preventing loss of, restoring, and improving movement. Students will learn how to identify the diseased/injured tissue and/or body system, and how to use targeted movement-related interventions (physical agents, soft tissue mobilization, therapeutic exercise) to enhance movement.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7462. Patient Care Skills II.**

This course covers physical therapist care of medically complex patients with multi-system involvement. Content focuses on integumentary care/wound management, acute care/ICU, orthotics, and prosthetics. Complicating factors such as age, malnutrition, pain, obesity, diabetes, and other comorbidities are included.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7480. Clinical Education II.**

This course is a full-time clinical education experience in which the student will apply the theory and clinical skills acquired during previous didactic coursework in the clinical setting.

**4 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PT 7481. Clinical Education III.**

This course is a full-time clinical education experience in which the student will apply the theory and clinical skills acquired during previous didactic coursework in the clinical setting.

**4 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PT 7539. Musculoskeletal I – Spine.**

Study of static and dynamic aspects of the vertebral column and skull studied through lecture, lab, literature review, and independent study. Knowledge and skill will be integrated to identify problems, prognosis, functional goals, and to develop comprehensive intervention programs related to the spine, including preventative health planning.

**5 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7549. Musculoskeletal II - Lower Extremity.**

Study of static structural and dynamic aspects of the lower extremity. Emphasizes the effects and affects of forces on function. Clinical decision-making involving the integration of knowledge and skill to identify problems, establish goals, and develop comprehensive physical therapy programs related to the region of study.

**5 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7559. Musculoskeletal III - Upper Extremity.**

Study of static structural and dynamic aspects of the upper extremity. Emphasizes the effects and affects of forces on function. Clinical decision-making involving the integration of knowledge and skill to identify problems, establish goals, and develop comprehensive physical therapy programs related to the region of study.

**5 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7690. Clinical Education IV.**

This course is a full-time clinical education experience in which the student will apply the theory and clinical skills acquired during previous didactic coursework in the clinical setting.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

Willow Hall Room 214  
Round Rock Campus

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**Master of Science in Respiratory Care (MSRC)**

The Master of Science in Respiratory Care (MSRC) degree is a 36-hour, online post-professional program requiring 24-hours of core Respiratory Care (RC) courses plus 12-hours in one of the two concentrations - Leadership or Polysomnography. The MSRC program will offer practicing respiratory therapists the opportunity to study advanced respiratory care topics within specific core and concentration courses. Students learn from doctoral prepared graduate faculty on subjects relevant to the field of Respiratory Care. The program will prepare respiratory therapists for roles in leadership, education, research, healthcare administration, and polysomnography. The online delivery format allows degree completion

for working therapists without having to leave their geographic location or place of employment. There are three options available for students interested in MSRC. Students can enroll in the Leadership concentration, the Polysomnography concentration, or the Leadership concentration with Polysomnography minor.

**MSRC Mission Statement**

The Master of Science in Respiratory Care (MSRC) is dedicated to excellence in teaching and research for Registered Respiratory Therapists (RRT) seeking current and emerging knowledge that may offer career advancement opportunities involving advanced leadership, management, research, clinical practice and education in the discipline of respiratory care.

**MSRC Vision Statement**

To be the respiratory care graduate program of choice for students, faculty, alumni and employers. To produce graduates with post-professional, respiratory care educational experiences that will lead to professional advancement.

**Master of Science in Respiratory Care (M.S.R.C.)**

- Major in Respiratory Care (Clinical Specialist Concentration) (<http://mycatalog.txstate.edu/graduate/health-professions/respiratory-care/respiratorycare-clinical-specialist-msrc/>)
- Major in Respiratory Care (Clinical Specialist Concentration and Minor in Polysomnography) (<http://mycatalog.txstate.edu/graduate/health-professions/respiratory-care/respiratory-care-clinical-specialist-minor-polysomnography-msrc/>)
- Major in Respiratory Care (Leadership Concentration) (p. 2351)
- Major in Respiratory Care (Leadership Concentration and Minor in Clinical Specialist) (<http://mycatalog.txstate.edu/graduate/health-professions/respiratory-care/respiratory-care-leadership-minor-clinical-specialist-msrc/>)
- Major in Respiratory Care (Leadership Concentration and Minor in Polysomnography) (p. 2354)
- Major in Respiratory Care (Polysomnography Concentration) (p. 2357)

**Program Overview**

This advanced online post-professional master's degree program offers practicing registered respiratory therapists (RRT) the opportunity to pursue current and emerging knowledge in the evolving respiratory care discipline within specific concentration areas. The program will prepare respiratory therapists seeking career advancement opportunities through graduate education for advanced respiratory care leadership roles, for healthcare-based clinical educators' positions, and for academic educators' positions in the discipline of respiratory care.

The educational objectives of the program are:

1. To provide a degree program that will prepare students for the emerging roles and functions within the respiratory care domains of leadership and clinical specializations.
2. To provide graduate level education that will prepare students to advance problem-solving skills with the ability to analyze and evaluate systems, technology, regulations, data needs to assist in creating new programs and systems, and policy development.



3. To provide a broad-based program of course work that supports the varied aspects of RC practice focusing on management, supervision, education, evidence-based medicine, and healthcare research.
4. To provide course work to prepare graduates to better serve as leaders and physician-extenders in clinical, managerial, and extended care settings.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (U.S. Citizens)
- International applicants not eligible for the NBRC RRT credential must have a baccalaureate degree in Respiratory Care/Therapy (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- proof of the RRT national credential administered through the NBRC (U.S. Citizens)
  - International students not eligible for the NBRC credential must complete their country's credentialing exam, if one exists
- resume/CV
- statement of purpose indicating ability and interest in completing the degree program
- three letters of recommendation from professionals or academics competent to assess the student's interest in pursuing a career or advancing in the field of study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52

- official IELTS (academic) scores required with a 6.5 overall with minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science in Respiratory Care (M.S.R.C.) degree with a major in Respiratory Care concentration in Leadership requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
RC 5301	Advanced Cardiopulmonary Physiology	3
RC 5302	Clinical Practice Guidelines and Respiratory Care Protocols	3
RC 5303	Respiratory Care Research Methods and Design	3
RC 5304	Cardiopulmonary Disease Patient Education	3
RC 5305	Respiratory Care Applied Research	3
RC 5306	Academic Leadership in Respiratory Care	3
RC 5307	Advanced Respiratory Care Seminar	3
RC 5308	Advanced Cardiopulmonary Diagnostics and Therapeutics	3
<b>Concentration</b>		
HA 5304	Healthcare Financial Management I	3
HA 5321	Healthcare Law and Policy	3
HA 5362	Healthcare Organizational Behavior, Theory, and Leadership	3
HS 5315	Principles of Healthcare Finance for Clinical Leaders	3
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

Students will complete a final research project and presentation that will serve as the comprehensive exam. The comprehensive exam will require design, development and implementation of an approved research project. Students must pass the comprehensive exam requirement to complete the M.S.R.C. degree.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Respiratory Care: RC

## Courses Offered

### Respiratory Care (RC)

#### RC 5211. Polysomnography Instrumentation.

Designed to teach the function, operation, and design of electroneurodiagnostic equipment. Monitoring devices, electrode application, and patient connection will be covered in detail. Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5214. Sleep Staging and Diagnostics.**

Advanced study of waveform characteristics and montage development, filters, and PSG electronics. Signal pathways, reference electrodes, impedance checking and filter settings in calibration waves will be covered. Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5215. Clinical Polysomnography-Sleep Staging.**

Advanced clinical education in sleep staging rules, light, delta and REM sleep scoring and analysis. EEG, EMG, ECG and respiratory events will be discussed in depth and are components of the polysomnogram report.

A research project and presentation will be assigned by the faculty.

Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5301. Advanced Cardiopulmonary Physiology.**

An in-depth study of cardiovascular and respiratory physiology. This course investigates pathologic physiological changes, adaptive mechanisms, and interrelationships of the cardiopulmonary systems. Students will apply advanced cardiopulmonary physiology to the management of patients requiring respiratory care services.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5302. Clinical Practice Guidelines and Respiratory Care Protocols.**

An examination of the roles of clinical practice guidelines and protocols in the continuum of patient care. Analysis of the development, modification, initiation, and evaluation of patient outcomes will be covered. Barriers to protocol practice and strategies for implementation will be explored. Evidence-based outcomes will be summarized through literature reviews.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5303. Respiratory Care Research Methods and Design.**

Provides an in-depth study of medical research including evaluation of published, peer-reviewed research designs. Students examine research articles and evaluate evidence-based research findings. Topics include: research ethics, sampling and research design, test statistics, conclusions, and practical versus statistical significance. Students will explore research protocol development, research proposals, and project management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5304. Cardiopulmonary Disease Patient Education.**

A comprehensive study of patient education and self-management of cardiopulmonary disease exacerbations including disease information, prevention and treatment. Programs for patient self-assessment, treatment efficiency, adjustment of drug regimen, behavior modification, and nicotine addiction will be examined. Methods for documenting outcomes and patient behavior modification will be covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5305. Respiratory Care Applied Research.**

This course offers an opportunity to apply research methods and design concepts. Students will design and submit a research proposal to the Texas State University's Institutional Review Board (IRB) for approval.

Prerequisite: RC 5303 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5306. Academic Leadership in Respiratory Care.**

Introduction to the foundations necessary to build a strong understanding of academic administration, fiscal planning, curriculum development, and outcomes assessment for respiratory therapist programs. Topics include preparation of annual accreditation reports, organization of clinical practice rotations, the role of advisory committees, and integration of didactic, laboratory, and clinical experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5307. Advanced Respiratory Care Seminar.**

In-depth discussion of topics related to current issues and trends in the profession and the impact on patient care services. Includes journal review, group discussion, project development, and online presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5308. Advanced Cardiopulmonary Diagnostics and Therapeutics.**

An overview of advanced cardiopulmonary diagnostic and therapeutic procedures addressing selected disorders including asthma, chronic obstructive lung diseases, restrictive lung diseases, pulmonary edema, congestive heart failure, and cardiac disorders. International disease standards and classifications established by the World Health Organization with appropriate treatment protocols will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5309. Advanced Respiratory Care Practice.**

This course is an exploration of advanced Respiratory Care topics to optimize practice in the healthcare environment. The course will address best practice recommendations and evidence-based research to enhance and expand the role of respiratory therapists. Topics will be presented through a translational medicine lens to bridge the gap between theory and practice. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5310. Fundamentals of Polysomnography.**

Introduction to the physiology of sleep, including sleep neurology, sleep architecture, and classification of sleep disorders. Review of basic cardiac physiology and ECG arrhythmia recognition. Sleep pathologies will be discussed according to etiology, pathophysiology, symptoms, diagnosis, treatment, and prognosis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**RC 5311. Advanced Mechanical Ventilation Practice.**

This course is an exploration of advanced mechanical ventilation in the acute care setting. This course will consist of in-depth review of current and emerging mechanical ventilation strategy and protocol. Mechanical ventilation content will be focused on invasive and non-invasive support mechanisms with a goal of bridging theory and practice. Evidence-based research, patient case studies, and video waveform analysis will be used to reinforce learning. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5313. Polysomnographic Therapeutic Intervention.**

In-depth study of the treatments available for sleep apnea including, CPAP, BiPAP, oxygen therapy, patient adjunctive fitting, surgical intervention, and the role of the sleep tech in titration. Special attention will be given to titration algorithms, nocturnal seizure disorder studies, REM behavior disorder studies, MSLT's, and MTW's. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**RC 5316. Respiratory Care Curriculum Development.**

This course prepares the respiratory therapist for a role as an educator in an academic and industry setting. The course focuses on building foundational knowledge of respiratory care curriculum and instruction. Topics include adult learning theory, writing objectives, online and in-person instruction, exam preparation, item analysis, and providing feedback. National organization curriculum recommendations will be integrated into the course content.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

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- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (U.S. Citizens)
- International applicants not eligible for the NBRC RRT credential must have a baccalaureate degree in Respiratory Care/Therapy (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- proof of the RRT national credential administered through the NBRC (U.S. Citizens)

- International students not eligible for the NBRC credential must complete their country's credentialing exam, if one exists
- resume/CV
- statement of purpose indicating ability and interest in completing the degree program
- three letters of recommendation from professionals or academics competent to assess the student's interest in pursuing a career or advancing in the field of study

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall with minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science in Respiratory Care (M.S.R.C.) degree with a major in Respiratory Care concentration in Leadership and a minor in Polysomnography requires 48 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
RC 5301	Advanced Cardiopulmonary Physiology	3
RC 5302	Clinical Practice Guidelines and Respiratory Care Protocols	3
RC 5303	Respiratory Care Research Methods and Design	3
RC 5304	Cardiopulmonary Disease Patient Education	3
RC 5305	Respiratory Care Applied Research	3
RC 5306	Academic Leadership in Respiratory Care	3
RC 5307	Advanced Respiratory Care Seminar	3
RC 5308	Advanced Cardiopulmonary Diagnostics and Therapeutics	3
<b>Concentration</b>		
HA 5304	Healthcare Financial Management I	3
HA 5321	Healthcare Law and Policy	3
HA 5362	Healthcare Organizational Behavior, Theory, and Leadership	3
HS 5315	Principles of Healthcare Finance for Clinical Leaders	3
<b>Minor</b>		
RC 5211	Polysomnography Instrumentation	2
RC 5214	Sleep Staging and Diagnostics	2
RC 5215	Clinical Polysomnography-Sleep Staging	2
RC 5310	Fundamentals of Polysomnography	3

RC 5313	Polysomnographic Therapeutic Intervention	3
<b>Total Hours</b>		<b>48</b>

## Comprehensive Examination Requirement

Students will complete a final research project and presentation that will serve as the comprehensive exam. The comprehensive exam will require design, development and implementation of an approved research project. Students must pass the comprehensive exam requirement to complete the M.S.R.C. degree.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Respiratory Care: RC

## Courses Offered

### Respiratory Care (RC)

#### RC 5211. Polysomnography Instrumentation.

Designed to teach the function, operation, and design of electroneurodiagnostic equipment. Monitoring devices, electrode application, and patient connection will be covered in detail. Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### RC 5214. Sleep Staging and Diagnostics.

Advanced study of waveform characteristics and montage development, filters, and PSG electronics. Signal pathways, reference electrodes, impedance checking and filter settings in calibration waves will be covered. Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### RC 5215. Clinical Polysomnography-Sleep Staging.

Advanced clinical education in sleep staging rules, light, delta and REM sleep scoring and analysis. EEG, EMG, ECG and respiratory events will be discussed in depth and are components of the polysomnogram report. A research project and presentation will be assigned by the faculty. Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### RC 5301. Advanced Cardiopulmonary Physiology.

An in-depth study of cardiovascular and respiratory physiology. This course investigates pathologic physiological changes, adaptive mechanisms, and interrelationships of the cardiopulmonary systems. Students will apply advanced cardiopulmonary physiology to the management of patients requiring respiratory care services.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5302. Clinical Practice Guidelines and Respiratory Care Protocols.**

An examination of the roles of clinical practice guidelines and protocols in the continuum of patient care. Analysis of the development, modification, initiation, and evaluation of patient outcomes will be covered. Barriers to protocol practice and strategies for implementation will be explored. Evidence-based outcomes will be summarized through literature reviews.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5303. Respiratory Care Research Methods and Design.**

Provides an in-depth study of medical research including evaluation of published, peer-reviewed research designs. Students examine research articles and evaluate evidence-based research findings. Topics include: research ethics, sampling and research design, test statistics, conclusions, and practical versus statistical significance. Students will explore research protocol development, research proposals, and project management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5304. Cardiopulmonary Disease Patient Education.**

A comprehensive study of patient education and self-management of cardiopulmonary disease exacerbations including disease information, prevention and treatment. Programs for patient self-assessment, treatment efficiency, adjustment of drug regimen, behavior modification, and nicotine addiction will be examined. Methods for documenting outcomes and patient behavior modification will be covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5305. Respiratory Care Applied Research.**

This course offers an opportunity to apply research methods and design concepts. Students will design and submit a research proposal to the Texas State University's Institutional Review Board (IRB) for approval. Prerequisite: RC 5303 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5306. Academic Leadership in Respiratory Care.**

Introduction to the foundations necessary to build a strong understanding of academic administration, fiscal planning, curriculum development, and outcomes assessment for respiratory therapist programs. Topics include preparation of annual accreditation reports, organization of clinical practice rotations, the role of advisory committees, and integration of didactic, laboratory, and clinical experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5307. Advanced Respiratory Care Seminar.**

In-depth discussion of topics related to current issues and trends in the profession and the impact on patient care services. Includes journal review, group discussion, project development, and online presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5308. Advanced Cardiopulmonary Diagnostics and Therapeutics.**

An overview of advanced cardiopulmonary diagnostic and therapeutic procedures addressing selected disorders including asthma, chronic obstructive lung diseases, restrictive lung diseases, pulmonary edema, congestive heart failure, and cardiac disorders. International disease standards and classifications established by the World Health Organization with appropriate treatment protocols will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5309. Advanced Respiratory Care Practice.**

This course is an exploration of advanced Respiratory Care topics to optimize practice in the healthcare environment. The course will address best practice recommendations and evidence-based research to enhance and expand the role of respiratory therapists. Topics will be presented through a translational medicine lens to bridge the gap between theory and practice. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5310. Fundamentals of Polysomnography.**

Introduction to the physiology of sleep, including sleep neurology, sleep architecture, and classification of sleep disorders. Review of basic cardiac physiology and ECG arrhythmia recognition. Sleep pathologies will be discussed according to etiology, pathophysiology, symptoms, diagnosis, treatment, and prognosis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**RC 5311. Advanced Mechanical Ventilation Practice.**

This course is an exploration of advanced mechanical ventilation in the acute care setting. This course will consist of in-depth review of current and emerging mechanical ventilation strategy and protocol. Mechanical ventilation content will be focused on invasive and non-invasive support mechanisms with a goal of bridging theory and practice. Evidence-based research, patient case studies, and video waveform analysis will be used to reinforce learning. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**RC 5313. Polysomnographic Therapeutic Intervention.**

In-depth study of the treatments available for sleep apnea including, CPAP, BiPAP, oxygen therapy, patient adjunctive fitting, surgical intervention, and the role of the sleep tech in titration. Special attention will be given to titration algorithms, nocturnal seizure disorder studies, REM behavior disorder studies, MSLT's, and MTW's. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**RC 5316. Respiratory Care Curriculum Development.**

This course prepares the respiratory therapist for a role as an educator in an academic and industry setting. The course focuses on building foundational knowledge of respiratory care curriculum and instruction. Topics include adult learning theory, writing objectives, online and in-person instruction, exam preparation, item analysis, and providing feedback. National organization curriculum recommendations will be integrated into the course content.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

This advanced online post-professional master's degree program offers practicing registered respiratory therapists (RRT) the opportunity to pursue current and emerging knowledge in the evolving respiratory care discipline within specific concentration areas. The program will prepare respiratory therapists seeking career advancement opportunities through graduate education for advanced respiratory care leadership roles, for healthcare-based clinical educators' positions, and for academic educators' positions in the discipline of respiratory care.

The educational objectives of the program are:

1. To provide a degree program that will prepare students for the emerging roles and functions within the respiratory care domains of leadership and clinical specializations.
2. To provide graduate level education that will prepare students to advance problem-solving skills with the ability to analyze and evaluate systems, technology, regulations, data needs to assist in creating new programs and systems, and policy development.
3. To provide a broad-based program of course work that supports the varied aspects of RC practice focusing on management, supervision, education, evidence-based medicine, and healthcare research.
4. To provide course work to prepare graduates to better serve as leaders and physician-extenders in clinical, managerial, and extended care settings.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (U.S. Citizens)
- International applicants not eligible for the NBRC RRT credential must have a baccalaureate degree in Respiratory Care/Therapy (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- proof of the RRT national credential administered through the NBRC (U.S. Citizens)
  - International students not eligible for the NBRC credential must complete their country's credentialing exam, if one exists
- resume/CV
- statement of purpose indicating ability and interest in completing the degree program
- three letters of recommendation from professionals or academics competent to assess the student's interest in pursuing a career or advancing in the field of study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#walver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall with minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science in Respiratory Care (M.S.R.C.) degree with a major in Respiratory Care concentration in Polysomnography requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
RC 5301	Advanced Cardiopulmonary Physiology	3

RC 5302	Clinical Practice Guidelines and Respiratory Care Protocols	3
RC 5303	Respiratory Care Research Methods and Design	3
RC 5304	Cardiopulmonary Disease Patient Education	3
RC 5305	Respiratory Care Applied Research	3
RC 5306	Academic Leadership in Respiratory Care	3
RC 5307	Advanced Respiratory Care Seminar	3
RC 5308	Advanced Cardiopulmonary Diagnostics and Therapeutics	3
<b>Concentration</b>		
RC 5211	Polysomnography Instrumentation	2
RC 5214	Sleep Staging and Diagnostics	2
RC 5215	Clinical Polysomnography-Sleep Staging	2
RC 5310	Fundamentals of Polysomnography	3
RC 5313	Polysomnographic Therapeutic Intervention	3
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

Students will complete a final research project and presentation that will serve as the comprehensive exam. The comprehensive exam will require design, development and implementation of an approved research project. Students must pass the comprehensive exam requirement to complete the M.S.R.C. degree.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Respiratory Care: RC

## Courses Offered

### Respiratory Care (RC)

#### RC 5211. Polysomnography Instrumentation.

Designed to teach the function, operation, and design of electroneurodiagnostic equipment. Monitoring devices, electrode application, and patient connection will be covered in detail. Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### RC 5214. Sleep Staging and Diagnostics.

Advanced study of waveform characteristics and montage development, filters, and PSG electronics. Signal pathways, reference electrodes, impedance checking and filter settings in calibration waves will be covered. Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### RC 5215. Clinical Polysomnography-Sleep Staging.

Advanced clinical education in sleep staging rules, light, delta and REM sleep scoring and analysis. EEG, EMG, ECG and respiratory events will be discussed in depth and are components of the polysomnogram report.

A research project and presentation will be assigned by the faculty.

Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### RC 5301. Advanced Cardiopulmonary Physiology.

An in-depth study of cardiovascular and respiratory physiology. This course investigates pathologic physiological changes, adaptive mechanisms, and interrelationships of the cardiopulmonary systems.

Students will apply advanced cardiopulmonary physiology to the management of patients requiring respiratory care services.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### RC 5302. Clinical Practice Guidelines and Respiratory Care Protocols.

An examination of the roles of clinical practice guidelines and protocols in the continuum of patient care. Analysis of the development, modification, initiation, and evaluation of patient outcomes will be covered. Barriers to protocol practice and strategies for implementation will be explored. Evidence-based outcomes will be summarized through literature reviews.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### RC 5303. Respiratory Care Research Methods and Design.

Provides an in-depth study of medical research including evaluation of published, peer-reviewed research designs. Students examine research articles and evaluate evidence-based research findings. Topics include: research ethics, sampling and research design, test statistics, conclusions, and practical versus statistical significance. Students will explore research protocol development, research proposals, and project management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### RC 5304. Cardiopulmonary Disease Patient Education.

A comprehensive study of patient education and self-management of cardiopulmonary disease exacerbations including disease information, prevention and treatment. Programs for patient self-assessment, treatment efficiency, adjustment of drug regimen, behavior modification, and nicotine addiction will be examined. Methods for documenting outcomes and patient behavior modification will be covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5305. Respiratory Care Applied Research.**

This course offers an opportunity to apply research methods and design concepts. Students will design and submit a research proposal to the Texas State University's Institutional Review Board (IRB) for approval. Prerequisite: RC 5303 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5306. Academic Leadership in Respiratory Care.**

Introduction to the foundations necessary to build a strong understanding of academic administration, fiscal planning, curriculum development, and outcomes assessment for respiratory therapist programs. Topics include preparation of annual accreditation reports, organization of clinical practice rotations, the role of advisory committees, and integration of didactic, laboratory, and clinical experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5307. Advanced Respiratory Care Seminar.**

In-depth discussion of topics related to current issues and trends in the profession and the impact on patient care services. Includes journal review, group discussion, project development, and online presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5308. Advanced Cardiopulmonary Diagnostics and Therapeutics.**

An overview of advanced cardiopulmonary diagnostic and therapeutic procedures addressing selected disorders including asthma, chronic obstructive lung diseases, restrictive lung diseases, pulmonary edema, congestive heart failure, and cardiac disorders. International disease standards and classifications established by the World Health Organization with appropriate treatment protocols will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5309. Advanced Respiratory Care Practice.**

This course is an exploration of advanced Respiratory Care topics to optimize practice in the healthcare environment. The course will address best practice recommendations and evidence-based research to enhance and expand the role of respiratory therapists. Topics will be presented through a translational medicine lens to bridge the gap between theory and practice. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5310. Fundamentals of Polysomnography.**

Introduction to the physiology of sleep, including sleep neurology, sleep architecture, and classification of sleep disorders. Review of basic cardiac physiology and ECG arrhythmia recognition. Sleep pathologies will be discussed according to etiology, pathophysiology, symptoms, diagnosis, treatment, and prognosis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**RC 5311. Advanced Mechanical Ventilation Practice.**

This course is an exploration of advanced mechanical ventilation in the acute care setting. This course will consist of in-depth review of current and emerging mechanical ventilation strategy and protocol. Mechanical ventilation content will be focused on invasive and non-invasive support mechanisms with a goal of bridging theory and practice. Evidence-based research, patient case studies, and video waveform analysis will be used to reinforce learning. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5313. Polysomnographic Therapeutic Intervention.**

In-depth study of the treatments available for sleep apnea including, CPAP, BiPAP, oxygen therapy, patient adjunctive fitting, surgical intervention, and the role of the sleep tech in titration. Special attention will be given to titration algorithms, nocturnal seizure disorder studies, REM behavior disorder studies, MSLT's, and MTW's. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**RC 5316. Respiratory Care Curriculum Development.**

This course prepares the respiratory therapist for a role as an educator in an academic and industry setting. The course focuses on building foundational knowledge of respiratory care curriculum and instruction. Topics include adult learning theory, writing objectives, online and in-person instruction, exam preparation, item analysis, and providing feedback. National organization curriculum recommendations will be integrated into the course content.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Dean**

Mary C. Brennan, Ph.D.

Flowers Hall Room 313

Telephone: 512-245-2317 Fax: 512-245-8291

<http://www.txstate.edu/liberalarts> (<http://www.txstate.edu/liberalarts/>)

**Associate Dean**

Emily Brunson, Ph.D.

**Associate Dean**

Elizabeth Erhart, Ph.D.

**Associate Dean**

Lucy Ditto Harney, Ph.D.

**Associate Dean**

Yongmei Lu, Ph.D.

#### Center Directors/Department Chairs/Program Directors

International Studies—Paul Hart, Ph.D.  
 Diversity and Gender Studies—Gloria Martinez, Ph.D.  
 Study of the Southwest—John Mckiernan-Gonzalez, Ph.D.  
 Anthropology—Christina Conlee, Ph.D.  
 English—Victoria L. Smith, Ph.D.  
 Geography and Environmental Studies—Jennifer Jensen, Ph.D.  
 History—Jeffrey L. Helgeson, Ph.D.  
 Philosophy—James Craig Hanks, Ph.D.  
 Political Science—Kenneth L. Grasso, Ph.D.  
 Psychology—Natalie A. Ceballos, Ph.D.  
 Sociology—Toni T. Watt, Ph.D.  
 World Languages & Literatures—Yasmine Beale-Rivaya, Ph.D.

Evans Liberal Arts Building Room 266  
 Telephone: 512-245-8272 Fax: 512-245-8076  
[www.txstate.edu/anthropology](http://www.txstate.edu/anthropology) (<http://www.txstate.edu/anthropology/>)

## Mission

The mission of the Department of Anthropology is to provide its graduate students with the methodological and theoretical foundations to conduct basic and applied research. We aim to produce professional, ethical, and productive graduates for employment in the academic and non-academic job markets. The graduate curriculum, fieldwork and externship opportunities, laboratories, and research centers provide an excellent foundation for student research, proposal writing experience, and numerous training and educational activities. We are committed to multiculturalism, the diversity of people and ideas, a spirit of inclusiveness, and a global perspective.

## Faculty Interests

Faculty in the Department of Anthropology have active research programs in the United States and around the world. Research interests in cultural anthropology include history of anthropology, anthropological theory, applied anthropology, comparative ethnic studies, design, health, gender, globalization, identity, language, religion, science and technology studies, and social media. Research interests in archaeology include hunter-gatherers, complex societies, ceramic and lithic analysis, epigraphy, iconography, geoarchaeology, curation, international heritage, and cultural resource management. Research interests in biological anthropology include skeletal biology, bioarchaeology, forensic anthropology, paleopathology, dental anthropology, primate behavioral ecology, primate conservation, and quantitative methods.

## Laboratories and Centers

The Department of Anthropology houses fully equipped laboratories and centers for training and research in cultural anthropology, archaeology, and biological anthropology. The innovative Anthropologies Lab (InnoAnth) provides opportunities for students and faculty to collaborate, learn and experiment with the innovative use of technologies and multimodal production in anthropological research. The Center for Archaeological Studies (CAS) provides student training in archaeological research in cultural resource management in Texas. The Archaeological Curation Facility (ACF) offers students curatorial training. The Center for the Arts and Symbolism in Ancient America (CASAA) is an academic center for students to study prehistoric works of ancient art in the Americas. The Anthropology Laboratory for Archaeological Research (ALAR) provides research space and equipment for students working

on archaeology in the Americas. The Forensic Anthropology Center at Texas State (FACTS) gives students hands-on experience with forensic casework, excavation and recovery methods, taphonomy and human decomposition, and laboratory analysis of human remains.

## Financial Assistance

Scholarships and fellowships are available to qualified students on a competitive basis through The Graduate College <https://www.gradcollege.txstate.edu/funding/scholarships.html>. The Department of Anthropology also has graduate instructional and teaching assistantships for qualified candidates. Please contact the master's or doctoral program coordinators, Department of Anthropology, for more information about financial assistance and the degree programs.

## Doctor of Philosophy (Ph.D.)

- Major in Applied Anthropology (p. 2360)

## Master of Arts (M.A.)

- Major in Anthropology (Archaeology Concentration Non-thesis Option) (p. 2368)
- Major in Anthropology (Archaeology Concentration Thesis Option) (<http://mycatalog.txstate.edu/graduate/liberal-arts/anthropology/archaeology-thesis-ma/>)
- Major in Anthropology (Biological Anthropology Concentration Non-thesis Option) (p. 2375)
- Major in Anthropology (Biological Anthropology Concentration Thesis Option) (<http://mycatalog.txstate.edu/graduate/liberal-arts/anthropology/biological-thesis-ma/>)
- Major in Anthropology (Cultural Anthropology Concentration Non-thesis Option) (p. 2383)
- Major in Anthropology (Cultural Anthropology Concentration Thesis Option) (<http://mycatalog.txstate.edu/graduate/liberal-arts/anthropology/culturalandlinguistic-thesis-ma/>)

## Minor

- Anthropology (p. 2390)

## Program Overview

The Department of Anthropology's doctoral program in Applied Anthropology incorporates intercultural communication, interdisciplinary understanding, research design, grant writing, project management, ethics and professional conduct, methods of data collection, and the use of theory in the interpretation of data. The curriculum emphasizes skills that will make Texas State trained applied anthropologists qualified for a broad range of non-academic and academic jobs.

## Educational Goal

Our educational goal is to produce the next generation of applied Ph.D. anthropologists—leaders in inter- and intra-disciplinary research who will help solve critical societal problems in the global 21st century. The following educational objectives are reflected in the doctoral coursework and program requirements.

- Research Techniques: With thorough experience using research technology, methods, and data analyses, graduates will have flexible tools for researching complex issues in applied anthropology. Graduates

will master these skills through intra- and interdisciplinary course work, research, and their dissertation project.

- **Theory:** By mastering historical and contemporary theory in anthropology, graduates will have a set of analytical concepts to be effective professionals in practice. Graduates will obtain these skills through intra- and interdisciplinary course work, research, and their dissertation project.
- **Professionalism:** Graduates will be able to apply ethical decision making, implement best practices, demonstrate effective leadership, become proficient in current topics in applied anthropology, have necessary skills to write competitive grants and contracts, and produce professional reports and manuscripts. Graduates will achieve these skills through intra- and interdisciplinary course work, research, and their dissertation project.

## Advising

At the time of acceptance into the program, the student will be assigned a dissertation advisor, who is a member of the doctoral faculty. Beginning in the first semester, the dissertation advisor and the doctoral program coordinator will work with the student to develop a program of study, and provide general academic and career-related advisement to the student. It is expected that students will pursue their course work and research activities in an efficient and timely manner.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- master's degree in anthropology or a closely related field from a regionally accredited university (Leveling courses with grades of B or better may be required if background course work is not sufficient.)
- official transcripts from **each institution** where course credit was granted
- competitive GPA, which typically means an overall GPA of 3.3 or higher, in all completed graduate course work
- GRE not required
- resume/CV, complete and current
- statement of purpose (3–5-page maximum, double-spaced) that includes

- the anthropological subdiscipline for which the student is applying
- background, experience, and skills
- identification of the professor(s) with whom the student would like to work
- specific dissertation research interests
- reasons for interest in the Texas State program
- readiness to complete the program in the specified time frame
- professional plans and goals
- if applicable, any crossover areas of research from other anthropological sub-disciplines
- three letters of recommendation addressing and evaluating the student's skills, academic potential, and ability to successfully complete the program in the specified time frame. Letters should be written by professors, academic instructors, and/or applied anthropology professionals.
- writing sample, such as the student's master's thesis or other sample of professional or academic writing

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Applied Anthropology requires 54 semester credit hours. Leveling courses with grades of B or better may be required if background course work is not sufficient.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ANTH 7341	Professional Ethics In Anthropology	3
ANTH 7344	Proposal Writing	3
ANTH 7397	Directed Research	3
<b>Theory</b>		
ANTH 7310	Advanced Theory in Anthropology	3
<b>Statistics</b>		
Choose 3 hours from the following:		3
BIO 7406	Statistics and Experimental Design II	
CJ 7350E	Discrete Multivariate Models	
ED 7353	Intermediate Quantitative Research Design and Analysis	



ED 7359	Seminar in Quantitative Research
GEO 7301	Advanced Quantitative Methods in Geography
SOCI 7307	Advanced Social Statistics
SOCI 7318	Seminar in Advanced Statistical Applications
<b>Research Techniques</b>	
Choose 6 hours from the following:	
ANTH 7300	Special Topics in Anthropological Methods
ANTH 7300C	Introductory Qualitative Methods
ANTH 7300D	Advanced Methods in Primatology
ANTH 7308	Cultural Resource Management
ANTH 7315	Advanced Archaeological Techniques
ANTH 7326	Technical Methods in Anthropology
ANTH 7351	GIS in Anthropology
ANTH 7352	Advanced Qualitative Methods
ANTH 7353	Applied Anthropology Methods
ANTH 7374	Advanced Human Osteology
ANTH 7376	Forensic Analysis of Human Skeletal Remains
<b>Prescribed Electives</b>	
Choose 15 hours from the following:	
ANTH 7301	Special Topics in Anthropological Studies
ANTH 7301B	Primate Conservation
ANTH 7395	Professional Externship
ANTH 7398	Collaborative Research
ANTH 7695	Professional Externship
ANTH 7995	Professional Externship
BIO 7433	Population Genetics
ISAN 7355	Database Management Systems
ENG 7314	Specializations in Professional and Technical Communication Topics
GEO 7361	Advanced Geographic Information Systems
HIST 7372	Practice of Museum Studies and Public History
HIST 7373	The Practice of Historic Preservation
HS 7356	Policy Development in the Healthcare Arena
MGT 7314	Organizational Behavior and Theory
MKT 7321	Marketing Management
PHIL 7355	Philosophy of Science
<b>Dissertation</b>	
Choose a minimum of 18 hours from the following:	
ANTH 7199	Dissertation
ANTH 7299	Dissertation
ANTH 7399	Dissertation
ANTH 7599	Dissertation
ANTH 7699	Dissertation
ANTH 7999	Dissertation
<b>Total Hours</b>	<b>54</b>

## Procedures for Prior Learning Assessment Course Credit:

Students in the Ph.D. in Applied Anthropology program are able to complete a maximum of 12 hours of course work through a prior learning assessment (PLA) evaluation process when they demonstrate mastery of applicable skills and learning outcomes. Students who have recent work, internship or externship experience, or externship opportunities while in

the program, are able to substitute this experience for course work. Note that the total number of credits earned through PLA and course transfer must not exceed 12 semester credit hours (for criteria and processes for earning transfer credit, see the relevant section in the catalog). Students who apply for PLA credit must meet the following conditions:

- The request for PLA credit must be made in the student's first year in the program.
- The student must have recent work (last five years) or externship experience in course subjects.

A portfolio of written work is used to evaluate a student's work and experience for course credit. The student provides a summary document that includes the course description for each course they are requesting PLA credit for, the student learning outcomes for the course (SLOs), and a numbered and detailed explanation of how their experience demonstrates expertise in the subject matter. In addition to the summary document, the student will include supporting materials in the form of appendices, which contain reports, peer-reviewed publications, contracts, grant proposals, etc. The explanation should include in part SLOs of each course under consideration explicitly mapped to parts of the student's supported materials that demonstrate mastery of the SLO. There should be no "double dipping" of a single aspect of a student's supporting materials mapped to more than one course SLO. In addition, if credit for several courses is requested, a single aspect of a student's supporting materials cannot be used for more than course.

The portfolio is evaluated by a PLA evaluation committee, constituted and chaired by the director of the doctoral program and including four core doctoral faculty in the student's subfield. Approval of the portfolio is required by the doctoral program director and a majority of the evaluation committee. Once approval is recommended by the department, the Ph.D. program coordinator submits a written petition to the Dean of The Graduate College to grant course credit for prior learning assessment. The petition must include the courses for which credit is requested. The petition also includes the decision of the evaluating committee and the summary document created by the student. The appendices are made available on request.

## Application for Advancement to Candidacy

When all requirements for admission to candidacy have been met (completion of the 36 semester credit hours of required course work, a minimum GPA of 3.3 with no grades less than a "B" in all course work, passing of the comprehensive or qualifying exam, and successful defense of an approved dissertation proposal) the Ph.D. program director forwards the Application for Advancement to Candidacy to the dean of The Graduate College for review and approval. This application form is available on The Graduate College website. Incomplete grades must have been resolved before approval for advancement to candidacy will be granted.

## Grade-Point Requirements for Advancement to Candidacy

A minimum GPA of 3.3 on all course work undertaken in the doctoral program is required for admission to candidacy. Grades below a "B" on any graduate course work cannot be applied toward the Ph.D. degree.

## Dissertation Proposal

The proposal must explain the anthropological significance of the research, outline the substance and scope of the dissertation research, detail the methodology to be used and survey the relevant literature.

## Comprehensive Examination

The comprehensive exam demonstrates that the student has gained mastery over substantive bodies of literature appropriate to the general topic to be addressed in the dissertation. The comprehensive exam will be based on a reading list generated by the student and agreed upon by their committee. The reading list will typically include examples of appropriate methodology, a review of literature in relevant theory, and a critical discussion of the major research question/topic. (However, other themes may also be appropriate.) A reading list will contain between 80 to 100 journal articles and chapters from edited books. An authored book will be considered the equivalent of 10 articles or book chapters. At least 60% of the reading list will come from journal articles or book chapters from edited books.

The comprehensive exam will be given in the department during two 4-hour time blocks over two consecutive weekdays. The questions for the exam will be created by the student's dissertation committee and based on the student's reading list. The number of questions may vary between 2 to 4 questions per day, but the total number of pages written by the students should not to exceed 20 double-spaced pages per day. The exam will be graded by the dissertation committee and returned within two weeks of the exam date.

## Dissertation Enrollment Requirements

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. At least 18 semester credit hours of dissertation research must be taken after having advanced to candidacy. If a student is receiving supervision on the dissertation during the summer or if the student is graduating in the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours (e.g., ANTH 7199) during the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours.

## Dissertation Time Limit

Each Ph.D. student must prepare a written dissertation proposal and defend it orally. This should be done by the time the student has completed 36 semester credit hours of required course work with a 3.3 GPA requirement, identified the dissertation committee, passed the comprehensive or qualifying exam, and successfully defended an approved dissertation proposal. After advancing to candidacy a student should complete their dissertation within five years, keeping in mind the ten-year total time limit. If the proposal defense is not passed, the student will have the option of taking a second and final defense in the following long semester. Students will be dismissed from the program if they do not pass the proposal defense the second time.

## Dissertation Committee

The student, in consultation with his/her dissertation advisor, must establish a dissertation committee that will consist of four members, including the student's dissertation committee chair, two other doctoral faculty members from the anthropology department, and one doctoral graduate faculty from another department at Texas State University or from another university. The student's dissertation committee chair will chair the committee. The student, the dissertation committee chair, and

the Dean of The Graduate College will approve the composition of the dissertation committee.

## Committee Changes

Any change to the dissertation committee must be submitted using the Dissertation Advisor/Committee Member Change Request Form for approval by the dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be downloaded from The Graduate College's website. The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the Ph.D. program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

## Dissertation Proposal

The proposal must explain the anthropological significance of the research, outline the substance and scope of the dissertation research, detail the methodology to be used, and survey the relevant literature.

## Dissertation Research and Writing

All doctoral students must complete a dissertation that must represent an original contribution to scholarship based on independent investigation. The style, organization, and mechanics of the dissertation should follow the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*. Referencing guidelines should either follow the American Anthropological Association or the guidelines from an appropriate professional journal, as deemed acceptable by the dissertation committee.

## Dissertation Defense

In the semester in which the student intends to graduate, a complete draft of the dissertation must be submitted to the dissertation committee chair 75 days prior, and to the dissertation committee members 45 days prior, to the final date for dissertation defenses (as set by The Graduate College). After the dissertation committee chair and the committee members have reviewed the draft with the student and provided comments, the student will incorporate the recommended changes into a new draft of the dissertation. When the dissertation committee chair and committee members are satisfied that the draft dissertation is defensible, the dissertation defense may be scheduled. A notice of the dissertation defense should be posted in the department 10 days prior to the defense.

The dissertation defense consists of two parts. The first part is a public presentation of the dissertation research. Notice of the defense presentation will be posted at least two weeks in advance. The second part of the defense will immediately follow the public presentation but will be restricted to the student's dissertation committee and entails an oral examination over the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation committee chair and a majority of the members of the dissertation committee. The results are stated on the Dissertation Defense Report form, and it and the Thesis/Dissertation Committee Approval form must be filed in The Graduate College before the Dean of The Graduate College gives final approval to the dissertation.

The student must submit the dissertation to The Graduate College for final approval. Specific guidelines for approval and submission of the dissertation are found in *The Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Approval and Submission of the Dissertation

Following approval and signing of the Thesis/Dissertation Committee Approval form by the members of the dissertation committee, the student must submit one copy of the dissertation to the office of The Graduate College for final approval. Specific guidelines for approval and submission of the dissertation can be obtained from the office of The Graduate College. Dissertations must be submitted in electronic format.

Doctoral level courses in Anthropology: ANTH (p. 2364)

## Courses Offered

### Anthropology (ANTH)

#### ANTH 7199. Dissertation.

Original research and writing in Applied Anthropology to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ANTH 7299. Dissertation.

Original research and writing in Applied Anthropology to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

#### ANTH 7300A. Methods in Historical Archaeology.

This course is an advanced survey of historical archaeology methods and theories that will intensively examine current trends in historical archaeology. Students will also be exposed to the material culture from historic period archaeological sites in Texas and North America.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### ANTH 7300B. Histological Analysis of Bone.

Biomechanical adaptations and important metabolic processes, such as growth and development, are recorded in bone microstructure, and can be observable long after death and the decomposition of other tissues. Histological analysis provides a way to access this record, and is therefore integral to research in forensic anthropology, bioarchaeology, and paleopathology.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### ANTH 7300C. Introductory Qualitative Methods.

This course provides instruction on qualitative methods and analysis. Students will learn through a combination of lecture and hands-on activities how to design qualitative research projects; collect qualitative data through methods such as interviews, focus groups and observations; analyze this data; and present qualitative results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### ANTH 7300D. Advanced Methods in Primatology.

In this course, students will learn about the methods used to study primates in captive and field settings, including observational and experimental methods. They will read and discuss recent publications on methods used by primatologists and apply their knowledge to provided examples as well as their own research. Related topics for discussion include research design, ethics, and inclusion in regards to methodology and primatology. Students will emerge from this course with an extensive knowledge of how to apply the appropriate methods to specific questions and hypotheses in primatology, both in the lab and in the field.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### ANTH 7300E. Curation of Archaeological Materials.

This course introduces students to current techniques and issues in the curation of museum and archaeological collections, combining discussion and presentations with applied work using Texas State's collections. Topics include the conservation, storage, and handling of artifacts; registering, documenting, and illustrating objects; and managing risk. We will also consider issues in the history, ethics, and governance of collections, as well as aspects of public outreach including exhibit design and education.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### ANTH 7300F. Gross Anatomy I.

In this class, students will master the gross human anatomy of the back, upper limb, lower limb, head and neck. Students will dissect human cadavers in the lab each day, and will learn the muscles, blood vessels, nerves, and organs of these areas.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### ANTH 7300G. Gross Anatomy II.

This course will allow students to learn the gross anatomical structures of the thorax, abdomen, pelvis and perineum. Students will dissect human cadavers in the lab each day, and will learn the muscles, blood vessels, nerves, and organs of these areas. Prerequisite: ANTH 7300F with a grade of a "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301A. Seminar in Forensic Anthropology.**

This seminar course is a critical survey of past and current research by forensic anthropologists. Through intensive review of the literature, students will understand the development of the discipline, current best practices, and new research directions within the field, and master the methods and theory used in forensic skeletal analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301B. Primate Conservation.**

This course introduces students to the diversity, distribution, and abundance of nonhuman primates. We will use principles from the field of conservation biology to examine the biological, abiotic, and anthropogenic factors related to primate extinction risk. Specifically, we will examine the various threats facing primate populations today, the ways that scientists define and monitor threatened/endangered populations, and the steps that are being taken to increase the likelihood of their survival.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301C. Design + Anthropology.**

This course will begin by exploring the anthropology of design, including the practices, implications, and expansion of design under contemporary capitalism. Students will then use this knowledge to examine the growing field of design anthropology and learn how anthropologists provide actionable insights and research for design work today.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301D. Cultural Heritage Management.**

This course introduces students to current problems and methods in the stewardship of cultural heritage, tangible and intangible, national and international. We will explore topics including ethics and law, development, tourism, public outreach and opinion, and ongoing threats to cultural heritage.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301E. The Archaeology of Hunter-Gatherers.**

This course is an overview of the development of hunter-gatherers as a focus of research in archaeology. Current methodological and theoretical approaches, especially the use of ethnographic and environmental data, will be demonstrated in an ecologically oriented survey of prehistoric hunter-gatherer research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301G. Mortuary Analysis: Perspectives on Death and Burial in the Past.**

This course on mortuary analysis examines the role of the dead within past human societies to understand social structures, cultural practices, and traditional beliefs. It integrates bioarchaeological evidence with anthropological theory, emphasizing the theoretical foundations of mortuary studies derived from archaeology, cultural anthropology, and skeletal biology. Through critical discussions and case studies, this course explores the dynamic relationship between the living and the deceased, highlighting the significance of the dead in human history.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301I. Medical Anthropology.**

This course examines the field of Medical Anthropology, reviews its primary theoretical orientations, and explores some of the health-related issues studied by medical anthropologists. The class also considers the practical nature of health-related research and how anthropologists can contribute to things like policy, treatment, and community interventions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301J. Applied Statistics Using R.**

This course introduces data science with the R language and environment. The goal is to develop foundations for statistical analysis, with special emphasis placed on the fundamentals of data science. Topics will include data organization and visualization, descriptive statistics, hypothesis testing, statistical modeling, and machine learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301K. Language in Society.**

This course examines the complexity of language variation, the social reciprocates of variation, and the significance of variation. Students will explore and correlate theoretical concepts with inclusive empirical case studies and use ethnographic methods to broadly engage the diverse use of language by individuals within society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301L. Linguistic Anthropology.**

This course enhances participants' understanding of essential topics, questions, theories, and methods in studying language and culture dynamics. Participants will learn about the crucial role that language plays in producing, reflecting, or furthering culture, and in orchestrating diverse social relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ANTH 7301M. Science, Technologies & Organizations.**

This course explores the intersection of science, technology, and organizations through foundational theories in science and technology studies (STS) and organizational anthropology. Students will examine concepts like objectivity, facts, authority, policy, infrastructure, and organizational power. The course highlights feminist STS perspectives to investigate how culture and power influence knowledge, technology, and organizations. By understanding these relationships, students will learn to apply and advocate for anthropology in multidisciplinary teams and organizations, extending their expertise beyond academic settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7302. Teaching Anthropology.**

This course is an introduction to key concepts and practices in the teaching of college-level Anthropology. It provides training in the practical aspects of classroom instruction, and is required for first-year teaching assistants. The course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ANTH 7305. Anthropological Statistics.**

In this leveling course, students learn basic quantitative statistics, how to evaluate quantitative methods presented in anthropological research papers, and be prepared for more advanced statistical methods classes. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 7308. Cultural Resource Management.**

Students will examine topics relevant to cultural resource management (CRM), especially archaeology, but also history, architecture, and cultural anthropology, done in compliance with historic preservation and environmental laws. Topics include the history of CRM, legal and regulatory framework, organization, methods, funding, and ethical and practical dilemmas.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7310. Advanced Theory in Anthropology.**

In this course students examine advanced theory in anthropology, drawing from one or more of the sub-disciplines. It includes both historical perspectives and contemporary usages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7310F. Ethnography of the US-Mexico Borderlands.**

This course examines the history, cultural development, and contemporary politics of the US-Mexican border region from interdisciplinary perspectives with a focus on critical theory and ethnography. Topics discussed will include labor migration, transnationalism, structural violence, religion and spirituality, gender, social movements, political ecology, and creative expression.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7311. Seminar in Cultural Anthropology.**

In this leveling course, students learn the historical foundations of cultural anthropology, key theories and methods, and examples of contemporary practice. Topics include evolutionism, functionalism, structuralism, ethnoscience, neo-Marxism, postmodernism, modernity, and ethno-racial formation. The course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ANTH 7312. Seminar in Biological Anthropology.**

In this leveling course, students learn the historical foundations of biological anthropology, its key theories and methods, and examples of its contemporary practice in evolutionary theory, human variation, paleoanthropology, primatology, and skeletal biology. The course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ANTH 7313. Seminar in Archaeology.**

In this leveling course, students learn the historical foundations of archaeology, its key theories and methods, and examples of its contemporary practice in New World and Old World archaeology. The course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ANTH 7315. Advanced Archaeological Techniques.**

The focus of this methods course is the analyses of archaeological materials, such as ceramics, lithics, or the images and symbols of pre-historic cultures. This course may be repeated once for credit, but no more than 6 hours will apply towards the doctoral degree.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**ANTH 7326. Technical Methods in Anthropology.**

Technical field and laboratory methods provide a suite of tools for anthropologists and related disciplines to collect and analyze data from archaeological, bioarchaeological, forensic, and other contexts. This class focuses on practical aspects of data acquisition, analysis, and management for the various instruments (geophysical, geospatial, and imaging).

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7341. Professional Ethics In Anthropology.**

Anthropologists face a variety of ethical issues as they engage in research with human and animal subjects. In this course, students will focus on many topics including review boards (IRB, IACUC), collaboration with human groups, bioethics, advocacy and activism, repatriation, intellectual property and publication, cultural heritage preservation, and workplace ethics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7344. Proposal Writing.**

In this course, students will develop the expert skills necessary to write competitive research grants and contracts for applied anthropology projects. The goal of this course is for students to write a submission-ready grant to fund their PhD dissertation research. Prerequisite: ANTH 7341 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7351. GIS in Anthropology.**

Geographic Information Systems (GIS) provide a suite of tools for anthropologists. This class focuses on practical aspects of GIS for the acquisition, analysis and interpretation of anthropological data. Students will engage in a hands-on approach to learning GIS applications through data acquisition, thematic mapping, data analysis, and spatial analysis.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7352. Advanced Qualitative Methods.**

Instruction in this course includes methods necessary to conduct applied cultural anthropology research in interdisciplinary settings. Topics include contextual interviewing, diary studies, free listing, pile sorting, panel studies and surveys. Students will also learn how to design methodologies for different types of projects, including rapid qualitative inquiries.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7353. Applied Anthropology Methods.**

This class focuses on how anthropology can solve practical problems in various disciplines, including behavioral health, education, human rights, community development, and business. Students will learn about client development, contract negotiations, project design, proposal writing, preparing deliverables, communicating results to a variety of stakeholders, teamwork, networking, and navigating ethical issues.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7374. Advanced Human Osteology.**

This course is a detailed study of the human skeleton, with focus on individuals at all life stages. Topics include biomechanics, embryology, and histology. Students will learn to identify hard tissue features and landmarks on whole and fragmentary bones and relate these to the associated soft tissue anatomy.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7376. Forensic Analysis of Human Skeletal Remains.**

This course focuses on technical case report writing and evidentiary best practices in forensic anthropological analysis of human skeletal remains. In addition to biological profile estimation techniques, research methods and theoretical foundations used for trauma analysis and taphonomic interpretation will be reviewed. Prerequisite: ANTH 5375 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7385. Seminar in Anthropology.**

This course introduces students to specialized areas of anthropological inquiry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 7395. Professional Externship.**

Under the direction of the dissertation advisor, students will conduct supervised work or research, related to their professional development, at a public or private organization. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 7397. Directed Research.**

Under the direction of the dissertation committee chair, students will prepare for their candidacy exams by developing a reading list of the theory and methods used in their anthropological sub-discipline. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 7398. Collaborative Research.**

In this course doctoral students initiate, conduct, and participate in collaborative research with graduate faculty. This course may be repeated once for credit, but not more than 6 hours will apply towards the doctoral degree. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 7399. Dissertation.**

Original research and writing in Applied Anthropology to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANTH 7599. Dissertation.**

Original research and writing in Applied Anthropology to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANTH 7695. Professional Externship.**

Under the direction of the dissertation advisor, students will conduct supervised work or research, related to their professional development, at a public or private organization. Prerequisite: Instructor approval.

**6 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 7699. Dissertation.**

Original research and writing in Applied Anthropology to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 7995. Professional Externship.**

Under the direction of the dissertation advisor, students will conduct supervised work or research, related to their professional development, at a public or private organization. Prerequisite: Instructor approval.

**9 Credit Hours. 1 Lecture Contact Hour. 40 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7999. Dissertation.**

Original research and writing in Applied Anthropology to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The purpose of the Master of Arts (M.A.) degree with a major in Anthropology at Texas State is to

1. give students the highest quality graduate-level education possible,
2. provide students interested in continuing their graduate education in Anthropology at the Ph.D. level the appropriate basis to successfully compete for entrance into top-tier programs,
3. provide students interested in non-academic careers that require, or are facilitated by, an advanced degree in Anthropology the education, tools and training necessary to secure employment, and
4. produce professional, ethical, and productive graduates.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- minimum 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV
- statement of purpose detailing the student's academic interests in one of the concentrations and identifying possible areas of anthropological research. If applicable, include any crossover areas of research from the other anthropological concentrations.
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#walver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Anthropology requires 36 semester credit hours, including a MA capstone project, via directed study or internship, with a product or deliverable that is appropriate to that work. To graduate, students are required to earn a 3.3 cumulative grade-point average (GPA) for all courses listed as Course Requirements.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ANTH 5311	Seminar in Cultural Anthropology	3
ANTH 5312	Seminar in Biological Anthropology	3
ANTH 5313	Seminar in Archaeology	3
<b>Concentration</b>		
ANTH 5305	Anthropological Statistics	3
ANTH 5315	Archaeological Artifact Identification and Analysis	3
<b>Prescribed Electives</b>		
Choose 15 hours from the following:		15
ANTH 5301	Advanced Principles of Cultural Anthropology	
ANTH 5303	Speech Analysis	
ANTH 5304	Sociolinguistics	
ANTH 5306	Anthropology and Art	
ANTH 5307	History of Evolutionary Thought	
ANTH 5308	Cultural Resource Management and Archaeology	
ANTH 5309	Culture, Medicine and the Body	
ANTH 5310	Theories and Issues in Anthropology	
ANTH 5314	Latin American Cultures	
ANTH 5316	The Origin and Evolution of Human Behavior	
ANTH 5317	Rock Art Field Methods	
ANTH 5318	Texas Archaeology	
ANTH 5320	Rise of Civilization	
ANTH 5322	Peoples and Cultures of Africa	
ANTH 5324	Mexican American Culture	
ANTH 5325	Medical Anthropology	
ANTH 5326	Field Methods in Forensic Anthropology	
ANTH 5330	Curation of Archaeological Materials	
ANTH 5332	Myths and Mound Builders	
ANTH 5333	Research Design in Biological Anthropology	

ANTH 5335	The Anthropology of Native American Belief Systems
ANTH 5336	Community Research Project
ANTH 5337	Theory in Linguistics Anthropology
ANTH 5338	Geoarchaeology
ANTH 5339	Theoretical Concepts in Archaeology
ANTH 5340	Paleoanthropology
ANTH 5341	Gross Anatomy
ANTH 5342	Primate Behavior
ANTH 5343	Human Variation & Adaptation
ANTH 5345	Archaeology of Mesoamerica
ANTH 5347	Archaeology of North America
ANTH 5349	The Incas
ANTH 5350	Gender and Sexuality in Cross Cultural Perspective
ANTH 5351	Anthropology of Peace and Violence
ANTH 5353	Applied Cultural Anthropology
ANTH 5355	Seminar in Culture Theory
ANTH 5356	Andean Civilizations
ANTH 5361	Qualitative Methods
ANTH 5363	The Art and Archaeology of the Olmec
ANTH 5373G	Research Design and Proposal Writing in Cultural Anthropology
ANTH 5374Y	Human Evolutionary Anatomy
ANTH 5374Z	Curation of Archaeological Materials
ANTH 5375	Advanced Methods in Skeletal Biology, Part I
ANTH 5376	Advanced Methods in Skeletal Biology, Part II
ANTH 5381	Paleopathology
ANTH 5390	Directed Study
ANTH 5395	Internship
May choose 6 hours of advisor-approved electives outside the department	
MA Capstone Project	6
ANTH 5390	Directed Study (may be taken twice for credit)
ANTH 5395	Internship (may be taken twice for credit)

May substitute up to 6 hours of MA Capstone Project Committee approved electives for ANTH 5390 and ANTH 5395

**Total Hours** **36**

## Comprehensive Examination Requirement

An oral MA Capstone Project defense is required. This oral defense will serve as the comprehensive examination requirement. If the MA Capstone Project Committee is not satisfied with a graduate student's oral defense, they will specify all deficiencies the student must resolve. The MA Capstone Project Committee will not sign the Master's Comprehensive Examination Report Form and the MA Capstone Project Submission Approval Form until all specified deficiencies have been resolved. Should the MA Capstone Project Committee decide to hold a second oral defense, the chair of the MA Capstone Project Committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Anthropology: ANTH

## Courses Offered

### Anthropology (ANTH)

#### ANTH 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ANTH 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ANTH 5301. Advanced Principles of Cultural Anthropology.

This course is an ethnographically-based analysis of major theoretical positions and debates in contemporary anthropology. (Stacked course with ANTH 3301.)

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ANTH 5302. Practicum in Teaching Anthropology.

An introduction to key concepts and practices in the teaching of college-level Anthropology. The course provides training in the practical aspects of classroom instruction. Required for first-year teaching and instructional assistants in the Anthropology Department. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ANTH 5303. Speech Analysis.

The focus of this course is the analysis of human speech sounds. It includes description of the acoustic properties of speech sounds, transcription of sounds using the International Phonetic Alphabet system, an understanding of the acoustic theories of speech, and practical experience in forensic speakers' identification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ANTH 5304. Sociolinguistics.

The focus of this course is on the complex interrelationships between language and other aspects of culture. Methods of sociolinguistics, theories of sociolinguistics, and current issues regarding the nature of language variation and change will be emphasized. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

#### ANTH 5305. Anthropological Statistics.

In this course students will learn how to statistically analyze anthropological data. Students will gain a firm understanding of basic quantitative statistics, will be able to evaluate quantitative methods presented in anthropological research papers, and will be prepared for classes in more advanced statistical methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ANTH 5306. Anthropology and Art.

In this course students will investigate the function of art and symbolism in pre-literate archaeological cultures that existed at the tribal and chiefdom levels of political and social development. A multidisciplinary focus will use anthropology and art historical approaches as research tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ANTH 5307. History of Evolutionary Thought.

This course discusses the impact of evolutionary discourse within the context of its history. Students will develop a thorough understanding of evolution and its importance to anthropology, as well as to other scientific disciplines.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ANTH 5308. Cultural Resource Management and Archaeology.

In this course students will examine various topics relevant to cultural resource management including state and federal laws, survey, testing, mitigation, and developing final reports.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ANTH 5309. Culture, Medicine and the Body.

This course explores how the human body, functions of the body, and the practices of medicine and healing are situated and contextualized within cultural frameworks. Case studies cover body and health-related topics over the life course, from birth to death.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ANTH 5310. Theories and Issues in Anthropology.

This course explores major theoretical and historical developments in anthropology, highlighting the discipline's unique four-field perspective that includes archaeology, biological and cultural anthropology, and anthropological linguistics. Topics stress the importance of anthropological thought in key scientific discoveries and cultural debates.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5311. Seminar in Cultural Anthropology.**

In this course, students will learn the historical foundations of cultural anthropology, its key theories and methods, and examples of its contemporary practice. Topics will include evolutionism, functionalism, structuralism, ethnoscience, neo-Marxism, postmodernism, and modernity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5312. Seminar in Biological Anthropology.**

In this course, students will learn the historical foundations of biological anthropology, its key theories and methods, and examples of its contemporary practice in evolutionary theory, human variation, paleoanthropology, primatology, and skeletal biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5313. Seminar in Archaeology.**

In this course, students will learn the historical foundations of archaeology, its key theories and methods, and examples of its contemporary practice in New World and Old World archaeology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5314. Latin American Cultures.**

Comprehensive study of cultures from Latin America. (Stacked course with ANTH 3314.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5315. Archaeological Artifact Identification and Analysis.**

This course will provide students with the skills, knowledge and ability to describe, characterize, and analyze artifacts commonly recovered from archaeological sites. Current theories covering the production and analysis of chipped and ground stone tools, ceramics, bone and other materials will be presented, and scientific analytical methods discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5316. The Origin and Evolution of Human Behavior.**

This course presents our current understanding of Old World Paleolithic Archaeology. The origin and evolution of hominid behavior, the initial colonization of the Old World, and the development of modern human behavior will be discussed for each continent. (Stacked course with ANTH 3316).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5317. Rock Art Field Methods.**

This course will train students in rock art field methods. They will gain first-hand experience recording rock art sites through photography, field sketches, mapping, and written inventories. Students will generate a visual and written description of the art, which they will use to infer and explain past human behavior. (Stacked course with ANTH 3317).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5318. Texas Archaeology.**

This course will present our current understanding of Texas archaeology. The environmental and social contexts of prehistoric, protohistoric, and historic records of Native American and Spanish occupations in Texas are discussed. (Stacked course with ANTH 3318.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5320. Rise of Civilization.**

This course examines the components that led to the dynamic state societies in Egypt, Sumeria, the Indus Valley, and China in the Old World and that of the Olmec in Mexico and Chavin in Peru. (Stacked course with ANTH 4320.)

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5322. Peoples and Cultures of Africa.**

This course is a general introduction to the contemporary peoples and cultures of Africa. Students will examine the social structure, economy, political systems, and religions of African cultures in the context of the radical economic and social transformations affecting the area. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5324. Mexican American Culture.**

This class is an exploration of Mexican American culture with an emphasis on the US-Mexico transborder region. The course integrates history, anthropology, and ethnic studies to capture the broad diversity of Mexican American experiences. Some of the topics covered include identity, social movements, Chicana feminism, transnational migration, spirituality, and cultural expressions such as visual art, film, music, and performance. (Stacked course with ANTH 3324.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**ANTH 5325. Medical Anthropology.**

This course focuses on how illness identities are culturally constructed, how adaptations or maladaptations to local environments affect health, how political and economic forces influence health and health behaviors, and how the practice of medical anthropology can contribute to solving urgent health issues around the world.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5326. Field Methods in Forensic Anthropology.**

In this course students will learn how to locate, excavate and recover human remains, associated personal effects, and other materials in order to ensure legal credibility for all recoveries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5330. Curation of Archaeological Materials.**

This course provides students with the skills to prepare archaeological materials for curation, which includes the processes and techniques used to stabilize and preserve organic and inorganic materials. This training can be used to gain certification in the field of archaeological curation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5332. Myths and Mound Builders.**

This course presents an anthropological approach to the iconography of the Native Americans of the Southeastern Ceremonial Complex. (Stacked course with ANTH 3332.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5333. Research Design in Biological Anthropology.**

This course provides students with an introduction to the principles and processes by which research projects in biological anthropology are devised and executed. It focuses on the issues of finding a topic to research, defining its scope and limitations, developing a research bibliography, and elaborating a research design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5335. The Anthropology of Native American Belief Systems.**

In this course students use anthropological approaches to investigate past and present Native American belief systems in order to determine the temporal range and evolving complexity of Native American religious and ritual expression.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5336. Community Research Project.**

This course gives students the opportunity to conduct hands-on anthropological research on a variety of topics in local communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5337. Theory in Linguistics Anthropology.**

In this course students will be introduced to the major theories of linguistics through reading and discussing classic and contemporary literatures. Particular attention will be given to how the various theories have influenced linguistic anthropology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5338. Geoarchaeology.**

This course will provide students with the knowledge and ability to interpret sediments and the nature of sediment accumulation at archaeological sites. The course will provide students with a foundation in sedimentology, natural depositional environments, weathering processes and soil development, stratigraphic analysis, archaeological site formation processes. (Stacked course with ANTH 3338).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5339. Theoretical Concepts in Archaeology.**

This course provides a broad survey of theory in archaeology as it is practiced throughout the world. It includes both historical perspectives and contemporary usage.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5340. Paleoanthropology.**

Critical review of the human fossil record from the appearance of the earliest hominins to the appearance of modern human forms. (Stacked course with ANTH 3340.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5341. Gross Anatomy.**

Students in this course examine the macroscopic structure of organs and soft and hard tissues in the human body. The course is divided into these units: back and thorax, neck and head, and upper and lower limb. Cadaver-based dissection labs accompany lecture topics.

**3 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5342. Primate Behavior.**

An organized course that examines current research in nonhuman primate studies from an anthropological perspective. (Stacked course with ANTH 3342.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5343. Human Variation and Adaptation.**

An organized course that examines human physical variation and adaptation from an evolutionary perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5345. Archaeology of Mesoamerica.**

This course examines the development of early huntergatherers through the appearance of agriculture to the rise of civilization in Mesoamerica. (Stacked course with ANTH 3345.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5346. Bioarchaeology.**

Bioarchaeology is the study of human skeletal remains in relation to the archaeological record. In this course students study theories and methods used in the analysis of archaeologically derived human skeletal remains to reconstruct patterns of subsistence, diet, disease, demography, biological relatedness, and the funerary activities of past populations. Prerequisite: ANTH 3381 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 5347. Archaeology of North America.**

This course examines human settlement of North America from the end of the Pleistocene to European discovery. (Stacked course with ANTH 3347.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5349. The Incas.**

The Incas were the largest Pre-Columbian empire in the Americas. This course will explore the origins of this civilization and how they conquered such a large area of South America. Using archaeological and historic information the class will examine various aspects of Inca society including religion, economics, and kingship. (Stacked course with ANTH 3349). (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5350. Gender and Sexuality in Cross Cultural Perspective.**

This course examines the relationships between women and men in societies around the world. (Stacked course with ANTH 3350.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5351. Anthropology of Peace and Violence.**

This class explores anthropological perspectives on peace and violence. It focuses on understanding violent practices within both traditional and current day societies including everyday violence and warfare. It explores the contributions of social structure, gender, religion, race, and ethnicity to violence. It examines efforts to build peace and reconciliation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5353. Applied Cultural Anthropology.**

This class focuses on how anthropology can solve practical problems in various disciplines, including behavioral health, education, human rights, community development, and business. Students will learn about client development, contract negotiations, project design, proposal writing, preparing deliverables, communicating results to a variety of stakeholders, teamwork, networking, and navigating ethical issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5355. Seminar in Culture Theory.**

An intensive examination of the principal theoretical positions in cultural anthropology, with an emphasis on the preparation of students with ethnographic analysis and fieldwork. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5356. Andean Civilizations.**

This course is a survey of civilizations in the Andean region of South America. Using archaeological data the class will examine cultural developments in the region from the earliest hunters and gatherers to the Inca Empire, the largest state in the Americas at the time of European contact. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5357. Historical Archaeology.**

This course is an advanced survey of historical archaeology methods and theories that will intensively examine current trends in historical archaeology. Students will also be exposed to the material culture from historic period archaeological sites in Texas and North America.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 5361. Qualitative Methods.**

This course provides instruction on qualitative methods and analysis. Students will learn through a combination of lecture and hands-on activities how to design qualitative research projects; collect qualitative data through methods such as interviews, focus groups and observations; analyze this data; and present qualitative results.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 5363. The Art and Archaeology of the Olmec.**

This course will present our current understanding of the art and archaeology of the Olmec culture, the earliest known civilization in North America. The Olmec culture is considered the influential foundation for later Mesoamerican civilizations such as the Maya and the Aztec. (Stacked course with ANTH 3363.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5373G. Research Design and Proposal Writing in Cultural Anthropology.**

This course will familiarize students with the basic principles and practices of effective research design and proposal writing in cultural anthropology. Students will acquire a practical experience in formulating a feasible and creative research project, performing a rigorous literature review, planning to protect human research subjects, and giving/receiving constructive peer reviews.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373I. Anthropology in Practice.**

This course introduces students to the application of anthropological ideas, methods, and skills in multiple employment sectors. Students will develop key job skills in communication, team work, networking, professional development, and project management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373J. Dental Anthropology and Oral Biology.**

The biological development of the cranio-facial structures will be presented with emphasis on hard tissue anatomy and diseases. Dental traits will be discussed in relation to human evolutionary concepts. Forensic methods that support identification of human remains are emphasized. This course is appropriate for anthropology students and pre-professional dentistry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373K. Nonverbal Communication-Gestures.**

Communication involves the use of 'invisible' words and gestures, or 'visible actions.' This course focuses on gestures, what they are, how they are used, what role they play in communication and in thinking, and their cultural underpinning. Students will learn the theoretical and methodological issues involved in studying different gestures across societies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373L. Cultural Heritage Management.**

This course introduces students to current problems and methods in the stewardship of cultural heritage, tangible and intangible, national and international. We will explore topics including ethics and law, development, tourism, public outreach and opinion, and ongoing threats to cultural heritage.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373M. Design + Anthropology.**

This course will begin by exploring the anthropology of design, including the practices, implications, and expansion of design under contemporary capitalism. Students will then use this knowledge to examine the growing field of design anthropology and learn how anthropologists provide actionable insights and research for design work today.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373O. Seminar on Race in Biological Anthropology.**

In this course students will learn where race concepts originated, examining the worldview and scientific mindsets that guided us into the 21st century. Students will explore how social race has become biological, drawing on literature from biological anthropology. Most importantly, students will explore pragmatic solutions in the context of anthropology research. Students will leave the course with an in-depth understanding of the role anthropology has played in current concepts of race and develop an informed scientific practice that they can apply.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373P. Science, Technologies, & Organizations.**

This course explores the intersection of science, technology, and organizations through foundational theories in science and technology studies (STS) and organizational anthropology. Students will examine concepts like objectivity, facts, authority, policy, infrastructure, and organizational power. The course highlights feminist STS perspectives to investigate how culture and power influence knowledge, technology, and organizations. By understanding these relationships, students will learn to apply and advocate for anthropology in multidisciplinary teams and organizations, extending their expertise beyond academic settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5374Y. Human Evolutionary Anatomy.**

This course is designed to give students an anatomical background to the study of human evolution with a focus on the comparative anatomy of apes, living humans, and fossil hominins.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ANTH 5374Z. Curation of Archaeological Materials.**

This course will examine the phenomenon of fundamentalism in a variety of religious traditions, both present and historical. Students will explore the political and social ramifications of fundamentalism in a world characterized by multiculturalism and globalization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ANTH 5375. Advanced Methods in Skeletal Biology, Part I.**

This course focuses on laboratory analytical techniques and data collection methods used to estimate the biological profile of modern, historic, or prehistoric human skeletal remains.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5376. Advanced Methods in Skeletal Biology, Part II.**

This course focuses on technical case report writing and evidentiary best practices in forensic anthropological analysis of human skeletal remains. In addition to biological profile estimation techniques, research methods and theoretical foundations used for trauma analysis and taphonomic interpretation will be reviewed. Prerequisite: ANTH 5375 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5381. Paleopathology.**

Paleopathology is the study of ancient diseases and is an important tool for understanding of past populations. In this course we will survey the range of pathology on human skeletons such as trauma, infection, syphilis, tuberculosis, leprosy, anemia, metabolic disturbances, arthritis, and tumors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ANTH 5382. Archaeology of the Earliest Americans.**

This course focuses on the scientific story of the first Americans: where they came from, when they arrived, and how they met the challenges of moving across the vast, unknown landscapes of North America. Topics include exploring the hemisphere's oldest sites and how people coped with changing global climates.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5385. Seminar in Anthropology.**

This course introduces students to specialized areas of anthropological inquiry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 5390. Directed Study.**

Course of independent study open to individual students at the invitation of the faculty member with the approval of the department chair and the graduate advisor. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5395. Internship.**

Under the direction of the thesis advisor and/or the internship coordinator, a student will conduct supervised work or research, related to a student's professional development, at a public or private organization. This course may be repeated once for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The purpose of the Master of Arts (M.A.) degree with a major in Anthropology at Texas State is to

1. give students the highest quality graduate-level education possible,
2. provide students interested in continuing their graduate education in Anthropology at the Ph.D. level the appropriate basis to successfully compete for entrance into top-tier programs,

3. provide students interested in non-academic careers that require, or are facilitated by, an advanced degree in Anthropology the education, tools and training necessary to secure employment, and
4. produce professional, ethical, and productive graduates.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application

• \$55 nonrefundable application fee

or

• \$90 nonrefundable application fee for applications with international credentials

• baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

• official transcripts from **each institution** where course credit was granted

• minimum 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)

• GRE not required

• resume/CV

• statement of purpose detailing the student's academic interests in one of the concentrations and identifying possible areas of anthropological research. If applicable, include any crossover areas of research from the other anthropological concentrations.

• three letters of recommendation
- ### Approved English Proficiency Exam Scores
- Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).
- official TOEFL iBT scores required with a 78 overall

• official PTE scores required with a 52 overall

• official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

• official Duolingo scores required with a 110 overall

• official TOEFL Essentials scores required with an 8.5 overall
- This program does **not** offer admission if the scores above are not met.
- ## Degree Requirements
- The Master of Arts (M.A.) degree with a major in Anthropology concentration in Biological Anthropology requires 36 semester credit
- hours, including including a MA Capstone Project, via a directed study or internship, with a product or deliverable that is appropriate to that work. To graduate, students are required to earn a 3.3 cumulative grade-point average (GPA) for all courses listed as Course Requirements.
- ## Course Requirements
- | Code                                | Title   | Hours |
|-------------------------------------|---|-------|
| Required Courses                    |   |       |
| ANTH 5311                           | Seminar in Cultural Anthropology                    | 3     |
| ANTH 5312                           | Seminar in Biological Anthropology                  | 3     |
| ANTH 5313                           | Seminar in Archaeology                              | 3     |
| Concentration                       |   |       |
| ANTH 5305                           | Anthropological Statistics                          | 3     |
| or CJ 5316                          | Quantitative Data Analysis                          |       |
| or CJ 5380Q                         | Qualitative Research Methods and Data Analysis      |       |
| or GEO 5301                         | Multivariate Quantitative Methods                   |       |
| or MATH 5305                        | Advanced Course in Probability and Statistics       |       |
| or MATH 5315                        | Mathematical Statistics                             |       |
| or MATH 5390                        | Statistics  |       |
| or PSY 5311                         | Univariate and Bivariate Statistics                 |       |
| or PSY 5321                         | Multivariate Statistics                             |       |
| or PSY 5360N                        | Advanced Statistical Methodology                    |       |
| or SOCI 5307                        | Advanced Statistics for the Social Sciences         |       |
| or SOCI 5308                        | Seminar in Quantitative Research Methods            |       |
| ANTH 5333                           | Research Design in Biological Anthropology          | 3     |
| Prescribed Electives                |   |       |
| Choose 15 hours from the following: |   | 15    |
| ANTH 5301                           | Advanced Principles of Cultural Anthropology        |       |
| ANTH 5303                           | Speech Analysis                                     |       |
| ANTH 5304                           | Sociolinguistics                                    |       |
| ANTH 5305                           | Anthropological Statistics                          |       |
| ANTH 5306                           | Anthropology and Art                                |       |
| ANTH 5307                           | History of Evolutionary Thought                     |       |
| ANTH 5308                           | Cultural Resource Management and Archaeology        |       |
| ANTH 5309                           | Culture, Medicine and the Body                      |       |
| ANTH 5310                           | Theories and Issues in Anthropology                 |       |
| ANTH 5314                           | Latin American Cultures                             |       |
| ANTH 5315                           | Archaeological Artifact Identification and Analysis |       |
| ANTH 5316                           | The Origin and Evolution of Human Behavior          |       |
| ANTH 5317                           | Rock Art Field Methods                              |       |
| ANTH 5318                           | Texas Archaeology                                   |       |
| ANTH 5320                           | Rise of Civilization                                |       |
| ANTH 5322                           | Peoples and Cultures of Africa                      |       |
| ANTH 5324                           | Mexican American Culture                            |       |
| ANTH 5325                           | Medical Anthropology                                |       |
| ANTH 5326                           | Field Methods in Forensic Anthropology              |       |
| ANTH 5330                           | Curation of Archaeological Materials                |       |
| ANTH 5332                           | Myths and Mound Builders                            |       |
| ANTH 5335                           | The Anthropology of Native American Belief Systems  |       |
| ANTH 5336                           | Community Research Project                          |       |
| ANTH 5337                           | Theory in Linguistics Anthropology                  |       |
| ANTH 5338                           | Ge archaeology                                      |       |



ANTH 5339	Theoretical Concepts in Archaeology	
ANTH 5340	Paleoanthropology	
ANTH 5341	Gross Anatomy	
ANTH 5342	Primate Behavior	
ANTH 5343	Human Variation & Adaptation	
ANTH 5345	Archaeology of Mesoamerica	
ANTH 5347	Archaeology of North America	
ANTH 5349	The Incas	
ANTH 5350	Gender and Sexuality in Cross Cultural Perspective	
ANTH 5351	Anthropology of Peace and Violence	
ANTH 5353	Applied Cultural Anthropology	
ANTH 5355	Seminar in Culture Theory	
ANTH 5356	Andean Civilizations	
ANTH 5361	Qualitative Methods	
ANTH 5363	The Art and Archaeology of the Olmec	
ANTH 5373G	Research Design and Proposal Writing in Cultural Anthropology	
ANTH 5374Y	Human Evolutionary Anatomy	
ANTH 5374Z	Curation of Archaeological Materials	
ANTH 5375	Advanced Methods in Skeletal Biology, Part I	
ANTH 5376	Advanced Methods in Skeletal Biology, Part II	
ANTH 5381	Paleopathology	
ANTH 5390	Directed Study	
ANTH 5395	Internship	
May choose 6 hours of advisor-approved electives outside the department.		
MA Capstone Project		6
ANTH 5390	Directed Study (may be taken twice for credit)	
ANTH 5395	Internship (may be taken twice for credit)	
May substitute up to 6 hours of MA Capstone Project Committee approved electives for ANTH 5390 and ANTH 5395		
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

An oral MA Capstone Project defense is required. This oral defense will serve as the comprehensive examination requirement. If the MA Capstone Project Committee is not satisfied with a graduate student's oral defense, they will specify all deficiencies the student must resolve. The MA Capstone Project Committee will not sign the Master's Comprehensive Examination Report Form and the MA Capstone Project Submission Approval Form until all specified deficiencies have been resolved. Should the MA Capstone Project Committee decide to hold a second oral defense, the chair of the MA Capstone Project Committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Anthropology: ANTH

## Courses Offered

### Anthropology (ANTH)

#### ANTH 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ANTH 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ANTH 5301. Advanced Principles of Cultural Anthropology.

This course is an ethnographically-based analysis of major theoretical positions and debates in contemporary anthropology. (Stacked course with ANTH 3301.)

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ANTH 5302. Practicum in Teaching Anthropology.

An introduction to key concepts and practices in the teaching of college-level Anthropology. The course provides training in the practical aspects of classroom instruction. Required for first-year teaching and instructional assistants in the Anthropology Department. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

#### ANTH 5303. Speech Analysis.

The focus of this course is the analysis of human speech sounds. It includes description of the acoustic properties of speech sounds, transcription of sounds using the International Phonetic Alphabet system, an understanding of the acoustic theories of speech, and practical experience in forensic speakers' identification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ANTH 5304. Sociolinguistics.

The focus of this course is on the complex interrelationships between language and other aspects of culture. Methods of sociolinguistics, theories of sociolinguistics, and current issues regarding the nature of language variation and change will be emphasized. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content  
**Grade Mode:** Standard Letter

**ANTH 5305. Anthropological Statistics.**

In this course students will learn how to statistically analyze anthropological data. Students will gain a firm understanding of basic quantitative statistics, will be able to evaluate quantitative methods presented in anthropological research papers, and will be prepared for classes in more advanced statistical methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5306. Anthropology and Art.**

In this course students will investigate the function of art and symbolism in pre-literate archaeological cultures that existed at the tribal and chiefdom levels of political and social development. A multidisciplinary focus will use anthropology and art historical approaches as research tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5307. History of Evolutionary Thought.**

This course discusses the impact of evolutionary discourse within the context of its history. Students will develop a thorough understanding of evolution and its importance to anthropology, as well as to other scientific disciplines.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5308. Cultural Resource Management and Archaeology.**

In this course students will examine various topics relevant to cultural resource management including state and federal laws, survey, testing, mitigation, and developing final reports.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5309. Culture, Medicine and the Body.**

This course explores how the human body, functions of the body, and the practices of medicine and healing are situated and contextualized within cultural frameworks. Case studies cover body and health-related topics over the life course, from birth to death.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5310. Theories and Issues in Anthropology.**

This course explores major theoretical and historical developments in anthropology, highlighting the discipline's unique four-field perspective that includes archaeology, biological and cultural anthropology, and anthropological linguistics. Topics stress the importance of anthropological thought in key scientific discoveries and cultural debates.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5311. Seminar in Cultural Anthropology.**

In this course, students will learn the historical foundations of cultural anthropology, its key theories and methods, and examples of its contemporary practice. Topics will include evolutionism, functionalism, structuralism, ethnoscience, neo-Marxism, postmodernism, and modernity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5312. Seminar in Biological Anthropology.**

In this course, students will learn the historical foundations of biological anthropology, its key theories and methods, and examples of its contemporary practice in evolutionary theory, human variation, paleoanthropology, primatology, and skeletal biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5313. Seminar in Archaeology.**

In this course, students will learn the historical foundations of archaeology, its key theories and methods, and examples of its contemporary practice in New World and Old World archaeology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5314. Latin American Cultures.**

Comprehensive study of cultures from Latin America. (Stacked course with ANTH 3314.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5315. Archaeological Artifact Identification and Analysis.**

This course will provide students with the skills, knowledge and ability to describe, characterize, and analyze artifacts commonly recovered from archaeological sites. Current theories covering the production and analysis of chipped and ground stone tools, ceramics, bone and other materials will be presented, and scientific analytical methods discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5316. The Origin and Evolution of Human Behavior.**

This course presents our current understanding of Old World Paleolithic Archaeology. The origin and evolution of hominid behavior, the initial colonization of the Old World, and the development of modern human behavior will be discussed for each continent. (Stacked course with ANTH 3316).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5317. Rock Art Field Methods.**

This course will train students in rock art field methods. They will gain first-hand experience recording rock art sites through photography, field sketches, mapping, and written inventories. Students will generate a visual and written description of the art, which they will use to infer and explain past human behavior. (Stacked course with ANTH 3317).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5318. Texas Archaeology.**

This course will present our current understanding of Texas archaeology. The environmental and social contexts of prehistoric, protohistoric, and historic records of Native American and Spanish occupations in Texas are discussed. (Stacked course with ANTH 3318.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5320. Rise of Civilization.**

This course examines the components that led to the dynamic state societies in Egypt, Sumeria, the Indus Valley, and China in the Old World and that of the Olmec in Mexico and Chavin in Peru. (Stacked course with ANTH 4320.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5322. Peoples and Cultures of Africa.**

This course is a general introduction to the contemporary peoples and cultures of Africa. Students will examine the social structure, economy, political systems, and religions of African cultures in the context of the radical economic and social transformations affecting the area. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5324. Mexican American Culture.**

This class is an exploration of Mexican American culture with an emphasis on the US-Mexico transborder region. The course integrates history, anthropology, and ethnic studies to capture the broad diversity of Mexican American experiences. Some of the topics covered include identity, social movements, Chicana feminism, transnational migration, spirituality, and cultural expressions such as visual art, film, music, and performance. (Stacked course with ANTH 3324.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5325. Medical Anthropology.**

This course focuses on how illness identities are culturally constructed, how adaptations or maladaptations to local environments affect health, how political and economic forces influence health and health behaviors, and how the practice of medical anthropology can contribute to solving urgent health issues around the world.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5326. Field Methods in Forensic Anthropology.**

In this course students will learn how to locate, excavate and recover human remains, associated personal effects, and other materials in order to ensure legal credibility for all recoveries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5330. Curation of Archaeological Materials.**

This course provides students with the skills to prepare archaeological materials for curation, which includes the processes and techniques used to stabilize and preserve organic and inorganic materials. This training can be used to gain certification in the field of archaeological curation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5332. Myths and Mound Builders.**

This course presents an anthropological approach to the iconography of the Native Americans of the Southeastern Ceremonial Complex. (Stacked course with ANTH 3332.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5333. Research Design in Biological Anthropology.**

This course provides students with an introduction to the principles and processes by which research projects in biological anthropology are devised and executed. It focuses on the issues of finding a topic to research, defining its scope and limitations, developing a research bibliography, and elaborating a research design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5335. The Anthropology of Native American Belief Systems.**

In this course students use anthropological approaches to investigate past and present Native American belief systems in order to determine the temporal range and evolving complexity of Native American religious and ritual expression.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5336. Community Research Project.**

This course gives students the opportunity to conduct hands-on anthropological research on a variety of topics in local communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5337. Theory in Linguistics Anthropology.**

In this course students will be introduced to the major theories of linguistics through reading and discussing classic and contemporary literatures. Particular attention will be given to how the various theories have influenced linguistic anthropology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5338. Geoarchaeology.**

This course will provide students with the knowledge and ability to interpret sediments and the nature of sediment accumulation at archaeological sites. The course will provide students with a foundation in sedimentology, natural depositional environments, weathering processes and soil development, stratigraphic analysis, archaeological site formation processes. (Stacked course with ANTH 3338).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5339. Theoretical Concepts in Archaeology.**

This course provides a broad survey of theory in archaeology as it is practiced throughout the world. It includes both historical perspectives and contemporary usage.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5340. Paleoanthropology.**

Critical review of the human fossil record from the appearance of the earliest hominins to the appearance of modern human forms. (Stacked course with ANTH 3340.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5341. Gross Anatomy.**

Students in this course examine the macroscopic structure of organs and soft and hard tissues in the human body. The course is divided into these units: back and thorax, neck and head, and upper and lower limb. Cadaver-based dissection labs accompany lecture topics.

**3 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5342. Primate Behavior.**

An organized course that examines current research in nonhuman primate studies from an anthropological perspective. (Stacked course with ANTH 3342.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5343. Human Variation and Adaptation.**

An organized course that examines human physical variation and adaptation from an evolutionary perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5345. Archaeology of Mesoamerica.**

This course examines the development of early huntergatherers through the appearance of agriculture to the rise of civilization in Mesoamerica. (Stacked course with ANTH 3345.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5346. Bioarchaeology.**

Bioarchaeology is the study of human skeletal remains in relation to the archaeological record. In this course students study theories and methods used in the analysis of archaeologically derived human skeletal remains to reconstruct patterns of subsistence, diet, disease, demography, biological relatedness, and the funerary activities of past populations. Prerequisite: ANTH 3381 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 5347. Archaeology of North America.**

This course examines human settlement of North America from the end of the Pleistocene to European discovery. (Stacked course with ANTH 3347.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5349. The Incas.**

The Incas were the largest Pre-Columbian empire in the Americas. This course will explore the origins of this civilization and how they conquered such a large area of South America. Using archaeological and historic information the class will examine various aspects of Inca society including religion, economics, and kingship. (Stacked course with ANTH 3349.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5350. Gender and Sexuality in Cross Cultural Perspective.**

This course examines the relationships between women and men in societies around the world. (Stacked course with ANTH 3350.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5351. Anthropology of Peace and Violence.**

This class explores anthropological perspectives on peace and violence. It focuses on understanding violent practices within both traditional and current day societies including everyday violence and warfare. It explores the contributions of social structure, gender, religion, race, and ethnicity to violence. It examines efforts to build peace and reconciliation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5353. Applied Cultural Anthropology.**

This class focuses on how anthropology can solve practical problems in various disciplines, including behavioral health, education, human rights, community development, and business. Students will learn about client development, contract negotiations, project design, proposal writing, preparing deliverables, communicating results to a variety of stakeholders, teamwork, networking, and navigating ethical issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5355. Seminar in Culture Theory.**

An intensive examination of the principal theoretical positions in cultural anthropology, with an emphasis on the preparation of students with ethnographic analysis and fieldwork. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5356. Andean Civilizations.**

This course is a survey of civilizations in the Andean region of South America. Using archaeological data the class will examine cultural developments in the region from the earliest hunters and gatherers to the Inca Empire, the largest state in the Americas at the time of European contact. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5357. Historical Archaeology.**

This course is an advanced survey of historical archaeology methods and theories that will intensively examine current trends in historical archaeology. Students will also be exposed to the material culture from historic period archaeological sites in Texas and North America.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 5361. Qualitative Methods.**

This course provides instruction on qualitative methods and analysis. Students will learn through a combination of lecture and hands-on activities how to design qualitative research projects; collect qualitative data through methods such as interviews, focus groups and observations; analyze this data; and present qualitative results.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 5363. The Art and Archaeology of the Olmec.**

This course will present our current understanding of the art and archaeology of the Olmec culture, the earliest known civilization in North America. The Olmec culture is considered the influential foundation for later Mesoamerican civilizations such as the Maya and the Aztec. (Stacked course with ANTH 3363.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5373G. Research Design and Proposal Writing in Cultural Anthropology.**

This course will familiarize students with the basic principles and practices of effective research design and proposal writing in cultural anthropology. Students will acquire a practical experience in formulating a feasible and creative research project, performing a rigorous literature review, planning to protect human research subjects, and giving/receiving constructive peer reviews.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373I. Anthropology in Practice.**

This course introduces students to the application of anthropological ideas, methods, and skills in multiple employment sectors. Students will develop key job skills in communication, team work, networking, professional development, and project management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373J. Dental Anthropology and Oral Biology.**

The biological development of the cranio-facial structures will be presented with emphasis on hard tissue anatomy and diseases. Dental traits will be discussed in relation to human evolutionary concepts. Forensic methods that support identification of human remains are emphasized. This course is appropriate for anthropology students and pre-professional dentistry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373K. Nonverbal Communication-Gestures.**

Communication involves the use of 'invisible' words and gestures, or 'visible actions.' This course focuses on gestures, what they are, how they are used, what role they play in communication and in thinking, and their cultural underpinning. Students will learn the theoretical and methodological issues involved in studying different gestures across societies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ANTH 5373L. Cultural Heritage Management.**

This course introduces students to current problems and methods in the stewardship of cultural heritage, tangible and intangible, national and international. We will explore topics including ethics and law, development, tourism, public outreach and opinion, and ongoing threats to cultural heritage.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373M. Design + Anthropology.**

This course will begin by exploring the anthropology of design, including the practices, implications, and expansion of design under contemporary capitalism. Students will then use this knowledge to examine the growing field of design anthropology and learn how anthropologists provide actionable insights and research for design work today.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373O. Seminar on Race in Biological Anthropology.**

In this course students will learn where race concepts originated, examining the worldview and scientific mindsets that guided us into the 21st century. Students will explore how social race has become biological, drawing on literature from biological anthropology. Most importantly, students will explore pragmatic solutions in the context of anthropology research. Students will leave the course with an in-depth understanding of the role anthropology has played in current concepts of race and develop an informed scientific practice that they can apply.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373P. Science, Technologies, & Organizations.**

This course explores the intersection of science, technology, and organizations through foundational theories in science and technology studies (STS) and organizational anthropology. Students will examine concepts like objectivity, facts, authority, policy, infrastructure, and organizational power. The course highlights feminist STS perspectives to investigate how culture and power influence knowledge, technology, and organizations. By understanding these relationships, students will learn to apply and advocate for anthropology in multidisciplinary teams and organizations, extending their expertise beyond academic settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5374Y. Human Evolutionary Anatomy.**

This course is designed to give students an anatomical background to the study of human evolution with a focus on the comparative anatomy of apes, living humans, and fossil hominins.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ANTH 5374Z. Curation of Archaeological Materials.**

This course will examine the phenomenon of fundamentalism in a variety of religious traditions, both present and historical. Students will explore the political and social ramifications of fundamentalism in a world characterized by multiculturalism and globalization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ANTH 5375. Advanced Methods in Skeletal Biology, Part I.**

This course focuses on laboratory analytical techniques and data collection methods used to estimate the biological profile of modern, historic, or prehistoric human skeletal remains.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5376. Advanced Methods in Skeletal Biology, Part II.**

This course focuses on technical case report writing and evidentiary best practices in forensic anthropological analysis of human skeletal remains. In addition to biological profile estimation techniques, research methods and theoretical foundations used for trauma analysis and taphonomic interpretation will be reviewed. Prerequisite: ANTH 5375 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5381. Paleopathology.**

Paleopathology is the study of ancient diseases and is an important tool for understanding of past populations. In this course we will survey the range of pathology on human skeletons such as trauma, infection, syphilis, tuberculosis, leprosy, anemia, metabolic disturbances, arthritis, and tumors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ANTH 5382. Archaeology of the Earliest Americans.**

This course focuses on the scientific story of the first Americans: where they came from, when they arrived, and how they met the challenges of moving across the vast, unknown landscapes of North America. Topics include exploring the hemisphere's oldest sites and how people coped with changing global climates.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5385. Seminar in Anthropology.**

This course introduces students to specialized areas of anthropological inquiry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 5390. Directed Study.**

Course of independent study open to individual students at the invitation of the faculty member with the approval of the department chair and the graduate advisor. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5395. Internship.**

Under the direction of the thesis advisor and/or the internship coordinator, a student will conduct supervised work or research, related to a student's professional development, at a public or private organization. This course may be repeated once for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The purpose of the Master of Arts (M.A.) degree with a major in Anthropology at Texas State is to

1. give students the highest quality graduate-level education possible,
2. provide students interested in continuing their graduate education in Anthropology at the Ph.D. level the appropriate basis to successfully compete for entrance into top-tier programs,

3. provide students interested in non-academic careers that require, or are facilitated by, an advanced degree in Anthropology the education, tools and training necessary to secure employment, and
4. produce professional, ethical, and productive graduates.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- minimum 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV
- statement of purpose detailing the student's academic interests in one of the concentrations and identifying possible areas of anthropological research. If applicable, include any crossover areas of research from the other anthropological concentrations.
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Anthropology concentration in Cultural Anthropology requires 36 semester credit hours,

including a MA capstone project, via a directed study or internship, with a product or deliverable that is appropriate to that work. To graduate, students are required to earn a 3.3 cumulative grade-point average (GPA) for all courses listed as Course Requirements.

Course Requirement

Code	Title	Hours
Required Courses		
ANTH 5311	Seminar in Cultural Anthropology	3
ANTH 5312	Seminar in Biological Anthropology	3
ANTH 5313	Seminar in Archaeology	3
Concentration		
ANTH 5361	Qualitative Methods	3
Prescribed Electives		
Choose 18 hours from the following:		18
ANTH 5301	Advanced Principles of Cultural Anthropology	
ANTH 5303	Speech Analysis	
ANTH 5304	Sociolinguistics	
ANTH 5305	Anthropological Statistics	
ANTH 5306	Anthropology and Art	
ANTH 5307	History of Evolutionary Thought	
ANTH 5308	Cultural Resource Management and Archaeology	
ANTH 5309	Culture, Medicine and the Body	
ANTH 5310	Theories and Issues in Anthropology	
ANTH 5314	Latin American Cultures	
ANTH 5315	Archaeological Artifact Identification and Analysis	
ANTH 5316	The Origin and Evolution of Human Behavior	
ANTH 5317	Rock Art Field Methods	
ANTH 5318	Texas Archaeology	
ANTH 5320	Rise of Civilization	
ANTH 5322	Peoples and Cultures of Africa	
ANTH 5324	Mexican American Culture	
ANTH 5325	Medical Anthropology	
ANTH 5326	Field Methods in Forensic Anthropology	
ANTH 5330	Curation of Archaeological Materials	
ANTH 5332	Myths and Mound Builders	
ANTH 5333	Research Design in Biological Anthropology	
ANTH 5335	The Anthropology of Native American Belief Systems	
ANTH 5336	Community Research Project	
ANTH 5337	Theory in Linguistics Anthropology	
ANTH 5338	Geoarchaeology	
ANTH 5339	Theoretical Concepts in Archaeology	
ANTH 5340	Paleoanthropology	
ANTH 5341	Gross Anatomy	
ANTH 5342	Primate Behavior	
ANTH 5343	Human Variation & Adaptation	
ANTH 5345	Archaeology of Mesoamerica	
ANTH 5347	Archaeology of North America	
ANTH 5349	The Incas	
ANTH 5350	Gender and Sexuality in Cross Cultural Perspective	
ANTH 5351	Anthropology of Peace and Violence	
ANTH 5353	Applied Cultural Anthropology	

ANTH 5355	Seminar in Culture Theory	
ANTH 5356	Andean Civilizations	
ANTH 5363	The Art and Archaeology of the Olmec	
ANTH 5373G	Research Design and Proposal Writing in Cultural Anthropology	
ANTH 5374Y	Human Evolutionary Anatomy	
ANTH 5374Z	Curation of Archaeological Materials	
ANTH 5375	Advanced Methods in Skeletal Biology, Part I	
ANTH 5376	Advanced Methods in Skeletal Biology, Part II	
ANTH 5381	Paleopathology	
ANTH 5390	Directed Study	
ANTH 5395	Internship	
May choose 6 hours of advisor-approved electives outside the department.		
MA Capstone Project		6
ANTH 5390	Directed Study (may be taken twice for credit)	
ANTH 5395	Internship (may be taken twice for credit)	
May substitute up to 6 hours of MA Capstone Project Committee approved electives for ANTH 5390 and ANTH 5395		
Total Hours		36

Comprehensive Examination Requirement

An oral MA Capstone Project defense is required. This oral defense will serve as the comprehensive examination requirement. If the MA Capstone Project Committee is not satisfied with a graduate student’s oral defense, they will specify all deficiencies the student must resolve. The MA Capstone Project Committee will not sign the Master’s Comprehensive Examination Report Form and the MA Capstone Project Submission Approval Form until all specified deficiencies have been resolved. Should the MA Capstone Project Committee decide to hold a second oral defense, the chair of the MA Capstone Project Committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master’s level courses in Anthropology: ANTH

Courses Offered Anthropology (ANTH)

ANTH 5199B. Thesis. This course represents a student’s continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no credit (F) basis. 1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours. Grade Mode: Credit/No Credit

ANTH 5299B. Thesis. This course represents a student’s continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no credit (F) basis. 2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Credit/No Credit

**ANTH 5301. Advanced Principles of Cultural Anthropology.**

This course is an ethnographically-based analysis of major theoretical positions and debates in contemporary anthropology. (Stacked course with ANTH 3301.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5302. Practicum in Teaching Anthropology.**

An introduction to key concepts and practices in the teaching of college-level Anthropology. The course provides training in the practical aspects of classroom instruction. Required for first-year teaching and instructional assistants in the Anthropology Department. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ANTH 5303. Speech Analysis.**

The focus of this course is the analysis of human speech sounds. It includes description of the acoustic properties of speech sounds, transcription of sounds using the International Phonetic Alphabet system, an understanding of the acoustic theories of speech, and practical experience in forensic speakers' identification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5304. Sociolinguistics.**

The focus of this course is on the complex interrelationships between language and other aspects of culture. Methods of sociolinguistics, theories of sociolinguistics, and current issues regarding the nature of language variation and change will be emphasized. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5305. Anthropological Statistics.**

In this course students will learn how to statistically analyze anthropological data. Students will gain a firm understanding of basic quantitative statistics, will be able to evaluate quantitative methods presented in anthropological research papers, and will be prepared for classes in more advanced statistical methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5306. Anthropology and Art.**

In this course students will investigate the function of art and symbolism in pre-literate archaeological cultures that existed at the tribal and chiefdom levels of political and social development. A multidisciplinary focus will use anthropology and art historical approaches as research tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5307. History of Evolutionary Thought.**

This course discusses the impact of evolutionary discourse within the context of its history. Students will develop a thorough understanding of evolution and its importance to anthropology, as well as to other scientific disciplines.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5308. Cultural Resource Management and Archaeology.**

In this course students will examine various topics relevant to cultural resource management including state and federal laws, survey, testing, mitigation, and developing final reports.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5309. Culture, Medicine and the Body.**

This course explores how the human body, functions of the body, and the practices of medicine and healing are situated and contextualized within cultural frameworks. Case studies cover body and health-related topics over the life course, from birth to death.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5310. Theories and Issues in Anthropology.**

This course explores major theoretical and historical developments in anthropology, highlighting the discipline's unique four-field perspective that includes archaeology, biological and cultural anthropology, and anthropological linguistics. Topics stress the importance of anthropological thought in key scientific discoveries and cultural debates.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5311. Seminar in Cultural Anthropology.**

In this course, students will learn the historical foundations of cultural anthropology, its key theories and methods, and examples of its contemporary practice. Topics will include evolutionism, functionalism, structuralism, ethnoscience, neo-Marxism, postmodernism, and modernity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5312. Seminar in Biological Anthropology.**

In this course, students will learn the historical foundations of biological anthropology, its key theories and methods, and examples of its contemporary practice in evolutionary theory, human variation, paleoanthropology, primatology, and skeletal biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5313. Seminar in Archaeology.**

In this course, students will learn the historical foundations of archaeology, its key theories and methods, and examples of its contemporary practice in New World and Old World archaeology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5314. Latin American Cultures.**

Comprehensive study of cultures from Latin America. (Stacked course with ANTH 3314.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5315. Archaeological Artifact Identification and Analysis.**

This course will provide students with the skills, knowledge and ability to describe, characterize, and analyze artifacts commonly recovered from archaeological sites. Current theories covering the production and analysis of chipped and ground stone tools, ceramics, bone and other materials will be presented, and scientific analytical methods discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5316. The Origin and Evolution of Human Behavior.**

This course presents our current understanding of Old World Paleolithic Archaeology. The origin and evolution of hominid behavior, the initial colonization of the Old World, and the development of modern human behavior will be discussed for each continent. (Stacked course with ANTH 3316).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5317. Rock Art Field Methods.**

This course will train students in rock art field methods. They will gain first-hand experience recording rock art sites through photography, field sketches, mapping, and written inventories. Students will generate a visual and written description of the art, which they will use to infer and explain past human behavior. (Stacked course with ANTH 3317).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5318. Texas Archaeology.**

This course will present our current understanding of Texas archaeology. The environmental and social contexts of prehistoric, protohistoric, and historic records of Native American and Spanish occupations in Texas are discussed. (Stacked course with ANTH 3318.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5320. Rise of Civilization.**

This course examines the components that led to the dynamic state societies in Egypt, Sumeria, the Indus Valley, and China in the Old World and that of the Olmec in Mexico and Chavin in Peru. (Stacked course with ANTH 4320.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5322. Peoples and Cultures of Africa.**

This course is a general introduction to the contemporary peoples and cultures of Africa. Students will examine the social structure, economy, political systems, and religions of African cultures in the context of the radical economic and social transformations affecting the area. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5324. Mexican American Culture.**

This class is an exploration of Mexican American culture with an emphasis on the US-Mexico transborder region. The course integrates history, anthropology, and ethnic studies to capture the broad diversity of Mexican American experiences. Some of the topics covered include identity, social movements, Chicana feminism, transnational migration, spirituality, and cultural expressions such as visual art, film, music, and performance. (Stacked course with ANTH 3324.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5325. Medical Anthropology.**

This course focuses on how illness identities are culturally constructed, how adaptations or maladaptations to local environments affect health, how political and economic forces influence health and health behaviors, and how the practice of medical anthropology can contribute to solving urgent health issues around the world.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5326. Field Methods in Forensic Anthropology.**

In this course students will learn how to locate, excavate and recover human remains, associated personal effects, and other materials in order to ensure legal credibility for all recoveries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5330. Curation of Archaeological Materials.**

This course provides students with the skills to prepare archaeological materials for curation, which includes the processes and techniques used to stabilize and preserve organic and inorganic materials. This training can be used to gain certification in the field of archaeological curation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ANTH 5332. Myths and Mound Builders.**

This course presents an anthropological approach to the iconography of the Native Americans of the Southeastern Ceremonial Complex. (Stacked course with ANTH 3332.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5333. Research Design in Biological Anthropology.**

This course provides students with an introduction to the principles and processes by which research projects in biological anthropology are devised and executed. It focuses on the issues of finding a topic to research, defining its scope and limitations, developing a research bibliography, and elaborating a research design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5335. The Anthropology of Native American Belief Systems.**

In this course students use anthropological approaches to investigate past and present Native American belief systems in order to determine the temporal range and evolving complexity of Native American religious and ritual expression.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5336. Community Research Project.**

This course gives students the opportunity to conduct hands-on anthropological research on a variety of topics in local communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5337. Theory in Linguistics Anthropology.**

In this course students will be introduced to the major theories of linguistics through reading and discussing classic and contemporary literatures. Particular attention will be given to how the various theories have influenced linguistic anthropology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5338. Geoarchaeology.**

This course will provide students with the knowledge and ability to interpret sediments and the nature of sediment accumulation at archaeological sites. The course will provide students with a foundation in sedimentology, natural depositional environments, weathering processes and soil development, stratigraphic analysis, archaeological site formation processes. (Stacked course with ANTH 3338).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5339. Theoretical Concepts in Archaeology.**

This course provides a broad survey of theory in archaeology as it is practiced throughout the world. It includes both historical perspectives and contemporary usage.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5340. Paleoanthropology.**

Critical review of the human fossil record from the appearance of the earliest hominins to the appearance of modern human forms. (Stacked course with ANTH 3340.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5341. Gross Anatomy.**

Students in this course examine the macroscopic structure of organs and soft and hard tissues in the human body. The course is divided into these units: back and thorax, neck and head, and upper and lower limb. Cadaver-based dissection labs accompany lecture topics.

**3 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5342. Primate Behavior.**

An organized course that examines current research in nonhuman primate studies from an anthropological perspective. (Stacked course with ANTH 3342.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5343. Human Variation and Adaptation.**

An organized course that examines human physical variation and adaptation from an evolutionary perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5345. Archaeology of Mesoamerica.**

This course examines the development of early huntergatherers through the appearance of agriculture to the rise of civilization in Mesoamerica. (Stacked course with ANTH 3345.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5346. Bioarchaeology.**

Bioarchaeology is the study of human skeletal remains in relation to the archaeological record. In this course students study theories and methods used in the analysis of archaeologically derived human skeletal remains to reconstruct patterns of subsistence, diet, disease, demography, biological relatedness, and the funerary activities of past populations. Prerequisite: ANTH 3381 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 5347. Archaeology of North America.**

This course examines human settlement of North America from the end of the Pleistocene to European discovery. (Stacked course with ANTH 3347.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5349. The Incas.**

The Incas were the largest Pre-Columbian empire in the Americas.

This course will explore the origins of this civilization and how they conquered such a large area of South America. Using archaeological and historic information the class will examine various aspects of Inca society including religion, economics, and kingship. (Stacked course with ANTH 3349). (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5350. Gender and Sexuality in Cross Cultural Perspective.**

This course examines the relationships between women and men in societies around the world. (Stacked course with ANTH 3350.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5351. Anthropology of Peace and Violence.**

This class explores anthropological perspectives on peace and violence. It focuses on understanding violent practices within both traditional and current day societies including everyday violence and warfare. It explores the contributions of social structure, gender, religion, race, and ethnicity to violence. It examines efforts to build peace and reconciliation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5353. Applied Cultural Anthropology.**

This class focuses on how anthropology can solve practical problems in various disciplines, including behavioral health, education, human rights, community development, and business. Students will learn about client development, contract negotiations, project design, proposal writing, preparing deliverables, communicating results to a variety of stakeholders, teamwork, networking, and navigating ethical issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5355. Seminar in Culture Theory.**

An intensive examination of the principal theoretical positions in cultural anthropology, with an emphasis on the preparation of students with ethnographic analysis and fieldwork. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5356. Andean Civilizations.**

This course is a survey of civilizations in the Andean region of South America. Using archaeological data the class will examine cultural developments in the region from the earliest hunters and gatherers to the Inca Empire, the largest state in the Americas at the time of European contact. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5357. Historical Archaeology.**

This course is an advanced survey of historical archaeology methods and theories that will intensively examine current trends in historical archaeology. Students will also be exposed to the material culture from historic period archaeological sites in Texas and North America.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 5361. Qualitative Methods.**

This course provides instruction on qualitative methods and analysis. Students will learn through a combination of lecture and hands-on activities how to design qualitative research projects; collect qualitative data through methods such as interviews, focus groups and observations; analyze this data; and present qualitative results.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 5363. The Art and Archaeology of the Olmec.**

This course will present our current understanding of the art and archaeology of the Olmec culture, the earliest known civilization in North America. The Olmec culture is considered the influential foundation for later Mesoamerican civilizations such as the Maya and the Aztec. (Stacked course with ANTH 3363.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5373G. Research Design and Proposal Writing in Cultural Anthropology.**

This course will familiarize students with the basic principles and practices of effective research design and proposal writing in cultural anthropology. Students will acquire a practical experience in formulating a feasible and creative research project, performing a rigorous literature review, planning to protect human research subjects, and giving/receiving constructive peer reviews.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373I. Anthropology in Practice.**

This course introduces students to the application of anthropological ideas, methods, and skills in multiple employment sectors. Students will develop key job skills in communication, team work, networking, professional development, and project management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373J. Dental Anthropology and Oral Biology.**

The biological development of the cranio-facial structures will be presented with emphasis on hard tissue anatomy and diseases. Dental traits will be discussed in relation to human evolutionary concepts. Forensic methods that support identification of human remains are emphasized. This course is appropriate for anthropology students and pre-professional dentistry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373K. Nonverbal Communication-Gestures.**

Communication involves the use of 'invisible' words and gestures, or 'visible actions.' This course focuses on gestures, what they are, how they are used, what role they play in communication and in thinking, and their cultural underpinning. Students will learn the theoretical and methodological issues involved in studying different gestures across societies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373L. Cultural Heritage Management.**

This course introduces students to current problems and methods in the stewardship of cultural heritage, tangible and intangible, national and international. We will explore topics including ethics and law, development, tourism, public outreach and opinion, and ongoing threats to cultural heritage.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373M. Design + Anthropology.**

This course will begin by exploring the anthropology of design, including the practices, implications, and expansion of design under contemporary capitalism. Students will then use this knowledge to examine the growing field of design anthropology and learn how anthropologists provide actionable insights and research for design work today.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373O. Seminar on Race in Biological Anthropology.**

In this course students will learn where race concepts originated, examining the worldview and scientific mindsets that guided us into the 21st century. Students will explore how social race has become biological, drawing on literature from biological anthropology. Most importantly, students will explore pragmatic solutions in the context of anthropology research. Students will leave the course with an in-depth understanding of the role anthropology has played in current concepts of race and develop an informed scientific practice that they can apply.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373P. Science, Technologies, & Organizations.**

This course explores the intersection of science, technology, and organizations through foundational theories in science and technology studies (STS) and organizational anthropology. Students will examine concepts like objectivity, facts, authority, policy, infrastructure, and organizational power. The course highlights feminist STS perspectives to investigate how culture and power influence knowledge, technology, and organizations. By understanding these relationships, students will learn to apply and advocate for anthropology in multidisciplinary teams and organizations, extending their expertise beyond academic settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5374Y. Human Evolutionary Anatomy.**

This course is designed to give students an anatomical background to the study of human evolution with a focus on the comparative anatomy of apes, living humans, and fossil hominins.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ANTH 5374Z. Curation of Archaeological Materials.**

This course will examine the phenomenon of fundamentalism in a variety of religious traditions, both present and historical. Students will explore the political and social ramifications of fundamentalism in a world characterized by multiculturalism and globalization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ANTH 5375. Advanced Methods in Skeletal Biology, Part I.**

This course focuses on laboratory analytical techniques and data collection methods used to estimate the biological profile of modern, historic, or prehistoric human skeletal remains.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5376. Advanced Methods in Skeletal Biology, Part II.**

This course focuses on technical case report writing and evidentiary best practices in forensic anthropological analysis of human skeletal remains. In addition to biological profile estimation techniques, research methods and theoretical foundations used for trauma analysis and taphonomic interpretation will be reviewed. Prerequisite: ANTH 5375 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ANTH 5381. Paleopathology.**

Paleopathology is the study of ancient diseases and is an important tool for understanding of past populations. In this course we will survey the range of pathology on human skeletons such as trauma, infection, syphilis, tuberculosis, leprosy, anemia, metabolic disturbances, arthritis, and tumors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Topics  
**Grade Mode:** Standard Letter

**ANTH 5382. Archaeology of the Earliest Americans.**

This course focuses on the scientific story of the first Americans: where they came from, when they arrived, and how they met the challenges of moving across the vast, unknown landscapes of North America. Topics include exploring the hemisphere's oldest sites and how people coped with changing global climates.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ANTH 5385. Seminar in Anthropology.**

This course introduces students to specialized areas of anthropological inquiry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**ANTH 5390. Directed Study.**

Course of independent study open to individual students at the invitation of the faculty member with the approval of the department chair and the graduate advisor. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**ANTH 5395. Internship.**

Under the direction of the thesis advisor and/or the internship coordinator, a student will conduct supervised work or research, related to a student's professional development, at a public or private organization. This course may be repeated once for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**ANTH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**ANTH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**ANTH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**ANTH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

The graduate minor in Anthropology requires 9 semester credit hours of Anthropology graduate advisor-approved master's level ANTH courses.

Trauth-Huffman Hall Room 478

T: 512.245.2361

<https://www.txstate.edu/cdgs> (<https://www.txstate.edu/cdgs/>)

The Center for Diversity and Gender Studies in the College of Liberal Arts administers the Diversity Studies minor, African American Studies minor, and the Women's Studies minor at the graduate level. The Center offers academic courses that help prepare students to work and live in a pluralistic society. In addition, it assists faculty with resources and professional development activities to encourage the infusion of multiculturalism in the curriculum through a Multicultural Curriculum Transformation and Research Institute. It houses a resource area with more than 1000 books, articles, and syllabi. The director of the Center works in collaboration with an advisory council of faculty, staff, and students representing several Texas State colleges and departments.

These minors will:

- Prepare students with a unique body of knowledge, cultural competence, and communication skills that will prepare them for a diverse and changing workforce.
- Enrich students' learning about cultural pluralism and improve their interpersonal and professional skills.
- Offer students a well-rounded liberal arts education and a greater understanding of their cultural history and traditions.

## Minors

- Diversity Studies (p. 2391)
- Women's, Gender, and Sexuality Studies (p. 2391)

The graduate minor in Diversity Studies requires 9 semester credit hours.

The Diversity Studies minor is an interdisciplinary program that encourages students to increase their knowledge of their own culture as well as the cultures of diverse groups in the United States and our global society. The minor offers opportunities to learn about cultural variation in human behavior across different cultures, and about theories and methods of how to work and conduct research with culturally diverse populations using a global perspective. Students will explore issues related to race, ethnicity, gender, religion, age, sexual orientation, and physical ability and disability in these specialized topics.

Code	Title	Hours
<b>Required Courses</b>		
DVST 5310	Diversity Studies: Theories & Issues	3
DVST 5320	Global Issues in Diversity	3
<b>Prescribed Electives</b>		
Choose 3 hours from the following:		3
ANTH 5314	Latin American Cultures	
ANTH 5322	Peoples and Cultures of Africa	
ANTH 5324	Mexican American Culture	
ANTH 5350	Gender and Sexuality in Cross Cultural Perspective	
BILG 5388	The Politics of Language	
CI 5310	Creativity: Theories, Research, Practices, and Issues	
CI 5330	Multicultural Teaching and Learning	
CJ 5333	Race, Class, and Crime	
CJ 7313	Race and Ethnicity in Crime and Criminal Justice	
COMM 5325	Seminar in Human Communication Theory	
COMM 5356	Gender and Communication	
ENG 5300	Language Problems in a Multicultural Environment	
ENG 5317	Specializations in Rhetoric and Composition	
ENG 5345	Southwestern Studies I: Defining the Region	
ENG 5346	Southwestern Studies II: Consequences of Region	
ENG 5383	Studies in Rhetorical Theory	
ENG 5395	Problems in Language and Literature	
GEO 5304	Qualitative Research Methods	
GEO 5349	Population Geography	
HIST 5314	Ethnohistory	
HIST 5315A	American Sexualities	
HIST 5315B	Queer History: GLBT Histories in the United States	
HIST 5316B	Women and Empire	
HIST 5323A	Society and Culture in Brazil	
HIST 5324B	Race, Class, and Nation in Modern Latin America	
HIST 5324C	Slavery and Emancipation in the Americas	
HIST 5325A	History of Mexico to 1848	
HIST 5345N	Transformation of the South	
HIST 5369	Music and Social Movements	
HIST 5345O	Immigration and US History	
HIST 5345Q	Gender and Citizenship	

HIST 5346	African American History
HIST 5351C	Race, Gender, and Ethnicity in American Labor History
HIST 5351F	US Women's History
HIST 5382	China and the Modern World
HIST 5395E	Mahatma Gandhi in World History
MC 5301	Mass Media and Society
MC 5309	Gender, Race, and Class in the Media
MC 5310	Global Media Issues
MC 5321	Latinos and Media
MC 5322	Global Media Strategy in Advertising and Public Relations
PHIL 5373	Themes in Africana Philosophy
PSY 5360P	Psychology of Culture and Diversity
RDG 5350	Literacy as Sociocultural Practice
SOCI 5350	Seminar on the Sociology of Gender
SOCI 5361	Aging and Dementia: Racial and Ethnic Minorities
SOCI 5370	Seminar in Sociology of Racial and Ethnic Relations
SOCI 5388B	
SOCI 5388F	Seminar in Poverty
SOCI 5390	Seminar in Globalization and Development
WS 5376	Images of Women
WS 5377	Realities of Women

**Total Hours** 9

The graduate minor in Women's, Gender, and Sexuality Studies requires 9-15 semester credit hours. The Graduate College and the Center for Diversity and Gender Studies offers this interdisciplinary program that concentrates on the fields of women's studies, gender studies, sexuality studies, and queer studies. Drawing on recent scholarship about women, gender and sexuality, this minor provides a flexible, coherent program that enables students to complement any major with the study of the significance of gender and sexuality. The Women's, Gender, and Sexuality Studies minor helps students create opportunities for themselves in a rapidly changing society.

Code	Title	Hours
<b>Required Courses</b>		
WS 5376	Images of Women	3
WS 5377	Realities of Women	3
<b>Prescribed Electives</b>		
Choose 3 to 9 hours of courses from the following:		3-9
ANTH 5324	Mexican American Culture	
ANTH 5350	Gender and Sexuality in Cross Cultural Perspective	
COMM 5325	Seminar in Human Communication Theory	
COMM 5342	Historical Rhetoric and Social Influence	
COMM 5356	Gender and Communication	
COUN 5394	Counseling Women	
DVST 5310	Diversity Studies: Theories & Issues	
ENG 5321	Contemporary Fiction	
ENG 5331	Studies in American Poetry	
ENG 5332	Studies in American Prose	
ENG 5364	Studies in the Romantic Movement	



ENG 5366	Studies in Victorian Poetry
ENG 5368	Studies in Victorian Prose
ENG 5388	Studies in Literature for Children or Adolescents
ENG 5389	History of Children's Literature
ENG 5395	Problems in Language and Literature
HIST 5315A	American Sexualities
HIST 5315B	Queer History: GLBT Histories in the United States
HIST 5316A	Women's Rights in Comparative Perspective
HIST 5316B	Women and Empire
HIST 5318E	European Sexualities
HIST 5345Q	Gender and Citizenship
HIST 5351C	Race, Gender, and Ethnicity in American Labor History
HIST 5351F	US Women's History
MC 5309	Gender, Race, and Class in the Media
PH 5345	Public Health Issues in Human Sexuality
PHIL 5301	Applied Philosophy
PHIL 5325	Philosophy of Sex and Love
PHIL 5333	Feminist Theory
PHIL 5388	Problems in Philosophy
PSY 5360H	Psychology of Women
SAHE 7345	Gender and Sexuality in College
SOCI 5350	Seminar on the Sociology of Gender
SOCI 5357	Gender and Aging in Society
SPAN 5390	Studies in Spanish Culture, Language, or Literature (Independent Study)
WS 5388	Independent Research in Women and Gender Studies
<b>Total Hours</b>	
<b>9-15</b>	

Flowers Hall Room 365  
 Telephone: 512-245-2163 Fax: 512-245-8546  
<http://www.english.txstate.edu/>

The discipline of English is expansive, and graduate programs may focus on one or more subdisciplines, including literature, rhetoric and composition, technical communication, and creative writing. The English Department at Texas State offers graduate courses that apply the most important current critical and theoretical approaches to the study of literature, help promising poets and fiction writers master their crafts, teach rhetorical skills to future expository writers and teachers of writing, cover the numerous kinds of writing demanded by rapidly changing technologies, and more. The department's graduate programs serve students with many interests by offering dozens of courses on a wide variety of topics. Students may focus on a single element of English studies or may combine elements. Our integrative approach allows students simultaneously to study beyond a single emphasis and to research a more focused specialization. Please visit the Graduate Programs tab on the department's website for more specific information about our majors.

## Financial Assistance

Graduate students in the M.A. programs may apply for appointments of up to two years as instructional or teaching assistants; students in the M.F.A. program may apply for appointments of up to three years. Instructional assistants have completed fewer than 18 graduate hours

in English and have limited duties; teaching assistants have completed 18 or more hours in English and have a wider range of teaching duties. Assistants ordinarily have assignments in composition courses or surveys of literature. Applications are available from graduate program directors.

Graduate students may apply for a number of departmental scholarships, including the Janie M. Grayson English Graduate Fellowship, the G. Jack Gravitt Scholarship, the Ralph and Fancys Houston Scholarships, the William F. McKeen III Scholarship, the Judith Caldwell Miller Scholarship, the Billy G. Moore Endowed Scholarship, the Mamie E. Smith Memorial Scholarship, the David R. Stevens Memorial Scholarship, the Mary-Agnes Taylor Endowed Scholarship, the Lone Dodson Young Endowed Scholarship, the Peterson-Charles Mosley Scholarship, and the Leonard and Elizabeth Wright Scholarship for Future Teachers. Contact a graduate program director for applications or additional information.

The Graduate College oversees additional scholarships and may be contacted at 512.245.2581 for further scholarship information.

## The Therese Kayser Lindsey Endowment for Literature

The Lindsey Endowment, dedicated April 11, 1978, is a gift of Mrs. Louise Lindsey Merrick to the Texas State University Foundation, made in memory of her mother, Therese Kayser Lindsey. A noted poet and patron of the arts, Mrs. Lindsey attended Southwest Texas State Normal School, completing her degree in 1905. She published four volumes of poetry and helped organize the Poetry Society of Texas.

The endowment, along with the Katherine Anne Porter Literary Center, supports the mission of the department by sponsoring readings by distinguished writers and scholars such as Mortimer Adler, Kazim Ali, Margaret Atwood, Sandra Cisneros, Natalie Diaz, Rita Dove, Louise Erdrich, Stanley Fish, Carolyn Forché, Ben Fountain, Allen Ginsberg, Jory Graham, Lauren Groff, Laurie Ann Guerrero, Terrance Hayes, T. Geronimo Johnson, Maxine Hong Kingston, Denise Levertov, Larry McMurtry, W.S. Merwin, N. Scott Momaday, Viet Thanh Nguyen, Nnedi Okorafor, Annie Proulx, Karen Russell, Tracy K. Smith, Gary Snyder, Helen Vendler, Alice Walker, and Charles Wright.

Visiting writers and scholars often meet with graduate classes, attend question-and-answer sessions, and hold informal discussions with graduate students.

## The University Endowed Chair in Creative Writing

The University Endowed Chair in Creative Writing brings distinguished writers annually to teach graduate writing workshops and to give public readings. Former chair holders include MacArthur Foundation Fellow Leslie Marmon Silko, National Book Award winning poet Ai, Pulitzer Prize finalist Barry Hannah, National Book Award winner Denis Johnson, American Book Award winner Li-Young Lee, National Book Award winner Robert Stone, National Book Award finalist Cristina Garcia, National Book Critics Circle Award Winner Ben Fountain, and National Book Award winner Tim O'Brien. Fiction writer Tim O'Brien and Poet Naomi Shihab Nye are both professors of Creative writing and continuing members of the M.F.A. program's faculty.

From Fall 2017 through Spring 2022, the chair holder will be Tea Obreht, winner of the Orange Prize for Fiction and a finalist for the National Book Award.

## The Katherine Anne Porter Literary Center

Established in 2000, the Katherine Anne Porter Literary Center is based in the childhood home of the Pulitzer Prize and National Book Award-winning author. The Center is host to numerous visiting writers each year. The house was dedicated as a National Literary Landmark in June 2002, by the Friends of Libraries USA and the Library of Congress.

## The L.D. and LaVerne Harrell Clark Literary Endowment and Fiction Prize

In 2009, writers L.D. and LaVerne Harrell Clark donated their Smithville, Texas home and property to Texas State to create an endowment for writers-in-residence. The endowment was subsequently enlarged to support Clark Fellows and the Clark Fiction Prize, an annual national award recognizing an exceptional book-length work of fiction. Awardees come to campus to receive the prize and offer a public reading. The inaugural prize was received in 2017 by Jim Shepard for *The Book of Aron*, and most recently in 2020 by Rebecca Makkai for *The Great Believers*.

## Master of Arts (M.A.)

- Major in Literature (Non-thesis Option) (p. 2393)
- Major in Literature (Thesis Option) (p. 2398)
- Major in Rhetoric and Composition (Non-thesis Option) (p. 2405)
- Major in Rhetoric and Composition (Thesis Option) (p. 2410)
- Major in Technical Communication (Internship Non-thesis Option) (p. 2417)
- Major in Technical Communication (Internship Non-thesis Minor Option) (p. 2422)
- Major in Technical Communication (Thesis Option) (p. 2428)
- Major in Technical Communication (Thesis Minor Option) (p. 2434)

## Master of Fine Arts (M.F.A.)

- Major in Creative Writing (Fiction Option) (p. 2441)
- Major in Creative Writing (Poetry Option) (p. 2448)

## Minor

- Literature (p. 2454)

## Program Overview

The Master of Arts (M.A.) degree with a major in Literature offers courses from a wide range of topics, periods, and genres in British and American literature, as well as in critical theory.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.25 GPA in a minimum of 24 hours of undergraduate English, including at least 12 advanced hours\*
- Student will be required to take leveling courses if they lack sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.
- GRE not required\*
- additional documents not required\*

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

If the English GPA falls between 3.0 and 3.25, the student must submit the following:

- official GRE (general test only) with competitive scores in the verbal reasoning section
- two letters of recommendation
- writing sample of non-fiction prose, preferably literary analysis

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Literature requires 36 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENG 5301	Literary Scholarship	3

ENG 5353	Studies in Medieval Literature	3
ENG 5354	Studies in Renaissance Literature	3
ENG 5321	Contemporary Fiction	3
or ENG 5359	Studies in Restoration and Eighteenth-century Literature	
or ENG 5364	Studies in the Romantic Movement	
or ENG 5366	Studies in Victorian Poetry	
or ENG 5368	Studies in Victorian Prose	
ENG 5321	Contemporary Fiction	3
or ENG 5325	Studies in Literature of the Southwest	
or ENG 5331	Studies in American Poetry	
or ENG 5332	Studies in American Prose	
or ENG 5345	Southwestern Studies I: Defining the Region	
or ENG 5346	Southwestern Studies II: Consequences of Region	
<b>Electives</b>		
Choose 9 hours of advisor-approved electives		9
Choose 3 hours of advisor-approved Literature after 1660 electives		3
<b>Minor</b>		
Choose a 9-hour advisor-approved minor <sup>1</sup>		9
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> Students choose among minors offered by many graduate programs or areas of emphasis in many areas, including traditional periods and genres, children's literature, rhetorical or literary theory, technical communication, ethnic studies, gender studies, and studies of the American Southwest.

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass the comprehensive exam, which consists of two parts: the General Exam and the written area exam. All MA Literature students must take the General Exam; if they fail the first attempt, they may retake it the next semester. The written area exam may be taken a second time if they are not passed the first time. For all elements, a third attempt is possible only with a written appeal that convinces the Department Chair to allow a final attempt.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in English: ENG

## Courses Offered

### English (ENG)

Graduate courses listed as "repeatable" ordinarily count toward nine hours of English degree credit unless otherwise indicated. Exceptions require written justification and departmental approval. Specific emphases of repeatable courses vary by term and instructor, but they may focus on literary and rhetorical forms and genres; authors, periods, or literary movements; perspectives from social, intellectual, and cultural studies; literary themes; or theoretical and practical information for technical communication. The department provides descriptions of specific courses prior to each term's enrollment period.

### ENG 5199B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### ENG 5299B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### ENG 5300. Language Problems in a Multicultural Environment.

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### ENG 5301. Literary Scholarship.

An introduction to scholarly resources, methods, theories, and responsibilities that guide the study and interpretations of literature in English. Literary texts chosen for detailed examination vary with expertise of the instructor. Required in first year of M.A. with a Literature Major.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ENG 5302. Media Studies.

The study of film and media history, theory, and practice. Special topics may include videography, video editing, genre, filmmakers, and regional film.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ENG 5307. Visual Rhetoric.

This course focuses on of this course is the investigation of image-based modes of rhetorical communication. The course includes theories of visual rhetoric and the analysis of the issues and implications of images.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ENG 5309. International Technical Communication.

This course covers models and theories of cultural differences and how to ethically and effectively communicate with cross-cultural audiences verbally and non-verbally. Students also learn how to analyze international audiences in terms of their values, cultural needs, and communication styles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5310. Studies in English Language and Linguistics.**

A study of the English language, with special attention to phonology, morphology, syntax, semantics, dialectology, sociolinguistics, normal language acquisition, and/or writing and spelling systems. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5311. Foundations in Technical Communication.**

An introduction to the theory and practice of technical communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5312. Editing the Professional Publication.**

The editing, design, layout, and proofreading of a professional publication. This course is an internship. May be repeated one time with different emphasis.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5313. Studies in Principles of Technical Communication.**

A group of courses that provide students theoretical and practical information useful in any position in technical communication. Recent emphases include Digital Media and the web, Technical Editing, and Visual Rhetoric. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5314. Specializations in Technical Communication.**

A group of courses that provide students theoretical and practical information for specialized types of technical communication. Recent emphases include International Technical Communication Proposal Writing, Software Documentation and Writing for the Government. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5315. Graduate Writing Workshop.**

A studio course in which the primary texts are student manuscripts. Concentrations in fiction or poetry examine principles and techniques of creating, evaluating, and revising writing in these genres. The course requires class members to review writing produced by other workshop members.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5316. Foundations in Rhetoric and Composition.**

A group of courses providing students with theoretical, pedagogical, and methodological foundations in the field of rhetoric and composition.

Emphases vary but include Contemporary Composition Theory and Composition Pedagogy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5317. Specializations in Rhetoric and Composition.**

A group of courses providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Center Theory, Practice, and Administration; Writing Across the Curriculum; Service Learning; and Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5320. Form and Theory of Fiction.**

An examination of traditional and current theory and practice in fiction.

Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of fiction in other literatures. For M.F.A. credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5321. Contemporary Fiction.**

Readings selected from canonical and/or experimental fiction. Recent emphases include novels into film, postmodern fiction, Magical Realism, and Saul Bellow. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5322. Form and Theory of Poetry.**

An examination of traditional and current theory and practice in poetry. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of poetry in other literatures. For MFA credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5323. Studies in Autobiography and Biography.**

A study of selected works in autobiography and biography with special attention to the art forms used in these works. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5324. Studies in Literary Genre.**

A study of one or more literary genres over several historical periods or from a variety of cultural perspectives. The course focuses on genres such as the following: the epic, the novel, the short story, the lyric, the pastoral, the romance, and Irish comic fiction. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5325. Studies in Literature of the Southwest.**

Selected Texas and Southwestern writers with emphasis on fiction. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5327. Research Methods in Rhetoric and Composition.**

This course introduces research practices in rhetoric and composition, focusing on the strategies, methods, paradigms, and perspectives that characterize qualitative and quantitative research. It considers research ethics, issues of representation, and the history and role of research in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5328. Directed Portfolio.**

Constitutes partial fulfillment of non-thesis option for students earning the MA in Rhetoric and Composition. Under guidance of a graduate faculty committee, students produce a portfolio of representative written work with written commentary and reflection. Repeatable once. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5329. User Experience (UX) and Usability Research.**

This course introduces foundational principles of user experience (UX) design theory and the practice of placing users and their needs as the focus of design. Along with the principles of human factors and user interface design, the course also focuses on user and task-analysis, field research methods, usability testing, and the UX process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5331. Studies in American Poetry.**

Selected poets with a survey of their works. Recent emphases include Walt Whitman, Emily Dickinson, Southern poetry, Denise Levertov, and Robert Bly. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5332. Studies in American Prose.**

Selected authors with special attention to novels. Recent emphases include William Faulkner, Ernest Hemingway, Richard Wright, and Zora Neale Hurston. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5335. Technical Editing.**

This course explores how to edit technical documents using different levels of editing, including copyediting and developmental editing. Students will also explore current trends in technical editing and publishing, as well as effective author-editor relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5336. Document Design.**

This course explores designing documents that utilize principles of design to maximize the effects of layout, style, color, information architecture, and typography. Students learn to coordinate content for information messaging and view documents as active, response-invoking artifacts in a variety of media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5340. Discourse Analysis.**

This course introduces theories and methodologies for the study of human discourse, or language in use. Discourse history, assumptions and principles, verbal and nonverbal communication, as well as society and culture's roles in a variety of discourse genres are analyzed and discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5341. Software Documentation.**

This course develops students' expertise in the management and production of writing that supports the efficient use of software in its intended environment. Major genres include software and hardware manuals such as tutorials, procedures, and reference manuals. Students address issues of user analysis, text design, graphics design, task orientation, etc.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ENG 5345. Southwestern Studies I: Defining the Region.**

An interdisciplinary course that surveys the physical, cultural, and social history of the Southwest, emphasizing architecture, art, literature, philosophy, politics, popular culture, and technology. Historical focus from the 15th to the mid-19th century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5346. Southwestern Studies II: Consequences of Region.**

Second course in a survey of physical, cultural, and social history of the Southwest, emphasizing regional and ethnic expressions of culture. This course moves from the broad overview of the first semester to more specific problems in the region and to the artistic products of regional culture. Historical focus is from the Civil War to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5353. Studies in Medieval Literature.**

Emphasis on authors, contexts, and genres of the medieval period. Recent emphases include Anglo-Saxon culture, language, and literature; Chaucer; non-Chaucerian medieval literature; pilgrimage literature. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5354. Studies in Renaissance Literature.**

Emphasis on authors, contexts, and genres of the Renaissance. Recent emphases include Shakespeare, Renaissance epic, Tudor humanism, and John Milton. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5359. Studies in Restoration and Eighteenth-century Literature.**

Major writers of the period with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Johnson and his circle, Restoration and eighteenth-century drama, and the eighteenth-century novel. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5364. Studies in the Romantic Movement.**

The works of the Early Romantics or Late Romantics in context with attention to nineteenth- and twentieth-century scholarship. Recent emphases include Blake and the other arts, Coleridge, the Wordsworths, Shelley, and Keats. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5366. Studies in Victorian Poetry.**

Major Victorian poets with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Tennyson, the Brownings, the Pre-Raphaelites, and Hopkins. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5368. Studies in Victorian Prose.**

Major Victorian prose writers with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include George Eliot, non-fiction Victorian prose, Victorian women novelists, and Charles Dickens. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5371. Studies in Modern British Literature.**

Selected authors with a survey of their works. Recent emphases include Yeats, Wilde, Auden, and Post-World War II British poetry. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5372. Practicum in English Studies.**

An introduction to key issues and concepts in the teaching of English studies. Required for first-year instructional assistants in the English Department. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5381. Studies in Modern British and American Drama.**

A survey of major British and American dramatists and their European or world context. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Header

**Grade Mode:** Standard Letter

**ENG 5382. Practicum in Composition.**

An introduction to key issues and concepts in the teaching of expository writing at the college level. Required for first-year teaching assistants in the English Department who have not previously taken ENG 5372. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5384. Critical Theory.**

A study of critical theory, emphasizing the history of criticism and/or contemporary critical theories. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5388. Studies in Literature for Children or Adolescents.**

A study of contemporary works, extending the student's knowledge of the literature and criticism in the field. Typical emphases are generic and/or thematic and include picture books, the contemporary novel, and the children's classics on film. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5389. History of Children's Literature.**

The history of children's literature from the Middle Ages through 1940. May be repeated with different emphases for up to six hours of graduate credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5390. Special Problems.**

Independent study under supervision of a graduate faculty member in English, with in-depth readings and research focused on a special problem in literature and/or language. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5391. Directed Studies in English.**

Students will conduct studies as necessary preparation for graduate-level coursework in English. The nature of the work varies depending on the student's level of academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ENG 5395. Problems in Language and Literature.**

Recent emphases include literary technique and literary theory. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5399A. Thesis.**

First semester of thesis enrollment. No thesis credit awarded until student has completed the thesis in English 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5399B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5599B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5999B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) degree with a major in Literature offers courses from a wide range of topics, periods, and genres in British and American literature, as well as in critical theory.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered.

Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.25 GPA in a minimum of 24 hours of undergraduate English, including at least 12 advanced hours\*
- Student will be required to take leveling courses if they lack sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.
- GRE not required\*
- additional documents not required\*

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

If the English GPA falls between 3.0 and 3.25, the student must submit the following:

- official GRE (general test only) with competitive scores in the verbal reasoning section
- two letters of recommendation
- writing sample of non-fiction prose, preferably literary analysis

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Literature requires 30 semester credit hours, including a thesis. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENG 5301	Literary Scholarship	3
ENG 5353	Studies in Medieval Literature	3
ENG 5354	Studies in Renaissance Literature	3
ENG 5321	Contemporary Fiction	3
or ENG 5359	Studies in Restoration and Eighteenth-century Literature	
or ENG 5364	Studies in the Romantic Movement	
or ENG 5366	Studies in Victorian Poetry	

or ENG 5368	Studies in Victorian Prose	
ENG 5321	Contemporary Fiction	3
or ENG 5325	Studies in Literature of the Southwest	
or ENG 5331	Studies in American Poetry	
or ENG 5332	Studies in American Prose	
or ENG 5345	Southwestern Studies I: Defining the Region	
or ENG 5346	Southwestern Studies II: Consequences of Region	

### Electives

Choose 3 hours of advisor-approved English Literature after 1660 electives	3
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### Thesis

ENG 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
ENG 5199B	Thesis	
ENG 5299B	Thesis	
ENG 5399B	Thesis	
ENG 5599B	Thesis	
ENG 5999B	Thesis	

### Minor

Choose 6-hour advisor-approved minor <sup>1</sup>	6
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**Total Hours** **30**

<sup>1</sup> Students choose among minors offered by many graduate programs or areas of emphasis in many areas, including traditional periods and genres, children's literature, rhetorical or literary theory, technical communication, ethnic studies, gender studies, and studies of the American Southwest.

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass the comprehensive exam, which consists of two parts: the General Exam and an oral thesis defense. All MA Literature students must take the General Exam; if they fail the first attempt, they may retake it the next semester. The oral defense for the thesis may be taken a second time if they are not passed the first time. For all elements, a third attempt is possible only with a written appeal that convinces the Department Chair to allow a final attempt.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures,

the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in English: ENG

## Courses Offered English (ENG)

Graduate courses listed as "repeatable" ordinarily count toward nine hours of English degree credit unless otherwise indicated. Exceptions require written justification and departmental approval. Specific emphases of repeatable courses vary by term and instructor, but they may focus on literary and rhetorical forms and genres; authors, periods, or literary movements; perspectives from social, intellectual, and cultural studies; literary themes; or theoretical and practical information for technical communication. The department provides descriptions of specific courses prior to each term's enrollment period.

**ENG 5199B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5299B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5300. Language Problems in a Multicultural Environment.**

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5301. Literary Scholarship.**

An introduction to scholarly resources, methods, theories, and responsibilities that guide the study and interpretations of literature in English. Literary texts chosen for detailed examination vary with expertise of the instructor. Required in first year of M.A. with a Literature Major.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5302. Media Studies.**

The study of film and media history, theory, and practice. Special topics may include videography, video editing, genre, filmmakers, and regional film.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5307. Visual Rhetoric.**

This course focuses on of this course is the investigation of image-based modes of rhetorical communication. The course includes theories of visual rhetoric and the analysis of the issues and implications of images.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5309. International Technical Communication.**

This course covers models and theories of cultural differences and how to ethically and effectively communicate with cross-cultural audiences verbally and non-verbally. Students also learn how to analyze international audiences in terms of their values, cultural needs, and communication styles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5310. Studies in English Language and Linguistics.**

A study of the English language, with special attention to phonology, morphology, syntax, semantics, dialectology, sociolinguistics, normal language acquisition, and/or writing and spelling systems. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5311. Foundations in Technical Communication.**

An introduction to the theory and practice of technical communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5312. Editing the Professional Publication.**

The editing, design, layout, and proofreading of a professional publication. This course is an internship. May be repeated one time with different emphasis.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5313. Studies in Principles of Technical Communication.**

A group of courses that provide students theoretical and practical information useful in any position in technical communication. Recent emphases include Digital Media and the web, Technical Editing, and Visual Rhetoric. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5314. Specializations in Technical Communication.**

A group of courses that provide students theoretical and practical information for specialized types of technical communication. Recent emphases include International Technical Communication Proposal Writing, Software Documentation and Writing for the Government. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5315. Graduate Writing Workshop.**

A studio course in which the primary texts are student manuscripts. Concentrations in fiction or poetry examine principles and techniques of creating, evaluating, and revising writing in these genres. The course requires class members to review writing produced by other workshop members.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**ENG 5316. Foundations in Rhetoric and Composition.**

A group of courses providing students with theoretical, pedagogical, and methodological foundations in the field of rhetoric and composition. Emphases vary but include Contemporary Composition Theory and Composition Pedagogy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5317. Specializations in Rhetoric and Composition.**

A group of courses providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Center Theory, Practice, and Administration; Writing Across the Curriculum; Service Learning; and Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5320. Form and Theory of Fiction.**

An examination of traditional and current theory and practice in fiction. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of fiction in other literatures. For M.F.A. credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5321. Contemporary Fiction.**

Readings selected from canonical and/or experimental fiction. Recent emphases include novels into film, postmodern fiction, Magical Realism, and Saul Bellow. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5322. Form and Theory of Poetry.**

An examination of traditional and current theory and practice in poetry. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of poetry in other literatures. For MFA credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5323. Studies in Autobiography and Biography.**

A study of selected works in autobiography and biography with special attention to the art forms used in these works. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5324. Studies in Literary Genre.**

A study of one or more literary genres over several historical periods or from a variety of cultural perspectives. The course focuses on genres such as the following: the epic, the novel, the short story, the lyric, the pastoral, the romance, and Irish comic fiction. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5325. Studies in Literature of the Southwest.**

Selected Texas and Southwestern writers with emphasis on fiction. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5327. Research Methods in Rhetoric and Composition.**

This course introduces research practices in rhetoric and composition, focusing on the strategies, methods, paradigms, and perspectives that characterize qualitative and quantitative research. It considers research ethics, issues of representation, and the history and role of research in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5328. Directed Portfolio.**

Constitutes partial fulfillment of non-thesis option for students earning the MA in Rhetoric and Composition. Under guidance of a graduate faculty committee, students produce a portfolio of representative written work with written commentary and reflection. Repeatable once. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5329. User Experience (UX) and Usability Research.**

This course introduces foundational principles of user experience (UX) design theory and the practice of placing users and their needs as the focus of design. Along with the principles of human factors and user interface design, the course also focuses on user and task-analysis, field research methods, usability testing, and the UX process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5331. Studies in American Poetry.**

Selected poets with a survey of their works. Recent emphases include Walt Whitman, Emily Dickinson, Southern poetry, Denise Levertov, and Robert Bly. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5332. Studies in American Prose.**

Selected authors with special attention to novels. Recent emphases include William Faulkner, Ernest Hemingway, Richard Wright, and Zora Neale Hurston. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5335. Technical Editing.**

This course explores how to edit technical documents using different levels of editing, including copyediting and developmental editing. Students will also explore current trends in technical editing and publishing, as well as effective author-editor relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5336. Document Design.**

This course explores designing documents that utilize principles of design to maximize the effects of layout, style, color, information architecture, and typography. Students learn to coordinate content for information messaging and view documents as active, response-invoking artifacts in a variety of media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5340. Discourse Analysis.**

This course introduces theories and methodologies for the study of human discourse, or language in use. Discourse history, assumptions and principles, verbal and nonverbal communication, as well as society and culture's roles in a variety of discourse genres are analyzed and discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5341. Software Documentation.**

This course develops students' expertise in the management and production of writing that supports the efficient use of software in its intended environment. Major genres include software and hardware manuals such as tutorials, procedures, and reference manuals. Students address issues of user analysis, text design, graphics design, task orientation, etc.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5345. Southwestern Studies I: Defining the Region.**

An interdisciplinary course that surveys the physical, cultural, and social history of the Southwest, emphasizing architecture, art, literature, philosophy, politics, popular culture, and technology. Historical focus from the 15th to the mid-19th century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5346. Southwestern Studies II: Consequences of Region.**

Second course in a survey of physical, cultural, and social history of the Southwest, emphasizing regional and ethnic expressions of culture. This course moves from the broad overview of the first semester to more specific problems in the region and to the artistic products of regional culture. Historical focus is from the Civil War to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5353. Studies in Medieval Literature.**

Emphasis on authors, contexts, and genres of the medieval period. Recent emphases include Anglo-Saxon culture, language, and literature; Chaucer; non-Chaucerian medieval literature; pilgrimage literature. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5354. Studies in Renaissance Literature.**

Emphasis on authors, contexts, and genres of the Renaissance. Recent emphases include Shakespeare, Renaissance epic, Tudor humanism, and John Milton. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5359. Studies in Restoration and Eighteenth-century Literature.**

Major writers of the period with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Johnson and his circle, Restoration and eighteenth-century drama, and the eighteenth-century novel. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5364. Studies in the Romantic Movement.**

The works of the Early Romantics or Late Romantics in context with attention to nineteenth- and twentieth-century scholarship. Recent emphases include Blake and the other arts, Coleridge, the Wordsworths, Shelley, and Keats. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5366. Studies in Victorian Poetry.**

Major Victorian poets with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Tennyson, the Brownings, the Pre-Raphaelites, and Hopkins. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5368. Studies in Victorian Prose.**

Major Victorian prose writers with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include George Eliot, non-fiction Victorian prose, Victorian women novelists, and Charles Dickens. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5371. Studies in Modern British Literature.**

Selected authors with a survey of their works. Recent emphases include Yeats, Wilde, Auden, and Post-World War II British poetry. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5372. Practicum in English Studies.**

An introduction to key issues and concepts in the teaching of English studies. Required for first-year instructional assistants in the English Department. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5381. Studies in Modern British and American Drama.**

A survey of major British and American dramatists and their European or world context. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Header

**Grade Mode:** Standard Letter

**ENG 5382. Practicum in Composition.**

An introduction to key issues and concepts in the teaching of expository writing at the college level. Required for first-year teaching assistants in the English Department who have not previously taken ENG 5372. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5384. Critical Theory.**

A study of critical theory, emphasizing the history of criticism and/or contemporary critical theories. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5388. Studies in Literature for Children or Adolescents.**

A study of contemporary works, extending the student's knowledge of the literature and criticism in the field. Typical emphases are generic and/or thematic and include picture books, the contemporary novel, and the children's classics on film. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5389. History of Children's Literature.**

The history of children's literature from the Middle Ages through 1940. May be repeated with different emphases for up to six hours of graduate credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5390. Special Problems.**

Independent study under supervision of a graduate faculty member in English, with in-depth readings and research focused on a special problem in literature and/or language. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5391. Directed Studies in English.**

Students will conduct studies as necessary preparation for graduate-level coursework in English. The nature of the work varies depending on the student's level of academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ENG 5395. Problems in Language and Literature.**

Recent emphases include literary technique and literary theory.  
Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5399A. Thesis.**

First semester of thesis enrollment. No thesis credit awarded until student has completed the thesis in English 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5399B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5599B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5999B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) degree with a major in Rhetoric and Composition ranks among the top nationwide with award-winning faculty and commitment to student success. Students enjoy a vibrant community dedicated to studying written discourse and the teaching of writing within a variety of contexts. The program also develops unique programs of study combining foundational knowledge with focused study in areas ranging from minority and feminist rhetorics to digital literacies, writing for social justice, and writing center studies.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in 12 or more hours of undergraduate English course work
- GRE not required
- portfolio (submit the following items as a single PDF document):
  - statement of purpose
  - at least two non-fiction documents (combined minimum of 15 pages, double-spaced) consisting of at least one academic research paper written for an undergraduate or graduate course
  - cover letter explaining when and for whom the submitted writing samples were written and discussing why they have been included as representative work
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#walver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Rhetoric and Composition requires 33 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENG 5326	Contemporary Composition Theory	3
ENG 5327	Research Methods in Rhetoric and Composition	3
ENG 5328	Directed Portfolio	3
ENG 5383	Studies in Rhetorical Theory	3
<b>Prescribed Electives</b>		
Choose 15 hours from the following:		15
ENG 5300	Language Problems in a Multicultural Environment	
ENG 5310	Studies in English Language and Linguistics	
ENG 5313	Studies in Principles of Technical Communication (Computers and Writing) <sup>1</sup>	
ENG 5316	Foundations in Rhetoric and Composition <sup>2,3</sup>	
ENG 5317	Specializations in Rhetoric and Composition <sup>2</sup>	
ENG 5383	Studies in Rhetorical Theory <sup>2,3</sup>	
<b>Cognate</b>		
Choose 6 hours of advisor-approved courses		6
<b>Total Hours</b>		<b>33</b>

<sup>1</sup> With program advisor's approval, students may take additional hours under ENG 5313 and ENG 5314 if course topics are deemed directly relevant to rhetoric and composition

<sup>2</sup> Topics vary

<sup>3</sup> Excludes Topic: History of Rhetoric

## Comprehensive Examination Requirement

Students are required to take a comprehensive examination covering the core courses in the program, as well as the student's area of specialization. For students pursuing the portfolio option, the comprehensive exam is both written and oral. In cases where the committee is not satisfied with the written and/or oral exam, students may be asked to revise portions of the exam and/or schedule a second exam. The committee will not sign off on the comprehensive exam until the student has successfully completed the exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in English: ENG

## Courses Offered

### English (ENG)

Graduate courses listed as "repeatable" ordinarily count toward nine hours of English degree credit unless otherwise indicated. Exceptions require written justification and departmental approval. Specific emphases of repeatable courses vary by term and instructor, but they may focus on literary and rhetorical forms and genres; authors, periods, or literary movements; perspectives from social, intellectual, and cultural studies; literary themes; or theoretical and practical information for technical communication. The department provides descriptions of specific courses prior to each term's enrollment period.

### ENG 5199B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### ENG 5299B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### ENG 5300. Language Problems in a Multicultural Environment.

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### ENG 5301. Literary Scholarship.

An introduction to scholarly resources, methods, theories, and responsibilities that guide the study and interpretations of literature in English. Literary texts chosen for detailed examination vary with expertise of the instructor. Required in first year of M.A. with a Literature Major.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ENG 5302. Media Studies.

The study of film and media history, theory, and practice. Special topics may include videography, video editing, genre, filmmakers, and regional film.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ENG 5307. Visual Rhetoric.

This course focuses on of this course is the investigation of image-based modes of rhetorical communication. The course includes theories of visual rhetoric and the analysis of the issues and implications of images.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ENG 5309. International Technical Communication.

This course covers models and theories of cultural differences and how to ethically and effectively communicate with cross-cultural audiences verbally and non-verbally. Students also learn how to analyze international audiences in terms of their values, cultural needs, and communication styles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ENG 5310. Studies in English Language and Linguistics.**

A study of the English language, with special attention to phonology, morphology, syntax, semantics, dialectology, sociolinguistics, normal language acquisition, and/or writing and spelling systems. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5311. Foundations in Technical Communication.**

An introduction to the theory and practice of technical communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5312. Editing the Professional Publication.**

The editing, design, layout, and proofreading of a professional publication. This course is an internship. May be repeated one time with different emphasis.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5313. Studies in Principles of Technical Communication.**

A group of courses that provide students theoretical and practical information useful in any position in technical communication. Recent emphases include Digital Media and the web, Technical Editing, and Visual Rhetoric. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5314. Specializations in Technical Communication.**

A group of courses that provide students theoretical and practical information for specialized types of technical communication. Recent emphases include International Technical Communication Proposal Writing, Software Documentation and Writing for the Government. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5315. Graduate Writing Workshop.**

A studio course in which the primary texts are student manuscripts. Concentrations in fiction or poetry examine principles and techniques of creating, evaluating, and revising writing in these genres. The course requires class members to review writing produced by other workshop members.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5316. Foundations in Rhetoric and Composition.**

A group of courses providing students with theoretical, pedagogical, and methodological foundations in the field of rhetoric and composition.

Emphases vary but include Contemporary Composition Theory and Composition Pedagogy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5317. Specializations in Rhetoric and Composition.**

A group of courses providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Center Theory, Practice, and Administration; Writing Across the Curriculum; Service Learning; and Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5320. Form and Theory of Fiction.**

An examination of traditional and current theory and practice in fiction.

Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of fiction in other literatures. For M.F.A. credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5321. Contemporary Fiction.**

Readings selected from canonical and/or experimental fiction. Recent emphases include novels into film, postmodern fiction, Magical Realism, and Saul Bellow. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5322. Form and Theory of Poetry.**

An examination of traditional and current theory and practice in poetry. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of poetry in other literatures. For MFA credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5323. Studies in Autobiography and Biography.**

A study of selected works in autobiography and biography with special attention to the art forms used in these works. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5324. Studies in Literary Genre.**

A study of one or more literary genres over several historical periods or from a variety of cultural perspectives. The course focuses on genres such as the following: the epic, the novel, the short story, the lyric, the pastoral, the romance, and Irish comic fiction. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5325. Studies in Literature of the Southwest.**

Selected Texas and Southwestern writers with emphasis on fiction. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5327. Research Methods in Rhetoric and Composition.**

This course introduces research practices in rhetoric and composition, focusing on the strategies, methods, paradigms, and perspectives that characterize qualitative and quantitative research. It considers research ethics, issues of representation, and the history and role of research in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5328. Directed Portfolio.**

Constitutes partial fulfillment of non-thesis option for students earning the MA in Rhetoric and Composition. Under guidance of a graduate faculty committee, students produce a portfolio of representative written work with written commentary and reflection. Repeatable once. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5329. User Experience (UX) and Usability Research.**

This course introduces foundational principles of user experience (UX) design theory and the practice of placing users and their needs as the focus of design. Along with the principles of human factors and user interface design, the course also focuses on user and task-analysis, field research methods, usability testing, and the UX process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5331. Studies in American Poetry.**

Selected poets with a survey of their works. Recent emphases include Walt Whitman, Emily Dickinson, Southern poetry, Denise Levertov, and Robert Bly. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5332. Studies in American Prose.**

Selected authors with special attention to novels. Recent emphases include William Faulkner, Ernest Hemingway, Richard Wright, and Zora Neale Hurston. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5335. Technical Editing.**

This course explores how to edit technical documents using different levels of editing, including copyediting and developmental editing. Students will also explore current trends in technical editing and publishing, as well as effective author-editor relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5336. Document Design.**

This course explores designing documents that utilize principles of design to maximize the effects of layout, style, color, information architecture, and typography. Students learn to coordinate content for information messaging and view documents as active, response-invoking artifacts in a variety of media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5340. Discourse Analysis.**

This course introduces theories and methodologies for the study of human discourse, or language in use. Discourse history, assumptions and principles, verbal and nonverbal communication, as well as society and culture's roles in a variety of discourse genres are analyzed and discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5341. Software Documentation.**

This course develops students' expertise in the management and production of writing that supports the efficient use of software in its intended environment. Major genres include software and hardware manuals such as tutorials, procedures, and reference manuals. Students address issues of user analysis, text design, graphics design, task orientation, etc.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5345. Southwestern Studies I: Defining the Region.**

An interdisciplinary course that surveys the physical, cultural, and social history of the Southwest, emphasizing architecture, art, literature, philosophy, politics, popular culture, and technology. Historical focus from the 15th to the mid-19th century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5346. Southwestern Studies II: Consequences of Region.**

Second course in a survey of physical, cultural, and social history of the Southwest, emphasizing regional and ethnic expressions of culture. This course moves from the broad overview of the first semester to more specific problems in the region and to the artistic products of regional culture. Historical focus is from the Civil War to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5353. Studies in Medieval Literature.**

Emphasis on authors, contexts, and genres of the medieval period. Recent emphases include Anglo-Saxon culture, language, and literature; Chaucer; non-Chaucerian medieval literature; pilgrimage literature. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5354. Studies in Renaissance Literature.**

Emphasis on authors, contexts, and genres of the Renaissance. Recent emphases include Shakespeare, Renaissance epic, Tudor humanism, and John Milton. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5359. Studies in Restoration and Eighteenth-century Literature.**

Major writers of the period with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Johnson and his circle, Restoration and eighteenth-century drama, and the eighteenth-century novel. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5364. Studies in the Romantic Movement.**

The works of the Early Romantics or Late Romantics in context with attention to nineteenth- and twentieth-century scholarship. Recent emphases include Blake and the other arts, Coleridge, the Wordsworths, Shelley, and Keats. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5366. Studies in Victorian Poetry.**

Major Victorian poets with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Tennyson, the Brownings, the Pre-Raphaelites, and Hopkins. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5368. Studies in Victorian Prose.**

Major Victorian prose writers with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include George Eliot, non-fiction Victorian prose, Victorian women novelists, and Charles Dickens. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5371. Studies in Modern British Literature.**

Selected authors with a survey of their works. Recent emphases include Yeats, Wilde, Auden, and Post-World War II British poetry. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5372. Practicum in English Studies.**

An introduction to key issues and concepts in the teaching of English studies. Required for first-year instructional assistants in the English Department. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5381. Studies in Modern British and American Drama.**

A survey of major British and American dramatists and their European or world context. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Header

**Grade Mode:** Standard Letter

**ENG 5382. Practicum in Composition.**

An introduction to key issues and concepts in the teaching of expository writing at the college level. Required for first-year teaching assistants in the English Department who have not previously taken ENG 5372. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5384. Critical Theory.**

A study of critical theory, emphasizing the history of criticism and/or contemporary critical theories. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5388. Studies in Literature for Children or Adolescents.**

A study of contemporary works, extending the student's knowledge of the literature and criticism in the field. Typical emphases are generic and/or thematic and include picture books, the contemporary novel, and the children's classics on film. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5389. History of Children's Literature.**

The history of children's literature from the Middle Ages through 1940. May be repeated with different emphases for up to six hours of graduate credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5390. Special Problems.**

Independent study under supervision of a graduate faculty member in English, with in-depth readings and research focused on a special problem in literature and/or language. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5391. Directed Studies in English.**

Students will conduct studies as necessary preparation for graduate-level coursework in English. The nature of the work varies depending on the student's level of academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ENG 5395. Problems in Language and Literature.**

Recent emphases include literary technique and literary theory. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5399A. Thesis.**

First semester of thesis enrollment. No thesis credit awarded until student has completed the thesis in English 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5399B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5599B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5999B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) degree with a major in Rhetoric and Composition ranks among the top nationwide with award-winning faculty and commitment to student success. Students enjoy a vibrant community dedicated to studying written discourse and the teaching of writing within a variety of contexts. The program also develops unique programs of study combining foundational knowledge with focused study in areas ranging from minority and feminist rhetorics to digital literacies, writing for social justice, and writing center studies.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in 12 or more hours of undergraduate English course work
- GRE not required
- portfolio (submit the following items as a single PDF document):
  - statement of purpose
  - at least two non-fiction documents (combined minimum of 15 pages, double-spaced) consisting of at least one academic research paper written for an undergraduate or graduate course
  - cover letter explaining when and for whom the submitted writing samples were written and discussing why they have been included as representative work
- three letters of recommendation

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Rhetoric and Composition requires 33 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENG 5326	Contemporary Composition Theory	3
ENG 5327	Research Methods in Rhetoric and Composition	3
ENG 5383	Studies in Rhetorical Theory	3
<b>Prescribed Electives</b>		
Choose 12 hours of the following:		12
ENG 5300	Language Problems in a Multicultural Environment	
ENG 5310	Studies in English Language and Linguistics	
ENG 5313	Studies in Principles of Technical Communication (Computers and Writing) <sup>1</sup>	

ENG 5316	Foundations in Rhetoric and Composition <sup>2</sup>	
ENG 5317	Specializations in Rhetoric and Composition <sup>2</sup>	
ENG 5383	Studies in Rhetorical Theory <sup>2,3</sup>	
<b>Thesis</b>		
ENG 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
ENG 5199B	Thesis	
ENG 5299B	Thesis	
ENG 5399B	Thesis	
ENG 5599B	Thesis	
ENG 5999B	Thesis	
<b>Cognate</b>		
Choose 6 hours of advisor-approved courses		6
<b>Total Hours</b>		<b>33</b>

<sup>1</sup> With program advisor's approval, students may take additional hours under ENG 5313 and ENG 5314 if course topics are deemed directly relevant to rhetoric and composition.

<sup>2</sup> Topics Vary

<sup>3</sup> Excludes ENG 5383 Topic: History of Rhetoric

## Comprehensive Examination Requirement

Students are required to take a comprehensive examination covering the core courses in the program, as well as the student's area of specialization. For students pursuing the thesis option, the comprehensive exam is oral and takes place during the thesis defense.

In cases where the committee is not satisfied with the written and/or oral defense, students may be asked to revise portions of the exam. The committee will not sign off on the comprehensive exam until the student has successfully completed the exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If



the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in English: ENG

## Courses Offered English (ENG)

Graduate courses listed as "repeatable" ordinarily count toward nine hours of English degree credit unless otherwise indicated. Exceptions require written justification and departmental approval. Specific emphases of repeatable courses vary by term and instructor, but they may focus on literary and rhetorical forms and genres; authors, periods, or literary movements; perspectives from social, intellectual, and cultural studies; literary themes; or theoretical and practical information for technical communication. The department provides descriptions of specific courses prior to each term's enrollment period.

### ENG 5199B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### ENG 5299B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5300. Language Problems in a Multicultural Environment.**

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5301. Literary Scholarship.**

An introduction to scholarly resources, methods, theories, and responsibilities that guide the study and interpretations of literature in English. Literary texts chosen for detailed examination vary with expertise of the instructor. Required in first year of M.A. with a Literature Major.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5302. Media Studies.**

The study of film and media history, theory, and practice. Special topics may include videography, video editing, genre, filmmakers, and regional film.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5307. Visual Rhetoric.**

This course focuses on of this course is the investigation of image-based modes of rhetorical communication. The course includes theories of visual rhetoric and the analysis of the issues and implications of images.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5309. International Technical Communication.**

This course covers models and theories of cultural differences and how to ethically and effectively communicate with cross-cultural audiences verbally and non-verbally. Students also learn how to analyze international audiences in terms of their values, cultural needs, and communication styles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5310. Studies in English Language and Linguistics.**

A study of the English language, with special attention to phonology, morphology, syntax, semantics, dialectology, sociolinguistics, normal language acquisition, and/or writing and spelling systems. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5311. Foundations in Technical Communication.**

An introduction to the theory and practice of technical communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5312. Editing the Professional Publication.**

The editing, design, layout, and proofreading of a professional publication. This course is an internship. May be repeated one time with different emphasis.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5313. Studies in Principles of Technical Communication.**

A group of courses that provide students theoretical and practical information useful in any position in technical communication. Recent emphases include Digital Media and the web, Technical Editing, and Visual Rhetoric. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5314. Specializations in Technical Communication.**

A group of courses that provide students theoretical and practical information for specialized types of technical communication. Recent emphases include International Technical Communication Proposal Writing, Software Documentation and Writing for the Government. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5315. Graduate Writing Workshop.**

A studio course in which the primary texts are student manuscripts. Concentrations in fiction or poetry examine principles and techniques of creating, evaluating, and revising writing in these genres. The course requires class members to review writing produced by other workshop members.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5316. Foundations in Rhetoric and Composition.**

A group of courses providing students with theoretical, pedagogical, and methodological foundations in the field of rhetoric and composition. Emphases vary but include Contemporary Composition Theory and Composition Pedagogy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5317. Specializations in Rhetoric and Composition.**

A group of courses providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Center Theory, Practice, and Administration; Writing Across the Curriculum; Service Learning; and Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5320. Form and Theory of Fiction.**

An examination of traditional and current theory and practice in fiction. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of fiction in other literatures. For M.F.A. credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5321. Contemporary Fiction.**

Readings selected from canonical and/or experimental fiction. Recent emphases include novels into film, postmodern fiction, Magical Realism, and Saul Bellow. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5322. Form and Theory of Poetry.**

An examination of traditional and current theory and practice in poetry. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of poetry in other literatures. For MFA credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5323. Studies in Autobiography and Biography.**

A study of selected works in autobiography and biography with special attention to the art forms used in these works. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5324. Studies in Literary Genre.**

A study of one or more literary genres over several historical periods or from a variety of cultural perspectives. The course focuses on genres such as the following: the epic, the novel, the short story, the lyric, the pastoral, the romance, and Irish comic fiction. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5325. Studies in Literature of the Southwest.**

Selected Texas and Southwestern writers with emphasis on fiction. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5327. Research Methods in Rhetoric and Composition.**

This course introduces research practices in rhetoric and composition, focusing on the strategies, methods, paradigms, and perspectives that characterize qualitative and quantitative research. It considers research ethics, issues of representation, and the history and role of research in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5328. Directed Portfolio.**

Constitutes partial fulfillment of non-thesis option for students earning the MA in Rhetoric and Composition. Under guidance of a graduate faculty committee, students produce a portfolio of representative written work with written commentary and reflection. Repeatable once. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5329. User Experience (UX) and Usability Research.**

This course introduces foundational principles of user experience (UX) design theory and the practice of placing users and their needs as the focus of design. Along with the principles of human factors and user interface design, the course also focuses on user and task-analysis, field research methods, usability testing, and the UX process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5331. Studies in American Poetry.**

Selected poets with a survey of their works. Recent emphases include Walt Whitman, Emily Dickinson, Southern poetry, Denise Levertov, and Robert Bly. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5332. Studies in American Prose.**

Selected authors with special attention to novels. Recent emphases include William Faulkner, Ernest Hemingway, Richard Wright, and Zora Neale Hurston. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5335. Technical Editing.**

This course explores how to edit technical documents using different levels of editing, including copyediting and developmental editing. Students will also explore current trends in technical editing and publishing, as well as effective author-editor relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5336. Document Design.**

This course explores designing documents that utilize principles of design to maximize the effects of layout, style, color, information architecture, and typography. Students learn to coordinate content for information messaging and view documents as active, response-invoking artifacts in a variety of media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5340. Discourse Analysis.**

This course introduces theories and methodologies for the study of human discourse, or language in use. Discourse history, assumptions and principles, verbal and nonverbal communication, as well as society and culture's roles in a variety of discourse genres are analyzed and discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5341. Software Documentation.**

This course develops students' expertise in the management and production of writing that supports the efficient use of software in its intended environment. Major genres include software and hardware manuals such as tutorials, procedures, and reference manuals. Students address issues of user analysis, text design, graphics design, task orientation, etc.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5345. Southwestern Studies I: Defining the Region.**

An interdisciplinary course that surveys the physical, cultural, and social history of the Southwest, emphasizing architecture, art, literature, philosophy, politics, popular culture, and technology. Historical focus from the 15th to the mid-19th century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5346. Southwestern Studies II: Consequences of Region.**

Second course in a survey of physical, cultural, and social history of the Southwest, emphasizing regional and ethnic expressions of culture. This course moves from the broad overview of the first semester to more specific problems in the region and to the artistic products of regional culture. Historical focus is from the Civil War to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5353. Studies in Medieval Literature.**

Emphasis on authors, contexts, and genres of the medieval period. Recent emphases include Anglo-Saxon culture, language, and literature; Chaucer; non-Chaucerian medieval literature; pilgrimage literature. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5354. Studies in Renaissance Literature.**

Emphasis on authors, contexts, and genres of the Renaissance. Recent emphases include Shakespeare, Renaissance epic, Tudor humanism, and John Milton. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5359. Studies in Restoration and Eighteenth-century Literature.**

Major writers of the period with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Johnson and his circle, Restoration and eighteenth-century drama, and the eighteenth-century novel. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5364. Studies in the Romantic Movement.**

The works of the Early Romantics or Late Romantics in context with attention to nineteenth- and twentieth-century scholarship. Recent emphases include Blake and the other arts, Coleridge, the Wordsworths, Shelley, and Keats. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5366. Studies in Victorian Poetry.**

Major Victorian poets with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Tennyson, the Brownings, the Pre-Raphaelites, and Hopkins. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5368. Studies in Victorian Prose.**

Major Victorian prose writers with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include George Eliot, non-fiction Victorian prose, Victorian women novelists, and Charles Dickens. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5371. Studies in Modern British Literature.**

Selected authors with a survey of their works. Recent emphases include Yeats, Wilde, Auden, and Post-World War II British poetry. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5372. Practicum in English Studies.**

An introduction to key issues and concepts in the teaching of English studies. Required for first-year instructional assistants in the English Department. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5381. Studies in Modern British and American Drama.**

A survey of major British and American dramatists and their European or world context. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Header

**Grade Mode:** Standard Letter

**ENG 5382. Practicum in Composition.**

An introduction to key issues and concepts in the teaching of expository writing at the college level. Required for first-year teaching assistants in the English Department who have not previously taken ENG 5372. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5384. Critical Theory.**

A study of critical theory, emphasizing the history of criticism and/or contemporary critical theories. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5388. Studies in Literature for Children or Adolescents.**

A study of contemporary works, extending the student's knowledge of the literature and criticism in the field. Typical emphases are generic and/or thematic and include picture books, the contemporary novel, and the children's classics on film. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5389. History of Children's Literature.**

The history of children's literature from the Middle Ages through 1940. May be repeated with different emphases for up to six hours of graduate credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5390. Special Problems.**

Independent study under supervision of a graduate faculty member in English, with in-depth readings and research focused on a special problem in literature and/or language. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5391. Directed Studies in English.**

Students will conduct studies as necessary preparation for graduate-level coursework in English. The nature of the work varies depending on the student's level of academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ENG 5395. Problems in Language and Literature.**

Recent emphases include literary technique and literary theory. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5399A. Thesis.**

First semester of thesis enrollment. No thesis credit awarded until student has completed the thesis in English 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5399B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**ENG 5599B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

- interest and/or experience in writing, editing
- interest and/or experience designing online or paper documents
- other pertinent information

**ENG 5999B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) degree with a major in Technical Communication prepares graduates to write in technical and other professional settings and to pursue doctoral work in the field.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txstate.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in 12 or more hours of undergraduate English, writing, editing, web design, or technical communication/professional writing course work (Other courses may be approved by the graduate advisor.)
- GRE not required
- portfolio (submit the following items as a single PDF document):
  - at least two non-fiction, prose documents (combined minimum of 15 pages, double-spaced) consisting of at least one academic research paper written for an undergraduate or graduate course
  - cover letter describing the submitted two (or more) non-fiction, prose documents
  - statement of purpose explaining the reasons for pursuing the MATC and including background information that demonstrates:

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Technical Communication consists of 30 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENG 5311	Foundations in Technical Communication	3
ENG 5312	Editing the Professional Publication	3
ENG 5326	Contemporary Composition Theory	3
or ENG 5383	Studies in Rhetorical Theory	
<b>Prescribed Electives</b>		
Choose 9 hours from the following:		9
ENG 5310	Studies in English Language and Linguistics (Digital Literacies)	
ENG 5313	Studies in Principles of Technical Communication (Digital & Print Document Design) <sup>2</sup>	
ENG 5313	Studies in Principles of Technical Communication (Digital Media and the Web) <sup>2</sup>	
ENG 5313	Studies in Principles of Technical Communication (Ethics in Technical Communication) <sup>2</sup>	
ENG 5313	Studies in Principles of Technical Communication (Software Documentation) <sup>2</sup>	
ENG 5313	Studies in Principles of Technical Communication (Digital Video Writing and Production) <sup>2</sup>	
ENG 5326	Contemporary Composition Theory (Computers and Writing)	
Choose 12 hours from the following:		12
ENG 5300	Language Problems in a Multicultural Environment	
ENG 5310	Studies in English Language and Linguistics	
ENG 5312	Editing the Professional Publication (may be taken twice) <sup>1</sup>	
ENG 5314	Specializations in Technical Communication <sup>1</sup>	
ENG 5317	Specializations in Rhetoric and Composition <sup>2</sup>	

ENG 5324	Studies in Literary Genre
<b>Total Hours</b>	<b>30</b>

<sup>1</sup> May be repeated a maximum of three times. Different topics are required.

<sup>2</sup> May be repeated a maximum of three times. Different topics are required.

## Comprehensive Examination Requirement

All students must complete a portfolio comprehensive exam to graduate. To complete the MATC Portfolio Comprehensive Exam, you will develop, organize, categorize, and present your best academic and practical work to demonstrate what you have learned in the MATC program. The portfolio serves as the assessment tool for faculty to comprehensively review the student's work. The portfolio collection should provide evidence of the student's growth through the program and provide support for the ideas you offered in the Reflective Analysis Essay that students will write as part of the portfolio presentation. All students are required to submit the portfolio in their last semester of the program. Students must pass the portfolio exam in order to graduate. The deadline affords students at least one week for revisions to any deficiencies specified by the review committee, should the review committee deem the portfolio incomplete or unacceptable. If the student fails to pass the portfolio comprehensive exam during the final semester, the student will retake the comprehensive exam during the next regular semester.

All students must also complete either the internship course ENG 5312 or thesis hours in order to graduate. The internship course is offered each spring. Students in the internship course complete a reflection that demonstrates mastery of best practices and applied theory. Students completing the thesis track need to be aware of the deadlines for thesis materials. Students are responsible for meeting all the deadlines prior to graduation. For more information, please see the program's Thesis Track webpage or go to the Graduate College website to view their guide to preparing and submitting a thesis, along with the required forms necessary to complete your thesis.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in English: ENG

## Courses Offered

### English (ENG)

#### ENG 5199B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENG 5299B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENG 5300. Language Problems in a Multicultural Environment.

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

#### ENG 5301. Literary Scholarship.

An introduction to scholarly resources, methods, theories, and responsibilities that guide the study and interpretations of literature in English. Literary texts chosen for detailed examination vary with expertise of the instructor. Required in first year of M.A. with a Literature Major.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ENG 5302. Media Studies.

The study of film and media history, theory, and practice. Special topics may include videography, video editing, genre, filmmakers, and regional film.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ENG 5307. Visual Rhetoric.

This course focuses on of this course is the investigation of image-based modes of rhetorical communication. The course includes theories of visual rhetoric and the analysis of the issues and implications of images.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ENG 5309. International Technical Communication.

This course covers models and theories of cultural differences and how to ethically and effectively communicate with cross-cultural audiences verbally and non-verbally. Students also learn how to analyze international audiences in terms of their values, cultural needs, and communication styles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ENG 5310. Studies in English Language and Linguistics.

A study of the English language, with special attention to phonology, morphology, syntax, semantics, dialectology, sociolinguistics, normal language acquisition, and/or writing and spelling systems. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ENG 5311. Foundations in Technical Communication.

An introduction to the theory and practice of technical communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5312. Editing the Professional Publication.**

The editing, design, layout, and proofreading of a professional publication. This course is an internship. May be repeated one time with different emphasis.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5313. Studies in Principles of Technical Communication.**

A group of courses that provide students theoretical and practical information useful in any position in technical communication. Recent emphases include Digital Media and the web, Technical Editing, and Visual Rhetoric. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5314. Specializations in Technical Communication.**

A group of courses that provide students theoretical and practical information for specialized types of technical communication. Recent emphases include International Technical Communication Proposal Writing, Software Documentation and Writing for the Government. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5315. Graduate Writing Workshop.**

A studio course in which the primary texts are student manuscripts. Concentrations in fiction or poetry examine principles and techniques of creating, evaluating, and revising writing in these genres. The course requires class members to review writing produced by other workshop members.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5316. Foundations in Rhetoric and Composition.**

A group of courses providing students with theoretical, pedagogical, and methodological foundations in the field of rhetoric and composition. Emphases vary but include Contemporary Composition Theory and Composition Pedagogy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5317. Specializations in Rhetoric and Composition.**

A group of courses providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Center Theory, Practice, and Administration; Writing Across the Curriculum; Service Learning; and Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5320. Form and Theory of Fiction.**

An examination of traditional and current theory and practice in fiction. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of fiction in other literatures. For M.F.A. credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5321. Contemporary Fiction.**

Readings selected from canonical and/or experimental fiction. Recent emphases include novels into film, postmodern fiction, Magical Realism, and Saul Bellow. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5322. Form and Theory of Poetry.**

An examination of traditional and current theory and practice in poetry. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of poetry in other literatures. For MFA credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5323. Studies in Autobiography and Biography.**

A study of selected works in autobiography and biography with special attention to the art forms used in these works. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5324. Studies in Literary Genre.**

A study of one or more literary genres over several historical periods or from a variety of cultural perspectives. The course focuses on genres such as the following: the epic, the novel, the short story, the lyric, the pastoral, the romance, and Irish comic fiction. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5325. Studies in Literature of the Southwest.**

Selected Texas and Southwestern writers with emphasis on fiction. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5327. Research Methods in Rhetoric and Composition.**

This course introduces research practices in rhetoric and composition, focusing on the strategies, methods, paradigms, and perspectives that characterize qualitative and quantitative research. It considers research ethics, issues of representation, and the history and role of research in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5328. Directed Portfolio.**

Constitutes partial fulfillment of non-thesis option for students earning the MA in Rhetoric and Composition. Under guidance of a graduate faculty committee, students produce a portfolio of representative written work with written commentary and reflection. Repeatable once. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5329. User Experience (UX) and Usability Research.**

This course introduces foundational principles of user experience (UX) design theory and the practice of placing users and their needs as the focus of design. Along with the principles of human factors and user interface design, the course also focuses on user and task-analysis, field research methods, usability testing, and the UX process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5331. Studies in American Poetry.**

Selected poets with a survey of their works. Recent emphases include Walt Whitman, Emily Dickinson, Southern poetry, Denise Levertov, and Robert Bly. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5332. Studies in American Prose.**

Selected authors with special attention to novels. Recent emphases include William Faulkner, Ernest Hemingway, Richard Wright, and Zora Neale Hurston. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5335. Technical Editing.**

This course explores how to edit technical documents using different levels of editing, including copyediting and developmental editing. Students will also explore current trends in technical editing and publishing, as well as effective author-editor relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5336. Document Design.**

This course explores designing documents that utilize principles of design to maximize the effects of layout, style, color, information architecture, and typography. Students learn to coordinate content for information messaging and view documents as active, response-invoking artifacts in a variety of media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5340. Discourse Analysis.**

This course introduces theories and methodologies for the study of human discourse, or language in use. Discourse history, assumptions and principles, verbal and nonverbal communication, as well as society and culture's roles in a variety of discourse genres are analyzed and discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5341. Software Documentation.**

This course develops students' expertise in the management and production of writing that supports the efficient use of software in its intended environment. Major genres include software and hardware manuals such as tutorials, procedures, and reference manuals. Students address issues of user analysis, text design, graphics design, task orientation, etc.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5345. Southwestern Studies I: Defining the Region.**

An interdisciplinary course that surveys the physical, cultural, and social history of the Southwest, emphasizing architecture, art, literature, philosophy, politics, popular culture, and technology. Historical focus from the 15th to the mid-19th century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5346. Southwestern Studies II: Consequences of Region.**

Second course in a survey of physical, cultural, and social history of the Southwest, emphasizing regional and ethnic expressions of culture. This course moves from the broad overview of the first semester to more specific problems in the region and to the artistic products of regional culture. Historical focus is from the Civil War to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5353. Studies in Medieval Literature.**

Emphasis on authors, contexts, and genres of the medieval period. Recent emphases include Anglo-Saxon culture, language, and literature; Chaucer; non-Chaucerian medieval literature; pilgrimage literature. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5354. Studies in Renaissance Literature.**

Emphasis on authors, contexts, and genres of the Renaissance. Recent emphases include Shakespeare, Renaissance epic, Tudor humanism, and John Milton. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5359. Studies in Restoration and Eighteenth-century Literature.**

Major writers of the period with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Johnson and his circle, Restoration and eighteenth-century drama, and the eighteenth-century novel. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5364. Studies in the Romantic Movement.**

The works of the Early Romantics or Late Romantics in context with attention to nineteenth- and twentieth-century scholarship. Recent emphases include Blake and the other arts, Coleridge, the Wordsworths, Shelley, and Keats. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5366. Studies in Victorian Poetry.**

Major Victorian poets with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Tennyson, the Brownings, the Pre-Raphaelites, and Hopkins. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5368. Studies in Victorian Prose.**

Major Victorian prose writers with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include George Eliot, non-fiction Victorian prose, Victorian women novelists, and Charles Dickens. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5371. Studies in Modern British Literature.**

Selected authors with a survey of their works. Recent emphases include Yeats, Wilde, Auden, and Post-World War II British poetry. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5372. Practicum in English Studies.**

An introduction to key issues and concepts in the teaching of English studies. Required for first-year instructional assistants in the English Department. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5381. Studies in Modern British and American Drama.**

A survey of major British and American dramatists and their European or world context. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Header

**Grade Mode:** Standard Letter

**ENG 5382. Practicum in Composition.**

An introduction to key issues and concepts in the teaching of expository writing at the college level. Required for first-year teaching assistants in the English Department who have not previously taken ENG 5372. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5384. Critical Theory.**

A study of critical theory, emphasizing the history of criticism and/or contemporary critical theories. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**ENG 5388. Studies in Literature for Children or Adolescents.**

A study of contemporary works, extending the student's knowledge of the literature and criticism in the field. Typical emphases are generic and/or thematic and include picture books, the contemporary novel, and the children's classics on film. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5389. History of Children's Literature.**

The history of children's literature from the Middle Ages through 1940. May be repeated with different emphases for up to six hours of graduate credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5390. Special Problems.**

Independent study under supervision of a graduate faculty member in English, with in-depth readings and research focused on a special problem in literature and/or language. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5391. Directed Studies in English.**

Students will conduct studies as necessary preparation for graduate-level coursework in English. The nature of the work varies depending on the student's level of academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ENG 5395. Problems in Language and Literature.**

Recent emphases include literary technique and literary theory. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5399A. Thesis.**

First semester of thesis enrollment. No thesis credit awarded until student has completed the thesis in English 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5399B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5599B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5999B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) degree with a major in Technical Communication prepares graduates to write in technical and other professional settings and to pursue doctoral work in the field.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in 12 or more hours of undergraduate English, writing, editing, web design, or technical communication/professional writing course work (Other courses may be approved by the graduate advisor.)
- GRE not required
- portfolio (submit the following items as a single PDF document):
  - at least two non-fiction, prose documents (combined minimum of 15 pages, double-spaced) consisting of at least one academic research paper written for an undergraduate or graduate course
  - cover letter describing the submitted two (or more) non-fiction, prose documents
  - statement of purpose explaining the reasons for pursuing the MATC and including background information that demonstrates:

- interest and/or experience in writing, editing
- interest and/or experience designing online or paper documents
- other pertinent information

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Technical Communication consists of 30 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENG 5311	Foundations in Technical Communication	3
ENG 5383	Studies in Rhetorical Theory	3
or ENG 5326	Contemporary Composition Theory	
ENG 5312	Editing the Professional Publication <sup>1</sup>	3
<b>Prescribed Electives</b>		
Choose 9 hours from the following:		9
ENG 5310	Studies in English Language and Linguistics	3
ENG 5313	Studies in Principles of Technical Communication (repeatable for credit) <sup>2</sup>	3
ENG 5341	Software Documentation	3
Choose 6 hours from the following:		6
ENG 5300	Language Problems in a Multicultural Environment	3
ENG 5307	Visual Rhetoric	3
ENG 5309	International Technical Communication	3
ENG 5310	Studies in English Language and Linguistics	3
ENG 5312	Editing the Professional Publication (may be taken twice) <sup>1</sup>	3
ENG 5314	Specializations in Technical Communication (Various Topics Repeatable for Credit) <sup>2</sup>	3
ENG 5317	Specializations in Rhetoric and Composition <sup>1</sup>	3
ENG 5324	Studies in Literary Genre	3
ENG 5329	User Experience (UX) and Usability Research	3
ENG 5335	Technical Editing	3
ENG 5336	Document Design	3
ENG 5340	Discourse Analysis	3
<b>Cognate</b>		

Choose 6 hours of advisor-approved courses	6
<b>Total Hours</b>	<b>75</b>

<sup>1</sup> May be repeated twice. Different topics are required.

<sup>2</sup> Unlimited repeats allowed. Different topics are required.

## Comprehensive Examination Requirement

All students must complete a portfolio comprehensive exam to graduate. To complete the MATC Portfolio Comprehensive Exam, you will develop, organize, categorize, and present your best academic and practical work to demonstrate what you have learned in the MATC program. The portfolio serves as the assessment tool for faculty to comprehensively review the student's work. The portfolio collection should provide evidence of the student's growth through the program and provide support for the ideas you offered in the Reflective Analysis Essay that students will write as part of the portfolio presentation. All students are required to submit the portfolio in their last semester of the program. Students must pass the portfolio exam in order to graduate. The deadline affords students at least one week for revisions to any deficiencies specified by the review committee, should the review committee deem the portfolio incomplete or unacceptable. If the student fails to pass the portfolio comprehensive exam during the final semester, the student will retake the comprehensive exam during the next regular semester.

All students must also complete either the internship course ENG 5312 or thesis hours in order to graduate. The internship course is offered each spring. Students in the internship course complete a reflection that demonstrates mastery of best practices and applied theory. Students completing the thesis track need to be aware of the deadlines for thesis materials. Students are responsible for meeting all the deadlines prior to graduation. For more information, please see the program's Thesis Track webpage or go to the Graduate College website to view their guide to preparing and submitting a thesis, along with the required forms necessary to complete your thesis.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in English: ENG

## Courses Offered

### English (ENG)

#### ENG 5199B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENG 5299B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5300. Language Problems in a Multicultural Environment.**

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5301. Literary Scholarship.**

An introduction to scholarly resources, methods, theories, and responsibilities that guide the study and interpretations of literature in English. Literary texts chosen for detailed examination vary with expertise of the instructor. Required in first year of M.A. with a Literature Major.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5302. Media Studies.**

The study of film and media history, theory, and practice. Special topics may include videography, video editing, genre, filmmakers, and regional film.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5307. Visual Rhetoric.**

This course focuses on of this course is the investigation of image-based modes of rhetorical communication. The course includes theories of visual rhetoric and the analysis of the issues and implications of images.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5309. International Technical Communication.**

This course covers models and theories of cultural differences and how to ethically and effectively communicate with cross-cultural audiences verbally and non-verbally. Students also learn how to analyze international audiences in terms of their values, cultural needs, and communication styles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5310. Studies in English Language and Linguistics.**

A study of the English language, with special attention to phonology, morphology, syntax, semantics, dialectology, sociolinguistics, normal language acquisition, and/or writing and spelling systems. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5311. Foundations in Technical Communication.**

An introduction to the theory and practice of technical communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5312. Editing the Professional Publication.**

The editing, design, layout, and proofreading of a professional publication. This course is an internship. May be repeated one time with different emphasis.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5313. Studies in Principles of Technical Communication.**

A group of courses that provide students theoretical and practical information useful in any position in technical communication. Recent emphases include Digital Media and the web, Technical Editing, and Visual Rhetoric. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5314. Specializations in Technical Communication.**

A group of courses that provide students theoretical and practical information for specialized types of technical communication. Recent emphases include International Technical Communication Proposal Writing, Software Documentation and Writing for the Government. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5315. Graduate Writing Workshop.**

A studio course in which the primary texts are student manuscripts. Concentrations in fiction or poetry examine principles and techniques of creating, evaluating, and revising writing in these genres. The course requires class members to review writing produced by other workshop members.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5316. Foundations in Rhetoric and Composition.**

A group of courses providing students with theoretical, pedagogical, and methodological foundations in the field of rhetoric and composition. Emphases vary but include Contemporary Composition Theory and Composition Pedagogy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5317. Specializations in Rhetoric and Composition.**

A group of courses providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Center Theory, Practice, and Administration; Writing Across the Curriculum; Service Learning; and Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5320. Form and Theory of Fiction.**

An examination of traditional and current theory and practice in fiction. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of fiction in other literatures. For M.F.A. credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5321. Contemporary Fiction.**

Readings selected from canonical and/or experimental fiction. Recent emphases include novels into film, postmodern fiction, Magical Realism, and Saul Bellow. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5322. Form and Theory of Poetry.**

An examination of traditional and current theory and practice in poetry. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of poetry in other literatures. For MFA credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5323. Studies in Autobiography and Biography.**

A study of selected works in autobiography and biography with special attention to the art forms used in these works. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5324. Studies in Literary Genre.**

A study of one or more literary genres over several historical periods or from a variety of cultural perspectives. The course focuses on genres such as the following: the epic, the novel, the short story, the lyric, the pastoral, the romance, and Irish comic fiction. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5325. Studies in Literature of the Southwest.**

Selected Texas and Southwestern writers with emphasis on fiction. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5327. Research Methods in Rhetoric and Composition.**

This course introduces research practices in rhetoric and composition, focusing on the strategies, methods, paradigms, and perspectives that characterize qualitative and quantitative research. It considers research ethics, issues of representation, and the history and role of research in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5328. Directed Portfolio.**

Constitutes partial fulfillment of non-thesis option for students earning the MA in Rhetoric and Composition. Under guidance of a graduate faculty committee, students produce a portfolio of representative written work with written commentary and reflection. Repeatable once. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5329. User Experience (UX) and Usability Research.**

This course introduces foundational principles of user experience (UX) design theory and the practice of placing users and their needs as the focus of design. Along with the principles of human factors and user interface design, the course also focuses on user and task-analysis, field research methods, usability testing, and the UX process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5331. Studies in American Poetry.**

Selected poets with a survey of their works. Recent emphases include Walt Whitman, Emily Dickinson, Southern poetry, Denise Levertov, and Robert Bly. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5332. Studies in American Prose.**

Selected authors with special attention to novels. Recent emphases include William Faulkner, Ernest Hemingway, Richard Wright, and Zora Neale Hurston. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5335. Technical Editing.**

This course explores how to edit technical documents using different levels of editing, including copyediting and developmental editing. Students will also explore current trends in technical editing and publishing, as well as effective author-editor relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5336. Document Design.**

This course explores designing documents that utilize principles of design to maximize the effects of layout, style, color, information architecture, and typography. Students learn to coordinate content for information messaging and view documents as active, response-invoking artifacts in a variety of media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5340. Discourse Analysis.**

This course introduces theories and methodologies for the study of human discourse, or language in use. Discourse history, assumptions and principles, verbal and nonverbal communication, as well as society and culture's roles in a variety of discourse genres are analyzed and discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5341. Software Documentation.**

This course develops students' expertise in the management and production of writing that supports the efficient use of software in its intended environment. Major genres include software and hardware manuals such as tutorials, procedures, and reference manuals. Students address issues of user analysis, text design, graphics design, task orientation, etc.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5345. Southwestern Studies I: Defining the Region.**

An interdisciplinary course that surveys the physical, cultural, and social history of the Southwest, emphasizing architecture, art, literature, philosophy, politics, popular culture, and technology. Historical focus from the 15th to the mid-19th century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5346. Southwestern Studies II: Consequences of Region.**

Second course in a survey of physical, cultural, and social history of the Southwest, emphasizing regional and ethnic expressions of culture. This course moves from the broad overview of the first semester to more specific problems in the region and to the artistic products of regional culture. Historical focus is from the Civil War to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5353. Studies in Medieval Literature.**

Emphasis on authors, contexts, and genres of the medieval period. Recent emphases include Anglo-Saxon culture, language, and literature; Chaucer; non-Chaucerian medieval literature; pilgrimage literature. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5354. Studies in Renaissance Literature.**

Emphasis on authors, contexts, and genres of the Renaissance. Recent emphases include Shakespeare, Renaissance epic, Tudor humanism, and John Milton. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5359. Studies in Restoration and Eighteenth-century Literature.**

Major writers of the period with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Johnson and his circle, Restoration and eighteenth-century drama, and the eighteenth-century novel. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5364. Studies in the Romantic Movement.**

The works of the Early Romantics or Late Romantics in context with attention to nineteenth- and twentieth-century scholarship. Recent emphases include Blake and the other arts, Coleridge, the Wordsworths, Shelley, and Keats. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5366. Studies in Victorian Poetry.**

Major Victorian poets with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Tennyson, the Brownings, the Pre-Raphaelites, and Hopkins. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5368. Studies in Victorian Prose.**

Major Victorian prose writers with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include George Eliot, non-fiction Victorian prose, Victorian women novelists, and Charles Dickens. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ENG 5371. Studies in Modern British Literature.**

Selected authors with a survey of their works. Recent emphases include Yeats, Wilde, Auden, and Post-World War II British poetry. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5372. Practicum in English Studies.**

An introduction to key issues and concepts in the teaching of English studies. Required for first-year instructional assistants in the English Department. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5381. Studies in Modern British and American Drama.**

A survey of major British and American dramatists and their European or world context. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Header

**Grade Mode:** Standard Letter

**ENG 5382. Practicum in Composition.**

An introduction to key issues and concepts in the teaching of expository writing at the college level. Required for first-year teaching assistants in the English Department who have not previously taken ENG 5372. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5384. Critical Theory.**

A study of critical theory, emphasizing the history of criticism and/or contemporary critical theories. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5388. Studies in Literature for Children or Adolescents.**

A study of contemporary works, extending the student's knowledge of the literature and criticism in the field. Typical emphases are generic and/or thematic and include picture books, the contemporary novel, and the children's classics on film. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5389. History of Children's Literature.**

The history of children's literature from the Middle Ages through 1940. May be repeated with different emphases for up to six hours of graduate credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5390. Special Problems.**

Independent study under supervision of a graduate faculty member in English, with in-depth readings and research focused on a special problem in literature and/or language. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5391. Directed Studies in English.**

Students will conduct studies as necessary preparation for graduate-level coursework in English. The nature of the work varies depending on the student's level of academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ENG 5395. Problems in Language and Literature.**

Recent emphases include literary technique and literary theory. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5399A. Thesis.**

First semester of thesis enrollment. No thesis credit awarded until student has completed the thesis in English 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5399B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

ENG 5599B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

ENG 5999B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

Program Overview

The Master of Arts (M.A.) degree with a major in Technical Communication prepares graduates to write in technical and other professional settings and to pursue doctoral work in the field.

Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College’s website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor’s degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in 12 or more hours of undergraduate English, writing, editing, web design, or technical communication/professional writing course work (Other courses may be approved by the graduate advisor.)
- GRE not required
- portfolio (submit the following items as a single PDF document):
  - at least two non-fiction, prose documents (combined minimum of 15 pages, double-spaced) consisting of at least one academic research paper written for an undergraduate or graduate course
  - cover letter describing the submitted two (or more) non-fiction, prose documents
  - statement of purpose explaining the reasons for pursuing the MATC and including background information that demonstrates:

- interest and/or experience in writing, editing
- interest and/or experience designing online or paper documents
- other pertinent information

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

Degree Requirements

The Master of Arts (M.A.) degree with a major in Technical Communication consists of 30 semester credit hours, including a thesis.

Course Requirements

Code	Title	Hours
Required Courses		
ENG 5311	Foundations in Technical Communication	3
ENG 5326	Contemporary Composition Theory	3
or ENG 5383	Studies in Rhetorical Theory	
Prescribed Electives		
Choose 9 hours from the following:		9
ENG 5310	Studies in English Language and Linguistics (Digital Literacies)	
ENG 5313	Studies in Principles of Technical Communication (Digital & Print Document Design) <sup>2</sup>	
ENG 5313	Studies in Principles of Technical Communication (Digital Media and the Web) <sup>2</sup>	
ENG 5313	Studies in Principles of Technical Communication (Ethics in Technical Communication) <sup>2</sup>	
ENG 5313	Studies in Principles of Technical Communication (Software Documentation) <sup>2</sup>	
ENG 5313	Studies in Principles of Technical Communication (Digital Video Writing and Production) <sup>2</sup>	
ENG 5326	Contemporary Composition Theory (Computers and Writing)	
Choose 9 hours from the following:		9
ENG 5300	Language Problems in a Multicultural Environment	
ENG 5310	Studies in English Language and Linguistics	
ENG 5312	Editing the Professional Publication (may be taken twice) <sup>1</sup>	
ENG 5314	Specializations in Technical Communication (Various Topics) <sup>2</sup>	
ENG 5317	Specializations in Rhetoric and Composition <sup>1</sup>	

ENG 5324	Studies in Literary Genre	
<b>Thesis</b>		
ENG 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
ENG 5199B	Thesis	
ENG 5299B	Thesis	
ENG 5399B	Thesis	
ENG 5599B	Thesis	
ENG 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> May be repeated a maximum of three times. Different topics are required.

<sup>2</sup> May be repeated a maximum of three times. Different topics are required.

## Comprehensive Examination Requirement

All students must complete a portfolio comprehensive exam to graduate. To complete the MATC Portfolio Comprehensive Exam, you will develop, organize, categorize, and present your best academic and practical work to demonstrate what you have learned in the MATC program. The portfolio serves as the assessment tool for faculty to comprehensively review the student's work. The portfolio collection should provide evidence of the student's growth through the program and provide support for the ideas you offered in the Reflective Analysis Essay that students will write as part of the portfolio presentation. All students are required to submit the portfolio in their last semester of the program. Students must pass the portfolio exam in order to graduate. The deadline affords students at least one week for revisions to any deficiencies specified by the review committee, should the review committee deem the portfolio incomplete or unacceptable. If the student fails to pass the portfolio comprehensive exam during the final semester, the student will retake the comprehensive exam during the next regular semester.

All students must also complete either the internship course ENG 5312 or thesis hours in order to graduate. The internship course is offered each spring. Students in the internship course complete a reflection that demonstrates mastery of best practices and applied theory. Students completing the thesis track need to be aware of the deadlines for thesis materials. Students are responsible for meeting all the deadlines prior to graduation. For more information, please see the program's Thesis Track webpage or go to the Graduate College website to view their guide to preparing and submitting a thesis, along with the required forms necessary to complete your thesis.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until

the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in English: ENG

## Courses Offered English (ENG)

### ENG 5199B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### ENG 5299B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### ENG 5300. Language Problems in a Multicultural Environment.

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### ENG 5301. Literary Scholarship.

An introduction to scholarly resources, methods, theories, and responsibilities that guide the study and interpretations of literature in English. Literary texts chosen for detailed examination vary with expertise of the instructor. Required in first year of M.A. with a Literature Major.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ENG 5302. Media Studies.

The study of film and media history, theory, and practice. Special topics may include videography, video editing, genre, filmmakers, and regional film.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ENG 5307. Visual Rhetoric.

This course focuses on of this course is the investigation of image-based modes of rhetorical communication. The course includes theories of visual rhetoric and the analysis of the issues and implications of images.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### ENG 5309. International Technical Communication.

This course covers models and theories of cultural differences and how to ethically and effectively communicate with cross-cultural audiences verbally and non-verbally. Students also learn how to analyze international audiences in terms of their values, cultural needs, and communication styles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5310. Studies in English Language and Linguistics.**

A study of the English language, with special attention to phonology, morphology, syntax, semantics, dialectology, sociolinguistics, normal language acquisition, and/or writing and spelling systems. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5311. Foundations in Technical Communication.**

An introduction to the theory and practice of technical communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5312. Editing the Professional Publication.**

The editing, design, layout, and proofreading of a professional publication. This course is an internship. May be repeated one time with different emphasis.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5313. Studies in Principles of Technical Communication.**

A group of courses that provide students theoretical and practical information useful in any position in technical communication. Recent emphases include Digital Media and the web, Technical Editing, and Visual Rhetoric. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5314. Specializations in Technical Communication.**

A group of courses that provide students theoretical and practical information for specialized types of technical communication. Recent emphases include International Technical Communication Proposal Writing, Software Documentation and Writing for the Government. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5315. Graduate Writing Workshop.**

A studio course in which the primary texts are student manuscripts. Concentrations in fiction or poetry examine principles and techniques of creating, evaluating, and revising writing in these genres. The course requires class members to review writing produced by other workshop members.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5316. Foundations in Rhetoric and Composition.**

A group of courses providing students with theoretical, pedagogical, and methodological foundations in the field of rhetoric and composition.

Emphases vary but include Contemporary Composition Theory and Composition Pedagogy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5317. Specializations in Rhetoric and Composition.**

A group of courses providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Center Theory, Practice, and Administration; Writing Across the Curriculum; Service Learning; and Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5320. Form and Theory of Fiction.**

An examination of traditional and current theory and practice in fiction.

Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of fiction in other literatures. For M.F.A. credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5321. Contemporary Fiction.**

Readings selected from canonical and/or experimental fiction. Recent emphases include novels into film, postmodern fiction, Magical Realism, and Saul Bellow. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5322. Form and Theory of Poetry.**

An examination of traditional and current theory and practice in poetry. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of poetry in other literatures. For MFA credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5323. Studies in Autobiography and Biography.**

A study of selected works in autobiography and biography with special attention to the art forms used in these works. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ENG 5324. Studies in Literary Genre.**

A study of one or more literary genres over several historical periods or from a variety of cultural perspectives. The course focuses on genres such as the following: the epic, the novel, the short story, the lyric, the pastoral, the romance, and Irish comic fiction. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5325. Studies in Literature of the Southwest.**

Selected Texas and Southwestern writers with emphasis on fiction. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5327. Research Methods in Rhetoric and Composition.**

This course introduces research practices in rhetoric and composition, focusing on the strategies, methods, paradigms, and perspectives that characterize qualitative and quantitative research. It considers research ethics, issues of representation, and the history and role of research in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5328. Directed Portfolio.**

Constitutes partial fulfillment of non-thesis option for students earning the MA in Rhetoric and Composition. Under guidance of a graduate faculty committee, students produce a portfolio of representative written work with written commentary and reflection. Repeatable once. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5329. User Experience (UX) and Usability Research.**

This course introduces foundational principles of user experience (UX) design theory and the practice of placing users and their needs as the focus of design. Along with the principles of human factors and user interface design, the course also focuses on user and task-analysis, field research methods, usability testing, and the UX process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5331. Studies in American Poetry.**

Selected poets with a survey of their works. Recent emphases include Walt Whitman, Emily Dickinson, Southern poetry, Denise Levertov, and Robert Bly. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5332. Studies in American Prose.**

Selected authors with special attention to novels. Recent emphases include William Faulkner, Ernest Hemingway, Richard Wright, and Zora Neale Hurston. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5335. Technical Editing.**

This course explores how to edit technical documents using different levels of editing, including copyediting and developmental editing. Students will also explore current trends in technical editing and publishing, as well as effective author-editor relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5336. Document Design.**

This course explores designing documents that utilize principles of design to maximize the effects of layout, style, color, information architecture, and typography. Students learn to coordinate content for information messaging and view documents as active, response-invoking artifacts in a variety of media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5340. Discourse Analysis.**

This course introduces theories and methodologies for the study of human discourse, or language in use. Discourse history, assumptions and principles, verbal and nonverbal communication, as well as society and culture's roles in a variety of discourse genres are analyzed and discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5341. Software Documentation.**

This course develops students' expertise in the management and production of writing that supports the efficient use of software in its intended environment. Major genres include software and hardware manuals such as tutorials, procedures, and reference manuals. Students address issues of user analysis, text design, graphics design, task orientation, etc.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5345. Southwestern Studies I: Defining the Region.**

An interdisciplinary course that surveys the physical, cultural, and social history of the Southwest, emphasizing architecture, art, literature, philosophy, politics, popular culture, and technology. Historical focus from the 15th to the mid-19th century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5346. Southwestern Studies II: Consequences of Region.**

Second course in a survey of physical, cultural, and social history of the Southwest, emphasizing regional and ethnic expressions of culture. This course moves from the broad overview of the first semester to more specific problems in the region and to the artistic products of regional culture. Historical focus is from the Civil War to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5353. Studies in Medieval Literature.**

Emphasis on authors, contexts, and genres of the medieval period. Recent emphases include Anglo-Saxon culture, language, and literature; Chaucer; non-Chaucerian medieval literature; pilgrimage literature. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5354. Studies in Renaissance Literature.**

Emphasis on authors, contexts, and genres of the Renaissance. Recent emphases include Shakespeare, Renaissance epic, Tudor humanism, and John Milton. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5359. Studies in Restoration and Eighteenth-century Literature.**

Major writers of the period with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Johnson and his circle, Restoration and eighteenth-century drama, and the eighteenth-century novel. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5364. Studies in the Romantic Movement.**

The works of the Early Romantics or Late Romantics in context with attention to nineteenth- and twentieth-century scholarship. Recent emphases include Blake and the other arts, Coleridge, the Wordsworths, Shelley, and Keats. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5366. Studies in Victorian Poetry.**

Major Victorian poets with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Tennyson, the Brownings, the Pre-Raphaelites, and Hopkins. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5368. Studies in Victorian Prose.**

Major Victorian prose writers with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include George Eliot, non-fiction Victorian prose, Victorian women novelists, and Charles Dickens. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5371. Studies in Modern British Literature.**

Selected authors with a survey of their works. Recent emphases include Yeats, Wilde, Auden, and Post-World War II British poetry. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5372. Practicum in English Studies.**

An introduction to key issues and concepts in the teaching of English studies. Required for first-year instructional assistants in the English Department. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5381. Studies in Modern British and American Drama.**

A survey of major British and American dramatists and their European or world context. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Header

**Grade Mode:** Standard Letter

**ENG 5382. Practicum in Composition.**

An introduction to key issues and concepts in the teaching of expository writing at the college level. Required for first-year teaching assistants in the English Department who have not previously taken ENG 5372. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5384. Critical Theory.**

A study of critical theory, emphasizing the history of criticism and/or contemporary critical theories. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5388. Studies in Literature for Children or Adolescents.**

A study of contemporary works, extending the student's knowledge of the literature and criticism in the field. Typical emphases are generic and/or thematic and include picture books, the contemporary novel, and the children's classics on film. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5389. History of Children's Literature.**

The history of children's literature from the Middle Ages through 1940. May be repeated with different emphases for up to six hours of graduate credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5390. Special Problems.**

Independent study under supervision of a graduate faculty member in English, with in-depth readings and research focused on a special problem in literature and/or language. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5391. Directed Studies in English.**

Students will conduct studies as necessary preparation for graduate-level coursework in English. The nature of the work varies depending on the student's level of academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ENG 5395. Problems in Language and Literature.**

Recent emphases include literary technique and literary theory. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5399A. Thesis.**

First semester of thesis enrollment. No thesis credit awarded until student has completed the thesis in English 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5399B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5599B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5999B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) degree with a major in Technical Communication prepares graduates to write in technical and other professional settings and to pursue doctoral work in the field.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered.

Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in 12 or more hours of undergraduate English, writing, editing, web design, or technical communication/professional writing course work (Other courses may be approved by the graduate advisor.)
- GRE not required
- portfolio (submit the following items as a single PDF document):
  - at least two non-fiction, prose documents (combined minimum of 15 pages, double-spaced) consisting of at least one academic research paper written for an undergraduate or graduate course
  - cover letter describing the submitted two (or more) non-fiction, prose documents
  - statement of purpose explaining the reasons for pursuing the MATC and including background information that demonstrates:
    - interest and/or experience in writing, editing
    - interest and/or experience designing online or paper documents
    - other pertinent information

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Technical Communication consists of 30 semester credit hours, including a minor and a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENG 5311	Foundations in Technical Communication	3
ENG 5326	Contemporary Composition Theory	3
or ENG 5383	Studies in Rhetorical Theory	
<b>Prescribed Electives</b>		
Choose 9 hours from the following:		9
ENG 5310	Studies in English Language and Linguistics (Digital Literacies)	

ENG 5313	Studies in Principles of Technical Communication (Digital & Print Document Design) <sup>2</sup>	
ENG 5313	Studies in Principles of Technical Communication (Digital Media and the Web) <sup>2</sup>	
ENG 5313	Studies in Principles of Technical Communication (Ethics in Technical Communication) <sup>2</sup>	
ENG 5313	Studies in Principles of Technical Communication (Software Documentation) <sup>2</sup>	
ENG 5313	Studies in Principles of Technical Communication (Digital Video Writing and Production) <sup>2</sup>	
ENG 5326	Contemporary Composition Theory (Computers and Writing)	
Choose 3 hours from the following:		3
ENG 5300	Language Problems in a Multicultural Environment	
ENG 5310	Studies in English Language and Linguistics	
ENG 5312	Editing the Professional Publication (may be taken twice) <sup>1</sup>	
ENG 5314	Specializations in Technical Communication (Various Topics) <sup>2</sup>	
ENG 5317	Specializations in Rhetoric and Composition <sup>1</sup>	
ENG 5324	Studies in Literary Genre	
<b>Thesis</b>		
ENG 5399A	Thesis	3
Choose a minimum of 3 hours from the following		3
ENG 5199B	Thesis	
ENG 5299B	Thesis	
ENG 5399B	Thesis	
ENG 5599B	Thesis	
ENG 5999B	Thesis	
<b>Minor</b>		
Choose a 6-hours advisor-approved minor		6
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> May be repeated a maximum of three times. Different topics are required.

<sup>2</sup> May be repeated a maximum of three times. Different topics are required.

## Comprehensive Examination Requirement

All students must complete a portfolio comprehensive exam to graduate. To complete the MATC Portfolio Comprehensive Exam, you will develop, organize, categorize, and present your best academic and practical work to demonstrate what you have learned in the MATC program. The portfolio serves as the assessment tool for faculty to comprehensively review the student's work. The portfolio collection should provide evidence of the student's growth through the program and provide support for the ideas you offered in the Reflective Analysis Essay that students will write as part of the portfolio presentation. All students are required to submit the portfolio in their last semester of the program. Students must pass the portfolio exam in order to graduate. The deadline affords students at least one week for revisions to any deficiencies specified by the review committee, should the review committee deem the portfolio incomplete or unacceptable. If the student fails to pass the portfolio comprehensive exam during the final semester, the student will retake the comprehensive exam during the next regular semester.

All students must also complete either the internship course ENG 5312 or thesis hours in order to graduate. The internship course is offered each spring. Students in the internship course complete a reflection that demonstrates mastery of best practices and applied theory. Students completing the thesis track need to be aware of the deadlines for thesis materials. Students are responsible for meeting all the deadlines prior to graduation. For more information, please see the program's Thesis Track webpage or go to the Graduate College website to view their guide to preparing and submitting a thesis, along with the required forms necessary to complete your thesis.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect

the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.



If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in English: ENG

## Courses Offered

### English (ENG)

#### **ENG 5199B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **ENG 5299B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **ENG 5300. Language Problems in a Multicultural Environment.**

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

#### **ENG 5301. Literary Scholarship.**

An introduction to scholarly resources, methods, theories, and responsibilities that guide the study and interpretations of literature in English. Literary texts chosen for detailed examination vary with expertise of the instructor. Required in first year of M.A. with a Literature Major.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ENG 5302. Media Studies.**

The study of film and media history, theory, and practice. Special topics may include videography, video editing, genre, filmmakers, and regional film.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ENG 5307. Visual Rhetoric.**

This course focuses on of this course is the investigation of image-based modes of rhetorical communication. The course includes theories of visual rhetoric and the analysis of the issues and implications of images.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ENG 5309. International Technical Communication.**

This course covers models and theories of cultural differences and how to ethically and effectively communicate with cross-cultural audiences verbally and non-verbally. Students also learn how to analyze international audiences in terms of their values, cultural needs, and communication styles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ENG 5310. Studies in English Language and Linguistics.**

A study of the English language, with special attention to phonology, morphology, syntax, semantics, dialectology, sociolinguistics, normal language acquisition, and/or writing and spelling systems. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ENG 5311. Foundations in Technical Communication.**

An introduction to the theory and practice of technical communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ENG 5312. Editing the Professional Publication.**

The editing, design, layout, and proofreading of a professional publication. This course is an internship. May be repeated one time with different emphasis.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **ENG 5313. Studies in Principles of Technical Communication.**

A group of courses that provide students theoretical and practical information useful in any position in technical communication. Recent emphases include Digital Media and the web, Technical Editing, and Visual Rhetoric. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ENG 5314. Specializations in Technical Communication.**

A group of courses that provide students theoretical and practical information for specialized types of technical communication. Recent emphases include International Technical Communication Proposal Writing, Software Documentation and Writing for the Government. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5315. Graduate Writing Workshop.**

A studio course in which the primary texts are student manuscripts. Concentrations in fiction or poetry examine principles and techniques of creating, evaluating, and revising writing in these genres. The course requires class members to review writing produced by other workshop members.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5316. Foundations in Rhetoric and Composition.**

A group of courses providing students with theoretical, pedagogical, and methodological foundations in the field of rhetoric and composition. Emphases vary but include Contemporary Composition Theory and Composition Pedagogy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5317. Specializations in Rhetoric and Composition.**

A group of courses providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Center Theory, Practice, and Administration; Writing Across the Curriculum; Service Learning; and Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5320. Form and Theory of Fiction.**

An examination of traditional and current theory and practice in fiction. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of fiction in other literatures. For M.F.A. credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5321. Contemporary Fiction.**

Readings selected from canonical and/or experimental fiction. Recent emphases include novels into film, postmodern fiction, Magical Realism, and Saul Bellow. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5322. Form and Theory of Poetry.**

An examination of traditional and current theory and practice in poetry. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of poetry in other literatures. For MFA credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5323. Studies in Autobiography and Biography.**

A study of selected works in autobiography and biography with special attention to the art forms used in these works. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5324. Studies in Literary Genre.**

A study of one or more literary genres over several historical periods or from a variety of cultural perspectives. The course focuses on genres such as the following: the epic, the novel, the short story, the lyric, the pastoral, the romance, and Irish comic fiction. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5325. Studies in Literature of the Southwest.**

Selected Texas and Southwestern writers with emphasis on fiction. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5327. Research Methods in Rhetoric and Composition.**

This course introduces research practices in rhetoric and composition, focusing on the strategies, methods, paradigms, and perspectives that characterize qualitative and quantitative research. It considers research ethics, issues of representation, and the history and role of research in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5328. Directed Portfolio.**

Constitutes partial fulfillment of non-thesis option for students earning the MA in Rhetoric and Composition. Under guidance of a graduate faculty committee, students produce a portfolio of representative written work with written commentary and reflection. Repeatable once. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5329. User Experience (UX) and Usability Research.**

This course introduces foundational principles of user experience (UX) design theory and the practice of placing users and their needs as the focus of design. Along with the principles of human factors and user interface design, the course also focuses on user and task-analysis, field research methods, usability testing, and the UX process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5331. Studies in American Poetry.**

Selected poets with a survey of their works. Recent emphases include Walt Whitman, Emily Dickinson, Southern poetry, Denise Levertov, and Robert Bly. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5332. Studies in American Prose.**

Selected authors with special attention to novels. Recent emphases include William Faulkner, Ernest Hemingway, Richard Wright, and Zora Neale Hurston. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5335. Technical Editing.**

This course explores how to edit technical documents using different levels of editing, including copyediting and developmental editing. Students will also explore current trends in technical editing and publishing, as well as effective author-editor relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5336. Document Design.**

This course explores designing documents that utilize principles of design to maximize the effects of layout, style, color, information architecture, and typography. Students learn to coordinate content for information messaging and view documents as active, response-invoking artifacts in a variety of media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5340. Discourse Analysis.**

This course introduces theories and methodologies for the study of human discourse, or language in use. Discourse history, assumptions and principles, verbal and nonverbal communication, as well as society and culture's roles in a variety of discourse genres are analyzed and discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5341. Software Documentation.**

This course develops students' expertise in the management and production of writing that supports the efficient use of software in its intended environment. Major genres include software and hardware manuals such as tutorials, procedures, and reference manuals. Students address issues of user analysis, text design, graphics design, task orientation, etc.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5345. Southwestern Studies I: Defining the Region.**

An interdisciplinary course that surveys the physical, cultural, and social history of the Southwest, emphasizing architecture, art, literature, philosophy, politics, popular culture, and technology. Historical focus from the 15th to the mid-19th century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5346. Southwestern Studies II: Consequences of Region.**

Second course in a survey of physical, cultural, and social history of the Southwest, emphasizing regional and ethnic expressions of culture. This course moves from the broad overview of the first semester to more specific problems in the region and to the artistic products of regional culture. Historical focus is from the Civil War to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5353. Studies in Medieval Literature.**

Emphasis on authors, contexts, and genres of the medieval period. Recent emphases include Anglo-Saxon culture, language, and literature; Chaucer; non-Chaucerian medieval literature; pilgrimage literature. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5354. Studies in Renaissance Literature.**

Emphasis on authors, contexts, and genres of the Renaissance. Recent emphases include Shakespeare, Renaissance epic, Tudor humanism, and John Milton. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5359. Studies in Restoration and Eighteenth-century Literature.**

Major writers of the period with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Johnson and his circle, Restoration and eighteenth-century drama, and the eighteenth-century novel. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5364. Studies in the Romantic Movement.**

The works of the Early Romantics or Late Romantics in context with attention to nineteenth- and twentieth-century scholarship. Recent emphases include Blake and the other arts, Coleridge, the Wordsworths, Shelley, and Keats. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5366. Studies in Victorian Poetry.**

Major Victorian poets with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Tennyson, the Brownings, the Pre-Raphaelites, and Hopkins. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5368. Studies in Victorian Prose.**

Major Victorian prose writers with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include George Eliot, non-fiction Victorian prose, Victorian women novelists, and Charles Dickens. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5371. Studies in Modern British Literature.**

Selected authors with a survey of their works. Recent emphases include Yeats, Wilde, Auden, and Post-World War II British poetry. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5372. Practicum in English Studies.**

An introduction to key issues and concepts in the teaching of English studies. Required for first-year instructional assistants in the English Department. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5381. Studies in Modern British and American Drama.**

A survey of major British and American dramatists and their European or world context. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Header

**Grade Mode:** Standard Letter

**ENG 5382. Practicum in Composition.**

An introduction to key issues and concepts in the teaching of expository writing at the college level. Required for first-year teaching assistants in the English Department who have not previously taken ENG 5372. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5384. Critical Theory.**

A study of critical theory, emphasizing the history of criticism and/or contemporary critical theories. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5388. Studies in Literature for Children or Adolescents.**

A study of contemporary works, extending the student's knowledge of the literature and criticism in the field. Typical emphases are generic and/or thematic and include picture books, the contemporary novel, and the children's classics on film. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5389. History of Children's Literature.**

The history of children's literature from the Middle Ages through 1940. May be repeated with different emphases for up to six hours of graduate credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5390. Special Problems.**

Independent study under supervision of a graduate faculty member in English, with in-depth readings and research focused on a special problem in literature and/or language. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5391. Directed Studies in English.**

Students will conduct studies as necessary preparation for graduate-level coursework in English. The nature of the work varies depending on the student's level of academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ENG 5395. Problems in Language and Literature.**

Recent emphases include literary technique and literary theory. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5399A. Thesis.**

First semester of thesis enrollment. No thesis credit awarded until student has completed the thesis in English 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5399B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5599B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5999B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Fine Arts (M.F.A.) degree with a major in Creative Writing program offers talented writers the opportunity to develop skills as fiction writers or poets in a formal academic program.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume or CV
- Submit a PDF file that contains your statement of purpose (maximum 750 words)
  - *Prompt for statement of purpose:* Discuss your goals for your time in our three-year program. How do you hope to use this time to grow as a writer? You might additionally choose to address scholarly goals, professional goals, and/or what you see as the benefits of living and working in a diverse community of writers.
- three letters of recommendation that address your academic qualifications **and** your commitment to good citizenship in a collegial and diverse academic community. If you are applying for an Instructional or Teaching Assistantship, all letters should **also** discuss your potential as a teacher.
- creative portfolio (combined into one PDF file)
  - Fiction applicants should submit a maximum of 25 double-spaced pages of their work (short stories and/or a novel excerpts).
  - Poetry applicants should submit 12-15 poems.
  - Both Fiction and Poetry applicants may, if they choose, also include one creative nonfiction essay or excerpt in their portfolio, subject to the same 25-page maximum for the manuscript in total.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).



- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Fine Arts (M.F.A.) degree with a major in Creative Writing concentration in fiction requires 48 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENG 5315	Graduate Writing Workshop (Repeated for a total of 12 hours)	12
ENG 5395	Problems in Language and Literature	3
ENG 5320	Form and Theory of Fiction	3
<b>Prescribed Electives</b>		
Choose 15 hours from the following:		15
ENG 5301	Literary Scholarship	
ENG 5302	Media Studies	
ENG 5310	Studies in English Language and Linguistics	
ENG 5312	Editing the Professional Publication	
ENG 5313	Studies in Principles of Technical Communication	
ENG 5314	Specializations in Technical Communication	
ENG 5316	Foundations in Rhetoric and Composition	
ENG 5317	Specializations in Rhetoric and Composition	
ENG 5321	Contemporary Fiction	
ENG 5323	Studies in Autobiography and Biography	
ENG 5324	Studies in Literary Genre	
ENG 5325	Studies in Literature of the Southwest	
ENG 5331	Studies in American Poetry	
ENG 5332	Studies in American Prose	
ENG 5345	Southwestern Studies I: Defining the Region	
ENG 5346	Southwestern Studies II: Consequences of Region	
ENG 5353	Studies in Medieval Literature	
ENG 5354	Studies in Renaissance Literature	
ENG 5359	Studies in Restoration and Eighteenth-century Literature	
ENG 5364	Studies in the Romantic Movement	
ENG 5366	Studies in Victorian Poetry	
ENG 5368	Studies in Victorian Prose	
ENG 5371	Studies in Modern British Literature	
ENG 5381	Studies in Modern British and American Drama	
ENG 5384	Critical Theory	
ENG 5388	Studies in Literature for Children or Adolescents	
ENG 5389	History of Children's Literature	
ENG 5395	Problems in Language and Literature	
TH 5354	Playwriting	
TH 5358	Screenwriting	

TH 5359	Advanced Screenwriting	
<b>Minor</b>		
Choose a 9-hour advisor-approved minor		9
<b>Thesis</b>		
ENG 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
ENG 5199B	Thesis	
ENG 5299B	Thesis	
ENG 5399B	Thesis	
ENG 5599B	Thesis	
ENG 5999B	Thesis	
<b>Total Hours</b>		<b>48</b>

## Comprehensive Examination Requirements

All candidates for graduate degrees must pass one or more comprehensive examinations.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the

thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in English: ENG

## Courses Offered

### English (ENG)

Graduate courses listed as "repeatable" ordinarily count toward nine hours of English degree credit unless otherwise indicated. Exceptions require written justification and departmental approval. Specific emphases of repeatable courses vary by term and instructor, but they may focus on literary and rhetorical forms and genres; authors, periods, or literary movements; perspectives from social, intellectual, and cultural studies; literary themes; or theoretical and practical information for technical communication. The department provides descriptions of specific courses prior to each term's enrollment period.

#### ENG 5199B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENG 5299B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENG 5300. Language Problems in a Multicultural Environment.

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5301. Literary Scholarship.**

An introduction to scholarly resources, methods, theories, and responsibilities that guide the study and interpretations of literature in English. Literary texts chosen for detailed examination vary with expertise of the instructor. Required in first year of M.A. with a Literature Major.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5302. Media Studies.**

The study of film and media history, theory, and practice. Special topics may include videography, video editing, genre, filmmakers, and regional film.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5307. Visual Rhetoric.**

This course focuses on of this course is the investigation of image-based modes of rhetorical communication. The course includes theories of visual rhetoric and the analysis of the issues and implications of images.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5309. International Technical Communication.**

This course covers models and theories of cultural differences and how to ethically and effectively communicate with cross-cultural audiences verbally and non-verbally. Students also learn how to analyze international audiences in terms of their values, cultural needs, and communication styles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5310. Studies in English Language and Linguistics.**

A study of the English language, with special attention to phonology, morphology, syntax, semantics, dialectology, sociolinguistics, normal language acquisition, and/or writing and spelling systems. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5311. Foundations in Technical Communication.**

An introduction to the theory and practice of technical communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5312. Editing the Professional Publication.**

The editing, design, layout, and proofreading of a professional publication. This course is an internship. May be repeated one time with different emphasis.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5313. Studies in Principles of Technical Communication.**

A group of courses that provide students theoretical and practical information useful in any position in technical communication. Recent emphases include Digital Media and the web, Technical Editing, and Visual Rhetoric. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5314. Specializations in Technical Communication.**

A group of courses that provide students theoretical and practical information for specialized types of technical communication. Recent emphases include International Technical Communication Proposal Writing, Software Documentation and Writing for the Government. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5315. Graduate Writing Workshop.**

A studio course in which the primary texts are student manuscripts. Concentrations in fiction or poetry examine principles and techniques of creating, evaluating, and revising writing in these genres. The course requires class members to review writing produced by other workshop members.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5316. Foundations in Rhetoric and Composition.**

A group of courses providing students with theoretical, pedagogical, and methodological foundations in the field of rhetoric and composition. Emphases vary but include Contemporary Composition Theory and Composition Pedagogy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5317. Specializations in Rhetoric and Composition.**

A group of courses providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Center Theory, Practice, and Administration; Writing Across the Curriculum; Service Learning; and Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5320. Form and Theory of Fiction.**

An examination of traditional and current theory and practice in fiction. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of fiction in other literatures. For M.F.A. credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5321. Contemporary Fiction.**

Readings selected from canonical and/or experimental fiction. Recent emphases include novels into film, postmodern fiction, Magical Realism, and Saul Bellow. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5322. Form and Theory of Poetry.**

An examination of traditional and current theory and practice in poetry. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of poetry in other literatures. For MFA credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5323. Studies in Autobiography and Biography.**

A study of selected works in autobiography and biography with special attention to the art forms used in these works. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5324. Studies in Literary Genre.**

A study of one or more literary genres over several historical periods or from a variety of cultural perspectives. The course focuses on genres such as the following: the epic, the novel, the short story, the lyric, the pastoral, the romance, and Irish comic fiction. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5325. Studies in Literature of the Southwest.**

Selected Texas and Southwestern writers with emphasis on fiction. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5327. Research Methods in Rhetoric and Composition.**

This course introduces research practices in rhetoric and composition, focusing on the strategies, methods, paradigms, and perspectives that characterize qualitative and quantitative research. It considers research ethics, issues of representation, and the history and role of research in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5328. Directed Portfolio.**

Constitutes partial fulfillment of non-thesis option for students earning the MA in Rhetoric and Composition. Under guidance of a graduate faculty committee, students produce a portfolio of representative written work with written commentary and reflection. Repeatable once. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5329. User Experience (UX) and Usability Research.**

This course introduces foundational principles of user experience (UX) design theory and the practice of placing users and their needs as the focus of design. Along with the principles of human factors and user interface design, the course also focuses on user and task-analysis, field research methods, usability testing, and the UX process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5331. Studies in American Poetry.**

Selected poets with a survey of their works. Recent emphases include Walt Whitman, Emily Dickinson, Southern poetry, Denise Levertov, and Robert Bly. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5332. Studies in American Prose.**

Selected authors with special attention to novels. Recent emphases include William Faulkner, Ernest Hemingway, Richard Wright, and Zora Neale Hurston. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5335. Technical Editing.**

This course explores how to edit technical documents using different levels of editing, including copyediting and developmental editing. Students will also explore current trends in technical editing and publishing, as well as effective author-editor relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5336. Document Design.**

This course explores designing documents that utilize principles of design to maximize the effects of layout, style, color, information architecture, and typography. Students learn to coordinate content for information messaging and view documents as active, response-invoking artifacts in a variety of media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5340. Discourse Analysis.**

This course introduces theories and methodologies for the study of human discourse, or language in use. Discourse history, assumptions and principles, verbal and nonverbal communication, as well as society and culture's roles in a variety of discourse genres are analyzed and discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5341. Software Documentation.**

This course develops students' expertise in the management and production of writing that supports the efficient use of software in its intended environment. Major genres include software and hardware manuals such as tutorials, procedures, and reference manuals. Students address issues of user analysis, text design, graphics design, task orientation, etc.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5345. Southwestern Studies I: Defining the Region.**

An interdisciplinary course that surveys the physical, cultural, and social history of the Southwest, emphasizing architecture, art, literature, philosophy, politics, popular culture, and technology. Historical focus from the 15th to the mid-19th century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5346. Southwestern Studies II: Consequences of Region.**

Second course in a survey of physical, cultural, and social history of the Southwest, emphasizing regional and ethnic expressions of culture. This course moves from the broad overview of the first semester to more specific problems in the region and to the artistic products of regional culture. Historical focus is from the Civil War to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5353. Studies in Medieval Literature.**

Emphasis on authors, contexts, and genres of the medieval period. Recent emphases include Anglo-Saxon culture, language, and literature; Chaucer; non-Chaucerian medieval literature; pilgrimage literature. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5354. Studies in Renaissance Literature.**

Emphasis on authors, contexts, and genres of the Renaissance. Recent emphases include Shakespeare, Renaissance epic, Tudor humanism, and John Milton. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5359. Studies in Restoration and Eighteenth-century Literature.**

Major writers of the period with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Johnson and his circle, Restoration and eighteenth-century drama, and the eighteenth-century novel. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5364. Studies in the Romantic Movement.**

The works of the Early Romantics or Late Romantics in context with attention to nineteenth- and twentieth-century scholarship. Recent emphases include Blake and the other arts, Coleridge, the Wordsworths, Shelley, and Keats. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5366. Studies in Victorian Poetry.**

Major Victorian poets with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Tennyson, the Brownings, the Pre-Raphaelites, and Hopkins. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5368. Studies in Victorian Prose.**

Major Victorian prose writers with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include George Eliot, non-fiction Victorian prose, Victorian women novelists, and Charles Dickens. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ENG 5371. Studies in Modern British Literature.**

Selected authors with a survey of their works. Recent emphases include Yeats, Wilde, Auden, and Post-World War II British poetry. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5372. Practicum in English Studies.**

An introduction to key issues and concepts in the teaching of English studies. Required for first-year instructional assistants in the English Department. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5381. Studies in Modern British and American Drama.**

A survey of major British and American dramatists and their European or world context. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Header

**Grade Mode:** Standard Letter

**ENG 5382. Practicum in Composition.**

An introduction to key issues and concepts in the teaching of expository writing at the college level. Required for first-year teaching assistants in the English Department who have not previously taken ENG 5372. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5384. Critical Theory.**

A study of critical theory, emphasizing the history of criticism and/or contemporary critical theories. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5388. Studies in Literature for Children or Adolescents.**

A study of contemporary works, extending the student's knowledge of the literature and criticism in the field. Typical emphases are generic and/or thematic and include picture books, the contemporary novel, and the children's classics on film. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5389. History of Children's Literature.**

The history of children's literature from the Middle Ages through 1940. May be repeated with different emphases for up to six hours of graduate credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5390. Special Problems.**

Independent study under supervision of a graduate faculty member in English, with in-depth readings and research focused on a special problem in literature and/or language. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5391. Directed Studies in English.**

Students will conduct studies as necessary preparation for graduate-level coursework in English. The nature of the work varies depending on the student's level of academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ENG 5395. Problems in Language and Literature.**

Recent emphases include literary technique and literary theory. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5399A. Thesis.**

First semester of thesis enrollment. No thesis credit awarded until student has completed the thesis in English 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5399B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

ENG 5599B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

ENG 5999B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

Program Overview

The Master of Fine Arts (M.F.A.) degree with a major in Creative Writing program offers talented writers the opportunity to develop skills as fiction writers or poets in a formal academic program.

Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume or CV
- Submit a PDF file that contains your statement of purpose (maximum 750 words)
  - *Prompt for statement of purpose:* Discuss your goals for your time in our three-year program. How do you hope to use this time to grow as a writer? You might additionally choose to address scholarly goals, professional goals, and/or what you see as the benefits of living and working in a diverse community of writers.
- three letters of recommendation that address your academic qualifications **and** your commitment to good citizenship in a collegial and diverse academic community. If you are applying for an Instructional or Teaching Assistantship, all letters should **also** discuss your potential as a teacher.

- creative portfolio (combined into one PDF file)
  - Fiction applicants should submit a maximum of 25 double-spaced pages of their work (short stories and/or a novel excerpts)
- Poetry applicants should submit 12-15 poems.
- Both Fiction and Poetry applicants may, if they choose, also include one creative nonfiction essay or excerpt in their portfolio, subject to the same 25-page maximum for the manuscript in total.

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

Degree Requirements

The Master of Fine Arts (M.F.A.) degree with a major in Creative Writing concentration in poetry requires 48 semester credit hours, including a thesis.

Course Requirements

Code	Title	Hours
Required Courses		
ENG 5315	Graduate Writing Workshop (Repeated for a total of 12 hours)	12
ENG 5395	Problems in Language and Literature	3
ENG 5322	Form and Theory of Poetry	3
Prescribed Electives		
Choose 15 hours from the following:		15
ENG 5301	Literary Scholarship	
ENG 5302	Media Studies	
ENG 5310	Studies in English Language and Linguistics	
ENG 5312	Editing the Professional Publication	
ENG 5313	Studies in Principles of Technical Communication	
ENG 5314	Specializations in Technical Communication	
ENG 5316	Foundations in Rhetoric and Composition	
ENG 5317	Specializations in Rhetoric and Composition	
ENG 5321	Contemporary Fiction	
ENG 5323	Studies in Autobiography and Biography	
ENG 5324	Studies in Literary Genre	
ENG 5325	Studies in Literature of the Southwest	
ENG 5331	Studies in American Poetry	
ENG 5332	Studies in American Prose	
ENG 5345	Southwestern Studies I: Defining the Region	

ENG 5346	Southwestern Studies II: Consequences of Region	
ENG 5353	Studies in Medieval Literature	
ENG 5354	Studies in Renaissance Literature	
ENG 5359	Studies in Restoration and Eighteenth-century Literature	
ENG 5364	Studies in the Romantic Movement	
ENG 5366	Studies in Victorian Poetry	
ENG 5368	Studies in Victorian Prose	
ENG 5371	Studies in Modern British Literature	
ENG 5381	Studies in Modern British and American Drama	
ENG 5384	Critical Theory	
ENG 5388	Studies in Literature for Children or Adolescents	
ENG 5389	History of Children's Literature	
ENG 5395	Problems in Language and Literature	
TH 5354	Playwriting	
TH 5358	Screenwriting	
TH 5359	Advanced Screenwriting	
<b>Minor</b>		
Choose a 9-hour advisor-approved minor		9
<b>Thesis</b>		
ENG 5399A	Thesis	3
Choose a minimum 3 hours from the following:		3
ENG 5199B	Thesis	
ENG 5299B	Thesis	
ENG 5399B	Thesis	
ENG 5599B	Thesis	
ENG 5999B	Thesis	
<b>Total Hours</b>		<b>48</b>

## Comprehensive Examination Requirements

All candidates for graduate degrees must pass one or more comprehensive examinations.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must

obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in English: ENG

## Courses Offered

### English (ENG)

Graduate courses listed as "repeatable" ordinarily count toward nine hours of English degree credit unless otherwise indicated. Exceptions require written justification and departmental approval. Specific emphases of repeatable courses vary by term and instructor, but they may focus on literary and rhetorical forms and genres; authors, periods, or literary movements; perspectives from social, intellectual, and cultural studies; literary themes; or theoretical and practical information for technical communication. The department provides descriptions of specific courses prior to each term's enrollment period.

#### ENG 5199B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENG 5299B. Thesis.

Continuing thesis enrollment until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENG 5300. Language Problems in a Multicultural Environment.

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

#### ENG 5301. Literary Scholarship.

An introduction to scholarly resources, methods, theories, and responsibilities that guide the study and interpretations of literature in English. Literary texts chosen for detailed examination vary with expertise of the instructor. Required in first year of M.A. with a Literature Major.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ENG 5302. Media Studies.

The study of film and media history, theory, and practice. Special topics may include videography, video editing, genre, filmmakers, and regional film.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ENG 5307. Visual Rhetoric.

This course focuses on of this course is the investigation of image-based modes of rhetorical communication. The course includes theories of visual rhetoric and the analysis of the issues and implications of images.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ENG 5309. International Technical Communication.

This course covers models and theories of cultural differences and how to ethically and effectively communicate with cross-cultural audiences verbally and non-verbally. Students also learn how to analyze international audiences in terms of their values, cultural needs, and communication styles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ENG 5310. Studies in English Language and Linguistics.

A study of the English language, with special attention to phonology, morphology, syntax, semantics, dialectology, sociolinguistics, normal language acquisition, and/or writing and spelling systems. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5311. Foundations in Technical Communication.**

An introduction to the theory and practice of technical communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5312. Editing the Professional Publication.**

The editing, design, layout, and proofreading of a professional publication. This course is an internship. May be repeated one time with different emphasis.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5313. Studies in Principles of Technical Communication.**

A group of courses that provide students theoretical and practical information useful in any position in technical communication. Recent emphases include Digital Media and the web, Technical Editing, and Visual Rhetoric. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5314. Specializations in Technical Communication.**

A group of courses that provide students theoretical and practical information for specialized types of technical communication. Recent emphases include International Technical Communication Proposal Writing, Software Documentation and Writing for the Government. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5315. Graduate Writing Workshop.**

A studio course in which the primary texts are student manuscripts. Concentrations in fiction or poetry examine principles and techniques of creating, evaluating, and revising writing in these genres. The course requires class members to review writing produced by other workshop members.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5316. Foundations in Rhetoric and Composition.**

A group of courses providing students with theoretical, pedagogical, and methodological foundations in the field of rhetoric and composition. Emphases vary but include Contemporary Composition Theory and Composition Pedagogy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5317. Specializations in Rhetoric and Composition.**

A group of courses providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Center Theory, Practice, and Administration; Writing Across the Curriculum; Service Learning; and Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5320. Form and Theory of Fiction.**

An examination of traditional and current theory and practice in fiction. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of fiction in other literatures. For M.F.A. credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5321. Contemporary Fiction.**

Readings selected from canonical and/or experimental fiction. Recent emphases include novels into film, postmodern fiction, Magical Realism, and Saul Bellow. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5322. Form and Theory of Poetry.**

An examination of traditional and current theory and practice in poetry. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of poetry in other literatures. For MFA credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5323. Studies in Autobiography and Biography.**

A study of selected works in autobiography and biography with special attention to the art forms used in these works. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5324. Studies in Literary Genre.**

A study of one or more literary genres over several historical periods or from a variety of cultural perspectives. The course focuses on genres such as the following: the epic, the novel, the short story, the lyric, the pastoral, the romance, and Irish comic fiction. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ENG 5325. Studies in Literature of the Southwest.**

Selected Texas and Southwestern writers with emphasis on fiction. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5327. Research Methods in Rhetoric and Composition.**

This course introduces research practices in rhetoric and composition, focusing on the strategies, methods, paradigms, and perspectives that characterize qualitative and quantitative research. It considers research ethics, issues of representation, and the history and role of research in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5328. Directed Portfolio.**

Constitutes partial fulfillment of non-thesis option for students earning the MA in Rhetoric and Composition. Under guidance of a graduate faculty committee, students produce a portfolio of representative written work with written commentary and reflection. Repeatable once. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5329. User Experience (UX) and Usability Research.**

This course introduces foundational principles of user experience (UX) design theory and the practice of placing users and their needs as the focus of design. Along with the principles of human factors and user interface design, the course also focuses on user and task-analysis, field research methods, usability testing, and the UX process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5331. Studies in American Poetry.**

Selected poets with a survey of their works. Recent emphases include Walt Whitman, Emily Dickinson, Southern poetry, Denise Levertov, and Robert Bly. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5332. Studies in American Prose.**

Selected authors with special attention to novels. Recent emphases include William Faulkner, Ernest Hemingway, Richard Wright, and Zora Neale Hurston. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5335. Technical Editing.**

This course explores how to edit technical documents using different levels of editing, including copyediting and developmental editing. Students will also explore current trends in technical editing and publishing, as well as effective author-editor relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5336. Document Design.**

This course explores designing documents that utilize principles of design to maximize the effects of layout, style, color, information architecture, and typography. Students learn to coordinate content for information messaging and view documents as active, response-invoking artifacts in a variety of media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5340. Discourse Analysis.**

This course introduces theories and methodologies for the study of human discourse, or language in use. Discourse history, assumptions and principles, verbal and nonverbal communication, as well as society and culture's roles in a variety of discourse genres are analyzed and discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5341. Software Documentation.**

This course develops students' expertise in the management and production of writing that supports the efficient use of software in its intended environment. Major genres include software and hardware manuals such as tutorials, procedures, and reference manuals. Students address issues of user analysis, text design, graphics design, task orientation, etc.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5345. Southwestern Studies I: Defining the Region.**

An interdisciplinary course that surveys the physical, cultural, and social history of the Southwest, emphasizing architecture, art, literature, philosophy, politics, popular culture, and technology. Historical focus from the 15th to the mid-19th century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5346. Southwestern Studies II: Consequences of Region.**

Second course in a survey of physical, cultural, and social history of the Southwest, emphasizing regional and ethnic expressions of culture. This course moves from the broad overview of the first semester to more specific problems in the region and to the artistic products of regional culture. Historical focus is from the Civil War to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5353. Studies in Medieval Literature.**

Emphasis on authors, contexts, and genres of the medieval period.

Recent emphases include Anglo-Saxon culture, language, and literature; Chaucer; non-Chaucerian medieval literature; pilgrimage literature.

Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5354. Studies in Renaissance Literature.**

Emphasis on authors, contexts, and genres of the Renaissance. Recent emphases include Shakespeare, Renaissance epic, Tudor humanism, and John Milton. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5359. Studies in Restoration and Eighteenth-century Literature.**

Major writers of the period with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Johnson and his circle, Restoration and eighteenth-century drama, and the eighteenth-century novel. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5364. Studies in the Romantic Movement.**

The works of the Early Romantics or Late Romantics in context with attention to nineteenth- and twentieth-century scholarship. Recent emphases include Blake and the other arts, Coleridge, the Wordsworths, Shelley, and Keats. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5366. Studies in Victorian Poetry.**

Major Victorian poets with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Tennyson, the Brownings, the Pre-Raphaelites, and Hopkins. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5368. Studies in Victorian Prose.**

Major Victorian prose writers with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include George Eliot, non-fiction Victorian prose, Victorian women novelists, and Charles Dickens. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5371. Studies in Modern British Literature.**

Selected authors with a survey of their works. Recent emphases include Yeats, Wilde, Auden, and Post-World War II British poetry. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5372. Practicum in English Studies.**

An introduction to key issues and concepts in the teaching of English studies. Required for first-year instructional assistants in the English Department. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5381. Studies in Modern British and American Drama.**

A survey of major British and American dramatists and their European or world context. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Header

**Grade Mode:** Standard Letter

**ENG 5382. Practicum in Composition.**

An introduction to key issues and concepts in the teaching of expository writing at the college level. Required for first-year teaching assistants in the English Department who have not previously taken ENG 5372. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5384. Critical Theory.**

A study of critical theory, emphasizing the history of criticism and/or contemporary critical theories. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5388. Studies in Literature for Children or Adolescents.**

A study of contemporary works, extending the student's knowledge of the literature and criticism in the field. Typical emphases are generic and/or thematic and include picture books, the contemporary novel, and the children's classics on film. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5389. History of Children's Literature.**

The history of children's literature from the Middle Ages through 1940. May be repeated with different emphases for up to six hours of graduate credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5390. Special Problems.**

Independent study under supervision of a graduate faculty member in English, with in-depth readings and research focused on a special problem in literature and/or language. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5391. Directed Studies in English.**

Students will conduct studies as necessary preparation for graduate-level coursework in English. The nature of the work varies depending on the student's level of academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ENG 5395. Problems in Language and Literature.**

Recent emphases include literary technique and literary theory. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5399A. Thesis.**

First semester of thesis enrollment. No thesis credit awarded until student has completed the thesis in English 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5399B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5599B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5999B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

The graduate minor in Literature requires 6 semester credit hours of advisor-approved English courses. Minors should have completed at least 21 hours of undergraduate English, including at least 9 hours of advanced courses, with a GPA of 2.75 or higher (4.0 scale).

Evans Liberal Arts Building Room 139

Telephone: 512-245-2170; Fax: 512-245-8353

<http://www.geo.txstate.edu/>

## Mission

The Mission of the Department of Geography and Environmental Studies is to provide its students with educational experiences of the highest quality, to conduct vital research that benefits society, and to serve our communities, from the local to the international levels. We are committed to outstanding teaching and scholarly activities within the framework of academic freedom, the diversity of people and ideas, a spirit of inclusiveness, and a global perspective.

## Vision

The Department of Geography and Environmental Studies will continue to stress both the theoretical and applied realms in all of our degree programs. We will provide a rigorous educational experience through innovative teaching, engagement with the community, and dedication to all of our students and alumni. We will increase our visibility as a research department through faculty scholarship, research grant activities, international collaborations, the recruiting of top students for our graduate programs, the organization of national and international conferences and symposia, a robust program of scholarly exchanges, and services in academic and professional organizations.

## Programs

The department offers three Ph.D. programs and five master's program. The Ph.D. programs are: (1) Doctor of Philosophy in Geography, (2) Doctor of Philosophy in Geographic Education, and (3) Doctor of Philosophy in Geographic Information Science. The master's programs include: (1) Master of Applied Geography (M.A.Geo.) in Geographic Information Science, (2) Master of Applied Geography (M.A.Geo.) in Geography, (3) Master of Applied Geography (M.A.Geo.) in Geography (Geographic Education Concentration), (4) Master of Applied Geography (M.A.Geo.) in Geography Resource & Environmental Studies, and (5) Master of Science (M.S.) in Geography. In addition to the in-residence programs mentioned above, the department offers an Online Ph.D. program in Geographic Education and an Online M.A.Geo. in Geography (Geographic Education Concentration). The online Ph.D. program and M.A.Geo. in Geography (Geographic Education Concentration) provide opportunities for students to complete the degree requirements online. The department also provides flexibility in the Master of Applied Geography (M.A.Geo.) in Geography Resource & Environmental Studies and Master of Applied Geography (M.A.Geo.) in Geographic Information Science by offering the option to take 51% to 100% of the required coursework online. Additional information about these programs is provided under the Degrees & Programs links at the department webpage (<https://www.geo.txstate.edu/>).

## Financial Assistance

Graduate assistantships are available to qualified candidates. Please contact the Graduate Program Coordinator for more information about financial assistance and the degree programs. For scholarship information, please contact the office of The Graduate College at Texas State or visit their website at <https://www.gradcollege.txstate.edu/funding/scholarships.html>.

**All students are subject to the policies and procedures outlined in the departmental graduate student handbook available at <https://www.geo.txst.edu/degrees-programs/graduate.html>**

## Doctor of Philosophy (Ph.D.)

- Major in Geographic Education (p. 2455)
- Major in Geographic Information Science (p. 2464)
- Major in Geography (p. 2473)

## Master of Applied Geography (M.A.Geo.)

- Major in Geographic Information Science (p. 2482)
- Major in Geography (p. 2490)
- Major in Geography (Geographic Education Option) (p. 2497)
- Major in Natural Resources and Environmental Studies (p. 2504)

## Master of Science (M.S.)

- Major in Geography (p. 2512)

## Minor

- Geography (p. 2521)

## Program Overview

The course curriculum for the doctoral degree is designed to provide depth and breadth of knowledge in geographic theory and research methods. To be admitted to the geography doctoral program, a student

must have completed a master's degree in geography or in a related discipline.

Each doctoral student will have their program tailored to meet the academic goals agreed upon in consultation with the Ph.D. research advisor, with the approval of the graduate program coordinator, the department chair, and the dean of The Graduate College. All programs will include the necessary core, skills, specialization, and internal and external elective courses.

## Educational Goal

The educational goal of the program is to provide a Ph.D. in Geography through which students will be educated in the process of geographic research, the development of new knowledge, and the application of this research and knowledge to solve problems with spatial dimensions.

## Financial Assistance

Graduate assistantships and scholarships are available to qualified candidates. Please contact the graduate staff advisor in the Department of Geography for more information about assistantships. The Graduate College can provide further information regarding scholarships.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- master's degree in geography or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a U.S. Master's degree. Master's degrees following a three-year Bachelor's degrees may not be equivalent; please contact [gradcollege@txstate.edu](mailto:gradcollege@txstate.edu) if you are unsure.)
- official transcripts from **each institution** where course credit was granted
- minimum 3.5 GPA in all completed graduate course work
- completion of a master's thesis or demonstrated evidence of scholarly research and writing
- GRE score not required
- resume/CV
- statement of purpose explaining the student's reasons for pursuing doctoral study and academic professional interests and goals

- three letters of recommendation demonstrating adequate subject preparation in content and quality as reflected in the student's transcripts

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Geographic Education requires 46 semester credit hours.

Course Requirements

Code	Title	Hours
Required Courses		
GEO 7300	Advanced Geographic Research Design	3
GEO 7301	Advanced Quantitative Methods in Geography	3
or GEO 7304	Qualitative Research Methods	
GEO 7302	Nature and Philosophy of Geography	3
Skills		
Choose 4 hours from the following:		4
GEO 7415	Geographic Applications of Remote Sensing	
GEO 7417	Geographic Information Systems	
GEO 7430	Field Methods	
GEO 7447	Spatial Graphics in Geographic Education	
Specialization		
Choose 12 hours from the following:		12
GEO 7342	Theories and Methods in Geographic Education	
GEO 7344	Seminar in Geographic Curriculum	
GEO 7346	Standards and Assessment in Geography	
GEO 7447	Spatial Graphics in Geographic Education	
GEO 7371	Advanced Seminar in Geographic Education	
GEO 7390	Independent Study	
Prescribed Electives		
Choose 6 hours from the following:		6
GEO 7304	Qualitative Research Methods	
GEO 7305	Historical Geography of the Environment	
GEO 7308	Advanced Regional Field Studies	
GEO 7313	Environmental Systems	
GEO 7316	Remote Sensing and the Environment	
GEO 7318	GIS and Environmental Geography	
GEO 7330	Geography of Hazards	

GEO 7334	Geographic Aspects of Water
GEO 7341	Urban Environment
GEO 7342	Theories and Methods in Geographic Education
GEO 7344	Seminar in Geographic Curriculum
GEO 7346	Standards and Assessment in Geography
GEO 7349	Population Geography
GEO 7361	Advanced Geographic Information Systems
GEO 7362	Geographic Visualization
GEO 7364	Geocomputation
GEO 7365	Theoretical Cartography
GEO 7366	Advanced Topics in Remote Sensing
GEO 7368	Lidar and SfM Data Processing and Analysis
GEO 7369	Exploring Spatial Databases
GEO 7370	Advanced Seminar in Environmental Geography
GEO 7371	Advanced Seminar in Geographic Education
GEO 7372	Seminar in Geographic Information Science
GEO 7390	Independent Study
GEO 7393B	Biogeography in Mountain Environments
GEO 7393C	Managing Urbanization
GEO 7393D	International Migration
GEO 7393E	Geography of Land Management
GEO 7393F	Gender and Development
GEO 7393G	Political Geography
GEO 7393J	Soil and Society
GEO 7393K	Biogeomorphology
GEO 7393M	Global Climate Change
GEO 7393N	Rivers and Society
GEO 7415	Geographic Applications of Remote Sensing
GEO 7417	Geographic Information Systems
GEO 7418	Technical Foundations and Methods in Geographic Information Science
GEO 7430	Field Methods
GEO 7447	Spatial Graphics in Geographic Education
Dissertation	
Choose a minimum of 15 hours from the following:	
GEO 7199B	Dissertation
GEO 7299B	Dissertation
GEO 7399B	Dissertation
GEO 7599B	Dissertation
GEO 7699B	Dissertation
GEO 7999B	Dissertation

Total Hours 46

Comprehensive Examination Requirements

All candidates for graduate degrees must pass one or more comprehensive examinations.

Advancement to Candidacy Applications for Advancement to Candidacy

The student will need to download the Application for Advancement to Candidacy form from The Graduate College website. The student will



need to complete the form and return it to their department, who will then submit it to The Graduate College for approval.

### **Advancement to Candidacy Time Limit**

Doctoral students will need to be advanced to candidacy within four years of initiating Ph.D. course work. A student will need to indicate their intent to advance to candidacy during the term in which the student will complete the 31 hours of required course work.

No credit will be applied toward a student's doctoral degree for course work completed more than four years before the date on which the student is to advance to candidacy. This time limit applies toward credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions.

Requests for a time extension must be submitted to the student's Ph.D. advisor and graduate coordinator who, in turn, submits a recommendation to the dean of The Graduate College.

### **Grade-Point Requirements for Advancement to Candidacy**

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.0. No grade earned below "B" on any graduate course work may apply toward a Ph.D. at Texas State.

Incomplete grades must be cleared through the office of The Graduate College at least ten days before the approval for advancement to candidacy.

### **Semester Hour Requirements**

The student must complete 31 semester hours of graduate course work to meet the minimum requirements for advancement to candidacy. In some cases, a student may need to complete additional hours before being allowed to advance to candidacy. The student must have satisfied the residency requirement of 18 graduate credit hours.

### **Advancement to Candidacy Comprehensive Examination**

All applicants for advancement to candidacy for the doctoral degree must pass a comprehensive examination. The examination procedure may be obtained from the graduate staff advisor. Both prevailing expectations in the field and the actual courses taken by the candidate will determine the subject matter of the examination. This examination may not be taken until all required course work has been completed. The student may take the candidacy comprehensive examination without being enrolled in course work provided they have not been enrolled in dissertation course(s).

Arrangements for the examination will be made with the student's Ph.D. advisor. The results of the "Advancement to Candidacy Comprehensive Examination" must be filed in the office of The Graduate College before final approval to advance to candidacy is given by the dean of The Graduate College. The department is responsible for submitting the report to the office of The Graduate College.

### **Dissertation Proposal**

The dissertation proposal must be approved by the dean of The Graduate College and successfully defended in front of the dissertation committee before a student can advance to candidacy. Information about the dissertation procedures can be found in the "Dissertation Research and Writing" section of this catalog.

### **Recommendation for Advancement to Candidacy**

The geography graduate committee recommends the applicant for advancement to candidacy to the chair of the Department of Geography and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been completed.

### **Dissertation Research and Writing**

All doctoral students are required to complete a dissertation. The dissertation must be an original contribution to scholarship and the result of independent investigation in a significant area. Preparation of the dissertation must follow the latest edition of Kate L. Turabian's *A Manual for Writers* or the *Annals of the Association of American Geographers*.

### **Dissertation Enrollment Requirements**

#### **Enrollment**

After being admitted to candidacy, students must be continuously enrolled each term for dissertation hours. If a student is receiving supervision on the dissertation during the summer or the student is graduating during the summer, the student must be enrolled in dissertation hours for that term. All candidates for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred.

#### **Hours**

Students must complete a minimum of 15 semester hours of dissertation research and writing credit.

### **Dissertation Time Limit**

Students are expected to complete the dissertation within three years of advancement to candidacy. The geography graduate committee will review the student's progress annually.

### **Ph.D. Advisory Committee**

The Ph.D. advisory committee must be formed to oversee the research and writing of the dissertation. The Ph.D. advisory committee will include a Ph.D. advisor and a minimum of three additional committee members (two of whom must be from the Department of Geography and one from outside the department). The members must be chosen from qualified Ph.D. faculty. The Ph.D. advisor and the advisory committee will be selected in consultation with the student and through mutual agreement with committee members. The Ph.D. advisor will chair the dissertation committee and must be from the major department. The advisor and advisory committee must be approved by the graduate program coordinator, the department chair, as listed on the "Dissertation Committee Request" form and submitted to the dean of The Graduate College for final approval.

### **Committee Changes**

Any changes to the advisory committee must be submitted for approval to the advisory committee chair, the graduate coordinator, the department chair, and the dean of The Graduate College. Changes must be submitted no less than sixty days before the final oral comprehensive examination. The "Dissertation Advisor/Committee Member Change Request" form may be obtained from The Graduate College website.

## Dissertation Proposal

Students must submit the dissertation proposal and one copy of the official "Dissertation Proposal" form to their dissertation advisor. After obtaining **original** committee members' signatures and the department chair's signature, the student must submit the dissertation proposal and the form to the dean of The Graduate College for approval before proceeding with research on the dissertation. The proposal form may be obtained from The Graduate College website.

## Defense of the Dissertation Proposal

Students must defend the dissertation proposal in an oral examination with the Ph.D. advisory committee. The examination will address the proposed dissertation topic (problem definition and scope), research method, and relevant literature. The advisory committee must sign the "Defense of the Dissertation Proposal" form and then submit it for the signature of the department chair. The original must be sent to the office of The Graduate College.

## Final Oral Comprehensive Examination

Students must pass the final oral examination that covers the dissertation and the general field of the dissertation. To schedule the final oral examination, the student must apply to their Ph.D. advisor the term that they complete the dissertation. A completed "Doctoral Comprehensive Examination Report" form must be submitted to the dean of The Graduate College.

## Approval and Submission of the Dissertation and Abstract

The approval of the dissertation requires positive votes from the Ph.D. advisor and from a majority of the members of the Ph.D. advisory committee. One copy of the dissertation and the signed "Thesis/Dissertation Committee Approval" form must be submitted to the dean of The Graduate College for final approval once the committee has approved the dissertation. Refer to the *Graduate College Guide to Preparing and Submitting a Thesis/Dissertation* (available on The Graduate College website) for specific submission guidelines.

Doctoral level courses in Geography: GEO

## Courses Offered

### Geography (GEO)

#### GEO 7190. Independent Study.

Research in geography under the direction of a supervising professor. Repeatable once for additional credit with a different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### GEO 7199A. Dissertation.

Original research and writing in Geography is to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### GEO 7199B. Dissertation.

Original research and writing in Geographic Education is to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### GEO 7199C. Dissertation.

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### GEO 7290. Independent Study.

This course is designed to provide a student with credit while conducting independent research in consultation with his or her research advisor. Repeatable once for additional credit with a different topic.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### GEO 7299A. Dissertation.

Original research and writing in Geography to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### GEO 7299B. Dissertation.

Original research and writing in Geographic Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7299C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7300. Advanced Geographic Research Design.**

The purpose of this course is to develop an appreciation for the process of research as practiced by contemporary professional geographers.

Topics covered include formulating research problems, reviewing and critiquing published literature, developing and executing a research design, and completing a research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7301. Advanced Quantitative Methods in Geography.**

How to mathematically and statistically model geographic problems is the focus of this course. The application of multivariate statistical techniques to geographic problems and the problems that spatial data create in the application of statistical and other quantitative techniques are central issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7302. Nature and Philosophy of Geography.**

This course is a critical analysis of the historical development of geographic thought: its roots, its present status, and future directions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7304. Qualitative Research Methods.**

This course introduces the qualitative research paradigm, including research design, methods of data collection, and inductive analysis. Standards of scientific research that call for a deeper evaluation of complex social relationships are emphasized. The focus and application will be oriented towards human geography and nature-society relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7305. Historical Geography of the Environment.**

This course examines the evolution of environmental problems using the techniques and analytical perspectives of historical geography. Special emphasis is given to the emergence of environmental challenges related to urbanization and climate change. Students engage with scholarship related to historical geography of the environment and develop original research related to environmental change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7308. Advanced Regional Field Studies.**

Advanced study of geographic phenomena during field excursions to a particular site or region. Course includes preparation of site inventory, site guides, and on-site presentations. Repeatable once for additional credit with a different site or region.

**3 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7313. Environmental Systems.**

Theories and concepts involved in environmental systems will be examined. Tools and research issues relevant to their analysis will also be explored. Basic principles, as well as specific research questions and techniques, will be proposed to give students a foundation for analysis of current issues involving environmental systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7316. Remote Sensing and the Environment.**

A detailed examination and implementation of sophisticated approaches for processing satellite digital images with emphasis on environmental applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7318. GIS and Environmental Geography.**

This course examines the nature of environmental problems and explores the potential of GIS for environmental modeling and management. The conceptual basis for using GIS as well as the framing of environmental research problems will be covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7330. Geography of Hazards.**

This seminar examines research on issues related to the geography of hazards. Topics will be determined by instructor and student interests. Special emphasis will be placed on conceptual, theoretical, and methodological approaches to advance the study of spatial aspects of hazards such as risk, vulnerability, resilience, relief, recovery, and change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7334. Geographic Aspects of Water.**

This seminar is a critical analysis of developmental and current literature that define water's critical role in determining the physical and cultural characteristics of the earth. Principal focus will be placed on water's role on land use and as a critical resource.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7341. Urban Environment.**

Students in this course will critically engage with scholarly and governmental research relating to urban environments, urban environmentalism, and urban environmental management. Emphasis is placed on students developing and executing a unique, topically relevant research project aimed at improving our understanding of the way in which human-environment interaction influences, and is influenced by, urban geography and the urban experience. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7342. Theories and Methods in Geographic Education.**

This seminar is a critical analysis of previous and current literature concerning problems in pedagogy, philosophy, learning theory, research methods, teaching methodologies, and techniques of geographic education. A research paper will be required of each student on a topic related to the course content. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7344. Seminar in Geographic Curriculum.**

The seminar will be a survey and discussion of major curricula in geographic education. Geography will be viewed as a school subject that is part of the social studies, as an element of interdisciplinary studies, and as a stand alone subject.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7345. Contemporary Topics in Geographic Education.**

This course is a survey of initiatives and reforms in geography education spanning from the 1980s to the present day. Students are expected to develop and carry out research plans that address current theories in geographic education. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7346. Standards and Assessment in Geography.**

An introduction to assessment procedures in geography education is central to the course. Analysis of national standards in geography and how they have affected geographic learning in grades K-12 will be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7349. Population Geography.**

An in-depth study of the growth, movement, and spatial distribution of human populations is the central theme. Students will read and discuss professional articles that stress both theory and analytical techniques. Topics will include population growth and the environment, rural and small town depopulation, spatial diffusion processes, migration trends and theories, urban population growth, and techniques such as multivariate analysis and population projections. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7350. Practicum in Teaching Geography.**

This course introduces key concepts in teaching geography and provides regular training and planned periodic evaluations of instructional responsibilities. Course topics include instructional and assessment strategies in geography and classroom management. This course is required for first-year instructional assistants in the Geography Department. Students do not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate

Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**GEO 7352. Social Theory, Space, and Geography.**

This course examines key texts and concepts in social and political theory, focusing on theories of space and their mobilization in geographical research. Space and geography are approached with respect to several topics and debates in social theory including structuralism and agency, feminist theory and embodiment, racial formations, assemblage thinking and actor-network theory, hybridity, governance, and scale.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7361. Advanced Geographic Information Systems.**

This course provides exposure to advanced topics in GIS, particularly to quantitative methods and techniques for developing and interpreting models of natural and anthropogenic phenomena over the geographical space.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7362. Geographic Visualization.**

This course focuses on the interdisciplinary field of Geographic Visualization. Students will review visualization research in computer graphics, human computer interaction, GIScience, and cartography and relate the research approaches to useful and usable geographic visualizations. Prerequisite: GEO 3411 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7364. Geocomputation.**

Geocomputation reviews and analyzes concepts of computational modeling in Geography. The course will include modeling theory and advanced topics such as parallel processing, neural networks, cellular automata, scientific visualization, and fuzzy modeling. Students will practice model development, specifically spatially explicit simulation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7365. Theoretical Cartography.**

This course focuses on theoretical developments in cartography, and in particular looks at the role of maps and other graphic devices as tools for the discovery, analysis, and communication of geographical knowledge.

Prerequisite: GEO 3411 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7366. Advanced Topics in Remote Sensing.**

The course focuses on advanced topics including the theoretical basis, mathematical foundations, and current research frontiers in remote sensing. Prerequisite: GEO 5415 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7368. Lidar and SfM Data Processing and Analysis.**

This course covers doctoral level skills in Light Detection and Ranging (lidar) systems and Structure from Motion (SfM) workflows for mapping and analysis of the environment. Students learn to successfully apply knowledge of lidar data and SfM workflows for a variety of Geographic Information Science applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7369. Exploring Spatial Databases.**

This course covers principles of spatial ontologies and spatial semantics to facilitate appropriate database conceptualization, design and implementation. Course assignments and projects provide in-depth experience with database query languages. Course work is completed using a spatially-enabled Relational Database Management Systems (RDBMS). Prerequisite: GEO 7417 or equivalent with a grade of 'B' or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7370. Advanced Seminar in Environmental Geography.**

This research seminar focuses on the methods, approaches, issues, and concepts of major themes in environmental geography. Special emphasis will be placed on theoretical and conceptual understandings of how humans interact with the environment from a geographical perspective. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7371. Advanced Seminar in Geographic Education.**

This research seminar analyzes literature and research into recent trends in geographic education. Emphasis will be on new developments in curriculum, content, and teaching methodologies. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7372. Seminar in Geographic Information Science.**

This course deals with advanced and current research issues in Geographic Information Science. Based on this objective, the course aims at educating doctoral students to conduct research in Geographic Information Science as well as develop innovative applications of Geographic Information Science. May be repeated for credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7390. Independent Study.**

Research in geography under the direction of a supervising professor. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7393B. Biogeography in Mountain Environments.**

This course examines how plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms and geological factors affect spatial distribution of animals and plants; all within the environmental limitation and conditions of mountains. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393C. Managing Urbanization.**

This course examines survey methods and procedures related to managing and preparing for urban growth. Selected topics for examination include transportation planning, housing, historic preservation, and environmental design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393D. International Migration.**

This course provides a survey of geographic and social science research conducted across various topics of international migration. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter



**GEO 7393E. Geography of Land Management.**

This course explores U.S. land management philosophies, techniques, and development approaches. Major topics include land ethics/philosophies, U.S. traditions in cadastral geography, urban sprawl and green development, land conservation techniques, the role of local/state/federal regulation in land management, and the human-environment impacts of land development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393F. Gender and Development.**

This course is a survey of geographic and social science research conducted across various topics of gender studies and international development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393G. Political Geography.**

This course is a survey of geographic and social science research conducted across various topics of political geography. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393J. Soil and Society.**

This course explores the importance of soil resources for environmental and socioeconomic sustainability. Soil science will be introduced, but the majority of the course will focus on soil's value to societies. Specific topics that will be explored include soil geography, historical abuses of soil resources, and current conservation efforts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393K. Biogeomorphology.**

This course will examine the ways in which plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms, and geological factors affect spatial distributions of animals and plants. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393M. Global Climate Change.**

This course examines various implications of global climate change, including impacts on science, politics, and society. Emphasis will be placed on anthropogenic influences across the 20th and 21st centuries, contemporary mitigation options, and future adaptation strategies amidst a complex and dynamic climate system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393N. Rivers and Society.**

This course examines river system processes and how they are influenced by human activities. We will discuss the principles and practices of large-scale river basin management with an emphasis on the different perspectives and motivations driving different management goals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393P. Advanced Seminar in Human Geography.**

This course will engage students in systematic critical analysis of the theories and methods of human geography. The students will conduct careful research on a topic in human geography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393Q. Geomorphology in the Anthropocene.**

This course will examine the ways in which humans interact with and affect geomorphological processes and landforms, and how humans directly act as geomorphological agents. The level at which human activities have transformed the surface of the Earth will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7399A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7399B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7399C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7415. Geographic Applications of Remote Sensing.**

Students will focus on geographic applications of the principles and practices of digital image processing, classification, and modeling using satellite images.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7417. Geographic Information Systems.**

Course is concerned with the analysis of interpretation of maps stored in digital form. Students are introduced to the concepts involving computerized cartographic and geographic data input, storage and retrieval, data manipulation and analysis, graphic and tabular report generation, and cartographic modeling.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7418. Technical Foundations and Methods in Geographic Information Science.**

This course addresses technical foundations and methods in management, analysis, visualization, and dissemination of geographically-referenced data and information in digital form. Topics include data structures, algorithms, and a variety of methods used in GIS and spatial data analysis.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7419. Advanced Techniques in Geographic Information Science.**

This course develops advanced Geographic Information System (GIS) concepts and application issues, spatial data manipulation and analysis skills, and provides hands-on experience with GIS, programming, and spatial analytics hardware/software programs. Emphasis is placed on practical application of skills to real world issues using advanced GIS techniques and geoprogramming. Prerequisite: GEO 7417 or equivalent with a grade of "C" or better and instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7430. Field Methods.**

Methods and techniques for observing, measuring, recording, and reporting on geographic phenomena are investigated in this course. Students will learn the use of instruments and materials in the collection of data for mapping and field research in the local area. Prerequisites: GEO 2410 and GEO 3301 both with grades of "D" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7447. Spatial Graphics in Geographic Education.**

This course examines traditional and innovative geoinformation and geovisualization technologies and their relationship to spatial thinking and the teaching and learning of geography. The course reviews academic literature, research methods, and teaching methodologies related to spatial graphics in geographic education. The lab portion provides geovisualization design skills for geographic education.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7599A. Dissertation.**

Original research and writing in Geography to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7599B. Dissertation.**

Original research and writing in Geographic Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7599C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The course curriculum for the doctoral degree is designed to provide depth and breadth of knowledge in geographic theory and research methods. To be admitted to the Geography Doctoral program, a student must have completed a Master's Degree in Geography or in a related discipline.

Each doctoral student will have her/his program tailored to meet the academic goals agreed upon in consultation with the Ph.D. research advisor, with the approval of the graduate program coordinator, the department chair, and the dean of The Graduate College. All programs will include the necessary core, skills, specialization, and internal and external elective courses.

## Educational Goal

The educational goal of the program is to provide a Ph.D. in Geography through which students will be educated in the process of geographic research, the development of new knowledge, and the application of this research and knowledge to solve problems with spatial dimensions.

## Financial Assistance

Graduate assistantships and scholarships are available to qualified candidates. Please contact the graduate staff advisor in the Department of Geography for more information about assistantships. The Graduate College can provide further information regarding scholarships.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- master's degree in geography or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a U.S. Master's degree. Master's degrees following a three-year Bachelor's degrees may not be equivalent; please contact [gradcollege@txstate.edu](mailto:gradcollege@txstate.edu) ([gcprocessing@txstate.edu](mailto:gcprocessing@txstate.edu)) if you are unsure.)
- official transcripts from **each institution** where course credit was granted
- minimum 3.5 GPA in all completed graduate course work
- completion of a master's thesis or demonstrated evidence of scholarly research and writing
- GRE score is not required
- resume/CV
- statement of purpose explaining the student's reasons for pursuing doctoral study and academic professional interests and goals
- three letters of recommendation demonstrating adequate subject preparation in content and quality as reflected in the student's transcripts

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Geographic Information Science requires 46 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
GEO 7300	Advanced Geographic Research Design	3
GEO 7301	Advanced Quantitative Methods in Geography	3
GEO 7302	Nature and Philosophy of Geography	3

GEO 7418	Technical Foundations and Methods in Geographic Information Science	4
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Specialization		
Choose 12 hours from the following:		12
GEO 7316	Remote Sensing and the Environment	
GEO 7318	GIS and Environmental Geography	
GEO 7361	Advanced Geographic Information Systems	
GEO 7362	Geographic Visualization	
GEO 7364	Geocomputation	
GEO 7365	Theoretical Cartography	
GEO 7366	Advanced Topics in Remote Sensing	
GEO 7368	Lidar and SfM Data Processing and Analysis	
GEO 7369	Exploring Spatial Databases	
GEO 7372	Seminar in Geographic Information Science	
GEO 7419	Advanced Techniques in Geographic Information Science	
GEO 7447	Spatial Graphics in Geographic Education	

Prescribed Electives		
Choose 6 hours from the following:		6
GEO 7304	Qualitative Research Methods	
GEO 7305	Historical Geography of the Environment	
GEO 7308	Advanced Regional Field Studies	
GEO 7313	Environmental Systems	
GEO 7316	Remote Sensing and the Environment	
GEO 7318	GIS and Environmental Geography	
GEO 7330	Geography of Hazards	
GEO 7334	Geographic Aspects of Water	
GEO 7341	Urban Environment	
GEO 7342	Theories and Methods in Geographic Education	
GEO 7344	Seminar in Geographic Curriculum	
GEO 7346	Standards and Assessment in Geography	
GEO 7349	Population Geography	
GEO 7361	Advanced Geographic Information Systems	
GEO 7362	Geographic Visualization	
GEO 7364	Geocomputation	
GEO 7365	Theoretical Cartography	
GEO 7366	Advanced Topics in Remote Sensing	
GEO 7368	Lidar and SfM Data Processing and Analysis	
GEO 7369	Exploring Spatial Databases	
GEO 7370	Advanced Seminar in Environmental Geography	
GEO 7371	Advanced Seminar in Geographic Education	
GEO 7372	Seminar in Geographic Information Science	
GEO 7390	Independent Study	
GEO 7393C	Managing Urbanization	
GEO 7393D	International Migration	
GEO 7393E	Geography of Land Management	
GEO 7393F	Gender and Development	
GEO 7393G	Political Geography	
GEO 7393J	Soil and Society	
GEO 7393M	Global Climate Change	
GEO 7393N	Rivers and Society	
GEO 7415	Geographic Applications of Remote Sensing	

GEO 7417	Geographic Information Systems	
GEO 7418	Technical Foundations and Methods in Geographic Information Science	
GEO 7419	Advanced Techniques in Geographic Information Science	
GEO 7430	Field Methods	
GEO 7447	Spatial Graphics in Geographic Education	
<b>Dissertation</b>		
Choose a minimum of 15 hours from the following:		15
GEO 7199C	Dissertation	
GEO 7299C	Dissertation	
GEO 7399C	Dissertation	
GEO 7699C	Dissertation	
GEO 7999C	Dissertation	
<b>Total Hours</b>		<b>46</b>

## Comprehensive Examination Requirements

All candidates for graduate degrees must pass one or more comprehensive examinations.

## Advancement to Candidacy

### Applications for Advancement to Candidacy

The student will need to download the Application for Advancement to Candidacy form from The Graduate College website. The student will need to complete the form and return it to their department, who will then submit it to The Graduate College for approval.

### Advancement to Candidacy Time Limit

Doctoral students will need to be advanced to candidacy within four years of initiating Ph.D. course work. A student will need to indicate their intent to advance to candidacy during the term in which the student will complete the 31 hours of required course work.

No credit will be applied toward a student's doctoral degree for course work completed more than four years before the date on which the student is to advance to candidacy. This time limit applies toward credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions.

Requests for a time extension must be submitted to the student's Ph.D. advisor and graduate coordinator who, in turn, submits a recommendation to the dean of The Graduate College.

### Grade-Point Requirements for Advancement to Candidacy

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.0. No grade earned below "B" on any graduate course work may apply toward a Ph.D. at Texas State.

Incomplete grades must be cleared through the office of The Graduate College at least ten days before the approval for advancement to candidacy.

### Semester Hour Requirements

The student must complete 31 semester hours of graduate course work to meet the minimum requirements for advancement to candidacy. In some cases, a student may need to complete additional hours before

being allowed to advance to candidacy. The student must have satisfied the residency requirement of 18 graduate credit hours.

## Advancement to Candidacy Comprehensive Examination

All applicants for advancement to candidacy for the doctoral degree must pass a comprehensive examination. The examination procedure may be obtained from the graduate staff advisor. Both prevailing expectations in the field and the actual courses taken by the candidate will determine the subject matter of the examination. This examination may not be taken until all required course work has been completed. The student may take the candidacy comprehensive examination without being enrolled in course work provided they have not been enrolled in dissertation course(s).

Arrangements for the examination will be made with the student's Ph.D. advisor. The results of the "Advancement to Candidacy Comprehensive Examination" must be filed in the office of The Graduate College before final approval to advance to candidacy is given by the dean of The Graduate College. The department is responsible for submitting the report to the office of The Graduate College.

## Dissertation Proposal

The dissertation proposal must be approved by the dean of The Graduate College and successfully defended in front of the dissertation committee before a student can advance to candidacy. Information about the dissertation procedures can be found in the "Dissertation Research and Writing" section of this catalog.

## Recommendation for Advancement to Candidacy

The geography graduate committee recommends the applicant for advancement to candidacy to the chair of the Department of Geography and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been completed.

## Dissertation Research and Writing

All doctoral students are required to complete a dissertation. The dissertation must be an original contribution to scholarship and the result of independent investigation in a significant area. Preparation of the dissertation must follow the latest edition of Kate L. Turabian's *A Manual for Writers* or the *Annals of the Association of American Geographers*.

## Dissertation Enrollment Requirements

### Enrollment

After being admitted to candidacy, students must be continuously enrolled each term for dissertation hours. If a student is receiving supervision on the dissertation during the summer or the student is graduating during the summer, the student must be enrolled in dissertation hours for that term. All candidates for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred.

## Hours

Students must complete a minimum of 15 semester hours of dissertation research and writing credit.



## Dissertation Time Limit

Students are expected to complete the dissertation within three years of advancement to candidacy. The geography graduate committee will review the student's progress annually.

## Ph.D. Advisory Committee

The Ph.D. advisory committee must be formed to oversee the research and writing of the dissertation. The Ph.D. advisory committee will include a Ph.D. advisor and a minimum of three additional committee members (two of whom must be from the Department of Geography and one from outside the department). The members must be chosen from qualified Ph.D. faculty. The Ph.D. advisor and the advisory committee will be selected in consultation with the student and through mutual agreement with committee members. The Ph.D. advisor will chair the dissertation committee and must be from the major department. The advisor and advisory committee must be approved by the graduate program coordinator, the department chair, as listed on the "Dissertation Committee Request" form and submitted to the dean of The Graduate College for final approval.

## Committee Changes

Any changes to the advisory committee must be submitted for approval to the advisory committee chair, the graduate coordinator, the department chair, and the dean of The Graduate College. Changes must be submitted no less than sixty days before the final oral comprehensive examination. The "Dissertation Advisor/Committee Member Change Request" form may be obtained from The Graduate College website.

## Dissertation Proposal

Students must submit the dissertation proposal and one copy of the official "Dissertation Proposal" form to their dissertation advisor. After obtaining **original** committee members' signatures and the department chair's signature, the student must submit the dissertation proposal and the form to the dean of The Graduate College for approval before proceeding with research on the dissertation. The proposal form may be obtained from The Graduate College website.

## Defense of the Dissertation Proposal

Students must defend the dissertation proposal in an oral examination with the Ph.D. advisory committee. The examination will address the proposed dissertation topic (problem definition and scope), research method, and relevant literature. The advisory committee must sign the "Defense of the Dissertation Proposal" form and then submit it for the signature of the department chair. The original must be sent to the office of The Graduate College.

## Final Oral Comprehensive Examination

Students must pass the final oral examination that covers the dissertation and the general field of the dissertation. To schedule the final oral examination, the student must apply to their Ph.D. advisor the term that they complete the dissertation. A completed "Doctoral Comprehensive Examination Report" form must be submitted to the dean of The Graduate College.

## Approval and Submission of the Dissertation and Abstract

The approval of the dissertation requires positive votes from the Ph.D. advisor and from a majority of the members of the Ph.D. advisory

committee. One copy of the dissertation and the signed "Thesis/Dissertation Committee Approval" form must be submitted to the dean of The Graduate College for final approval once the committee has approved the dissertation. Refer to the *Graduate College Guide to Preparing and Submitting a Thesis/Dissertation* (available on The Graduate College website) for specific submission guidelines.

Doctoral level courses in Geography: GEO

## Courses Offered

### Geography (GEO)

#### GEO 7190. Independent Study.

Research in geography under the direction of a supervising professor. Repeatable once for additional credit with a different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### GEO 7199A. Dissertation.

Original research and writing in Geography is to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### GEO 7199B. Dissertation.

Original research and writing in Geographic Education is to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### GEO 7199C. Dissertation.

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### GEO 7290. Independent Study.

This course is designed to provide a student with credit while conducting independent research in consultation with his or her research advisor. Repeatable once for additional credit with a different topic.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7299A. Dissertation.**

Original research and writing in Geography to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7299B. Dissertation.**

Original research and writing in Geographic Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7299C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7300. Advanced Geographic Research Design.**

The purpose of this course is to develop an appreciation for the process of research as practiced by contemporary professional geographers. Topics covered include formulating research problems, reviewing and critiquing published literature, developing and executing a research design, and completing a research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7301. Advanced Quantitative Methods in Geography.**

How to mathematically and statistically model geographic problems is the focus of this course. The application of multivariate statistical techniques to geographic problems and the problems that spatial data create in the application of statistical and other quantitative techniques are central issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7302. Nature and Philosophy of Geography.**

This course is a critical analysis of the historical development of geographic thought: its roots, its present status, and future directions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7304. Qualitative Research Methods.**

This course introduces the qualitative research paradigm, including research design, methods of data collection, and inductive analysis. Standards of scientific research that call for a deeper evaluation of complex social relationships are emphasized. The focus and application will be oriented towards human geography and nature-society relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7305. Historical Geography of the Environment.**

This course examines the evolution of environmental problems using the techniques and analytical perspectives of historical geography. Special emphasis is given to the emergence of environmental challenges related to urbanization and climate change. Students engage with scholarship related to historical geography of the environment and develop original research related to environmental change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7308. Advanced Regional Field Studies.**

Advanced study of geographic phenomena during field excursions to a particular site or region. Course includes preparation of site inventory, site guides, and on-site presentations. Repeatable once for additional credit with a different site or region.

**3 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7313. Environmental Systems.**

Theories and concepts involved in environmental systems will be examined. Tools and research issues relevant to their analysis will also be explored. Basic principles, as well as specific research questions and techniques, will be proposed to give students a foundation for analysis of current issues involving environmental systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7316. Remote Sensing and the Environment.**

A detailed examination and implementation of sophisticated approaches for processing satellite digital images with emphasis on environmental applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7318. GIS and Environmental Geography.**

This course examines the nature of environmental problems and explores the potential of GIS for environmental modeling and management. The conceptual basis for using GIS as well as the framing of environmental research problems will be covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7330. Geography of Hazards.**

This seminar examines research on issues related to the geography of hazards. Topics will be determined by instructor and student interests. Special emphasis will be placed on conceptual, theoretical, and methodological approaches to advance the study of spatial aspects of hazards such as risk, vulnerability, resilience, relief, recovery, and change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7334. Geographic Aspects of Water.**

This seminar is a critical analysis of developmental and current literature that define water's critical role in determining the physical and cultural characteristics of the earth. Principal focus will be placed on water's role on land use and as a critical resource.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7341. Urban Environment.**

Students in this course will critically engage with scholarly and governmental research relating to urban environments, urban environmentalism, and urban environmental management. Emphasis is placed on students developing and executing a unique, topically relevant research project aimed at improving our understanding of the way in which human-environment interaction influences, and is influenced by, urban geography and the urban experience. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7342. Theories and Methods in Geographic Education.**

This seminar is a critical analysis of previous and current literature concerning problems in pedagogy, philosophy, learning theory, research methods, teaching methodologies, and techniques of geographic education. A research paper will be required of each student on a topic related to the course content. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7344. Seminar in Geographic Curriculum.**

The seminar will be a survey and discussion of major curricula in geographic education. Geography will be viewed as a school subject that is part of the social studies, as an element of interdisciplinary studies, and as a stand alone subject.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7345. Contemporary Topics in Geographic Education.**

This course is a survey of initiatives and reforms in geography education spanning from the 1980s to the present day. Students are expected to develop and carry out research plans that address current theories in geographic education. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7346. Standards and Assessment in Geography.**

An introduction to assessment procedures in geography education is central to the course. Analysis of national standards in geography and how they have affected geographic learning in grades K-12 will be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7349. Population Geography.**

An in-depth study of the growth, movement, and spatial distribution of human populations is the central theme. Students will read and discuss professional articles that stress both theory and analytical techniques. Topics will include population growth and the environment, rural and small town depopulation, spatial diffusion processes, migration trends and theories, urban population growth, and techniques such as multivariate analysis and population projections. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7350. Practicum in Teaching Geography.**

This course introduces key concepts in teaching geography and provides regular training and planned periodic evaluations of instructional responsibilities. Course topics include instructional and assessment strategies in geography and classroom management. This course is required for first-year instructional assistants in the Geography Department. Students do not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate

Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**GEO 7352. Social Theory, Space, and Geography.**

This course examines key texts and concepts in social and political theory, focusing on theories of space and their mobilization in geographical research. Space and geography are approached with respect to several topics and debates in social theory including structuralism and agency, feminist theory and embodiment, racial formations, assemblage thinking and actor-network theory, hybridity, governance, and scale.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7361. Advanced Geographic Information Systems.**

This course provides exposure to advanced topics in GIS, particularly to quantitative methods and techniques for developing and interpreting models of natural and anthropogenic phenomena over the geographical space.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7362. Geographic Visualization.**

This course focuses on the interdisciplinary field of Geographic Visualization. Students will review visualization research in computer graphics, human computer interaction, GIScience, and cartography and relate the research approaches to useful and usable geographic visualizations. Prerequisite: GEO 3411 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7364. Geocomputation.**

Geocomputation reviews and analyzes concepts of computational modeling in Geography. The course will include modeling theory and advanced topics such as parallel processing, neural networks, cellular automata, scientific visualization, and fuzzy modeling. Students will practice model development, specifically spatially explicit simulation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7365. Theoretical Cartography.**

This course focuses on theoretical developments in cartography, and in particular looks at the role of maps and other graphic devices as tools for the discovery, analysis, and communication of geographical knowledge. Prerequisite: GEO 3411 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7366. Advanced Topics in Remote Sensing.**

The course focuses on advanced topics including the theoretical basis, mathematical foundations, and current research frontiers in remote sensing. Prerequisite: GEO 5415 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7368. Lidar and SfM Data Processing and Analysis.**

This course covers doctoral level skills in Light Detection and Ranging (lidar) systems and Structure from Motion (SfM) workflows for mapping and analysis of the environment. Students learn to successfully apply knowledge of lidar data and SfM workflows for a variety of Geographic Information Science applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7369. Exploring Spatial Databases.**

This course covers principles of spatial ontologies and spatial semantics to facilitate appropriate database conceptualization, design and implementation. Course assignments and projects provide in-depth experience with database query languages. Course work is completed using a spatially-enabled Relational Database Management Systems (RDBMS). Prerequisite: GEO 7417 or equivalent with a grade of 'B' or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7370. Advanced Seminar in Environmental Geography.**

This research seminar focuses on the methods, approaches, issues, and concepts of major themes in environmental geography. Special emphasis will be placed on theoretical and conceptual understandings of how humans interact with the environment from a geographical perspective. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7371. Advanced Seminar in Geographic Education.**

This research seminar analyzes literature and research into recent trends in geographic education. Emphasis will be on new developments in curriculum, content, and teaching methodologies. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7372. Seminar in Geographic Information Science.**

This course deals with advanced and current research issues in Geographic Information Science. Based on this objective, the course aims at educating doctoral students to conduct research in Geographic Information Science as well as develop innovative applications of Geographic Information Science. May be repeated for credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7390. Independent Study.**

Research in geography under the direction of a supervising professor. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7393B. Biogeography in Mountain Environments.**

This course examines how plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms and geological factors affect spatial distribution of animals and plants; all within the environmental limitation and conditions of mountains. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393C. Managing Urbanization.**

This course examines survey methods and procedures related to managing and preparing for urban growth. Selected topics for examination include transportation planning, housing, historic preservation, and environmental design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393D. International Migration.**

This course provides a survey of geographic and social science research conducted across various topics of international migration. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393E. Geography of Land Management.**

This course explores U.S. land management philosophies, techniques, and development approaches. Major topics include land ethics/philosophies, U.S. traditions in cadastral geography, urban sprawl and green development, land conservation techniques, the role of local/state/federal regulation in land management, and the human-environment impacts of land development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393F. Gender and Development.**

This course is a survey of geographic and social science research conducted across various topics of gender studies and international development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393G. Political Geography.**

This course is a survey of geographic and social science research conducted across various topics of political geography. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393J. Soil and Society.**

This course explores the importance of soil resources for environmental and socioeconomic sustainability. Soil science will be introduced, but the majority of the course will focus on soil's value to societies. Specific topics that will be explored include soil geography, historical abuses of soil resources, and current conservation efforts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393K. Biogeomorphology.**

This course will examine the ways in which plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms, and geological factors affect spatial distributions of animals and plants. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393M. Global Climate Change.**

This course examines various implications of global climate change, including impacts on science, politics, and society. Emphasis will be placed on anthropogenic influences across the 20th and 21st centuries, contemporary mitigation options, and future adaptation strategies amidst a complex and dynamic climate system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393N. Rivers and Society.**

This course examines river system processes and how they are influenced by human activities. We will discuss the principles and practices of large-scale river basin management with an emphasis on the different perspectives and motivations driving different management goals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**GEO 7393P. Advanced Seminar in Human Geography.**

This course will engage students in systematic critical analysis of the theories and methods of human geography. The students will conduct careful research on a topic in human geography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393Q. Geomorphology in the Anthropocene.**

This course will examine the ways in which humans interact with and affect geomorphological processes and landforms, and how humans directly act as geomorphological agents. The level at which human activities have transformed the surface of the Earth will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7399A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7399B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7399C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7415. Geographic Applications of Remote Sensing.**

Students will focus on geographic applications of the principles and practices of digital image processing, classification, and modeling using satellite images.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7417. Geographic Information Systems.**

Course is concerned with the analysis of interpretation of maps stored in digital form. Students are introduced to the concepts involving computerized cartographic and geographic data input, storage and retrieval, data manipulation and analysis, graphic and tabular report generation, and cartographic modeling.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7418. Technical Foundations and Methods in Geographic Information Science.**

This course addresses technical foundations and methods in management, analysis, visualization, and dissemination of geographically-referenced data and information in digital form. Topics include data structures, algorithms, and a variety of methods used in GIS and spatial data analysis.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7419. Advanced Techniques in Geographic Information Science.**

This course develops advanced Geographic Information System (GIS) concepts and application issues, spatial data manipulation and analysis skills, and provides hands-on experience with GIS, programming, and spatial analytics hardware/software programs. Emphasis is placed on practical application of skills to real world issues using advanced GIS techniques and geoprogramming. Prerequisite: GEO 7417 or equivalent with a grade of "C" or better and instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7430. Field Methods.**

Methods and techniques for observing, measuring, recording, and reporting on geographic phenomena are investigated in this course. Students will learn the use of instruments and materials in the collection of data for mapping and field research in the local area. Prerequisites: GEO 2410 and GEO 3301 both with grades of "D" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7447. Spatial Graphics in Geographic Education.**

This course examines traditional and innovative geoinformation and geovisualization technologies and their relationship to spatial thinking and the teaching and learning of geography. The course reviews academic literature, research methods, and teaching methodologies related to spatial graphics in geographic education. The lab portion provides geovisualization design skills for geographic education.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7599A. Dissertation.**

Original research and writing in Geography to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7599B. Dissertation.**

Original research and writing in Geographic Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7599C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The course curriculum for the Doctoral degree is designed to provide depth and breadth of knowledge in geographic theory and research methods. To be admitted to the Geography Doctoral program, a student must have completed a Master's degree in Geography or in a related discipline.

Each doctoral student will have her/his program tailored to meet the academic goals agreed upon in consultation with the Ph.D. research advisor, with the approval of the graduate program coordinator, the department chair, and the dean of The Graduate College. All programs will include the necessary core, skills, specialization, and internal and external elective courses.

## Educational Goal

The educational goal of the program is to provide a Ph.D. in Geography through which students will be educated in the process of geographic

research, the development of new knowledge, and the application of this research and knowledge to solve problems with spatial dimensions.

Financial Assistance

Graduate assistantships and scholarships are available to qualified candidates. Please contact the graduate staff advisor in the Department of Geography for more information about assistantships. The Graduate College can provide further information regarding scholarships.

Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College’s website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor’s degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- master’s degree in geography or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a U.S. Master’s degree. Master’s degrees following a three-year Bachelor’s degrees may not be equivalent; please contact [gradcollege@txstate.edu](mailto:gradcollege@txstate.edu) if you are unsure.)
- official transcripts from **each institution** where course credit was granted
- minimum 3.5 GPA in all completed graduate course work
- completion of a master’s thesis or demonstrated evidence of scholarly research and writing
- GRE score not required
- resume/CV
- statement of purpose explaining the student’s reasons for pursuing doctoral study and academic professional interests and goals
- three letters of recommendation demonstrating adequate subject preparation in content and quality as reflected in the student’s transcripts

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52

- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Geography requires 46 semester credit hours.

Course Requirements

Code	Title	Hours
Required Courses		
GEO 7300	Advanced Geographic Research Design	3
GEO 7301	Advanced Quantitative Methods in Geography	3
or GEO 7304	Qualitative Research Methods	
GEO 7302	Nature and Philosophy of Geography	3
Skills		
Choose 4 hours from the following:		4
GEO 7415	Geographic Applications of Remote Sensing	
GEO 7417	Geographic Information Systems	
GEO 7418	Technical Foundations and Methods in Geographic Information Science	
GEO 7419	Advanced Techniques in Geographic Information Science	
GEO 7430	Field Methods	
GEO 7447	Spatial Graphics in Geographic Education	
Prescribed Electives		
Choose 18 hours from the following:		18
GEO 7304	Qualitative Research Methods	
GEO 7305	Historical Geography of the Environment	
GEO 7308	Advanced Regional Field Studies	
GEO 7313	Environmental Systems	
GEO 7316	Remote Sensing and the Environment	
GEO 7318	GIS and Environmental Geography	
GEO 7330	Geography of Hazards	
GEO 7334	Geographic Aspects of Water	
GEO 7341	Urban Environment	
GEO 7342	Theories and Methods in Geographic Education	
GEO 7344	Seminar in Geographic Curriculum	
GEO 7346	Standards and Assessment in Geography	
GEO 7349	Population Geography	
GEO 7352	Social Theory, Space, and Geography	
GEO 7361	Advanced Geographic Information Systems	
GEO 7362	Geographic Visualization	
GEO 7364	Geocomputation	
GEO 7365	Theoretical Cartography	
GEO 7366	Advanced Topics in Remote Sensing	
GEO 7368	Lidar and SfM Data Processing and Analysis	
GEO 7369	Exploring Spatial Databases	
GEO 7370	Advanced Seminar in Environmental Geography	
GEO 7371	Advanced Seminar in Geographic Education	

GEO 7372	Seminar in Geographic Information Science
GEO 7390	Independent Study
GEO 7393B	Biogeography in Mountain Environments
GEO 7393C	Managing Urbanization
GEO 7393D	International Migration
GEO 7393E	Geography of Land Management
GEO 7393F	Gender and Development
GEO 7393G	Political Geography
GEO 7393J	Soil and Society
GEO 7393K	Biogeomorphology
GEO 7393M	Global Climate Change
GEO 7393N	Rivers and Society
GEO 7415	Geographic Applications of Remote Sensing
GEO 7417	Geographic Information Systems
GEO 7418	Technical Foundations and Methods in Geographic Information Science
GEO 7419	Advanced Techniques in Geographic Information Science
GEO 7430	Field Methods
GEO 7447	Spatial Graphics in Geographic Education
May choose 6 hours of advisor-approved electives from outside the department.	

**Dissertation**

Choose a minimum of 15 hours from the following: 15

GEO 7199A	Dissertation
GEO 7299A	Dissertation
GEO 7399A	Dissertation
GEO 7599A	Dissertation
GEO 7699A	Dissertation
GEO 7999A	Dissertation

**Total Hours** 46

## Comprehensive Examination Requirements

All candidates for graduate degrees must pass one or more comprehensive examinations.

## Advancement to Candidacy

### Applications for Advancement to Candidacy

The student will need to download the Application for Advancement to Candidacy form from The Graduate College website. The student will need to complete the form and return it to their department, who will then submit it to The Graduate College for approval.

### Advancement to Candidacy Time Limit

Doctoral students will need to be advanced to candidacy within four years of initiating Ph.D. course work. A student will need to indicate their intent to advance to candidacy during the term in which the student will complete the 31 hours of required course work.

No credit will be applied toward a student's doctoral degree for course work completed more than four years before the date on which the student is to advance to candidacy. This time limit applies toward credit

earned at Texas State as well as credit transferred to Texas State from other accredited institutions.

Requests for a time extension must be submitted to the student's Ph.D. advisor and graduate coordinator who, in turn, submits a recommendation to the dean of The Graduate College.

## Grade-Point Requirements for Advancement to Candidacy

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.0. No grade earned below "B" on any graduate course work may apply toward a Ph.D. at Texas State.

Incomplete grades must be cleared through the office of The Graduate College at least ten days before the approval for advancement to candidacy.

## Semester Hour Requirements

The student must complete 31 semester hours of graduate course work to meet the minimum requirements for advancement to candidacy. In some cases, a student may need to complete additional hours before being allowed to advance to candidacy. The student must have satisfied the residency requirement of 18 graduate credit hours.

## Advancement to Candidacy Comprehensive Examination

All applicants for advancement to candidacy for the doctoral degree must pass a comprehensive examination. The examination procedure may be obtained from the graduate staff advisor. Both prevailing expectations in the field and the actual courses taken by the candidate will determine the subject matter of the examination. This examination may not be taken until all required course work has been completed. The student may take the candidacy comprehensive examination without being enrolled in course work provided they have not been enrolled in dissertation course(s).

Arrangements for the examination will be made with the student's Ph.D. advisor. The results of the "Advancement to Candidacy Comprehensive Examination" must be filed in the office of The Graduate College before final approval to advance to candidacy is given by the dean of The Graduate College. The department is responsible for submitting the report to the office of The Graduate College.

## Dissertation Proposal

The dissertation proposal must be approved by the dean of The Graduate College and successfully defended in front of the dissertation committee before a student can advance to candidacy. Information about the dissertation procedures can be found in the "Dissertation Research and Writing" section of this catalog.

## Recommendation for Advancement to Candidacy

The geography graduate committee recommends the applicant for advancement to candidacy to the chair of the Department of Geography and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been completed.

## Dissertation Research and Writing

All doctoral students are required to complete a dissertation. The dissertation must be an original contribution to scholarship and the result of independent investigation in a significant area. Preparation of the

dissertation must follow the latest edition of Kate L. Turabian's *A Manual for Writers* or the *Annals of the Association of American Geographers*.

## Dissertation Enrollment Requirements

### Enrollment

After being admitted to candidacy, students must be continuously enrolled each term for dissertation hours. If a student is receiving supervision on the dissertation during the summer or the student is graduating during the summer, the student must be enrolled in dissertation hours for that term. All candidates for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred.

### Hours

Students must complete a minimum of 15 semester hours of dissertation research and writing credit.

## Dissertation Time Limit

Students are expected to complete the dissertation within three years of advancement to candidacy. The geography graduate committee will review the student's progress annually.

## Ph.D. Advisory Committee

The Ph.D. advisory committee must be formed to oversee the research and writing of the dissertation. The Ph.D. advisory committee will include a Ph.D. advisor and a minimum of three additional committee members (two of whom must be from the Department of Geography and one from outside the department). The members must be chosen from qualified Ph.D. faculty. The Ph.D. advisor and the advisory committee will be selected in consultation with the student and through mutual agreement with committee members. The Ph.D. advisor will chair the dissertation committee and must be from the major department. The advisor and advisory committee must be approved by the graduate program coordinator, the department chair, as listed on the "Dissertation Committee Request" form and submitted to the dean of The Graduate College for final approval.

## Committee Changes

Any changes to the advisory committee must be submitted for approval to the advisory committee chair, the graduate coordinator, the department chair, and the dean of The Graduate College. Changes must be submitted no less than sixty days before the final oral comprehensive examination. The "Dissertation Advisor/Committee Member Change Request" form may be obtained from The Graduate College website.

## Dissertation Proposal

Students must submit the dissertation proposal and one copy of the official "Dissertation Proposal" form to their dissertation advisor. After obtaining **original** committee members' signatures and the department chair's signature, the student must submit the dissertation proposal and the form to the dean of The Graduate College for approval before proceeding with research on the dissertation. The proposal form may be obtained from The Graduate College website.

## Defense of the Dissertation Proposal

Students must defend the dissertation proposal in an oral examination with the Ph.D. advisory committee. The examination will address the proposed dissertation topic (problem definition and scope), research

method, and relevant literature. The advisory committee must sign the "Defense of the Dissertation Proposal" form and then submit it for the signature of the department chair. The original must be sent to the office of The Graduate College.

## Final Oral Comprehensive Examination

Students must pass the final oral examination that covers the dissertation and the general field of the dissertation. To schedule the final oral examination, the student must apply to their Ph.D. advisor the term that they complete the dissertation. A completed "Doctoral Comprehensive Examination Report" form must be submitted to the dean of The Graduate College.

## Approval and Submission of the Dissertation and Abstract

The approval of the dissertation requires positive votes from the Ph.D. advisor and from a majority of the members of the Ph.D. advisory committee. One copy of the dissertation and the signed "Thesis/Dissertation Committee Approval" form must be submitted to the dean of The Graduate College for final approval once the committee has approved the dissertation. Refer to the *Graduate College Guide to Preparing and Submitting a Thesis/Dissertation* (available on The Graduate College website) for specific submission guidelines.

Doctoral level courses in Geography: GEO

## Courses Offered

### Geography (GEO)

#### GEO 7190. Independent Study.

Research in geography under the direction of a supervising professor. Repeatable once for additional credit with a different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### GEO 7199A. Dissertation.

Original research and writing in Geography is to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### GEO 7199B. Dissertation.

Original research and writing in Geographic Education is to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**GEO 7199C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7290. Independent Study.**

This course is designed to provide a student with credit while conducting independent research in consultation with his or her research advisor. Repeatable once for additional credit with a different topic.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7299A. Dissertation.**

Original research and writing in Geography to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7299B. Dissertation.**

Original research and writing in Geographic Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7299C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7300. Advanced Geographic Research Design.**

The purpose of this course is to develop an appreciation for the process of research as practiced by contemporary professional geographers. Topics covered include formulating research problems, reviewing and critiquing published literature, developing and executing a research design, and completing a research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7301. Advanced Quantitative Methods in Geography.**

How to mathematically and statistically model geographic problems is the focus of this course. The application of multivariate statistical techniques to geographic problems and the problems that spatial data create in the application of statistical and other quantitative techniques are central issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7302. Nature and Philosophy of Geography.**

This course is a critical analysis of the historical development of geographic thought: its roots, its present status, and future directions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7304. Qualitative Research Methods.**

This course introduces the qualitative research paradigm, including research design, methods of data collection, and inductive analysis. Standards of scientific research that call for a deeper evaluation of complex social relationships are emphasized. The focus and application will be oriented towards human geography and nature-society relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7305. Historical Geography of the Environment.**

This course examines the evolution of environmental problems using the techniques and analytical perspectives of historical geography. Special emphasis is given to the emergence of environmental challenges related to urbanization and climate change. Students engage with scholarship related to historical geography of the environment and develop original research related to environmental change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7308. Advanced Regional Field Studies.**

Advanced study of geographic phenomena during field excursions to a particular site or region. Course includes preparation of site inventory, site guides, and on-site presentations. Repeatable once for additional credit with a different site or region.

**3 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7313. Environmental Systems.**

Theories and concepts involved in environmental systems will be examined. Tools and research issues relevant to their analysis will also be explored. Basic principles, as well as specific research questions and techniques, will be proposed to give students a foundation for analysis of current issues involving environmental systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7316. Remote Sensing and the Environment.**

A detailed examination and implementation of sophisticated approaches for processing satellite digital images with emphasis on environmental applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7318. GIS and Environmental Geography.**

This course examines the nature of environmental problems and explores the potential of GIS for environmental modeling and management. The conceptual basis for using GIS as well as the framing of environmental research problems will be covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7330. Geography of Hazards.**

This seminar examines research on issues related to the geography of hazards. Topics will be determined by instructor and student interests. Special emphasis will be placed on conceptual, theoretical, and methodological approaches to advance the study of spatial aspects of hazards such as risk, vulnerability, resilience, relief, recovery, and change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7334. Geographic Aspects of Water.**

This seminar is a critical analysis of developmental and current literature that define water's critical role in determining the physical and cultural characteristics of the earth. Principal focus will be placed on water's role on land use and as a critical resource.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7341. Urban Environment.**

Students in this course will critically engage with scholarly and governmental research relating to urban environments, urban environmentalism, and urban environmental management. Emphasis is placed on students developing and executing a unique, topically relevant research project aimed at improving our understanding of the way in which human-environment interaction influences, and is influenced by, urban geography and the urban experience. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7342. Theories and Methods in Geographic Education.**

This seminar is a critical analysis of previous and current literature concerning problems in pedagogy, philosophy, learning theory, research methods, teaching methodologies, and techniques of geographic education. A research paper will be required of each student on a topic related to the course content. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7344. Seminar in Geographic Curriculum.**

The seminar will be a survey and discussion of major curricula in geographic education. Geography will be viewed as a school subject that is part of the social studies, as an element of interdisciplinary studies, and as a stand alone subject.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7345. Contemporary Topics in Geographic Education.**

This course is a survey of initiatives and reforms in geography education spanning from the 1980s to the present day. Students are expected to develop and carry out research plans that address current theories in geographic education. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7346. Standards and Assessment in Geography.**

An introduction to assessment procedures in geography education is central to the course. Analysis of national standards in geography and how they have affected geographic learning in grades K-12 will be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7349. Population Geography.**

An in-depth study of the growth, movement, and spatial distribution of human populations is the central theme. Students will read and discuss professional articles that stress both theory and analytical techniques. Topics will include population growth and the environment, rural and small town depopulation, spatial diffusion processes, migration trends and theories, urban population growth, and techniques such as multivariate analysis and population projections. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7350. Practicum in Teaching Geography.**

This course introduces key concepts in teaching geography and provides regular training and planned periodic evaluations of instructional responsibilities. Course topics include instructional and assessment strategies in geography and classroom management. This course is required for first-year instructional assistants in the Geography Department. Students do not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**GEO 7352. Social Theory, Space, and Geography.**

This course examines key texts and concepts in social and political theory, focusing on theories of space and their mobilization in geographical research. Space and geography are approached with respect to several topics and debates in social theory including structuralism and agency, feminist theory and embodiment, racial formations, assemblage thinking and actor-network theory, hybridity, governance, and scale.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7361. Advanced Geographic Information Systems.**

This course provides exposure to advanced topics in GIS, particularly to quantitative methods and techniques for developing and interpreting models of natural and anthropogenic phenomena over the geographical space.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7362. Geographic Visualization.**

This course focuses on the interdisciplinary field of Geographic Visualization. Students will review visualization research in computer graphics, human computer interaction, GIScience, and cartography and relate the research approaches to useful and usable geographic visualizations. Prerequisite: GEO 3411 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7364. Geocomputation.**

Geocomputation reviews and analyzes concepts of computational modeling in Geography. The course will include modeling theory and advanced topics such as parallel processing, neural networks, cellular automata, scientific visualization, and fuzzy modeling. Students will practice model development, specifically spatially explicit simulation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7365. Theoretical Cartography.**

This course focuses on theoretical developments in cartography, and in particular looks at the role of maps and other graphic devices as tools for the discovery, analysis, and communication of geographical knowledge. Prerequisite: GEO 3411 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7366. Advanced Topics in Remote Sensing.**

The course focuses on advanced topics including the theoretical basis, mathematical foundations, and current research frontiers in remote sensing. Prerequisite: GEO 5415 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7368. Lidar and SfM Data Processing and Analysis.**

This course covers doctoral level skills in Light Detection and Ranging (lidar) systems and Structure from Motion (SfM) workflows for mapping and analysis of the environment. Students learn to successfully apply knowledge of lidar data and SfM workflows for a variety of Geographic Information Science applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7369. Exploring Spatial Databases.**

This course covers principles of spatial ontologies and spatial semantics to facilitate appropriate database conceptualization, design and implementation. Course assignments and projects provide in-depth experience with database query languages. Course work is completed using a spatially-enabled Relational Database Management Systems (RDBMS). Prerequisite: GEO 7417 or equivalent with a grade of 'B' or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7370. Advanced Seminar in Environmental Geography.**

This research seminar focuses on the methods, approaches, issues, and concepts of major themes in environmental geography. Special emphasis will be placed on theoretical and conceptual understandings of how humans interact with the environment from a geographical perspective. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7371. Advanced Seminar in Geographic Education.**

This research seminar analyzes literature and research into recent trends in geographic education. Emphasis will be on new developments in curriculum, content, and teaching methodologies. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7372. Seminar in Geographic Information Science.**

This course deals with advanced and current research issues in Geographic Information Science. Based on this objective, the course aims at educating doctoral students to conduct research in Geographic Information Science as well as develop innovative applications of Geographic Information Science. May be repeated for credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7390. Independent Study.**

Research in geography under the direction of a supervising professor. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7393B. Biogeography in Mountain Environments.**

This course examines how plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms and geological factors affect spatial distribution of animals and plants; all within the environmental limitation and conditions of mountains. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393C. Managing Urbanization.**

This course examines survey methods and procedures related to managing and preparing for urban growth. Selected topics for examination include transportation planning, housing, historic preservation, and environmental design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393D. International Migration.**

This course provides a survey of geographic and social science research conducted across various topics of international migration. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393E. Geography of Land Management.**

This course explores U.S. land management philosophies, techniques, and development approaches. Major topics include land ethics/philosophies, U.S. traditions in cadastral geography, urban sprawl and green development, land conservation techniques, the role of local/state/federal regulation in land management, and the human-environment impacts of land development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393F. Gender and Development.**

This course is a survey of geographic and social science research conducted across various topics of gender studies and international development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393G. Political Geography.**

This course is a survey of geographic and social science research conducted across various topics of political geography. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393J. Soil and Society.**

This course explores the importance of soil resources for environmental and socioeconomic sustainability. Soil science will be introduced, but the majority of the course will focus on soil's value to societies. Specific topics that will be explored include soil geography, historical abuses of soil resources, and current conservation efforts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393K. Biogeomorphology.**

This course will examine the ways in which plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms, and geological factors affect spatial distributions of animals and plants. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393M. Global Climate Change.**

This course examines various implications of global climate change, including impacts on science, politics, and society. Emphasis will be placed on anthropogenic influences across the 20th and 21st centuries, contemporary mitigation options, and future adaptation strategies amidst a complex and dynamic climate system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393N. Rivers and Society.**

This course examines river system processes and how they are influenced by human activities. We will discuss the principles and practices of large-scale river basin management with an emphasis on the different perspectives and motivations driving different management goals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393P. Advanced Seminar in Human Geography.**

This course will engage students in systematic critical analysis of the theories and methods of human geography. The students will conduct careful research on a topic in human geography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393Q. Geomorphology in the Anthropocene.**

This course will examine the ways in which humans interact with and affect geomorphological processes and landforms, and how humans directly act as geomorphological agents. The level at which human activities have transformed the surface of the Earth will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7399A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7399B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7399C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7415. Geographic Applications of Remote Sensing.**

Students will focus on geographic applications of the principles and practices of digital image processing, classification, and modeling using satellite images.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7417. Geographic Information Systems.**

Course is concerned with the analysis of interpretation of maps stored in digital form. Students are introduced to the concepts involving computerized cartographic and geographic data input, storage and retrieval, data manipulation and analysis, graphic and tabular report generation, and cartographic modeling.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7418. Technical Foundations and Methods in Geographic Information Science.**

This course addresses technical foundations and methods in management, analysis, visualization, and dissemination of geographically-referenced data and information in digital form. Topics include data structures, algorithms, and a variety of methods used in GIS and spatial data analysis.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7419. Advanced Techniques in Geographic Information Science.**

This course develops advanced Geographic Information System (GIS) concepts and application issues, spatial data manipulation and analysis skills, and provides hands-on experience with GIS, programming, and spatial analytics hardware/software programs. Emphasis is placed on practical application of skills to real world issues using advanced GIS techniques and geoprogramming. Prerequisite: GEO 7417 or equivalent with a grade of "C" or better and instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7430. Field Methods.**

Methods and techniques for observing, measuring, recording, and reporting on geographic phenomena are investigated in this course. Students will learn the use of instruments and materials in the collection of data for mapping and field research in the local area. Prerequisites: GEO 2410 and GEO 3301 both with grades of "D" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7447. Spatial Graphics in Geographic Education.**

This course examines traditional and innovative geoinformation and geovisualization technologies and their relationship to spatial thinking and the teaching and learning of geography. The course reviews academic literature, research methods, and teaching methodologies related to spatial graphics in geographic education. The lab portion provides geovisualization design skills for geographic education.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter



**GEO 7599A. Dissertation.**

Original research and writing in Geography to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7599B. Dissertation.**

Original research and writing in Geographic Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7599C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Applied Geography (M.A.Geo.) degree program is designed to prepare geographers to use their skills and background knowledge to solve real-world problems with geographic dimensions. Applied Geography includes such sub-fields as environmental management, geographic education, GIS, cartography, land use planning, location analysis, land management, transportation systems planning, applied physical geography, geographic aspects of environmental law, and spatial modeling.

## Financial Assistance

Graduate assistantships are available to qualified candidates. Please contact the graduate program coordinator in the Department of Geography for more information about financial assistance and the degree programs. For scholarship information, please visit The Graduate College website at <http://www.gradcollege.txstate.edu/funding.html>.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- **Fall 2024:** overall minimum 3.2 GPA or 3.2 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- **Spring 2025 and beyond:** overall minimum 3.0 GPA or 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work
- GRE not required
- resume/CV
- statement of purpose identifying the student's preferred degree and concentration and possible areas of research
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Applied Geography (M.A.Geo.) degree with a major in Geography Information Science requires 33 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
GEO 5300	Applied Research Design and Techniques	3
GEO 5301	Multivariate Quantitative Methods	3
GEO 5309	Geographical Analysis	3
GEO 5335	Directed Research	3
<b>Concentration</b>		
Choose 18-20 hours from the following:		18-20
GEO 5362	Geographic Visualization	
GEO 5365	Remote Sensing and the Environment	
GEO 5367	Exploring Spatial Databases	
GEO 5368	Lidar and SfM Data Processing and Analysis	
GEO 5390	Independent Study	
GEO 5408	Web Mapping	
GEO 5415	Geographic Applications of Remote Sensing	
GEO 5417	Advanced Cartographic Design	
GEO 5418	Geographic Information Systems I	
GEO 5419	Geographic Information Systems II	
GEO 5424	GPS and GIS	
<b>Prescribed Electives</b>		
Choose 3 hours from the following:		3
GEO 5304	Qualitative Research Methods	
GEO 5308	Regional Field Studies	
GEO 5312	Managing Urbanization	
GEO 5313	Environmental Studies	
GEO 5314	Geographic Elements of Environmental Law	
GEO 5316	Applied Physical Geography	
GEO 5317	Seminar in Applied Human Geography	
GEO 5318	Environment Problems of the U.S.-Mexico Border	
GEO 5319	Seminar in Nature and Heritage Tourism	
GEO 5322	Interpretive Environmental Geography	
GEO 5323	Researching the City	
GEO 5326	Parks and Protected Places	
GEO 5329	Historical Geography of the Environment	
GEO 5330	Geography of Hazards	
GEO 5332	Environmental Geography of the Coastal Zone	
GEO 5334	Applied Water Resources	
GEO 5336	Transportation Systems	
GEO 5339	The Geography of Land Management	
GEO 5340	Active Learning in Geography	
GEO 5341	Contemporary Issues in Geographic Education	
GEO 5342	Theory and Research Methods in Geographic Education	
GEO 5344	Curriculum, Standards, and Assessments in Geography	
GEO 5349	Population Geography	
GEO 5351	Regional Waste Management	
GEO 5352	Air Quality Management	
GEO 5353	Emergency Management	
GEO 5360	Seminar in Planning Problems	
GEO 5370	Seminar in Applied Physical Geography	

GEO 5380	Internship
GEO 5395	Problems in Applied Geography
GEO 5408	Web Mapping
GEO 5415	Geographic Applications of Remote Sensing
GEO 5417	Advanced Cartographic Design
GEO 5419	Geographic Information Systems II
GEO 5424	GPS and GIS
GEO 5430	Field Methods
GEO 5680	Internship
May choose 6 hours of advisor-approved electives outside the department	
<b>Total Hours</b>	<b>33-35</b>

## Comprehensive Examination Requirement

Students are required to take a comprehensive examination. The committee evaluates the comprehensive examination. The research advisor fills out the report of the comprehensive examination form and forwards this to the Graduate Staff Advisor, who then forwards the form to the Graduate College.

In evaluating the examination, the committee has two options: pass or fail. Students who fail the examination may also be required by their committees to complete additional course work or undertake research projects. These must be completed to the satisfaction of the committee before the examination is retaken. A student who has failed the comprehensive examination is eligible to retake the comprehensive examination once. Unless under extenuating circumstances and with the approval of the Graduate Program Coordinator, the second examination must take place no sooner than thirty days after the first comprehensive examination. A student who fails the comprehensive examination twice is dismissed from the graduate program.

Master's level courses in Geography: GEO

## Courses Offered

### Geography (GEO)

#### GEO 5190. Independent Study.

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for a total of six semester hours of credit. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### GEO 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### GEO 5290. Independent Study.

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for total of six semester hours of credit. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### GEO 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### GEO 5300. Applied Research Design and Techniques.

Students will be introduced to appropriate research methods for applied geographers. Emphasis will be placed on the scientific method, productive library research, data collection and analysis, fieldwork, effective writing, and the nature of graphic representation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### GEO 5301. Multivariate Quantitative Methods.

The use of multivariate descriptive and inferential statistics as applied to geographic data and problems, beginning with the general linear model and including topics such as multiple regression, principal components analysis, discriminant analysis, and clustering algorithms. Prerequisite: GEO 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### GEO 5304. Qualitative Research Methods.

This course introduces the qualitative research paradigm, including research design, methods of data collection, and inductive analysis. Standards of scientific research that call for a deeper evaluation of complex social relationships are emphasized. The focus and application will be oriented towards human geography and nature-society relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### GEO 5308. Regional Field Studies.

Study of geographic phenomena during field excursions to a particular site or region. Students will study the physical and/or cultural environments through off-campus field experience. Students will research, analyze, and report on major regional geographic features. Repeatable once for additional credit with a different site or region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5309. Geographical Analysis.**

A survey of typical spatial problems of interest to geographers, with emphasis on current research and application being undertaken by the faculty in the Department of Geography. Topics include environmental geography, geographic education, land use and regional development, and cartographic representation and geographic information theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5312. Managing Urbanization.**

Survey methods and procedures related to managing and preparing for urban growth. Selected topics for examination include transportation planning, housing, historic preservation, and environmental design. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5313. Environmental Studies.**

A critical analysis of the major causes of environmental change and human response to environmental problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5314. Geographic Elements of Environmental Law.**

A survey of environmental laws related to land, air, and water pollution. The nature of environmental problems will be studied as they relate to urbanization, industrialization, land development, noise, radiation and solid waste management, and the laws and guidelines that have been passed to alleviate such problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5315. Geographic Analysis of Global Issues.**

This course focuses on a critical analysis of contemporary global or regional issues from geographic perspectives. The course emphasizes research-based case studies associated with the topics and integrative approaches to the study of world regions and world cultures. The course may be repeated with permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5316. Applied Physical Geography.**

This course is a survey of methods and techniques used in the collection, analysis, and evaluation of information relating to problems within the physical environment. Emphasis will be on problems characteristic of particular geographic locations or specific environmental settings. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5317. Seminar in Applied Human Geography.**

A focus on the methods and techniques used in the collection, analysis, and evaluation of information relating to problems within the human geographical environment. Emphasis will be on problems pertaining to particular geographic locations or special environmental settings. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5318. Environment Problems of the U.S.-Mexico Border.**

This course serves as an in-depth introduction to the physical, social, and environmental landscapes of the region of the U.S.-Mexico Border. The course applies an interdisciplinary perspective to geographic understanding of the environmental and health-related issues experienced by residents of the borderlands. Special attention is given to management and planning solutions to the region's problems. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5319. Seminar in Nature and Heritage Tourism.**

This seminar focuses on the special geographic issues of nature and heritage tourism. Particular emphasis is placed on sites and activities, costs and benefits, commoditization and authenticity, resource protection, and substantive learning content of nature and heritage tourism activities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5322. Interpretive Environmental Geography.**

Students learn to use geographic theories and concepts to provide holistic and thematic interpretation of environmental information, as specified by interpretive principles. Students also learn advanced use of traditional and digital presentation techniques and research methods, which include audience assessment and program evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5323. Researching the City.**

This course covers data collection and analysis of urban life and the factors considered in locating industry, business, housing, and community facilities. Attention will be paid to the location of manufacturing activities, commercial enterprises, and a variety of social service facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5326. Parks and Protected Places.**

This course serves as an in-depth introduction to the philosophy, establishment, and operation of public parks, wildlife refuges, protected areas, non-governmental preserves and historic sites. Students will be introduced to the scientific and policy rationale for the creation of such areas as well as methods of classification and acquisition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5329. Historical Geography of the Environment.**

This course examines the evolution of environmental problems using the techniques and analytical perspectives of historical geography. Special emphasis is given to the emergence of environmental challenges related to urbanization and climate change. Students in this class will engage with scholarship related to historical geography of the environment and develop original research related to environmental change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5330. Geography of Hazards.**

This course focuses on understanding and advancing scholarship in hazards research – the threats to life, health, and welfare caused by natural, technological, and/or social processes, and disasters. Special emphasis is placed on understanding the complexities of the assessment and management of risks, hazards, and disasters at multiple geographic scales.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5332. Environmental Geography of the Coastal Zone.**

Investigation of the physical geographic factors associated with the coastal zone and the role of human activities in problems and opportunities characteristic of this environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5334. Applied Water Resources.**

Application of techniques employed in water management including flood hazards, water supply assessment, and water management strategies. Students will apply principles to specific watersheds and water problems including the analysis of various physical, land use, and legal parameters.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5335. Directed Research.**

This course is directed research on various topics in applied geography under the supervision of a graduate faculty member. Students gain experience about the entire process of conducting applied research in geography. Students receive course credit after a directed research report is approved by a student's advisor and members of the student's committee.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5336. Transportation Systems.**

This course introduces key concepts and methods of transportation geography and transportation planning. Topics include, among others, the spatial structure of transportation systems, transportation economics, and logistics. Various methods, techniques, and technologies for transportation analysis, particularly Geographic Information Systems (GIS), will be explored and applied as part of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5339. The Geography of Land Management.**

This course explores U.S. land management philosophies, techniques, and development approaches. Major topics include land ethics/philosophies, U.S. traditions in cadastral geography, urban sprawl and green development, land conservation techniques, the role of local/state/federal regulations in land management, and the human environmental impacts of land development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5340. Active Learning in Geography.**

The course focuses on instructional strategies that will allow teachers to promote active learning in geography. Emphasis will be on how active learning can help students reach geography content and skills standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5341. Contemporary Issues in Geographic Education.**

This course examines current approaches to teaching geography in American education. Specific attention will be given to new classroom materials, curriculum reform efforts, and research developments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5342. Theory and Research Methods in Geographic Education.**

The course focuses on designing, conducting, and presenting empirical research on teaching and learning geography. This course emphasizes the critical analysis of theories, research methods, and key research questions in geographic education and developing a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5344. Curriculum, Standards, and Assessments in Geography.**

This course is a survey of major curriculum and assessment theories and practices in geography education. Geography is examined as a school subject that is part of the social studies, as an element of interdisciplinary studies, and as a stand-alone subject. The concept of teacher leadership frame discussions of geography subject matter and standards implementation in schools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**GEO 5345. Spatial Thinking in Education.**

This course introduces the concept of spatial thinking and discusses how spatial thinking may be taught in the context of K-16 education. Students examine various instructional strategies to facilitate spatial thinking in the classroom and design grade-level appropriate learning experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5346. Inquiry-Based Teaching in Human Geography.**

This course introduces models of geographic inquiry for instruction in human geography at the secondary and postsecondary levels. Case studies examining contemporary issues will be paired with lessons and activities that support integrated and inquiry-based approaches to teaching human geography. Students develop inquiry lessons aligned with geography/social studies standards, the Advanced Placement Human Geography course, and introductory undergraduate courses in human geography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5349. Population Geography.**

An in-depth study of the spatial distribution and movement of human populations. Course will emphasize current issues and analytical techniques. Topics will include the impact of population growth, spatial diffusion processes, migration trends and theories, explanation of regional demographic differences, and techniques such as population projections. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5350. Practicum in Teaching Geography.**

This course introduces key concepts in teaching geography and provides regular training and planned periodic evaluations of instructional responsibilities. Course topics include instructional and assessment strategies in geography and classroom management. This course is required for first-year instructional assistants in the Geography Department. Students do not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**GEO 5351. Regional Waste Management.**

The principles of effective solid waste planning and management will be examined as they relate to such activities as waste generation, storage and collection, transfer and transportation, processing and volume reduction, resource conservation and recovery, the disposal of wastes, and the handling of special wastes, particularly those of a toxic and hazardous nature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5352. Air Quality Management.**

A geographic assessment of air quality management in the United States. Spatial distribution of the types, sources, and effects of air pollutants. Meteorology and physics of air pollution dispersion. Legislative and regulatory approaches to pollution management. National, state, regional, and local policy development procedures. Geographic methods for air pollution management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5353. Emergency Management.**

This course provides an overview of the most important aspects of emergency management at all geographic scales, with emphasis on local, regional, and federal levels. Best practices and proper methodologies are emphasized as well as ways that students can develop the skills and capabilities for a career in this field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5360. Seminar in Planning Problems.**

A critical and in-depth examination of several problem areas currently facing the planner.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5365. Remote Sensing and the Environment.**

This course provides an examination and implementation of sophisticated approaches for processing satellite digital images with emphasis on environmental applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5367. Exploring Spatial Databases.**

This course covers principles of spatial ontologies and spatial semantics to facilitate appropriate database conceptualization, design and implementation. Course assignments and projects provide in-depth experience with database query languages. Course work is completed using a spatially-enabled Relational Database Management Systems (RDBMS). Prerequisite: GEO 5418 or equivalent with a grade of 'B' or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5368. Lidar and SfM Data Processing and Analysis.**

This course covers Light Detection and Ranging (lidar) systems and Structure from Motion (SfM) workflows for mapping and analysis of the environment. Students learn to successfully apply knowledge of lidar data and SfM workflows for a variety of Geographic Information Science applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5370. Seminar in Applied Physical Geography.**

Critical analysis of theories, models, and techniques of physical geographic research with the focus on application to real-world problems. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5371. Seminar in Geographic Education.**

This research seminar addresses contemporary topics related to geographic education. The emphasis is on applications of learning theories, teaching strategies, and innovative tools in geography classrooms. Course topics may vary depending on student and faculty interest. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5380. Internship.**

Application of techniques of applied geography in an actual on-the-job setting. Internships will be arranged and supervised by the Internship Director. May be repeated once for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5390. Independent Study.**

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for a total of six semester hours of credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5393B. Biogeography in Mountain Environments.**

This course examines how plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms and geological factors affect spatial distribution of animals and plants; all within the environmental limitation and conditions of mountains. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393D. Water Resource Planning.**

This seminar presents case-studies related to water quality protection and mitigation and to the planning of water supply at the state and regional level from a policy practitioner's perspective. The objective of the course is to identify the components of the planning process and its outcomes, including water-use conservation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393E. Geomorphology in the Anthropocene.**

This course will examine the ways in which humans interact with and affect geomorphological processes and landforms, and how humans directly act as geomorphological agents. The level at which human activities have transformed the surface of the Earth will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393G. Jobs, Careers, and Professional Development in Geography.**

This course introduces graduate students to research-based strategies for career planning and professional development in geography. Career opportunities for geographers in business, government, nonprofit, and academic organizations are examined. The course also analyzes professional identities, applications of geography in society, professional ethics, lifelong learning, work-life balance, and professional networking.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393H. Professional Development in Geographic Education.**

This course combines useful, dynamic geography content with a sensible professional development online delivery system. The content emphasis stresses the applicability of geography in our modern world thus offering jobs and careers to students. The message for teachers is that geography has become more oriented to student aspirations and civic and environmental responsibility.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393I. Geography and the Social Studies.**

This course examines on how geography fits within the social studies. It details how geography can be taught alongside history, economics, and civics for a well-rounded social studies curriculum. Attention is paid to technology, skills and perspectives. The course examines various social studies frameworks and standards. This course will prepare teachers to be versatile in their social studies knowledge and understanding. It will enhance a teacher's ability to teach geography across all of the social studies subjects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393K. Advanced Web Cartography and Data Visualization.**

This course provides advanced training in the design and development of interactive, web-based data visualization systems with emphasis on the modern cartographic process and the spatial applications of interactive data visualization principles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5395. Problems in Applied Geography.**

Designed to consider a selected topic relating to applied geography. Emphasis on the practical application of geographic tools, with individual or group participation in a specific project. Course topics may vary depending on student and faculty interests and may apply to any of the four graduate tracks: physical-environmental, urban and regional planning, geographic education or GIScience. Repeatable for up to six hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in GEO 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**GEO 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5408. Web Mapping.**

This course introduces students to modern interactive and dynamic mapping and GIS techniques that allow internet-based cartographic representations of temporal and non-temporal geospatial objects and phenomena. Prerequisite: GEO 3411 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5415. Geographic Applications of Remote Sensing.**

Students will focus on Geographic applications of the principles and practices of digital image processing, classification, and modeling using satellite images.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5417. Advanced Cartographic Design.**

This advanced course in cartography focuses on thematic map design. The objective is to produce a series of well-designed, professional grade maps (or an atlas) that students can use to build a cartographic portfolio. Theoretical concepts and principles will be introduced using practical examples and written assignments. Prerequisite: GEO 3411 with a grade of "D" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5418. Geographic Information Systems I.**

Course is concerned with the analysis and interpretation of maps stored in digital form. Students are introduced to concepts and practices involving computerized cartographic and geographic data input, storage and retrieval, data manipulation and analysis, graphic and tabular report generation, and cartographic modeling.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5419. Geographic Information Systems II.**

This course aims to develop more advanced GIS concepts and application issues, further spatial data manipulation and analysis skills, and provide hands-on experience with GIS hardware and software programs. The emphasis will be on practical application of skills to real world issues. Prerequisite: GEO 5418 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5424. GPS and GIS.**

Students will learn to plan and conduct fieldwork using Global Positioning System (GPS) to differentially correct GPS data, and to build Geographic Information Systems (GIS) applications using GPS technology. The course is project-based and involves working with external clients(s). Prerequisites: GEO 2426 with a grade of "D" or better or GEO 5418 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5430. Field Methods.**

Course will emphasize common field techniques necessary in the construction of accurate maps. Various kinds of data collection techniques will be presented that will facilitate geographic research. Prerequisite: GEO 3301 with a grade of "D" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5447. Technology in Geographic Education.**

The course focuses on the applications and implications of technology in geographic education. The emphasis is placed on the role of technology as an instructional tool to promote inquiry-based learning.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**GEO 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5680. Internship.**

Application of techniques of applied geography in an actual on-the-job setting. Internships will be arranged and supervised by the Internship Director.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**GEO 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Applied Geography (M.A.Geo.) degree with a major in Geography is designed to prepare geographers to use their skills and background knowledge to solve real-world problems with geographic dimensions. Applied Geography includes such sub-fields as Environmental Management, Geographic Education, GIS, Cartography, Land use Planning, Location Analysis, Land Management, Transportation Systems Planning, Applied Physical Geography, Geographic Aspects of Environmental Law, and Spatial Modeling.

## Financial Assistance

Graduate assistantships are available to qualified candidates. Please contact the graduate program coordinator in the Department of Geography for more information about financial assistance and the degree programs. For scholarship information, please visit The Graduate College website at <http://www.gradcollege.txstate.edu/funding.html>.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted

- **Fall 2024:** overall minimum 3.2 GPA or 3.2 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- **Spring 2025 and beyond:** overall minimum 3.0 GPA or 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work
- GRE not required
- resume/CV
- statement of purpose identifying the student's preferred degree and concentration and possible areas of research
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Applied Geography (M.A.Geo.) degree with a major in Geography requires 33 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
GEO 5300	Applied Research Design and Techniques	3
GEO 5301	Multivariate Quantitative Methods	3
or GEO 5304	Qualitative Research Methods	
GEO 5309	Geographical Analysis	3
GEO 5335	Directed Research	3
<b>Prescribed Electives</b>		
Choose 21 hours from the following:		21
GEO 5301	Multivariate Quantitative Methods	
GEO 5304	Qualitative Research Methods	
GEO 5308	Regional Field Studies	
GEO 5312	Managing Urbanization	
GEO 5313	Environmental Studies	
GEO 5314	Geographic Elements of Environmental Law	
GEO 5315	Geographic Analysis of Global Issues	
GEO 5316	Applied Physical Geography	
GEO 5317	Seminar in Applied Human Geography	
GEO 5318	Environment Problems of the U.S.-Mexico Border	

GEO 5319	Seminar in Nature and Heritage Tourism
GEO 5322	Interpretive Environmental Geography
GEO 5323	Researching the City
GEO 5326	Parks and Protected Places
GEO 5329	Historical Geography of the Environment
GEO 5330	Geography of Hazards
GEO 5332	Environmental Geography of the Coastal Zone
GEO 5334	Applied Water Resources
GEO 5336	Transportation Systems
GEO 5339	The Geography of Land Management
GEO 5340	Active Learning in Geography
GEO 5341	Contemporary Issues in Geographic Education
GEO 5342	Theory and Research Methods in Geographic Education
GEO 5344	Curriculum, Standards, and Assessments in Geography
GEO 5349	Population Geography
GEO 5351	Regional Waste Management
GEO 5352	Air Quality Management
GEO 5353	Emergency Management
GEO 5360	Seminar in Planning Problems
GEO 5367	Exploring Spatial Databases
GEO 5370	Seminar in Applied Physical Geography
GEO 5380	Internship
GEO 5390	Independent Study
GEO 5395	Problems in Applied Geography
GEO 5408	Web Mapping
GEO 5415	Geographic Applications of Remote Sensing
GEO 5417	Advanced Cartographic Design
GEO 5418	Geographic Information Systems I
GEO 5419	Geographic Information Systems II
GEO 5424	GPS and GIS
GEO 5430	Field Methods
GEO 5680	Internship
May choose 6 hours of advisor-approved electives from outside the department	

**Total Hours****33**

## Comprehensive Examination Requirement

Students are required to take a comprehensive examination. The committee evaluates the comprehensive examination. The research advisor fills out the report of the comprehensive examination form and forwards this to the Graduate Staff Advisor, who then forwards the form to the Graduate College.

In evaluating the examination, the committee has two options: pass or fail. Students who fail the examination may also be required by their committees to complete additional course work or undertake research projects. These must be completed to the satisfaction of the committee before the examination is retaken. A student who has failed the comprehensive examination is eligible to retake the comprehensive examination once. Unless under extenuating circumstances and with the approval of the Graduate Program Coordinator, the second examination must take place no sooner than thirty days after the first comprehensive

examination. A student who fails the comprehensive examination twice is dismissed from the graduate program.

Master's level courses in Geography: GEO

## Courses Offered

### Geography (GEO)

#### **GEO 5190. Independent Study.**

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for a total of six semester hours of credit. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### **GEO 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **GEO 5290. Independent Study.**

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for total of six semester hours of credit. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### **GEO 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **GEO 5300. Applied Research Design and Techniques.**

Students will be introduced to appropriate research methods for applied geographers. Emphasis will be placed on the scientific method, productive library research, data collection and analysis, fieldwork, effective writing, and the nature of graphic representation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**GEO 5301. Multivariate Quantitative Methods.**

The use of multivariate descriptive and inferential statistics as applied to geographic data and problems, beginning with the general linear model and including topics such as multiple regression, principal components analysis, discriminant analysis, and clustering algorithms. Prerequisite: GEO 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5304. Qualitative Research Methods.**

This course introduces the qualitative research paradigm, including research design, methods of data collection, and inductive analysis. Standards of scientific research that call for a deeper evaluation of complex social relationships are emphasized. The focus and application will be oriented towards human geography and nature-society relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5308. Regional Field Studies.**

Study of geographic phenomena during field excursions to a particular site or region. Students will study the physical and/or cultural environments through off-campus field experience. Students will research, analyze, and report on major regional geographic features. Repeatable once for additional credit with a different site or region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5309. Geographical Analysis.**

A survey of typical spatial problems of interest to geographers, with emphasis on current research and application being undertaken by the faculty in the Department of Geography. Topics include environmental geography, geographic education, land use and regional development, and cartographic representation and geographic information theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5312. Managing Urbanization.**

Survey methods and procedures related to managing and preparing for urban growth. Selected topics for examination include transportation planning, housing, historic preservation, and environmental design. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5313. Environmental Studies.**

A critical analysis of the major causes of environmental change and human response to environmental problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5314. Geographic Elements of Environmental Law.**

A survey of environmental laws related to land, air, and water pollution. The nature of environmental problems will be studied as they relate to urbanization, industrialization, land development, noise, radiation and solid waste management, and the laws and guidelines that have been passed to alleviate such problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5315. Geographic Analysis of Global Issues.**

This course focuses on a critical analysis of contemporary global or regional issues from geographic perspectives. The course emphasizes research-based case studies associated with the topics and integrative approaches to the study of world regions and world cultures. The course may be repeated with permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5316. Applied Physical Geography.**

This course is a survey of methods and techniques used in the collection, analysis, and evaluation of information relating to problems within the physical environment. Emphasis will be on problems characteristic of particular geographic locations or specific environmental settings. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5317. Seminar in Applied Human Geography.**

A focus on the methods and techniques used in the collection, analysis, and evaluation of information relating to problems within the human geographical environment. Emphasis will be on problems pertaining to particular geographic locations or special environmental settings. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5318. Environment Problems of the U.S.-Mexico Border.**

This course serves as an in-depth introduction to the physical, social, and environmental landscapes of the region of the U.S.-Mexico Border. The course applies an interdisciplinary perspective to geographic understanding of the environmental and health-related issues experienced by residents of the borderlands. Special attention is given to management and planning solutions to the region's problems. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5319. Seminar in Nature and Heritage Tourism.**

This seminar focuses on the special geographic issues of nature and heritage tourism. Particular emphasis is placed on sites and activities, costs and benefits, commoditization and authenticity, resource protection, and substantive learning content of nature and heritage tourism activities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5322. Interpretive Environmental Geography.**

Students learn to use geographic theories and concepts to provide holistic and thematic interpretation of environmental information, as specified by interpretive principles. Students also learn advanced use of traditional and digital presentation techniques and research methods, which include audience assessment and program evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5323. Researching the City.**

This course covers data collection and analysis of urban life and the factors considered in locating industry, business, housing, and community facilities. Attention will be paid to the location of manufacturing activities, commercial enterprises, and a variety of social service facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5326. Parks and Protected Places.**

This course serves as an in-depth introduction to the philosophy, establishment, and operation of public parks, wildlife refuges, protected areas, non-governmental preserves and historic sites. Students will be introduced to the scientific and policy rationale for the creation of such areas as well as methods of classification and acquisition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5329. Historical Geography of the Environment.**

This course examines the evolution of environmental problems using the techniques and analytical perspectives of historical geography. Special emphasis is given to the emergence of environmental challenges related to urbanization and climate change. Students in this class will engage with scholarship related to historical geography of the environment and develop original research related to environmental change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5330. Geography of Hazards.**

This course focuses on understanding and advancing scholarship in hazards research – the threats to life, health, and welfare caused by natural, technological, and/or social processes, and disasters. Special emphasis is placed on understanding the complexities of the assessment and management of risks, hazards, and disasters at multiple geographic scales.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5332. Environmental Geography of the Coastal Zone.**

Investigation of the physical geographic factors associated with the coastal zone and the role of human activities in problems and opportunities characteristic of this environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5334. Applied Water Resources.**

Application of techniques employed in water management including flood hazards, water supply assessment, and water management strategies. Students will apply principles to specific watersheds and water problems including the analysis of various physical, land use, and legal parameters.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5335. Directed Research.**

This course is directed research on various topics in applied geography under the supervision of a graduate faculty member. Students gain experience about the entire process of conducting applied research in geography. Students receive course credit after a directed research report is approved by a student's advisor and members of the student's committee.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5336. Transportation Systems.**

This course introduces key concepts and methods of transportation geography and transportation planning. Topics include, among others, the spatial structure of transportation systems, transportation economics, and logistics. Various methods, techniques, and technologies for transportation analysis, particularly Geographic Information Systems (GIS), will be explored and applied as part of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5339. The Geography of Land Management.**

This course explores U.S. land management philosophies, techniques, and development approaches. Major topics include land ethics/philosophies, U.S. traditions in cadastral geography, urban sprawl and green development, land conservation techniques, the role of local/state/federal regulations in land management, and the human environmental impacts of land development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5340. Active Learning in Geography.**

The course focuses on instructional strategies that will allow teachers to promote active learning in geography. Emphasis will be on how active learning can help students reach geography content and skills standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5341. Contemporary Issues in Geographic Education.**

This course examines current approaches to teaching geography in American education. Specific attention will be given to new classroom materials, curriculum reform efforts, and research developments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5342. Theory and Research Methods in Geographic Education.**

The course focuses on designing, conducting, and presenting empirical research on teaching and learning geography. This course emphasizes the critical analysis of theories, research methods, and key research questions in geographic education and developing a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5344. Curriculum, Standards, and Assessments in Geography.**

This course is a survey of major curriculum and assessment theories and practices in geography education. Geography is examined as a school subject that is part of the social studies, as an element of interdisciplinary studies, and as a stand-alone subject. The concept of teacher leadership frame discussions of geography subject matter and standards implementation in schools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5345. Spatial Thinking in Education.**

This course introduces the concept of spatial thinking and discusses how spatial thinking may be taught in the context of K-16 education. Students examine various instructional strategies to facilitate spatial thinking in the classroom and design grade-level appropriate learning experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5346. Inquiry-Based Teaching in Human Geography.**

This course introduces models of geographic inquiry for instruction in human geography at the secondary and postsecondary levels. Case studies examining contemporary issues will be paired with lessons and activities that support integrated and inquiry-based approaches to teaching human geography. Students develop inquiry lessons aligned with geography/social studies standards, the Advanced Placement Human Geography course, and introductory undergraduate courses in human geography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5349. Population Geography.**

An in-depth study of the spatial distribution and movement of human populations. Course will emphasize current issues and analytical techniques. Topics will include the impact of population growth, spatial diffusion processes, migration trends and theories, explanation of regional demographic differences, and techniques such as population projections. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5350. Practicum in Teaching Geography.**

This course introduces key concepts in teaching geography and provides regular training and planned periodic evaluations of instructional responsibilities. Course topics include instructional and assessment strategies in geography and classroom management. This course is required for first-year instructional assistants in the Geography Department. Students do not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**GEO 5351. Regional Waste Management.**

The principles of effective solid waste planning and management will be examined as they relate to such activities as waste generation, storage and collection, transfer and transportation, processing and volume reduction, resource conservation and recovery, the disposal of wastes, and the handling of special wastes, particularly those of a toxic and hazardous nature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5352. Air Quality Management.**

A geographic assessment of air quality management in the United States. Spatial distribution of the types, sources, and effects of air pollutants. Meteorology and physics of air pollution dispersion. Legislative and regulatory approaches to pollution management. National, state, regional, and local policy development procedures. Geographic methods for air pollution management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5353. Emergency Management.**

This course provides an overview of the most important aspects of emergency management at all geographic scales, with emphasis on local, regional, and federal levels. Best practices and proper methodologies are emphasized as well as ways that students can develop the skills and capabilities for a career in this field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5360. Seminar in Planning Problems.**

A critical and in-depth examination of several problem areas currently facing the planner.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5365. Remote Sensing and the Environment.**

This course provides an examination and implementation of sophisticated approaches for processing satellite digital images with emphasis on environmental applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5367. Exploring Spatial Databases.**

This course covers principles of spatial ontologies and spatial semantics to facilitate appropriate database conceptualization, design and implementation. Course assignments and projects provide in-depth experience with database query languages. Course work is completed using a spatially-enabled Relational Database Management Systems (RDBMS). Prerequisite: GEO 5418 or equivalent with a grade of 'B' or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5368. Lidar and SfM Data Processing and Analysis.**

This course covers Light Detection and Ranging (lidar) systems and Structure from Motion (SfM) workflows for mapping and analysis of the environment. Students learn to successfully apply knowledge of lidar data and SfM workflows for a variety of Geographic Information Science applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5370. Seminar in Applied Physical Geography.**

Critical analysis of theories, models, and techniques of physical geographic research with the focus on application to real-world problems. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5371. Seminar in Geographic Education.**

This research seminar addresses contemporary topics related to geographic education. The emphasis is on applications of learning theories, teaching strategies, and innovative tools in geography classrooms. Course topics may vary depending on student and faculty interest. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5380. Internship.**

Application of techniques of applied geography in an actual on-the-job setting. Internships will be arranged and supervised by the Internship Director. May be repeated once for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5390. Independent Study.**

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for a total of six semester hours of credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5393B. Biogeography in Mountain Environments.**

This course examines how plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms and geological factors affect spatial distribution of animals and plants; all within the environmental limitation and conditions of mountains. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393D. Water Resource Planning.**

This seminar presents case-studies related to water quality protection and mitigation and to the planning of water supply at the state and regional level from a policy practitioner's perspective. The objective of the course is to identify the components of the planning process and its outcomes, including water-use conservation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393E. Geomorphology in the Anthropocene.**

This course will examine the ways in which humans interact with and affect geomorphological processes and landforms, and how humans directly act as geomorphological agents. The level at which human activities have transformed the surface of the Earth will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393G. Jobs, Careers, and Professional Development in Geography.**

This course introduces graduate students to research-based strategies for career planning and professional development in geography. Career opportunities for geographers in business, government, nonprofit, and academic organizations are examined. The course also analyzes professional identities, applications of geography in society, professional ethics, lifelong learning, work-life balance, and professional networking.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393H. Professional Development in Geographic Education.**

This course combines useful, dynamic geography content with a sensible professional development online delivery system. The content emphasis stresses the applicability of geography in our modern world thus offering jobs and careers to students. The message for teachers is that geography has become more oriented to student aspirations and civic and environmental responsibility.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393I. Geography and the Social Studies.**

This course examines on how geography fits within the social studies. It details how geography can be taught alongside history, economics, and civics for a well-rounded social studies curriculum. Attention is paid to technology, skills and perspectives. The course examines various social studies frameworks and standards. This course will prepare teachers to be versatile in their social studies knowledge and understanding. It will enhance a teacher's ability to teach geography across all of the social studies subjects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393K. Advanced Web Cartography and Data Visualization.**

This course provides advanced training in the design and development of interactive, web-based data visualization systems with emphasis on the modern cartographic process and the spatial applications of interactive data visualization principles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5395. Problems in Applied Geography.**

Designed to consider a selected topic relating to applied geography. Emphasis on the practical application of geographic tools, with individual or group participation in a specific project. Course topics may vary depending on student and faculty interests and may apply to any of the four graduate tracks: physical-environmental, urban and regional planning, geographic education or GIScience. Repeatable for up to six hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in GEO 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**GEO 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5408. Web Mapping.**

This course introduces students to modern interactive and dynamic mapping and GIS techniques that allow internet-based cartographic representations of temporal and non-temporal geospatial objects and phenomena. Prerequisite: GEO 3411 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5415. Geographic Applications of Remote Sensing.**

Students will focus on Geographic applications of the principles and practices of digital image processing, classification, and modeling using satellite images.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5417. Advanced Cartographic Design.**

This advanced course in cartography focuses on thematic map design. The objective is to produce a series of well-designed, professional grade maps (or an atlas) that students can use to build a cartographic portfolio. Theoretical concepts and principles will be introduced using practical examples and written assignments. Prerequisite: GEO 3411 with a grade of "D" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5418. Geographic Information Systems I.**

Course is concerned with the analysis and interpretation of maps stored in digital form. Students are introduced to concepts and practices involving computerized cartographic and geographic data input, storage and retrieval, data manipulation and analysis, graphic and tabular report generation, and cartographic modeling.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter



**GEO 5419. Geographic Information Systems II.**

This course aims to develop more advanced GIS concepts and application issues, further spatial data manipulation and analysis skills, and provide hands-on experience with GIS hardware and software programs. The emphasis will be on practical application of skills to real world issues. Prerequisite: GEO 5418 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5424. GPS and GIS.**

Students will learn to plan and conduct fieldwork using Global Positioning System (GPS) to differentially correct GPS data, and to build Geographic Information Systems (GIS) applications using GPS technology. The course is project-based and involves working with external clients(s).

Prerequisites: GEO 2426 with a grade of "D" or better or GEO 5418 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5430. Field Methods.**

Course will emphasize common field techniques necessary in the construction of accurate maps. Various kinds of data collection techniques will be presented that will facilitate geographic research.

Prerequisite: GEO 3301 with a grade of "D" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5447. Technology in Geographic Education.**

The course focuses on the applications and implications of technology in geographic education. The emphasis is placed on the role of technology as an instructional tool to promote inquiry-based learning.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**GEO 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5680. Internship.**

Application of techniques of applied geography in an actual on-the-job setting. Internships will be arranged and supervised by the Internship Director.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**GEO 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Applied Geography (M.A.Geo.) degree with a major in Geography is designed to prepare geographers to use their skills and background knowledge to solve real-world problems with geographic dimensions. Applied Geography includes such sub-fields as Environmental Management, Geographic Education, GIS, Cartography, Land use Planning, Location Analysis, Land Management, Transportation Systems Planning, Applied Physical Geography, Geographic Aspects of Environmental Law, and Spatial Modeling.

## Financial Assistance

Graduate assistantships are available to qualified candidates. Please contact the graduate program coordinator in the Department of Geography for more information about financial assistance and the degree programs. For scholarship information, please visit The Graduate College website at <http://www.gradcollege.txstate.edu/funding.html>.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- background course work
- GRE not required
- **Fall 2024: overall** minimum 3.2 GPA or 3.2 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- **Spring 2025 and beyond: overall** minimum 3.0 GPA or 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- resume/CV

- statement of purpose identifying the student’s preferred degree and concentration and possible areas of research
- three letters of recommendation

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- [official Duolingo Scores required with a 110 overall](#)
- [official TOEFL Essentials scores required with an 8.5 overall](#)

This program does **not** offer admission if the scores above are not met.

Degree Requirements

The Master of Applied Geography (M.A.Geo.) degree with a major in Geography concentration in Geographic Education requires 33 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses

Course Requirements

Code	Title	Hours
Required Courses		
GEO 5300 or GEO 5342	Applied Research Design and Techniques Theory and Research Methods in Geographic Education	3
GEO 5301 or GEO 5304 or DE 5339	Multivariate Quantitative Methods Qualitative Research Methods Assessment and Evaluation in Developmental Education	3
GEO 5309	Geographical Analysis	3
GEO 5335	Directed Research	3
Concentration		
Choose 15 hours from the following:		15
GEO 5340	Active Learning in Geography	
GEO 5341	Contemporary Issues in Geographic Education	
GEO 5342	Theory and Research Methods in Geographic Education	
GEO 5344	Curriculum, Standards, and Assessments in Geography	
GEO 5345	Spatial Thinking in Education	
GEO 5346	Inquiry-Based Teaching in Human Geography	
GEO 5447	Technology in Geographic Education	
Electives		
Choose 6 hours of advisor-approved electives		6
GEO 5308	Regional Field Studies	
GEO 5312	Managing Urbanization	
GEO 5313	Environmental Studies	
GEO 5314	Geographic Elements of Environmental Law	

GEO 5315	Geographic Analysis of Global Issues
GEO 5316	Applied Physical Geography
GEO 5317	Seminar in Applied Human Geography
GEO 5318	Environment Problems of the U.S.-Mexico Border
GEO 5323	Researching the City
GEO 5322	Interpretive Environmental Geography
GEO 5326	Parks and Protected Places
GEO 5329	Historical Geography of the Environment
GEO 5330	Geography of Hazards
GEO 5332	Environmental Geography of the Coastal Zone
GEO 5336	Transportation Systems
GEO 5349	Population Geography
GEO 5351	Regional Waste Management
GEO 5362	Geographic Visualization
GEO 5367	Exploring Spatial Databases
GEO 5370	Seminar in Applied Physical Geography
GEO 5390	Independent Study
GEO 5408	Web Mapping
GEO 5417	Advanced Cartographic Design
GEO 5418	Geographic Information Systems I
GEO 5419	Geographic Information Systems II
GEO 5424	GPS and GIS
GEO 5430	Field Methods
GEO 5352	Air Quality Management

Total Hours 33

Comprehensive Examination Requirement

Students are required to take a comprehensive examination. The committee evaluates the comprehensive examination. The research advisor fills out the report of the comprehensive examination form and forwards this to the Graduate Staff Advisor, who then forwards the form to the Graduate College.

In evaluating the examination, the committee has two options: pass or fail. Students who fail the examination may also be required by their committees to complete additional course work or undertake research projects. These must be completed to the satisfaction of the committee before the examination is retaken. A student who has failed the comprehensive examination is eligible to retake the comprehensive examination once. Unless under extenuating circumstances and with the approval of the Graduate Program Coordinator, the second examination must take place no sooner than thirty days after the first comprehensive examination. A student who fails the comprehensive examination twice is dismissed from the graduate program.

Master’s level courses in Geography: GEO

# Courses Offered

## Geography (GEO)

### GEO 5190. Independent Study.

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for a total of six semester hours of credit. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### GEO 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### GEO 5290. Independent Study.

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for total of six semester hours of credit. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### GEO 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### GEO 5300. Applied Research Design and Techniques.

Students will be introduced to appropriate research methods for applied geographers. Emphasis will be placed on the scientific method, productive library research, data collection and analysis, fieldwork, effective writing, and the nature of graphic representation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### GEO 5301. Multivariate Quantitative Methods.

The use of multivariate descriptive and inferential statistics as applied to geographic data and problems, beginning with the general linear model and including topics such as multiple regression, principal components analysis, discriminant analysis, and clustering algorithms. Prerequisite: GEO 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### GEO 5304. Qualitative Research Methods.

This course introduces the qualitative research paradigm, including research design, methods of data collection, and inductive analysis. Standards of scientific research that call for a deeper evaluation of complex social relationships are emphasized. The focus and application will be oriented towards human geography and nature-society relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### GEO 5308. Regional Field Studies.

Study of geographic phenomena during field excursions to a particular site or region. Students will study the physical and/or cultural environments through off-campus field experience. Students will research, analyze, and report on major regional geographic features. Repeatable once for additional credit with a different site or region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

### GEO 5309. Geographical Analysis.

A survey of typical spatial problems of interest to geographers, with emphasis on current research and application being undertaken by the faculty in the Department of Geography. Topics include environmental geography, geographic education, land use and regional development, and cartographic representation and geographic information theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### GEO 5312. Managing Urbanization.

Survey methods and procedures related to managing and preparing for urban growth. Selected topics for examination include transportation planning, housing, historic preservation, and environmental design. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### GEO 5313. Environmental Studies.

A critical analysis of the major causes of environmental change and human response to environmental problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### GEO 5314. Geographic Elements of Environmental Law.

A survey of environmental laws related to land, air, and water pollution. The nature of environmental problems will be studied as they relate to urbanization, industrialization, land development, noise, radiation and solid waste management, and the laws and guidelines that have been passed to alleviate such problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5315. Geographic Analysis of Global Issues.**

This course focuses on a critical analysis of contemporary global or regional issues from geographic perspectives. The course emphasizes research-based case studies associated with the topics and integrative approaches to the study of world regions and world cultures. The course may be repeated with permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5316. Applied Physical Geography.**

This course is a survey of methods and techniques used in the collection, analysis, and evaluation of information relating to problems within the physical environment. Emphasis will be on problems characteristic of particular geographic locations or specific environmental settings.

Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5317. Seminar in Applied Human Geography.**

A focus on the methods and techniques used in the collection, analysis, and evaluation of information relating to problems within the human geographical environment. Emphasis will be on problems pertaining to particular geographic locations or special environmental settings.

Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5318. Environment Problems of the U.S.-Mexico Border.**

This course serves as an in-depth introduction to the physical, social, and environmental landscapes of the region of the U.S.-Mexico Border.

The course applies an interdisciplinary perspective to geographic understanding of the environmental and health-related issues experienced by residents of the borderlands. Special attention is given to management and planning solutions to the region's problems. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5319. Seminar in Nature and Heritage Tourism.**

This seminar focuses on the special geographic issues of nature and heritage tourism. Particular emphasis is placed on sites and activities, costs and benefits, commoditization and authenticity, resource protection, and substantive learning content of nature and heritage tourism activities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5322. Interpretive Environmental Geography.**

Students learn to use geographic theories and concepts to provide holistic and thematic interpretation of environmental information, as specified by interpretive principles. Students also learn advanced use of traditional and digital presentation techniques and research methods, which include audience assessment and program evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5323. Researching the City.**

This course covers data collection and analysis of urban life and the factors considered in locating industry, business, housing, and community facilities. Attention will be paid to the location of manufacturing activities, commercial enterprises, and a variety of social service facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5326. Parks and Protected Places.**

This course serves as an in-depth introduction to the philosophy, establishment, and operation of public parks, wildlife refuges, protected areas, non-governmental preserves and historic sites. Students will be introduced to the scientific and policy rationale for the creation of such areas as well as methods of classification and acquisition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5329. Historical Geography of the Environment.**

This course examines the evolution of environmental problems using the techniques and analytical perspectives of historical geography. Special emphasis is given to the emergence of environmental challenges related to urbanization and climate change. Students in this class will engage with scholarship related to historical geography of the environment and develop original research related to environmental change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5330. Geography of Hazards.**

This course focuses on understanding and advancing scholarship in hazards research – the threats to life, health, and welfare caused by natural, technological, and/or social processes, and disasters. Special emphasis is placed on understanding the complexities of the assessment and management of risks, hazards, and disasters at multiple geographic scales.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5332. Environmental Geography of the Coastal Zone.**

Investigation of the physical geographic factors associated with the coastal zone and the role of human activities in problems and opportunities characteristic of this environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5334. Applied Water Resources.**

Application of techniques employed in water management including flood hazards, water supply assessment, and water management strategies. Students will apply principles to specific watersheds and water problems including the analysis of various physical, land use, and legal parameters.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5335. Directed Research.**

This course is directed research on various topics in applied geography under the supervision of a graduate faculty member. Students gain experience about the entire process of conducting applied research in geography. Students receive course credit after a directed research report is approved by a student's advisor and members of the student's committee.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5336. Transportation Systems.**

This course introduces key concepts and methods of transportation geography and transportation planning. Topics include, among others, the spatial structure of transportation systems, transportation economics, and logistics. Various methods, techniques, and technologies for transportation analysis, particularly Geographic Information Systems (GIS), will be explored and applied as part of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5339. The Geography of Land Management.**

This course explores U.S. land management philosophies, techniques, and development approaches. Major topics include land ethics/philosophies, U.S. traditions in cadastral geography, urban sprawl and green development, land conservation techniques, the role of local/state/federal regulations in land management, and the human environmental impacts of land development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5340. Active Learning in Geography.**

The course focuses on instructional strategies that will allow teachers to promote active learning in geography. Emphasis will be on how active learning can help students reach geography content and skills standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5341. Contemporary Issues in Geographic Education.**

This course examines current approaches to teaching geography in American education. Specific attention will be given to new classroom materials, curriculum reform efforts, and research developments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5342. Theory and Research Methods in Geographic Education.**

The course focuses on designing, conducting, and presenting empirical research on teaching and learning geography. This course emphasizes the critical analysis of theories, research methods, and key research questions in geographic education and developing a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5344. Curriculum, Standards, and Assessments in Geography.**

This course is a survey of major curriculum and assessment theories and practices in geography education. Geography is examined as a school subject that is part of the social studies, as an element of interdisciplinary studies, and as a stand-alone subject. The concept of teacher leadership frame discussions of geography subject matter and standards implementation in schools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5345. Spatial Thinking in Education.**

This course introduces the concept of spatial thinking and discusses how spatial thinking may be taught in the context of K-16 education. Students examine various instructional strategies to facilitate spatial thinking in the classroom and design grade-level appropriate learning experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5346. Inquiry-Based Teaching in Human Geography.**

This course introduces models of geographic inquiry for instruction in human geography at the secondary and postsecondary levels. Case studies examining contemporary issues will be paired with lessons and activities that support integrated and inquiry-based approaches to teaching human geography. Students develop inquiry lessons aligned with geography/social studies standards, the Advanced Placement Human Geography course, and introductory undergraduate courses in human geography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5349. Population Geography.**

An in-depth study of the spatial distribution and movement of human populations. Course will emphasize current issues and analytical techniques. Topics will include the impact of population growth, spatial diffusion processes, migration trends and theories, explanation of regional demographic differences, and techniques such as population projections. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**GEO 5350. Practicum in Teaching Geography.**

This course introduces key concepts in teaching geography and provides regular training and planned periodic evaluations of instructional responsibilities. Course topics include instructional and assessment strategies in geography and classroom management. This course is required for first-year instructional assistants in the Geography Department. Students do not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**GEO 5351. Regional Waste Management.**

The principles of effective solid waste planning and management will be examined as they relate to such activities as waste generation, storage and collection, transfer and transportation, processing and volume reduction, resource conservation and recovery, the disposal of wastes, and the handling of special wastes, particularly those of a toxic and hazardous nature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5352. Air Quality Management.**

A geographic assessment of air quality management in the United States. Spatial distribution of the types, sources, and effects of air pollutants. Meteorology and physics of air pollution dispersion. Legislative and regulatory approaches to pollution management. National, state, regional, and local policy development procedures. Geographic methods for air pollution management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5353. Emergency Management.**

This course provides an overview of the most important aspects of emergency management at all geographic scales, with emphasis on local, regional, and federal levels. Best practices and proper methodologies are emphasized as well as ways that students can develop the skills and capabilities for a career in this field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5360. Seminar in Planning Problems.**

A critical and in-depth examination of several problem areas currently facing the planner.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5365. Remote Sensing and the Environment.**

This course provides an examination and implementation of sophisticated approaches for processing satellite digital images with emphasis on environmental applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5367. Exploring Spatial Databases.**

This course covers principles of spatial ontologies and spatial semantics to facilitate appropriate database conceptualization, design and implementation. Course assignments and projects provide in-depth experience with database query languages. Course work is completed using a spatially-enabled Relational Database Management Systems (RDBMS). Prerequisite: GEO 5418 or equivalent with a grade of 'B' or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5368. Lidar and SfM Data Processing and Analysis.**

This course covers Light Detection and Ranging (lidar) systems and Structure from Motion (SfM) workflows for mapping and analysis of the environment. Students learn to successfully apply knowledge of lidar data and SfM workflows for a variety of Geographic Information Science applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5370. Seminar in Applied Physical Geography.**

Critical analysis of theories, models, and techniques of physical geographic research with the focus on application to real-world problems. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5371. Seminar in Geographic Education.**

This research seminar addresses contemporary topics related to geographic education. The emphasis is on applications of learning theories, teaching strategies, and innovative tools in geography classrooms. Course topics may vary depending on student and faculty interest. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5380. Internship.**

Application of techniques of applied geography in an actual on-the-job setting. Internships will be arranged and supervised by the Internship Director. May be repeated once for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5390. Independent Study.**

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for a total of six semester hours of credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5393B. Biogeography in Mountain Environments.**

This course examines how plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms and geological factors affect spatial distribution of animals and plants; all within the environmental limitation and conditions of mountains. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393D. Water Resource Planning.**

This seminar presents case-studies related to water quality protection and mitigation and to the planning of water supply at the state and regional level from a policy practitioner's perspective. The objective of the course is to identify the components of the planning process and its outcomes, including water-use conservation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393E. Geomorphology in the Anthropocene.**

This course will examine the ways in which humans interact with and affect geomorphological processes and landforms, and how humans directly act as geomorphological agents. The level at which human activities have transformed the surface of the Earth will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393G. Jobs, Careers, and Professional Development in Geography.**

This course introduces graduate students to research-based strategies for career planning and professional development in geography. Career opportunities for geographers in business, government, nonprofit, and academic organizations are examined. The course also analyzes professional identities, applications of geography in society, professional ethics, lifelong learning, work-life balance, and professional networking.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393H. Professional Development in Geographic Education.**

This course combines useful, dynamic geography content with a sensible professional development online delivery system. The content emphasis stresses the applicability of geography in our modern world thus offering jobs and careers to students. The message for teachers is that geography has become more oriented to student aspirations and civic and environmental responsibility.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393I. Geography and the Social Studies.**

This course examines on how geography fits within the social studies. It details how geography can be taught alongside history, economics, and civics for a well-rounded social studies curriculum. Attention is paid to technology, skills and perspectives. The course examines various social studies frameworks and standards. This course will prepare teachers to be versatile in their social studies knowledge and understanding. It will enhance a teacher's ability to teach geography across all of the social studies subjects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393K. Advanced Web Cartography and Data Visualization.**

This course provides advanced training in the design and development of interactive, web-based data visualization systems with emphasis on the modern cartographic process and the spatial applications of interactive data visualization principles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5395. Problems in Applied Geography.**

Designed to consider a selected topic relating to applied geography. Emphasis on the practical application of geographic tools, with individual or group participation in a specific project. Course topics may vary depending on student and faculty interests and may apply to any of the four graduate tracks: physical-environmental, urban and regional planning, geographic education or GIScience. Repeatable for up to six hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in GEO 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**GEO 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5408. Web Mapping.**

This course introduces students to modern interactive and dynamic mapping and GIS techniques that allow internet-based cartographic representations of temporal and non-temporal geospatial objects and phenomena. Prerequisite: GEO 3411 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5415. Geographic Applications of Remote Sensing.**

Students will focus on Geographic applications of the principles and practices of digital image processing, classification, and modeling using satellite images.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5417. Advanced Cartographic Design.**

This advanced course in cartography focuses on thematic map design. The objective is to produce a series of well-designed, professional grade maps (or an atlas) that students can use to build a cartographic portfolio. Theoretical concepts and principles will be introduced using practical examples and written assignments. Prerequisite: GEO 3411 with a grade of "D" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5418. Geographic Information Systems I.**

Course is concerned with the analysis and interpretation of maps stored in digital form. Students are introduced to concepts and practices involving computerized cartographic and geographic data input, storage and retrieval, data manipulation and analysis, graphic and tabular report generation, and cartographic modeling.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5419. Geographic Information Systems II.**

This course aims to develop more advanced GIS concepts and application issues, further spatial data manipulation and analysis skills, and provide hands-on experience with GIS hardware and software programs. The emphasis will be on practical application of skills to real world issues. Prerequisite: GEO 5418 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5424. GPS and GIS.**

Students will learn to plan and conduct fieldwork using Global Positioning System (GPS) to differentially correct GPS data, and to build Geographic Information Systems (GIS) applications using GPS technology. The course is project-based and involves working with external clients(s). Prerequisites: GEO 2426 with a grade of "D" or better or GEO 5418 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5430. Field Methods.**

Course will emphasize common field techniques necessary in the construction of accurate maps. Various kinds of data collection techniques will be presented that will facilitate geographic research. Prerequisite: GEO 3301 with a grade of "D" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5447. Technology in Geographic Education.**

The course focuses on the applications and implications of technology in geographic education. The emphasis is placed on the role of technology as an instructional tool to promote inquiry-based learning.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**GEO 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5680. Internship.**

Application of techniques of applied geography in an actual on-the-job setting. Internships will be arranged and supervised by the Internship Director.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**GEO 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Applied Geography (M.A.Geo.) degree program is designed to prepare geographers to use their skills and background knowledge to solve real-world problems with geographic dimensions. Applied Geography includes such sub-fields as Environmental Management,

Geographic Education, GIS, Cartography, Land use Planning, Location Analysis, Land Management, Transportation Systems Planning, Applied Physical Geography, Geographic Aspects of Environmental Law, and Spatial Modeling.

## Financial Assistance

Graduate assistantships are available to qualified candidates. Please contact the graduate program coordinator in the Department of Geography for more information about financial assistance and the degree programs. For scholarship information, please visit The Graduate College website at <http://www.gradcollege.txstate.edu/funding.html>.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- **Fall 2024: overall** minimum 3.2 GPA or 3.2 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- **Spring 2025 and beyond: overall minimum 3.0 GPA or 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)**
- background course work
- GRE not required
- resume/CV
- statement of purpose identifying the student's preferred degree and concentration and possible areas of research
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52

- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Applied Geography (M.A.Geo.) degree with a major in Natural Resources and Environmental Studies requires 33 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
GEO 5300	Applied Research Design and Techniques	3
GEO 5301	Multivariate Quantitative Methods	3
or GEO 5304	Qualitative Research Methods	
GEO 5309	Geographical Analysis	3
GEO 5335	Directed Research	3
<b>Concentration</b>		
GEO 5313	Environmental Studies	3
GEO 5314	Geographic Elements of Environmental Law	3
Choose 9 hours from the following:		9
GEO 5308	Regional Field Studies	
GEO 5312	Managing Urbanization	
GEO 5315	Geographic Analysis of Global Issues	
GEO 5316	Applied Physical Geography	
GEO 5317	Seminar in Applied Human Geography	
GEO 5318	Environment Problems of the U.S.-Mexico Border	
GEO 5322	Interpretive Environmental Geography	
GEO 5326	Parks and Protected Places	
GEO 5329	Historical Geography of the Environment	
GEO 5330	Geography of Hazards	
GEO 5332	Environmental Geography of the Coastal Zone	
GEO 5334	Applied Water Resources	
GEO 5336	Transportation Systems	
GEO 5339	The Geography of Land Management	
GEO 5349	Population Geography	
GEO 5351	Regional Waste Management	
GEO 5352	Air Quality Management	
GEO 5353	Emergency Management	
GEO 5370	Seminar in Applied Physical Geography	
GEO 5390	Independent Study	
GEO 5415	Geographic Applications of Remote Sensing	
GEO 5418	Geographic Information Systems I	
GEO 5419	Geographic Information Systems II	
GEO 5424	GPS and GIS	
GEO 5430	Field Methods	
<b>Prescribed Electives</b>		
Choose 6 hours from the following:		6
GEO 5308	Regional Field Studies	

GEO 5312	Managing Urbanization
GEO 5313	Environmental Studies
GEO 5314	Geographic Elements of Environmental Law
GEO 5315	Geographic Analysis of Global Issues
GEO 5316	Applied Physical Geography
GEO 5317	Seminar in Applied Human Geography
GEO 5318	Environment Problems of the U.S.-Mexico Border
GEO 5319	Seminar in Nature and Heritage Tourism
GEO 5322	Interpretive Environmental Geography
GEO 5323	Researching the City
GEO 5326	Parks and Protected Places
GEO 5329	Historical Geography of the Environment
GEO 5330	Geography of Hazards
GEO 5332	Environmental Geography of the Coastal Zone
GEO 5334	Applied Water Resources
GEO 5336	Transportation Systems
GEO 5339	The Geography of Land Management
GEO 5340	Active Learning in Geography
GEO 5341	Contemporary Issues in Geographic Education
GEO 5342	Theory and Research Methods in Geographic Education
GEO 5344	Curriculum, Standards, and Assessments in Geography
GEO 5349	Population Geography
GEO 5351	Regional Waste Management
GEO 5352	Air Quality Management
GEO 5353	Emergency Management
GEO 5360	Seminar in Planning Problems
GEO 5367	Exploring Spatial Databases
GEO 5370	Seminar in Applied Physical Geography
GEO 5380	Internship
GEO 5390	Independent Study
GEO 5395	Problems in Applied Geography
GEO 5408	Web Mapping
GEO 5415	Geographic Applications of Remote Sensing
GEO 5417	Advanced Cartographic Design
GEO 5418	Geographic Information Systems I
GEO 5419	Geographic Information Systems II
GEO 5424	GPS and GIS
GEO 5430	Field Methods
GEO 5680	Internship

May choose 3 hours of advisor-approved electives from outside the department

**Total Hours**

**33**

## Comprehensive Examination Requirement

Students are required to take a comprehensive examination. The committee evaluates the comprehensive examination. The research advisor fills out the report of the comprehensive examination form and forwards this to the Graduate Staff Advisor, who then forwards the form to the Graduate College.

In evaluating the examination, the committee has two options: pass or fail. Students who fail the examination may also be required by

their committees to complete additional course work or undertake research projects. These must be completed to the satisfaction of the committee before the examination is retaken. A student who has failed the comprehensive examination is eligible to retake the comprehensive examination once. Unless under extenuating circumstances and with the approval of the Graduate Program Coordinator, the second examination must take place no sooner than thirty days after the first comprehensive examination. A student who fails the comprehensive examination twice is dismissed from the graduate program.

Master's level courses in Geography: GEO

## Courses Offered

### Geography (GEO)

#### GEO 5190. Independent Study.

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for a total of six semester hours of credit. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### GEO 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### GEO 5290. Independent Study.

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for total of six semester hours of credit. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### GEO 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### GEO 5300. Applied Research Design and Techniques.

Students will be introduced to appropriate research methods for applied geographers. Emphasis will be placed on the scientific method, productive library research, data collection and analysis, fieldwork, effective writing, and the nature of graphic representation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**GEO 5301. Multivariate Quantitative Methods.**

The use of multivariate descriptive and inferential statistics as applied to geographic data and problems, beginning with the general linear model and including topics such as multiple regression, principal components analysis, discriminant analysis, and clustering algorithms. Prerequisite: GEO 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5304. Qualitative Research Methods.**

This course introduces the qualitative research paradigm, including research design, methods of data collection, and inductive analysis. Standards of scientific research that call for a deeper evaluation of complex social relationships are emphasized. The focus and application will be oriented towards human geography and nature-society relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5308. Regional Field Studies.**

Study of geographic phenomena during field excursions to a particular site or region. Students will study the physical and/or cultural environments through off-campus field experience. Students will research, analyze, and report on major regional geographic features. Repeatable once for additional credit with a different site or region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5309. Geographical Analysis.**

A survey of typical spatial problems of interest to geographers, with emphasis on current research and application being undertaken by the faculty in the Department of Geography. Topics include environmental geography, geographic education, land use and regional development, and cartographic representation and geographic information theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5312. Managing Urbanization.**

Survey methods and procedures related to managing and preparing for urban growth. Selected topics for examination include transportation planning, housing, historic preservation, and environmental design. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5313. Environmental Studies.**

A critical analysis of the major causes of environmental change and human response to environmental problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5314. Geographic Elements of Environmental Law.**

A survey of environmental laws related to land, air, and water pollution. The nature of environmental problems will be studied as they relate to urbanization, industrialization, land development, noise, radiation and solid waste management, and the laws and guidelines that have been passed to alleviate such problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5315. Geographic Analysis of Global Issues.**

This course focuses on a critical analysis of contemporary global or regional issues from geographic perspectives. The course emphasizes research-based case studies associated with the topics and integrative approaches to the study of world regions and world cultures. The course may be repeated with permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5316. Applied Physical Geography.**

This course is a survey of methods and techniques used in the collection, analysis, and evaluation of information relating to problems within the physical environment. Emphasis will be on problems characteristic of particular geographic locations or specific environmental settings. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5317. Seminar in Applied Human Geography.**

A focus on the methods and techniques used in the collection, analysis, and evaluation of information relating to problems within the human geographical environment. Emphasis will be on problems pertaining to particular geographic locations or special environmental settings. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5318. Environment Problems of the U.S.-Mexico Border.**

This course serves as an in-depth introduction to the physical, social, and environmental landscapes of the region of the U.S.-Mexico Border. The course applies an interdisciplinary perspective to geographic understanding of the environmental and health-related issues experienced by residents of the borderlands. Special attention is given to management and planning solutions to the region's problems. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5319. Seminar in Nature and Heritage Tourism.**

This seminar focuses on the special geographic issues of nature and heritage tourism. Particular emphasis is placed on sites and activities, costs and benefits, commoditization and authenticity, resource protection, and substantive learning content of nature and heritage tourism activities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5322. Interpretive Environmental Geography.**

Students learn to use geographic theories and concepts to provide holistic and thematic interpretation of environmental information, as specified by interpretive principles. Students also learn advanced use of traditional and digital presentation techniques and research methods, which include audience assessment and program evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5323. Researching the City.**

This course covers data collection and analysis of urban life and the factors considered in locating industry, business, housing, and community facilities. Attention will be paid to the location of manufacturing activities, commercial enterprises, and a variety of social service facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5326. Parks and Protected Places.**

This course serves as an in-depth introduction to the philosophy, establishment, and operation of public parks, wildlife refuges, protected areas, non-governmental preserves and historic sites. Students will be introduced to the scientific and policy rationale for the creation of such areas as well as methods of classification and acquisition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5329. Historical Geography of the Environment.**

This course examines the evolution of environmental problems using the techniques and analytical perspectives of historical geography. Special emphasis is given to the emergence of environmental challenges related to urbanization and climate change. Students in this class will engage with scholarship related to historical geography of the environment and develop original research related to environmental change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5330. Geography of Hazards.**

This course focuses on understanding and advancing scholarship in hazards research – the threats to life, health, and welfare caused by natural, technological, and/or social processes, and disasters. Special emphasis is placed on understanding the complexities of the assessment and management of risks, hazards, and disasters at multiple geographic scales.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5332. Environmental Geography of the Coastal Zone.**

Investigation of the physical geographic factors associated with the coastal zone and the role of human activities in problems and opportunities characteristic of this environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5334. Applied Water Resources.**

Application of techniques employed in water management including flood hazards, water supply assessment, and water management strategies. Students will apply principles to specific watersheds and water problems including the analysis of various physical, land use, and legal parameters.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5335. Directed Research.**

This course is directed research on various topics in applied geography under the supervision of a graduate faculty member. Students gain experience about the entire process of conducting applied research in geography. Students receive course credit after a directed research report is approved by a student's advisor and members of the student's committee.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5336. Transportation Systems.**

This course introduces key concepts and methods of transportation geography and transportation planning. Topics include, among others, the spatial structure of transportation systems, transportation economics, and logistics. Various methods, techniques, and technologies for transportation analysis, particularly Geographic Information Systems (GIS), will be explored and applied as part of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5339. The Geography of Land Management.**

This course explores U.S. land management philosophies, techniques, and development approaches. Major topics include land ethics/philosophies, U.S. traditions in cadastral geography, urban sprawl and green development, land conservation techniques, the role of local/state/federal regulations in land management, and the human environmental impacts of land development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5340. Active Learning in Geography.**

The course focuses on instructional strategies that will allow teachers to promote active learning in geography. Emphasis will be on how active learning can help students reach geography content and skills standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5341. Contemporary Issues in Geographic Education.**

This course examines current approaches to teaching geography in American education. Specific attention will be given to new classroom materials, curriculum reform efforts, and research developments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5342. Theory and Research Methods in Geographic Education.**

The course focuses on designing, conducting, and presenting empirical research on teaching and learning geography. This course emphasizes the critical analysis of theories, research methods, and key research questions in geographic education and developing a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5344. Curriculum, Standards, and Assessments in Geography.**

This course is a survey of major curriculum and assessment theories and practices in geography education. Geography is examined as a school subject that is part of the social studies, as an element of interdisciplinary studies, and as a stand-alone subject. The concept of teacher leadership frame discussions of geography subject matter and standards implementation in schools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5345. Spatial Thinking in Education.**

This course introduces the concept of spatial thinking and discusses how spatial thinking may be taught in the context of K-16 education. Students examine various instructional strategies to facilitate spatial thinking in the classroom and design grade-level appropriate learning experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5346. Inquiry-Based Teaching in Human Geography.**

This course introduces models of geographic inquiry for instruction in human geography at the secondary and postsecondary levels. Case studies examining contemporary issues will be paired with lessons and activities that support integrated and inquiry-based approaches to teaching human geography. Students develop inquiry lessons aligned with geography/social studies standards, the Advanced Placement Human Geography course, and introductory undergraduate courses in human geography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5349. Population Geography.**

An in-depth study of the spatial distribution and movement of human populations. Course will emphasize current issues and analytical techniques. Topics will include the impact of population growth, spatial diffusion processes, migration trends and theories, explanation of regional demographic differences, and techniques such as population projections. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5350. Practicum in Teaching Geography.**

This course introduces key concepts in teaching geography and provides regular training and planned periodic evaluations of instructional responsibilities. Course topics include instructional and assessment strategies in geography and classroom management. This course is required for first-year instructional assistants in the Geography Department. Students do not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**GEO 5351. Regional Waste Management.**

The principles of effective solid waste planning and management will be examined as they relate to such activities as waste generation, storage and collection, transfer and transportation, processing and volume reduction, resource conservation and recovery, the disposal of wastes, and the handling of special wastes, particularly those of a toxic and hazardous nature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5352. Air Quality Management.**

A geographic assessment of air quality management in the United States. Spatial distribution of the types, sources, and effects of air pollutants. Meteorology and physics of air pollution dispersion. Legislative and regulatory approaches to pollution management. National, state, regional, and local policy development procedures. Geographic methods for air pollution management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5353. Emergency Management.**

This course provides an overview of the most important aspects of emergency management at all geographic scales, with emphasis on local, regional, and federal levels. Best practices and proper methodologies are emphasized as well as ways that students can develop the skills and capabilities for a career in this field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5360. Seminar in Planning Problems.**

A critical and in-depth examination of several problem areas currently facing the planner.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5365. Remote Sensing and the Environment.**

This course provides an examination and implementation of sophisticated approaches for processing satellite digital images with emphasis on environmental applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5367. Exploring Spatial Databases.**

This course covers principles of spatial ontologies and spatial semantics to facilitate appropriate database conceptualization, design and implementation. Course assignments and projects provide in-depth experience with database query languages. Course work is completed using a spatially-enabled Relational Database Management Systems (RDBMS). Prerequisite: GEO 5418 or equivalent with a grade of 'B' or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5368. Lidar and SfM Data Processing and Analysis.**

This course covers Light Detection and Ranging (lidar) systems and Structure from Motion (SfM) workflows for mapping and analysis of the environment. Students learn to successfully apply knowledge of lidar data and SfM workflows for a variety of Geographic Information Science applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5370. Seminar in Applied Physical Geography.**

Critical analysis of theories, models, and techniques of physical geographic research with the focus on application to real-world problems. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5371. Seminar in Geographic Education.**

This research seminar addresses contemporary topics related to geographic education. The emphasis is on applications of learning theories, teaching strategies, and innovative tools in geography classrooms. Course topics may vary depending on student and faculty interest. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5380. Internship.**

Application of techniques of applied geography in an actual on-the-job setting. Internships will be arranged and supervised by the Internship Director. May be repeated once for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5390. Independent Study.**

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for a total of six semester hours of credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5393B. Biogeography in Mountain Environments.**

This course examines how plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms and geological factors affect spatial distribution of animals and plants; all within the environmental limitation and conditions of mountains. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393D. Water Resource Planning.**

This seminar presents case-studies related to water quality protection and mitigation and to the planning of water supply at the state and regional level from a policy practitioner's perspective. The objective of the course is to identify the components of the planning process and its outcomes, including water-use conservation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393E. Geomorphology in the Anthropocene.**

This course will examine the ways in which humans interact with and affect geomorphological processes and landforms, and how humans directly act as geomorphological agents. The level at which human activities have transformed the surface of the Earth will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393G. Jobs, Careers, and Professional Development in Geography.**

This course introduces graduate students to research-based strategies for career planning and professional development in geography. Career opportunities for geographers in business, government, nonprofit, and academic organizations are examined. The course also analyzes professional identities, applications of geography in society, professional ethics, lifelong learning, work-life balance, and professional networking.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393H. Professional Development in Geographic Education.**

This course combines useful, dynamic geography content with a sensible professional development online delivery system. The content emphasis stresses the applicability of geography in our modern world thus offering jobs and careers to students. The message for teachers is that geography has become more oriented to student aspirations and civic and environmental responsibility.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393I. Geography and the Social Studies.**

This course examines on how geography fits within the social studies. It details how geography can be taught alongside history, economics, and civics for a well-rounded social studies curriculum. Attention is paid to technology, skills and perspectives. The course examines various social studies frameworks and standards. This course will prepare teachers to be versatile in their social studies knowledge and understanding. It will enhance a teacher's ability to teach geography across all of the social studies subjects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393K. Advanced Web Cartography and Data Visualization.**

This course provides advanced training in the design and development of interactive, web-based data visualization systems with emphasis on the modern cartographic process and the spatial applications of interactive data visualization principles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5395. Problems in Applied Geography.**

Designed to consider a selected topic relating to applied geography. Emphasis on the practical application of geographic tools, with individual or group participation in a specific project. Course topics may vary depending on student and faculty interests and may apply to any of the four graduate tracks: physical-environmental, urban and regional planning, geographic education or GIScience. Repeatable for up to six hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in GEO 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**GEO 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5408. Web Mapping.**

This course introduces students to modern interactive and dynamic mapping and GIS techniques that allow internet-based cartographic representations of temporal and non-temporal geospatial objects and phenomena. Prerequisite: GEO 3411 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5415. Geographic Applications of Remote Sensing.**

Students will focus on Geographic applications of the principles and practices of digital image processing, classification, and modeling using satellite images.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5417. Advanced Cartographic Design.**

This advanced course in cartography focuses on thematic map design. The objective is to produce a series of well-designed, professional grade maps (or an atlas) that students can use to build a cartographic portfolio. Theoretical concepts and principles will be introduced using practical examples and written assignments. Prerequisite: GEO 3411 with a grade of "D" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5418. Geographic Information Systems I.**

Course is concerned with the analysis and interpretation of maps stored in digital form. Students are introduced to concepts and practices involving computerized cartographic and geographic data input, storage and retrieval, data manipulation and analysis, graphic and tabular report generation, and cartographic modeling.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter



**GEO 5419. Geographic Information Systems II.**

This course aims to develop more advanced GIS concepts and application issues, further spatial data manipulation and analysis skills, and provide hands-on experience with GIS hardware and software programs. The emphasis will be on practical application of skills to real world issues. Prerequisite: GEO 5418 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5424. GPS and GIS.**

Students will learn to plan and conduct fieldwork using Global Positioning System (GPS) to differentially correct GPS data, and to build Geographic Information Systems (GIS) applications using GPS technology. The course is project-based and involves working with external clients(s).

Prerequisites: GEO 2426 with a grade of "D" or better or GEO 5418 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5430. Field Methods.**

Course will emphasize common field techniques necessary in the construction of accurate maps. Various kinds of data collection techniques will be presented that will facilitate geographic research.

Prerequisite: GEO 3301 with a grade of "D" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5447. Technology in Geographic Education.**

The course focuses on the applications and implications of technology in geographic education. The emphasis is placed on the role of technology as an instructional tool to promote inquiry-based learning.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**GEO 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5680. Internship.**

Application of techniques of applied geography in an actual on-the-job setting. Internships will be arranged and supervised by the Internship Director.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**GEO 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Geography is designed to give highly qualified students exposure to geographic theory and research at the pre-doctoral level. Programmatic emphases include Environmental Geography, Geographic Education, Geographic Information Science, and other specialty areas in geography represented by the current active research interests of the faculty.

## Financial Assistance

Graduate assistantships are available to qualified candidates. Please contact the graduate program coordinator in the Department of Geography for more information about financial assistance and the degree programs. For scholarship information, please visit The Graduate College website at <http://www.gradcollege.txstate.edu/funding.html>.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- background course work
- **Fall 2024: overall** minimum 3.4 GPA or 3.4 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- **Spring 2025 and beyond: overall** minimum 3.25 GPA or 3.25 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV

- statement of purpose identifying the student's preferred degree and concentration and possible areas of research
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Geography requires 30 semester credit hours, including a thesis. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
GEO 5301	Multivariate Quantitative Methods	3
or GEO 5304	Qualitative Research Methods	
GEO 5309	Geographical Analysis	3
GEO 7300	Advanced Geographic Research Design	3
<b>Prescribed Electives</b>		
Choose 9 hours of electives from following:		9
GEO 5308	Regional Field Studies	
GEO 5312	Managing Urbanization	
GEO 5313	Environmental Studies	
GEO 5315	Geographic Analysis of Global Issues	
GEO 5314	Geographic Elements of Environmental Law	
GEO 5316	Applied Physical Geography	
GEO 5317	Seminar in Applied Human Geography	
GEO 5318	Environment Problems of the U.S.-Mexico Border	
GEO 5319	Seminar in Nature and Heritage Tourism	
GEO 5322	Interpretive Environmental Geography	
GEO 5323	Researching the City	
GEO 5326	Parks and Protected Places	
GEO 5329	Historical Geography of the Environment	
GEO 5330	Geography of Hazards	
GEO 5332	Environmental Geography of the Coastal Zone	
GEO 5334	Applied Water Resources	
GEO 5336	Transportation Systems	
GEO 5339	The Geography of Land Management	
GEO 5340	Active Learning in Geography	

GEO 5341	Contemporary Issues in Geographic Education	
GEO 5342	Theory and Research Methods in Geographic Education	
GEO 5344	Curriculum, Standards, and Assessments in Geography	
GEO 5349	Population Geography	
GEO 5351	Regional Waste Management	
GEO 5352	Air Quality Management	
GEO 5353	Emergency Management	
GEO 5360	Seminar in Planning Problems	
GEO 5362	Geographic Visualization	
GEO 5365	Remote Sensing and the Environment	
GEO 5367	Exploring Spatial Databases	
GEO 5368	Lidar and SfM Data Processing and Analysis	
GEO 5370	Seminar in Applied Physical Geography	
GEO 5380	Internship	
GEO 5390	Independent Study	
GEO 5395	Problems in Applied Geography	
GEO 5408	Web Mapping	
GEO 5415	Geographic Applications of Remote Sensing	
GEO 5417	Advanced Cartographic Design	
GEO 5418	Geographic Information Systems I	
GEO 5419	Geographic Information Systems II	
GEO 5424	GPS and GIS	
GEO 5430	Field Methods	
GEO 5680	Internship	
Choose 6 hours from the following:		6
GEO 7301	Advanced Quantitative Methods in Geography	
GEO 7302	Nature and Philosophy of Geography	
GEO 7305	Historical Geography of the Environment	
GEO 7308	Advanced Regional Field Studies	
GEO 7313	Environmental Systems	
GEO 7316	Remote Sensing and the Environment	
GEO 7318	GIS and Environmental Geography	
GEO 7330	Geography of Hazards	
GEO 7334	Geographic Aspects of Water	
GEO 7341	Urban Environment	
GEO 7342	Theories and Methods in Geographic Education	
GEO 7344	Seminar in Geographic Curriculum	
GEO 7346	Standards and Assessment in Geography	
GEO 7349	Population Geography	
GEO 7352	Social Theory, Space, and Geography	
GEO 7361	Advanced Geographic Information Systems	
GEO 7362	Geographic Visualization	
GEO 7364	Geocomputation	
GEO 7365	Theoretical Cartography	
GEO 7366	Advanced Topics in Remote Sensing	
GEO 7368	Lidar and SfM Data Processing and Analysis	
GEO 7369	Exploring Spatial Databases	
GEO 7370	Advanced Seminar in Environmental Geography	
GEO 7371	Advanced Seminar in Geographic Education	
GEO 7372	Seminar in Geographic Information Science	

GEO 7390	Independent Study	
GEO 7393C	Managing Urbanization	
GEO 7393D	International Migration	
GEO 7393E	Geography of Land Management	
GEO 7393F	Gender and Development	
GEO 7393G	Political Geography	
GEO 7393J	Soil and Society	
GEO 7393M	Global Climate Change	
GEO 7393N	Rivers and Society	
GEO 7415	Geographic Applications of Remote Sensing	
GEO 7417	Geographic Information Systems	
GEO 7418	Technical Foundations and Methods in Geographic Information Science	
GEO 7430	Field Methods	
GEO 7447	Spatial Graphics in Geographic Education	
<b>Thesis</b>		
GEO 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
GEO 5199B	Thesis	
GEO 5299B	Thesis	
GEO 5399B	Thesis	
GEO 5599B	Thesis	
GEO 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

Students are required to take a comprehensive examination. The committee evaluates the comprehensive examination. The research advisor fills out the report of the comprehensive examination form and forwards this to the Graduate Staff Advisor, who then forwards the form to the Graduate College.

In evaluating the examination, the committee has two options: pass or fail. Students who fail the examination may also be required by their committees to complete additional course work or undertake research projects. These must be completed to the satisfaction of the committee before the examination is retaken. A student who has failed the comprehensive examination is eligible to retake the comprehensive examination once. Unless under extenuating circumstances and with the approval of the Graduate Program Coordinator, the second examination must take place no sooner than thirty days after the first comprehensive examination. A student who fails the comprehensive examination twice is dismissed from the graduate program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her

thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis

course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Geography: GEO

## Courses Offered

### Geography (GEO)

#### GEO 5190. Independent Study.

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for a total of six semester hours of credit. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### GEO 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### GEO 5290. Independent Study.

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for total of six semester hours of credit. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### GEO 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### GEO 5300. Applied Research Design and Techniques.

Students will be introduced to appropriate research methods for applied geographers. Emphasis will be placed on the scientific method, productive library research, data collection and analysis, fieldwork, effective writing, and the nature of graphic representation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### GEO 5301. Multivariate Quantitative Methods.

The use of multivariate descriptive and inferential statistics as applied to geographic data and problems, beginning with the general linear model and including topics such as multiple regression, principal components analysis, discriminant analysis, and clustering algorithms. Prerequisite: GEO 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### GEO 5304. Qualitative Research Methods.

This course introduces the qualitative research paradigm, including research design, methods of data collection, and inductive analysis. Standards of scientific research that call for a deeper evaluation of complex social relationships are emphasized. The focus and application will be oriented towards human geography and nature-society relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5308. Regional Field Studies.**

Study of geographic phenomena during field excursions to a particular site or region. Students will study the physical and/or cultural environments through off-campus field experience. Students will research, analyze, and report on major regional geographic features. Repeatable once for additional credit with a different site or region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5309. Geographical Analysis.**

A survey of typical spatial problems of interest to geographers, with emphasis on current research and application being undertaken by the faculty in the Department of Geography. Topics include environmental geography, geographic education, land use and regional development, and cartographic representation and geographic information theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5312. Managing Urbanization.**

Survey methods and procedures related to managing and preparing for urban growth. Selected topics for examination include transportation planning, housing, historic preservation, and environmental design. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5313. Environmental Studies.**

A critical analysis of the major causes of environmental change and human response to environmental problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5314. Geographic Elements of Environmental Law.**

A survey of environmental laws related to land, air, and water pollution. The nature of environmental problems will be studied as they relate to urbanization, industrialization, land development, noise, radiation and solid waste management, and the laws and guidelines that have been passed to alleviate such problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5315. Geographic Analysis of Global Issues.**

This course focuses on a critical analysis of contemporary global or regional issues from geographic perspectives. The course emphasizes research-based case studies associated with the topics and integrative approaches to the study of world regions and world cultures. The course may be repeated with permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5316. Applied Physical Geography.**

This course is a survey of methods and techniques used in the collection, analysis, and evaluation of information relating to problems within the physical environment. Emphasis will be on problems characteristic of particular geographic locations or specific environmental settings. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5317. Seminar in Applied Human Geography.**

A focus on the methods and techniques used in the collection, analysis, and evaluation of information relating to problems within the human geographical environment. Emphasis will be on problems pertaining to particular geographic locations or special environmental settings. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5318. Environment Problems of the U.S.-Mexico Border.**

This course serves as an in-depth introduction to the physical, social, and environmental landscapes of the region of the U.S.-Mexico Border. The course applies an interdisciplinary perspective to geographic understanding of the environmental and health-related issues experienced by residents of the borderlands. Special attention is given to management and planning solutions to the region's problems. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5319. Seminar in Nature and Heritage Tourism.**

This seminar focuses on the special geographic issues of nature and heritage tourism. Particular emphasis is placed on sites and activities, costs and benefits, commoditization and authenticity, resource protection, and substantive learning content of nature and heritage tourism activities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5322. Interpretive Environmental Geography.**

Students learn to use geographic theories and concepts to provide holistic and thematic interpretation of environmental information, as specified by interpretive principles. Students also learn advanced use of traditional and digital presentation techniques and research methods, which include audience assessment and program evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**GEO 5323. Researching the City.**

This course covers data collection and analysis of urban life and the factors considered in locating industry, business, housing, and community facilities. Attention will be paid to the location of manufacturing activities, commercial enterprises, and a variety of social service facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5326. Parks and Protected Places.**

This course serves as an in-depth introduction to the philosophy, establishment, and operation of public parks, wildlife refuges, protected areas, non-governmental preserves and historic sites. Students will be introduced to the scientific and policy rationale for the creation of such areas as well as methods of classification and acquisition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5329. Historical Geography of the Environment.**

This course examines the evolution of environmental problems using the techniques and analytical perspectives of historical geography. Special emphasis is given to the emergence of environmental challenges related to urbanization and climate change. Students in this class will engage with scholarship related to historical geography of the environment and develop original research related to environmental change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5330. Geography of Hazards.**

This course focuses on understanding and advancing scholarship in hazards research – the threats to life, health, and welfare caused by natural, technological, and/or social processes, and disasters. Special emphasis is placed on understanding the complexities of the assessment and management of risks, hazards, and disasters at multiple geographic scales.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5332. Environmental Geography of the Coastal Zone.**

Investigation of the physical geographic factors associated with the coastal zone and the role of human activities in problems and opportunities characteristic of this environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5334. Applied Water Resources.**

Application of techniques employed in water management including flood hazards, water supply assessment, and water management strategies. Students will apply principles to specific watersheds and water problems including the analysis of various physical, land use, and legal parameters.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5335. Directed Research.**

This course is directed research on various topics in applied geography under the supervision of a graduate faculty member. Students gain experience about the entire process of conducting applied research in geography. Students receive course credit after a directed research report is approved by a student's advisor and members of the student's committee.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5336. Transportation Systems.**

This course introduces key concepts and methods of transportation geography and transportation planning. Topics include, among others, the spatial structure of transportation systems, transportation economics, and logistics. Various methods, techniques, and technologies for transportation analysis, particularly Geographic Information Systems (GIS), will be explored and applied as part of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5339. The Geography of Land Management.**

This course explores U.S. land management philosophies, techniques, and development approaches. Major topics include land ethics/philosophies, U.S. traditions in cadastral geography, urban sprawl and green development, land conservation techniques, the role of local/state/federal regulations in land management, and the human environmental impacts of land development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5340. Active Learning in Geography.**

The course focuses on instructional strategies that will allow teachers to promote active learning in geography. Emphasis will be on how active learning can help students reach geography content and skills standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5341. Contemporary Issues in Geographic Education.**

This course examines current approaches to teaching geography in American education. Specific attention will be given to new classroom materials, curriculum reform efforts, and research developments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5342. Theory and Research Methods in Geographic Education.**

The course focuses on designing, conducting, and presenting empirical research on teaching and learning geography. This course emphasizes the critical analysis of theories, research methods, and key research questions in geographic education and developing a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5344. Curriculum, Standards, and Assessments in Geography.**

This course is a survey of major curriculum and assessment theories and practices in geography education. Geography is examined as a school subject that is part of the social studies, as an element of interdisciplinary studies, and as a stand-alone subject. The concept of teacher leadership frame discussions of geography subject matter and standards implementation in schools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5345. Spatial Thinking in Education.**

This course introduces the concept of spatial thinking and discusses how spatial thinking may be taught in the context of K-16 education. Students examine various instructional strategies to facilitate spatial thinking in the classroom and design grade-level appropriate learning experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5346. Inquiry-Based Teaching in Human Geography.**

This course introduces models of geographic inquiry for instruction in human geography at the secondary and postsecondary levels. Case studies examining contemporary issues will be paired with lessons and activities that support integrated and inquiry-based approaches to teaching human geography. Students develop inquiry lessons aligned with geography/social studies standards, the Advanced Placement Human Geography course, and introductory undergraduate courses in human geography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5349. Population Geography.**

An in-depth study of the spatial distribution and movement of human populations. Course will emphasize current issues and analytical techniques. Topics will include the impact of population growth, spatial diffusion processes, migration trends and theories, explanation of regional demographic differences, and techniques such as population projections. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5350. Practicum in Teaching Geography.**

This course introduces key concepts in teaching geography and provides regular training and planned periodic evaluations of instructional responsibilities. Course topics include instructional and assessment strategies in geography and classroom management. This course is required for first-year instructional assistants in the Geography Department. Students do not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**GEO 5351. Regional Waste Management.**

The principles of effective solid waste planning and management will be examined as they relate to such activities as waste generation, storage and collection, transfer and transportation, processing and volume reduction, resource conservation and recovery, the disposal of wastes, and the handling of special wastes, particularly those of a toxic and hazardous nature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5352. Air Quality Management.**

A geographic assessment of air quality management in the United States. Spatial distribution of the types, sources, and effects of air pollutants. Meteorology and physics of air pollution dispersion. Legislative and regulatory approaches to pollution management. National, state, regional, and local policy development procedures. Geographic methods for air pollution management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5353. Emergency Management.**

This course provides an overview of the most important aspects of emergency management at all geographic scales, with emphasis on local, regional, and federal levels. Best practices and proper methodologies are emphasized as well as ways that students can develop the skills and capabilities for a career in this field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5360. Seminar in Planning Problems.**

A critical and in-depth examination of several problem areas currently facing the planner.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5365. Remote Sensing and the Environment.**

This course provides an examination and implementation of sophisticated approaches for processing satellite digital images with emphasis on environmental applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5367. Exploring Spatial Databases.**

This course covers principles of spatial ontologies and spatial semantics to facilitate appropriate database conceptualization, design and implementation. Course assignments and projects provide in-depth experience with database query languages. Course work is completed using a spatially-enabled Relational Database Management Systems (RDBMS). Prerequisite: GEO 5418 or equivalent with a grade of 'B' or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5368. Lidar and SfM Data Processing and Analysis.**

This course covers Light Detection and Ranging (lidar) systems and Structure from Motion (SfM) workflows for mapping and analysis of the environment. Students learn to successfully apply knowledge of lidar data and SfM workflows for a variety of Geographic Information Science applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5370. Seminar in Applied Physical Geography.**

Critical analysis of theories, models, and techniques of physical geographic research with the focus on application to real-world problems. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5371. Seminar in Geographic Education.**

This research seminar addresses contemporary topics related to geographic education. The emphasis is on applications of learning theories, teaching strategies, and innovative tools in geography classrooms. Course topics may vary depending on student and faculty interest. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5380. Internship.**

Application of techniques of applied geography in an actual on-the-job setting. Internships will be arranged and supervised by the Internship Director. May be repeated once for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5390. Independent Study.**

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for a total of six semester hours of credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5393B. Biogeography in Mountain Environments.**

This course examines how plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms and geological factors affect spatial distribution of animals and plants; all within the environmental limitation and conditions of mountains. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393D. Water Resource Planning.**

This seminar presents case-studies related to water quality protection and mitigation and to the planning of water supply at the state and regional level from a policy practitioner's perspective. The objective of the course is to identify the components of the planning process and its outcomes, including water-use conservation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393E. Geomorphology in the Anthropocene.**

This course will examine the ways in which humans interact with and affect geomorphological processes and landforms, and how humans directly act as geomorphological agents. The level at which human activities have transformed the surface of the Earth will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393G. Jobs, Careers, and Professional Development in Geography.**

This course introduces graduate students to research-based strategies for career planning and professional development in geography. Career opportunities for geographers in business, government, nonprofit, and academic organizations are examined. The course also analyzes professional identities, applications of geography in society, professional ethics, lifelong learning, work-life balance, and professional networking.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393H. Professional Development in Geographic Education.**

This course combines useful, dynamic geography content with a sensible professional development online delivery system. The content emphasis stresses the applicability of geography in our modern world thus offering jobs and careers to students. The message for teachers is that geography has become more oriented to student aspirations and civic and environmental responsibility.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393I. Geography and the Social Studies.**

This course examines on how geography fits within the social studies. It details how geography can be taught alongside history, economics, and civics for a well-rounded social studies curriculum. Attention is paid to technology, skills and perspectives. The course examines various social studies frameworks and standards. This course will prepare teachers to be versatile in their social studies knowledge and understanding. It will enhance a teacher's ability to teach geography across all of the social studies subjects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393K. Advanced Web Cartography and Data Visualization.**

This course provides advanced training in the design and development of interactive, web-based data visualization systems with emphasis on the modern cartographic process and the spatial applications of interactive data visualization principles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5395. Problems in Applied Geography.**

Designed to consider a selected topic relating to applied geography. Emphasis on the practical application of geographic tools, with individual or group participation in a specific project. Course topics may vary depending on student and faculty interests and may apply to any of the four graduate tracks: physical-environmental, urban and regional planning, geographic education or GIScience. Repeatable for up to six hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in GEO 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**GEO 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5408. Web Mapping.**

This course introduces students to modern interactive and dynamic mapping and GIS techniques that allow internet-based cartographic representations of temporal and non-temporal geospatial objects and phenomena. Prerequisite: GEO 3411 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5415. Geographic Applications of Remote Sensing.**

Students will focus on Geographic applications of the principles and practices of digital image processing, classification, and modeling using satellite images.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5417. Advanced Cartographic Design.**

This advanced course in cartography focuses on thematic map design. The objective is to produce a series of well-designed, professional grade maps (or an atlas) that students can use to build a cartographic portfolio. Theoretical concepts and principles will be introduced using practical examples and written assignments. Prerequisite: GEO 3411 with a grade of "D" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5418. Geographic Information Systems I.**

Course is concerned with the analysis and interpretation of maps stored in digital form. Students are introduced to concepts and practices involving computerized cartographic and geographic data input, storage and retrieval, data manipulation and analysis, graphic and tabular report generation, and cartographic modeling.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5419. Geographic Information Systems II.**

This course aims to develop more advanced GIS concepts and application issues, further spatial data manipulation and analysis skills, and provide hands-on experience with GIS hardware and software programs. The emphasis will be on practical application of skills to real world issues. Prerequisite: GEO 5418 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5424. GPS and GIS.**

Students will learn to plan and conduct fieldwork using Global Positioning System (GPS) to differentially correct GPS data, and to build Geographic Information Systems (GIS) applications using GPS technology. The course is project-based and involves working with external clients(s). Prerequisites: GEO 2426 with a grade of "D" or better or GEO 5418 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5430. Field Methods.**

Course will emphasize common field techniques necessary in the construction of accurate maps. Various kinds of data collection techniques will be presented that will facilitate geographic research. Prerequisite: GEO 3301 with a grade of "D" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5447. Technology in Geographic Education.**

The course focuses on the applications and implications of technology in geographic education. The emphasis is placed on the role of technology as an instructional tool to promote inquiry-based learning.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**GEO 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5680. Internship.**

Application of techniques of applied geography in an actual on-the-job setting. Internships will be arranged and supervised by the Internship Director.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**GEO 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

The graduate minor in Geography requires 9 semester credit hours of advisor-approved Geography courses.

Taylor-Murphy Building Room 202

Telephone: 512-245-2142 Fax: 512-245-3043

<http://www.txstate.edu/history> (<http://www.txstate.edu/history/>)

The Department of History at Texas State University is strongly committed to excellence in scholarship and teaching. We strive to facilitate our students' intellectual and professional growth by: (1) sharing with them knowledge about the past that helps explain the defining aspects of contemporary life; (2) introducing them to patterns of global diversity, past and present, as well as the historical foundation of inequity, stereotyping, and mythologizing; (3) challenging them to think critically in order to formulate educated, evidence-based opinions about the past; and (4) helping them develop and refine research, analytical, communication, and social skills. Our faculty's research, shared with the scholarly community and the public through publications and presentations, aims to broaden and disseminate our understanding of the past and increase general interest in history.

Successful graduates enter doctoral programs or find jobs in the public and private sector. Our students have gone on for further study to universities across the country, from the University of California at Berkeley to the University of Michigan to the University of Massachusetts at Amherst, to the University of Pennsylvania. A number have secured academic appointments. Other students have utilized their training in

positions at Dell, General Motors, and many other major corporations. Public history students have earned appointments with national and regional governmental agencies while others have used their teaching and research skills in secondary schools.

## Master of Arts (M.A.)

- Major in History (History Education Concentration) (p. 2521)
- Major in History (Non-thesis Option) (p. 2531)
- Major in History (Public History Concentration Non-thesis Option) (p. 2542)
- Major in History (Public History Concentration Thesis Option) (p. 2552)
- Major in History (Thesis Option) (p. 2564)

## Minor

- History (p. 2575)

## Program Overview

The graduate program in History is designed to prepare students for careers in professional history (college teaching, research, or writing), public history, historic tourism, preservation, museums, consulting, public education (secondary teaching), and to provide a general liberal arts education for students desiring careers in business, journalism, law, and government service.

Individuals interested in a more detailed description of the graduate program in history should request a copy of the Graduate Student Handbook from the Department of History. Copies of the Graduate Student Handbook and other information may be obtained from the department's website at <http://www.txstate.edu/history> (<http://www.txstate.edu/history/>).

## Financial Assistance

A limited number of assistantships and scholarships are available to qualified graduate students. Prospective students interested in applying for an assistantship should contact the graduate director in the Department of History. The Graduate College can provide further information about scholarships.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review



the International Admission Documents page (p. 806) for additional requirements.

- completed online application (<https://apply.gradcollege.txstate.edu/apply/>)
- \$55 nonrefundable application fee or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- a copy of an official transcript from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours (<https://www.gradcollege.txstate.edu/admissions/policy.html#gpa>) of undergraduate course work (plus any completed graduate courses)
- minimum 3.25 GPA in a minimum of 24 hours of undergraduate history course work
- GRE not required
- resume/CV highlighting academic achievements
- statement of purpose (750-1000 words with name in header) describing the ways in which the student's undergraduate experience in history courses directed their career toward graduate-level work in history or how that experience shaped the student's expectations of their work in history at the graduate level at Texas State University.
- two letters of recommendation with at least one from a history professor (if the student majored in history)
- language competency statement: Thesis students should assess their level of competency to read and research in any languages other than English that could be essential to their area of study or thesis topic. They should provide a brief explanation of any relevant language competencies, including the means through which they acquired them, any plans to improve them, and a self-assessment of reading and speaking skills in terms of basic, intermediate, proficient, advanced, and native abilities. If an applicant plans to research and study in English language sources only, then they should simply state this.
- writing sample, preferably a research paper of 15 to 20 pages in length, produced during the student's coursework. If the student is unable to submit a paper of this type, please contact the Director of Graduate Studies ([jd65@txstate.edu](mailto:jd65@txstate.edu)) to discuss other acceptable submissions.

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and
  - minimum individual module scores of 6.0

- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

Degree Requirements

The Master of Arts (M.A.) degree with a major in History concentration in History Education requires 36 semester credit hours, including a minor. Students must earn a grade of "B" or better in all history courses.

Course Requirements

Code	Title	Hours
Required Courses		
HIST 5361	Historiography and Methods	3
HIST 5398	General Research Seminar	3
Prescribed Electives		
Choose 12 hours from the following:		12
HIST 5307	Medieval European History: Contemporary Trends in Medieval Historiography	
HIST 5309D	Early Modern Spain	
HIST 5310	Western European History Since 1815	
HIST 5313	Early American History	
HIST 5314	Ethnohistory	
HIST 5315A	American Sexualities	
HIST 5315B	Queer History: GLBT Histories in the United States	
HIST 5316A	Women's Rights in Comparative Perspective	
HIST 5316B	Women and Empire	
HIST 5318A	Eighteenth Century England	
HIST 5318C	The Age of the Stuarts	
HIST 5318D	European Imperialism	
HIST 5318E	European Sexualities	
HIST 5319	The Age of the Tudors	
HIST 5323A	Society and Culture in Brazil	
HIST 5323B	History of Race and Slavery in Brazil	
HIST 5324B	Race, Class, and Nation in Modern Latin America	
HIST 5324C	Slavery and Emancipation in the Americas	
HIST 5324D	Writing the History of Latin America: The Colonial Era	
HIST 5324E	Modern Latin American Revolutions	
HIST 5325A	History of Mexico to 1848	
HIST 5325C	Revolutionary Mexico	
HIST 5325D	Mexico Since the Revolution	
HIST 5335	Twentieth-Century Russia	
HIST 5336	East European History	
HIST 5341B	Caribbean Transnationalism and Diplomacy	
HIST 5343	The Progressive Era	
HIST 5344	History and Memory	
HIST 5345D	Oral History: Theory & Practice	
HIST 5345M	History of Utopian Communities	
HIST 5345N	Transformation of the South	
HIST 5345O	Immigration and US History	
HIST 5345Q	Gender and Citizenship	
HIST 5345R	History of Country Music	
HIST 5345S	Theories and Methods in Popular Music History/ Culture Studies	

HIST 5345T	Biography and American History	
HIST 5346	African American History	
HIST 5347	Texas History	
HIST 5348	History of Texas Music	
HIST 5350	The Frontier in American History	
HIST 5351B	Cold War America	
HIST 5351C	Race, Gender, and Ethnicity in American Labor History	
HIST 5351D	Politics & Society of Postwar America, 1945-Present	
HIST 5351F	US Women's History	
HIST 5351H	US Latino/a History	
HIST 5353	Greater Southwestern History	
HIST 5358	Sectionalism & Slavery in the United States	
HIST 5362	Military History	
HIST 5363	Antebellum American Society & Culture	
HIST 5367	US Era of Civil War and Reconstruction	
HIST 5369	Music and Social Movements	
HIST 5381	Chinese Communism	
HIST 5382	China and the Modern World	
HIST 5385	Topics in the History of the Modern Middle East	
HIST 5390	Problems in Historical Research	
HIST 5395D	Interpretations of World History	
HIST 5395E	Mahatma Gandhi in World History	
HIST 5395H	European Colonialism	
HIST 5395I	Global Cold War	
<b>Comprehensive Examination</b>		
Choose a minimum of 3 hours from the following:		3
HIST 5588	Comprehensive Examinations	
HIST 5388	Comprehensive Examinations	
HIST 5988	Comprehensive Examinations	
<b>Minor</b>		
Choose a 15-hour advisor-approved minor		15
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

The comprehensive examination will consist of written and oral portions. The comprehensive exam should be taken during the last semester of course work. Exams must be completed within one year of the student's last semester of classes except under extraordinary circumstances. Students who perform unacceptably on the exam may take the exam a second time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in History: HIST

## Courses Offered

### History (HIST)

#### HIST 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### HIST 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### HIST 5301. Instructional Methods Practicum for Graduate Assistants.

Required as a condition of employment for graduate teaching and instructional assistants. This course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### HIST 5307. Medieval European History: Contemporary Trends in Medieval Historiography.

This course introduces graduate students to the craft of the medieval historian, with emphasis on major contemporary shifts in American historiography of the European Middle Ages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIST 5309D. Early Modern Spain.

A seminar based on selected topics in political, social, intellectual, and economic history of Spain from 1450 to 1815. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### HIST 5310. Western European History Since 1815.

A seminar based on selected topics in the history of Western Europe from 1815 to the present. May be repeated with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HIST 5313. Early American History.**

A seminar based on selected topics in the Colonial Revolutionary and Early National periods of the United States history. May be repeated with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5314. Ethnohistory.**

This seminar seeks to familiarize students with current questions, methods, theories, and debates in ethnohistory, a multidisciplinary approach to the history of indigenous peoples. Materials studied will include both classic and recent ethnohistorical works. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5315A. American Sexualities.**

This course addresses the history of sexualities in the United States from the colonial era to present to shed light on the ways that sexuality has shaped social life, establish conventions, and created spaces to defy norms. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5315B. Queer History: GLBT Histories in the United States.**

This course examines the histories of different sexual minorities from the colonial era to present, though the majority of the course focuses on the twentieth century, to explore the rise of the modern lesbian, gay, bisexual, and transgender identities, politics, and culture. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316A. Women's Rights in Comparative Perspective.**

This course considers national, transnational, and global development of campaigns for women's rights since the nineteenth century. The course examines how women agitated for their rights in different cultural and historical moments. Students will gain familiarity with comparative feminisms, the gendered nature of liberal movements, and women's activism in national and international arenas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316B. Women and Empire.**

From 1492 until World War II the globe was dominated by imperialism. This course considers the ways that women, in the metropolises of Europe and throughout colonial settings, found their lives shaped by empire. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316C. Women and Gender in the Early Modern Atlantic World.**

This course introduces students to the themes, topics, and issues that animate the histories of African, European, and indigenous women in the Atlantic World from 1500 to 1800. Emphasis will be placed on comparisons between empires and on the methodological challenges of researching early modern women.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318A. Eighteenth Century England.**

A seminar based on selected topics in political, social, intellectual, and economic history of England from 1688 to 1815. May be repeated with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5318C. The Age of the Stuarts.**

A study of selected topics in English history between 1603 and 1714.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5318D. European Imperialism.**

Europe's penchant for building empires helped to greatly enhance their influence (economic, political, and cultural) from the fifteenth to the twentieth century. The course will review the major European empires and discuss the extent of their influence during this 500 year span.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318E. European Sexualities.**

This course examines the history of sexuality of Europe in the modern era. It considers how the history of sexuality intersects with and explicates many of the crucial events in modern European history including empire, total war, communism, fascism, decolonization, and immigration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318F. European Fascisms and Historical Memory.**

This course compares historical and contemporary manifestations of fascism in Europe. It considers how the historical memory of fascism has impacted historical memory of the past, contemporary movements, legal structures, museums, and other historical monuments in Europe today.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5319. The Age of the Tudors.**

This readings-based course emphasizes differing interpretations of selected topics in English history from circa 1485 to 1603. Constitutional, political, governmental, social, religious, and cultural aspects of the era are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5323A. Society and Culture in Brazil.**

This seminar explores the social and cultural history of Brazil through its various ages, the "Age of Sugar", the "Age of Coffee", the "Age of Pedro II", the "Belle Epoque", and the worlds of the sugar and coffee barons. It explores the character of these ages marked by the grand plantation houses, devotion to European models, and the conflict with a slave society, covering the years from the colonial period to the turn of the twentieth century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5323B. History of Race and Slavery in Brazil.**

This course assesses the literature on race relations and slavery in Brazil. It situates the topic within a comparative, Atlantic framework and provides a critical understanding of the chief issues and debates in the field. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324B. Race, Class, and Nation in Modern Latin America.**

A seminar that examines the relationship between race, class, and nation building in Latin America, beginning with independence in the nineteenth century and continuing to contemporary times. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324C. Slavery and Emancipation in the Americas.**

This course examines slavery in the Americas in its full social, political, and economic context. Students will enlarge their understanding of slavery by using an international, transatlantic framework for comparison. The course strengthens analytical skills through extensive discussion as well as significant writing and research. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324D. Writing the History of Latin America: The Colonial Era.**

This readings seminar provides a critical assessment of the main themes and debates of colonial Latin American historiography. The course discusses the different paradigms under which historians have approached the cultures and societies of the region under Spanish and Portuguese rule, emphasizing on the latest trends and developments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324E. Modern Latin American Revolutions.**

The course is a seminar that examines and compares the causes, consequences and results of Latin America's twentieth century revolutions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325A. History of Mexico to 1848.**

A topic course studying the history of Mexico from pre-historic times to the Treaty of Guadalupe Hidalgo. The course encompasses the development of Indian societies from the Yucatan to the American Southwest preceding the Spanish conquest, the social, economic, and political development of Spanish colonial Mexico, the War in Independence, and the formation of the new nation through the war with the United States. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325C. Revolutionary Mexico.**

A graduate seminar that explores the interrelated economic, social, political, and cultural conditions and forces that shaped revolutionary Mexico. Ideological currents that impacted the period will be examined. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325D. Mexico Since the Revolution.**

This class is a Graduate Seminar covering the History of Post-Revolutionary Mexico. This course will explore the history of Mexico since the Revolution, including the social, cultural, and economic legacies of the Revolution, as well as the process of State building, one party rule, globalization, and the transition to democracy. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5335. Twentieth-Century Russia.**

A seminar based on selected topics in recent Russian history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5336. East European History.**

A seminar based on selected topics in recent East European history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5341B. Caribbean Transnationalism and Diplomacy.**

This seminar focuses on the international relations of the twentieth-century Caribbean, with emphasis on interactions between Cuba, the Dominican Republic, Haiti, Jamaica, the United States, and Venezuela. Students will analyze the ways that international action and response in these countries have affected policy, government, and international social movements. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5343. The Progressive Era.**

This course is a seminar on the rise of industrial capitalism and corporate power and the public response to the related restructuring of the social and economic order between 1890 and 1920, with particular emphasis on the strengths and weaknesses of progressivism as a democratic movement for reform. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5344. History and Memory.**

This course examines the way that groups shape the the collective memory of past events, how memory shifts over time, and the way it can be influenced by present influences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5345D. Oral History: Theory & Practice.**

A seminar based upon developing a theoretical and practical understanding of the techniques of oral historical research and document preservation and presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345M. History of Utopian Communities.**

This seminar examines utopian experiments in American History. Starting with John Winthrop's 1630 "City upon a Hill," the course explores both religious and secular communal ventures through the eighteenth and nineteenth centuries. The course concludes with an examination of counter-cultural, twentieth-century communes, intentional communities, and cultic separatists.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345N. Transformation of the South.**

This course is a readings research seminar on African-American culture and life in the twentieth century South from 1890-1971. The course provides the students with a thorough historical examination through biographies and community studies of specific issues and events that ended legal segregation in the South. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345O. Immigration and US History.**

This course focuses on North American immigration history from colonial times to the present and looks at how both immigrants and native-born Americans struggled to reconcile conflicting notions of identity and national loyalty. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345P. History of Mexican American Music in the Southwest.**

This class will introduce students to the musical history of Islamic Spain, Spanish Colonial Mexico, and Mexico and investigate the influences of these traditions on the development of Mexican-American music in the American Southwest. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter



**HIST 5345Q. Gender and Citizenship.**

This course is designed to introduce students to the literature in United States history that addresses issues of gender and how they relate to US citizenship from the colonial period to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345R. History of Country Music.**

This seminar traces the various ethnic, social, cultural, political, economic, and demographic forces in American society that have helped shape country music. Students will also explore how this uniquely American cultural idiom mirrors the historical evolution of the United States.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345S. Theories and Methods in Popular Music History/Culture Studies.**

This is a course in the theories and methods of cultural studies and popular music history for graduate students. It is intended to review the history of debates and methodologies in the field to prepare students to do original work that fits into the larger conversations in popular music studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5345T. Biography and American History.**

In this class students will delve into the practice of biography and the ways in which biographers convey American history and culture through a life story.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5345U. Dark Tourism: Interpreting Historic Sites of Oppression, Death, and Disaster.**

This course examines issues and effective methods of interpreting historic sites open to visitors associated with tragic historical events and practices, such as battlefields, concentration camps, massacre sites, and plantation houses, that are to the public. Dark tourism sites in the United States and around the world will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5346. African American History.**

This course is an intensive readings and research seminar in African American History. Through the uses of lectures, biographies, institutional histories and community studies, students will be introduced to the different interpretive themes and methodologies that have created the myriad of historical interpretations and reinterpretations of African American History. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5347. Texas History.**

A seminar based on selected topics in the history of Texas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5348. History of Texas Music.**

This course examines the evolution of music in Texas and the American Southwest from pre-Colombian times to the present, with an emphasis on how music reflects the ethnically diverse history and culture of the region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5350. The Frontier in American History.**

A seminar based on selected topics in the history of the frontier in American development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5351B. Cold War America.**

This course examines the Cold War years 1945 to 1960, concentrating on the domestic scene. The class will discuss the major issues of domestic politics, society, and culture, through the use of both primary and secondary sources. They will also examine the historiography of the period. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351C. Race, Gender, and Ethnicity in American Labor History.**

This graduate seminar explores the impact of race, gender, and ethnicity upon American Labor History. Readings integrate race, gender, and ethnicity as categories of analysis into the study of class formation, experiences, and consciousness within the American labor force. The focus will be on unorganized as well as organized workers in the context of their social, cultural, political, and workplace environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351D. Politics & Society of Postwar America, 1945-Present.**

This course will explore the interaction of political, economic, and social forces in the years following the Second World War. Emphasis will be placed on analyzing the interdependent relationship between political structures, social movements, and economic circumstances. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351E. Foundations of the U.S. Conservation Movement.**

The course will provide an overview of the conservation movement from the writings of Henry David Thoreau to publication of Rachel Carson's *Silent Spring*. Emphasis will be on social and cultural influences, with particular attention to government programs, naturalist literature, activism, movement leaders, and landmarks of environmental debate.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5351F. US Women's History.**

This course offers graduate students an introduction in the topics, themes, and issues that animate the history of women in the US. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351H. US Latino/a History.**

This course explores the histories, cultures, and politics that shape Latino/a experiences in the United States and examines the way Latino communities helped shape the making of the nation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5353. Greater Southwestern History.**

A seminar based on selected topics in the history of the Greater American Southwest. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5358. Sectionalism & Slavery in the United States.**

This course assesses the literature on the causes and consequences of the sectional conflict between the American North and the South before the Civil War, with particular focus on works examining the slavery issue and the way it exacerbated American sectionalism, leading to the fracturing of the American nation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5361. Historiography and Methods.**

A general introduction to key concepts, approaches, and challenges involved in reading, researching, and writing history at the professional level.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5362. Military History.**

This seminar is based on selected topics in military history. May be repeated with different emphases up to nine hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5363. Antebellum American Society & Culture.**

This seminar explores the cultural dynamics, social relations, and political and economic structures that shaped the lives of ordinary Americans in the three decades before the Civil War. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5367. US Era of Civil War and Reconstruction.**

A seminar that examines the history of the causes, course, and consequences of the American Civil War and the efforts to reconstruct the American Nation in its aftermath. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5369. Music and Social Movements.**

This course examines the historical role music has played in a variety of social movements related to race, gender, ethnicity, religion, politics, economics, education, labor, civil rights, and other issues in U.S. history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5371. The Practice of Public History.**

A seminar addressing the definition, evolution, and philosophy of public history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5372. The Practice of Museum Studies and Material Culture.**

A seminar addressing the history, organization, and functions of history museums.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5373. The Practice of Historic Preservation.**

A seminar addressing architectural history and preservation theory and practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5374. Public History Internship.**

Application of skills in public history in an on-the job setting. Internships will be selected by the student and instructor, and will be supervised by the instructor. May be repeated once for additional credit.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5375A. Documentary Film.**

The use of film & video in public programming; research & produce documents.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375B. Archival Management.**

A seminar based on the history, theory, and practice of archival management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375C. Cultural Resource Management.**

This seminar addresses the management of cultural resources such as historic buildings, historic sites, and other tangible remains of our heritage. It explores how cultural resources are preserved and managed under federal and state law, and the nature of the regulatory practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375D. Material Culture in America.**

This course examines the interactions between people and things in American society. The ways in which Americans have created, used, altered, and thought about material objects help us to understand history. Readings and research will focus on the values and attitudes embodied in the production, use, and preservation of objects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375E. Management & Administration in Historical Organizations.**

This course provides an introduction to the non-profit based management, leadership, and administration issues and practices for historical organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375F. Education Programs in Historical/Cultural Institutions.**

This course will study the role of education programs as primary to the missions of historical and cultural institutions and will explore how institutions create and evaluate formal and informal education programs and materials for a variety of audiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375I. Heritage in a Global Context.**

Heritage management is the interdisciplinary approach to the preservation, protection, and public use of the historical record. This course examines definitions and approaches within a global context. Theory and practice will be analyzed through case studies and real world examples. Current issues, sustainability and maritime issues/practices will be included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5375J. American Architectural History.**

This course will analyze the historical development of American architecture, and examine architecture as evidence of America's cultural, social, economic, and technological evolution from 1607 to the present. Focus will be placed on the role of historic American architecture in the practice of public history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375K. Evaluating Historic Sites.**

Every year millions of tourists flock to historic sites desiring to commune with "real" history, to "feel" the past. This course will introduce students to methods that scholars use to examine critically the interpretation of history at these sites without discounting the emotional connection to place that many visitors experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375L. Controversy and History.**

This seminar explores how controversy, power relations, and politics are embedded in the practice of public history. It is designed to help the future practitioner navigate the complex political landscape of public history. This course is informed by the professor's experience as a consultant and federal historian. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5375M. Writing for Public History.**

This will be a course intensively focused on research and writing specifically for public history audiences through a variety of venues: journal articles, magazine/newspaper articles, brochures, promotional literature, personal essays, historical markers, reviews, websites, cultural resource management "gray literature," and professional papers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375N. Digital History.**

Students will study the history of print and digital media to better understand the practice of digital history. They will be introduced to a variety of digital approaches to the study of history, and they will produce and contribute to a variety of digital projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375O. Records Management & Institutional Archives.**

This course will introduce students to the principles and theories in records management and institutional archives. It will provide practical experience creating a records retentions schedule, researching retention requirements and best practices, appraising records with enduring value, and establishing archival series to accommodate ongoing acquisition of institutional records.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375P. The Family and Child in History and Heritage.**

This course examines the historical development of the family and childhood using academic family history methods and public approaches to family heritage. It examines differing experiences of ancestors and concepts of family and childhood over time by race, class, and gender, reflecting shifts in culture, economy, and power relations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5376. Local and Community History.**

A seminar applying historical methods to the study of U.S. communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5377. Public History Project.**

A team project focusing on one or more aspects of public history- museum exhibit, historic site interpretation, historic resources survey, etc. Repeatable with a different emphasis.

**3 Credit Hours. 1 Lecture Contact Hour. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5379A. Public History Final Master's Project.**

This course will be the initial development of an individualized, advanced student project in cooperation with a client or host institution, focused on any one or a combination of the public history areas of historic preservation, archives, oral history, museums, local and community history or cultural resource management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5379B. Public History Final Master's Project.**

This course, to be taken during the last year of the Public History program, is the continuation of an individualized, advanced student project focused on any one or a combination of the public history areas of historic preservation, archives, oral history, museums, local and community history or cultural resource management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5381. Chinese Communism.**

The Chinese Communist movement from 1919 to the present. Will focus on (1) urban and rural aspects of Chinese Communism; (2) the rise to power of the Chinese Communist Party on mainland China in 1949; and (3) the construction of the Party-State and Socialism in the People's Republic of China. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5382. China and the Modern World.**

This course examines Chinese relations with the modern world from 1800 to the present, focusing on the external aggression and internal transformation between 1839 and 1945; the split into two Chinas in 1949; the mainland China/Taiwan developments, interactions between the two Chinese governments and among the world community since then. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5385. Topics in the History of the Modern Middle East.**

A seminar based on selected topics from current histories of the Middle East during the 19th and 20th centuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HIST 5388. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who need to prepare for their comprehensive exams (written and oral).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HIST 5390. Problems in Historical Research.**

This course is open to graduate students on an individual basis by arrangement with the department. May be repeated with the approval of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5395D. Interpretations of World History.**

A survey of world history that focuses on Western civilization as the catalyst of change in world history since the tenth century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5395E. Mahatma Gandhi in World History.**

In this course students explore how writers have narrated Gandhi's life and interpreted his historical role. Students will research aspects of Gandhi's life using primary sources. The focus of the course will be the study of material left out of histories on Gandhi and reasons for omitted material. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395H. European Colonialism.**

This seminar examines the variety of European imperial and colonial experiences around the world from ancient to modern times through selected primary sources and historical literature. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395I. Global Cold War.**

This seminar will survey literature characteristic of the "new" Cold War historiography, and introduce students to primary sources available at Alkek required to write valuable original work. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395J. Foreigners in Japan, 1850-2000.**

This course investigates a central question that arises in discussions of Japan: What have been the effects of foreign influences on Japanese society? Materials for study focus on memoirs written by foreigners – from Europe, the Americas, and East Asia – as they describe their lives in the country through various eras since 1850.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5398. General Research Seminar.**

A seminar designed to enhance research and writing skills in history. May be repeated for credit as topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in History 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5588. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who need to prepare for their comprehensive exams (written and oral) and retain half-time status.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5988. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who, having completed all other coursework, need to prepare for their comprehensive exams (written and oral) and retain full-time status.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The graduate program in history is designed to prepare students for careers in professional history (college teaching, research, or writing), public history, historic tourism, preservation, museums, consulting, public



education (secondary teaching), and to provide a general liberal arts education for students desiring careers in business, journalism, law, and government service.

Individuals interested in a more detailed description of the graduate program in history should request a copy of the Graduate Student Handbook from the Department of History. Copies of the Graduate Student Handbook and other information may be obtained from the department's website at <http://www.txstate.edu/history> (<http://www.txstate.edu/history/>).

## Financial Assistance

A limited number of assistantships and scholarships are available to qualified graduate students. Prospective students interested in applying for an assistantship should contact the graduate director in the Department of History. The Graduate College can provide further information about scholarships.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application (<https://apply.gradcollege.txstate.edu/apply/>)
- \$55 nonrefundable application fee or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- a copy of an official transcript from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours (<https://www.gradcollege.txstate.edu/admissions/policy.html#gpa>) of undergraduate course work (plus any completed graduate courses)
- minimum 3.25 GPA in a minimum of 24 hours of undergraduate history course work
- GRE not required
- resume/CV highlighting academic achievements

- statement of purpose (750-1000 words with name in header) describing how the student's undergraduate experience in history courses directed their career toward graduate-level work in history or how that experience shaped the student's expectations of work in history at the graduate level at Texas State University.
- two letters of recommendation with at least one from a history professor (if the student majored in history)
- language competency statement: Thesis students should assess their level of competency to read and research in any languages other than English that could be essential to their area of study or thesis topic. They should provide a brief explanation of any relevant language competencies, including the means through which they acquired them, any plans to improve them, and a self-assessment of reading and speaking skills in terms of basic, intermediate, proficient, advanced, and native abilities. If an applicant plans to research and study in English language sources only, then they should simply state this.
- writing sample, preferably a research paper of 15 to 20 pages in length, produced during the student's coursework. If the student is unable to submit a paper of this type, please contact the Director of Graduate Studies ([jd65@txstate.edu](mailto:jd65@txstate.edu)) to discuss other acceptable submissions.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and
  - minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Arts (M.A.) degree with a major in History requires 36 semester credit hours. Students must earn a grade of "B" or better in all history courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
HIST 5361	Historiography and Methods	3
HIST 5398	General Research Seminar	3
<b>Prescribed Electives</b>		<b>27</b>
Choose 27 hours from the following:		
HIST 5307	Medieval European History: Contemporary Trends in Medieval Historiography	
HIST 5309D	Early Modern Spain	
HIST 5310	Western European History Since 1815	
HIST 5313	Early American History	
HIST 5314	Ethnohistory	
HIST 5315A	American Sexualities	

HIST 5315B	Queer History: GLBT Histories in the United States
HIST 5316A	Women's Rights in Comparative Perspective
HIST 5316B	Women and Empire
HIST 5318A	Eighteenth Century England
HIST 5318C	The Age of the Stuarts
HIST 5318D	European Imperialism
HIST 5318E	European Sexualities
HIST 5319	The Age of the Tudors
HIST 5323A	Society and Culture in Brazil
HIST 5323B	History of Race and Slavery in Brazil
HIST 5324B	Race, Class, and Nation in Modern Latin America
HIST 5324C	Slavery and Emancipation in the Americas
HIST 5324D	Writing the History of Latin America: The Colonial Era
HIST 5324E	Modern Latin American Revolutions
HIST 5325A	History of Mexico to 1848
HIST 5325C	Revolutionary Mexico
HIST 5325D	Mexico Since the Revolution
HIST 5335	Twentieth-Century Russia
HIST 5336	East European History
HIST 5341B	Caribbean Transnationalism and Diplomacy
HIST 5343	The Progressive Era
HIST 5344	History and Memory
HIST 5345D	Oral History: Theory & Practice
HIST 5345M	History of Utopian Communities
HIST 5345N	Transformation of the South
HIST 5345O	Immigration and US History
HIST 5345P	History of Mexican American Music in the Southwest
HIST 5345Q	Gender and Citizenship
HIST 5345R	History of Country Music
HIST 5345S	Theories and Methods in Popular Music History/Culture Studies
HIST 5345T	Biography and American History
HIST 5346	African American History
HIST 5347	Texas History
HIST 5348	History of Texas Music
HIST 5350	The Frontier in American History
HIST 5351B	Cold War America
HIST 5351C	Race, Gender, and Ethnicity in American Labor History
HIST 5351D	Politics & Society of Postwar America, 1945-Present
HIST 5351F	US Women's History
HIST 5351H	US Latino/a History
HIST 5353	Greater Southwestern History
HIST 5358	Sectionalism & Slavery in the United States
HIST 5362	Military History
HIST 5363	Antebellum American Society & Culture
HIST 5366	Antebellum American History
HIST 5367	US Era of Civil War and Reconstruction
HIST 5369	Music and Social Movements
HIST 5381	Chinese Communism

HIST 5382	China and the Modern World
HIST 5385	Topics in the History of the Modern Middle East
HIST 5390	Problems in Historical Research
HIST 5395D	Interpretations of World History
HIST 5395E	Mahatma Gandhi in World History
HIST 5395H	European Colonialism
HIST 5395I	Global Cold War
May choose 6 hours of advisor-approved electives from outside the department	
<b>Comprehensive Examination</b>	
Choose a minimum of 3 hours from the following:	
HIST 5388	Comprehensive Examinations
HIST 5588	Comprehensive Examinations
HIST 5988	Comprehensive Examinations
<b>Total Hours</b>	<b>36</b>

## Comprehensive Examination Requirement

The comprehensive examination will consist of written and oral portions. The comprehensive exam should be taken during the last semester of course work. Exams must be completed within one year of the student's last semester of classes except under extraordinary circumstances. Students who perform unacceptably on the exam may take the exam a second time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in History: HIST

## Courses Offered

### History (HIST)

#### HIST 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### HIST 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### HIST 5301. Instructional Methods Practicum for Graduate Assistants.

Required as a condition of employment for graduate teaching and instructional assistants. This course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**HIST 5307. Medieval European History: Contemporary Trends in Medieval Historiography.**

This course introduces graduate students to the craft of the medieval historian, with emphasis on major contemporary shifts in American historiography of the European Middle Ages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5309D. Early Modern Spain.**

A seminar based on selected topics in political, social, intellectual, and economic history of Spain from 1450 to 1815. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5310. Western European History Since 1815.**

A seminar based on selected topics in the history of Western Europe from 1815 to the present. May be repeated with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HIST 5313. Early American History.**

A seminar based on selected topics in the Colonial Revolutionary and Early National periods of the United States history. May be repeated with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5314. Ethnohistory.**

This seminar seeks to familiarize students with current questions, methods, theories, and debates in ethnohistory, a multidisciplinary approach to the history of indigenous peoples. Materials studied will include both classic and recent ethnohistorical works. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5315A. American Sexualities.**

This course addresses the history of sexualities in the United States from the colonial era to present to shed light on the ways that sexuality has shaped social life, establish conventions, and created spaces to defy norms. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5315B. Queer History: GLBT Histories in the United States.**

This course examines the histories of different sexual minorities from the colonial era to present, though the majority of the course focuses on the twentieth century, to explore the rise of the modern lesbian, gay, bisexual, and transgender identities, politics, and culture. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316A. Women's Rights in Comparative Perspective.**

This course considers national, transnational, and global development of campaigns for women's rights since the nineteenth century. The course examines how women agitated for their rights in different cultural and historical moments. Students will gain familiarity with comparative feminisms, the gendered nature of liberal movements, and women's activism in national and international arenas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316B. Women and Empire.**

From 1492 until World War II the globe was dominated by imperialism. This course considers the ways that women, in the metropolises of Europe and throughout colonial settings, found their lives shaped by empire. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316C. Women and Gender in the Early Modern Atlantic World.**

This course introduces students to the themes, topics, and issues that animate the histories of African, European, and indigenous women in the Atlantic World from 1500 to 1800. Emphasis will be placed on comparisons between empires and on the methodological challenges of researching early modern women.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318A. Eighteenth Century England.**

A seminar based on selected topics in political, social, intellectual, and economic history of England from 1688 to 1815. May be repeated with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5318C. The Age of the Stuarts.**

A study of selected topics in English history between 1603 and 1714.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5318D. European Imperialism.**

Europe's penchant for building empires helped to greatly enhance their influence (economic, political, and cultural) from the fifteenth to the twentieth century. The course will review the major European empires and discuss the extent of their influence during this 500 year span.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318E. European Sexualities.**

This course examines the history of sexuality of Europe in the modern era. It considers how the history of sexuality intersects with and explicates many of the crucial events in modern European history including empire, total war, communism, fascism, decolonization, and immigration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318F. European Fascisms and Historical Memory.**

This course compares historical and contemporary manifestations of fascism in Europe. It considers how the historical memory of fascism has impacted historical memory of the past, contemporary movements, legal structures, museums, and other historical monuments in Europe today.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5319. The Age of the Tudors.**

This readings-based course emphasizes differing interpretations of selected topics in English history from circa 1485 to 1603. Constitutional, political, governmental, social, religious, and cultural aspects of the era are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5323A. Society and Culture in Brazil.**

This seminar explores the social and cultural history of Brazil through its various ages, the "Age of Sugar", the "Age of Coffee", the "Age of Pedro II", the "Belle Epoque", and the worlds of the sugar and coffee barons. It explores the character of these ages marked by the grand plantation houses, devotion to European models, and the conflict with a slave society, covering the years from the colonial period to the turn of the twentieth century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5323B. History of Race and Slavery in Brazil.**

This course assesses the literature on race relations and slavery in Brazil. It situates the topic within a comparative, Atlantic framework and provides a critical understanding of the chief issues and debates in the field. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324B. Race, Class, and Nation in Modern Latin America.**

A seminar that examines the relationship between race, class, and nation building in Latin America, beginning with independence in the nineteenth century and continuing to contemporary times. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324C. Slavery and Emancipation in the Americas.**

This course examines slavery in the Americas in its full social, political, and economic context. Students will enlarge their understanding of slavery by using an international, transatlantic framework for comparison. The course strengthens analytical skills through extensive discussion as well as significant writing and research. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324D. Writing the History of Latin America: The Colonial Era.**

This readings seminar provides a critical assessment of the main themes and debates of colonial Latin American historiography. The course discusses the different paradigms under which historians have approached the cultures and societies of the region under Spanish and Portuguese rule, emphasizing on the latest trends and developments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324E. Modern Latin American Revolutions.**

The course is a seminar that examines and compares the causes, consequences and results of Latin America's twentieth century revolutions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325A. History of Mexico to 1848.**

A topic course studying the history of Mexico from pre-historic times to the Treaty of Guadalupe Hidalgo. The course encompasses the development of Indian societies from the Yucatan to the American Southwest preceding the Spanish conquest, the social, economic, and political development of Spanish colonial Mexico, the War in Independence, and the formation of the new nation through the war with the United States. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325C. Revolutionary Mexico.**

A graduate seminar that explores the interrelated economic, social, political, and cultural conditions and forces that shaped revolutionary Mexico. Ideological currents that impacted the period will be examined. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325D. Mexico Since the Revolution.**

This class is a Graduate Seminar covering the History of Post-Revolutionary Mexico. This course will explore the history of Mexico since the Revolution, including the social, cultural, and economic legacies of the Revolution, as well as the process of State building, one party rule, globalization, and the transition to democracy. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5335. Twentieth-Century Russia.**

A seminar based on selected topics in recent Russian history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5336. East European History.**

A seminar based on selected topics in recent East European history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5341B. Caribbean Transnationalism and Diplomacy.**

This seminar focuses on the international relations of the twentieth-century Caribbean, with emphasis on interactions between Cuba, the Dominican Republic, Haiti, Jamaica, the United States, and Venezuela. Students will analyze the ways that international action and response in these countries have affected policy, government, and international social movements. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5343. The Progressive Era.**

This course is a seminar on the rise of industrial capitalism and corporate power and the public response to the related restructuring of the social and economic order between 1890 and 1920, with particular emphasis on the strengths and weaknesses of progressivism as a democratic movement for reform. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5344. History and Memory.**

This course examines the way that groups shape the the collective memory of past events, how memory shifts over time, and the way it can be influenced by present influences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5345D. Oral History: Theory & Practice.**

A seminar based upon developing a theoretical and practical understanding of the techniques of oral historical research and document preservation and presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345M. History of Utopian Communities.**

This seminar examines utopian experiments in American History. Starting with John Winthrop's 1630 "City upon a Hill," the course explores both religious and secular communal ventures through the eighteenth and nineteenth centuries. The course concludes with an examination of counter-cultural, twentieth-century communes, intentional communities, and cultic separatists.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter



**HIST 5345N. Transformation of the South.**

This course is a readings research seminar on African-American culture and life in the twentieth century South from 1890-1971. The course provides the students with a thorough historical examination through biographies and community studies of specific issues and events that ended legal segregation in the South. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345O. Immigration and US History.**

This course focuses on North American immigration history from colonial times to the present and looks at how both immigrants and native-born Americans struggled to reconcile conflicting notions of identity and national loyalty. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345P. History of Mexican American Music in the Southwest.**

This class will introduce students to the musical history of Islamic Spain, Spanish Colonial Mexico, and Mexico and investigate the influences of these traditions on the development of Mexican-American music in the American Southwest. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345Q. Gender and Citizenship.**

This course is designed to introduce students to the literature in United States history that addresses issues of gender and how they relate to US citizenship from the colonial period to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345R. History of Country Music.**

This seminar traces the various ethnic, social, cultural, political, economic, and demographic forces in American society that have helped shape country music. Students will also explore how this uniquely American cultural idiom mirrors the historical evolution of the United States.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345S. Theories and Methods in Popular Music History/Culture Studies.**

This is a course in the theories and methods of cultural studies and popular music history for graduate students. It is intended to review the history of debates and methodologies in the field to prepare students to do original work that fits into the larger conversations in popular music studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5345T. Biography and American History.**

In this class students will delve into the practice of biography and the ways in which biographers convey American history and culture through a life story.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5345U. Dark Tourism: Interpreting Historic Sites of Oppression, Death, and Disaster.**

This course examines issues and effective methods of interpreting historic sites open to visitors associated with tragic historical events and practices, such as battlefields, concentration camps, massacre sites, and plantation houses, that are to the public. Dark tourism sites in the United States and around the world will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5346. African American History.**

This course is an intensive readings and research seminar in African American History. Through the uses of lectures, biographies, institutional histories and community studies, students will be introduced to the different interpretive themes and methodologies that have created the myriad of historical interpretations and reinterpretations of African American History. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5347. Texas History.**

A seminar based on selected topics in the history of Texas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5348. History of Texas Music.**

This course examines the evolution of music in Texas and the American Southwest from pre-Colombian times to the present, with an emphasis on how music reflects the ethnically diverse history and culture of the region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5350. The Frontier in American History.**

A seminar based on selected topics in the history of the frontier in American development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5351B. Cold War America.**

This course examines the Cold War years 1945 to 1960, concentrating on the domestic scene. The class will discuss the major issues of domestic politics, society, and culture, through the use of both primary and secondary sources. They will also examine the historiography of the period. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351C. Race, Gender, and Ethnicity in American Labor History.**

This graduate seminar explores the impact of race, gender, and ethnicity upon American Labor History. Readings integrate race, gender, and ethnicity as categories of analysis into the study of class formation, experiences, and consciousness within the American labor force. The focus will be on unorganized as well as organized workers in the context of their social, cultural, political, and workplace environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351D. Politics & Society of Postwar America, 1945-Present.**

This course will explore the interaction of political, economic, and social forces in the years following the Second World War. Emphasis will be placed on analyzing the interdependent relationship between political structures, social movements, and economic circumstances. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351E. Foundations of the U.S. Conservation Movement.**

The course will provide an overview of the conservation movement from the writings of Henry David Thoreau to publication of Rachel Carson's *Silent Spring*. Emphasis will be on social and cultural influences, with particular attention to government programs, naturalist literature, activism, movement leaders, and landmarks of environmental debate.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5351F. US Women's History.**

This course offers graduate students an introduction in the topics, themes, and issues that animate the history of women in the US. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351H. US Latino/a History.**

This course explores the histories, cultures, and politics that shape Latino/a experiences in the United States and examines the way Latino communities helped shape the making of the nation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5353. Greater Southwestern History.**

A seminar based on selected topics in the history of the Greater American Southwest. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5358. Sectionalism & Slavery in the United States.**

This course assesses the literature on the causes and consequences of the sectional conflict between the American North and the South before the Civil War, with particular focus on works examining the slavery issue and the way it exacerbated American sectionalism, leading to the fracturing of the American nation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5361. Historiography and Methods.**

A general introduction to key concepts, approaches, and challenges involved in reading, researching, and writing history at the professional level.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5362. Military History.**

This seminar is based on selected topics in military history. May be repeated with different emphases up to nine hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5363. Antebellum American Society & Culture.**

This seminar explores the cultural dynamics, social relations, and political and economic structures that shaped the lives of ordinary Americans in the three decades before the Civil War. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5367. US Era of Civil War and Reconstruction.**

A seminar that examines the history of the causes, course, and consequences of the American Civil War and the efforts to reconstruct the American Nation in its aftermath. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5369. Music and Social Movements.**

This course examines the historical role music has played in a variety of social movements related to race, gender, ethnicity, religion, politics, economics, education, labor, civil rights, and other issues in U.S. history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5371. The Practice of Public History.**

A seminar addressing the definition, evolution, and philosophy of public history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5372. The Practice of Museum Studies and Material Culture.**

A seminar addressing the history, organization, and functions of history museums.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5373. The Practice of Historic Preservation.**

A seminar addressing architectural history and preservation theory and practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5374. Public History Internship.**

Application of skills in public history in an on-the job setting. Internships will be selected by the student and instructor, and will be supervised by the instructor. May be repeated once for additional credit.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5375A. Documentary Film.**

The use of film & video in public programming; research & produce documents.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375B. Archival Management.**

A seminar based on the history, theory, and practice of archival management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375C. Cultural Resource Management.**

This seminar addresses the management of cultural resources such as historic buildings, historic sites, and other tangible remains of our heritage. It explores how cultural resources are preserved and managed under federal and state law, and the nature of the regulatory practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375D. Material Culture in America.**

This course examines the interactions between people and things in American society. The ways in which Americans have created, used, altered, and thought about material objects help us to understand history. Readings and research will focus on the values and attitudes embodied in the production, use, and preservation of objects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375E. Management & Administration in Historical Organizations.**

This course provides an introduction to the non-profit based management, leadership, and administration issues and practices for historical organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375F. Education Programs in Historical/Cultural Institutions.**

This course will study the role of education programs as primary to the missions of historical and cultural institutions and will explore how institutions create and evaluate formal and informal education programs and materials for a variety of audiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375I. Heritage in a Global Context.**

Heritage management is the interdisciplinary approach to the preservation, protection, and public use of the historical record. This course examines definitions and approaches within a global context. Theory and practice will be analyzed through case studies and real world examples. Current issues, sustainability and maritime issues/practices will be included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5375J. American Architectural History.**

This course will analyze the historical development of American architecture, and examine architecture as evidence of America's cultural, social, economic, and technological evolution from 1607 to the present. Focus will be placed on the role of historic American architecture in the practice of public history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375K. Evaluating Historic Sites.**

Every year millions of tourists flock to historic sites desiring to commune with "real" history, to "feel" the past. This course will introduce students to methods that scholars use to examine critically the interpretation of history at these sites without discounting the emotional connection to place that many visitors experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375L. Controversy and History.**

This seminar explores how controversy, power relations, and politics are embedded in the practice of public history. It is designed to help the future practitioner navigate the complex political landscape of public history. This course is informed by the professor's experience as a consultant and federal historian. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5375M. Writing for Public History.**

This will be a course intensively focused on research and writing specifically for public history audiences through a variety of venues: journal articles, magazine/newspaper articles, brochures, promotional literature, personal essays, historical markers, reviews, websites, cultural resource management "gray literature," and professional papers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375N. Digital History.**

Students will study the history of print and digital media to better understand the practice of digital history. They will be introduced to a variety of digital approaches to the study of history, and they will produce and contribute to a variety of digital projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375O. Records Management & Institutional Archives.**

This course will introduce students to the principles and theories in records management and institutional archives. It will provide practical experience creating a records retentions schedule, researching retention requirements and best practices, appraising records with enduring value, and establishing archival series to accommodate ongoing acquisition of institutional records.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375P. The Family and Child in History and Heritage.**

This course examines the historical development of the family and childhood using academic family history methods and public approaches to family heritage. It examines differing experiences of ancestors and concepts of family and childhood over time by race, class, and gender, reflecting shifts in culture, economy, and power relations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5376. Local and Community History.**

A seminar applying historical methods to the study of U.S. communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5377. Public History Project.**

A team project focusing on one or more aspects of public history- museum exhibit, historic site interpretation, historic resources survey, etc. Repeatable with a different emphasis.

**3 Credit Hours. 1 Lecture Contact Hour. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5379A. Public History Final Master's Project.**

This course will be the initial development of an individualized, advanced student project in cooperation with a client or host institution, focused on any one or a combination of the public history areas of historic preservation, archives, oral history, museums, local and community history or cultural resource management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5379B. Public History Final Master's Project.**

This course, to be taken during the last year of the Public History program, is the continuation of an individualized, advanced student project focused on any one or a combination of the public history areas of historic preservation, archives, oral history, museums, local and community history or cultural resource management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5381. Chinese Communism.**

The Chinese Communist movement from 1919 to the present. Will focus on (1) urban and rural aspects of Chinese Communism; (2) the rise to power of the Chinese Communist Party on mainland China in 1949; and (3) the construction of the Party-State and Socialism in the People's Republic of China. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5382. China and the Modern World.**

This course examines Chinese relations with the modern world from 1800 to the present, focusing on the external aggression and internal transformation between 1839 and 1945; the split into two Chinas in 1949; the mainland China/Taiwan developments, interactions between the two Chinese governments and among the world community since then. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5385. Topics in the History of the Modern Middle East.**

A seminar based on selected topics from current histories of the Middle East during the 19th and 20th centuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HIST 5388. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who need to prepare for their comprehensive exams (written and oral).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HIST 5390. Problems in Historical Research.**

This course is open to graduate students on an individual basis by arrangement with the department. May be repeated with the approval of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5395D. Interpretations of World History.**

A survey of world history that focuses on Western civilization as the catalyst of change in world history since the tenth century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5395E. Mahatma Gandhi in World History.**

In this course students explore how writers have narrated Gandhi's life and interpreted his historical role. Students will research aspects of Gandhi's life using primary sources. The focus of the course will be the study of material left out of histories on Gandhi and reasons for omitted material. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395H. European Colonialism.**

This seminar examines the variety of European imperial and colonial experiences around the world from ancient to modern times through selected primary sources and historical literature. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395I. Global Cold War.**

This seminar will survey literature characteristic of the "new" Cold War historiography, and introduce students to primary sources available at Alkek required to write valuable original work. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395J. Foreigners in Japan, 1850-2000.**

This course investigates a central question that arises in discussions of Japan: What have been the effects of foreign influences on Japanese society? Materials for study focus on memoirs written by foreigners – from Europe, the Americas, and East Asia – as they describe their lives in the country through various eras since 1850.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**HIST 5398. General Research Seminar.**

A seminar designed to enhance research and writing skills in history. May be repeated for credit as topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in History 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5588. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who need to prepare for their comprehensive exams (written and oral) and retain half-time status.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5988. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who, having completed all other coursework, need to prepare for their comprehensive exams (written and oral) and retain full-time status.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The graduate program in History is designed to prepare students for careers in professional history (college teaching, research, or writing), public history, historic tourism, preservation, museums, consulting, public

education (secondary teaching), and to provide a general liberal arts education for students desiring careers in business, journalism, law, and government service.

Individuals interested in a more detailed description of the graduate program in history should request a copy of the Graduate Student Handbook from the Department of History. Copies of the Graduate Student Handbook and other information may be obtained from the department's website at <http://www.txstate.edu/history> (<http://www.txstate.edu/history/>).

## Financial Assistance

A limited number of assistantships and scholarships are available to qualified graduate students. Prospective students interested in applying for an assistantship should contact the graduate director in the Department of History. The Graduate College can provide further information about scholarships.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application (<https://apply.gradcollege.txstate.edu/apply/>)
- \$55 nonrefundable application fee  
or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- a copy of an official transcript from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours (<https://www.gradcollege.txstate.edu/admissions/policy.html#gpa>) of undergraduate course work (plus any completed graduate courses)
- minimum 3.25 GPA in a minimum of 24 hours of undergraduate history course work
- GRE not required
- resume/CV highlighting academic achievements

- statement of purpose (750-1000 words with name in header) describing how the student's undergraduate experience in history courses directed their career toward graduate-level work in history or how that experience shaped their expectation of work in history at the graduate level at Texas State University.
- two letters of recommendation with at least one from a history professor (if the student majored in history)
- language competency statement: Thesis students should assess their level of competency to read and research in any languages other than English that could be essential to their area of study or thesis topic. They should provide a brief explanation of any relevant language competencies, including the means through which they acquired them, any plans to improve them, and a self-assessment of reading and speaking skills in terms of basic, intermediate, proficient, advanced, and native abilities. If an applicant plans to research and study in English language sources only, then they should simply state this.
- writing sample, preferably a research paper of 15 to 20 pages in length, produced during the student's coursework. If the student is unable to submit a paper of this type, please contact the Director of Graduate Studies (jd65@txstate.edu) to discuss other acceptable submissions.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 [overall](#)
- official IELTS (academic) scores required with a 6.5 overall
  - [minimum individual module scores of 6.0](#)
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Arts (M.A.) degree with a major in History concentration in Public History requires 36 semester credit hours. Students must earn a grade of "B" or better in all history courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
HIST 5361	Historiography and Methods	3
HIST 5371	The Practice of Public History	3
HIST 5374	Public History Internship	3
HIST 5398	General Research Seminar	3
<b>Concentration</b>		
Choose 12 hours from the following courses. Students have the option of taking a maximum of six hours of electives in a single outside field with the graduate advisor's approval. These courses must support their special research or career-related needs and interests.		12
HIST 5345D	Oral History: Theory & Practice	

HIST 5351E	Foundations of the U.S. Conservation Movement
HIST 5372	The Practice of Museum Studies and Material Culture
HIST 5373	The Practice of Historic Preservation
HIST 5375A	Documentary Film
HIST 5375B	Archival Management
HIST 5375C	Cultural Resource Management
HIST 5375D	Material Culture in America
HIST 5375E	Management & Administration in Historical Organizations
HIST 5375F	Education Programs in Historical/Cultural Institutions
HIST 5375I	Heritage in a Global Context
HIST 5375J	American Architectural History
HIST 5375K	Evaluating Historic Sites
HIST 5375L	Controversy and History
HIST 5375M	Writing for Public History
HIST 5375N	Digital History
HIST 5375O	Records Management & Institutional Archives
HIST 5375P	The Family and Child in History and Heritage
HIST 5376	Local and Community History
HIST 5377	Public History Project

### Prescribed Electives

Choose 9 hours from the following: 9

HIST 5307	Medieval European History: Contemporary Trends in Medieval Historiography
HIST 5309D	Early Modern Spain
HIST 5310	Western European History Since 1815
HIST 5313	Early American History
HIST 5314	Ethnohistory
HIST 5315A	American Sexualities
HIST 5315B	Queer History: GLBT Histories in the United States
HIST 5316A	Women's Rights in Comparative Perspective
HIST 5316B	Women and Empire
HIST 5318A	Eighteenth Century England
HIST 5318C	The Age of the Stuarts
HIST 5318D	European Imperialism
HIST 5319	The Age of the Tudors
HIST 5323A	Society and Culture in Brazil
HIST 5323B	History of Race and Slavery in Brazil
HIST 5324B	Race, Class, and Nation in Modern Latin America
HIST 5324C	Slavery and Emancipation in the Americas
HIST 5324D	Writing the History of Latin America: The Colonial Era
HIST 5324E	Modern Latin American Revolutions
HIST 5325A	History of Mexico to 1848
HIST 5325C	Revolutionary Mexico
HIST 5325D	Mexico Since the Revolution
HIST 5335	Twentieth-Century Russia
HIST 5336	East European History
HIST 5341B	Caribbean Transnationalism and Diplomacy
HIST 5343	The Progressive Era
HIST 5344	History and Memory

HIST 5345M	History of Utopian Communities
HIST 5345N	Transformation of the South
HIST 5345O	Immigration and US History
HIST 5345P	History of Mexican American Music in the Southwest
HIST 5345Q	Gender and Citizenship
HIST 5345R	History of Country Music
HIST 5345S	Theories and Methods in Popular Music History/ Culture Studies
HIST 5345T	Biography and American History
HIST 5346	African American History
HIST 5347	Texas History
HIST 5348	History of Texas Music
HIST 5350	The Frontier in American History
HIST 5351B	Cold War America
HIST 5351C	Race, Gender, and Ethnicity in American Labor History
HIST 5351D	Politics & Society of Postwar America, 1945-Present
HIST 5351F	US Women's History
HIST 5351H	US Latino/a History
HIST 5353	Greater Southwestern History
HIST 5358	Sectionalism & Slavery in the United States
HIST 5362	Military History
HIST 5363	Antebellum American Society & Culture
HIST 5367	US Era of Civil War and Reconstruction
HIST 5369	Music and Social Movements
HIST 5381	Chinese Communism
HIST 5382	China and the Modern World
HIST 5385	Topics in the History of the Modern Middle East
HIST 5390	Problems in Historical Research
HIST 5395D	Interpretations of World History
HIST 5395E	Mahatma Gandhi in World History
HIST 5395H	European Colonialism
HIST 5395I	Global Cold War
May choose 6 hours of advisor-approved electives from outside the department	
<b>Comprehensive Examination</b>	
Choose a minimum of 3 hours from the following:	
HIST 5388	Comprehensive Examinations
HIST 5588	Comprehensive Examinations
HIST 5988	Comprehensive Examinations

**Total Hours****36**

## Comprehensive Examination Requirement

The comprehensive examination will consist of written and oral portions. The comprehensive exam should be taken during the last semester of course work. Exams must be completed within one year of the student's last semester of classes except under extraordinary circumstances. Students who perform unacceptably on the exam may take the exam a second time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in History: HIST

## Courses Offered

### History (HIST)

#### HIST 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### HIST 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### HIST 5301. Instructional Methods Practicum for Graduate Assistants.

Required as a condition of employment for graduate teaching and instructional assistants. This course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### HIST 5307. Medieval European History: Contemporary Trends in Medieval Historiography.

This course introduces graduate students to the craft of the medieval historian, with emphasis on major contemporary shifts in American historiography of the European Middle Ages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### HIST 5309D. Early Modern Spain.

A seminar based on selected topics in political, social, intellectual, and economic history of Spain from 1450 to 1815. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### HIST 5310. Western European History Since 1815.

A seminar based on selected topics in the history of Western Europe from 1815 to the present. May be repeated with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HIST 5313. Early American History.**

A seminar based on selected topics in the Colonial Revolutionary and Early National periods of the United States history. May be repeated with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5314. Ethnohistory.**

This seminar seeks to familiarize students with current questions, methods, theories, and debates in ethnohistory, a multidisciplinary approach to the history of indigenous peoples. Materials studied will include both classic and recent ethnohistorical works. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5315A. American Sexualities.**

This course addresses the history of sexualities in the United States from the colonial era to present to shed light on the ways that sexuality has shaped social life, establish conventions, and created spaces to defy norms. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5315B. Queer History: GLBT Histories in the United States.**

This course examines the histories of different sexual minorities from the colonial era to present, though the majority of the course focuses on the twentieth century, to explore the rise of the modern lesbian, gay, bisexual, and transgender identities, politics, and culture. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316A. Women's Rights in Comparative Perspective.**

This course considers national, transnational, and global development of campaigns for women's rights since the nineteenth century. The course examines how women agitated for their rights in different cultural and historical moments. Students will gain familiarity with comparative feminisms, the gendered nature of liberal movements, and women's activism in national and international arenas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316B. Women and Empire.**

From 1492 until World War II the globe was dominated by imperialism. This course considers the ways that women, in the metropolises of Europe and throughout colonial settings, found their lives shaped by empire. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316C. Women and Gender in the Early Modern Atlantic World.**

This course introduces students to the themes, topics, and issues that animate the histories of African, European, and indigenous women in the Atlantic World from 1500 to 1800. Emphasis will be placed on comparisons between empires and on the methodological challenges of researching early modern women.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318A. Eighteenth Century England.**

A seminar based on selected topics in political, social, intellectual, and economic history of England from 1688 to 1815. May be repeated with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5318C. The Age of the Stuarts.**

A study of selected topics in English history between 1603 and 1714.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5318D. European Imperialism.**

Europe's penchant for building empires helped to greatly enhance their influence (economic, political, and cultural) from the fifteenth to the twentieth century. The course will review the major European empires and discuss the extent of their influence during this 500 year span.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318E. European Sexualities.**

This course examines the history of sexuality of Europe in the modern era. It considers how the history of sexuality intersects with and explicates many of the crucial events in modern European history including empire, total war, communism, fascism, decolonization, and immigration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318F. European Fascisms and Historical Memory.**

This course compares historical and contemporary manifestations of fascism in Europe. It considers how the historical memory of fascism has impacted historical memory of the past, contemporary movements, legal structures, museums, and other historical monuments in Europe today.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5319. The Age of the Tudors.**

This readings-based course emphasizes differing interpretations of selected topics in English history from circa 1485 to 1603. Constitutional, political, governmental, social, religious, and cultural aspects of the era are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5323A. Society and Culture in Brazil.**

This seminar explores the social and cultural history of Brazil through its various ages, the "Age of Sugar", the "Age of Coffee", the "Age of Pedro II", the "Belle Epoque", and the worlds of the sugar and coffee barons. It explores the character of these ages marked by the grand plantation houses, devotion to European models, and the conflict with a slave society, covering the years from the colonial period to the turn of the twentieth century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5323B. History of Race and Slavery in Brazil.**

This course assesses the literature on race relations and slavery in Brazil. It situates the topic within a comparative, Atlantic framework and provides a critical understanding of the chief issues and debates in the field. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324B. Race, Class, and Nation in Modern Latin America.**

A seminar that examines the relationship between race, class, and nation building in Latin America, beginning with independence in the nineteenth century and continuing to contemporary times. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324C. Slavery and Emancipation in the Americas.**

This course examines slavery in the Americas in its full social, political, and economic context. Students will enlarge their understanding of slavery by using an international, transatlantic framework for comparison. The course strengthens analytical skills through extensive discussion as well as significant writing and research. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324D. Writing the History of Latin America: The Colonial Era.**

This readings seminar provides a critical assessment of the main themes and debates of colonial Latin American historiography. The course discusses the different paradigms under which historians have approached the cultures and societies of the region under Spanish and Portuguese rule, emphasizing on the latest trends and developments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324E. Modern Latin American Revolutions.**

The course is a seminar that examines and compares the causes, consequences and results of Latin America's twentieth century revolutions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325A. History of Mexico to 1848.**

A topic course studying the history of Mexico from pre-historic times to the Treaty of Guadalupe Hidalgo. The course encompasses the development of Indian societies from the Yucatan to the American Southwest preceding the Spanish conquest, the social, economic, and political development of Spanish colonial Mexico, the War in Independence, and the formation of the new nation through the war with the United States. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325C. Revolutionary Mexico.**

A graduate seminar that explores the interrelated economic, social, political, and cultural conditions and forces that shaped revolutionary Mexico. Ideological currents that impacted the period will be examined. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter



**HIST 5325D. Mexico Since the Revolution.**

This class is a Graduate Seminar covering the History of Post-Revolutionary Mexico. This course will explore the history of Mexico since the Revolution, including the social, cultural, and economic legacies of the Revolution, as well as the process of State building, one party rule, globalization, and the transition to democracy. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5335. Twentieth-Century Russia.**

A seminar based on selected topics in recent Russian history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5336. East European History.**

A seminar based on selected topics in recent East European history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5341B. Caribbean Transnationalism and Diplomacy.**

This seminar focuses on the international relations of the twentieth-century Caribbean, with emphasis on interactions between Cuba, the Dominican Republic, Haiti, Jamaica, the United States, and Venezuela. Students will analyze the ways that international action and response in these countries have affected policy, government, and international social movements. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5343. The Progressive Era.**

This course is a seminar on the rise of industrial capitalism and corporate power and the public response to the related restructuring of the social and economic order between 1890 and 1920, with particular emphasis on the strengths and weaknesses of progressivism as a democratic movement for reform. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5344. History and Memory.**

This course examines the way that groups shape the the collective memory of past events, how memory shifts over time, and the way it can be influenced by present influences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5345D. Oral History: Theory & Practice.**

A seminar based upon developing a theoretical and practical understanding of the techniques of oral historical research and document preservation and presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345M. History of Utopian Communities.**

This seminar examines utopian experiments in American History. Starting with John Winthrop's 1630 "City upon a Hill," the course explores both religious and secular communal ventures through the eighteenth and nineteenth centuries. The course concludes with an examination of counter-cultural, twentieth-century communes, intentional communities, and cultic separatists.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345N. Transformation of the South.**

This course is a readings research seminar on African-American culture and life in the twentieth century South from 1890-1971. The course provides the students with a thorough historical examination through biographies and community studies of specific issues and events that ended legal segregation in the South. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345O. Immigration and US History.**

This course focuses on North American immigration history from colonial times to the present and looks at how both immigrants and native-born Americans struggled to reconcile conflicting notions of identity and national loyalty. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345P. History of Mexican American Music in the Southwest.**

This class will introduce students to the musical history of Islamic Spain, Spanish Colonial Mexico, and Mexico and investigate the influences of these traditions on the development of Mexican-American music in the American Southwest. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345Q. Gender and Citizenship.**

This course is designed to introduce students to the literature in United States history that addresses issues of gender and how they relate to US citizenship from the colonial period to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345R. History of Country Music.**

This seminar traces the various ethnic, social, cultural, political, economic, and demographic forces in American society that have helped shape country music. Students will also explore how this uniquely American cultural idiom mirrors the historical evolution of the United States.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345S. Theories and Methods in Popular Music History/Culture Studies.**

This is a course in the theories and methods of cultural studies and popular music history for graduate students. It is intended to review the history of debates and methodologies in the field to prepare students to do original work that fits into the larger conversations in popular music studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5345T. Biography and American History.**

In this class students will delve into the practice of biography and the ways in which biographers convey American history and culture through a life story.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5345U. Dark Tourism: Interpreting Historic Sites of Oppression, Death, and Disaster.**

This course examines issues and effective methods of interpreting historic sites open to visitors associated with tragic historical events and practices, such as battlefields, concentration camps, massacre sites, and plantation houses, that are to the public. Dark tourism sites in the United States and around the world will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5346. African American History.**

This course is an intensive readings and research seminar in African American History. Through the uses of lectures, biographies, institutional histories and community studies, students will be introduced to the different interpretive themes and methodologies that have created the myriad of historical interpretations and reinterpretations of African American History. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5347. Texas History.**

A seminar based on selected topics in the history of Texas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5348. History of Texas Music.**

This course examines the evolution of music in Texas and the American Southwest from pre-Colombian times to the present, with an emphasis on how music reflects the ethnically diverse history and culture of the region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5350. The Frontier in American History.**

A seminar based on selected topics in the history of the frontier in American development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5351B. Cold War America.**

This course examines the Cold War years 1945 to 1960, concentrating on the domestic scene. The class will discuss the major issues of domestic politics, society, and culture, through the use of both primary and secondary sources. They will also examine the historiography of the period. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351C. Race, Gender, and Ethnicity in American Labor History.**

This graduate seminar explores the impact of race, gender, and ethnicity upon American Labor History. Readings integrate race, gender, and ethnicity as categories of analysis into the study of class formation, experiences, and consciousness within the American labor force. The focus will be on unorganized as well as organized workers in the context of their social, cultural, political, and workplace environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351D. Politics & Society of Postwar America, 1945-Present.**

This course will explore the interaction of political, economic, and social forces in the years following the Second World War. Emphasis will be placed on analyzing the interdependent relationship between political structures, social movements, and economic circumstances. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351E. Foundations of the U.S. Conservation Movement.**

The course will provide an overview of the conservation movement from the writings of Henry David Thoreau to publication of Rachel Carson's *Silent Spring*. Emphasis will be on social and cultural influences, with particular attention to government programs, naturalist literature, activism, movement leaders, and landmarks of environmental debate.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5351F. US Women's History.**

This course offers graduate students an introduction in the topics, themes, and issues that animate the history of women in the US. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351H. US Latino/a History.**

This course explores the histories, cultures, and politics that shape Latino/a experiences in the United States and examines the way Latino communities helped shape the making of the nation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5353. Greater Southwestern History.**

A seminar based on selected topics in the history of the Greater American Southwest. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5358. Sectionalism & Slavery in the United States.**

This course assesses the literature on the causes and consequences of the sectional conflict between the American North and the South before the Civil War, with particular focus on works examining the slavery issue and the way it exacerbated American sectionalism, leading to the fracturing of the American nation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5361. Historiography and Methods.**

A general introduction to key concepts, approaches, and challenges involved in reading, researching, and writing history at the professional level.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5362. Military History.**

This seminar is based on selected topics in military history. May be repeated with different emphases up to nine hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5363. Antebellum American Society & Culture.**

This seminar explores the cultural dynamics, social relations, and political and economic structures that shaped the lives of ordinary Americans in the three decades before the Civil War. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5367. US Era of Civil War and Reconstruction.**

A seminar that examines the history of the causes, course, and consequences of the American Civil War and the efforts to reconstruct the American Nation in its aftermath. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5369. Music and Social Movements.**

This course examines the historical role music has played in a variety of social movements related to race, gender, ethnicity, religion, politics, economics, education, labor, civil rights, and other issues in U.S. history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5371. The Practice of Public History.**

A seminar addressing the definition, evolution, and philosophy of public history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5372. The Practice of Museum Studies and Material Culture.**

A seminar addressing the history, organization, and functions of history museums.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5373. The Practice of Historic Preservation.**

A seminar addressing architectural history and preservation theory and practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5374. Public History Internship.**

Application of skills in public history in an on-the-job setting. Internships will be selected by the student and instructor, and will be supervised by the instructor. May be repeated once for additional credit.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5375A. Documentary Film.**

The use of film & video in public programming; research & produce documents.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375B. Archival Management.**

A seminar based on the history, theory, and practice of archival management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375C. Cultural Resource Management.**

This seminar addresses the management of cultural resources such as historic buildings, historic sites, and other tangible remains of our heritage. It explores how cultural resources are preserved and managed under federal and state law, and the nature of the regulatory practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375D. Material Culture in America.**

This course examines the interactions between people and things in American society. The ways in which Americans have created, used, altered, and thought about material objects help us to understand history. Readings and research will focus on the values and attitudes embodied in the production, use, and preservation of objects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375E. Management & Administration in Historical Organizations.**

This course provides an introduction to the non-profit based management, leadership, and administration issues and practices for historical organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375F. Education Programs in Historical/Cultural Institutions.**

This course will study the role of education programs as primary to the missions of historical and cultural institutions and will explore how institutions create and evaluate formal and informal education programs and materials for a variety of audiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375I. Heritage in a Global Context.**

Heritage management is the interdisciplinary approach to the preservation, protection, and public use of the historical record. This course examines definitions and approaches within a global context. Theory and practice will be analyzed through case studies and real world examples. Current issues, sustainability and maritime issues/practices will be included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5375J. American Architectural History.**

This course will analyze the historical development of American architecture, and examine architecture as evidence of America's cultural, social, economic, and technological evolution from 1607 to the present. Focus will be placed on the role of historic American architecture in the practice of public history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375K. Evaluating Historic Sites.**

Every year millions of tourists flock to historic sites desiring to commune with "real" history, to "feel" the past. This course will introduce students to methods that scholars use to examine critically the interpretation of history at these sites without discounting the emotional connection to place that many visitors experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375L. Controversy and History.**

This seminar explores how controversy, power relations, and politics are embedded in the practice of public history. It is designed to help the future practitioner navigate the complex political landscape of public history. This course is informed by the professor's experience as a consultant and federal historian. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5375M. Writing for Public History.**

This will be a course intensively focused on research and writing specifically for public history audiences through a variety of venues: journal articles, magazine/newspaper articles, brochures, promotional literature, personal essays, historical markers, reviews, websites, cultural resource management "gray literature," and professional papers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375N. Digital History.**

Students will study the history of print and digital media to better understand the practice of digital history. They will be introduced to a variety of digital approaches to the study of history, and they will produce and contribute to a variety of digital projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375O. Records Management & Institutional Archives.**

This course will introduce students to the principles and theories in records management and institutional archives. It will provide practical experience creating a records retentions schedule, researching retention requirements and best practices, appraising records with enduring value, and establishing archival series to accommodate ongoing acquisition of institutional records.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375P. The Family and Child in History and Heritage.**

This course examines the historical development of the family and childhood using academic family history methods and public approaches to family heritage. It examines differing experiences of ancestors and concepts of family and childhood over time by race, class, and gender, reflecting shifts in culture, economy, and power relations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5376. Local and Community History.**

A seminar applying historical methods to the study of U.S. communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5377. Public History Project.**

A team project focusing on one or more aspects of public history- museum exhibit, historic site interpretation, historic resources survey, etc. Repeatable with a different emphasis.

**3 Credit Hours. 1 Lecture Contact Hour. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5379A. Public History Final Master's Project.**

This course will be the initial development of an individualized, advanced student project in cooperation with a client or host institution, focused on any one or a combination of the public history areas of historic preservation, archives, oral history, museums, local and community history or cultural resource management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5379B. Public History Final Master's Project.**

This course, to be taken during the last year of the Public History program, is the continuation of an individualized, advanced student project focused on any one or a combination of the public history areas of historic preservation, archives, oral history, museums, local and community history or cultural resource management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5381. Chinese Communism.**

The Chinese Communist movement from 1919 to the present. Will focus on (1) urban and rural aspects of Chinese Communism; (2) the rise to power of the Chinese Communist Party on mainland China in 1949; and (3) the construction of the Party-State and Socialism in the People's Republic of China. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5382. China and the Modern World.**

This course examines Chinese relations with the modern world from 1800 to the present, focusing on the external aggression and internal transformation between 1839 and 1945; the split into two Chinas in 1949; the mainland China/Taiwan developments, interactions between the two Chinese governments and among the world community since then. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5385. Topics in the History of the Modern Middle East.**

A seminar based on selected topics from current histories of the Middle East during the 19th and 20th centuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HIST 5388. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who need to prepare for their comprehensive exams (written and oral).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**HIST 5390. Problems in Historical Research.**

This course is open to graduate students on an individual basis by arrangement with the department. May be repeated with the approval of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5395D. Interpretations of World History.**

A survey of world history that focuses on Western civilization as the catalyst of change in world history since the tenth century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5395E. Mahatma Gandhi in World History.**

In this course students explore how writers have narrated Gandhi's life and interpreted his historical role. Students will research aspects of Gandhi's life using primary sources. The focus of the course will be the study of material left out of histories on Gandhi and reasons for omitted material. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395H. European Colonialism.**

This seminar examines the variety of European imperial and colonial experiences around the world from ancient to modern times through selected primary sources and historical literature. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395I. Global Cold War.**

This seminar will survey literature characteristic of the "new" Cold War historiography, and introduce students to primary sources available at Alkek required to write valuable original work. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395J. Foreigners in Japan, 1850-2000.**

This course investigates a central question that arises in discussions of Japan: What have been the effects of foreign influences on Japanese society? Materials for study focus on memoirs written by foreigners – from Europe, the Americas, and East Asia – as they describe their lives in the country through various eras since 1850.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5398. General Research Seminar.**

A seminar designed to enhance research and writing skills in history. May be repeated for credit as topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in History 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5588. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who need to prepare for their comprehensive exams (written and oral) and retain half-time status.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5988. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who, having completed all other coursework, need to prepare for their comprehensive exams (written and oral) and retain full-time status.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The graduate program in History is designed to prepare students for careers in professional history (college teaching, research, or writing), public history, historic tourism, preservation, museums, consulting, public

education (secondary teaching), and to provide a general liberal arts education for students desiring careers in business, journalism, law, and government service.

Individuals interested in a more detailed description of the graduate program in history should request a copy of the Graduate Student Handbook from the Department of History. Copies of the Graduate Student Handbook and other information may be obtained from the department's website at <http://www.txstate.edu/history> (<http://www.txstate.edu/history/>).

## Financial Assistance

A limited number of assistantships and scholarships are available to qualified graduate students. Prospective students interested in applying for an assistantship should contact the graduate director in the Department of History. The Graduate College can provide further information about scholarships.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application (<https://apply.gradcollege.txstate.edu/apply/>)
- \$55 nonrefundable application fee or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- a copy of an official transcript from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours (<https://www.gradcollege.txstate.edu/admissions/policy.html#gpa>) of undergraduate course work (plus any completed graduate courses)
- minimum 3.25 GPA in a minimum of 24 hours of undergraduate history course work
- GRE not required
- resume/CV highlighting academic achievements

- statement of purpose (750-1000 words with name in header) describing how the student's undergraduate experience in history courses directed their career toward graduate-level work in history or how that experience shaped the student's expectation of their work in history at the graduate level at Texas State University.
- two letters of recommendation with at least one from a history professor (if the student majored in history)
- language competency statement: Thesis students should assess their level of competency to read and research in any languages other than English that could be essential to their area of study or thesis topic. Provide a brief explanation of any relevant language competencies, including the means through which you acquired them, any plans to improve them, and a self-assessment of reading and speaking skills in terms of basic, intermediate, proficient, advanced, and native abilities. If an applicant plans to research and study in English language sources only, then they should simply state this.
- writing sample, preferably a research paper of 15 to 20 pages in length, produced during the student's coursework. If the student is unable to submit a paper of this type, please contact the Director of Graduate Studies ([jd65@txstate.edu](mailto:jd65@txstate.edu)) to discuss other acceptable submissions.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Arts (M.A.) degree with a major in History concentration in Public History requires 39 semester credit hours, including a thesis. Students must earn a grade of "B" or better in all history courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
HIST 5361	Historiography and Methods	3
HIST 5371	The Practice of Public History	3
HIST 5374	Public History Internship	3
HIST 5398	General Research Seminar	3
<b>Concentration</b>		
Choose 12 hours from the following courses. Students have the option of taking a maximum of six hours of electives in a single outside field with the graduate advisor's approval. These courses must support their special research or career-related needs and interests.		12
HIST 5345D	Oral History: Theory & Practice	

HIST 5351E	Foundations of the U.S. Conservation Movement	HIST 5335	Twentieth-Century Russia
HIST 5372	The Practice of Museum Studies and Material Culture	HIST 5336	East European History
HIST 5373	The Practice of Historic Preservation	HIST 5341A	
HIST 5375A	Documentary Film	HIST 5341B	Caribbean Transnationalism and Diplomacy
HIST 5375B	Archival Management	HIST 5341C	
HIST 5375C	Cultural Resource Management	HIST 5343	The Progressive Era
HIST 5375D	Material Culture in America	HIST 5344	History and Memory
HIST 5375E	Management & Administration in Historical Organizations	HIST 5345M	History of Utopian Communities
HIST 5375F	Education Programs in Historical/Cultural Institutions	HIST 5345N	Transformation of the South
HIST 5375H		HIST 5345O	Immigration and US History
HIST 5375I	Heritage in a Global Context	HIST 5345P	History of Mexican American Music in the Southwest
HIST 5375J	American Architectural History	HIST 5345Q	Gender and Citizenship
HIST 5375K	Evaluating Historic Sites	HIST 5345R	History of Country Music
HIST 5375L	Controversy and History	HIST 5345S	Theories and Methods in Popular Music History/Culture Studies
HIST 5375M	Writing for Public History	HIST 5345T	Biography and American History
HIST 5375N	Digital History	HIST 5346	African American History
HIST 5375O	Records Management & Institutional Archives	HIST 5347	Texas History
HIST 5375P	The Family and Child in History and Heritage	HIST 5348	History of Texas Music
HIST 5376	Local and Community History	HIST 5350	The Frontier in American History
HIST 5377	Public History Project	HIST 5351B	Cold War America
<b>Prescribed Electives</b>		HIST 5351C	Race, Gender, and Ethnicity in American Labor History
Choose 9 hours from the following:		HIST 5351D	Politics & Society of Postwar America, 1945-Present
HIST 5307	Medieval European History: Contemporary Trends in Medieval Historiography	HIST 5351F	US Women's History
HIST 5308E		HIST 5351H	US Latino/a History
HIST 5308F		HIST 5353	Greater Southwestern History
HIST 5308G		HIST 5358	Sectionalism & Slavery in the United States
HIST 5309A		HIST 5362	Military History
HIST 5309D	Early Modern Spain	HIST 5363	Antebellum American Society & Culture
HIST 5310	Western European History Since 1815	HIST 5366B	
HIST 5313	Early American History	HIST 5367	US Era of Civil War and Reconstruction
HIST 5314	Ethnohistory	HIST 5369	Music and Social Movements
HIST 5315A	American Sexualities	HIST 5381	Chinese Communism
HIST 5315B	Queer History: GLBT Histories in the United States	HIST 5382	China and the Modern World
HIST 5316A	Women's Rights in Comparative Perspective	HIST 5385	Topics in the History of the Modern Middle East
HIST 5316B	Women and Empire	HIST 5390	Problems in Historical Research
HIST 5318A	Eighteenth Century England	HIST 5395B	
HIST 5318C	The Age of the Stuarts	HIST 5395D	Interpretations of World History
HIST 5318D	European Imperialism	HIST 5395E	Mahatma Gandhi in World History
HIST 5319	The Age of the Tudors	HIST 5395H	European Colonialism
HIST 5323A	Society and Culture in Brazil	HIST 5395I	Global Cold War
HIST 5323B	History of Race and Slavery in Brazil	May choose 6 hours of advisor-approved electives from outside the department	
HIST 5324B	Race, Class, and Nation in Modern Latin America	<b>Thesis</b>	
HIST 5324C	Slavery and Emancipation in the Americas	HIST 5399A	Thesis 3
HIST 5324D	Writing the History of Latin America: The Colonial Era	Choose a minimum of 3 hours from the following:	
HIST 5324E	Modern Latin American Revolutions	HIST 5199B	Thesis
HIST 5325A	History of Mexico to 1848	HIST 5299B	Thesis
HIST 5325C	Revolutionary Mexico	HIST 5399B	Thesis
HIST 5325D	Mexico Since the Revolution	HIST 5599B	Thesis

## Comprehensive Examination Requirement

The comprehensive exam will consist of an oral defense of the thesis and an oral examination of the thesis presented. The comprehensive exam or defense should be taken during the last semester of course work.

Exams must be completed within one year of the student's last semester of classes except under extraordinary circumstances. Students who perform unacceptably on the exam may take the exam a second time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis

work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf

- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in History: HIST

## Courses Offered

### History (HIST)

#### **HIST 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **HIST 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **HIST 5301. Instructional Methods Practicum for Graduate Assistants.**

Required as a condition of employment for graduate teaching and instructional assistants. This course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **HIST 5307. Medieval European History: Contemporary Trends in Medieval Historiography.**

This course introduces graduate students to the craft of the medieval historian, with emphasis on major contemporary shifts in American historiography of the European Middle Ages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **HIST 5309D. Early Modern Spain.**

A seminar based on selected topics in political, social, intellectual, and economic history of Spain from 1450 to 1815. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### **HIST 5310. Western European History Since 1815.**

A seminar based on selected topics in the history of Western Europe from 1815 to the present. May be repeated with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### **HIST 5313. Early American History.**

A seminar based on selected topics in the Colonial Revolutionary and Early National periods of the United States history. May be repeated with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **HIST 5314. Ethnohistory.**

This seminar seeks to familiarize students with current questions, methods, theories, and debates in ethnohistory, a multidisciplinary approach to the history of indigenous peoples. Materials studied will include both classic and recent ethnohistorical works. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

#### **HIST 5315A. American Sexualities.**

This course addresses the history of sexualities in the United States from the colonial era to present to shed light on the ways that sexuality has shaped social life, establish conventions, and created spaces to defy norms. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### **HIST 5315B. Queer History: GLBT Histories in the United States.**

This course examines the histories of different sexual minorities from the colonial era to present, though the majority of the course focuses on the twentieth century, to explore the rise of the modern lesbian, gay, bisexual, and transgender identities, politics, and culture. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### **HIST 5316A. Women's Rights in Comparative Perspective.**

This course considers national, transnational, and global development of campaigns for women's rights since the nineteenth century. The course examines how women agitated for their rights in different cultural and historical moments. Students will gain familiarity with comparative feminisms, the gendered nature of liberal movements, and women's activism in national and international arenas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter



**HIST 5316B. Women and Empire.**

From 1492 until World War II the globe was dominated by imperialism. This course considers the ways that women, in the metropolises of Europe and throughout colonial settings, found their lives shaped by empire. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316C. Women and Gender in the Early Modern Atlantic World.**

This course introduces students to the themes, topics, and issues that animate the histories of African, European, and indigenous women in the Atlantic World from 1500 to 1800. Emphasis will be placed on comparisons between empires and on the methodological challenges of researching early modern women.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318A. Eighteenth Century England.**

A seminar based on selected topics in political, social, intellectual, and economic history of England from 1688 to 1815. May be repeated with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5318C. The Age of the Stuarts.**

A study of selected topics in English history between 1603 and 1714.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5318D. European Imperialism.**

Europe's penchant for building empires helped to greatly enhance their influence (economic, political, and cultural) from the fifteenth to the twentieth century. The course will review the major European empires and discuss the extent of their influence during this 500 year span.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318E. European Sexualities.**

This course examines the history of sexuality of Europe in the modern era. It considers how the history of sexuality intersects with and explicates many of the crucial events in modern European history including empire, total war, communism, fascism, decolonization, and immigration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318F. European Fascisms and Historical Memory.**

This course compares historical and contemporary manifestations of fascism in Europe. It considers how the historical memory of fascism has impacted historical memory of the past, contemporary movements, legal structures, museums, and other historical monuments in Europe today.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5319. The Age of the Tudors.**

This readings-based course emphasizes differing interpretations of selected topics in English history from circa 1485 to 1603. Constitutional, political, governmental, social, religious, and cultural aspects of the era are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5323A. Society and Culture in Brazil.**

This seminar explores the social and cultural history of Brazil through its various ages, the "Age of Sugar", the "Age of Coffee", the "Age of Pedro II", the "Belle Epoque", and the worlds of the sugar and coffee barons. It explores the character of these ages marked by the grand plantation houses, devotion to European models, and the conflict with a slave society, covering the years from the colonial period to the turn of the twentieth century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5323B. History of Race and Slavery in Brazil.**

This course assesses the literature on race relations and slavery in Brazil. It situates the topic within a comparative, Atlantic framework and provides a critical understanding of the chief issues and debates in the field. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324B. Race, Class, and Nation in Modern Latin America.**

A seminar that examines the relationship between race, class, and nation building in Latin America, beginning with independence in the nineteenth century and continuing to contemporary times. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324C. Slavery and Emancipation in the Americas.**

This course examines slavery in the Americas in its full social, political, and economic context. Students will enlarge their understanding of slavery by using an international, transatlantic framework for comparison. The course strengthens analytical skills through extensive discussion as well as significant writing and research. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324D. Writing the History of Latin America: The Colonial Era.**

This readings seminar provides a critical assessment of the main themes and debates of colonial Latin American historiography. The course discusses the different paradigms under which historians have approached the cultures and societies of the region under Spanish and Portuguese rule, emphasizing on the latest trends and developments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324E. Modern Latin American Revolutions.**

The course is a seminar that examines and compares the causes, consequences and results of Latin America's twentieth century revolutions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325A. History of Mexico to 1848.**

A topic course studying the history of Mexico from pre-historic times to the Treaty of Guadalupe Hidalgo. The course encompasses the development of Indian societies from the Yucatan to the American Southwest preceding the Spanish conquest, the social, economic, and political development of Spanish colonial Mexico, the War in Independence, and the formation of the new nation through the war with the United States. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325C. Revolutionary Mexico.**

A graduate seminar that explores the interrelated economic, social, political, and cultural conditions and forces that shaped revolutionary Mexico. Ideological currents that impacted the period will be examined. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325D. Mexico Since the Revolution.**

This class is a Graduate Seminar covering the History of Post-Revolutionary Mexico. This course will explore the history of Mexico since the Revolution, including the social, cultural, and economic legacies of the Revolution, as well as the process of State building, one party rule, globalization, and the transition to democracy. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5335. Twentieth-Century Russia.**

A seminar based on selected topics in recent Russian history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5336. East European History.**

A seminar based on selected topics in recent East European history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5341B. Caribbean Transnationalism and Diplomacy.**

This seminar focuses on the international relations of the twentieth-century Caribbean, with emphasis on interactions between Cuba, the Dominican Republic, Haiti, Jamaica, the United States, and Venezuela. Students will analyze the ways that international action and response in these countries have affected policy, government, and international social movements. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5343. The Progressive Era.**

This course is a seminar on the rise of industrial capitalism and corporate power and the public response to the related restructuring of the social and economic order between 1890 and 1920, with particular emphasis on the strengths and weaknesses of progressivism as a democratic movement for reform. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5344. History and Memory.**

This course examines the way that groups shape the the collective memory of past events, how memory shifts over time, and the way it can be influenced by present influences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5345D. Oral History: Theory & Practice.**

A seminar based upon developing a theoretical and practical understanding of the techniques of oral historical research and document preservation and presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345M. History of Utopian Communities.**

This seminar examines utopian experiments in American History. Starting with John Winthrop's 1630 "City upon a Hill," the course explores both religious and secular communal ventures through the eighteenth and nineteenth centuries. The course concludes with an examination of counter-cultural, twentieth-century communes, intentional communities, and cultic separatists.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345N. Transformation of the South.**

This course is a readings research seminar on African-American culture and life in the twentieth century South from 1890-1971. The course provides the students with a thorough historical examination through biographies and community studies of specific issues and events that ended legal segregation in the South. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345O. Immigration and US History.**

This course focuses on North American immigration history from colonial times to the present and looks at how both immigrants and native-born Americans struggled to reconcile conflicting notions of identity and national loyalty. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345P. History of Mexican American Music in the Southwest.**

This class will introduce students to the musical history of Islamic Spain, Spanish Colonial Mexico, and Mexico and investigate the influences of these traditions on the development of Mexican-American music in the American Southwest. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345Q. Gender and Citizenship.**

This course is designed to introduce students to the literature in United States history that addresses issues of gender and how they relate to US citizenship from the colonial period to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345R. History of Country Music.**

This seminar traces the various ethnic, social, cultural, political, economic, and demographic forces in American society that have helped shape country music. Students will also explore how this uniquely American cultural idiom mirrors the historical evolution of the United States.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345S. Theories and Methods in Popular Music History/Culture Studies.**

This is a course in the theories and methods of cultural studies and popular music history for graduate students. It is intended to review the history of debates and methodologies in the field to prepare students to do original work that fits into the larger conversations in popular music studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5345T. Biography and American History.**

In this class students will delve into the practice of biography and the ways in which biographers convey American history and culture through a life story.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5345U. Dark Tourism: Interpreting Historic Sites of Oppression, Death, and Disaster.**

This course examines issues and effective methods of interpreting historic sites open to visitors associated with tragic historical events and practices, such as battlefields, concentration camps, massacre sites, and plantation houses, that are to the public. Dark tourism sites in the United States and around the world will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5346. African American History.**

This course is an intensive readings and research seminar in African American History. Through the uses of lectures, biographies, institutional histories and community studies, students will be introduced to the different interpretive themes and methodologies that have created the myriad of historical interpretations and reinterpretations of African American History. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5347. Texas History.**

A seminar based on selected topics in the history of Texas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5348. History of Texas Music.**

This course examines the evolution of music in Texas and the American Southwest from pre-Colombian times to the present, with an emphasis on how music reflects the ethnically diverse history and culture of the region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5350. The Frontier in American History.**

A seminar based on selected topics in the history of the frontier in American development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5351B. Cold War America.**

This course examines the Cold War years 1945 to 1960, concentrating on the domestic scene. The class will discuss the major issues of domestic politics, society, and culture, through the use of both primary and secondary sources. They will also examine the historiography of the period. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351C. Race, Gender, and Ethnicity in American Labor History.**

This graduate seminar explores the impact of race, gender, and ethnicity upon American Labor History. Readings integrate race, gender, and ethnicity as categories of analysis into the study of class formation, experiences, and consciousness within the American labor force. The focus will be on unorganized as well as organized workers in the context of their social, cultural, political, and workplace environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351D. Politics & Society of Postwar America, 1945-Present.**

This course will explore the interaction of political, economic, and social forces in the years following the Second World War. Emphasis will be placed on analyzing the interdependent relationship between political structures, social movements, and economic circumstances. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351E. Foundations of the U.S. Conservation Movement.**

The course will provide an overview of the conservation movement from the writings of Henry David Thoreau to publication of Rachel Carson's Silent Spring. Emphasis will be on social and cultural influences, with particular attention to government programs, naturalist literature, activism, movement leaders, and landmarks of environmental debate.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5351F. US Women's History.**

This course offers graduate students an introduction in the topics, themes, and issues that animate the history of women in the US. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351H. US Latino/a History.**

This course explores the histories, cultures, and politics that shape Latino/a experiences in the United States and examines the way Latino communities helped shape the making of the nation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5353. Greater Southwestern History.**

A seminar based on selected topics in the history of the Greater American Southwest. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5358. Sectionalism & Slavery in the United States.**

This course assesses the literature on the causes and consequences of the sectional conflict between the American North and the South before the Civil War, with particular focus on works examining the slavery issue and the way it exacerbated American sectionalism, leading to the fracturing of the American nation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5361. Historiography and Methods.**

A general introduction to key concepts, approaches, and challenges involved in reading, researching, and writing history at the professional level.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5362. Military History.**

This seminar is based on selected topics in military history. May be repeated with different emphases up to nine hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5363. Antebellum American Society & Culture.**

This seminar explores the cultural dynamics, social relations, and political and economic structures that shaped the lives of ordinary Americans in the three decades before the Civil War. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5367. US Era of Civil War and Reconstruction.**

A seminar that examines the history of the causes, course, and consequences of the American Civil War and the efforts to reconstruct the American Nation in its aftermath. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5369. Music and Social Movements.**

This course examines the historical role music has played in a variety of social movements related to race, gender, ethnicity, religion, politics, economics, education, labor, civil rights, and other issues in U.S. history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5371. The Practice of Public History.**

A seminar addressing the definition, evolution, and philosophy of public history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5372. The Practice of Museum Studies and Material Culture.**

A seminar addressing the history, organization, and functions of history museums.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5373. The Practice of Historic Preservation.**

A seminar addressing architectural history and preservation theory and practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5374. Public History Internship.**

Application of skills in public history in an on-the-job setting. Internships will be selected by the student and instructor, and will be supervised by the instructor. May be repeated once for additional credit.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5375A. Documentary Film.**

The use of film & video in public programming; research & produce documents.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375B. Archival Management.**

A seminar based on the history, theory, and practice of archival management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375C. Cultural Resource Management.**

This seminar addresses the management of cultural resources such as historic buildings, historic sites, and other tangible remains of our heritage. It explores how cultural resources are preserved and managed under federal and state law, and the nature of the regulatory practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375D. Material Culture in America.**

This course examines the interactions between people and things in American society. The ways in which Americans have created, used, altered, and thought about material objects help us to understand history. Readings and research will focus on the values and attitudes embodied in the production, use, and preservation of objects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375E. Management & Administration in Historical Organizations.**

This course provides an introduction to the non-profit based management, leadership, and administration issues and practices for historical organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter



**HIST 5375F. Education Programs in Historical/Cultural Institutions.**

This course will study the role of education programs as primary to the missions of historical and cultural institutions and will explore how institutions create and evaluate formal and informal education programs and materials for a variety of audiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375I. Heritage in a Global Context.**

Heritage management is the interdisciplinary approach to the preservation, protection, and public use of the historical record. This course examines definitions and approaches within a global context. Theory and practice will be analyzed through case studies and real world examples. Current issues, sustainability and maritime issues/practices will be included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5375J. American Architectural History.**

This course will analyze the historical development of American architecture, and examine architecture as evidence of America's cultural, social, economic, and technological evolution from 1607 to the present. Focus will be placed on the role of historic American architecture in the practice of public history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375K. Evaluating Historic Sites.**

Every year millions of tourists flock to historic sites desiring to commune with "real" history, to "feel" the past. This course will introduce students to methods that scholars use to examine critically the interpretation of history at these sites without discounting the emotional connection to place that many visitors experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375L. Controversy and History.**

This seminar explores how controversy, power relations, and politics are embedded in the practice of public history. It is designed to help the future practitioner navigate the complex political landscape of public history. This course is informed by the professor's experience as a consultant and federal historian. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5375M. Writing for Public History.**

This will be a course intensively focused on research and writing specifically for public history audiences through a variety of venues: journal articles, magazine/newspaper articles, brochures, promotional literature, personal essays, historical markers, reviews, websites, cultural resource management "gray literature," and professional papers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375N. Digital History.**

Students will study the history of print and digital media to better understand the practice of digital history. They will be introduced to a variety of digital approaches to the study of history, and they will produce and contribute to a variety of digital projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375O. Records Management & Institutional Archives.**

This course will introduce students to the principles and theories in records management and institutional archives. It will provide practical experience creating a records retentions schedule, researching retention requirements and best practices, appraising records with enduring value, and establishing archival series to accommodate ongoing acquisition of institutional records.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375P. The Family and Child in History and Heritage.**

This course examines the historical development of the family and childhood using academic family history methods and public approaches to family heritage. It examines differing experiences of ancestors and concepts of family and childhood over time by race, class, and gender, reflecting shifts in culture, economy, and power relations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5376. Local and Community History.**

A seminar applying historical methods to the study of U.S. communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5377. Public History Project.**

A team project focusing on one or more aspects of public history- museum exhibit, historic site interpretation, historic resources survey, etc. Repeatable with a different emphasis.

**3 Credit Hours. 1 Lecture Contact Hour. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5379A. Public History Final Master's Project.**

This course will be the initial development of an individualized, advanced student project in cooperation with a client or host institution, focused on any one or a combination of the public history areas of historic preservation, archives, oral history, museums, local and community history or cultural resource management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5379B. Public History Final Master's Project.**

This course, to be taken during the last year of the Public History program, is the continuation of an individualized, advanced student project focused on any one or a combination of the public history areas of historic preservation, archives, oral history, museums, local and community history or cultural resource management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5381. Chinese Communism.**

The Chinese Communist movement from 1919 to the present. Will focus on (1) urban and rural aspects of Chinese Communism; (2) the rise to power of the Chinese Communist Party on mainland China in 1949; and (3) the construction of the Party-State and Socialism in the People's Republic of China. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5382. China and the Modern World.**

This course examines Chinese relations with the modern world from 1800 to the present, focusing on the external aggression and internal transformation between 1839 and 1945; the split into two Chinas in 1949; the mainland China/Taiwan developments, interactions between the two Chinese governments and among the world community since then. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5385. Topics in the History of the Modern Middle East.**

A seminar based on selected topics from current histories of the Middle East during the 19th and 20th centuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HIST 5388. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who need to prepare for their comprehensive exams (written and oral).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HIST 5390. Problems in Historical Research.**

This course is open to graduate students on an individual basis by arrangement with the department. May be repeated with the approval of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5395D. Interpretations of World History.**

A survey of world history that focuses on Western civilization as the catalyst of change in world history since the tenth century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5395E. Mahatma Gandhi in World History.**

In this course students explore how writers have narrated Gandhi's life and interpreted his historical role. Students will research aspects of Gandhi's life using primary sources. The focus of the course will be the study of material left out of histories on Gandhi and reasons for omitted material. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395H. European Colonialism.**

This seminar examines the variety of European imperial and colonial experiences around the world from ancient to modern times through selected primary sources and historical literature. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395I. Global Cold War.**

This seminar will survey literature characteristic of the "new" Cold War historiography, and introduce students to primary sources available at Alkek required to write valuable original work. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395J. Foreigners in Japan, 1850-2000.**

This course investigates a central question that arises in discussions of Japan: What have been the effects of foreign influences on Japanese society? Materials for study focus on memoirs written by foreigners – from Europe, the Americas, and East Asia – as they describe their lives in the country through various eras since 1850.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5398. General Research Seminar.**

A seminar designed to enhance research and writing skills in history. May be repeated for credit as topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in History 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5588. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who need to prepare for their comprehensive exams (written and oral) and retain half-time status.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5988. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who, having completed all other coursework, need to prepare for their comprehensive exams (written and oral) and retain full-time status.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The graduate program in History is designed to prepare students for careers in professional history (college teaching, research, or writing), public history, historic tourism, preservation, museums, consulting, public

education (secondary teaching), and to provide a general liberal arts education for students desiring careers in business, journalism, law, and government service.

Individuals interested in a more detailed description of the graduate program in history should request a copy of the Graduate Student Handbook from the Department of History. Copies of the Graduate Student Handbook and other information may be obtained from the department's website at <http://www.txstate.edu/history> (<http://www.txstate.edu/history/>).

## Financial Assistance

A limited number of assistantships and scholarships are available to qualified graduate students. Prospective students interested in applying for an assistantship should contact the graduate director in the Department of History. The Graduate College can provide further information about scholarships.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application (<https://apply.gradcollege.txstate.edu/apply/>)
- \$55 nonrefundable application fee  
or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- a copy of an official transcript from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours (<https://www.gradcollege.txstate.edu/admissions/policy.html#gpa>) of undergraduate course work (plus any completed graduate courses)
- minimum 3.25 GPA in a minimum of 24 hours of undergraduate history course work
- GRE not required
- resume/CV highlighting academic achievements

- statement of purpose (750-1000 words with name in header) describing how the student's undergraduate experience in history courses directed their career toward graduate-level work in history or how that experience shaped what the student's expectation of their work in history at the graduate level at Texas State University.
- two letters of recommendation with at least one from a history professor (if the student majored in history)
- language competency statement: Thesis students should assess their level of competency to read and research in any languages other than English that could be essential to their area of study or thesis topic. They should provide a brief explanation of any relevant language competencies, including the means through which they acquired them, any plans to improve them, and a self-assessment of reading and speaking skills in terms of basic, intermediate, proficient, advanced, and native abilities. If an applicant plans to research and study in English language sources only, then they should simply state this.
- writing sample, preferably a research paper of 15 to 20 pages in length, produced during the student's coursework. If the student is unable to submit a paper of this type, please contact the Director of Graduate Studies (jd65@txstate.edu) to discuss other acceptable submissions.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Arts (M.A.) degree with a major in History requires 33 semester credit hours, including a thesis. Students must earn a grade of "B" or better in all history courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
HIST 5361	Historiography and Methods	3
HIST 5398	General Research Seminar	3
<b>Prescribed Electives</b>		
Choose 21 hours from the following courses. Students have the option of taking a maximum of six hours of electives in a single outside field with the graduate advisor's approval. These courses must support their special research or career-related needs and interests.		21
HIST 5307	Medieval European History: Contemporary Trends in Medieval Historiography	
HIST 5309D	Early Modern Spain	
HIST 5310	Western European History Since 1815	

HIST 5313	Early American History
HIST 5314	Ethnohistory
HIST 5315A	American Sexualities
HIST 5315B	Queer History: GLBT Histories in the United States
HIST 5316A	Women's Rights in Comparative Perspective
HIST 5316B	Women and Empire
HIST 5318A	Eighteenth Century England
HIST 5318C	The Age of the Stuarts
HIST 5318D	European Imperialism
HIST 5318E	European Sexualities
HIST 5319	The Age of the Tudors
HIST 5323A	Society and Culture in Brazil
HIST 5323B	History of Race and Slavery in Brazil
HIST 5324B	Race, Class, and Nation in Modern Latin America
HIST 5324C	Slavery and Emancipation in the Americas
HIST 5324D	Writing the History of Latin America: The Colonial Era
HIST 5324E	Modern Latin American Revolutions
HIST 5325A	History of Mexico to 1848
HIST 5325C	Revolutionary Mexico
HIST 5325D	Mexico Since the Revolution
HIST 5335	Twentieth-Century Russia
HIST 5336	East European History
HIST 5341B	Caribbean Transnationalism and Diplomacy
HIST 5343	The Progressive Era
HIST 5344	History and Memory
HIST 5345D	Oral History: Theory & Practice
HIST 5345M	History of Utopian Communities
HIST 5345N	Transformation of the South
HIST 5345O	Immigration and US History
HIST 5345P	History of Mexican American Music in the Southwest
HIST 5345Q	Gender and Citizenship
HIST 5345R	History of Country Music
HIST 5345S	Theories and Methods in Popular Music History/Culture Studies
HIST 5345T	Biography and American History
HIST 5346	African American History
HIST 5347	Texas History
HIST 5348	History of Texas Music
HIST 5350	The Frontier in American History
HIST 5351B	Cold War America
HIST 5351C	Race, Gender, and Ethnicity in American Labor History
HIST 5351D	Politics & Society of Postwar America, 1945-Present
HIST 5351F	US Women's History
HIST 5351H	US Latino/a History
HIST 5353	Greater Southwestern History
HIST 5358	Sectionalism & Slavery in the United States
HIST 5362	Military History
HIST 5363	Antebellum American Society & Culture
HIST 5366	Antebellum American History

HIST 5367	US Era of Civil War and Reconstruction	
HIST 5369	Music and Social Movements	
HIST 5381	Chinese Communism	
HIST 5382	China and the Modern World	
HIST 5385	Topics in the History of the Modern Middle East	
HIST 5390	Problems in Historical Research	
HIST 5395D	Interpretations of World History	
HIST 5395E	Mahatma Gandhi in World History	
HIST 5395H	European Colonialism	
HIST 5395I	Global Cold War	
May choose 6 hours of advisor-approved electives from outside the department		
<b>Thesis</b>		
HIST 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
HIST 5199B	Thesis	
HIST 5299B	Thesis	
HIST 5399B	Thesis	
HIST 5599B	Thesis	
HIST 5999B	Thesis	
<b>Total Hours</b>		<b>33</b>

## Comprehensive Examination Requirement

The comprehensive exam will consist of an oral defense of the thesis and an oral examination of the thesis presented. The comprehensive exam or defense should be taken during the last semester of course work. Exams must be completed within one year of the student's last semester of classes except under extraordinary circumstances. Students who perform unacceptably on the exam may take the exam a second time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If

the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:



1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in History: HIST

## Courses Offered

### History (HIST)

#### **HIST 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **HIST 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **HIST 5301. Instructional Methods Practicum for Graduate Assistants.**

Required as a condition of employment for graduate teaching and instructional assistants. This course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **HIST 5307. Medieval European History: Contemporary Trends in Medieval Historiography.**

This course introduces graduate students to the craft of the medieval historian, with emphasis on major contemporary shifts in American historiography of the European Middle Ages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **HIST 5309D. Early Modern Spain.**

A seminar based on selected topics in political, social, intellectual, and economic history of Spain from 1450 to 1815. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### **HIST 5310. Western European History Since 1815.**

A seminar based on selected topics in the history of Western Europe from 1815 to the present. May be repeated with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### **HIST 5313. Early American History.**

A seminar based on selected topics in the Colonial Revolutionary and Early National periods of the United States history. May be repeated with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **HIST 5314. Ethnohistory.**

This seminar seeks to familiarize students with current questions, methods, theories, and debates in ethnohistory, a multidisciplinary approach to the history of indigenous peoples. Materials studied will include both classic and recent ethnohistorical works. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5315A. American Sexualities.**

This course addresses the history of sexualities in the United States from the colonial era to present to shed light on the ways that sexuality has shaped social life, establish conventions, and created spaces to defy norms. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5315B. Queer History: GLBT Histories in the United States.**

This course examines the histories of different sexual minorities from the colonial era to present, though the majority of the course focuses on the twentieth century, to explore the rise of the modern lesbian, gay, bisexual, and transgender identities, politics, and culture. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316A. Women's Rights in Comparative Perspective.**

This course considers national, transnational, and global development of campaigns for women's rights since the nineteenth century. The course examines how women agitated for their rights in different cultural and historical moments. Students will gain familiarity with comparative feminisms, the gendered nature of liberal movements, and women's activism in national and international arenas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316B. Women and Empire.**

From 1492 until World War II the globe was dominated by imperialism. This course considers the ways that women, in the metropolises of Europe and throughout colonial settings, found their lives shaped by empire. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316C. Women and Gender in the Early Modern Atlantic World.**

This course introduces students to the themes, topics, and issues that animate the histories of African, European, and indigenous women in the Atlantic World from 1500 to 1800. Emphasis will be placed on comparisons between empires and on the methodological challenges of researching early modern women.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318A. Eighteenth Century England.**

A seminar based on selected topics in political, social, intellectual, and economic history of England from 1688 to 1815. May be repeated with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5318C. The Age of the Stuarts.**

A study of selected topics in English history between 1603 and 1714.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5318D. European Imperialism.**

Europe's penchant for building empires helped to greatly enhance their influence (economic, political, and cultural) from the fifteenth to the twentieth century. The course will review the major European empires and discuss the extent of their influence during this 500 year span.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318E. European Sexualities.**

This course examines the history of sexuality of Europe in the modern era. It considers how the history of sexuality intersects with and explicates many of the crucial events in modern European history including empire, total war, communism, fascism, decolonization, and immigration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318F. European Fascisms and Historical Memory.**

This course compares historical and contemporary manifestations of fascism in Europe. It considers how the historical memory of fascism has impacted historical memory of the past, contemporary movements, legal structures, museums, and other historical monuments in Europe today.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5319. The Age of the Tudors.**

This readings-based course emphasizes differing interpretations of selected topics in English history from circa 1485 to 1603. Constitutional, political, governmental, social, religious, and cultural aspects of the era are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5323A. Society and Culture in Brazil.**

This seminar explores the social and cultural history of Brazil through its various ages, the "Age of Sugar", the "Age of Coffee", the "Age of Pedro II", the "Belle Epoque", and the worlds of the sugar and coffee barons. It explores the character of these ages marked by the grand plantation houses, devotion to European models, and the conflict with a slave society, covering the years from the colonial period to the turn of the twentieth century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5323B. History of Race and Slavery in Brazil.**

This course assesses the literature on race relations and slavery in Brazil. It situates the topic within a comparative, Atlantic framework and provides a critical understanding of the chief issues and debates in the field. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324B. Race, Class, and Nation in Modern Latin America.**

A seminar that examines the relationship between race, class, and nation building in Latin America, beginning with independence in the nineteenth century and continuing to contemporary times. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324C. Slavery and Emancipation in the Americas.**

This course examines slavery in the Americas in its full social, political, and economic context. Students will enlarge their understanding of slavery by using an international, transatlantic framework for comparison. The course strengthens analytical skills through extensive discussion as well as significant writing and research. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324D. Writing the History of Latin America: The Colonial Era.**

This readings seminar provides a critical assessment of the main themes and debates of colonial Latin American historiography. The course discusses the different paradigms under which historians have approached the cultures and societies of the region under Spanish and Portuguese rule, emphasizing on the latest trends and developments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324E. Modern Latin American Revolutions.**

The course is a seminar that examines and compares the causes, consequences and results of Latin America's twentieth century revolutions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325A. History of Mexico to 1848.**

A topic course studying the history of Mexico from pre-historic times to the Treaty of Guadalupe Hidalgo. The course encompasses the development of Indian societies from the Yucatan to the American Southwest preceding the Spanish conquest, the social, economic, and political development of Spanish colonial Mexico, the War in Independence, and the formation of the new nation through the war with the United States. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325C. Revolutionary Mexico.**

A graduate seminar that explores the interrelated economic, social, political, and cultural conditions and forces that shaped revolutionary Mexico. Ideological currents that impacted the period will be examined. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325D. Mexico Since the Revolution.**

This class is a Graduate Seminar covering the History of Post-Revolutionary Mexico. This course will explore the history of Mexico since the Revolution, including the social, cultural, and economic legacies of the Revolution, as well as the process of State building, one party rule, globalization, and the transition to democracy. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5335. Twentieth-Century Russia.**

A seminar based on selected topics in recent Russian history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5336. East European History.**

A seminar based on selected topics in recent East European history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5341B. Caribbean Transnationalism and Diplomacy.**

This seminar focuses on the international relations of the twentieth-century Caribbean, with emphasis on interactions between Cuba, the Dominican Republic, Haiti, Jamaica, the United States, and Venezuela. Students will analyze the ways that international action and response in these countries have affected policy, government, and international social movements. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5343. The Progressive Era.**

This course is a seminar on the rise of industrial capitalism and corporate power and the public response to the related restructuring of the social and economic order between 1890 and 1920, with particular emphasis on the strengths and weaknesses of progressivism as a democratic movement for reform. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5344. History and Memory.**

This course examines the way that groups shape the the collective memory of past events, how memory shifts over time, and the way it can be influenced by present influences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5345D. Oral History: Theory & Practice.**

A seminar based upon developing a theoretical and practical understanding of the techniques of oral historical research and document preservation and presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345M. History of Utopian Communities.**

This seminar examines utopian experiments in American History. Starting with John Winthrop's 1630 "City upon a Hill," the course explores both religious and secular communal ventures through the eighteenth and nineteenth centuries. The course concludes with an examination of counter-cultural, twentieth-century communes, intentional communities, and cultic separatists.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345N. Transformation of the South.**

This course is a readings research seminar on African-American culture and life in the twentieth century South from 1890-1971. The course provides the students with a thorough historical examination through biographies and community studies of specific issues and events that ended legal segregation in the South. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345O. Immigration and US History.**

This course focuses on North American immigration history from colonial times to the present and looks at how both immigrants and native-born Americans struggled to reconcile conflicting notions of identity and national loyalty. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345P. History of Mexican American Music in the Southwest.**

This class will introduce students to the musical history of Islamic Spain, Spanish Colonial Mexico, and Mexico and investigate the influences of these traditions on the development of Mexican-American music in the American Southwest. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345Q. Gender and Citizenship.**

This course is designed to introduce students to the literature in United States history that addresses issues of gender and how they relate to US citizenship from the colonial period to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345R. History of Country Music.**

This seminar traces the various ethnic, social, cultural, political, economic, and demographic forces in American society that have helped shape country music. Students will also explore how this uniquely American cultural idiom mirrors the historical evolution of the United States.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345S. Theories and Methods in Popular Music History/Culture Studies.**

This is a course in the theories and methods of cultural studies and popular music history for graduate students. It is intended to review the history of debates and methodologies in the field to prepare students to do original work that fits into the larger conversations in popular music studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5345T. Biography and American History.**

In this class students will delve into the practice of biography and the ways in which biographers convey American history and culture through a life story.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5345U. Dark Tourism: Interpreting Historic Sites of Oppression, Death, and Disaster.**

This course examines issues and effective methods of interpreting historic sites open to visitors associated with tragic historical events and practices, such as battlefields, concentration camps, massacre sites, and plantation houses, that are to the public. Dark tourism sites in the United States and around the world will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5346. African American History.**

This course is an intensive readings and research seminar in African American History. Through the uses of lectures, biographies, institutional histories and community studies, students will be introduced to the different interpretive themes and methodologies that have created the myriad of historical interpretations and reinterpretations of African American History. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5347. Texas History.**

A seminar based on selected topics in the history of Texas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5348. History of Texas Music.**

This course examines the evolution of music in Texas and the American Southwest from pre-Colombian times to the present, with an emphasis on how music reflects the ethnically diverse history and culture of the region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5350. The Frontier in American History.**

A seminar based on selected topics in the history of the frontier in American development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5351B. Cold War America.**

This course examines the Cold War years 1945 to 1960, concentrating on the domestic scene. The class will discuss the major issues of domestic politics, society, and culture, through the use of both primary and secondary sources. They will also examine the historiography of the period. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351C. Race, Gender, and Ethnicity in American Labor History.**

This graduate seminar explores the impact of race, gender, and ethnicity upon American Labor History. Readings integrate race, gender, and ethnicity as categories of analysis into the study of class formation, experiences, and consciousness within the American labor force. The focus will be on unorganized as well as organized workers in the context of their social, cultural, political, and workplace environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351D. Politics & Society of Postwar America, 1945-Present.**

This course will explore the interaction of political, economic, and social forces in the years following the Second World War. Emphasis will be placed on analyzing the interdependent relationship between political structures, social movements, and economic circumstances. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter



**HIST 5351E. Foundations of the U.S. Conservation Movement.**

The course will provide an overview of the conservation movement from the writings of Henry David Thoreau to publication of Rachel Carson's *Silent Spring*. Emphasis will be on social and cultural influences, with particular attention to government programs, naturalist literature, activism, movement leaders, and landmarks of environmental debate.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5351F. US Women's History.**

This course offers graduate students an introduction in the topics, themes, and issues that animate the history of women in the US. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351H. US Latino/a History.**

This course explores the histories, cultures, and politics that shape Latino/a experiences in the United States and examines the way Latino communities helped shape the making of the nation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5353. Greater Southwestern History.**

A seminar based on selected topics in the history of the Greater American Southwest. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5358. Sectionalism & Slavery in the United States.**

This course assesses the literature on the causes and consequences of the sectional conflict between the American North and the South before the Civil War, with particular focus on works examining the slavery issue and the way it exacerbated American sectionalism, leading to the fracturing of the American nation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5361. Historiography and Methods.**

A general introduction to key concepts, approaches, and challenges involved in reading, researching, and writing history at the professional level.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5362. Military History.**

This seminar is based on selected topics in military history. May be repeated with different emphases up to nine hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5363. Antebellum American Society & Culture.**

This seminar explores the cultural dynamics, social relations, and political and economic structures that shaped the lives of ordinary Americans in the three decades before the Civil War. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5367. US Era of Civil War and Reconstruction.**

A seminar that examines the history of the causes, course, and consequences of the American Civil War and the efforts to reconstruct the American Nation in its aftermath. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5369. Music and Social Movements.**

This course examines the historical role music has played in a variety of social movements related to race, gender, ethnicity, religion, politics, economics, education, labor, civil rights, and other issues in U.S. history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5371. The Practice of Public History.**

A seminar addressing the definition, evolution, and philosophy of public history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5372. The Practice of Museum Studies and Material Culture.**

A seminar addressing the history, organization, and functions of history museums.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5373. The Practice of Historic Preservation.**

A seminar addressing architectural history and preservation theory and practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5374. Public History Internship.**

Application of skills in public history in an on-the job setting. Internships will be selected by the student and instructor, and will be supervised by the instructor. May be repeated once for additional credit.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5375A. Documentary Film.**

The use of film & video in public programming; research & produce documents.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375B. Archival Management.**

A seminar based on the history, theory, and practice of archival management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375C. Cultural Resource Management.**

This seminar addresses the management of cultural resources such as historic buildings, historic sites, and other tangible remains of our heritage. It explores how cultural resources are preserved and managed under federal and state law, and the nature of the regulatory practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375D. Material Culture in America.**

This course examines the interactions between people and things in American society. The ways in which Americans have created, used, altered, and thought about material objects help us to understand history. Readings and research will focus on the values and attitudes embodied in the production, use, and preservation of objects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375E. Management & Administration in Historical Organizations.**

This course provides an introduction to the non-profit based management, leadership, and administration issues and practices for historical organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375F. Education Programs in Historical/Cultural Institutions.**

This course will study the role of education programs as primary to the missions of historical and cultural institutions and will explore how institutions create and evaluate formal and informal education programs and materials for a variety of audiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375I. Heritage in a Global Context.**

Heritage management is the interdisciplinary approach to the preservation, protection, and public use of the historical record. This course examines definitions and approaches within a global context. Theory and practice will be analyzed through case studies and real world examples. Current issues, sustainability and maritime issues/practices will be included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5375J. American Architectural History.**

This course will analyze the historical development of American architecture, and examine architecture as evidence of America's cultural, social, economic, and technological evolution from 1607 to the present. Focus will be placed on the role of historic American architecture in the practice of public history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375K. Evaluating Historic Sites.**

Every year millions of tourists flock to historic sites desiring to commune with "real" history, to "feel" the past. This course will introduce students to methods that scholars use to examine critically the interpretation of history at these sites without discounting the emotional connection to place that many visitors experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375L. Controversy and History.**

This seminar explores how controversy, power relations, and politics are embedded in the practice of public history. It is designed to help the future practitioner navigate the complex political landscape of public history. This course is informed by the professor's experience as a consultant and federal historian. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5375M. Writing for Public History.**

This will be a course intensively focused on research and writing specifically for public history audiences through a variety of venues: journal articles, magazine/newspaper articles, brochures, promotional literature, personal essays, historical markers, reviews, websites, cultural resource management "gray literature," and professional papers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375N. Digital History.**

Students will study the history of print and digital media to better understand the practice of digital history. They will be introduced to a variety of digital approaches to the study of history, and they will produce and contribute to a variety of digital projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375O. Records Management & Institutional Archives.**

This course will introduce students to the principles and theories in records management and institutional archives. It will provide practical experience creating a records retentions schedule, researching retention requirements and best practices, appraising records with enduring value, and establishing archival series to accommodate ongoing acquisition of institutional records.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375P. The Family and Child in History and Heritage.**

This course examines the historical development of the family and childhood using academic family history methods and public approaches to family heritage. It examines differing experiences of ancestors and concepts of family and childhood over time by race, class, and gender, reflecting shifts in culture, economy, and power relations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5376. Local and Community History.**

A seminar applying historical methods to the study of U.S. communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5377. Public History Project.**

A team project focusing on one or more aspects of public history- museum exhibit, historic site interpretation, historic resources survey, etc. Repeatable with a different emphasis.

**3 Credit Hours. 1 Lecture Contact Hour. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5379A. Public History Final Master's Project.**

This course will be the initial development of an individualized, advanced student project in cooperation with a client or host institution, focused on any one or a combination of the public history areas of historic preservation, archives, oral history, museums, local and community history or cultural resource management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5379B. Public History Final Master's Project.**

This course, to be taken during the last year of the Public History program, is the continuation of an individualized, advanced student project focused on any one or a combination of the public history areas of historic preservation, archives, oral history, museums, local and community history or cultural resource management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5381. Chinese Communism.**

The Chinese Communist movement from 1919 to the present. Will focus on (1) urban and rural aspects of Chinese Communism; (2) the rise to power of the Chinese Communist Party on mainland China in 1949; and (3) the construction of the Party-State and Socialism in the People's Republic of China. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5382. China and the Modern World.**

This course examines Chinese relations with the modern world from 1800 to the present, focusing on the external aggression and internal transformation between 1839 and 1945; the split into two Chinas in 1949; the mainland China/Taiwan developments, interactions between the two Chinese governments and among the world community since then. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5385. Topics in the History of the Modern Middle East.**

A seminar based on selected topics from current histories of the Middle East during the 19th and 20th centuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HIST 5388. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who need to prepare for their comprehensive exams (written and oral).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HIST 5390. Problems in Historical Research.**

This course is open to graduate students on an individual basis by arrangement with the department. May be repeated with the approval of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5395D. Interpretations of World History.**

A survey of world history that focuses on Western civilization as the catalyst of change in world history since the tenth century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5395E. Mahatma Gandhi in World History.**

In this course students explore how writers have narrated Gandhi's life and interpreted his historical role. Students will research aspects of Gandhi's life using primary sources. The focus of the course will be the study of material left out of histories on Gandhi and reasons for omitted material. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395H. European Colonialism.**

This seminar examines the variety of European imperial and colonial experiences around the world from ancient to modern times through selected primary sources and historical literature. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395I. Global Cold War.**

This seminar will survey literature characteristic of the "new" Cold War historiography, and introduce students to primary sources available at Alkek required to write valuable original work. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395J. Foreigners in Japan, 1850-2000.**

This course investigates a central question that arises in discussions of Japan: What have been the effects of foreign influences on Japanese society? Materials for study focus on memoirs written by foreigners – from Europe, the Americas, and East Asia – as they describe their lives in the country through various eras since 1850.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5398. General Research Seminar.**

A seminar designed to enhance research and writing skills in history. May be repeated for credit as topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in History 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5588. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who need to prepare for their comprehensive exams (written and oral) and retain half-time status.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5988. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who, having completed all other coursework, need to prepare for their comprehensive exams (written and oral) and retain full-time status.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

The graduate minor in History requires 12 semester credit hours of advisor-approved History courses. Minors should have completed at least 18 hours of undergraduate History courses with a GPA of 3.0 or higher (4.0 scale).

Derrick Hall Room 101

T: 512.245.2339

<http://www.txstate.edu/internationalstudies> (<http://www.txstate.edu/internationalstudies/>)

The Center for International Studies is dedicated to understanding and appreciating the rich cultural, political, and social diversity of the world. Our mission is to provide quality interdisciplinary education about international affairs that will prepare graduates for rewarding careers in the public and private sectors, including law, diplomacy, and business, as well as further graduate level education.

## Master of Arts (M.A.)

- Major in International Studies (Non-thesis Option) (p. 2576)
- Major in International Studies (Thesis Option) (p. 2579)

## Program Overview

The Master of Arts (M.A.) degree with a major in International Studies is an interdisciplinary program that prepares students for work and leadership in an interdependent world. Through training in area studies, technology information training, oral and written communication skills, and business acumen, the program aims to develop leaders for business, government, military, education, non-profit organizations, and international institutions that are collectively facing an increasingly interdependent world where cultural diversity is a reality and the need to appreciate and value such heterogeneity is a prerequisite to global peace and prosperity.

### Paul D. Coverdell Fellows Program

The Coverdell Fellowship Program for returned Peace Corps volunteers is currently available for returned volunteers pursuing the master's degree in International Studies at the Center for International Studies.

## Financial Assistance

A limited number of fellowships and scholarships are available to qualified graduate students. Departmental fellowships and scholarships are listed on the Center for International Studies website: <http://www.txstate.edu/internationalstudies> (<http://www.txstate.edu/internationalstudies/>). The Graduate College can provide further information about scholarships.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials

- baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)\*
- proficiency in the speaking, reading, and oral comprehension of a modern language other than English as demonstrated by the following:
  - grade of B or better in modern language course work beyond the second year that was taken within the last three years at an accredited college, university, or language institute
  - examination for proficiency levels in reading, speaking, and listening that would place the student beyond the second year of language courses\*
  - recent foreign living experience of at least six continuous months in a single non-English-speaking culture outside the U.S.
- GRE not required\*
- resume/CV
- statement of purpose (2–5 pages) describing the following:
  - the reasons for considering the international studies program
  - how it fits into a process of professional development
  - what the student hopes to accomplish by enrolling in the program
- three letters of recommendation from professors

### Coverdell Applicants Requirements

- completed online application
- baccalaureate degree from a regionally accredited university
- official transcripts from each institution where course credit was granted. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)\*
- background course work: a passing grade in at least 6 hours in introductory (principles of) microeconomics and macroeconomics courses (can be taken prior to the start of the program or concurrently with first year courses) at a regionally accredited college of university
- proficiency in the speaking, reading, and oral comprehension of a modern language other than English as demonstrated by the following:
  - grade of B or better in modern language course work beyond the second year that was taken within the last three years at an accredited college, university, or language institute
  - examination of proficiency levels in reading, speaking, and listening that would place the student beyond the second year of language courses\*
  - recent foreign living experience of at least 6 continuous months in a single non-English-speaking culture outside the U.S.
- GRE not required\*



- official Peace Corps description of service (application fees may be waived upon receipt)
- resume/CV listing Peace Corps Service
- statement of purpose (2–5 pages) describing the following:
  - the reasons for considering the international studies program
  - how it fits into a process of professional development
  - what the student hopes to accomplish by enrolling in the program
  - Peace Corps service
- two letters of recommendation from professors

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and
  - minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

### \*Additional Information

GPA and GRE Requirement

If the overall GPA or last-60-hours GPA falls between 2.8–2.99, the student may submit the following:

- official GRE (general test only) scores with competitive scores

Foreign Language Proficiency Requirement

If the last language course was taken more than three years before the date of admission, and there has been no significant involvement in the language in the interim, the student may be asked to take a refresher course(s) in the language.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in International Studies requires 36 semester credit hours, including an internship.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
Choose 3 hours global history from the following:		3
HIST 5309D	Early Modern Spain	
HIST 5310	Western European History Since 1815	
HIST 5316A	Women's Rights in Comparative Perspective	
HIST 5316B	Women and Empire	
HIST 5318A	Eighteenth Century England	
HIST 5318C	The Age of the Stuarts	
HIST 5318D	European Imperialism	
HIST 5318E	European Sexualities	
HIST 5318F	European Fascisms and Historical Memory	
HIST 5319	The Age of the Tudors	
HIST 5323A	Society and Culture in Brazil	

HIST 5324B	Race, Class, and Nation in Modern Latin America	
HIST 5324C	Slavery and Emancipation in the Americas	
HIST 5324D	Writing the History of Latin America: The Colonial Era	
HIST 5324E	Modern Latin American Revolutions	
HIST 5325A	History of Mexico to 1848	
HIST 5325C	Revolutionary Mexico	
HIST 5325D	Mexico Since the Revolution	
HIST 5335	Twentieth-Century Russia	
HIST 5336	East European History	
HIST 5341B	Caribbean Transnationalism and Diplomacy	
HIST 5345O	Immigration and US History	
HIST 5345P	History of Mexican American Music in the Southwest	
HIST 5362	Military History	
HIST 5381	Chinese Communism	
HIST 5382	China and the Modern World	
HIST 5385	Topics in the History of the Modern Middle East	
HIST 5395D	Interpretations of World History	
HIST 5395E	Mahatma Gandhi in World History	
HIST 5395H	European Colonialism	
HIST 5395I	Global Cold War	
Choose 9 hours of global politics from the following:		9
PS 5310	Studies in Ancient and Medieval Political Thought	
PS 5311	Social Contract Theory	
PS 5315	Contemporary Perspectives in Modern Liberalism	
PS 5316	The Crisis of Liberalism and The Future of Democracy	
PS 5317	Theological Perspectives in Modern Democracy	
PS 5318	The Problem of Power and the Crisis of Modernity	
PS 5330A	Nuclear Weapons in International Politics	
PS 5330C	Party Systems in Latin America	
PS 5330D	Problems in Political Science: International Humanitarian Affairs	
PS 5330F	Topics in Comparative Politics of European and Developing Countries	
PS 5330J	Authoritarian Regimes	
PS 5332	Problems in American Foreign Relations	
PS 5356	The British Political Order Since 1900	
PS 5357	Russian Politics and Josef Stalin	
PS 5359	Comparative Democratization	
PS 5360	Economic Development in Developing Nations	
PS 5361	Government and Politics of African States	
PS 5362	Problems of Democracy in Latin America	
PS 5363	Party Systems in Latin America	
PS 5375	Seminar in International Relations Theory	
PS 5377	Problems in International Organizations	
PS 5378	Problems in International Law	
PS 5379	Problems in International Political Economy	
PS 5380	International Conflict and Security	
PS 5398	Directed Reading and Research	
Internship		3
IS 5387	International Studies Internship	

**Prescribed Electives**

Choose 21 hours from the following: 21

ANTH 5301	Advanced Principles of Cultural Anthropology	HIST 5325A	History of Mexico to 1848
ANTH 5306	Anthropology and Art	HIST 5325C	Revolutionary Mexico
ANTH 5314	Latin American Cultures	HIST 5325D	Mexico Since the Revolution
ANTH 5320	Rise of Civilization	HIST 5335	Twentieth-Century Russia
ANTH 5322	Peoples and Cultures of Africa	HIST 5336	East European History
ANTH 5325	Medical Anthropology	HIST 5341B	Caribbean Transnationalism and Diplomacy
ANTH 5345	Archaeology of Mesoamerica	HIST 5345O	Immigration and US History
ANTH 5349	The Incas	HIST 5345P	History of Mexican American Music in the Southwest
ANTH 5350	Gender and Sexuality in Cross Cultural Perspective	HIST 5362	Military History
ANTH 5356	Andean Civilizations	HIST 5381	Chinese Communism
ANTH 5373L	Cultural Heritage Management	HIST 5382	China and the Modern World
BILG 5388	The Politics of Language	HIST 5385	Topics in the History of the Modern Middle East
CI 5330	Multicultural Teaching and Learning	HIST 5390	Problems in Historical Research <sup>1</sup>
CI 5336	Methods and Materials for Teaching English as a Second Language	HIST 5395D	Interpretations of World History
CJ 5355	Intelligence Gathering and Operational Issues As Applied to Terrorism and Counterterrorism Operation	HIST 5395E	Mahatma Gandhi in World History
COMM 5312	Intercultural Communication	HIST 5395H	European Colonialism
COMM 5325	Seminar in Human Communication Theory	HIST 5395I	Global Cold War
DVST 5310	Diversity Studies: Theories & Issues	IS 5387	International Studies Internship
DVST 5320	Global Issues in Diversity	IS 5390	Problems in International Studies Research
ECO 5310	International Economics	IS 5398	General Research Methods
ECO 5320	Emerging Market Economies	MC 5301	Mass Media and Society
ENG 5311	Foundations in Technical Communication	MC 5302	Research Methods in Mass Communication
ENG 5313	Studies in Principles of Technical Communication <sup>1</sup>	MC 5303	Theories of Mass Communication
ENG 5314	Specializations in Technical Communication <sup>1</sup>	MC 5306L	Refugees, Nonprofit Organizations and Strategic Communication
ENG 5383	Studies in Rhetorical Theory <sup>1</sup>	MC 5310	Global Media Issues
GEO 5313	Environmental Studies	MC 5321	Latinos and Media
GEO 5315	Geographic Analysis of Global Issues	MC 5337	Global Media in the Connected World
GEO 5318	Environment Problems of the U.S.-Mexico Border	MGT 5312	Seminar in Management
GEO 5319	Seminar in Nature and Heritage Tourism	MKT 5322	Marketing Research Methods
GEO 5349	Population Geography	MKT 5330	International Marketing
GEO 5390	Independent Study <sup>1</sup>	MU 5369	History of Music in Latin America
HIST 5309D	Early Modern Spain	PHIL 5301	Applied Philosophy
HIST 5310	Western European History Since 1815	PHIL 5322	Professional Ethics
HIST 5316A	Women's Rights in Comparative Perspective	PHIL 5329	Food Ethics
HIST 5316B	Women and Empire	PHIL 5373	Themes in Africana Philosophy
HIST 5318A	Eighteenth Century England	PA 5352	Comparative Public Administration
HIST 5318C	The Age of the Stuarts	PS 5310	Studies in Ancient and Medieval Political Thought
HIST 5318D	European Imperialism	PS 5311	Social Contract Theory
HIST 5318E	European Sexualities	PS 5315	Contemporary Perspectives in Modern Liberalism
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HIST 5323A	Society and Culture in Brazil	PS 5330A	Nuclear Weapons in International Politics
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PS 5378	Problems in International Law	
PS 5379	Problems in International Political Economy	
PS 5380	International Conflict and Security	
PS 5398	Directed Reading and Research	
REL 5365	Philosophical Issues in Judaism, Christianity, and Islam	
SOCI 5320	Seminar in Demography	
SOCI 5367	Seminar in Sustainable Cities	
SOCI 5370	Seminar in Sociology of Racial and Ethnic Relations	
SOCI 5371	Directed Study <sup>1</sup>	
SOCI 5388G	Seminar in Food and Society	
SOCI 5390	Seminar in Globalization and Development	
SOCI 5395	Global Insecurity	
SOWK 5300F	International Social Work	
TECH 5310	Product Design and Development	
TECH 5384	Problems in Technology <sup>1</sup>	
TECH 5385	Readings in Technology <sup>1</sup>	
Total Hours		36

<sup>1</sup> Classes must have global/international emphasis

## Comprehensive Examination Requirement

Students are required to take a written comprehensive exam in their last semester of the program. Students must pass the comprehensive exam during the last semester in at most two attempts. If the student fails to pass the comprehensive exam in two attempts during the final semester, the student will retake the comprehensive exam during the next regular semester.

An oral exam is part of the comprehensive examination requirement. Students are required to take the exam in their last semester and must pass in at most two attempts. If the student fails to pass the oral exam in two attempts during the final semester, the student will retake the oral exam during the next regular semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in International Studies: IS

## Courses Offered

### International Studies (IS)

#### IS 5387. International Studies Internship.

A work/research experience in a government agency or company related to the students' career interests. The internship will consist of a minimum of 150 hours in the workplace and will require a research paper. This course may be repeated once for additional internship credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### IS 5390. Problems in International Studies Research.

The instructor and student create an in-depth research project on a topic of interest to both participants.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### IS 5398. General Research Methods.

The principal purpose of the General Research Methods seminar is to prepare students to successfully produce research papers and/or theses. Students in this course will produce a research paper using primary and secondary source materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

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- or
- \$90 nonrefundable application fee for applications with international credentials
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- official transcripts from **each institution** where course credit was granted. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)\*
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- official transcripts from each institution where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)\*
- background course work: a passing grade in at least 6 hours in introductory (principles of) microeconomics and macroeconomics courses (can be taken prior to the start of the program or concurrently with first year courses) at a regionally accredited college of university

- proficiency in the speaking, reading, and oral comprehension of a modern language other than English as demonstrated by the following:
  - grade of B or better in modern language course work beyond the second year that was taken within the last three years at an accredited college, university, or language institute
  - examination of proficiency levels in reading, speaking, and listening that would place the student beyond the second year of language courses\*
  - recent foreign living experience of at least 6 continuous months in a single non-English-speaking culture outside the U.S.
- GRE not required\*
- official Peace Corps description of service (application fees will be waived upon receipt)
- resume/CV listing Peace Corps Service
- statement of purpose (2–5 pages) describing the following:
  - the reasons for considering the international studies program
  - how it fits into a process of professional development
  - what the student hopes to accomplish by enrolling in the program
  - Peace Corps service
- two letters of recommendation from professors

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

\*Additional Information

GPA and GRE Requirement  
If the overall GPA or last-60-hours GPA falls between 2.8–2.99, the student may submit the following:

- official GRE (general test only) scores with competitive scores

Foreign Language Proficiency Requirement  
If the last language course was taken more than three years before the date of admission, and there has been no significant involvement in the language in the interim, the student may be asked to take a refresher course(s) in the language.

Degree Requirements

The Master of Arts (M.A.) degree with a major in International Studies requires 30 semester credit hours, including a thesis.

Course Requirements

Code	Title	Hours
Required Courses		
Choose 3 hours of global history from the following:		3

HIST 5309D	Early Modern Spain
HIST 5310	Western European History Since 1815
HIST 5316A	Women's Rights in Comparative Perspective
HIST 5316B	Women and Empire
HIST 5318A	Eighteenth Century England
HIST 5318C	The Age of the Stuarts
HIST 5318D	European Imperialism
HIST 5318E	European Sexualities
HIST 5318F	European Fascisms and Historical Memory
HIST 5319	The Age of the Tudors
HIST 5323A	Society and Culture in Brazil
HIST 5324B	Race, Class, and Nation in Modern Latin America
HIST 5324C	Slavery and Emancipation in the Americas
HIST 5324D	Writing the History of Latin America: The Colonial Era
HIST 5324E	Modern Latin American Revolutions
HIST 5325A	History of Mexico to 1848
HIST 5325C	Revolutionary Mexico
HIST 5325D	Mexico Since the Revolution
HIST 5335	Twentieth-Century Russia
HIST 5336	East European History
HIST 5341B	Caribbean Transnationalism and Diplomacy
HIST 5345O	Immigration and US History
HIST 5345P	History of Mexican American Music in the Southwest
HIST 5362	Military History
HIST 5381	Chinese Communism
HIST 5382	China and the Modern World
HIST 5385	Topics in the History of the Modern Middle East
HIST 5395D	Interpretations of World History
HIST 5395E	Mahatma Gandhi in World History
HIST 5395H	European Colonialism
HIST 5395I	Global Cold War
Choose 9 hours of global politics from the following:	
PS 5310	Studies in Ancient and Medieval Political Thought
PS 5311	Social Contract Theory
PS 5315	Contemporary Perspectives in Modern Liberalism
PS 5316	The Crisis of Liberalism and The Future of Democracy
PS 5317	Theological Perspectives in Modern Democracy
PS 5318	The Problem of Power and the Crisis of Modernity
PS 5330A	Nuclear Weapons in International Politics
PS 5330C	Party Systems in Latin America
PS 5330D	Problems in Political Science: International Humanitarian Affairs
PS 5330F	Topics in Comparative Politics of European and Developing Countries
PS 5330J	Authoritarian Regimes
PS 5332	Problems in American Foreign Relations
PS 5356	The British Political Order Since 1900
PS 5357	Russian Politics and Josef Stalin
PS 5359	Comparative Democratization
PS 5360	Economic Development in Developing Nations

PS 5361	Government and Politics of African States
PS 5362	Problems of Democracy in Latin America
PS 5363	Party Systems in Latin America
PS 5375	Seminar in International Relations Theory
PS 5377	Problems in International Organizations
PS 5378	Problems in International Law
PS 5379	Problems in International Political Economy
PS 5380	International Conflict and Security
PS 5398	Directed Reading and Research
<b>Prescribed Electives</b>	
Choose 12 hours from the following:	
12	
ANTH 5301	Advanced Principles of Cultural Anthropology
ANTH 5306	Anthropology and Art
ANTH 5314	Latin American Cultures
ANTH 5320	Rise of Civilization
ANTH 5322	Peoples and Cultures of Africa
ANTH 5325	Medical Anthropology
ANTH 5345	Archaeology of Mesoamerica
ANTH 5349	The Incas
ANTH 5350	Gender and Sexuality in Cross Cultural Perspective
ANTH 5356	Andean Civilizations
ANTH 5373L	Cultural Heritage Management
BILG 5388	The Politics of Language
CI 5330	Multicultural Teaching and Learning
CI 5336	Methods and Materials for Teaching English as a Second Language
CJ 5355	Intelligence Gathering and Operational Issues As Applied to Terrorism and Counterterrorism Operation
COMM 5312	Intercultural Communication
COMM 5325	Seminar in Human Communication Theory
DVST 5310	Diversity Studies: Theories & Issues
DVST 5320	Global Issues in Diversity
ECO 5310	International Economics
ECO 5320	Emerging Market Economies
ENG 5311	Foundations in Technical Communication <sup>2</sup>
ENG 5313	Studies in Principles of Technical Communication <sup>2</sup>
ENG 5314	Specializations in Technical Communication <sup>2</sup>
ENG 5383	Studies in Rhetorical Theory
GEO 5313	Environmental Studies <sup>2</sup>
GEO 5315	Geographic Analysis of Global Issues
GEO 5318	Environment Problems of the U.S.-Mexico Border
GEO 5319	Seminar in Nature and Heritage Tourism
GEO 5349	Population Geography
GEO 5390	Independent Study <sup>2</sup>
HIST 5309D	Early Modern Spain
HIST 5310	Western European History Since 1815
HIST 5316A	Women's Rights in Comparative Perspective
HIST 5316B	Women and Empire
HIST 5318A	Eighteenth Century England
HIST 5318C	The Age of the Stuarts
HIST 5318D	European Imperialism



HIST 5318E	European Sexualities	PS 5318	The Problem of Power and the Crisis of Modernity
HIST 5318F	European Fascisms and Historical Memory	PS 5330A	Nuclear Weapons in International Politics
HIST 5319	The Age of the Tudors	PS 5330C	Party Systems in Latin America
HIST 5323A	Society and Culture in Brazil	PS 5330D	Problems in Political Science: International Humanitarian Affairs
HIST 5324B	Race, Class, and Nation in Modern Latin America	PS 5330F	Topics in Comparative Politics of European and Developing Countries
HIST 5324D	Writing the History of Latin America: The Colonial Era	PS 5330J	Authoritarian Regimes
HIST 5324E	Modern Latin American Revolutions	PS 5332	Problems in American Foreign Relations
HIST 5325C	Revolutionary Mexico	PS 5356	The British Political Order Since 1900
HIST 5325A	History of Mexico to 1848	PS 5357	Russian Politics and Josef Stalin
HIST 5325C	Revolutionary Mexico	PS 5359	Comparative Democratization
HIST 5325D	Mexico Since the Revolution	PS 5360	Economic Development in Developing Nations
HIST 5335	Twentieth-Century Russia	PS 5361	Government and Politics of African States
HIST 5336	East European History	PS 5362	Problems of Democracy in Latin America
HIST 5341B	Caribbean Transnationalism and Diplomacy	PS 5363	Party Systems in Latin America
HIST 5345O	Immigration and US History	PS 5375	Seminar in International Relations Theory
HIST 5345P	History of Mexican American Music in the Southwest	PS 5377	Problems in International Organizations
HIST 5362	Military History	PS 5378	Problems in International Law
HIST 5381	Chinese Communism	PS 5379	Problems in International Political Economy
HIST 5382	China and the Modern World	PS 5380	International Conflict and Security
HIST 5385	Topics in the History of the Modern Middle East	PS 5398	Directed Reading and Research
HIST 5390	Problems in Historical Research <sup>2</sup>	REL 5365	Philosophical Issues in Judaism, Christianity, and Islam
HIST 5395D	Interpretations of World History	SOCI 5320	Seminar in Demography
HIST 5395E	Mahatma Gandhi in World History	SOCI 5367	Seminar in Sustainable Cities
HIST 5395H	European Colonialism	SOCI 5370	Seminar in Sociology of Racial and Ethnic Relations
HIST 5395I	Global Cold War	SOCI 5388G	Seminar in Food and Society
IS 5387	International Studies Internship	SOCI 5371	Directed Study <sup>2</sup>
IS 5390	Problems in International Studies Research	SOCI 5390	Seminar in Globalization and Development
IS 5398	General Research Methods	SOCI 5395	Global Insecurity
MC 5301	Mass Media and Society	SOWK 5300F	International Social Work
MC 5302	Research Methods in Mass Communication	TECH 5310	Product Design and Development
MC 5303	Theories of Mass Communication	TECH 5384	Problems in Technology <sup>2</sup>
MC 5306L	Refugees, Nonprofit Organizations and Strategic Communication	TECH 5385	Readings in Technology <sup>2</sup>
MC 5310	Global Media Issues	<b>Thesis</b>	
MC 5321	Latinos and Media	Choose 3 hours from the following: <sup>1</sup>	
MC 5337	Global Media in the Connected World	GEO 5399A	Thesis
MGT 5312	Seminar in Management	HIST 5399A	Thesis
MKT 5322	Marketing Research Methods	MC 5399A	Thesis
MKT 5330	International Marketing	PS 5399A	Thesis
MU 5369	History of Music in Latin America	SOCI 5399A	Thesis
PHIL 5301	Applied Philosophy	SPAN 5399A	Thesis
PHIL 5322	Professional Ethics	Choose a minimum of 3 hours from the following: <sup>1</sup>	
PHIL 5329	Food Ethics	GEO 5199B	Thesis
PHIL 5373	Themes in Africana Philosophy	GEO 5299B	Thesis
PA 5352	Comparative Public Administration	GEO 5399B	Thesis
PS 5310	Studies in Ancient and Medieval Political Thought	GEO 5599B	Thesis
PS 5311	Social Contract Theory	GEO 5999B	Thesis
PS 5315	Contemporary Perspectives in Modern Liberalism	HIST 5199B	Thesis
PS 5316	The Crisis of Liberalism and The Future of Democracy	HIST 5299B	Thesis
PS 5317	Theological Perspectives in Modern Democracy	HIST 5399B	Thesis

HIST 5599B	Thesis	
HIST 5999B	Thesis	
MC 5199B	Thesis	
MC 5299B	Thesis	
MC 5399B	Thesis	
MC 5599B	Thesis	
MC 5999B	Thesis	
PS 5199B	Thesis	
PS 5299B	Thesis	
PS 5399B	Thesis	
PS 5599B	Thesis	
PS 5999B	Thesis	
SOCI 5199B	Thesis	
SOCI 5299B	Thesis	
SOCI 5399B	Thesis	
SOCI 5599B	Thesis	
SOCI 5999B	Thesis	
SPAN 5199B	Thesis	
SPAN 5299B	Thesis	
SPAN 5399B	Thesis	
SPAN 5599B	Thesis	
SPAN 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> All thesis courses must be in the same department.

<sup>2</sup> Classes must have global/international emphasis

## Comprehensive Examination Requirement

Students are required to take a written comprehensive exam in their last semester of the program. Students must pass the comprehensive exam during the last semester in at most two attempts. If the student fails to pass the comprehensive exam in two attempts during the final semester, the student will retake the comprehensive exam during the next regular semester.

An oral exam is part of the comprehensive examination requirement. Students are required to take the exam in their last semester and must pass in at most two attempts. If the student fails to pass the oral exam in two attempts during the final semester, the student will retake the oral exam during the next regular semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her

thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis

course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in International Studies: IS

## Courses Offered

### International Studies (IS)

#### IS 5387. International Studies Internship.

A work/research experience in a government agency or company related to the students' career interests. The internship will consist of a minimum of 150 hours in the workplace and will require a research paper. This course may be repeated once for additional internship credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### IS 5390. Problems in International Studies Research.

The instructor and student create an in-depth research project on a topic of interest to both participants.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### IS 5398. General Research Methods.

The principal purpose of the General Research Methods seminar is to prepare students to successfully produce research papers and/or theses. Students in this course will produce a research paper using primary and secondary source materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

Comal Building Room 102

Telephone: 512-245-2285 Fax: 512-245-8335

[www.txstate.edu/philosophy](http://www.txstate.edu/philosophy) (<http://www.txstate.edu/philosophy/>)

The graduate program, including the *M.A. in Applied Philosophy and Ethics* (MAAPE) and the Graduate Certificate in Professional Ethics, *in Environmental Leadership, Engagement, and Ethics; and in Ethics and Digital Technologies*, is central to the mission of the Philosophy Department and to our vision of its future. The MAAPE is a flourishing program, with over 110 students receiving their MA during its first ten years. The MAAPE has become nationally and internationally competitive, attracting students from Arizona, Maine, Maryland, Georgia, Arkansas, California, Columbia, Mexico, and Bangladesh, as well as from Texas.

We conceived of Applied Philosophy as philosophy engaged with other disciplines and the affairs and concerns of contemporary life. In research and in teaching the department emphasizes the relevance of philosophy to technology and engineering; mathematics, computer science, and disciplines in the natural sciences; medicines; the social sciences; public policy; the humanities and arts; law; and everyday life. The Department has interdisciplinary ties through the participation of faculty members in the Honors College, the Center for Diversity and Gender Studies, the program in International Studies, the Certified Public Manager program, the PhD in Materials Science, Engineering, and Commercialization, Physics, Women's Studies, Political Science, and the graduate program in Sustainability Studies. Additionally, the Department houses a growing program for research in, and teaching of, Responsible Conduct of Research Program, and has particular strengths in Philosophy of Technology and Science, Latin-American/Latino/a/x Philosophy, Environmental Philosophy and Ethics, and Dialogue.

The *M.A. in Applied Philosophy and Ethics* is designed to help students examine and discuss both contemporary and perennial problems. It includes courses in theoretical and methodological issues as well as public dialogue. The program can be completed in 14 months - over two summers and the academic year in between - and includes the opportunity to take courses outside of philosophy for those with interests in adjacent disciplines. The faculty is active, diverse, and pluralistic, representing a wide range of specialties and approaches to philosophy.

The faculty welcomes students with different goals. The program can serve as preparation for doctoral work in philosophy, but many students have other objectives. These include graduate study in adjacent fields, law, non-profit work, enhancing an existing career and personal

enrichment. Hence, the faculty welcomes outstanding and dedicated students without a background in the discipline.

The **Graduate Certificate in Professional Ethics** will help you engage more fully with ethical issues in your professional life. This certificate program, is a response to a wide and growing interest in the ethical dimensions of professional and public life. Participants strengthen their dimensions of professional and public life. Participants strengthen their understanding of ethics and enhance their ability to recognize and respond to ethical issues in a wide variety of settings. The program emphasizes advanced critical thinking and writing skills, in-depth knowledge of the history, theory, principles and concepts of ethics, the ability to recognize and resolve ethical dilemmas, and the knowledge and skills necessary for ethical leadership.

The **Graduate Certificate in Environmental Leadership, Engagement, and Ethics** provides professional development and educational opportunities through innovative courses in environmental leadership, engagement, and ethics. The program is intended for environmental professionals, students pursuing a graduate degree in another discipline for which a coherent set of courses on environmental issues will be a benefit, and anyone interested in learning more about engagement and ethics as they pertain to environmental topics.

The **Graduate Certificate in Ethics and Digital Technologies** offers educational and professional development through courses exploring the ethical implications of digital technologies. It is designed for professionals working within digital fields, graduate students from various disciplines seeking to complement their studies with ethical insights into digital technology, and anyone eager to understand the ethical and philosophical dimensions of these emerging technologies.

## Master of Arts (M.A.)

- Major in Applied Philosophy and Ethics (Non-thesis Option) (p. 2585)
- Major in Applied Philosophy and Ethics (Thesis Option) (p. 2590)

## Minor

- Philosophy (p. 2596)

## Certificate

- Environmental Leadership, Engagement, and Ethics (<http://mycatalog.txstate.edu/graduate/liberal-arts/philosophy/environmental-leadership-engagement-ethics-certificate/>)
- Ethics and Digital Technologies (<http://mycatalog.txstate.edu/graduate/liberal-arts/philosophy/ethics-digital-technologies-certificate/>)
- Professional Ethics (p. 2597)

## Program Overview

Dialogue, essential to any practical application of philosophy, is at the heart of the applied philosophy and ethics (MAAPE) program. Students apply theory by participating in the Department of Philosophy's Dialogue Series. The series includes student and faculty presenters from all eight colleges on campus, as well as speakers from off campus.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic

year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose (one page)
- two letters of recommendation
- writing sample

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Applied Philosophy and Ethics requires 33 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
PHIL 5301	Applied Philosophy	3
PHIL 5302	Dialogue	3
PHIL 5320	History of Ethics	3
or PHIL 5328	Major Work or Theme in Ethics	
PHIL 5332	Social and Political Philosophy	3
<b>Requirement in Non-Normative Philosophy</b>		
Chose 1 course from the following list. Additional courses from this list may be taken as electives.		3

PHIL 5304	Philosophy of Language
PHIL 5340	Philosophical Logic
PHIL 5355	Philosophy of Science
PHIL 5356	Philosophy of Knowledge
PHIL 5362A	Analytic Philosophy
<b>Prescribed Electives</b>	
Choose 18 hours from the following (up to six hours may be from outside the department, with approval of the Graduate Program Coordinator):	
PHIL 5101	Responsible Conduct of Research and Research Ethics
PHIL 5303	Philosophy of Technology
PHIL 5305	Philosophical Writing
PHIL 5329	Food Ethics
PHIL 5314	American Philosophy
PHIL 5322	Professional Ethics
PHIL 5323	Environmental Ethics
PHIL 5324	Meaning of Life
PHIL 5325	Philosophy of Sex and Love
PHIL 5326	Philosophy and Sport
PHIL 5327	Medical Ethics and Bio-ethics
PHIL 5328	Major Work or Theme in Ethics
PHIL 5331	Philosophy of Law
PHIL 5333	Feminist Theory
PHIL 5334	Philosophy of Economics
PHIL 5340	Philosophical Logic
PHIL 5351	Philosophy of Education
PHIL 5355	Philosophy of Science
PHIL 5356	Philosophy of Knowledge
PHIL 5360A	Ethics and Dementia
PHIL 5360B	Moral Psychology
PHIL 5360C	Philosophy, Nonviolence, Sustainability, and Social Change
PHIL 5361A	Philosophy of Biology
PHIL 5361B	Philosophy of the Human Sciences
PHIL 5361C	Philosophy of Emotion
PHIL 5362A	Analytic Philosophy
PHIL 5362B	19th Century Philosophy
PHIL 5363A	Philosophy and Science Fiction
PHIL 5373	Themes in Africana Philosophy
PHIL 5388	Problems in Philosophy
PHIL 5395	Internship in Applied Philosophy

**Total Hours** **33**

## Comprehensive Examination Requirement

Our comprehensive exam takes the form of an exit interview, which is typically conducted by two faculty members. This is an hour-long oral exam. The exam focuses on three of the student's papers; however, includes more general questions as well. The exam can be repeated until the student passes it.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Philosophy: PHIL

## Courses Offered

### Philosophy (PHIL)

#### PHIL 5100. Practicum in Teaching Philosophy.

This course orients Instructional Assistants to the principles of teaching philosophy responsibly. Topics include grades, evaluation of written work, classroom management, academic values, and teaching style. This course is required for all new Instructional Assistants in Philosophy. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

#### PHIL 5101. Responsible Conduct of Research and Research Ethics.

In this course students will examine issues, concepts, and cases in research ethics and the responsible conduct of research. Designed to meet NSF and NIH requirements for training, topics will include research integrity, conflicts of interest, authorship, peer review, human and animal experimentation, mentorship, data, and values in science. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling  
**Grade Mode:** Leveling/Assistantships

#### PHIL 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### PHIL 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### PHIL 5301. Applied Philosophy.

Practical application of methods and teaching of philosophy to such major areas of human experience as religion, science, morality, politics, art, or literature. The study of one or more of these areas will demonstrate how philosophy contributes to the identification of issues as well as their resolution.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**PHIL 5302. Dialogue.**

Study of literature about the nature, purpose, and significance of dialogue along with active participation in the dialogues of the Department of Philosophy's Dialogue Series.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5303. Philosophy of Technology.**

Study of philosophical and ethical dimensions of technology including the nature of technology and technological progress, the relation of humans to the technological environment, whether technology is value-laden, and the social character of technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5304. Philosophy of Language.**

This course will examine the nature, structure, and uses of language and its role in conceptualizing and attempting to solve perennial philosophical problems. Features of language such as meaning, reference, truth, verification, and speech acts will be investigated and applied to issues of metaphysics and ontology, epistemology, and theory construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5305. Philosophical Writing.**

The course focuses on theoretical and methodological foundation necessary for producing philosophical works suitable for submission to conferences or journals. Students will analyze the standards for and engage in the process of developing papers for professional presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5306. Foundation Studies.**

Foundation Studies in Philosophy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5314. American Philosophy.**

This course is an examination of contributions of Americans to perennial philosophical issues, including the tradition of American Pragmatism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5320. History of Ethics.**

This course is a survey of major ethical theories in the Western philosophical tradition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5322. Professional Ethics.**

Study of major topics in business and professional ethics, including what a profession is, whether it differs from business, and what is involved with moral education, social responsibilities, and ethical standards of professional and business people.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5323. Environmental Ethics.**

Study of ethical issues associated with the environment including the nature, use, preservation, and restoration of the environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5324. Meaning of Life.**

Investigation of major theories of the meaning of life in Western and Eastern philosophies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5325. Philosophy of Sex and Love.**

Critical examination of major philosophical theories on sex and love from ancient to modern times.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5326. Philosophy and Sport.**

An examination of the philosophical issues that arise in sport. Topics include the social significance of sport, amateurism, the ethics of competition, the meaning of violence within sports, and other related issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PHIL 5327. Medical Ethics and Bio-ethics.**

Study of ethical issues, dilemmas, codes of conduct, and social responsibilities of health care professionals and bio-researchers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5328. Major Work or Theme in Ethics.**

This course examines in detail a single significant work, theme or issue in ethics. May be repeated with a different focus.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5329. Food Ethics.**

Eating raises hard moral questions. This course explores those questions as well as potential answers. Standard topics include the nature of the food system, global hunger, food justice, consumer ethics, industrial agriculture and its alternatives, the plight of workers, overconsumption, and public health.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5331. Philosophy of Law.**

This course is a systematic study of the nature and function of law and of such problems as the relation of law to morality, and the justification of punishment. Additional topics include the nature of legal reasoning and interpretation, theories of law, and salient features of legal systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5332. Social and Political Philosophy.**

In this course students engage in an intensive examination of issues in political and social philosophy, including democracy, civil disobedience, anarchism, totalitarianism, and the nature of the state. Participants develop knowledge of major theories, concepts, and methodologies in social and political philosophy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5333. Feminist Theory.**

This course serves as an in-depth introduction to the various theoretical frameworks that have and continue to inform scholarship in feminism. Participants explore differences and commonalities between distinct feminist theoretical traditions (liberal feminism, Marxist feminism, post-structuralism, psychoanalysis, queer theory) and learn to critically engage accounts of identity, difference, social movement, globalization, nationalism, and social change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5334. Philosophy of Economics.**

This course serves as an in-depth introduction to the various theoretical frameworks that have and continue to inform scholarship in philosophy of economics. Participants explore differences and commonalities between distinct theoretical traditions (including liberal, Marxist, post-structuralist, positivist, neo-liberal, institutionalist, rational choice) and learn to critically examine the nature of economic phenomena and the possibilities of knowledge in economics. Participants also learn to appraise, including ethical appraisal of economic outcomes, institutions, and processes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5340. Philosophical Logic.**

The course is an examination of the conceptual frameworks of and philosophical challenges to classical and alternative logics. Special attention will be paid to the use of the logics within metaphysics, the axiomatic method as used in logic and mathematics, philosophy of language, philosophy of mind, and meta-ethics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5351. Philosophy of Education.**

Study of major philosophical theories on nature, value, and purpose of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5355. Philosophy of Science.**

An examination of some of the fundamental concepts in science, including relevant evidence, induction, explanation, and commitments when accepting a scientific theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5356. Philosophy of Knowledge.**

The course will consist of a close examination of topics in the philosophical theory of knowledge, such as skepticism, defining knowledge, the nature of justification, perception, and truth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5360A. Ethics and Dementia.**

This course provides an opportunity to examine ethical challenges posed by dementia for those with dementia, family members, caregivers, healthcare systems, policy makers, and others. Participants will critically explore ethics and dementia in clinical, social/cultural, everyday life, policy, end-of-life, and individual perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5360B. Moral Psychology.**

This seminar provides an introduction to the major theories, issues, and research relevant to the field of moral psychology. Drawing from a variety of fields—philosophy, social psychology, cognitive psychology, developmental psychology, and evolutionary theory—we will investigate what morality is, how it develops, and how it functions in society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5360C. Philosophy, Nonviolence, Sustainability, and Social Change.**

In this course students will study themes and concepts related to nonviolence, sustainability, and social change. Participants will critically examine the works of thinkers such as Thoreau, Addams, Tolstoy, Gandhi, King, and Chavez. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**PHIL 5360F. Biopolitics, Governmentality, and Ungovernability.**

This course is an introduction to (1) biopolitics, or the government of life, (2) governmentality, or the frameworks, modalities, and mechanisms of governance, and (3) ungovernability, or the limits of and resistances to governance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361A. Philosophy of Biology.**

In this course students will explore foundational questions in biology concerning the justification of biological theories, methods and concepts. Possible topics include concepts of fitness, units of selection, adaptationism, species, phylogenetic inference, homology, developmental systems, neuroscience, behavioral evolution, cooperation, altruism, evolutionary psychology, evolutionary ethics, cultural evolution, and race and gender.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361B. Philosophy of the Human Sciences.**

This course is a survey of current debates about the structure, nature, role, methodologies, scope, and aim of the human sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361C. Philosophy of Emotion.**

In this course students examine the understandings of emotions as developed in the history of philosophy, including topics such as somatic theories, cognitive theories, and philosophical accounts of feelings, mood, and other affective experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361D. Philosophy of Mind.**

In this course, students analyze both historical and contemporary philosophical attempts to explain the mind.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361E. Philosophy and Ethics in Virtual Reality.**

In this course, students investigate philosophical and ethical issues in virtual reality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361F. Philosophy and Ethics of Artificial Intelligence.**

In this course, students will explore philosophical and ethical dimensions of Artificial Intelligence.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5362A. Analytic Philosophy.**

Students in this course will examine major thinkers, works, theories, and problems of analytic philosophy. Topics will include the philosophy of language, logic, philosophy of mathematics, philosophy of mind, philosophy of science, metaphysics, epistemology, ethics, metaethics, and philosophical methodology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5362B. 19th Century Philosophy.**

This course offers a detailed introduction to central figures of 19th-century European philosophy such as Hegel, Marx, Kierkegaard, and Nietzsche in the context of their responses to the Enlightenment, the condition of modernity, the growth of democracy, nationalism, capitalism, Darwin, secularization, and the critical project of Kant.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5363A. Philosophy and Science Fiction.**

In this seminar students will examine intersections between philosophy and science fiction around topics such as the nature of reality, the existence and nature of the divine, the limits of human knowledge, the meaning of free will, the notions of personhood, the nature of morality, and the meaning of life.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5372. Latin American Philosophy.**

Students in this course study ancient Latin American thought, including Mayan, Aztec, Toltec, and Incan; pre- and post- conquest Latin American philosophy; contemporary Latin American philosophy; and the thinking of Latin Americans in the U.S.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5373. Themes in Africana Philosophy.**

In this course students will examine philosophy and philosophical practice as it emerges from the historical experiences of African Americans and the African Diaspora. Participants in the course will evaluate how the African-American philosophical tradition alters conventional philosophical accounts of subjectivity, knowledge, time, language, history, embodiment, memory, and justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PHIL 5388. Problems in Philosophy.**

Independent study open to students on individual or small group basis. May be repeated for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5395. Internship in Applied Philosophy.**

Structured practical experience in applied philosophy at a private or public setting. Supervision will be provided both by a member of the graduate faculty and by a key individual in the workplace. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis on PHIL 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

Dialogue, essential to any practical application of philosophy, is at the heart of the applied philosophy and ethics (MAAPE) program. Students apply theory by participating in the Department of Philosophy's Dialogue Series. The series includes student and faculty presenters from all eight colleges on campus, as well as speakers from off campus.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose (one page)
- two letters of recommendation
- writing sample

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Applied Philosophy and Ethics requires 30 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
PHIL 5301	Applied Philosophy	3
PHIL 5302	Dialogue	3
PHIL 5320	History of Ethics	3
or PHIL 5328	Major Work or Theme in Ethics	
PHIL 5332	Social and Political Philosophy	3
<b>Requirement in Non-normative Philosophy</b>		
Chose 1 course from the following list. Additional courses from this list may be taken as electives.		3
PHIL 5304	Philosophy of Language	
PHIL 5340	Philosophical Logic	
PHIL 5355	Philosophy of Science	
PHIL 5356	Philosophy of Knowledge	
PHIL 5362A	Analytic Philosophy	
<b>Prescribed Electives</b>		
Choose 9 hours from the following:		9
PHIL 5101	Responsible Conduct of Research and Research Ethics	
PHIL 5301	Applied Philosophy	
PHIL 5302	Dialogue	
PHIL 5303	Philosophy of Technology	
PHIL 5305	Philosophical Writing	
PHIL 5314	American Philosophy	
PHIL 5322	Professional Ethics	
PHIL 5323	Environmental Ethics	
PHIL 5324	Meaning of Life	
PHIL 5325	Philosophy of Sex and Love	
PHIL 5326	Philosophy and Sport	
PHIL 5327	Medical Ethics and Bio-ethics	
PHIL 5328	Major Work or Theme in Ethics	
PHIL 5329	Food Ethics	
PHIL 5331	Philosophy of Law	
PHIL 5333	Feminist Theory	
PHIL 5334	Philosophy of Economics	
PHIL 5340	Philosophical Logic	
PHIL 5351	Philosophy of Education	
PHIL 5355	Philosophy of Science	
PHIL 5356	Philosophy of Knowledge	
PHIL 5360A	Ethics and Dementia	
PHIL 5360B	Moral Psychology	
PHIL 5360C	Philosophy, Nonviolence, Sustainability, and Social Change	
PHIL 5361A	Philosophy of Biology	
PHIL 5361B	Philosophy of the Human Sciences	
PHIL 5361C	Philosophy of Emotion	
PHIL 5362A	Analytic Philosophy	
PHIL 5362B	19th Century Philosophy	
PHIL 5363A	Philosophy and Science Fiction	
PHIL 5373	Themes in Africana Philosophy	
PHIL 5388	Problems in Philosophy	

PHIL 5395	Internship in Applied Philosophy	
<b>Thesis</b>		
PHIL 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
PHIL 5199B	Thesis	
PHIL 5299B	Thesis	
PHIL 5399B	Thesis	
PHIL 5599B	Thesis	
PHIL 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

Our comprehensive exam takes the form of the thesis defense, which is typically conducted by two faculty members. The exam focuses on the merits of the thesis itself; however, includes general questions. The exam can be repeated until the student passes it.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student



will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's

progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Philosophy: PHIL

## Courses Offered Philosophy (PHIL)

### PHIL 5100. Practicum in Teaching Philosophy.

This course orients Instructional Assistants to the principles of teaching philosophy responsibly. Topics include grades, evaluation of written work, classroom management, academic values, and teaching style. This course is required for all new Instructional Assistants in Philosophy. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

### PHIL 5101. Responsible Conduct of Research and Research Ethics.

In this course students will examine issues, concepts, and cases in research ethics and the responsible conduct of research. Designed to meet NSF and NIH requirements for training, topics will include research integrity, conflicts of interest, authorship, peer review, human and animal experimentation, mentorship, data, and values in science. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling  
**Grade Mode:** Leveling/Assistantships

### PHIL 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5301. Applied Philosophy.**

Practical application of methods and teaching of philosophy to such major areas of human experience as religion, science, morality, politics, art, or literature. The study of one or more of these areas will demonstrate how philosophy contributes to the identification of issues as well as their resolution.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5302. Dialogue.**

Study of literature about the nature, purpose, and significance of dialogue along with active participation in the dialogues of the Department of Philosophy's Dialogue Series.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5303. Philosophy of Technology.**

Study of philosophical and ethical dimensions of technology including the nature of technology and technological progress, the relation of humans to the technological environment, whether technology is value-laden, and the social character of technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5304. Philosophy of Language.**

This course will examine the nature, structure, and uses of language and its role in conceptualizing and attempting to solve perennial philosophical problems. Features of language such as meaning, reference, truth, verification, and speech acts will be investigated and applied to issues of metaphysics and ontology, epistemology, and theory construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5305. Philosophical Writing.**

The course focuses on theoretical and methodological foundation necessary for producing philosophical works suitable for submission to conferences or journals. Students will analyze the standards for and engage in the process of developing papers for professional presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5306. Foundation Studies.**

Foundation Studies in Philosophy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5314. American Philosophy.**

This course is an examination of contributions of Americans to perennial philosophical issues, including the tradition of American Pragmatism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5320. History of Ethics.**

This course is a survey of major ethical theories in the Western philosophical tradition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5322. Professional Ethics.**

Study of major topics in business and professional ethics, including what a profession is, whether it differs from business, and what is involved with moral education, social responsibilities, and ethical standards of professional and business people.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5323. Environmental Ethics.**

Study of ethical issues associated with the environment including the nature, use, preservation, and restoration of the environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5324. Meaning of Life.**

Investigation of major theories of the meaning of life in Western and Eastern philosophies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5325. Philosophy of Sex and Love.**

Critical examination of major philosophical theories on sex and love from ancient to modern times.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5326. Philosophy and Sport.**

An examination of the philosophical issues that arise in sport. Topics include the social significance of sport, amateurism, the ethics of competition, the meaning of violence within sports, and other related issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PHIL 5327. Medical Ethics and Bio-ethics.**

Study of ethical issues, dilemmas, codes of conduct, and social responsibilities of health care professionals and bio-researchers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5328. Major Work or Theme in Ethics.**

This course examines in detail a single significant work, theme or issue in ethics. May be repeated with a different focus.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5329. Food Ethics.**

Eating raises hard moral questions. This course explores those questions as well as potential answers. Standard topics include the nature of the food system, global hunger, food justice, consumer ethics, industrial agriculture and its alternatives, the plight of workers, overconsumption, and public health.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5331. Philosophy of Law.**

This course is a systematic study of the nature and function of law and of such problems as the relation of law to morality, and the justification of punishment. Additional topics include the nature of legal reasoning and interpretation, theories of law, and salient features of legal systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5332. Social and Political Philosophy.**

In this course students engage in an intensive examination of issues in political and social philosophy, including democracy, civil disobedience, anarchism, totalitarianism, and the nature of the state. Participants develop knowledge of major theories, concepts, and methodologies in social and political philosophy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5333. Feminist Theory.**

This course serves as an in-depth introduction to the various theoretical frameworks that have and continue to inform scholarship in feminism. Participants explore differences and commonalities between distinct feminist theoretical traditions (liberal feminism, Marxist feminism, post-structuralism, psychoanalysis, queer theory) and learn to critically engage accounts of identity, difference, social movement, globalization, nationalism, and social change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5334. Philosophy of Economics.**

This course serves as an in-depth introduction to the various theoretical frameworks that have and continue to inform scholarship in philosophy of economics. Participants explore differences and commonalities between distinct theoretical traditions (including liberal, Marxist, post-structuralist, positivist, neo-liberal, institutionalist, rational choice) and learn to critically examine the nature of economic phenomena and the possibilities of knowledge in economics. Participants also learn to appraise, including ethical appraisal of economic outcomes, institutions, and processes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5340. Philosophical Logic.**

The course is an examination of the conceptual frameworks of and philosophical challenges to classical and alternative logics. Special attention will be paid to the use of the logics within metaphysics, the axiomatic method as used in logic and mathematics, philosophy of language, philosophy of mind, and meta-ethics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5351. Philosophy of Education.**

Study of major philosophical theories on nature, value, and purpose of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5355. Philosophy of Science.**

An examination of some of the fundamental concepts in science, including relevant evidence, induction, explanation, and commitments when accepting a scientific theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5356. Philosophy of Knowledge.**

The course will consist of a close examination of topics in the philosophical theory of knowledge, such as skepticism, defining knowledge, the nature of justification, perception, and truth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5360A. Ethics and Dementia.**

This course provides an opportunity to examine ethical challenges posed by dementia for those with dementia, family members, caregivers, healthcare systems, policy makers, and others. Participants will critically explore ethics and dementia in clinical, social/cultural, everyday life, policy, end-of-life, and individual perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5360B. Moral Psychology.**

This seminar provides an introduction to the major theories, issues, and research relevant to the field of moral psychology. Drawing from a variety of fields—philosophy, social psychology, cognitive psychology, developmental psychology, and evolutionary theory—we will investigate what morality is, how it develops, and how it functions in society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5360C. Philosophy, Nonviolence, Sustainability, and Social Change.**

In this course students will study themes and concepts related to nonviolence, sustainability, and social change. Participants will critically examine the works of thinkers such as Thoreau, Addams, Tolstoy, Gandhi, King, and Chavez. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**PHIL 5360F. Biopolitics, Governmentality, and Ungovernability.**

This course is an introduction to (1) biopolitics, or the government of life, (2) governmentality, or the frameworks, modalities, and mechanisms of governance, and (3) ungovernability, or the limits of and resistances to governance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361A. Philosophy of Biology.**

In this course students will explore foundational questions in biology concerning the justification of biological theories, methods and concepts. Possible topics include concepts of fitness, units of selection, adaptationism, species, phylogenetic inference, homology, developmental systems, neuroscience, behavioral evolution, cooperation, altruism, evolutionary psychology, evolutionary ethics, cultural evolution, and race and gender.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361B. Philosophy of the Human Sciences.**

This course is a survey of current debates about the structure, nature, role, methodologies, scope, and aim of the human sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361C. Philosophy of Emotion.**

In this course students examine the understandings of emotions as developed in the history of philosophy, including topics such as somatic theories, cognitive theories, and philosophical accounts of feelings, mood, and other affective experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361D. Philosophy of Mind.**

In this course, students analyze both historical and contemporary philosophical attempts to explain the mind.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361E. Philosophy and Ethics in Virtual Reality.**

In this course, students investigate philosophical and ethical issues in virtual reality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361F. Philosophy and Ethics of Artificial Intelligence.**

In this course, students will explore philosophical and ethical dimensions of Artificial Intelligence.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5362A. Analytic Philosophy.**

Students in this course will examine major thinkers, works, theories, and problems of analytic philosophy. Topics will include the philosophy of language, logic, philosophy of mathematics, philosophy of mind, philosophy of science, metaphysics, epistemology, ethics, metaethics, and philosophical methodology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5362B. 19th Century Philosophy.**

This course offers a detailed introduction to central figures of 19th-century European philosophy such as Hegel, Marx, Kierkegaard, and Nietzsche in the context of their responses to the Enlightenment, the condition of modernity, the growth of democracy, nationalism, capitalism, Darwin, secularization, and the critical project of Kant.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5363A. Philosophy and Science Fiction.**

In this seminar students will examine intersections between philosophy and science fiction around topics such as the nature of reality, the existence and nature of the divine, the limits of human knowledge, the meaning of free will, the notions of personhood, the nature of morality, and the meaning of life.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5372. Latin American Philosophy.**

Students in this course study ancient Latin American thought, including Mayan, Aztec, Toltec, and Incan; pre- and post- conquest Latin American philosophy; contemporary Latin American philosophy; and the thinking of Latin Americans in the U.S.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5373. Themes in Africana Philosophy.**

In this course students will examine philosophy and philosophical practice as it emerges from the historical experiences of African Americans and the African Diaspora. Participants in the course will evaluate how the African-American philosophical tradition alters conventional philosophical accounts of subjectivity, knowledge, time, language, history, embodiment, memory, and justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PHIL 5388. Problems in Philosophy.**

Independent study open to students on individual or small group basis. May be repeated for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5395. Internship in Applied Philosophy.**

Structured practical experience in applied philosophy at a private or public setting. Supervision will be provided both by a member of the graduate faculty and by a key individual in the workplace. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis on PHIL 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

The graduate minor in Philosophy requires 6 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
Choose 6 hours from the following:		6
PHIL 5301	Applied Philosophy	
PHIL 5302	Dialogue	
PHIL 5303	Philosophy of Technology	
PHIL 5304	Philosophy of Language	
PHIL 5305	Philosophical Writing	
PHIL 5314	American Philosophy	
PHIL 5320	History of Ethics	
PHIL 5322	Professional Ethics	
PHIL 5323	Environmental Ethics	
PHIL 5324	Meaning of Life	
PHIL 5325	Philosophy of Sex and Love	
PHIL 5326	Philosophy and Sport	
PHIL 5327	Medical Ethics and Bio-ethics	
PHIL 5328	Major Work or Theme in Ethics	
PHIL 5329	Food Ethics	
PHIL 5331	Philosophy of Law	
PHIL 5332	Social and Political Philosophy	
PHIL 5333	Feminist Theory	
PHIL 5334	Philosophy of Economics	
PHIL 5340	Philosophical Logic	
PHIL 5351	Philosophy of Education	
PHIL 5355	Philosophy of Science	
PHIL 5356	Philosophy of Knowledge	
PHIL 5360A	Ethics and Dementia	
PHIL 5360B	Moral Psychology	
PHIL 5360C	Philosophy, Nonviolence, Sustainability, and Social Change	



PHIL 5361A	Philosophy of Biology
PHIL 5361B	Philosophy of the Human Sciences
PHIL 5361C	Philosophy of Emotion
PHIL 5362A	Analytic Philosophy
PHIL 5362B	19th Century Philosophy
PHIL 5363A	Philosophy and Science Fiction
PHIL 5373	Themes in Africana Philosophy
PHIL 5388	Problems in Philosophy
PHIL 5395	Internship in Applied Philosophy
WS 5376	Images of Women

**Total Hours****6**

## Program Overview

The graduate certificate in Professional Ethics will help students engage more fully with ethical issues in their professional life. This 12-hour certificate program will enhance students' abilities to analyze arguments, capacities to reason and express themselves clearly, leadership skills, and awareness of the ethical dimensions of work and public life. The certificate is available online or face-to-face and is open to all interested persons who hold a bachelor's degree with a 3.0 minimum GPA.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$20 nonrefundable application fee
- or
- \$60 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- minimum 2.5 GPA overall GPA or a 2.5 GPA in the last 60 hours of undergraduate course work
- minimum 3.0 GPA in all completed graduate course work (if applicable)
- GRE not required

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt

countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Course Requirements

The graduate certificate in Professional Ethics requires 12 semester credit hours – six hours of required course work (two courses), three hours of directed PHIL elective and three hours of elective course work. The required courses are PHIL 5322: Professional Ethics and PHIL 5360G: Applied Ethics.

The directed elective must be chosen from:

PHIL 5303: Philosophy of Technology

PHIL 5320: History of Ethics

PHIL 5323: Environmental Ethics

PHIL 5327 Medical Ethics and Bioethics

PHIL 5329: Food Ethics

PHIL 5360A: Ethics and Dementia

PHIL 5360B: Moral Psychology

PHIL 5360C: Philosophy, Nonviolence, Sustainability, and Social Change

PHIL 5395: Internship in Applied Philosophy

The elective course may be selected from any of the graduate courses in PHIL or REL.

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[www.polisci.txstate.edu](http://www.polisci.txstate.edu) (<http://www.polisci.txstate.edu/>)

The Department of Political Science, as a part of the College of Liberal Arts is dedicated to promoting student learning about fundamental theory and key concepts relevant to political science and public administration and encouraging student learning relative to the development of strong analytical skills, effective oral and written communication skills, and rigorous critical thinking skills. Throughout the course of their study, students are invited to reflect not simply on their career goals but also on what type of persons they want to become, and on their rights and duties as citizens.

We are the academic home for about 800 undergraduate majors and minors and 380 graduate students. The department offers master's degree programs in political science, public administration, and legal studies, including a paralegal studies certificate. In partnership with the Texas City and County Management Association, we offer the manager-in-residence program whereby a city manager offers mentorship to students interested in careers as public administrators. The student chapter of the International City and County Management Association gives students the opportunity to network with public service professionals. Students also get practical experience through internships

with local, state and nonprofit organizations. We also house the William P. Hobby Center for Public Service, the Center for Research, Public Policy, and Training (CRPPT), the Armed Forces and Society Journal, the Journal of Critical Infrastructure Policy and, the Good Governance Worldwide Journal.

## Texas Certified Public Manager (CPM) Program

Please see the ‘Texas Certified Public Manager Program’ section of this catalog.

## Master of Arts (M.A.)

- Major in Legal Studies (p. 2598)
- Major in Political Science (Non-thesis Option) (p. 2601)
- Major in Political Science (Thesis Option) (p. 2607)

## Master of Public Administration (M.P.A.)

- Major in Public Administration (Applied Research Project Concentration) (p. 2614)
- Major in Public Administration (Non-thesis Option) (p. 2618)
- Major in Public Administration (Thesis Option) (p. 2622)

## Minors

- Legal Studies (p. 2628)
- Political Science (p. 2628)

## Certificates

- Paralegal Studies (p. 2628) (requires concurrent enrollment in the Master of Arts degree with a major in Legal Studies Program at Texas State University)

## Program Overview

The M.A. major in Legal Studies is an ABA-approved program that offers career enhancement in law-related fields and helps meet the evolving needs of the legal and business communities and federal and state government entities. It is offered concurrently with the Paralegal Studies Certificate, which is also an ABA-approved paralegal training program. These programs do not qualify graduates to practice law. Legal assistants or paralegals must work under the supervision of a licensed attorney.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College’s website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application (including the Paralegal Studies Certificate)
- \$20 nonrefundable certificate fee (Paralegal Studies Certificate) **and** \$55 nonrefundable application fee

or

- \$20 nonrefundable certificate fee (Paralegal Studies Certificate) **and** \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor’s degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)\*
- GRE not required
- interview with the legal studies graduate advisor
- additional documents not required\*

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

### \*Additional Information

If the overall GPA or the last-60-hours GPA falls between 2.50 and 2.99, the student must submit the following:

- personal statement explaining any special circumstances which would otherwise qualify the student for admission to the program
- two letters of recommendation from persons who could comment upon the ability to perform in the requested area of study

\*Conditional admission is not available to applicants who require "F" or "J" visas.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Legal Studies requires 36 semester credit hours. Students must successfully complete the 36-hour curriculum while maintaining a “B” average and must receive a “B” or better in each required course.

## Course Requirements

Code	Title	Hours
Required Courses		
LS 5310	Introduction to the Paralegal Profession and Legal Technology	3
LS 5320	Legal Research	3
LS 5330	Legal Theories and Analysis	3
LS 5340	Litigation	3

LS 5350	Legal Drafting	3
LS 5360	Advanced Litigation	3
LS 5370	Advanced Legal Research & Writing	3
LS 5389	Law Office Internship	3
LS 5399	Applied Research Project	3

**Prescribed Electives**

Choose 9 hours from the following: 9

LS 5341	Administrative Law
LS 5343	Family Law
LS 5349	Business Organizations
LS 5351	Estates and Trusts
LS 5353	Real Estate
LS 5359	Alternative Dispute Resolution
LS 5361	Criminal Law and Procedure
LS 5363	Social Legislation
LS 5371	Intellectual Property Law
LS 5373	Contract Law

**Total Hours** 36

Students who fail to earn a "B" or better in a required course after a second attempt may be dismissed from the program.

## Comprehensive Examination Requirement

The comprehensive exam takes the form of an oral exam administered as part of the Applied Research Project (LS 5399) course in the student's final semester in the program. The oral exam focuses on the applied research project and underlying legal research. Students who perform unacceptably on the exam may take the exam a second time in a subsequent semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Political Science: POSI

## Courses Offered

### Legal Studies (LS)

#### LS 5310. Introduction to the Paralegal Profession and Legal Technology.

This course provides an introduction to the paralegal profession and law office technology, including the history of and current issues facing the profession, paralegal associations, paralegal regulation and certification options, paralegal ethics, and the skills necessary to become an effective paralegal, with an emphasis placed on legal technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### LS 5320. Legal Research.

This course provides a study of the legal research process, including primary and secondary sources of law and related finding tools and legal citation rules; research using books and online tools; and provides a basic introduction to legal writing, including how to brief cases and prepare legal research memoranda.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### LS 5330. Legal Theories and Analysis.

This course is a study of statutory and case law development of basic legal theory including tort theory, contract theory, and evidence theory.

This course is intended to assist students in gaining knowledge of fundamental legal theory, reasoning, and analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### LS 5340. Litigation.

This course is a study of statutory and case law relating to civil procedure in order to develop an understanding of litigation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### LS 5341. Administrative Law.

This course deals with the origin, development, and theory of Administrative Law as well as the agencies and tribunals that administer the law. Emphasis is on enforcement, quasi-legislative and quasi-judicial powers of federal administrative agencies and state tribunals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### LS 5343. Family Law.

This course examines Texas law, dealing with pre-marital contracts, marriage relationships, annulment, abortion, adoption, juveniles, Family Code, divorce, support for children, custody, and separation agreements.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### LS 5349. Business Organizations.

This course is a study of the federal and Texas law relating to corporations with particular emphasis on the preparation of initial and amended articles of incorporation, satisfaction of state filing requirements, the drafting of employment agreements, and other activities necessary to the maintenance, merger, and the closing of corporations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### LS 5350. Legal Drafting.

This course is a study of legal drafting styles, forms and techniques, including legal document drafting, objective, informative document drafting, and persuasive-style drafting of trial and appellate briefs.

Prerequisite: LS 5320 with grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### LS 5351. Estates and Trusts.

This course is the study of Texas laws relating to estates and trusts with emphasis on the preparation of documents regarding the administration of estates.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5353. Real Estate.**

This course is a study of Texas laws concerning real properties, conveyances, recordation, taxation, and sales regarding real property. Students are familiarized with various records dealing with real property maintained by public officials and develop an understanding of the procedures by which titles are searched. Repeatable with different emphasis for a maximum of 6 credit hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**LS 5359. Alternative Dispute Resolution.**

This course is an in-depth study of procedural and substantive legal principles of alternative dispute resolution. Emphasis will be placed on procedures and practical applications of negotiation, mediation, arbitration, and alternative adjudicative processes with integration of ethical and policy issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5360. Advanced Litigation.**

This course is a study of the use of the American legal system to resolve disputes between individuals and entities. Emphasis is on trial advocacy planning, analysis, preparation, and strategy. Students develop skills necessary to understand and to participate as an advocate in the trial process. Prerequisite: LS 5320 and LS 5340 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5361. Criminal Law and Procedure.**

This course is a study of the state and federal statutory and common law relating to the criminal justice system. This course includes the study of the criminal litigation process and procedure with emphasis on theory and practical legal assistant skill development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5363. Social Legislation.**

This course is a study of Texas and federal laws established by statute to remedy various social problems including worker's compensation, unemployment compensation, bankruptcy, and commercial transactions. This course includes a study of statutory and case law development. May be repeated with different emphasis for a maximum of 6 credit hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**LS 5370. Advanced Legal Research & Writing.**

This course has four components: (1) refinement of skills in computer-assisted and manual legal research; (2) legal analysis, legal writing, and organizing, complex legal documents; (3) techniques of persuasive argument; and (4) applied research project. Prerequisite: LS 5350 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5371. Intellectual Property Law.**

This course covers principal tenets of intellectual property, including trademarks, copyrights, patents, and trade secrets. Students analyze a wide variety of intellectual property issues, the impact of intellectual property in our current society, and the practical and theoretical concerns raised by the interplay of state and federal laws.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5373. Contract Law.**

This course is a study of contracts (e.g., real estate contracts, employment contracts; contracts for services; construction contracts; e-contracts); the common law and statutory law of contracts (e.g., Statute of Frauds; Uniform Commercial Code; Uniform Computer Information Transactions Act; Uniform Electronic Transactions Act), and contract drafting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5380A. Texas Water Law.**

This course examines the chief legal issues that will determine the future of water policy in Texas, with a focus on how state and local agencies administer the state's ground and surface water legal regimes and regulatory framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**LS 5380B. Environmental Litigation.**

This course conducts an in-depth examination of researching, filing, and litigating claims under federal and state environmental statutes. The course focuses on the aspects of environmental litigation that make it different than its non-environmental counterparts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**LS 5388. Directed Reading and Research.**

This course is an advanced reading and/or research on various topics in legal studies under the direction of a graduate faculty member. May be repeated once with different emphasis and professor for a maximum of 6 credit hours. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**LS 5389. Law Office Internship.**

This course emphasizes problems, procedures, and ethics in the legal-working environment. Students are involved in internship consisting of approximately 10-15 hours a week to gain experience in the legal-working environment. Course is required unless the student has related experience and has, with program director permission, elected to take a practicum. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**LS 5399. Applied Research Project.**

This course is the applied research project for the Master of Arts in Legal Studies degree. Students work with the supervising instructor to complete an applied research project to submit for oral examination. Prerequisite: LS 5370 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Graduate students find exceptional resources at their fingertips. With a large full-time faculty, students have the opportunity for a close intellectual exchange with professors. Texas State is also a depository for federal and state government documents as well as a member of the Council of Research and Academic Libraries. Current master's students have been successful in pursuing doctoral education, teaching careers or professional careers ranging from federal, state and local government to nonprofit organizations.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in political science from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)\*

- background course work: political science undergraduate minor or at least nine hours of upper-level course work in political science or related field\*
- GRE not required\*
- resume/CV
- statement of purpose (minimum 500 words)
- three letters of recommendation
- writing sample (minimum five pages, double-spaced) from a political science course or social science/humanities course

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

If the last-60-hours GPA does not meet the minimum requirement, or the student does not have the undergraduate degree, minor, or upper-level course work, the student must submit the following:

- official GRE (general test only) with competitive scores in the verbal reasoning, quantitative reasoning, and analytical writing sections to be considered for conditional admission. Conditional admission is not available to applicants who require "F" or "J" visas.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Political Science requires 36 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Course</b>		
PS 5301	Approaches to the Study of Political Science	3
<b>Prescribed Electives</b>		
Choose 33 hours from the following:		33
PS 5302	Political Research and Methodology	
PS 5310	Studies in Ancient and Medieval Political Thought	
PS 5311	Social Contract Theory	
PS 5312	Roots of American Constitutionalism	
PS 5313	Justice and Liberty in American Thought	
PS 5315	Contemporary Perspectives in Modern Liberalism	
PS 5316	The Crisis of Liberalism and The Future of Democracy	
PS 5317	Theological Perspectives in Modern Democracy	



PS 5318	The Problem of Power and the Crisis of Modernity
PS 5330A	Nuclear Weapons in International Politics
PS 5330B	Tocqueville and American Democracy
PS 5330C	Party Systems in Latin America
PS 5330D	Problems in Political Science: International Humanitarian Affairs
PS 5330E	Religion and American Political Culture
PS 5330F	Topics in Comparative Politics of European and Developing Countries
PS 5330H	Topics in Political Science: Seminar on Freedom of Speech and Thought
PS 5330J	Authoritarian Regimes
PS 5332	Problems in American Foreign Relations
PS 5334	Texas Politics
PS 5335	The Role of Interests in America
PS 5336	Property, Liberty, and Popular Sovereignty
PS 5337	American Political Culture
PS 5338	American Political Discourse
PS 5339	The American Presidency
PS 5340	Congress and the Legislative Process
PS 5341	Seminar in Constitutional Law and Theory
PS 5356	The British Political Order Since 1900
PS 5357	Russian Politics and Josef Stalin
PS 5360	Economic Development in Developing Nations
PS 5361	Government and Politics of African States
PS 5362	Problems of Democracy in Latin America
PS 5363	Party Systems in Latin America
PS 5371	American Grand Strategy
PS 5375	Seminar in International Relations Theory
PS 5377	Problems in International Organizations
PS 5378	Problems in International Law
PS 5379	Problems in International Political Economy
PS 5380	International Conflict and Security
PS 5389	Internship in Government
PS 5390	Political Science Curriculum Development
PS 5391	Political Science Teaching Practicum
PS 5398	Directed Reading and Research
May choose 9 hours of advisor-approved electives from outside the department	

**Total Hours****36**

## Comprehensive Examination Requirement

The Non-thesis Track comprehensive exam is a written exam administered in the student's final semester in the program (in April of the spring semester or November of the fall semester). The written exam focuses on the student's program coursework. Students who perform unacceptably on the exam may take the exam a second time in a subsequent semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Political Science: PS

## Courses Offered

### Political Science (PS)

#### PS 5100. Instructional Methods Practicum for Graduate Assistants.

This course introduces key concepts and practices in the teaching of college introductory political science courses. It provides regular in-service training and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. It is repeatable 3 times with different emphases and with a maximum of 4 credit hours.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### PS 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in a Thesis B course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### PS 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in a Thesis B course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### PS 5300. Foundation Studies in Political Science.

Students develop knowledge and skills required for success in graduate-level coursework in Political Science. Course content varies depending on academic preparation. This course does not earn graduate degree credit. The approval of the graduate program director is required. It is repeatable 3 times with different emphases and with a maximum of 12 credit hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### PS 5301. Approaches to the Study of Political Science.

This course provides an intensive introduction to the advanced study of political science. It focuses on the key concepts, variables, and approaches used to describe, explain, and predict political phenomena. It also discusses key normative theories and the variety of methodologies used in political science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5302. Political Research and Methodology.**

This course is a topical seminar for the exploration of problems in the scope and the methods of political science and public administration. The course emphasizes quantitative methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5310. Studies in Ancient and Medieval Political Thought.**

This course covers selected topics in Greek and Roman political theory, patristic understanding of politics, and the political theory of the Middle and High Middle Ages. This course includes study of the writings and thought of Thucydides, Plato, Aristotle, Cicero, Augustine, Al-Farabi, John of Salisbury, Aquinas, and others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5311. Social Contract Theory.**

This course is an examination of the social contract, consent, and popular sovereignty in early modern thought. Attention is given to the work of Thomas Hobbs, John Locke, Jean Jacques Rousseau, and Immanuel Kant (as well as others) and to their critics both then and now.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5312. Roots of American Constitutionalism.**

This course examines the origins and evolution of the ideas which inform the American constitutional system, includes an examination of classical, Christian, medieval, Renaissance, and Enlightenment thought that, combined with the British liberal tradition, laid the groundwork for the American experiment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5313. Justice and Liberty in American Thought.**

This course examines the concepts of justice and liberty in American thought from the seventeenth century to the present. Attention is given both to the nature of liberty and justice and to their practical requirement as understood by various American thinkers, including statesmen, reformers, social scientists, and philosophers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5315. Contemporary Perspectives in Modern Liberalism.**

This course is a brief review of the history and development of modern liberalism and the ensuing response and contemporary alternatives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5316. The Crisis of Liberalism and The Future of Democracy.**

This course is an examination of the nature and intellectual foundations of the liberal tradition and the implications of the crisis besetting contemporary theory for the future of democratic government.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5317. Theological Perspectives in Modern Democracy.**

This course explores the influence of religion on the rise of modern democracy and the efforts of various religious thinkers to explore the nature and foundations of democratic government.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5318. The Problem of Power and the Crisis of Modernity.**

This course is an examination of the crisis of modernity and its implications for humanity's future.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5330A. Nuclear Weapons in International Politics.**

This course examines the effects of nuclear weapons on international politics. The course begins with a comparative historical account of the nuclear arms race and efforts to achieve nuclear arms control and disarmament. It then shifts to examine contemporary theories of nuclear proliferation and the case studies which illumine them. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**PS 5330B. Tocqueville and American Democracy.**

This course considers Tocqueville's Democracy in America. Topics include the relationship between aristocracy and democracy; the instability of democracy; the antidotes to these instabilities; the significance of habit in Tocqueville's thought; the case for American Exceptionalism; and the importance of religion for democracy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 5330C. Party Systems in Latin America.**

The course examines some key insights in party and party system theory and practice. Latin America is the regional referent for examining these themes, and country examples are studied in considerable depth to illustrate the theory. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**PS 5330D. Problems in Political Science: International Humanitarian Affairs.**

This course inquires into the intellectual legacy of international humanitarian issues, including forced migration, refugee problems, moral issues related to humanitarian intervention and emergency aid issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**PS 5330E. Religion and American Political Culture.**

An examination of the ways in which religious beliefs and institutions have shaped American political culture; the ways in which American culture has influenced these beliefs and institutions; and the ongoing debates regarding the proper role of religion in American public life.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 5330F. Topics in Comparative Politics of European and Developing Countries.**

This course explores the recent political history, institutions, party systems, and economic policies of some of the major countries in the globe. The course is devoted to the study of individual advanced European democracies as well as important developing nations, including China, Iran, Russia, Mexico, India and South Africa.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 5330H. Topics in Political Science: Seminar on Freedom of Speech and Thought.**

This course considers freedom of speech and thought as foundational conditions in liberal conceptions of human flourishing. The course will combine a close reading of modern and contemporary authors with an analysis of recent controversies implicating these freedoms, such as debates about hate speech and political correctness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 5330J. Authoritarian Regimes.**

While democracy became the most common political regime type around the world in the 1990s, many authoritarian regimes continue to persist or have emerged in countries such as China, Cameroon, Saudi Arabia, Russia, and Venezuela. How do these regimes emerge and function in the presence of popular demands for democratization and leadership challenges from authoritarian regime elites? How do authoritarian regimes collapse and what are the prospects for democracy in current authoritarian regimes? How do authoritarian regimes act in international relations? This course surveys the existing literature on these questions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 5332. Problems in American Foreign Relations.**

This course is a seminar based on selected topics in American foreign policy and United States involvement in international relations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5334. Texas Politics.**

This course examines some of the traditional debates over federalism, intergovernmental relations, and different ways people compare the states. It introduces Texas political institutions and its political history as well as examines some of the current Texas public policy questions such as education, criminal justice, and economic development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5335. The Role of Interests in America.**

This course examines the role of interest groups and other organizations in the United States. Students learn about the range of social and economic interests presently active in our country and what observers from a variety of perspectives believe this activity implies for the health of our political system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5336. Property, Liberty, and Popular Sovereignty.**

This course examines the role, status, and power of property in demographic societies. It takes a modified historical approach to the subject, tracing attitudes regarding property from before the American Revolution until today. Although the emphasis is on the United States, the course reviews property in other societies where appropriate.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5337. American Political Culture.**

This course explores selected problems related to American political culture with particular emphasis on the question of the cultural preconditions of free government. Beginning with Alexis de Tocqueville's classic study of American political culture, the course explores different Tocquevillian themes in a contemporary American context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5338. American Political Discourse.**

This class identifies the way political discourse and social and political cultures connect within Americans' minds. Diverse theoretical perspectives will be used to explore the phenomena involved in social and political issues regarding values, meanings, norms, and prejudices and methods of improving political discourse within American political culture.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5339. The American Presidency.**

This course entails an historical analysis of presidential elections from 1789 to the present day. In addition, students examine and engage in reasonable speculations about the upcoming elections.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5340. Congress and the Legislative Process.**

This course examines the American legislative process with a focus on Congress. The framework for the course is based on three themes: 1) the "dual Congress," i.e., the notions of deliberation versus representation; 2) the distribution of power in Congress and its consequences; and 3) the bicameral nature of Congress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5341. Seminar in Constitutional Law and Theory.**

This course examines selected issues in constitutional theory, including the theory of judicial review, and constitutional interpretation. It examines the debate on constitutional interpretation in light of cases dealing with the First Amendment freedom of speech, press, and religion, and with substantive due process and the equal protection clause.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5356. The British Political Order Since 1900.**

This course examines British policy from 1901 to the present and the major events that affected British history and politics. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5357. Russian Politics and Josef Stalin.**

This course examines Josef Stalin's personal and public life, analyzes his accomplishments and failures, and generates a summative assessment of his impact on Russian and global politics. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5359. Comparative Democratization.**

This course examines the inner workings of autocracies and democracies in the developing world, as well as processes of regime transitions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5360. Economic Development in Developing Nations.**

This course examines some of the factors that account for economic development/underdevelopment in developing nations. The factors examined include political, economic and institutional variables. These underlying variables reveal the multi-causal nature of socio-economic development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5361. Government and Politics of African States.**

This course examines governments and politics of African states. It examines the nature of domestic and international politics, the precolonial politics and political culture, the impact of the colonial period on politics, several cases of post-colonial successes and failures, the critical nature of external involvement in the politics, and the settings of civil war. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5362. Problems of Democracy in Latin America.**

This course examines the main structural and institutional obstacles that stand in the way of high quality democracy in Latin America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5363. Party Systems in Latin America.**

The course examines some key insights in party and party system theory and practice. Latin America is the regional referent for examining these themes, and country examples are studied in considerable depth to illustrate the theory. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5371. American Grand Strategy.**

This course examines the making of American grand strategy and the scholarly debates surrounding the various strategic options to best advance the long-term national interest. The class examines theories of grand strategy, as well as historical and modern examples, and focuses on drawing parallels and lessons for the present and the future.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5375. Seminar in International Relations Theory.**

This course is designed to engage students in the major theoretical and conceptual traditions of international relations in order to assess the complex issues, developments and events constituting international politics. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5377. Problems in International Organizations.**

This course analyzes the structure, functions, and role of the international organizations in the international system. The course addresses the role of international regions, regional organizations, functional agencies, and bilateral organizations. The procedures and processes on international argument and policy-making are studied through participation in a model security council. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**PS 5378. Problems in International Law.**

This course examines the nature, functions, and scope, of international law. It addresses several major areas including legal sources, diplomatic practice, territorial jurisdiction, legal personality, the law of state responsibility, asylum law, human rights, and the law of war. The course is heavily research oriented and includes moot court arbitration. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**PS 5379. Problems in International Political Economy.**

This course examines theories and issues in international political economy. The course emphasizes the political and economic conditions conducive to the development of cooperative international economic behavior among countries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**PS 5380. International Conflict and Security.**

This course deals with the field of security studies. Security studies focuses on what Clausewitz famously called "politics by other means": war. This course centers on three enduring topics: the causes of war, the use of force, and the future of warfare. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5389. Internship in Government.**

This course offers students practical experience in the on-going work of a selected governmental unit. The student is evaluated on the basis of a research paper, work journal, and work performance. The approval of the graduate program director is required. It may be repeated once with different emphasis and with a maximum of 6 credit hours.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5390. Political Science Curriculum Development.**

This course is designed for graduate students with a social science teacher emphasis who are interested in teaching dual credit courses on federal or state government. The course focuses on practical teaching matters including, construction of syllabi, delivering effective lectures, teaching formats, test construction, and grading practices Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5391. Political Science Teaching Practicum.**

This course is designed for graduate students with a social science teacher emphasis who are interested in teaching dual credit courses. Prerequisite: PS 5390 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5398. Directed Reading and Research.**

This course is an advanced reading and/or research on various topics in political science under the direction of a graduate faculty member. It may be repeated once with different emphasis and professor for a maximum of 6 credit hours. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until a student has completed the thesis under a Political Science Thesis B course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in a Thesis B course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in a Thesis B course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**PS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in a Thesis B course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

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## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in political science from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)\*
- background course work: political science undergraduate minor or at least nine hours of upper-level course work in political science or related field\*
- GRE not required\*
- resume/CV
- statement of purpose (minimum 500 words)
- three letters of recommendation
- writing sample (minimum five pages, double-spaced) from a political science course or social science/humanities course

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

If the last-60-hours GPA does not meet the minimum requirement, or the student does not have the undergraduate degree, minor, or upper-level course work, the student must submit the following:

- official GRE (general test only) with competitive scores in the verbal reasoning, quantitative reasoning, and analytical writing sections to be considered for conditional admission. Conditional admission is not available to applicants who require "F" or "J" visas.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Political Science requires 33 semester credit hours, including a thesis. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Require Courses</b>		
PS 5301	Approaches to the Study of Political Science	3
<b>Prescribed Electives</b>		
Choose 24 hours from the following:		24
PS 5302	Political Research and Methodology	
PS 5310	Studies in Ancient and Medieval Political Thought	
PS 5311	Social Contract Theory	
PS 5312	Roots of American Constitutionalism	
PS 5313	Justice and Liberty in American Thought	
PS 5315	Contemporary Perspectives in Modern Liberalism	
PS 5316	The Crisis of Liberalism and The Future of Democracy	
PS 5317	Theological Perspectives in Modern Democracy	
PS 5318	The Problem of Power and the Crisis of Modernity	
PS 5330A	Nuclear Weapons in International Politics	
PS 5330B	Tocqueville and American Democracy	
PS 5330C	Party Systems in Latin America	
PS 5330D	Problems in Political Science: International Humanitarian Affairs	
PS 5330E	Religion and American Political Culture	
PS 5330F	Topics in Comparative Politics of European and Developing Countries	

PS 5330H	Topics in Political Science: Seminar on Freedom of Speech and Thought	
PS 5330J	Authoritarian Regimes	
PS 5332	Problems in American Foreign Relations	
PS 5334	Texas Politics	
PS 5335	The Role of Interests in America	
PS 5336	Property, Liberty, and Popular Sovereignty	
PS 5337	American Political Culture	
PS 5338	American Political Discourse	
PS 5339	The American Presidency	
PS 5340	Congress and the Legislative Process	
PS 5341	Seminar in Constitutional Law and Theory	
PS 5356	The British Political Order Since 1900	
PS 5357	Russian Politics and Josef Stalin	
PS 5360	Economic Development in Developing Nations	
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PS 5378	Problems in International Law	
PS 5390	Political Science Curriculum Development	
PS 5391	Political Science Teaching Practicum	
PS 5379	Problems in International Political Economy	
PS 5380	International Conflict and Security	
PS 5389	Internship in Government	
PS 5398	Directed Reading and Research	
May choose 9 hours of advisor-approved electives from outside the department		
<b>Thesis</b>		
PS 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
PS 5199B	Thesis	
PS 5299B	Thesis	
PS 5399B	Thesis	
PS 5599B	Thesis	
PS 5999B	Thesis	
<b>Total Hours</b>		<b>33</b>

## Comprehensive Examination Requirement

The Thesis Track comprehensive exam takes the form of an oral exam administered as part of the thesis oral defense. The oral exam focuses on the thesis and student coursework. Students who perform unacceptably on the exam may take the exam a second time in a subsequent semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with

the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being

made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Political Science: PS

## Courses Offered

### Political Science (PS)

#### PS 5100. Instructional Methods Practicum for Graduate Assistants.

This course introduces key concepts and practices in the teaching of college introductory political science courses. It provides regular in-service training and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. It is repeatable 3 times with different emphases and with a maximum of 4 credit hours.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### PS 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in a Thesis B course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### PS 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in a Thesis B course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### PS 5300. Foundation Studies in Political Science.

Students develop knowledge and skills required for success in graduate-level coursework in Political Science. Course content varies depending on academic preparation. This course does not earn graduate degree credit. The approval of the graduate program director is required. It is repeatable 3 times with different emphases and with a maximum of 12 credit hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### PS 5301. Approaches to the Study of Political Science.

This course provides an intensive introduction to the advanced study of political science. It focuses on the key concepts, variables, and approaches used to describe, explain, and predict political phenomena. It also discusses key normative theories and the variety of methodologies used in political science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5302. Political Research and Methodology.**

This course is a topical seminar for the exploration of problems in the scope and the methods of political science and public administration. The course emphasizes quantitative methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5310. Studies in Ancient and Medieval Political Thought.**

This course covers selected topics in Greek and Roman political theory, patristic understanding of politics, and the political theory of the Middle and High Middle Ages. This course includes study of the writings and thought of Thucydides, Plato, Aristotle, Cicero, Augustine, Al-Farabi, John of Salisbury, Aquinas, and others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5311. Social Contract Theory.**

This course is an examination of the social contract, consent, and popular sovereignty in early modern thought. Attention is given to the work of Thomas Hobbs, John Locke, Jean Jacques Rousseau, and Immanuel Kant (as well as others) and to their critics both then and now.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5312. Roots of American Constitutionalism.**

This course examines the origins and evolution of the ideas which inform the American constitutional system, includes an examination of classical, Christian, medieval, Renaissance, and Enlightenment thought that, combined with the British liberal tradition, laid the groundwork for the American experiment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5313. Justice and Liberty in American Thought.**

This course examines the concepts of justice and liberty in American thought from the seventeenth century to the present. Attention is given both to the nature of liberty and justice and to their practical requirement as understood by various American thinkers, including statesmen, reformers, social scientists, and philosophers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5315. Contemporary Perspectives in Modern Liberalism.**

This course is a brief review of the history and development of modern liberalism and the ensuing response and contemporary alternatives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5316. The Crisis of Liberalism and The Future of Democracy.**

This course is an examination of the nature and intellectual foundations of the liberal tradition and the implications of the crisis besetting contemporary theory for the future of democratic government.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5317. Theological Perspectives in Modern Democracy.**

This course explores the influence of religion on the rise of modern democracy and the efforts of various religious thinkers to explore the nature and foundations of democratic government.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5318. The Problem of Power and the Crisis of Modernity.**

This course is an examination of the crisis of modernity and its implications for humanity's future.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5330A. Nuclear Weapons in International Politics.**

This course examines the effects of nuclear weapons on international politics. The course begins with a comparative historical account of the nuclear arms race and efforts to achieve nuclear arms control and disarmament. It then shifts to examine contemporary theories of nuclear proliferation and the case studies which illumine them. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**PS 5330B. Tocqueville and American Democracy.**

This course considers Tocqueville's Democracy in America. Topics include the relationship between aristocracy and democracy; the instability of democracy; the antidotes to these instabilities; the significance of habit in Tocqueville's thought; the case for American Exceptionalism; and the importance of religion for democracy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 5330C. Party Systems in Latin America.**

The course examines some key insights in party and party system theory and practice. Latin America is the regional referent for examining these themes, and country examples are studied in considerable depth to illustrate the theory. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**PS 5330D. Problems in Political Science: International Humanitarian Affairs.**

This course inquires into the intellectual legacy of international humanitarian issues, including forced migration, refugee problems, moral issues related to humanitarian intervention and emergency aid issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**PS 5330E. Religion and American Political Culture.**

An examination of the ways in which religious beliefs and institutions have shaped American political culture; the ways in which American culture has influenced these beliefs and institutions; and the ongoing debates regarding the proper role of religion in American public life.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 5330F. Topics in Comparative Politics of European and Developing Countries.**

This course explores the recent political history, institutions, party systems, and economic policies of some of the major countries in the globe. The course is devoted to the study of individual advanced European democracies as well as important developing nations, including China, Iran, Russia, Mexico, India and South Africa.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 5330H. Topics in Political Science: Seminar on Freedom of Speech and Thought.**

This course considers freedom of speech and thought as foundational conditions in liberal conceptions of human flourishing. The course will combine a close reading of modern and contemporary authors with an analysis of recent controversies implicating these freedoms, such as debates about hate speech and political correctness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 5330J. Authoritarian Regimes.**

While democracy became the most common political regime type around the world in the 1990s, many authoritarian regimes continue to persist or have emerged in countries such as China, Cameroon, Saudi Arabia, Russia, and Venezuela. How do these regimes emerge and function in the presence of popular demands for democratization and leadership challenges from authoritarian regime elites? How do authoritarian regimes collapse and what are the prospects for democracy in current authoritarian regimes? How do authoritarian regimes act in international relations? This course surveys the existing literature on these questions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 5332. Problems in American Foreign Relations.**

This course is a seminar based on selected topics in American foreign policy and United States involvement in international relations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5334. Texas Politics.**

This course examines some of the traditional debates over federalism, intergovernmental relations, and different ways people compare the states. It introduces Texas political institutions and its political history as well as examines some of the current Texas public policy questions such as education, criminal justice, and economic development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5335. The Role of Interests in America.**

This course examines the role of interest groups and other organizations in the United States. Students learn about the range of social and economic interests presently active in our country and what observers from a variety of perspectives believe this activity implies for the health of our political system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5336. Property, Liberty, and Popular Sovereignty.**

This course examines the role, status, and power of property in demographic societies. It takes a modified historical approach to the subject, tracing attitudes regarding property from before the American Revolution until today. Although the emphasis is on the United States, the course reviews property in other societies where appropriate.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5337. American Political Culture.**

This course explores selected problems related to American political culture with particular emphasis on the question of the cultural preconditions of free government. Beginning with Alexis de Tocqueville's classic study of American political culture, the course explores different Tocquevillian themes in a contemporary American context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5338. American Political Discourse.**

This class identifies the way political discourse and social and political cultures connect within Americans' minds. Diverse theoretical perspectives will be used to explore the phenomena involved in social and political issues regarding values, meanings, norms, and prejudices and methods of improving political discourse within American political culture.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**PS 5339. The American Presidency.**

The course entails an historical analysis of presidential elections from 1789 to the present day. In addition, students examine and engage in reasonable speculations about the upcoming elections.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5340. Congress and the Legislative Process.**

This course examines the American legislative process with a focus on Congress. The framework for the course is based on three themes: 1) the "dual Congress," i.e., the notions of deliberation versus representation; 2) the distribution of power in Congress and its consequences; and 3) the bicameral nature of Congress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5341. Seminar in Constitutional Law and Theory.**

This course examines selected issues in constitutional theory, including the theory of judicial review, and constitutional interpretation. It examines the debate on constitutional interpretation in light of cases dealing with the First Amendment freedom of speech, press, and religion, and with substantive due process and the equal protection clause.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5356. The British Political Order Since 1900.**

This course examines British policy from 1901 to the present and the major events that affected British history and politics. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5357. Russian Politics and Josef Stalin.**

This course examines Josef Stalin's personal and public life, analyzes his accomplishments and failures, and generates a summative assessment of his impact on Russian and global politics. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5359. Comparative Democratization.**

This course examines the inner workings of autocracies and democracies in the developing world, as well as processes of regime transitions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5360. Economic Development in Developing Nations.**

This course examines some of the factors that account for economic development/underdevelopment in developing nations. The factors examined include political, economic and institutional variables. These underlying variables reveal the multi-causal nature of socio-economic development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5361. Government and Politics of African States.**

This course examines governments and politics of African states. It examines the nature of domestic and international politics, the precolonial politics and political culture, the impact of the colonial period on politics, several cases of post-colonial successes and failures, the critical nature of external involvement in the politics, and the settings of civil war. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5362. Problems of Democracy in Latin America.**

This course examines the main structural and institutional obstacles that stand in the way of high quality democracy in Latin America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5363. Party Systems in Latin America.**

The course examines some key insights in party and party system theory and practice. Latin America is the regional referent for examining these themes, and country examples are studied in considerable depth to illustrate the theory. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5371. American Grand Strategy.**

This course examines the making of American grand strategy and the scholarly debates surrounding the various strategic options to best advance the long-term national interest. The class examines theories of grand strategy, as well as historical and modern examples, and focuses on drawing parallels and lessons for the present and the future.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5375. Seminar in International Relations Theory.**

This course is designed to engage students in the major theoretical and conceptual traditions of international relations in order to assess the complex issues, developments and events constituting international politics. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5377. Problems in International Organizations.**

This course analyzes the structure, functions, and role of the international organizations in the international system. The course addresses the role of international regions, regional organizations, functional agencies, and bilateral organizations. The procedures and processes on international argument and policy-making are studied through participation in a model security council. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**PS 5378. Problems in International Law.**

This course examines the nature, functions, and scope, of international law. It addresses several major areas including legal sources, diplomatic practice, territorial jurisdiction, legal personality, the law of state responsibility, asylum law, human rights, and the law of war. The course is heavily research oriented and includes moot court arbitration. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**PS 5379. Problems in International Political Economy.**

This course examines theories and issues in international political economy. The course emphasizes the political and economic conditions conducive to the development of cooperative international economic behavior among countries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**PS 5380. International Conflict and Security.**

This course deals with the field of security studies. Security studies focuses on what Clausewitz famously called "politics by other means": war. This course centers on three enduring topics: the causes of war, the use of force, and the future of warfare. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5389. Internship in Government.**

This course offers students practical experience in the on-going work of a selected governmental unit. The student is evaluated on the basis of a research paper, work journal, and work performance. The approval of the graduate program director is required. It may be repeated once with different emphasis and with a maximum of 6 credit hours.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5390. Political Science Curriculum Development.**

This course is designed for graduate students with a social science teacher emphasis who are interested in teaching dual credit courses on federal or state government. The course focuses on practical teaching matters including, construction of syllabi, delivering effective lectures, teaching formats, test construction, and grading practices Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5391. Political Science Teaching Practicum.**

This course is designed for graduate students with a social science teacher emphasis who are interested in teaching dual credit courses. Prerequisite: PS 5390 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5398. Directed Reading and Research.**

This course is an advanced reading and/or research on various topics in political science under the direction of a graduate faculty member. It may be repeated once with different emphasis and professor for a maximum of 6 credit hours. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until a student has completed the thesis under a Political Science Thesis B course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in a Thesis B course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in a Thesis B course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PS 5999B. Thesis.**  
This course represents a student’s continuing thesis enrollments. The student continues to enroll in a Thesis B course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Public Administration (M.P.A.) degree program cultivates practical, research-oriented students for careers as reflective practitioners guided by democratic values, integrity and service. Students work with faculty who have been recognized nationally for their contribution to outstanding teaching, research, and service. The faculty leads practical research projects to inform public management and public policy in the region. The M.P.A. program is accredited by the Network of Schools of Public Policy, Affairs, and Administration (NASPAA).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College’s website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor’s degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose (two pages in 12-point Times New Roman font, double-spaced with one-inch margins and full name in the header) addressing the following: academic interests, personal and professional experiences relevant for graduate work, motivations and accomplishments, potential as a graduate student and readiness for graduate school, interest in the M.P.A. program at Texas State and reasons the student would be a good fit, and aspirations and the specific goals
- two letters of recommendation

- public sector experience (If the student does not have public sector experience, the student must complete a three-hour internship course.)

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Public Administration (M.P.A.) degree with a major in Public Administration concentration in Applied Research Project requires 39 semester credit hours. All students will be required to complete an applied research project (ARP) and complete an oral defense of the ARP.

### Background

Students who have not completed a statistics course in the last five years with a grade of B or better will be required to take PA 5311 as a required elective. Students who do not have administrative experience must take PA 5389 Internship in Government. The internship can be waived by sending documentation of administrative experience directly to the M.P.A. director.

## Course Requirements

Code	Title	Hours
Required Courses		
PA 5300	Introduction to Public Policy and Administration	3
PA 5310	Public Finance Administration	3
PA 5320	Organizational Theory, Change, and Behavior	3
PA 5330	Public Personnel Administration	3
PA 5340	Introduction to Public Law	3
PA 5350	Public Policy Processes	3
PA 5370	Public Management and Ethics	3
PA 5390	Applied Research Methodology	3
PA 5397	Research Design and Proposal Development for Public Administration	3
PA 5398	Applied Research Project	3
Prescribed Electives		
Choose 9 hours from the following:		9
PA 5311	Introduction to Statistical Analysis	
PA 5312	Program Evaluation and Administrative Statistical Analysis	
PA 5313	Public Sector Economics	
PA 5314	Public Administration and Information Technology	
PA 5315	Public Performance Management	
PA 5331	Labor Management Relations	

PA 5332	Management Practices in Public Personnel Administration
PA 5351	Urban Sustainability Policy
PA 5352	Comparative Public Administration
PA 5353	Ecology and the Politics of Sustainability
PA 5355	Environmental Policy
PA 5361	Introduction to the Nonprofit and Voluntary Sector
PA 5362	Alternative Public Service Delivery Systems
PA 5388	Directed Reading and Research
PA 5389	Internship in Government
PA 5387	Research Practicum
May choose advisor-approved electives from outside the department	
<b>Total Hours</b>	<b>39</b>

## Applied Research Project

All students will be required to complete an applied research prospectus (ARP) and complete an oral defense in PA 5397. Students may elect to engage in PA 5398 to complete the proposed research or select an additional 3 hours of "prescribed electives" to complete degree requirements.

## Comprehensive Examination Requirement

An oral defense of the applied research project (ARP) in front of a committee of faculty and practitioners will serve as the comprehensive examination requirement. If a student does not successfully defend the ARP in the first attempt, one subsequent chance to defend the ARP will be provided after the student satisfactorily addresses every suggestion for improvement made by the ARP committee.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Public Administration: PA

## Courses Offered

### Public Administration (PA)

#### PA 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### PA 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### PA 5300. Introduction to Public Policy and Administration.

This course introduces students to the study and practice of US public administration and policy. It also focuses on the dynamics of the democratic governance process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### PA 5310. Public Finance Administration.

This course examines the applied aspects of public finance including operating budgets, revenue estimation, capital budgeting, financial planning, budgetary decision-making, cost benefit analysis, and life-cycle costing. In addition, strategies for budget justification, presentation, and implementation are examined. The use of various budgetary tools and techniques are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### PA 5311. Introduction to Statistical Analysis.

This course applies quantitative methods to problems faced by public administration practitioners. Topics include the use of descriptive and inferential statistics as they apply to decision-making in public management. Students gain hands-on experience with data collection, analysis, and interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### PA 5312. Program Evaluation and Administrative Statistical Analysis.

This is an advanced course in the application of quantitative methods for the evaluation of public policies and programs. The course emphasizes the administrative and managerial environment. Prerequisite: PA 5311 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### PA 5313. Public Sector Economics.

This course presents basic concepts of economics as applied to the public sector. Principles of economics for policy analysis and management are examined in the context of collective action, public choice, resource allocation, and service delivery. The course also examines the financing of national, state, and local governments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5314. Public Administration and Information Technology.**

This course explores the use of information technology in the public sector. It emphasizes the issues that public administrators need to know concerning the impact of information technology on their organizations. The course covers E-Democracy, E-Governance, Enterprise Architecture, Public Management Information Systems (PMIS), E-Procurement, and E-Commerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5315. Public Performance Management.**

This course examines public sector performance management and measurement as tools for improving strategic planning, resource allocation, organizational learning, and internal operational processes. It also examines accountability, managerial performance, and evaluation processes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5320. Organizational Theory, Change, and Behavior.**

This course analyzes classic and contemporary literature on organizational theory and behavior in the public sector. Emphasis is placed on history and development of organizational theory and core concepts such as organizational culture, power, and change. The implications of organizational theory for democratic governance are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5330. Public Personnel Administration.**

This course introduces students to public personnel functions from a managerial perspective. Examples of topics covered include: recruitment and selection, performance evaluation, discipline, collective bargaining, classification, and compensation. Constructive leadership of government personnel that encourages a more competent, motivated, and representative administration workforce is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5331. Labor Management Relations.**

This course examines the historical development of public employee unions and the effects of collective bargaining agreements on personnel policy development. Public laws concerning collective bargaining procedures and strategy on the part of public managers are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5332. Management Practices in Public Personnel Administration.**

This course is a seminar-based examination of selected topics in public personnel administration including job analysis, position classification, test construction, performance appraisal, succession planning, and affirmative action. The role of the personnel office as a strategic partner in accomplishing organizational goals is also explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5340. Introduction to Public Law.**

This course examines the regulatory environment, legal requirements, and constraints that public officials face when carrying out their duties. The use of online research tools to find administrative materials and analyze public law issues is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5350. Public Policy Processes.**

This course is an overview of the process of public policymaking including policy formulation and implementation. Emphasis is placed on actors in the policy process and on the political environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5351. Urban Sustainability Policy.**

This course examines the basic components of urban transportation and land use policy. In addition to building an understanding of the historic foundation of urban policy and planning, students explore the underlying concepts related to sustainability to analyze underlying tensions and potential connections across policy spheres.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5352. Comparative Public Administration.**

This course examines differences in various national administrative systems and the role of international organizations. It explores differences that influence various public policy issues from countries around the world. Policy issues examined include poverty, human rights, health care, and the environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**PA 5353. Ecology and the Politics of Sustainability.**

This course is an exploration of problems and policies dealing with air, water, waste, energy use, natural resources, sustainability, and global environmental issues. This class highlights the historical drivers of environmental policy. Implementation strategies, policy mechanisms, and compliance adherence are also examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5355. Environmental Policy.**

This course will introduce students to the public policy process and the details of U.S. environmental policy and administration. Problems and policies dealing with air, water, solid waste, hazardous waste, energy use, natural resources, climate change, sustainability, and global environmental governance will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5361. Introduction to the Nonprofit and Voluntary Sector.**

This course provides a foundation for understanding the history, scope, and function of the American nonprofit and voluntary sector. It includes an examination of the conceptual and theoretical underpinnings of the sector, and assessment of the role of these organizations in society, and their impact on public policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5362. Alternative Public Service Delivery Systems.**

This course examines alternative delivery of public services. The reliance on market mechanisms, contracting out, and privatization are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5370. Public Management and Ethics.**

This course explores issues of morality and ethics in the public sector. It also considers subjects such as administrative discretion, the public interest, democratic values, and dissent. The course aims to formulate a frame of reference for judging behavior and clarifying our role and responsibility as moral agents.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5380A. Texas Water Law and Policy.**

This course examines the chief policy issue that will determine the future of Texas: how state and local agencies administer the state's ground- and surface water legal regimes. With the legal and regulatory framework in place, the course investigates pressing water policy issues that confront Texas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PA 5380B. Environmental Litigation.**

This course conducts an in-depth examination of researching, filing, and litigating claims under federal and state environmental statutes. The course focuses on the aspects of environmental litigation that make it different than its non-environmental counterparts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PA 5387. Research Practicum.**

This course uses structured group research to analyze a current policy, management, or administrative issue. A professor-led research team completes a final report detailing findings and recommendations for action. May be repeated once for additional credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5388. Directed Reading and Research.**

This course guides students in directed reading and research on various topics in public policy and administration under the direction of a graduate faculty member. The course may be repeated once with a different emphasis for additional credit for a maximum of 6 credit hours. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5389. Internship in Government.**

This course provides students with the opportunity to integrate classroom learning with practical experience. Students with little or no work experience related to public service are required to complete an internship. Students considering a career change should consider an internship. May be repeated once for additional credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5390. Applied Research Methodology.**

This course is an introduction to applied research methods in the public sector. Topics include the scientific method, research design, measurement, qualitative research, and sampling. Data collection methods such as survey research, content analysis, and secondary data analysis are also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5397. Research Design and Proposal Development for Public Administration.**

This course prepares students for the demands of academic and professional writing. Students learn how to identify a public problem, develop a research purpose statement, and complete a literature review around a conceptual framework. This course prepares the student for their Applied Research Project (ARP). Prerequisite: PS 5390 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5398. Applied Research Project.**

This course serves as the capstone experience for MPA students. Students complete an original and empirical Applied Research Project (ARP), complete an oral defense of the ARP, and prepare the ARP for publication. Prerequisite: PA 5397 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in public administration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PA 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PA 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PA 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Public Administration (M.P.A.) degree program cultivates practical, research-oriented students for careers as reflective

practitioners guided by democratic values, integrity and service. Students work with faculty who have been recognized nationally for their contribution to outstanding teaching, research, and service. The M.P.A. program is accredited by the Network of Schools of Public Policy, Affairs, and Administration (NASPAA).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - GRE not required
  - statement of purpose (two pages in 12-point Times New Roman font, double-spaced with one-inch margins and full name in the header) addressing the following: academic interests, personal and professional experiences relevant for graduate work, motivations and accomplishments, potential as a graduate student and readiness for graduate school, interest in the M.P.A. program at Texas State and reasons the student would be a good fit, and aspirations and the specific goals
  - two letters of recommendation
  - public sector experience (If the student does not have public sector experience, the student must complete a three-hour internship course.)

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Public Administration (M.P.A.) degree with a major in Public Administration requires 39 semester credit hours. Students in the non-thesis option are required to complete a comprehensive written exam and an oral defense of the examination.

### Background

Students who have not completed a statistics course in the last five years with a grade of B or better will be required to take PA 5311 as a required elective. Students who do not have administrative experience must take PA 5389 Internship in Government. The internship can be waived by sending documentation of administrative experience directly to the M.P.A. director.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
PA 5300	Introduction to Public Policy and Administration	3
PA 5310	Public Finance Administration	3
PA 5320	Organizational Theory, Change, and Behavior	3
PA 5330	Public Personnel Administration	3
PA 5340	Introduction to Public Law	3
PA 5350	Public Policy Processes	3
PA 5370	Public Management and Ethics	3
PA 5390	Applied Research Methodology	3
<b>Prescribed Electives</b>		
Choose 15 hours from the following:		15
PA 5311	Introduction to Statistical Analysis	
PA 5312	Program Evaluation and Administrative Statistical Analysis	
PA 5314	Public Administration and Information Technology	
PA 5315	Public Performance Management	
PA 5331	Labor Management Relations	
PA 5332	Management Practices in Public Personnel Administration	
PA 5355	Environmental Policy	
PA 5361	Introduction to the Nonprofit and Voluntary Sector	
PA 5362	Alternative Public Service Delivery Systems	
PA 5388	Directed Reading and Research	
PA 5389	Internship in Government	
PA 5387	Research Practicum	
May choose advisor-approved electives from outside the department		
<b>Total Hours</b>		<b>39</b>

## Comprehensive Examination Requirement

Students are required to take a written comprehensive examination in their last semester of the program. This option requires written responses to three questions and a subsequent oral defense of these responses in front of a committee of faculty and practitioners. Students must pass the comprehensive exam during the last semester. If the student fails to pass

the comprehensive exam during the final semester, the student will retake the comprehensive exam during the next regular long semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Public Administration: PA

## Courses Offered

### Public Administration (PA)

#### PA 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### PA 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### PA 5300. Introduction to Public Policy and Administration.

This course introduces students to the study and practice of US public administration and policy. It also focuses on the dynamics of the democratic governance process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### PA 5310. Public Finance Administration.

This course examines the applied aspects of public finance including operating budgets, revenue estimation, capital budgeting, financial planning, budgetary decision-making, cost benefit analysis, and life-cycle costing. In addition, strategies for budget justification, presentation, and implementation are examined. The use of various budgetary tools and techniques are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### PA 5311. Introduction to Statistical Analysis.

This course applies quantitative methods to problems faced by public administration practitioners. Topics include the use of descriptive and inferential statistics as they apply to decision-making in public management. Students gain hands-on experience with data collection, analysis, and interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5312. Program Evaluation and Administrative Statistical Analysis.**

This is an advanced course in the application of quantitative methods for the evaluation of public policies and programs. The course emphasizes the administrative and managerial environment. Prerequisite: PA 5311 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5313. Public Sector Economics.**

This course presents basic concepts of economics as applied to the public sector. Principles of economics for policy analysis and management are examined in the context of collective action, public choice, resource allocation, and service delivery. The course also examines the financing of national, state, and local governments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5314. Public Administration and Information Technology.**

This course explores the use of information technology in the public sector. It emphasizes the issues that public administrators need to know concerning the impact of information technology on their organizations. The course covers E-Democracy, E-Governance, Enterprise Architecture, Public Management Information Systems (PMIS), E-Procurement, and E-Commerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5315. Public Performance Management.**

This course examines public sector performance management and measurement as tools for improving strategic planning, resource allocation, organizational learning, and internal operational processes. It also examines accountability, managerial performance, and evaluation processes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5320. Organizational Theory, Change, and Behavior.**

This course analyzes classic and contemporary literature on organizational theory and behavior in the public sector. Emphasis is placed on history and development of organizational theory and core concepts such as organizational culture, power, and change. The implications of organizational theory for democratic governance are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5330. Public Personnel Administration.**

This course introduces students to public personnel functions from a managerial perspective. Examples of topics covered include: recruitment and selection, performance evaluation, discipline, collective bargaining, classification, and compensation. Constructive leadership of government personnel that encourages a more competent, motivated, and representative administration workforce is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5331. Labor Management Relations.**

This course examines the historical development of public employee unions and the effects of collective bargaining agreements on personnel policy development. Public laws concerning collective bargaining procedures and strategy on the part of public managers are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5332. Management Practices in Public Personnel Administration.**

This course is a seminar-based examination of selected topics in public personnel administration including job analysis, position classification, test construction, performance appraisal, succession planning, and affirmative action. The role of the personnel office as a strategic partner in accomplishing organizational goals is also explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5340. Introduction to Public Law.**

This course examines the regulatory environment, legal requirements, and constraints that public officials face when carrying out their duties. The use of online research tools to find administrative materials and analyze public law issues is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5350. Public Policy Processes.**

This course is an overview of the process of public policymaking including policy formulation and implementation. Emphasis is placed on actors in the policy process and on the political environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5351. Urban Sustainability Policy.**

This course examines the basic components of urban transportation and land use policy. In addition to building an understanding of the historic foundation of urban policy and planning, students explore the underlying concepts related to sustainability to analyze underlying tensions and potential connections across policy spheres.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5352. Comparative Public Administration.**

This course examines differences in various national administrative systems and the role of international organizations. It explores differences that influence various public policy issues from countries around the world. Policy issues examined include poverty, human rights, health care, and the environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5353. Ecology and the Politics of Sustainability.**

This course is an exploration of problems and policies dealing with air, water, waste, energy use, natural resources, sustainability, and global environmental issues. This class highlights the historical drivers of environmental policy. Implementation strategies, policy mechanisms, and compliance adherence are also examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5355. Environmental Policy.**

This course will introduce students to the public policy process and the details of U.S. environmental policy and administration. Problems and policies dealing with air, water, solid waste, hazardous waste, energy use, natural resources, climate change, sustainability, and global environmental governance will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5361. Introduction to the Nonprofit and Voluntary Sector.**

This course provides a foundation for understanding the history, scope, and function of the American nonprofit and voluntary sector. It includes an examination of the conceptual and theoretical underpinnings of the sector, and assessment of the role of these organizations in society, and their impact on public policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5362. Alternative Public Service Delivery Systems.**

This course examines alternative delivery of public services. The reliance on market mechanisms, contracting out, and privatization are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5370. Public Management and Ethics.**

This course explores issues of morality and ethics in the public sector. It also considers subjects such as administrative discretion, the public interest, democratic values, and dissent. The course aims to formulate a frame of reference for judging behavior and clarifying our role and responsibility as moral agents.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5380A. Texas Water Law and Policy.**

This course examines the chief policy issue that will determine the future of Texas: how state and local agencies administer the state's ground- and surface water legal regimes. With the legal and regulatory framework in place, the course investigates pressing water policy issues that confront Texas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PA 5380B. Environmental Litigation.**

This course conducts an in-depth examination of researching, filing, and litigating claims under federal and state environmental statutes. The course focuses on the aspects of environmental litigation that make it different than its non-environmental counterparts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PA 5387. Research Practicum.**

This course uses structured group research to analyze a current policy, management, or administrative issue. A professor-led research team completes a final report detailing findings and recommendations for action. May be repeated once for additional credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5388. Directed Reading and Research.**

This course guides students in directed reading and research on various topics in public policy and administration under the direction of a graduate faculty member. The course may be repeated once with a different emphasis for additional credit for a maximum of 6 credit hours. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**PA 5389. Internship in Government.**

This course provides students with the opportunity to integrate classroom learning with practical experience. Students with little or no work experience related to public service are required to complete an internship. Students considering a career change should consider an internship. May be repeated once for additional credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5390. Applied Research Methodology.**

This course is an introduction to applied research methods in the public sector. Topics include the scientific method, research design, measurement, qualitative research, and sampling. Data collection methods such as survey research, content analysis, and secondary data analysis are also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5397. Research Design and Proposal Development for Public Administration.**

This course prepares students for the demands of academic and professional writing. Students learn how to identify a public problem, develop a research purpose statement, and complete a literature review around a conceptual framework. This course prepares the student for their Applied Research Project (ARP). Prerequisite: PS 5390 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5398. Applied Research Project.**

This course serves as the capstone experience for MPA students. Students complete an original and empirical Applied Research Project (ARP), complete an oral defense of the ARP, and prepare the ARP for publication. Prerequisite: PA 5397 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in public administration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PA 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PA 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PA 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Public Administration (M.P.A.) degree program cultivates practical, research-oriented students for careers as reflective practitioners guided by democratic values, integrity and service. Students work with faculty who have been recognized nationally for their contribution to outstanding teaching, research, and service. The M.P.A. program is accredited by the Network of Schools of Public Policy, Affairs, and Administration (NASPAA).

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose (two pages in 12-point Times New Roman font, double-spaced with one-inch margins and full name in the header) addressing the following: academic interests, personal and professional experiences relevant for graduate work, motivations and accomplishments, potential as a graduate student and readiness for graduate school, interest in the M.P.A. program at Texas State and reasons the student would be a good fit, and aspirations and the specific goals
- two letters of recommendation
- public sector experience (If the student does not have public sector experience, the student must complete a three-hour internship course.)

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wrapper>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Public Administration (M.P.A.) degree with a major in Public Administration requires 39 semester credit hours, including a thesis. All students will be required to complete a thesis and an oral defense of the thesis.

### Background

Students who have not completed a statistics course in the last five years with a grade of B or better will be required to take PA 5311 as a required elective. Students who do not have administrative experience must take PA 5389 Internship in Government. The internship can be waived by sending documentation of administrative experience directly to the M.P.A. director.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
PA 5300	Introduction to Public Policy and Administration	3
PA 5310	Public Finance Administration	3
PA 5320	Organizational Theory, Change, and Behavior	3
PA 5330	Public Personnel Administration	3
PA 5340	Introduction to Public Law	3
PA 5350	Public Policy Processes	3
PA 5370	Public Management and Ethics	3

PA 5390	Applied Research Methodology	3
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### Prescribed Electives

Choose 9 hours from the following: 9

PA 5311	Introduction to Statistical Analysis
PA 5312	Program Evaluation and Administrative Statistical Analysis
PA 5314	Public Administration and Information Technology
PA 5315	Public Performance Management
PA 5331	Labor Management Relations
PA 5332	Management Practices in Public Personnel Administration
PA 5355	Environmental Policy
PA 5361	Introduction to the Nonprofit and Voluntary Sector
PA 5362	Alternative Public Service Delivery Systems
PA 5387	Research Practicum
PA 5388	Directed Reading and Research
PA 5389	Internship in Government

May choose advisor-approved electives from outside the department

### Thesis

PA 5399A	Thesis	3
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Choose a minimum of 3 hours from the following: 3

PA 5199B	Thesis
PA 5299B	Thesis
PA 5399B	Thesis
PA 5599B	Thesis
PA 5999B	Thesis

**Total Hours** 39

## Thesis

Students registering for PA 5399A must prepare a thesis proposal under the guidance of a thesis chair that includes a statement of the problem, literature review, theoretical framework, research design, data collection procedures, and a representative bibliography. Upon successful completion of PA 5399A, students may register for PA 5399B with thesis chair approval.

## Comprehensive Examination Requirement

An oral defense of the thesis in front of a committee of faculty and practitioners will serve as the comprehensive examination requirement. If a student does not successfully defend the thesis in the first attempt, one subsequent chance to defend the thesis will be provided after the student satisfactorily addresses every suggestion for improvement made by the thesis committee.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until

the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Public Administration: PA

## Courses Offered

### Public Administration (PA)

#### PA 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### PA 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### PA 5300. Introduction to Public Policy and Administration.

This course introduces students to the study and practice of US public administration and policy. It also focuses on the dynamics of the democratic governance process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### PA 5310. Public Finance Administration.

This course examines the applied aspects of public finance including operating budgets, revenue estimation, capital budgeting, financial planning, budgetary decision-making, cost benefit analysis, and life-cycle costing. In addition, strategies for budget justification, presentation, and implementation are examined. The use of various budgetary tools and techniques are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### PA 5311. Introduction to Statistical Analysis.

This course applies quantitative methods to problems faced by public administration practitioners. Topics include the use of descriptive and inferential statistics as they apply to decision-making in public management. Students gain hands-on experience with data collection, analysis, and interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### PA 5312. Program Evaluation and Administrative Statistical Analysis.

This is an advanced course in the application of quantitative methods for the evaluation of public policies and programs. The course emphasizes the administrative and managerial environment. Prerequisite: PA 5311 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### PA 5313. Public Sector Economics.

This course presents basic concepts of economics as applied to the public sector. Principles of economics for policy analysis and management are examined in the context of collective action, public choice, resource allocation, and service delivery. The course also examines the financing of national, state, and local governments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### PA 5314. Public Administration and Information Technology.

This course explores the use of information technology in the public sector. It emphasizes the issues that public administrators need to know concerning the impact of information technology on their organizations. The course covers E-Democracy, E-Governance, Enterprise Architecture, Public Management Information Systems (PMIS), E-Procurement, and E-Commerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### PA 5315. Public Performance Management.

This course examines public sector performance management and measurement as tools for improving strategic planning, resource allocation, organizational learning, and internal operational processes. It also examines accountability, managerial performance, and evaluation processes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### PA 5320. Organizational Theory, Change, and Behavior.

This course analyzes classic and contemporary literature on organizational theory and behavior in the public sector. Emphasis is placed on history and development of organizational theory and core concepts such as organizational culture, power, and change. The implications of organizational theory for democratic governance are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5330. Public Personnel Administration.**

This course introduces students to public personnel functions from a managerial perspective. Examples of topics covered include: recruitment and selection, performance evaluation, discipline, collective bargaining, classification, and compensation. Constructive leadership of government personnel that encourages a more competent, motivated, and representative administration workforce is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5331. Labor Management Relations.**

This course examines the historical development of public employee unions and the effects of collective bargaining agreements on personnel policy development. Public laws concerning collective bargaining procedures and strategy on the part of public managers are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5332. Management Practices in Public Personnel Administration.**

This course is a seminar-based examination of selected topics in public personnel administration including job analysis, position classification, test construction, performance appraisal, succession planning, and affirmative action. The role of the personnel office as a strategic partner in accomplishing organizational goals is also explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5340. Introduction to Public Law.**

This course examines the regulatory environment, legal requirements, and constraints that public officials face when carrying out their duties. The use of online research tools to find administrative materials and analyze public law issues is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5350. Public Policy Processes.**

This course is an overview of the process of public policymaking including policy formulation and implementation. Emphasis is placed on actors in the policy process and on the political environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5351. Urban Sustainability Policy.**

This course examines the basic components of urban transportation and land use policy. In addition to building an understanding of the historic foundation of urban policy and planning, students explore the underlying concepts related to sustainability to analyze underlying tensions and potential connections across policy spheres.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5352. Comparative Public Administration.**

This course examines differences in various national administrative systems and the role of international organizations. It explores differences that influence various public policy issues from countries around the world. Policy issues examined include poverty, human rights, health care, and the environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5353. Ecology and the Politics of Sustainability.**

This course is an exploration of problems and policies dealing with air, water, waste, energy use, natural resources, sustainability, and global environmental issues. This class highlights the historical drivers of environmental policy. Implementation strategies, policy mechanisms, and compliance adherence are also examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5355. Environmental Policy.**

This course will introduce students to the public policy process and the details of U.S. environmental policy and administration. Problems and policies dealing with air, water, solid waste, hazardous waste, energy use, natural resources, climate change, sustainability, and global environmental governance will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5361. Introduction to the Nonprofit and Voluntary Sector.**

This course provides a foundation for understanding the history, scope, and function of the American nonprofit and voluntary sector. It includes an examination of the conceptual and theoretical underpinnings of the sector, and assessment of the role of these organizations in society, and their impact on public policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**PA 5362. Alternative Public Service Delivery Systems.**

This course examines alternative delivery of public services. The reliance on market mechanisms, contracting out, and privatization are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5370. Public Management and Ethics.**

This course explores issues of morality and ethics in the public sector. It also considers subjects such as administrative discretion, the public interest, democratic values, and dissent. The course aims to formulate a frame of reference for judging behavior and clarifying our role and responsibility as moral agents.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5380A. Texas Water Law and Policy.**

This course examines the chief policy issue that will determine the future of Texas: how state and local agencies administer the state's ground- and surface water legal regimes. With the legal and regulatory framework in place, the course investigates pressing water policy issues that confront Texas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PA 5380B. Environmental Litigation.**

This course conducts an in-depth examination of researching, filing, and litigating claims under federal and state environmental statutes. The course focuses on the aspects of environmental litigation that make it different than its non-environmental counterparts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PA 5387. Research Practicum.**

This course uses structured group research to analyze a current policy, management, or administrative issue. A professor-led research team completes a final report detailing findings and recommendations for action. May be repeated once for additional credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5388. Directed Reading and Research.**

This course guides students in directed reading and research on various topics in public policy and administration under the direction of a graduate faculty member. The course may be repeated once with a different emphasis for additional credit for a maximum of 6 credit hours. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5389. Internship in Government.**

This course provides students with the opportunity to integrate classroom learning with practical experience. Students with little or no work experience related to public service are required to complete an internship. Students considering a career change should consider an internship. May be repeated once for additional credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5390. Applied Research Methodology.**

This course is an introduction to applied research methods in the public sector. Topics include the scientific method, research design, measurement, qualitative research, and sampling. Data collection methods such as survey research, content analysis, and secondary data analysis are also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5397. Research Design and Proposal Development for Public Administration.**

This course prepares students for the demands of academic and professional writing. Students learn how to identify a public problem, develop a research purpose statement, and complete a literature review around a conceptual framework. This course prepares the student for their Applied Research Project (ARP). Prerequisite: PS 5390 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5398. Applied Research Project.**

This course serves as the capstone experience for MPA students. Students complete an original and empirical Applied Research Project (ARP), complete an oral defense of the ARP, and prepare the ARP for publication. Prerequisite: PA 5397 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in public administration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

PA 5399B. Thesis.

This course represents a student’s continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

PA 5599B. Thesis.

This course represents a student’s continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

PA 5999B. Thesis.

This course represents a student’s continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

The graduate minor in Legal Studies requires 9-12 semester credit hours. Students in the Legal Studies minor must meet with the director of the legal studies program prior to enrollment in the following courses. The minor, by itself, does not constitute an ABA-approved program for paralegal study.

Code	Title	Hours
Required Course		
LS 5320	Legal Research	3
Prescribed Electives		
Choose 6 to 9 hours from the following:		6-9
LS 5330	Legal Theories and Analysis	
LS 5340	Litigation	
LS 5343	Family Law	
LS 5349	Business Organizations	
LS 5350	Legal Drafting	
LS 5351	Estates and Trusts	
LS 5353	Real Estate	
LS 5359	Alternative Dispute Resolution	
LS 5361	Criminal Law and Procedure	
LS 5363	Social Legislation	
LS 5371	Intellectual Property Law	
LS 5373	Contract Law	
Total Hours		9-12

The graduate minor in Political Science requires 9 semester credit hours.

Code	Title	Hours
Required Courses		
Choose 9 hours from the following:		9

PS 5301	Approaches to the Study of Political Science
PS 5302	Political Research and Methodology
PS 5310	Studies in Ancient and Medieval Political Thought
PS 5311	Social Contract Theory
PS 5312	Roots of American Constitutionalism
PS 5313	Justice and Liberty in American Thought
PS 5315	Contemporary Perspectives in Modern Liberalism
PS 5316	The Crisis of Liberalism and The Future of Democracy
PS 5317	Theological Perspectives in Modern Democracy
PS 5318	The Problem of Power and the Crisis of Modernity
PS 5330A	Nuclear Weapons in International Politics
PS 5330B	Tocqueville and American Democracy
PS 5332	Problems in American Foreign Relations
PS 5334	Texas Politics
PS 5335	The Role of Interests in America
PS 5336	Property, Liberty, and Popular Sovereignty
PS 5337	American Political Culture
PS 5338	American Political Discourse
PS 5339	The American Presidency
PS 5340	Congress and the Legislative Process
PS 5341	Seminar in Constitutional Law and Theory
PS 5356	The British Political Order Since 1900
PS 5357	Russian Politics and Josef Stalin
PS 5360	Economic Development in Developing Nations
PS 5361	Government and Politics of African States
PS 5375	Seminar in International Relations Theory
PS 5377	Problems in International Organizations
PS 5378	Problems in International Law
PS 5379	Problems in International Political Economy
PS 5380	International Conflict and Security
PS 5389	Internship in Government

Program Overview

A “paralegal” is a professional who is trained to handle certain law-related responsibilities as an integral member of a legal staff. A paralegal is not admitted to the practice of law in Texas but has, through education, training and experience, demonstrated knowledge of the legal system, legal principles and procedures and uses such knowledge in rendering paralegal assistance to an attorney in the representation of that attorney’s clients. The functions of a paralegal are limited only to the extent that they are limited by law. The properly trained paralegal may, under the supervision of a lawyer, perform a variety of functions that include researching legal issues, drafting documents, managing complex files, developing legal practice systems, interviewing witnesses, conducting fact investigations, summarizing depositions, and assisting the attorney in and out of the courtroom.

Our program is unique because we have one of the few professional certificate programs offered by a university at the graduate level. Our program is offered through the Department of Political Science and the Graduate College. We must comply with strict requirements regarding our curriculum, our faculty, and the type of student entering our program.

The program consists of 24 graduate level hours and may be completed in two or more semesters.

As a result of the inherent structure of our program, we offer one of the best professional paralegal programs in the state of Texas and in the United States. Our program is superior for at least three reasons:

- the type of student entering the program (see admission requirements (<http://mals.polisci.txstate.edu/LS-program/Admission-Requirements.html>)).
- the balanced curriculum offered.
- the faculty teaching in the program. (Each of our faculty instructors has had experience as a practicing attorney, and all have experience working with paralegals.

Also, our program has been approved by the American Bar Association (ABA) and is an institutional member of the American Association for Paralegal Education (AafPE).

This certificate program requires concurrent enrollment in the Master of Arts major in Legal Studies (p. 2598) at Texas State University.

The Paralegal Studies certificate program is an ABA-approved, non-degree certificate program available to students who have a baccalaureate degree and a minimum 3.0 grade-point average (on a 4.0 scale) on the last 60 semester hours of undergraduate work and are currently pursuing a master's degree at Texas State. This certificate program is designed to prepare students to perform as highly qualified paralegals (also referred to as "legal assistants") with both a theoretical knowledge of substantive law as well as practical skills. A paralegal is not licensed to practice law but is trained to handle certain law related responsibilities under the supervision and direction of a licensed attorney. Applicants to this program must also successfully complete an interview with the director of the paralegal program. This certificate program requires concurrent enrollment in the Master of Arts major in Legal Studies at Texas State University.

## Course Requirements

Students must successfully complete a 24-hour curriculum while maintaining an overall "B" average and must receive a "B" or better in each required course.

Code	Title	Hours
<b>Required Courses</b>		
LS 5310	Introduction to the Paralegal Profession and Legal Technology	3
LS 5320	Legal Research	3
LS 5330	Legal Theories and Analysis	3
LS 5340	Litigation	3
LS 5350	Legal Drafting	3
LS 5389	Law Office Internship	3
<b>Prescribed Electives</b>		
Select 6 hours from the following:		6
LS 5341	Administrative Law	
LS 5343	Family Law	
LS 5349	Business Organizations	
LS 5351	Estates and Trusts	
LS 5353	Real Estate	
LS 5359	Alternative Dispute Resolution	

LS 5361	Criminal Law and Procedure	
LS 5363	Social Legislation	
LS 5371	Intellectual Property Law	
LS 5373	Contract Law	
<b>Total Hours</b>		<b>24</b>

Trauth-Huffman Hall Room 253  
T: 512.245.2526 F: 512.245.3153  
<http://www.psych.txstate.edu/>

The mission of the Master of Arts in Psychological Research program at Texas State is to foster competence in the methodological foundations and conduct of psychological research across a wide variety of settings. The program has a strong empirical orientation and focus is placed on learning interpersonal, research, and statistical skills and competencies relevant to the responsible and ethical conduct of both basic and applied psychological research. This program is appropriate for individuals wishing to work in research settings or intending to pursue a doctoral degree in Psychology.

The Department of Psychology is housed in Trauth-Huffman Hall (THH), a LEED-certified building completed in June 2012. Current research facilities in the department include a saliva analysis laboratory, three state-of-the-art EEG systems, two eye-tracking systems, Doppler imaging equipment, state-of-the-art observation rooms, a sleep lab with dedicated EEG equipment, a dedicated computer lab for research, and a variety of other faculty research labs used for studies on addiction, cognition, exercise, sleep, and many other health-related issues. Faculty areas of expertise include clinical, neuropsychology, cognitive neuroscience, health psychology, quantitative psychology, developmental psychology, and social psychology, among others.

In accordance with the reclassification of Texas State as an Emerging Research University in January 2012, the Department of Psychology is committed to expanding its research agenda while retaining its lasting commitment to teaching. The department strongly supports the view that research and teaching are complementary activities. Thus, our goal is to gain national and international recognition as a research-oriented and teaching-intensive department.

## Master of Arts (M.A.)

- Major in Psychological Research (Non-thesis Option) (p. 2629)
- Major in Psychological Research (Thesis Option) (p. 2634)

## Minor

- Psychology (p. 2640)

## Program Overview

The Master of Arts (M.A.) degree with a major in Psychological Research is designed to foster competence in the methodological foundations and conduct of psychological research across a wide variety of settings. Students will gain expertise regarding the impact of biological, social, emotional, cognitive, and behavioral factors on psychological phenomena. Focus is placed on learning interpersonal/research skills and statistical competencies relevant to the responsible and ethical conduct of both basic and applied psychological research.

## Evaluation of Student Fitness and Performance

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- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in the following prerequisite courses:
  - Introduction to Psychology
  - Quantitative and Statistical Methods
  - Experimental and Research Methods
- GRE not required
- research interest statement listing three faculty members in the Texas State Psychology Department whose research interests most closely match the student's
- resume/CV including prior experience in research or clinical areas, awards, and scholarships
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Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
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- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
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## Degree Requirements

The Master of Arts (M.A.) degree with a major in Psychological Research requires 38 semester credit hours.

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The Graduate Director or Designee will review all students' grades at the end of each semester and send written notification to those students who make grades of "C" or worse explaining their status and any required actions.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
PSY 5198	Research Seminar (Taken twice)	2
PSY 5311	Univariate and Bivariate Statistics	3
PSY 5321	Multivariate Statistics	3
PSY 5324	Biological Bases of Behavior	3
PSY 5391	Research Methods & Experimental Design	3
PSY 5366	Individual Study (Taken twice)	6
<b>Prescribed Electives</b>		
Choose 18 hours from the following:		18
PSY 5306	Psychological Development: Theories & Research	
PSY 5310	Advanced Psychopathology	
PSY 5318	Assessment in Psychology	
PSY 5320	Principles of Measurement and Statistics	
PSY 5326	Neuropsychological Assessment	
PSY 5335	Foundations of Health Psychology	
PSY 5345	Psychopharmacology	
PSY 5348	Health Psychology: Prevention and Intervention	
PSY 5352	Psychological Therapies	
PSY 5360G	Forensic Psychology	
PSY 5362	Cognitive Neuroscience	
PSY 5366	Individual Study	
PSY 5367	Research Seminar in Social Psychology	
PSY 5370	Learning, Cognition, and Motivation	
PSY 5373	Human Memory and Memory Disorders	
PSY 5374	The Psychology of Language	
PSY 5381	Introduction to Psychophysiology	
PSY 5398	Internship in Psychology	
<b>Total Hours</b>		<b>38</b>

## Comprehensive Examination Requirement

All students in the Psychological Research Program are required by the University to take and pass a comprehensive examination in order to graduate. Students will have their comprehensive examination administered orally and will be evaluated on the basis of their final project. If students fail the exam, they are allowed to repeat it until they pass.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Psychology: PSY

## Courses Offered

### Psychology (PSY)

#### PSY 5105. Practicum in Teaching Psychology.

This course will examine processes and strategies designed to improve the teaching and learning process. Students will be introduced to learning and instructional theory and selected concepts, issues, and strategies of instructional planning, delivery, management, and evaluation. This course does not earn graduate degree credit. Repeatable with different emphasis. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### PSY 5198. Research Seminar.

Taken in two consecutive semesters, this seminar provides an orientation to the graduate program and the steps required for thesis completion.

Topics include the discussion of research interests, critiquing literature, and topic selection; developing and submitting a research proposal; selecting a thesis committee; and thesis completion and submission.

Restricted to M.A. students in Psychological Research.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PSY 5199B. Thesis.

This course represents a student's continuous thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### PSY 5299B. Thesis.

This course represents a student's continuous thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**PSY 5306. Psychological Development: Theories & Research.**

This course is an advanced coverage of biological, social, and cognitive development throughout the lifespan. Topics include cognitive developmental theory, sensory/perceptual development, language development, infant attachment, the development of gender roles, moral development, and issues related to aging. Prerequisite: PSY 3300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**PSY 5310. Advanced Psychopathology.**

This course offers a critical analysis of the definition and classification of psychopathology and experiences and an in-depth study of theories and research on causes, remediation, and prevention. Prerequisite: PSY 3315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**PSY 5311. Univariate and Bivariate Statistics.**

This course introduces students to univariate and bivariate statistical concepts and techniques used in psychology research (e.g., probability, sampling distributions, t-tests, and analysis of variance, correlation). Emphasis is placed on developing skills in data analysis including the selection of appropriate techniques, using data analysis software, and interpretation of statistical results. Prerequisite: PSY 2301 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**PSY 5318. Assessment in Psychology.**

The course will provide an overview of assessment instruments commonly used by psychologists and neuropsychologists in research and practice. Basic psychometrics such as validity and reliability also will be covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**PSY 5320. Principles of Measurement and Statistics.**

The course emphasizes classical measurement theory, including reliability and validity of measurement instruments commonly used in psychology, and reviews descriptive statistics with a focus on correlation and regression. Prerequisite: Course in undergraduate statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**PSY 5321. Multivariate Statistics.**

This course introduces students to multivariate statistical techniques commonly used in psychological research such as analysis of variance and covariance, multiple regression, and factor analysis. Emphasis is placed on developing applied skills in data analysis: selection of appropriate statistical techniques, using data analysis software, and interpretation of statistical results. Prerequisite: PSY 5311 with a grade of "B" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**PSY 5324. Biological Bases of Behavior.**

This course provides an overview of the nervous system structure and function appropriate to the overall field of Psychology in order to foster an appreciation of the biological determinants of behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**PSY 5326. Neuropsychological Assessment.**

This course will introduce principles of neuropsychological assessment including assessment procedures, interpretation of results, neuropathology, and the range of neuropsychological functions to be assessed. This course will also cover the characteristics and administration of several neuropsychological assessment instruments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**PSY 5335. Foundations of Health Psychology.**

This course will utilize a biopsychosocial approach to understand the psychology of wellness and disease. Topics include stress, coping, pain, social support, and chronic illness. Special emphasis will focus on physiological responses, psychoneuroimmunology, and somatization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**PSY 5345. Psychopharmacology.**

This course explores: (1) the reasons that humans and animals consume mind altering substances called psychoactive drugs, (2) the neuronal, chemical, and hormonal mechanisms underlying drug action, and (3) the environmental factors that modulate the impact of psychoactive drugs on emotional, cognitive, perceptual and behavioral expression in humans and animals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**PSY 5348. Health Psychology: Prevention and Intervention.**

This course will focus on primary, secondary and tertiary prevention and intervention strategies to enhance health and wellness. Topics will include health-promoting behaviors, risky health behaviors, theories of health behavior change, the process of medical care, and treatment adherence. Special emphasis will be on planning, implementation, and assessment of interventions. Prerequisites: PSY 5335 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5352. Psychological Therapies.**

This survey course on evidence-based psychological interventions focuses on the active mechanisms by which therapies work and their application to specific diagnostic categories and conditions. Interpersonal, behavioral, cognitive-behavioral, and dialectical behavior therapies will be highlighted along with newer empirically-based therapies such as Acceptance and Commitment Therapy and mindfulness approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5360G. Forensic Psychology.**

Examination of the relationships between psychology and the Criminal Justice system. Emphasis is placed on how psychology variables influence how individuals carry out their duties within the system. Sample topics include: (a) psychology and jury decision-making, (b) accuracy/impact of eyewitnesses testimony, and (c) how characteristics of defendants influence juries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**PSY 5360H. Psychology of Women.**

The course includes an in-depth examination of the development of women's roles and gender differences as well as a consideration of women's relationships, sexuality, employment, and diversity. Special topics such as women and violence will also be covered. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**PSY 5360N. Advanced Statistical Methodology.**

An overview of commonly used statistical methods in scientific research, with a core focus on generalized linear mixed models for individual studies and meta-analysis for study aggregation. Analyses will be implemented primarily in the R statistical programming environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 5360O. Applied Biostatistics in Health Research.**

This course will examine methodological approaches and applied biostatistics in health research. Emphasis on non-parametric univariate and multivariate statistical tests. Prerequisite: PSY 5311 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 5360P. Psychology of Culture and Diversity.**

This course provides a graduate level introduction to psychological theories and methods that examine the links between culture and human behavior, affect and cognitions. The course explores the relevance of these links to life development, mental health, social and gender identity, and sexuality. The student is expected to gain critical thinking skills in evaluating the validity of psychological knowledge within a cultural context. More importantly, the students are expected to gain an appreciation and understanding for cultural variation in human behavior across different cultures and an enhanced awareness and ability to work with a culturally diverse and multicultural population.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 5362. Cognitive Neuroscience.**

This course provides a comprehensive introduction to cognitive neuroscience: the study of the biological basis of cognitive processes such as perception, attention, memory, language, and decision-making. This is a seminar course that will cover theoretical constructs, methods, and current research findings in cognitive neuroscience. Prerequisite: PSY 3322 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5366. Individual Study.**

Students design and execute original research or engage in extensive fieldwork in the field of psychology under the supervision of a faculty member. May be repeated once for credit. Prerequisite: PSY 5391 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PSY 5367. Research Seminar in Social Psychology.**

The course provides an in-depth examination of selected topics in social psychology. The focus of student commitment and responsibility is learning about social psychology and actively producing psychological knowledge. The course covers the research process and concludes with each student developing a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5370. Learning, Cognition, and Motivation.**

Basic problems in the acquisition of responses, treating with such constructs as reinforcement, extinction, retention, forgetting, problem solving, motivation, and punishment. Major theories are treated through attention to classical experiments, but greatest emphasis is given to contemporary research. See Educational Psychology 5370.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5373. Human Memory and Memory Disorders.**

This course provides a comprehensive overview of topics in human memory including different types of memory and the brain structures involved. Special emphasis will be given to problems with memory including aging memory, amnesia, and Alzheimer's disease. This course will cover current theories of memory with discussions of cutting-edge research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5374. The Psychology of Language.**

This course provides a grounding in the cognitive theories/models of the major areas of language research: acquisition, comprehension, and production. It also provides an overview of the cognitive processes involved in several specific topic areas in language, such as syntax, semantics, discourse, prosody, bilingualism, neuro-linguistics, sign language, and reading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5381. Introduction to Psychophysiology.**

This course will provide an overview of the principles, theory, and applications of using physiological measures to study mental processes. This course will illustrate how the use of psychophysiological measurements can enhance our understanding of brain/mind/behavior relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5391. Research Methods & Experimental Design.**

Problems in psychology, emphasis on research procedures. A research project is required of each student. Restricted to M.A. students in Psychological Research.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5398. Internship in Psychology.**

Students engage in extensive field work in a professional setting related to psychology. Prerequisite: PSY 5311 and PSY 5321 and PSY 5391 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in PSY 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PSY 5399B. Thesis.**

This course represents a student's continuous thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PSY 5599B. Thesis.**

This course represents a student's continuous thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

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**PSY 5999B. Thesis.**

This course represents a student's continuous thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

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Choose 18 hours from the following:		18
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PSY 5373	Human Memory and Memory Disorders	
PSY 5374	The Psychology of Language	
PSY 5381	Introduction to Psychophysiology	
PSY 5398	Internship in Psychology	
<b>Thesis</b>		
PSY 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
PSY 5199B	Thesis	
PSY 5299B	Thesis	
PSY 5399B	Thesis	
PSY 5599B	Thesis	
PSY 5999B	Thesis	
<b>Total Hours</b>		<b>38</b>

## Comprehensive Examination Requirement

All students in the Psychological Research Program are required by the University to take and pass a comprehensive examination in order to graduate. Thesis students will have their Comprehensive Examination

administered orally as part of their thesis defense. If students fail the defense, they are allowed to repeat it until they pass.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the



topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival

quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Psychology: PSY

## Courses Offered

### Psychology (PSY)

#### PSY 5105. Practicum in Teaching Psychology.

This course will examine processes and strategies designed to improve the teaching and learning process. Students will be introduced to learning and instructional theory and selected concepts, issues, and strategies of instructional planning, delivery, management, and evaluation. This course does not earn graduate degree credit. Repeatable with different emphasis. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### PSY 5198. Research Seminar.

Taken in two consecutive semesters, this seminar provides an orientation to the graduate program and the steps required for thesis completion. Topics include the discussion of research interests, critiquing literature, and topic selection; developing and submitting a research proposal; selecting a thesis committee; and thesis completion and submission. Restricted to M.A. students in Psychological Research.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PSY 5199B. Thesis.

This course represents a student's continuous thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### PSY 5299B. Thesis.

This course represents a student's continuous thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### PSY 5306. Psychological Development: Theories & Research.

This course is an advanced coverage of biological, social, and cognitive development throughout the lifespan. Topics include cognitive developmental theory, sensory/perceptual development, language development, infant attachment, the development of gender roles, moral development, and issues related to aging. Prerequisite: PSY 3300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5310. Advanced Psychopathology.**

This course offers a critical analysis of the definition and classification of psychopathology and experiences and an in-depth study of theories and research on causes, remediation, and prevention. Prerequisite: PSY 3315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5311. Univariate and Bivariate Statistics.**

This course introduces students to univariate and bivariate statistical concepts and techniques used in psychology research (e.g., probability, sampling distributions, t-tests, and analysis of variance, correlation). Emphasis is placed on developing skills in data analysis including the selection of appropriate techniques, using data analysis software, and interpretation of statistical results. Prerequisite: PSY 2301 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**PSY 5318. Assessment in Psychology.**

The course will provide an overview of assessment instruments commonly used by psychologists and neuropsychologists in research and practice. Basic psychometrics such as validity and reliability also will be covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5320. Principles of Measurement and Statistics.**

The course emphasizes classical measurement theory, including reliability and validity of measurement instruments commonly used in psychology, and reviews descriptive statistics with a focus on correlation and regression. Prerequisite: Course in undergraduate statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5321. Multivariate Statistics.**

This course introduces students to multivariate statistical techniques commonly used in psychological research such as analysis of variance and covariance, multiple regression, and factor analysis. Emphasis is placed on developing applied skills in data analysis: selection of appropriate statistical techniques, using data analysis software, and interpretation of statistical results. Prerequisite: PSY 5311 with a grade of "B" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**PSY 5324. Biological Bases of Behavior.**

This course provides an overview of the nervous system structure and function appropriate to the overall field of Psychology in order to foster an appreciation of the biological determinants of behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5326. Neuropsychological Assessment.**

This course will introduce principles of neuropsychological assessment including assessment procedures, interpretation of results, neuropathology, and the range of neuropsychological functions to be assessed. This course will also cover the characteristics and administration of several neuropsychological assessment instruments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5335. Foundations of Health Psychology.**

This course will utilize a biopsychosocial approach to understand the psychology of wellness and disease. Topics include stress, coping, pain, social support, and chronic illness. Special emphasis will focus on physiological responses, psychoneuroimmunology, and somatization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5345. Psychopharmacology.**

This course explores: (1) the reasons that humans and animals consume mind altering substances called psychoactive drugs, (2) the neuronal, chemical, and hormonal mechanisms underlying drug action, and (3) the environmental factors that modulate the impact of psychoactive drugs on emotional, cognitive, perceptual and behavioral expression in humans and animals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5348. Health Psychology: Prevention and Intervention.**

This course will focus on primary, secondary and tertiary prevention and intervention strategies to enhance health and wellness. Topics will include health-promoting behaviors, risky health behaviors, theories of health behavior change, the process of medical care, and treatment adherence. Special emphasis will be on planning, implementation, and assessment of interventions. Prerequisites: PSY 5335 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5352. Psychological Therapies.**

This survey course on evidence-based psychological interventions focuses on the active mechanisms by which therapies work and their application to specific diagnostic categories and conditions. Interpersonal, behavioral, cognitive-behavioral, and dialectical behavior therapies will be highlighted along with newer empirically-based therapies such as Acceptance and Commitment Therapy and mindfulness approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5360G. Forensic Psychology.**

Examination of the relationships between psychology and the Criminal Justice system. Emphasis is placed on how psychology variables influence how individuals carry out their duties within the system. Sample topics include: (a) psychology and jury decision-making, (b) accuracy/impact of eyewitnesses testimony, and (c) how characteristics of defendants influence juries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**PSY 5360H. Psychology of Women.**

The course includes an in-depth examination of the development of women's roles and gender differences as well as a consideration of women's relationships, sexuality, employment, and diversity. Special topics such as women and violence will also be covered. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**PSY 5360N. Advanced Statistical Methodology.**

An overview of commonly used statistical methods in scientific research, with a core focus on generalized linear mixed models for individual studies and meta-analysis for study aggregation. Analyses will be implemented primarily in the R statistical programming environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 5360O. Applied Biostatistics in Health Research.**

This course will examine methodological approaches and applied biostatistics in health research. Emphasis on non-parametric univariate and multivariate statistical tests. Prerequisite: PSY 5311 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 5360P. Psychology of Culture and Diversity.**

This course provides a graduate level introduction to psychological theories and methods that examine the links between culture and human behavior, affect and cognitions. The course explores the relevance of these links to life development, mental health, social and gender identity, and sexuality. The student is expected to gain critical thinking skills in evaluating the validity of psychological knowledge within a cultural context. More importantly, the students are expected to gain an appreciation and understanding for cultural variation in human behavior across different cultures and an enhanced awareness and ability to work with a culturally diverse and multicultural population.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 5362. Cognitive Neuroscience.**

This course provides a comprehensive introduction to cognitive neuroscience: the study of the biological basis of cognitive processes such as perception, attention, memory, language, and decision-making. This is a seminar course that will cover theoretical constructs, methods, and current research findings in cognitive neuroscience. Prerequisite: PSY 3322 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5366. Individual Study.**

Students design and execute original research or engage in extensive fieldwork in the field of psychology under the supervision of a faculty member. May be repeated once for credit. Prerequisite: PSY 5391 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PSY 5367. Research Seminar in Social Psychology.**

The course provides an in-depth examination of selected topics in social psychology. The focus of student commitment and responsibility is learning about social psychology and actively producing psychological knowledge. The course covers the research process and concludes with each student developing a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5370. Learning, Cognition, and Motivation.**

Basic problems in the acquisition of responses, treating with such constructs as reinforcement, extinction, retention, forgetting, problem solving, motivation, and punishment. Major theories are treated through attention to classical experiments, but greatest emphasis is given to contemporary research. See Educational Psychology 5370.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5373. Human Memory and Memory Disorders.**

This course provides a comprehensive overview of topics in human memory including different types of memory and the brain structures involved. Special emphasis will be given to problems with memory including aging memory, amnesia, and Alzheimer's disease. This course will cover current theories of memory with discussions of cutting-edge research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5374. The Psychology of Language.**

This course provides a grounding in the cognitive theories/models of the major areas of language research: acquisition, comprehension, and production. It also provides an overview of the cognitive processes involved in several specific topic areas in language, such as syntax, semantics, discourse, prosody, bilingualism, neuro-linguistics, sign language, and reading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5381. Introduction to Psychophysiology.**

This course will provide an overview of the principles, theory, and applications of using physiological measures to study mental processes. This course will illustrate how the use of psychophysiological measurements can enhance our understanding of brain/mind/behavior relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5391. Research Methods & Experimental Design.**

Problems in psychology, emphasis on research procedures. A research project is required of each student. Restricted to M.A. students in Psychological Research.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5398. Internship in Psychology.**

Students engage in extensive field work in a professional setting related to psychology. Prerequisite: PSY 5311 and PSY 5321 and PSY 5391 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in PSY 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PSY 5399B. Thesis.**

This course represents a student's continuous thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PSY 5599B. Thesis.**

This course represents a student's continuous thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PSY 5999B. Thesis.**

This course represents a student's continuous thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

The graduate minor in Psychology requires 12 semester credit hours.

Code	Title	Hours
<b>Required Course</b>		
PSY 5310	Advanced Psychopathology	3
or PSY 5324	Biological Bases of Behavior	
or PSY 5370	Learning, Cognition, and Motivation	
<b>Electives</b>		
Choose 9 hours of advisor-approved psychology electives		9
<b>Total Hours</b>		<b>12</b>

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www.soci.txstate.edu (<http://www.soci.txstate.edu>)

The Department of Sociology at Texas State consists of a student-friendly faculty with wide-ranging specialties. Faculty research interests include gender and the workplace, health, aging, life course, dementia, sexuality, demography, community organization, deviance, criminology, social stratification and inequality, popular culture, social movements, globalization, sustainability, and the environment. Although the department offers a large number of sub-fields for students to consider, increasingly the department is focusing upon graduate programs concentrating on Health, Dementia, and Aging, Sustainability and the Environment. The department offers valuable preparation in research skills including qualitative and quantitative research methods and statistical analysis. Faculty members have published numerous articles, book chapters, and books in their areas of interest. In addition, several faculty members have received national/international recognition from within academic circles and the popular press for their research.

The faculty also takes pride in the teaching reputation of the department and many faculty members have won major teaching awards.

## Mission Statement

Our mission is to provide an environment conducive to intellectual exchange characterized by innovative and outstanding:

- Teaching and curricula
- Service to students and community
- Scholarship and research

- Sociological practice with an emphasis on applications of statistics and methods
- Commitment to multiculturalism and diversity

## Vision Statement

Our vision is to become a premier sociology department providing nationally and internationally recognized academic programs.

## Background

An applicant who does not have undergraduate sociology courses in social theory, statistics, basic knowledge of statistical software, and social research must complete undergraduate leveling courses in each of these areas. Depending on the extent of undergraduate education in sociology or related fields, students may be permitted to take up to six hours of selected graduate courses before completing these undergraduate requirements.

## Student Fitness and Performance

### Program Standards

Students enrolled in all academic programs in the Department of Sociology must maintain high scholastic standards and develop a mastery of the knowledge and methods of the discipline. Students are expected to demonstrate emotional and mental fitness in their interactions with others, use skills and methods that are generally accepted by others in the profession, and conform to the American Sociological Association's Code of Ethics, the Texas State University Honor Code, and the Texas State University Code of Student Conduct. A student's acceptance in any program does not guarantee the student's fitness to remain in that program. The faculty is responsible for verifying that only those students who continue to meet program standards are allowed to continue in any program.

### Evaluation of Student Fitness and Performance

Members of the faculty, using their professional judgments, evaluate student fitness and performance continuously. The criteria used by the faculty to make such judgments include instructors' observations of student performance in class or in activities related to courses, evaluations of student performance on theses and practica, site supervisors' evaluations of student performance in practica, and the codes of ethics noted above. Students who are not making satisfactory progress or who are not meeting program standards should consider withdrawing from the program.

In this context, the term "satisfactory progress" refers to an academic judgment made regarding the student's fitness and performance. It is a judgment that the student has failed to meet program standards rather than a judgment made on the basis of the student's violation of valid rules of conduct. Disciplinary matters are referred to Student Justice.

### Student Review Process

If a faculty member believes that a student is not making satisfactory progress or meeting program standards, they should discuss the situation with the student. If the faculty member believes that the student's conduct cannot improve to acceptable standards, the faculty member should refer the student to the program standards committee. The program standards committee consists of three faculty members appointed by the department chair in consultation with the senior faculty.

The committee will notify the student of the reasons that they are not making satisfactory progress or meeting program standards and will give the

student an opportunity to meet with the committee to respond and to present information and witnesses to the committee. The committee will also meet with the faculty member who referred the student to the committee. After considering the matter, and within ten working days of meeting with the student, the committee will report to the student and the chair. The committee will recommend that the student either be allowed to remain in the program or be removed from the program. The committee may make other recommendations, such as placing restrictions or conditions on the student's continuing in the program. Within ten working days of receiving the committee's recommendations, the student will notify the chair of the student's acceptance or rejection of the committee's recommendation.

Within ten working days of receiving the committee's recommendation, the chair will make a decision as to the student's continued presence in the program. Before making the decision, the chair will give the student an opportunity to meet with the chair and to offer information on the student's behalf. However, the chair need not meet with the student before making a decision if the chair has given the student a reasonable opportunity to meet, and the student has either failed or refused to meet. The chair will notify the student of the decision.

If the student is dissatisfied with the chair's decision, they may appeal to the dean of the College of Liberal Arts. However, in order for an appeal to be considered, the student must submit a written notice for an appeal to the chair and to the dean within ten working days of receiving the chair's decision. The dean will consider the matter based on information compiled by the chair and notify the student of his or her decision within ten working days of the dean's receipt of the appeal from the chair. The dean may meet with the student and give the student an opportunity to address the issues. The dean's decision is final.

## Financial Assistance

The Department of Sociology provides financial aid to selected students by employing graduate students as instructional assistants and research assistants. The Graduate College can provide information about graduate scholarships.

## Master of Arts (M.A.)

- Major in Sociology (p. 2642)
- Major in Sustainability Studies (Non-thesis Option) (p. 2648)
- Major in Sustainability Studies (Thesis Option) (p. 2655)

## Master of Science (M.S.)

- Major in Applied Sociology (Non-thesis Option) (p. 2663)
- Major in Applied Sociology (Practicum Option) (p. 2669)
- Major in Dementia and Aging Studies (Dementia and Long-term Care Concentration) (p. 2674)
- Major in Dementia and Aging Studies (Practitioner Concentration) (p. 2684)
- Major in Dementia and Aging Studies (Research Concentration) (p. 2690)
- Major in Sustainability Studies (Non-thesis Option) (p. 2697)
- Major in Sustainability Studies (Thesis Option) (p. 2705)

## Minor

- Sociology (p. 2713)



## Program Overview

The Master of Arts (M.A.) degree with a major in Sociology has three goals. The first goal is to prepare graduates for a career in one of a number of fields, including but not limited to corporate research, personnel work, administration, and data analysis. The second goal is to prepare graduates to teach in community colleges. The third goal is to provide a sound general background for those who anticipate further graduate training beyond the master's degree.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in sociological theory, statistics, SPSS, and social research (background leveling courses will be required if student lacks prerequisite background and/or content area knowledge)
- GRE not required
- current resume or curriculum vitae
- statement of purpose (two pages, double-spaced with the student's full name and contact information) that describes personal and career goals. Include academic interests and the relationship of this graduate degree to life/personal goals. Also, the statement should discuss the student's interest in this particular graduate program and the student's career goals after earning the degree. The Graduate Admissions Committee will evaluate the following:
  - Did the student demonstrate a familiarity with the field?
  - Did the student indicate his/her strengths (background, experience, training, and education)?
  - Did the student express why the program will hone his/her skills?
  - Did the student statement show excellence or promise in writing skills?
- three letters of recommendation from individuals knowledgeable about the student's academic ability and promise as a scholar

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Sociology requires 36 semester credit hours, including a thesis. Students who do not have the appropriate background coursework may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
Required Courses		
SOCI 5306	Sociological Theory Seminar	3
SOCI 5307	Advanced Statistics for the Social Sciences	3
SOCI 5308	Seminar in Quantitative Research Methods	3
SOCI 5309	Seminar in Qualitative Research Methods	3
Prescribed Electives		
Choose 12 hours from the following:		12
SOCI 5316	Seminar in Deviation and Social Problems	
SOCI 5319	Seminar in Social Psychology	
SOCI 5320	Seminar in Demography	
SOCI 5322	Impact Analysis Research	
SOCI 5323	Grant Writing for the Social Sciences	
SOCI 5350	Seminar on the Sociology of Gender	
SOCI 5353	Seminar in the Community	
SOCI 5363	Seminar in Medical Sociology	
SOCI 5368	Seminar in Environmental Sociology	
SOCI 5370	Seminar in Sociology of Racial and Ethnic Relations	
SOCI 5371	Directed Study	
SOCI 5383	Seminar on Aging	
SOCI 5388F	Seminar in Poverty	
SOCI 5388G	Seminar in Food and Society	
SOCI 5388H	Advanced Statistical Analysis II	
SOCI 5388J	Applied Survey Research	
SOCI 5390	Seminar in Globalization and Development	
SOCI 5395	Global Insecurity	
Thesis		
SOCI 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
SOCI 5199B	Thesis	
SOCI 5299B	Thesis	
SOCI 5399B	Thesis	

SOCI 5599B	Thesis	
SOCI 5999B	Thesis	
May choose 6 hours of advisor-approved electives from outside the department		6
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

All students earning the M.A. major in Sociology must pass one or more comprehensive examinations, either written, oral, or both at the end of their coursework. Students will defend the thesis and be knowledgeable about material from substantive courses as well as core courses. An appeals process is described in the sociology department's *Graduate Student Handbook*.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and

assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form

- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Sociology: SOCI

## Courses Offered

### Sociology (SOCI)

#### **SOCI 5105. Practicum in Teaching Sociology.**

An introduction to key concepts and practices in the teaching of college course in Sociology. Provides regular in-service training and planned periodic evaluations of instructional responsibilities. Required for first-year teaching and instructional assistants in the Sociology Department. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **SOCI 5110. Proseminar in Sociology.**

This course will orient new graduate students to the department and the profession. Topics include presentations at professional meetings, academic writing and publishing, and putting together curriculum vitae.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### **SOCI 5198B. Applied Research Practicum II.**

This course represents a student's continuing enrollment to complete the practicum project. The student continues to enroll in this course until the practicum project is approved by the practicum committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **SOCI 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **SOCI 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **SOCI 5300. Foundation Studies in Sociology.**

This course provides prerequisite knowledge required for success in graduate-level coursework in Sociology. Course content varies depending on academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### **SOCI 5306. Sociological Theory Seminar.**

This graduate theory course examines the role of social theory in the historical and contemporary quest for knowledge and understanding of society. The first half of the course emphasizes the European Classics. The second half of the course is devoted to contemporary theory. Emphasis throughout will be on using theory to better understand current events and everyday life experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

#### **SOCI 5307. Advanced Statistics for the Social Sciences.**

Application of advanced statistical theory and methods to the analysis of social data. Prerequisite: SOCI 3307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **SOCI 5308. Seminar in Quantitative Research Methods.**

The application of research methods to social science with emphasis on direct, practical experience in research. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **SOCI 5309. Seminar in Qualitative Research Methods.**

This course examines qualitative methods in Sociology. Topics include examples of classical and modern qualitative research, and issues related to qualitative research. Students critique qualitative studies and conduct and defend a qualitative project. Departmental approval needed for non-majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5316. Seminar in Deviation and Social Problems.**

A systematic analysis of contemporary social problems and various types of social deviation. Emphasis is on the socialization process as it relates to social problems and human deviation. The sociological explanation of underlying factors will be stressed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5318. Seminar in Advanced Data Applications.**

This course will cover the application of various statistical techniques, such as chi-square, correlation, and regression while introducing statistical analysis to students using software such as SPSS.

Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5319. Seminar in Social Psychology.**

A critical appraisal of the major theories and theorists found in Social Psychology with emphasis on their application to contemporary social and psychological issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5320. Seminar in Demography.**

A seminar in the study of population with emphasis on sources of demographic data, techniques of demographic analysis, and population composition and forecasts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5322. Impact Analysis Research.**

This course is designed to introduce students to the assessment of organizational impact. It addresses both the historical development and social functions of evaluation, as well as practical application of assessment research. Emphasis will be on appropriate research design, implementing the design, and analysis of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5323. Grant Writing for the Social Sciences.**

This course offers an applied approach to developing grant-writing skills for the social scientist. It will cover all aspects of proposal development including idea generation, funding source identification, project description, project plan, project management, evaluation methods, and budget preparation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5350. Seminar on the Sociology of Gender.**

This course is a graduate level seminar on the study of gender in sociology with a focus on issues of race, ethnicity, social class, and sexuality. We will examine the major contemporary scholarly debates about gender and explore how gender issues are embedded in different institutions and organizations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5351. Introduction to Dementia Studies.**

This course is an introduction to the social-scientific study of the causes and consequences of dementia, as well as to issues related to the care of persons with dementia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5352. Dementia and Caregiving.**

This course for the Dementia and Aging Studies degree covers current research on policy and support for caregivers of persons with dementia, with an emphasis on the applied sociological focus of caregiver training and education. The course also addresses broader public sociology issues of caregiving and healthcare.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5353. Seminar in the Community.**

A study of contemporary urban society with emphasis on understanding the social structure as a prerequisite to planning and problem solving at the community level. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5354. Theoretical Perspectives in Aging and Dementia.**

This course discusses theories of aging from biological, psychological, and social science perspectives. The course also demonstrates how these theories can be applied to analyzing various aging issues, particularly the social care of persons with Alzheimer's disease and other dementias.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5355. The Social Psychology of Dementia.**

This course analyzes the social construction of dementia and salient social psychological theories, concepts, and research in dementia studies. It investigates the social psychology of dementia in relation to mind, identity, stereotypes, prejudice, attributions, socialization, emotions, social interaction and the impact of institutions on the self.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5356. End of Life Care.**

This course focuses on issues of dying and death. Topics covered include symptom management, palliative care, hospice, pain control, life-sustaining treatment and spiritual, legal and ethical issues related to dying and death. Also covered will be different religious views on euthanasia, dying, death, and funerals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5357. Gender and Aging in Society.**

This course is a seminar on the study of gender and aging. This seminar will examine issues of aging identities, the aging body, sexuality, health and medicine, and caregiving among older adults. This course emphasizes the aging experience in our culture as a fundamentally gendered phenomenon. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5359. Seminar in Drugs and Society.**

A sociological examination of the use of legal and illegal drugs in society, with emphasis on topics such as the "war on drugs," the pharmaceutical industry, and drugs as technologies of medicalization, as well as incentives to social change. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5361. Aging and Dementia: Racial and Ethnic Minorities.**

This course provides an analysis of how race and ethnicity affect aging and dementia, with particular emphasis on the United States. The course examines health and quality of life of racial and ethnic minorities in later life, social factors that influence these differences, and means of intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5362. Rural Aging and Dementia.**

This graduate course examines aging and dementia issues in rural America. Demographic trends, cultural and economic changes, and intervention strategies will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5363. Seminar in Medical Sociology.**

A seminar on selected topics of human health and health care organizations. Topics to be stressed include: social causes and consequences of morbidity and mortality, professionalization and socialization of health care practitioners, organization of health institutions, and demographic changes in health problems and needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5364. Clinical Gerontology: Interventions for Elders and Persons with Dementia.**

This course takes a clinical sociology perspective in studying the issues of the aged and persons with dementia. The approach is humanistic and multidisciplinary, seeking to improve the quality of older persons' lives by assessing situations and reducing problems using analysis and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5366. Social Inequality: Race, Class, and Gender in the United States.**

This course investigates the topic of social inequality. The intersections of class, race and gender as they produce inequality are explored, along with theoretical perspectives and empirical evidence informing the study of social inequality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5367. Seminar in Sustainable Cities.**

This course analyzes the complex relationship between urbanization and environmental change from a sociological perspective. Overarching themes include sustainability and environmental justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5368. Seminar in Environmental Sociology.**

This course situates societies within their ecological context and vice versa. Focusing upon social and environmental interactions, including the interactions of social organization, inequality, and policy, provides a comprehensive understanding of the physical and social milieu. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5370. Seminar in Sociology of Racial and Ethnic Relations.**

This course examines the dynamics of dominant and subordinate social groups. The course focuses on racial, ethnic, and class differences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SOCI 5371. Directed Study.**

Course of independent study open to individual students only at the invitation of the faculty member with the approval of the department chair and the graduate advisor. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5383. Seminar on Aging.**

This course provides graduate students with an opportunity to examine national and global issues involved with the aging process and population aging from a social scientific and multicultural perspective. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5388F. Seminar in Poverty.**

This course is a graduate seminar on the sociological study of US poverty and social mobility. We will examine poverty measurement and trends, poverty-related social policies, theories for explaining poverty and mobility, and the intersection of poverty and social mobility with issues of gender, race, family structure, and place. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388G. Seminar in Food and Society.**

This graduate course focuses on the sociological study of food. It examines the current food system and its interactions with macro-level social institutions, as well as individual identity and well-being. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388H. Advanced Statistical Analysis II.**

The focus of this course is advanced data analysis. This course will cover topics such as regression, limited dependent variables analysis, and time series analysis. A secondary aim is to demonstrate data analyses using popular software packages. Prerequisite: SOCI 5307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5388J. Applied Survey Research.**

This course offers an applied approach to learning about survey methods. The course links research on survey construction and implementation to practical applications in which students solve problems associated with real-world survey instruments. Students will learn appropriate survey research terminology, as well as how to communicate in an effective and non-technical manner to others in need of survey assistance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5390. Seminar in Globalization and Development.**

This seminar explores issues related to socioeconomic development and change, particularly in the "Global south." The course will focus on factors affecting development and underdevelopment around the world. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5395. Global Insecurity.**

This graduate seminar covers global, socially constructed risks perceived as threats to sustainable development. Topics include theories of globalization and insecurity; an assessment of threats to democracy and human rights, the environment, food security, public health and safety; as well as local, national and international responses to these threats. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5398A. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5398B. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SOCI 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) degree with a major in Sustainability Studies is specifically designed to prepare committed leaders to address emerging sustainability issues. Students completing the program will have the technical skills to formulate and solve problems at the appropriate scale, as well as the breadth of vision to recognize the inter-connectedness and complexity of human-environment systems. Graduates will be prepared for admission into strong doctoral programs or professional schools, and important positions in the growing field of sustainability-related careers within local, state, or federal government, regulatory agencies, non-governmental organizations, consulting firms and within relevant industries. The program is available to graduate students seeking a more diversified program of study than is generally available for students specializing in a single discipline. The program is open to any qualified graduate student, and is particularly relevant for those wishing to improve their subject matter competence in more than one discipline. The M.A. major in Sustainability Studies is designed for students inclined toward the humanities, arts, communication, urban or regional planning, or related fields. The program is tailored to accommodate both full-time and part-time graduate students.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>).

International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - GRE not required
  - current resume/CV
  - statement of purpose (approximately two pages, double-spaced with full name and contact information) regarding the student's interest in pursuing the M.A. degree and describing personal and career goals. Include academic interests and the relationship of this graduate degree to life/personal goals. Also, the statement should discuss the student's interest in this particular graduate program and the student's career goals after earning the degree. The Graduate Admissions Committee will evaluate the following:
    - Did the student demonstrate a familiarity with the field?
    - Did the student indicate his/her strengths (background, experience, training, and education)?
    - Did the student express why the program will hone his/her skills?
    - Did the student statement show excellence or promise in writing skills?
  - three letters of recommendation from professionals competent to assess the student's interest in pursuing a career in this field of study. Two of the three letters must be from someone who can assess academic accomplishments and/or potential in the program.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Sustainability Studies requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
PHIL 5323	Environmental Ethics	3
SUST 5301	Seminar in Sustainability	3
SUST 5398	Professional Project	3
Choose 3 hours from the following:		3
ANTH 5361	Qualitative Methods	
ENG 5327	Research Methods in Rhetoric and Composition	
GEO 5304	Qualitative Research Methods	
PA 5311	Introduction to Statistical Analysis	
PHIL 5340	Philosophical Logic	
<b>Prescribed Electives: Society and Environment</b>		
Choose 3 hours from the following:		3
AG 5301	Agricultural Development and Policy	
AG 5302	Economics of Agricultural Production	
AG 5304	Economics of Sustainable Natural Resource Management	
AG 5355	Methods of Technological Change	
AG 5365	The Role of Animal Science in Society: An Integrated Approach	
BIO 5350M	Wildlife Policy and Law in North America	
BIO 7360U	Sustainability in a Changing World	
BLAW 5333	Legal Issues of Sustainability and Responsibility	
BLAW 5368I	International Business Ethics	
FCS 5305	Sustainable Housing	
GEO 5312	Managing Urbanization	
GEO 5313	Environmental Studies	
GEO 5314	Geographic Elements of Environmental Law	
GEO 5318	Environment Problems of the U.S.-Mexico Border	
GEO 5322	Interpretive Environmental Geography	
GEO 5323	Researching the City	
GEO 5326	Parks and Protected Places	
GEO 5329	Historical Geography of the Environment	
GEO 5330	Geography of Hazards	
GEO 5332	Environmental Geography of the Coastal Zone	
GEO 5349	Population Geography	
GEO 5351	Regional Waste Management	
GEO 5393D	Water Resource Planning	
MCS 5342	Sustainable Consumer Economy	
PA 5351	Urban Sustainability Policy	
PA 5353	Ecology and the Politics of Sustainability	
PA 5355	Environmental Policy	
PA 5380A	Texas Water Law and Policy	
PHIL 5329	Food Ethics	
PHIL 5360C	Philosophy, Nonviolence, Sustainability, and Social Change	
SOCI 5353	Seminar in the Community	

SOCI 5367	Seminar in Sustainable Cities
SOCI 5368	Seminar in Environmental Sociology
SOCI 5388G	Seminar in Food and Society
SOCI 5390	Seminar in Globalization and Development
SOCI 5395	Global Insecurity

### Prescribed Electives: Science and the Environment

Choose 3-4 hours from the following: 3-4

AG 5320	Integrated Agricultural Production in Aquaponic Systems
AG 5323	Composting and Integrated Resource Management
AG 5324	Agroecology and Integrated Agriculture
AG 5426	Soil Health and Development
BIO 5415	Ichthyology
BIO 5470	Limnology
CSM 5368	Sustainable Construction
FCS 5307	Sustainable Lighting
MCS 5303	Sustainable Textiles
GEO 5316	Applied Physical Geography
GEO 5334	Applied Water Resources
GEO 5370	Seminar in Applied Physical Geography
GEO 5395	Problems in Applied Geography
TECH 5382	Industrial Ecology and Sustainability Engineering

### Prescribed Electives

Choose 18 hours from the following: 18

AG 5301	Agricultural Development and Policy
AG 5302	Economics of Agricultural Production
AG 5304	Economics of Sustainable Natural Resource Management
AG 5320	Integrated Agricultural Production in Aquaponic Systems
AG 5323	Composting and Integrated Resource Management
AG 5324	Agroecology and Integrated Agriculture
AG 5355	Methods of Technological Change
AG 5365	The Role of Animal Science in Society: An Integrated Approach
AG 5426	Soil Health and Development
BIO 5350M	Wildlife Policy and Law in North America
BIO 5415	Ichthyology
BIO 5470	Limnology
BIO 7360U	Sustainability in a Changing World
BLAW 5333	Legal Issues of Sustainability and Responsibility
BLAW 5368I	International Business Ethics
CSM 5368	Sustainable Construction
ENG 5353	Studies in Medieval Literature
FCS 5305	Sustainable Housing
FCS 5307	Sustainable Lighting
GEO 5312	Managing Urbanization
GEO 5313	Environmental Studies
GEO 5314	Geographic Elements of Environmental Law
GEO 5316	Applied Physical Geography
GEO 5318	Environment Problems of the U.S.-Mexico Border

GEO 5322	Interpretive Environmental Geography
GEO 5323	Researching the City
GEO 5326	Parks and Protected Places
GEO 5329	Historical Geography of the Environment
GEO 5330	Geography of Hazards
GEO 5332	Environmental Geography of the Coastal Zone
GEO 5334	Applied Water Resources
GEO 5349	Population Geography
GEO 5351	Regional Waste Management
GEO 5370	Seminar in Applied Physical Geography
GEO 5393D	Water Resource Planning
GEO 5395	Problems in Applied Geography
MCS 5303	Sustainable Textiles
MCS 5342	Sustainable Consumer Economy
PA 5351	Urban Sustainability Policy
PA 5353	Ecology and the Politics of Sustainability
PA 5355	Environmental Policy
PA 5380A	Texas Water Law and Policy
PHIL 5329	Food Ethics
PHIL 5360C	Philosophy, Nonviolence, Sustainability, and Social Change
SOCI 5353	Seminar in the Community
SOCI 5367	Seminar in Sustainable Cities
SOCI 5368	Seminar in Environmental Sociology
SOCI 5388G	Seminar in Food and Society
SOCI 5390	Seminar in Globalization and Development
SOCI 5395	Global Insecurity
TECH 5382	Industrial Ecology and Sustainability Engineering

**Total Hours** **36-37**

## Comprehensive Examination Requirement

An oral professional project defense is required. This oral defense will serve as the comprehensive examination requirement. If the project committee is not satisfied with a graduate student's oral defense, they specify all deficiencies the student must resolve. The project committee will not sign the Master's Comprehensive Examination Report Form until all specified deficiencies have been resolved. Should the project committee decide to hold a second oral defense, the chair of the project committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Sustainability Studies: SUST (p. 2650), SOCI (p. 2651)

## Courses Offered

### Sustainability Studies (SUST)

#### SUST 5105. Practicum in Teaching.

This course is an introduction to key concepts and practices in the teaching of college courses. It provides regular in-service training and planned periodic evaluations of instructional responsibilities. It is required for first-year teaching and instructional assistants in the MA and MS in Sustainability programs. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### SUST 5197. Directed Study.

This course involves individual work with specific guidance from graduate faculty. Work may include participation in research, professional practice, and/or critical review of the related literature. Course may be repeated once for credit when topics vary.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### SUST 5198B. Professional Project II.

This course represents a student's continuing enrollment to complete the professional project. The student continues to enroll in this course until the project is completed and approved by the committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### SUST 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### SUST 5297. Directed Study.

This course involves individual work with specific guidance from graduate faculty. Work may include participation in research, professional practice, and/or critical review of the related literature. Course may be repeated once for credit when topics vary.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### SUST 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5301. Seminar in Sustainability.**

The seminar in sustainability is an opportunity for students to learn about issues from a wide-ranging set of perspectives. The seminar is, by design, interdisciplinary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SUST 5397. Directed Study.**

This course involves individual work with specific guidance from graduate faculty. Work may include participation in research, professional practice, and/or critical review of the related literature. Course may be repeated once for credit when topics vary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SUST 5398. Professional Project.**

This course involves individual work related to a professional topic or project with specific guidance from graduate faculty. The project requires the completion of a rigorous paper that is the culmination of the final paper/project for the non-thesis degree in Sustainability Studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SUST 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SUST 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Sociology (SOCI)****SOCI 5105. Practicum in Teaching Sociology.**

An introduction to key concepts and practices in the teaching of college course in Sociology. Provides regular in-service training and planned periodic evaluations of instructional responsibilities. Required for first-year teaching and instructional assistants in the Sociology Department. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**SOCI 5110. Proseminar in Sociology.**

This course will orient new graduate students to the department and the profession. Topics include presentations at professional meetings, academic writing and publishing, and putting together curriculum vitae.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5198B. Applied Research Practicum II.**

This course represents a student's continuing enrollment to complete the practicum project. The student continues to enroll in this course until the practicum project is approved by the practicum committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5300. Foundation Studies in Sociology.**

This course provides prerequisite knowledge required for success in graduate-level coursework in Sociology. Course content varies depending on academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships



**SOCI 5306. Sociological Theory Seminar.**

This graduate theory course examines the role of social theory in the historical and contemporary quest for knowledge and understanding of society. The first half of the course emphasizes the European Classics. The second half of the course is devoted to contemporary theory. Emphasis throughout will be on using theory to better understand current events and everyday life experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5307. Advanced Statistics for the Social Sciences.**

Application of advanced statistical theory and methods to the analysis of social data. Prerequisite: SOCI 3307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5308. Seminar in Quantitative Research Methods.**

The application of research methods to social science with emphasis on direct, practical experience in research. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5309. Seminar in Qualitative Research Methods.**

This course examines qualitative methods in Sociology. Topics include examples of classical and modern qualitative research, and issues related to qualitative research. Students critique qualitative studies and conduct and defend a qualitative project. Departmental approval needed for non-majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5316. Seminar in Deviation and Social Problems.**

A systematic analysis of contemporary social problems and various types of social deviation. Emphasis is on the socialization process as it relates to social problems and human deviation. The sociological explanation of underlying factors will be stressed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5318. Seminar in Advanced Data Applications.**

This course will cover the application of various statistical techniques, such as chi-square, correlation, and regression while introducing statistical analysis to students using software such as SPSS. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5319. Seminar in Social Psychology.**

A critical appraisal of the major theories and theorists found in Social Psychology with emphasis on their application to contemporary social and psychological issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5320. Seminar in Demography.**

A seminar in the study of population with emphasis on sources of demographic data, techniques of demographic analysis, and population composition and forecasts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5322. Impact Analysis Research.**

This course is designed to introduce students to the assessment of organizational impact. It addresses both the historical development and social functions of evaluation, as well as practical application of assessment research. Emphasis will be on appropriate research design, implementing the design, and analysis of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5323. Grant Writing for the Social Sciences.**

This course offers an applied approach to developing grant-writing skills for the social scientist. It will cover all aspects of proposal development including idea generation, funding source identification, project description, project plan, project management, evaluation methods, and budget preparation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5350. Seminar on the Sociology of Gender.**

This course is a graduate level seminar on the study of gender in sociology with a focus on issues of race, ethnicity, social class, and sexuality. We will examine the major contemporary scholarly debates about gender and explore how gender issues are embedded in different institutions and organizations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5351. Introduction to Dementia Studies.**

This course is an introduction to the social-scientific study of the causes and consequences of dementia, as well as to issues related to the care of persons with dementia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5352. Dementia and Caregiving.**

This course for the Dementia and Aging Studies degree covers current research on policy and support for caregivers of persons with dementia, with an emphasis on the applied sociological focus of caregiver training and education. The course also addresses broader public sociology issues of caregiving and healthcare.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5353. Seminar in the Community.**

A study of contemporary urban society with emphasis on understanding the social structure as a prerequisite to planning and problem solving at the community level. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5354. Theoretical Perspectives in Aging and Dementia.**

This course discusses theories of aging from biological, psychological, and social science perspectives. The course also demonstrates how these theories can be applied to analyzing various aging issues, particularly the social care of persons with Alzheimer's disease and other dementias.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5355. The Social Psychology of Dementia.**

This course analyzes the social construction of dementia and salient social psychological theories, concepts, and research in dementia studies. It investigates the social psychology of dementia in relation to mind, identity, stereotypes, prejudice, attributions, socialization, emotions, social interaction and the impact of institutions on the self.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5356. End of Life Care.**

This course focuses on issues of dying and death. Topics covered include symptom management, palliative care, hospice, pain control, life-sustaining treatment and spiritual, legal and ethical issues related to dying and death. Also covered will be different religious views on euthanasia, dying, death, and funerals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5357. Gender and Aging in Society.**

This course is a seminar on the study of gender and aging. This seminar will examine issues of aging identities, the aging body, sexuality, health and medicine, and caregiving among older adults. This course emphasizes the aging experience in our culture as a fundamentally gendered phenomenon. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5359. Seminar in Drugs and Society.**

A sociological examination of the use of legal and illegal drugs in society, with emphasis on topics such as the "war on drugs," the pharmaceutical industry, and drugs as technologies of medicalization, as well as incentives to social change. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5361. Aging and Dementia: Racial and Ethnic Minorities.**

This course provides an analysis of how race and ethnicity affect aging and dementia, with particular emphasis on the United States. The course examines health and quality of life of racial and ethnic minorities in later life, social factors that influence these differences, and means of intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5362. Rural Aging and Dementia.**

This graduate course examines aging and dementia issues in rural America. Demographic trends, cultural and economic changes, and intervention strategies will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5363. Seminar in Medical Sociology.**

A seminar on selected topics of human health and health care organizations. Topics to be stressed include: social causes and consequences of morbidity and mortality, professionalization and socialization of health care practitioners, organization of health institutions, and demographic changes in health problems and needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5364. Clinical Gerontology: Interventions for Elders and Persons with Dementia.**

This course takes a clinical sociology perspective in studying the issues of the aged and persons with dementia. The approach is humanistic and multidisciplinary, seeking to improve the quality of older persons' lives by assessing situations and reducing problems using analysis and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5366. Social Inequality: Race, Class, and Gender in the United States.**

This course investigates the topic of social inequality. The intersections of class, race and gender as they produce inequality are explored, along with theoretical perspectives and empirical evidence informing the study of social inequality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5367. Seminar in Sustainable Cities.**

This course analyzes the complex relationship between urbanization and environmental change from a sociological perspective. Overarching themes include sustainability and environmental justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5368. Seminar in Environmental Sociology.**

This course situates societies within their ecological context and vice versa. Focusing upon social and environmental interactions, including the interactions of social organization, inequality, and policy, provides a comprehensive understanding of the physical and social milieu. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5370. Seminar in Sociology of Racial and Ethnic Relations.**

This course examines the dynamics of dominant and subordinate social groups. The course focuses on racial, ethnic, and class differences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5371. Directed Study.**

Course of independent study open to individual students only at the invitation of the faculty member with the approval of the department chair and the graduate advisor. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5383. Seminar on Aging.**

This course provides graduate students with an opportunity to examine national and global issues involved with the aging process and population aging from a social scientific and multicultural perspective. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5388F. Seminar in Poverty.**

This course is a graduate seminar on the sociological study of US poverty and social mobility. We will examine poverty measurement and trends, poverty-related social policies, theories for explaining poverty and mobility, and the intersection of poverty and social mobility with issues of gender, race, family structure, and place. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388G. Seminar in Food and Society.**

This graduate course focuses on the sociological study of food. It examines the current food system and its interactions with macro-level social institutions, as well as individual identity and well-being. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388H. Advanced Statistical Analysis II.**

The focus of this course is advanced data analysis. This course will cover topics such as regression, limited dependent variables analysis, and time series analysis. A secondary aim is to demonstrate data analyses using popular software packages. Prerequisite: SOCI 5307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5388J. Applied Survey Research.**

This course offers an applied approach to learning about survey methods. The course links research on survey construction and implementation to practical applications in which students solve problems associated with real-world survey instruments. Students will learn appropriate survey research terminology, as well as how to communicate in an effective and non-technical manner to others in need of survey assistance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5390. Seminar in Globalization and Development.**

This seminar explores issues related to socioeconomic development and change, particularly in the "Global south." The course will focus on factors affecting development and underdevelopment around the world. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5395. Global Insecurity.**

This graduate seminar covers global, socially constructed risks perceived as threats to sustainable development. Topics include theories of globalization and insecurity; an assessment of threats to democracy and human rights, the environment, food security, public health and safety; as well as local, national and international responses to these threats. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5398A. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5398B. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SOCI 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) degree with a major in Sustainability Studies is specifically designed to prepare committed leaders to address emerging sustainability issues. Students completing the program will have the technical skills to formulate and solve problems at the appropriate scale, as well as the breadth of vision to recognize the inter-connectedness and complexity of human-environment systems. Graduates will be prepared for admission into strong doctoral programs or professional schools, and important positions in the growing field of sustainability-related careers within local, state, or federal government, regulatory agencies, non-governmental organizations, consulting firms and within relevant industries. The program is available to graduate students seeking a more diversified program of study than is generally available for students specializing in a single discipline. The program is open to any qualified graduate student, and is particularly relevant for those wishing to improve their subject matter competence in more than one discipline. The M.A. in Sustainability Studies is designed for students inclined toward the humanities, arts, communication, urban or regional planning, or related fields. The program is tailored to accommodate both full-time and part-time graduate students.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txstate.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- current resume/CV
- statement of purpose (approximately two pages, double-spaced with full name and contact information) regarding the student's

interest in pursuing the M.A. degree and describing personal and career goals. Include academic interests and the relationship of this graduate degree to life/personal goals. Also, the statement should discuss the student's interest in this particular graduate program and the student's career goals after earning the degree. The Graduate Admissions Committee will evaluate the following:

- Did the student demonstrate a familiarity with the field?
- Did the student indicate his/her strengths (background, experience, training, and education)?
- Did the student express why the program will hone his/her skills?
- Did the student statement show excellence or promise in writing skills?
- three letters of recommendation from professionals competent to assess the student's interest in pursuing a career in this field of study. Two of the three letters must be from someone who can assess academic accomplishments and/or potential in the program.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- [official Duolingo Scores required with a 110 overall](#)
- [official TOEFL Essentials scores required with an 8.5 overall](#)

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Sustainability Studies requires 36 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
PHIL 5323	Environmental Ethics	3
SUST 5301	Seminar in Sustainability	3
Choose 3 hours from the following:		3
ANTH 5361	Qualitative Methods	
ENG 5327	Research Methods in Rhetoric and Composition	
GEO 5304	Qualitative Research Methods	
PA 5311	Introduction to Statistical Analysis	
PHIL 5340	Philosophical Logic	
<b>Prescribed Electives: Society and Environment</b>		
Choose 3 hours from the following:		3
AG 5301	Agricultural Development and Policy	
AG 5302	Economics of Agricultural Production	
AG 5304	Economics of Sustainable Natural Resource Management	
AG 5355	Methods of Technological Change	
AG 5365	The Role of Animal Science in Society: An Integrated Approach	

BIO 5350M	Wildlife Policy and Law in North America
BIO 7360U	Sustainability in a Changing World
BLAW 5333	Legal Issues of Sustainability and Responsibility
BLAW 5368I	International Business Ethics
FCS 5305	Sustainable Housing
GEO 5312	Managing Urbanization
GEO 5313	Environmental Studies
GEO 5314	Geographic Elements of Environmental Law
GEO 5318	Environment Problems of the U.S.-Mexico Border
GEO 5322	Interpretive Environmental Geography
GEO 5323	Researching the City
GEO 5326	Parks and Protected Places
GEO 5329	Historical Geography of the Environment
GEO 5330	Geography of Hazards
GEO 5332	Environmental Geography of the Coastal Zone
GEO 5349	Population Geography
GEO 5351	Regional Waste Management
GEO 5393D	Water Resource Planning
MCS 5342	Sustainable Consumer Economy
PA 5351	Urban Sustainability Policy
PA 5353	Ecology and the Politics of Sustainability
PA 5355	Environmental Policy
PA 5380A	Texas Water Law and Policy
PHIL 5329	Food Ethics
PHIL 5360C	Philosophy, Nonviolence, Sustainability, and Social Change
SOCI 5353	Seminar in the Community
SOCI 5367	Seminar in Sustainable Cities
SOCI 5368	Seminar in Environmental Sociology
SOCI 5388G	Seminar in Food and Society
SOCI 5390	Seminar in Globalization and Development
SOCI 5395	Global Insecurity

### Prescribed Electives: Science and the Environment

Choose 3 hours from the following: 3-4

AG 5320	Integrated Agricultural Production in Aquaponic Systems
AG 5323	Composting and Integrated Resource Management
AG 5324	Agroecology and Integrated Agriculture
AG 5426	Soil Health and Development
BIO 5415	Ichthyology
BIO 5470	Limnology
CSM 5368	Sustainable Construction
FCS 5307	Sustainable Lighting
MCS 5303	Sustainable Textiles
GEO 5316	Applied Physical Geography
GEO 5334	Applied Water Resources
GEO 5370	Seminar in Applied Physical Geography
GEO 5395	Problems in Applied Geography
TECH 5382	Industrial Ecology and Sustainability Engineering

### Prescribed Electives

Choose 15 hours from the following: 15

AG 5301	Agricultural Development and Policy
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AG 5302	Economics of Agricultural Production
AG 5304	Economics of Sustainable Natural Resource Management
AG 5320	Integrated Agricultural Production in Aquaponic Systems
AG 5323	Composting and Integrated Resource Management
AG 5324	Agroecology and Integrated Agriculture
AG 5355	Methods of Technological Change
AG 5365	The Role of Animal Science in Society: An Integrated Approach
AG 5426	Soil Health and Development
BIO 5350M	Wildlife Policy and Law in North America
BIO 5415	Ichthyology
BIO 5470	Limnology
BIO 7360U	Sustainability in a Changing World
BLAW 5333	Legal Issues of Sustainability and Responsibility
BLAW 5368I	International Business Ethics
CSM 5368	Sustainable Construction
ENG 5353	Studies in Medieval Literature
FCS 5305	Sustainable Housing
FCS 5307	Sustainable Lighting
GEO 5312	Managing Urbanization
GEO 5313	Environmental Studies
GEO 5314	Geographic Elements of Environmental Law
GEO 5316	Applied Physical Geography
GEO 5318	Environment Problems of the U.S.-Mexico Border
GEO 5322	Interpretive Environmental Geography
GEO 5323	Researching the City
GEO 5326	Parks and Protected Places
GEO 5329	Historical Geography of the Environment
GEO 5330	Geography of Hazards
GEO 5332	Environmental Geography of the Coastal Zone
GEO 5334	Applied Water Resources
GEO 5349	Population Geography
GEO 5351	Regional Waste Management
GEO 5370	Seminar in Applied Physical Geography
GEO 5393D	Water Resource Planning
GEO 5395	Problems in Applied Geography
MCS 5303	Sustainable Textiles
MCS 5342	Sustainable Consumer Economy
PA 5351	Urban Sustainability Policy
PA 5353	Ecology and the Politics of Sustainability
PA 5355	Environmental Policy
PA 5380A	Texas Water Law and Policy
PHIL 5329	Food Ethics
PHIL 5361	Topics in Philosophy of Science and Technology
PHIL 5360C	Philosophy, Nonviolence, Sustainability, and Social Change
SOCI 5353	Seminar in the Community
SOCI 5367	Seminar in Sustainable Cities
SOCI 5368	Seminar in Environmental Sociology
SOCI 5388G	Seminar in Food and Society

SOCI 5390	Seminar in Globalization and Development
SOCI 5395	Global Insecurity
TECH 5382	Industrial Ecology and Sustainability Engineering
<b>Thesis</b>	
SUST 5399A	Thesis
Choose a minimum of 3 hours from the following:	
SUST 5199B	Thesis
SUST 5299B	Thesis
SUST 5399B	Thesis
SUST 5599B	Thesis
SUST 5999B	Thesis
<b>Total Hours</b>	
<b>36-37</b>	

## Comprehensive Examination Requirement

An oral thesis defense is required. This oral defense will serve as the comprehensive examination requirement. If the thesis committee is not satisfied with a graduate student's oral defense, they specify all deficiencies the student must resolve. The thesis committee will not sign the Master's Comprehensive Examination Report Form and the Thesis Submission Approval Form until all specified deficiencies have been resolved. Should the thesis committee decide to hold a second oral defense, the chair of the thesis committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Sustainability Studies: SUST (p. 2659), SOCI (p. 2658)

## Courses Offered

### Sustainability Studies (SUST)

#### SUST 5105. Practicum in Teaching.

This course is an introduction to key concepts and practices in the teaching of college courses. It provides regular in-service training and planned periodic evaluations of instructional responsibilities. It is required for first-year teaching and instructional assistants in the MA and MS in Sustainability programs. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### SUST 5197. Directed Study.

This course involves individual work with specific guidance from graduate faculty. Work may include participation in research, professional practice, and/or critical review of the related literature. Course may be repeated once for credit when topics vary.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SUST 5198B. Professional Project II.**

This course represents a student's continuing enrollment to complete the professional project. The student continues to enroll in this course until the project is completed and approved by the committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SUST 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5297. Directed Study.**

This course involves individual work with specific guidance from graduate faculty. Work may include participation in research, professional practice, and/or critical review of the related literature. Course may be repeated once for credit when topics vary.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SUST 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5301. Seminar in Sustainability.**

The seminar in sustainability is an opportunity for students to learn about issues from a wide-ranging set of perspectives. The seminar is, by design, interdisciplinary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SUST 5397. Directed Study.**

This course involves individual work with specific guidance from graduate faculty. Work may include participation in research, professional practice, and/or critical review of the related literature. Course may be repeated once for credit when topics vary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SUST 5398. Professional Project.**

This course involves individual work related to a professional topic or project with specific guidance from graduate faculty. The project requires the completion of a rigorous paper that is the culmination of the final paper/project for the non-thesis degree in Sustainability Studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SUST 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SUST 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Sociology (SOCI)

**SOCI 5105. Practicum in Teaching Sociology.**

An introduction to key concepts and practices in the teaching of college course in Sociology. Provides regular in-service training and planned periodic evaluations of instructional responsibilities. Required for first-year teaching and instructional assistants in the Sociology Department. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**SOCI 5110. Proseminar in Sociology.**

This course will orient new graduate students to the department and the profession. Topics include presentations at professional meetings, academic writing and publishing, and putting together curriculum vitae.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5198B. Applied Research Practicum II.**

This course represents a student's continuing enrollment to complete the practicum project. The student continues to enroll in this course until the practicum project is approved by the practicum committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5300. Foundation Studies in Sociology.**

This course provides prerequisite knowledge required for success in graduate-level coursework in Sociology. Course content varies depending on academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**SOCI 5306. Sociological Theory Seminar.**

This graduate theory course examines the role of social theory in the historical and contemporary quest for knowledge and understanding of society. The first half of the course emphasizes the European Classics. The second half of the course is devoted to contemporary theory. Emphasis throughout will be on using theory to better understand current events and everyday life experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5307. Advanced Statistics for the Social Sciences.**

Application of advanced statistical theory and methods to the analysis of social data. Prerequisite: SOCI 3307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5308. Seminar in Quantitative Research Methods.**

The application of research methods to social science with emphasis on direct, practical experience in research. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5309. Seminar in Qualitative Research Methods.**

This course examines qualitative methods in Sociology. Topics include examples of classical and modern qualitative research, and issues related to qualitative research. Students critique qualitative studies and conduct and defend a qualitative project. Departmental approval needed for non-majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5316. Seminar in Deviation and Social Problems.**

A systematic analysis of contemporary social problems and various types of social deviation. Emphasis is on the socialization process as it relates to social problems and human deviation. The sociological explanation of underlying factors will be stressed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5318. Seminar in Advanced Data Applications.**

This course will cover the application of various statistical techniques, such as chi-square, correlation, and regression while introducing statistical analysis to students using software such as SPSS. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5319. Seminar in Social Psychology.**

A critical appraisal of the major theories and theorists found in Social Psychology with emphasis on their application to contemporary social and psychological issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5320. Seminar in Demography.**

A seminar in the study of population with emphasis on sources of demographic data, techniques of demographic analysis, and population composition and forecasts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5322. Impact Analysis Research.**

This course is designed to introduce students to the assessment of organizational impact. It addresses both the historical development and social functions of evaluation, as well as practical application of assessment research. Emphasis will be on appropriate research design, implementing the design, and analysis of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5323. Grant Writing for the Social Sciences.**

This course offers an applied approach to developing grant-writing skills for the social scientist. It will cover all aspects of proposal development including idea generation, funding source identification, project description, project plan, project management, evaluation methods, and budget preparation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5350. Seminar on the Sociology of Gender.**

This course is a graduate level seminar on the study of gender in sociology with a focus on issues of race, ethnicity, social class, and sexuality. We will examine the major contemporary scholarly debates about gender and explore how gender issues are embedded in different institutions and organizations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5351. Introduction to Dementia Studies.**

This course is an introduction to the social-scientific study of the causes and consequences of dementia, as well as to issues related to the care of persons with dementia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5352. Dementia and Caregiving.**

This course for the Dementia and Aging Studies degree covers current research on policy and support for caregivers of persons with dementia, with an emphasis on the applied sociological focus of caregiver training and education. The course also addresses broader public sociology issues of caregiving and healthcare.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5353. Seminar in the Community.**

A study of contemporary urban society with emphasis on understanding the social structure as a prerequisite to planning and problem solving at the community level. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5354. Theoretical Perspectives in Aging and Dementia.**

This course discusses theories of aging from biological, psychological, and social science perspectives. The course also demonstrates how these theories can be applied to analyzing various aging issues, particularly the social care of persons with Alzheimer's disease and other dementias.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5355. The Social Psychology of Dementia.**

This course analyzes the social construction of dementia and salient social psychological theories, concepts, and research in dementia studies. It investigates the social psychology of dementia in relation to mind, identity, stereotypes, prejudice, attributions, socialization, emotions, social interaction and the impact of institutions on the self.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5356. End of Life Care.**

This course focuses on issues of dying and death. Topics covered include symptom management, palliative care, hospice, pain control, life-sustaining treatment and spiritual, legal and ethical issues related to dying and death. Also covered will be different religious views on euthanasia, dying, death, and funerals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5357. Gender and Aging in Society.**

This course is a seminar on the study of gender and aging. This seminar will examine issues of aging identities, the aging body, sexuality, health and medicine, and caregiving among older adults. This course emphasizes the aging experience in our culture as a fundamentally gendered phenomenon. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5359. Seminar in Drugs and Society.**

A sociological examination of the use of legal and illegal drugs in society, with emphasis on topics such as the "war on drugs," the pharmaceutical industry, and drugs as technologies of medicalization, as well as incentives to social change. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SOCI 5361. Aging and Dementia: Racial and Ethnic Minorities.**

This course provides an analysis of how race and ethnicity affect aging and dementia, with particular emphasis on the United States. The course examines health and quality of life of racial and ethnic minorities in later life, social factors that influence these differences, and means of intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5362. Rural Aging and Dementia.**

This graduate course examines aging and dementia issues in rural America. Demographic trends, cultural and economic changes, and intervention strategies will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5363. Seminar in Medical Sociology.**

A seminar on selected topics of human health and health care organizations. Topics to be stressed include: social causes and consequences of morbidity and mortality, professionalization and socialization of health care practitioners, organization of health institutions, and demographic changes in health problems and needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5364. Clinical Gerontology: Interventions for Elders and Persons with Dementia.**

This course takes a clinical sociology perspective in studying the issues of the aged and persons with dementia. The approach is humanistic and multidisciplinary, seeking to improve the quality of older persons' lives by assessing situations and reducing problems using analysis and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5366. Social Inequality: Race, Class, and Gender in the United States.**

This course investigates the topic of social inequality. The intersections of class, race and gender as they produce inequality are explored, along with theoretical perspectives and empirical evidence informing the study of social inequality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5367. Seminar in Sustainable Cities.**

This course analyzes the complex relationship between urbanization and environmental change from a sociological perspective. Overarching themes include sustainability and environmental justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5368. Seminar in Environmental Sociology.**

This course situates societies within their ecological context and vice versa. Focusing upon social and environmental interactions, including the interactions of social organization, inequality, and policy, provides a comprehensive understanding of the physical and social milieu. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5370. Seminar in Sociology of Racial and Ethnic Relations.**

This course examines the dynamics of dominant and subordinate social groups. The course focuses on racial, ethnic, and class differences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5371. Directed Study.**

Course of independent study open to individual students only at the invitation of the faculty member with the approval of the department chair and the graduate advisor. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5383. Seminar on Aging.**

This course provides graduate students with an opportunity to examine national and global issues involved with the aging process and population aging from a social scientific and multicultural perspective. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5388F. Seminar in Poverty.**

This course is a graduate seminar on the sociological study of US poverty and social mobility. We will examine poverty measurement and trends, poverty-related social policies, theories for explaining poverty and mobility, and the intersection of poverty and social mobility with issues of gender, race, family structure, and place. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388G. Seminar in Food and Society.**

This graduate course focuses on the sociological study of food. It examines the current food system and its interactions with macro-level social institutions, as well as individual identity and well-being. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388H. Advanced Statistical Analysis II.**

The focus of this course is advanced data analysis. This course will cover topics such as regression, limited dependent variables analysis, and time series analysis. A secondary aim is to demonstrate data analyses using popular software packages. Prerequisite: SOCI 5307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5388J. Applied Survey Research.**

This course offers an applied approach to learning about survey methods. The course links research on survey construction and implementation to practical applications in which students solve problems associated with real-world survey instruments. Students will learn appropriate survey research terminology, as well as how to communicate in an effective and non-technical manner to others in need of survey assistance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5390. Seminar in Globalization and Development.**

This seminar explores issues related to socioeconomic development and change, particularly in the "Global south." The course will focus on factors affecting development and underdevelopment around the world. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5395. Global Insecurity.**

This graduate seminar covers global, socially constructed risks perceived as threats to sustainable development. Topics include theories of globalization and insecurity; an assessment of threats to democracy and human rights, the environment, food security, public health and safety; as well as local, national and international responses to these threats. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5398A. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5398B. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SOCI 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Applied Sociology is designed to prepare students for careers in state and federal government agencies, large and small businesses and non-profit organizations. Graduates of this program will have the skills and knowledge necessary to compete in a rapidly changing job market, having mastered the techniques of both qualitative and quantitative research, general statistical analysis, and impact analysis.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review

the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - background course work in sociological theory, statistics, SPSS, and social research (leveling courses will be required if student lacks sufficient background course work)
  - GRE not required
  - current resume or curriculum vitae
  - statement of purpose (two pages, double-spaced with the student's full name and contact information) that describes personal and career goals. Include academic interests and the relationship of this graduate degree to life/personal goals. Also, the statement should discuss the student's interest in this particular graduate program and the student's career goals after earning the degree. The Graduate Admissions Committee will evaluate the following:
    - Did the student demonstrate a familiarity with the field?
    - Did the student indicate his/her strengths (background, experience, training, and education)?
    - Did the student express why the program will hone his/her skills?
    - Did the student statement show excellence or promise in writing skills?
  - three letters of recommendation from individuals knowledgeable about the student's academic ability and promise as a scholar

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

Degree Requirements

The Master of Science (M.S.) degree with a major in Applied Sociology requires 36 semester credit hours. Students who do not have the

appropriate background course work may be required to complete leveling courses.

Course Requirements

Code	Title	Hours
Required Courses		
SOCI 5306	Sociological Theory Seminar	3
SOCI 5307	Advanced Statistics for the Social Sciences	3
SOCI 5308	Seminar in Quantitative Research Methods	3
SOCI 5309	Seminar in Qualitative Research Methods	3
SOCI 5322	Impact Analysis Research	3
SOCI 5323	Grant Writing for the Social Sciences	3
Prescribed Electives		
Choose 3 hours from the following:		3
SOCI 5320	Seminar in Demography	
SOCI 5388H	Advanced Statistical Analysis II	
SOCI 5388J	Applied Survey Research	
Choose 15 hours from the following:		15
SOCI 5316	Seminar in Deviation and Social Problems	
SOCI 5318	Seminar in Advanced Data Applications	
SOCI 5319	Seminar in Social Psychology	
SOCI 5350	Seminar on the Sociology of Gender	
SOCI 5353	Seminar in the Community	
SOCI 5359	Seminar in Drugs and Society	
SOCI 5363	Seminar in Medical Sociology	
SOCI 5367	Seminar in Sustainable Cities	
SOCI 5368	Seminar in Environmental Sociology	
SOCI 5370	Seminar in Sociology of Racial and Ethnic Relations	
SOCI 5383	Seminar on Aging	
SOCI 5388F	Seminar in Poverty	
SOCI 5388G	Seminar in Food and Society	
SOCI 5390	Seminar in Globalization and Development	
SOCI 5395	Global Insecurity	
May choose 6 hours of advisor-approved electives outside the department		
Total Hours		36

Comprehensive Examination Requirement

Students are required to take a written comprehensive examination in their last semester of the program. Students must pass the comprehensive exam during the last semester in at most two attempts. If the student fails to pass the comprehensive exam in two attempts during the final semester, the student will retake the comprehensive exam during the next regular semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Sociology: SOCI

# Courses Offered

## Sociology (SOCI)

### **SOCI 5105. Practicum in Teaching Sociology.**

An introduction to key concepts and practices in the teaching of college course in Sociology. Provides regular in-service training and planned periodic evaluations of instructional responsibilities. Required for first-year teaching and instructional assistants in the Sociology Department. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### **SOCI 5110. Proseminar in Sociology.**

This course will orient new graduate students to the department and the profession. Topics include presentations at professional meetings, academic writing and publishing, and putting together curriculum vitae.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### **SOCI 5198B. Applied Research Practicum II.**

This course represents a student's continuing enrollment to complete the practicum project. The student continues to enroll in this course until the practicum project is approved by the practicum committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **SOCI 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### **SOCI 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### **SOCI 5300. Foundation Studies in Sociology.**

This course provides prerequisite knowledge required for success in graduate-level coursework in Sociology. Course content varies depending on academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

### **SOCI 5306. Sociological Theory Seminar.**

This graduate theory course examines the role of social theory in the historical and contemporary quest for knowledge and understanding of society. The first half of the course emphasizes the European Classics. The second half of the course is devoted to contemporary theory. Emphasis throughout will be on using theory to better understand current events and everyday life experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### **SOCI 5307. Advanced Statistics for the Social Sciences.**

Application of advanced statistical theory and methods to the analysis of social data. Prerequisite: SOCI 3307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **SOCI 5308. Seminar in Quantitative Research Methods.**

The application of research methods to social science with emphasis on direct, practical experience in research. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **SOCI 5309. Seminar in Qualitative Research Methods.**

This course examines qualitative methods in Sociology. Topics include examples of classical and modern qualitative research, and issues related to qualitative research. Students critique qualitative studies and conduct and defend a qualitative project. Departmental approval needed for non-majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **SOCI 5316. Seminar in Deviation and Social Problems.**

A systematic analysis of contemporary social problems and various types of social deviation. Emphasis is on the socialization process as it relates to social problems and human deviation. The sociological explanation of underlying factors will be stressed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

### **SOCI 5318. Seminar in Advanced Data Applications.**

This course will cover the application of various statistical techniques, such as chi-square, correlation, and regression while introducing statistical analysis to students using software such as SPSS. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5319. Seminar in Social Psychology.**

A critical appraisal of the major theories and theorists found in Social Psychology with emphasis on their application to contemporary social and psychological issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5320. Seminar in Demography.**

A seminar in the study of population with emphasis on sources of demographic data, techniques of demographic analysis, and population composition and forecasts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5322. Impact Analysis Research.**

This course is designed to introduce students to the assessment of organizational impact. It addresses both the historical development and social functions of evaluation, as well as practical application of assessment research. Emphasis will be on appropriate research design, implementing the design, and analysis of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5323. Grant Writing for the Social Sciences.**

This course offers an applied approach to developing grant-writing skills for the social scientist. It will cover all aspects of proposal development including idea generation, funding source identification, project description, project plan, project management, evaluation methods, and budget preparation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5350. Seminar on the Sociology of Gender.**

This course is a graduate level seminar on the study of gender in sociology with a focus on issues of race, ethnicity, social class, and sexuality. We will examine the major contemporary scholarly debates about gender and explore how gender issues are embedded in different institutions and organizations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5351. Introduction to Dementia Studies.**

This course is an introduction to the social-scientific study of the causes and consequences of dementia, as well as to issues related to the care of persons with dementia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5352. Dementia and Caregiving.**

This course for the Dementia and Aging Studies degree covers current research on policy and support for caregivers of persons with dementia, with an emphasis on the applied sociological focus of caregiver training and education. The course also addresses broader public sociology issues of caregiving and healthcare.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5353. Seminar in the Community.**

A study of contemporary urban society with emphasis on understanding the social structure as a prerequisite to planning and problem solving at the community level. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5354. Theoretical Perspectives in Aging and Dementia.**

This course discusses theories of aging from biological, psychological, and social science perspectives. The course also demonstrates how these theories can be applied to analyzing various aging issues, particularly the social care of persons with Alzheimer's disease and other dementias.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5355. The Social Psychology of Dementia.**

This course analyzes the social construction of dementia and salient social psychological theories, concepts, and research in dementia studies. It investigates the social psychology of dementia in relation to mind, identity, stereotypes, prejudice, attributions, socialization, emotions, social interaction and the impact of institutions on the self.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5356. End of Life Care.**

This course focuses on issues of dying and death. Topics covered include symptom management, palliative care, hospice, pain control, life-sustaining treatment and spiritual, legal and ethical issues related to dying and death. Also covered will be different religious views on euthanasia, dying, death, and funerals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5357. Gender and Aging in Society.**

This course is a seminar on the study of gender and aging. This seminar will examine issues of aging identities, the aging body, sexuality, health and medicine, and caregiving among older adults. This course emphasizes the aging experience in our culture as a fundamentally gendered phenomenon. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SOCI 5359. Seminar in Drugs and Society.**

A sociological examination of the use of legal and illegal drugs in society, with emphasis on topics such as the “war on drugs,” the pharmaceutical industry, and drugs as technologies of medicalization, as well as incentives to social change. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5361. Aging and Dementia: Racial and Ethnic Minorities.**

This course provides an analysis of how race and ethnicity affect aging and dementia, with particular emphasis on the United States. The course examines health and quality of life of racial and ethnic minorities in later life, social factors that influence these differences, and means of intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5362. Rural Aging and Dementia.**

This graduate course examines aging and dementia issues in rural America. Demographic trends, cultural and economic changes, and intervention strategies will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5363. Seminar in Medical Sociology.**

A seminar on selected topics of human health and health care organizations. Topics to be stressed include: social causes and consequences of morbidity and mortality, professionalization and socialization of health care practitioners, organization of health institutions, and demographic changes in health problems and needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5364. Clinical Gerontology: Interventions for Elders and Persons with Dementia.**

This course takes a clinical sociology perspective in studying the issues of the aged and persons with dementia. The approach is humanistic and multidisciplinary, seeking to improve the quality of older persons' lives by assessing situations and reducing problems using analysis and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5366. Social Inequality: Race, Class, and Gender in the United States.**

This course investigates the topic of social inequality. The intersections of class, race and gender as they produce inequality are explored, along with theoretical perspectives and empirical evidence informing the study of social inequality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5367. Seminar in Sustainable Cities.**

This course analyzes the complex relationship between urbanization and environmental change from a sociological perspective. Overarching themes include sustainability and environmental justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5368. Seminar in Environmental Sociology.**

This course situates societies within their ecological context and vice versa. Focusing upon social and environmental interactions, including the interactions of social organization, inequality, and policy, provides a comprehensive understanding of the physical and social milieu. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5370. Seminar in Sociology of Racial and Ethnic Relations.**

This course examines the dynamics of dominant and subordinate social groups. The course focuses on racial, ethnic, and class differences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5371. Directed Study.**

Course of independent study open to individual students only at the invitation of the faculty member with the approval of the department chair and the graduate advisor. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5383. Seminar on Aging.**

This course provides graduate students with an opportunity to examine national and global issues involved with the aging process and population aging from a social scientific and multicultural perspective. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5388F. Seminar in Poverty.**

This course is a graduate seminar on the sociological study of US poverty and social mobility. We will examine poverty measurement and trends, poverty-related social policies, theories for explaining poverty and mobility, and the intersection of poverty and social mobility with issues of gender, race, family structure, and place. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388G. Seminar in Food and Society.**

This graduate course focuses on the sociological study of food. It examines the current food system and its interactions with macro-level social institutions, as well as individual identity and well-being. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388H. Advanced Statistical Analysis II.**

The focus of this course is advanced data analysis. This course will cover topics such as regression, limited dependent variables analysis, and time series analysis. A secondary aim is to demonstrate data analyses using popular software packages. Prerequisite: SOCI 5307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5388J. Applied Survey Research.**

This course offers an applied approach to learning about survey methods. The course links research on survey construction and implementation to practical applications in which students solve problems associated with real-world survey instruments. Students will learn appropriate survey research terminology, as well as how to communicate in an effective and non-technical manner to others in need of survey assistance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5390. Seminar in Globalization and Development.**

This seminar explores issues related to socioeconomic development and change, particularly in the "Global south." The course will focus on factors affecting development and underdevelopment around the world. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5395. Global Insecurity.**

This graduate seminar covers global, socially constructed risks perceived as threats to sustainable development. Topics include theories of globalization and insecurity; an assessment of threats to democracy and human rights, the environment, food security, public health and safety; as well as local, national and international responses to these threats. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5398A. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5398B. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SOCI 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Applied Sociology is designed to prepare students for careers in state and federal government agencies, large and small businesses and non-profit organizations. Graduates of this program will have the skills and knowledge necessary to compete in a rapidly changing job market, having mastered the techniques of both qualitative and quantitative research, general statistical analysis, and impact analysis.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in sociological theory, statistics, SPSS, and social research (leveling courses will be required if student lacks sufficient background course work)
- GRE not required
- current resume or curriculum vitae
- statement of purpose (two pages, double-spaced with the student's full name and contact information) that describes personal and career goals. Include academic interests and the relationship of this graduate degree to life/personal goals. Also, the statement should discuss the student's interest in this particular graduate program and the student's career goals after earning the degree. The Graduate Admissions Committee will evaluate the following:
  - Did the student demonstrate a familiarity with the field?
  - Did the student indicate his/her strengths (background, experience, training, and education)?

- Did the student express why the program will hone his/her skills?
- Did the student statement show excellence or promise in writing skills?
- three letters of recommendation from individuals knowledgeable about the student's academic ability and promise as a scholar

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Science (M.S.) degree with a major in Applied Sociology (Practicum Concentration) requires 36 semester hours, including an applied research practicum. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SOCI 5306	Sociological Theory Seminar	3
SOCI 5307	Advanced Statistics for the Social Sciences	3
SOCI 5308	Seminar in Quantitative Research Methods	3
SOCI 5309	Seminar in Qualitative Research Methods	3
SOCI 5322	Impact Analysis Research	3
SOCI 5323	Grant Writing for the Social Sciences	3
<b>Applied Research Practicum</b>		
SOCI 5398A	Applied Research Practicum	3
SOCI 5398B	Applied Research Practicum	3
<b>Prescribed Electives</b>		
Choose 12 hours from the following:		12
SOCI 5316	Seminar in Deviation and Social Problems	
SOCI 5319	Seminar in Social Psychology	
SOCI 5320	Seminar in Demography	
SOCI 5353	Seminar in the Community	
SOCI 5359	Seminar in Drugs and Society	
SOCI 5363	Seminar in Medical Sociology	
SOCI 5368	Seminar in Environmental Sociology	
SOCI 5370	Seminar in Sociology of Racial and Ethnic Relations	
SOCI 5371	Directed Study	
SOCI 5383	Seminar on Aging	
SOCI 5388F	Seminar in Poverty	
SOCI 5388G	Seminar in Food and Society	
SOCI 5388H	Advanced Statistical Analysis II	

SOCI 5388J	Applied Survey Research
SOCI 5390	Seminar in Globalization and Development
SOCI 5395	Global Insecurity
May choose 6 hours of advisor-approved electives from outside the department	
<b>Total Hours</b>	<b>36</b>

## Practicum

Students will initiate a site-based research project to collect impact analysis or assessment data of interest to site administrators. During a subsequent term, students will complete a professional research paper based on the data. Students will be required to have a practicum proposal approved by their committee prior to beginning the research paper. Although students' research projects will vary, each will combine the emphases of the program — sociological methods and statistics, needs assessment, impact analysis, and grant writing — with the collection and analysis of quantitative and/or qualitative data.

## Comprehensive Examination Requirement

Students are required to take a written comprehensive examination in their last semester of the program. Students must pass the comprehensive exam during the last semester in at most two attempts. If the student fails to pass the comprehensive exam in two attempts during the final semester, the student will retake the comprehensive exam during the next regular semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Sociology: SOCI

## Courses Offered

### Sociology (SOCI)

#### SOCI 5105. Practicum in Teaching Sociology.

An introduction to key concepts and practices in the teaching of college course in Sociology. Provides regular in-service training and planned periodic evaluations of instructional responsibilities. Required for first-year teaching and instructional assistants in the Sociology Department. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### SOCI 5110. Proseminar in Sociology.

This course will orient new graduate students to the department and the profession. Topics include presentations at professional meetings, academic writing and publishing, and putting together curriculum vitae.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### SOCI 5198B. Applied Research Practicum II.

This course represents a student's continuing enrollment to complete the practicum project. The student continues to enroll in this course until the practicum project is approved by the practicum committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### SOCI 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### SOCI 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### SOCI 5300. Foundation Studies in Sociology.

This course provides prerequisite knowledge required for success in graduate-level coursework in Sociology. Course content varies depending on academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### SOCI 5306. Sociological Theory Seminar.

This graduate theory course examines the role of social theory in the historical and contemporary quest for knowledge and understanding of society. The first half of the course emphasizes the European Classics. The second half of the course is devoted to contemporary theory. Emphasis throughout will be on using theory to better understand current events and everyday life experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

#### SOCI 5307. Advanced Statistics for the Social Sciences.

Application of advanced statistical theory and methods to the analysis of social data. Prerequisite: SOCI 3307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5308. Seminar in Quantitative Research Methods.**

The application of research methods to social science with emphasis on direct, practical experience in research. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5309. Seminar in Qualitative Research Methods.**

This course examines qualitative methods in Sociology. Topics include examples of classical and modern qualitative research, and issues related to qualitative research. Students critique qualitative studies and conduct and defend a qualitative project. Departmental approval needed for non-majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5316. Seminar in Deviation and Social Problems.**

A systematic analysis of contemporary social problems and various types of social deviation. Emphasis is on the socialization process as it relates to social problems and human deviation. The sociological explanation of underlying factors will be stressed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5318. Seminar in Advanced Data Applications.**

This course will cover the application of various statistical techniques, such as chi-square, correlation, and regression while introducing statistical analysis to students using software such as SPSS.

Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5319. Seminar in Social Psychology.**

A critical appraisal of the major theories and theorists found in Social Psychology with emphasis on their application to contemporary social and psychological issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5320. Seminar in Demography.**

A seminar in the study of population with emphasis on sources of demographic data, techniques of demographic analysis, and population composition and forecasts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5322. Impact Analysis Research.**

This course is designed to introduce students to the assessment of organizational impact. It addresses both the historical development and social functions of evaluation, as well as practical application of assessment research. Emphasis will be on appropriate research design, implementing the design, and analysis of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5323. Grant Writing for the Social Sciences.**

This course offers an applied approach to developing grant-writing skills for the social scientist. It will cover all aspects of proposal development including idea generation, funding source identification, project description, project plan, project management, evaluation methods, and budget preparation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5350. Seminar on the Sociology of Gender.**

This course is a graduate level seminar on the study of gender in sociology with a focus on issues of race, ethnicity, social class, and sexuality. We will examine the major contemporary scholarly debates about gender and explore how gender issues are embedded in different institutions and organizations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5351. Introduction to Dementia Studies.**

This course is an introduction to the social-scientific study of the causes and consequences of dementia, as well as to issues related to the care of persons with dementia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5352. Dementia and Caregiving.**

This course for the Dementia and Aging Studies degree covers current research on policy and support for caregivers of persons with dementia, with an emphasis on the applied sociological focus of caregiver training and education. The course also addresses broader public sociology issues of caregiving and healthcare.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5353. Seminar in the Community.**

A study of contemporary urban society with emphasis on understanding the social structure as a prerequisite to planning and problem solving at the community level. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SOCI 5354. Theoretical Perspectives in Aging and Dementia.**

This course discusses theories of aging from biological, psychological, and social science perspectives. The course also demonstrates how these theories can be applied to analyzing various aging issues, particularly the social care of persons with Alzheimer's disease and other dementias.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5355. The Social Psychology of Dementia.**

This course analyzes the social construction of dementia and salient social psychological theories, concepts, and research in dementia studies. It investigates the social psychology of dementia in relation to mind, identity, stereotypes, prejudice, attributions, socialization, emotions, social interaction and the impact of institutions on the self.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5356. End of Life Care.**

This course focuses on issues of dying and death. Topics covered include symptom management, palliative care, hospice, pain control, life-sustaining treatment and spiritual, legal and ethical issues related to dying and death. Also covered will be different religious views on euthanasia, dying, death, and funerals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5357. Gender and Aging in Society.**

This course is a seminar on the study of gender and aging. This seminar will examine issues of aging identities, the aging body, sexuality, health and medicine, and caregiving among older adults. This course emphasizes the aging experience in our culture as a fundamentally gendered phenomenon. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5359. Seminar in Drugs and Society.**

A sociological examination of the use of legal and illegal drugs in society, with emphasis on topics such as the "war on drugs," the pharmaceutical industry, and drugs as technologies of medicalization, as well as incentives to social change. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5361. Aging and Dementia: Racial and Ethnic Minorities.**

This course provides an analysis of how race and ethnicity affect aging and dementia, with particular emphasis on the United States. The course examines health and quality of life of racial and ethnic minorities in later life, social factors that influence these differences, and means of intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5362. Rural Aging and Dementia.**

This graduate course examines aging and dementia issues in rural America. Demographic trends, cultural and economic changes, and intervention strategies will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5363. Seminar in Medical Sociology.**

A seminar on selected topics of human health and health care organizations. Topics to be stressed include: social causes and consequences of morbidity and mortality, professionalization and socialization of health care practitioners, organization of health institutions, and demographic changes in health problems and needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5364. Clinical Gerontology: Interventions for Elders and Persons with Dementia.**

This course takes a clinical sociology perspective in studying the issues of the aged and persons with dementia. The approach is humanistic and multidisciplinary, seeking to improve the quality of older persons' lives by assessing situations and reducing problems using analysis and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5366. Social Inequality: Race, Class, and Gender in the United States.**

This course investigates the topic of social inequality. The intersections of class, race and gender as they produce inequality are explored, along with theoretical perspectives and empirical evidence informing the study of social inequality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5367. Seminar in Sustainable Cities.**

This course analyzes the complex relationship between urbanization and environmental change from a sociological perspective. Overarching themes include sustainability and environmental justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5368. Seminar in Environmental Sociology.**

This course situates societies within their ecological context and vice versa. Focusing upon social and environmental interactions, including the interactions of social organization, inequality, and policy, provides a comprehensive understanding of the physical and social milieu. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5370. Seminar in Sociology of Racial and Ethnic Relations.**

This course examines the dynamics of dominant and subordinate social groups. The course focuses on racial, ethnic, and class differences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5371. Directed Study.**

Course of independent study open to individual students only at the invitation of the faculty member with the approval of the department chair and the graduate advisor. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5383. Seminar on Aging.**

This course provides graduate students with an opportunity to examine national and global issues involved with the aging process and population aging from a social scientific and multicultural perspective. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5388F. Seminar in Poverty.**

This course is a graduate seminar on the sociological study of US poverty and social mobility. We will examine poverty measurement and trends, poverty-related social policies, theories for explaining poverty and mobility, and the intersection of poverty and social mobility with issues of gender, race, family structure, and place. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388G. Seminar in Food and Society.**

This graduate course focuses on the sociological study of food. It examines the current food system and its interactions with macro-level social institutions, as well as individual identity and well-being. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388H. Advanced Statistical Analysis II.**

The focus of this course is advanced data analysis. This course will cover topics such as regression, limited dependent variables analysis, and time series analysis. A secondary aim is to demonstrate data analyses using popular software packages. Prerequisite: SOCI 5307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5388J. Applied Survey Research.**

This course offers an applied approach to learning about survey methods. The course links research on survey construction and implementation to practical applications in which students solve problems associated with real-world survey instruments. Students will learn appropriate survey research terminology, as well as how to communicate in an effective and non-technical manner to others in need of survey assistance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5390. Seminar in Globalization and Development.**

This seminar explores issues related to socioeconomic development and change, particularly in the "Global south." The course will focus on factors affecting development and underdevelopment around the world. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5395. Global Insecurity.**

This graduate seminar covers global, socially constructed risks perceived as threats to sustainable development. Topics include theories of globalization and insecurity; an assessment of threats to democracy and human rights, the environment, food security, public health and safety; as well as local, national and international responses to these threats. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5398A. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5398B. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SOCI 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

This interdisciplinary, online degree offers cutting-edge knowledge about dementia and aging studies, including evolving issues related to the care of persons with dementia and other topics related to aging and the life course.

Housed in the Department of Sociology, this program also includes course work from the Department of Communication Studies, the School of Health Administration, and the School of Social Work.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>).

[www.gradcollege.txstate.edu](http://www.gradcollege.txstate.edu)). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work: at least six hours of undergraduate sociology/social science courses related to aging or gerontology. (Two years of documented experience in the field of gerontology may be substituted for three or six hours of social science prerequisites). \*
- GRE not required
- resume/CV
- statement of purpose (two pages, double-spaced with the student's full name and contact information) that describes personal and career goals. Include academic interests and the relationship of this graduate degree to life/personal goals. Also, the statement should discuss the student's interest in this particular graduate program and the student's career goals after earning the degree. The Graduate Admissions Committee will evaluate the following:
  - Did the student demonstrate a familiarity with the field?
  - Did the student indicate his/her strengths (background, experience, training, and education)?
  - Did the student express why the program will hone his/her skills?
  - Did the student statement show excellence or promise in writing skills?
- three letters of recommendation from professionals competent to assess the student's interest in pursuing a career in this field of study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

**\*Additional Information**

If the student does not have sufficient background courses or work experience in social science or areas related to aging or gerontology, the student must take leveling courses prior to beginning graduate studies in the program. Courses may be completed as a non-degree seeking student (with approval from the Director of Graduate Programs in Sociology) at Texas State University or other universities.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Dementia and Aging Studies concentration in Dementia and Long Term Care requires 36 semester credit hours. Dementia and long term care allies the long term care certificate with core courses from the Department of Sociology to provide a social model of care approach to students who want to work in extended living environments when they graduate.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SOCI 5351	Introduction to Dementia Studies	3
SOCI 5352	Dementia and Caregiving	3
or SOCI 5355	The Social Psychology of Dementia	
SOCI 5383	Seminar on Aging	3
or SOCI 5354	Theoretical Perspectives in Aging and Dementia	
<b>Concentration</b>		
LTCA 5322	Environmental Management in Long Term Care	3
LTCA 5323	Governance Management in Long Term Care	3
LTCA 5324	Personnel Management in Long Term Care	3
LTCA 5325	Resident Care Management in Long Term Care	3
LTCA 5335	Financial Management in Long Term Care	3
LTCA 5681	Internship in Long Term Care	6
LTCA 5681	Internship in Long Term Care	6
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

Students are required to take a written comprehensive examination in their last semester of the program. Students must pass the comprehensive exam during the last semester in at most two attempts. If the student fails to pass the comprehensive exam in two attempts during the final semester, the student will retake the comprehensive exam during the next regular semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Sociology and related disciplines: CDIS (p. 2675), LTCA (p. 2679), SOCI (p. 2680)

## Courses Offered

### Communication Disorders (CDIS)

*For dementia and aging studies majors only.*

**CDIS 5138. Augmentative & Alternative Communication.**

This course is designed to provide graduate students in Communication Disorders with theory-driven, evidence-based, and clinically oriented knowledge and skills related to augmentative and alternative communication (AAC). This course will meet the core knowledge and skill areas in AAC mandated by the Council of Academic Accreditation in Audiology and Speech-Language Pathology.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5262. Introduction to Research in Communication Disorders.**

This course is designed to acquaint students with research protocols in the behavioral sciences with an emphasis on speech-language pathology. Topics include critical thinking, research design, data collection, data analysis, research writing, and evidence-based practice. The course will emphasize critical analysis of the professional literature in speech-language pathology.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5301. Advanced Independent Study in Communication Disorders.**

Discussions of various areas of speech language pathology. Attention to individual needs of the student. Emphasis on independent study in habilitation and rehabilitation of communication disorders. This course is repeatable for credit and can be taught by different faculty covering different topics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5312. Neuroanatomy for Communication Disorders.**

This is a lecture course that examines the organization of the brain, spinal cord, and peripheral nervous system. Significance of the areas of the nervous system that are primary or secondary for speech, language, and hearing are the main focus of this course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5321. Clinical Practicum in Audiology.**

Supervised clinical practicum in audiology. Focus is on both diagnostic and rehabilitative audiological management of diverse populations.

Must be taken every semester that a student participates in supervised audiology practicum. May be repeated for credit. This course does not earn graduate degree credit. Prerequisites: CDIS 4420 and CDIS 4370 or equivalents; instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required

**Grade Mode:** Leveling/Assistantships

**CDIS 5325. Anatomy and Physiology of the Speech Production System.**

Description of structure and function of the speech production system with emphasis on physical problems in speech, language, and hearing. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5330. Speech and Language Development.**

Course to acquaint students with acquisition of speech and language in children. Basic information from linguistics, psycholinguistics, psychology, and communication are examined for children in various stages of development. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5331. Stuttering.**

This course is designed to describe therapeutic intervention with children and adults who stutter. Techniques of assessment, management, and counseling are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5333. Language Disorders in School-Age and Adolescence.**

This introductory-level course will review assessment and intervention for language disorders in the school-age and adolescent population. The relationship between language and literacy will be discussed. Students will engage in detailed narrative analyses. Evidence-based practice and collaborative models of intervention will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5334. Assessment and Intervention of Speech Sound Disorders.**

This course is designed to study normal, delayed, and disordered child phonology in English and select dialects/languages. Course covers etiologies, characteristics, and anatomic/physiologic bases of delays/disorders, as well as their potential impact on phonological awareness and subsequent development in reading/writing. Prevention, assessment, and treatment of disorders will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5336. Motor Speech Disorders.**

The course reviews the neuroanatomic mechanisms underlying speech production and surveys the etiology, symptomatology, epidemiology, course, and prognosis of speech disorders resulting from impairment of the central and/or peripheral nervous system. Emphasis is placed on apraxia and the dysarthrias. Clinical application in assessment and rehabilitation of patients with neurogenically-based motor speech deficits is stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5337. Voice Disorders.**

This course is designed to describe the assessment of vocal function and disorders and the rehabilitation of the patient with vocal abnormalities due to vocal abuse, psychological, and/or organic etiologies, including laryngectomy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5339. Dysphagia.**

A review of anatomic and physiologic disturbances of swallowing in neurologically impaired and post-surgical head and neck cancer patients will be presented. Instrumentation, techniques of evaluation, and radiograph examination of deglutition will be reviewed. Rehabilitation procedures will be described in detail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5340. Cognitive Rehabilitation.**

This introductory-level course will review neuropathology and neurophysiology of traumatic brain injury and dementia, introduce relevant terms and models in cognitive rehabilitation, provide a framework for assessment and treatment, and discuss the functional impact of cognitive-communicative disorders on the patient and others. Prerequisites: CDIS 5336 and CDIS 5342 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5342. Aphasia and Related Disorders.**

The course develops an understanding of the etiology, symptomatology, assessment, remediation, and recovery patterns of acquired communication disorders that result from impairment of the central nervous system, with a focus on the aphasia and traumatic brain injuries. Coexisting problems caused by damage to cortical/sub-cortical structures will also be addressed. Recent advances in relevant clinical research and technology will be surveyed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CDIS 5344. Advanced Clinical Practicum I.**

This course is designed to be the first of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 15-20 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Credit/No Credit

**CDIS 5345. Advanced Clinical Practicum II.**

This course is designed to be the second of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 20-25 clock hours of clinical practicum experience will be accumulated. This course must be completed with a grade of "CR" or higher to advance to CDIS 5346. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 with a grade of a "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship

**Grade Mode:** Credit/No Credit

**CDIS 5346. Advanced Clinical Practicum III.**

This course is designed to be the third of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 both with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5347. Advanced Clinical Practicum IV.**

This course is designed to be the final of four clinical practicum experiences for first-year graduate students. Students will participate in clinical practicum experiences including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 all with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5350. Multicultural Issues in Communication Disorders.**

Addresses the social, cultural, and linguistic factors that impact the clinical service delivery provided to culturally and linguistically diverse populations. A primary focus of the course will be to address general principles of assessment and intervention as they relate to the clinical management of individuals with communication disorders from diverse cultural and language backgrounds. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5353. Phonetics.**

This course is designed to analyze normal and abnormal phonological processes in children and adults. Proficiency in transcription using the International Phonetic Alphabet (IPA) is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5363. Language Disorders in the Birth-to-5 Population.**

This introductory-level course will review assessment and intervention for language disorders in the birth-to-5 population. Use of assessment information to determine language disorders versus language difference will be addressed. Students will engage in detailed language sample analyses. Creating effective intervention plans using assessment data will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5369. Hearing Science.**

This course is designed to provide foundational knowledge in the areas of acoustics, auditory and vestibular anatomy/physiology, psychoacoustics, and speech perception across the lifespan.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CDIS 5370. Aural Rehabilitation.**

Principles and procedures in the habilitation and rehabilitation of hearing-impaired children and adults. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5375. Speech Science.**

This course is designed to provide a conceptual foundation in voice and speech production, speech perception, and acoustic analysis of voice and speech. The course will begin with the math and physics of acoustics, to provide students with a strong foundation in acoustics necessary to master speech science. Content will cover acoustical phonetics, theories of speech production and perception, and clinical application emphasizing acoustic instrumentation and software used in communication disorders. Examples of concepts to be covered include frequency, pitch, intensity, loudness, decibels, waveforms, spectra, spectrograms, filters, vocal tract transfer function, formants, and acoustic software for voice and speech analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5380. Communication and Aging.**

The influx of senior citizens in our population will require preparation for the increased incidence of communication problems due to normal and pathological aging processes. This course will address how aging affects communication, how communication disorders manifest in the aging population, and implications for professionals working with older adults.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5390. Seminar in Communication Disorders.**

Examination of current theoretical and clinical issues in Communication Disorders. Issues may include family management in communication disorders, language and literacy, issues in health care rehabilitation, instrumentation and entrepreneurship. May be repeated for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CDIS 5391. Evidence-Based Practice in Second Language Acquisition.**

This course is designed for the discussion of various areas of bilingual speech language pathology with the primary focus on second language acquisition. The assessment and treatment of bilingual individuals diagnosed with communication disorders will also be addressed.

Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5392. Evidence-Based Practice in Autism.**

The course is designed to help students understand how to promote the social aspects of language in children diagnosed with Autism Spectrum Disorders within an evidence-based practice framework. In this course, students will critically examine standardized norm-referenced tests used to diagnose autism. Also addressed will be the broad range of evidence-based language intervention strategies recommended for children with Autism in the early years and once in school. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5393. Evidence-Based Practice in Stuttering.**

This course is designed to examine current evidence-based practice and clinical issues in childhood-onset stuttering. Issues addressed may include counseling approaches and strategies, treatment efficacy across the lifespan and family involvement in the therapy process for childhood-onset stuttering. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5394. Evidence-Based Practice in Neurogenic, Voice, and Swallowing.**

This course examines the current theoretical and clinical issues in communication disorders related to medically-based communication and swallowing disorders (neurogenic, voice, and swallowing disorders). Attention will be given to individual needs of the student in developing practical application of research to clinical practice. This course places emphasis on independent study in the habilitation and rehabilitation of medical-based communication and swallowing disorders and interprofessional practice. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5395. Evidence-Based Practice in Communication Disorders Across the Lifespan.**

This course is designed to examine current theoretical and clinical issues impacting individuals exhibiting communication disorders throughout the lifespan. A variety of topics such as home health, language, literacy, pediatric feeding, entrepreneurship, and professional issues in Communication Disorders will be addressed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5396. Evidence-Based Practice for Language & Literacy in Children Who are Deaf or Hard of Hearing.**

The course is designed to help students understand how to promote the language and literacy of children who are d/Deaf and hard-of-hearing within an evidence-based practice framework. In this course, students will critically examine the broad range of language and literacy treatment approaches that are used with children who are d/Deaf and hard of hearing in the early years and once in school. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Communication Disorders 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5420. Diagnostic Audiology.**

This course is designed to relate anatomy and physiology of the auditory system and the science of acoustics to the study of normal, pathological auditory function. Laboratory experience in administration and interpretation of audiological tests. Discussion of professional opportunities in the field of Audiology and provision of audiological service to special populations will be held. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5462. Speech Sound Disorders.**

This course is designed to provide the principles and procedures for the identification, description, assessment, and treatment of speech sound disorders in children. Students will observe demonstrations of assessment and treatment procedures during lab. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5466. Language Disorders.**

This course includes principles and procedures for the identification, description, assessment, and remediation of language disorders in infants, children, and adolescents. Students will observe demonstrations of assessment procedures and types of language disorders within the context of clinical procedures. Describing observed behaviors and analyzing language samples are emphasized. This course does not earn graduate degree credit.

**4 Credit Hours. 4 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5689. Clinical Externship I in Communication Disorders.**

This course is designed to be the first off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 all with a grade of "C" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5690. Clinical Externship II in Communication Disorders.**

This course is designed to be the second off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 and CDIS 5689 all with a grade of a "CR" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Long Term Care Administration****LTCA 5302. Elder Abuse and Mistreatment.**

This course provides an introductory overview of key theories, concepts/principles, issues, practices and challenges in elder abuse and mistreatment (EA/M). Course content includes: definitions and theories, incidence and prevalence, risk/protective factors, assessment, prevention, intervention, factors affecting screening/reporting, and the impact of EA/M on victims, caregivers, family and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5305. Environmental Design for Dementia.**

The potential of the physical environment to play an active role in supporting independence, stimulation, and life quality for individuals with dementia will be explored in this course. Emphasis will be placed on principles behind environmental design and the importance of utilizing the physical environment as a therapeutic tool.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5322. Environmental Management in Long Term Care.**

Students will compare performance analyses of long-term care facilities with a focus on organizational culture, and internal and external customer satisfaction. Plans of managerial action to maximize customer satisfaction will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5323. Governance Management in Long Term Care.**

Focuses on regulations for the operation of long term care facilities as promulgated by state and federal governments. Reviews the minimum requirements for licensure and the standards for Medicaid certification in Texas. Also examines specific activities and functions regarding accountability and enforcement procedures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5324. Personnel Management in Long Term Care.**

An examination of management issues in long-term care primarily in the critical areas of human resources, public relations, and marketing. Examples include staff recruitment and retention programs, training needs analysis, and marketing plan formulation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5325. Resident Care Management in Long Term Care.**

Administratively oriented content related to nursing care, quality indicator, and geriatric pharmacology utilized in long term care facilities. The course content reflects the relative legislative requirements mandated for nursing homes and other long-term care facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5335. Financial Management in Long Term Care.**

Students will examine the fiscal performance of selected facilities utilizing data from annual Medicaid cost reports with a focus on revenue enhancement and census development. Students will contrast various systems for determination of reimbursement and use reimbursement issues in a strategic planning sense.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5681. Internship in Long Term Care.**

This course is an internship where the student works directly with an administrator in a licensed nursing facility and is exposed to aspects of facility operation and management. Students are required to complete 1,000 hours. To meet 1,000 hour licensure requirement, this course can be repeated up to two semesters.

**6 Credit Hours. 0 Lecture Contact Hours. 24 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Sociology (SOCI)****SOCI 5105. Practicum in Teaching Sociology.**

An introduction to key concepts and practices in the teaching of college course in Sociology. Provides regular in-service training and planned periodic evaluations of instructional responsibilities. Required for first-year teaching and instructional assistants in the Sociology Department. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**SOCI 5110. Proseminar in Sociology.**

This course will orient new graduate students to the department and the profession. Topics include presentations at professional meetings, academic writing and publishing, and putting together curriculum vitae.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5198B. Applied Research Practicum II.**

This course represents a student's continuing enrollment to complete the practicum project. The student continues to enroll in this course until the practicum project is approved by the practicum committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5300. Foundation Studies in Sociology.**

This course provides prerequisite knowledge required for success in graduate-level coursework in Sociology. Course content varies depending on academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**SOCI 5306. Sociological Theory Seminar.**

This graduate theory course examines the role of social theory in the historical and contemporary quest for knowledge and understanding of society. The first half of the course emphasizes the European Classics. The second half of the course is devoted to contemporary theory. Emphasis throughout will be on using theory to better understand current events and everyday life experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5307. Advanced Statistics for the Social Sciences.**

Application of advanced statistical theory and methods to the analysis of social data. Prerequisite: SOCI 3307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5308. Seminar in Quantitative Research Methods.**

The application of research methods to social science with emphasis on direct, practical experience in research. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5309. Seminar in Qualitative Research Methods.**

This course examines qualitative methods in Sociology. Topics include examples of classical and modern qualitative research, and issues related to qualitative research. Students critique qualitative studies and conduct and defend a qualitative project. Departmental approval needed for non-majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5316. Seminar in Deviation and Social Problems.**

A systematic analysis of contemporary social problems and various types of social deviation. Emphasis is on the socialization process as it relates to social problems and human deviation. The sociological explanation of underlying factors will be stressed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5318. Seminar in Advanced Data Applications.**

This course will cover the application of various statistical techniques, such as chi-square, correlation, and regression while introducing statistical analysis to students using software such as SPSS. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5319. Seminar in Social Psychology.**

A critical appraisal of the major theories and theorists found in Social Psychology with emphasis on their application to contemporary social and psychological issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5320. Seminar in Demography.**

A seminar in the study of population with emphasis on sources of demographic data, techniques of demographic analysis, and population composition and forecasts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5322. Impact Analysis Research.**

This course is designed to introduce students to the assessment of organizational impact. It addresses both the historical development and social functions of evaluation, as well as practical application of assessment research. Emphasis will be on appropriate research design, implementing the design, and analysis of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5323. Grant Writing for the Social Sciences.**

This course offers an applied approach to developing grant-writing skills for the social scientist. It will cover all aspects of proposal development including idea generation, funding source identification, project description, project plan, project management, evaluation methods, and budget preparation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5350. Seminar on the Sociology of Gender.**

This course is a graduate level seminar on the study of gender in sociology with a focus on issues of race, ethnicity, social class, and sexuality. We will examine the major contemporary scholarly debates about gender and explore how gender issues are embedded in different institutions and organizations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5351. Introduction to Dementia Studies.**

This course is an introduction to the social-scientific study of the causes and consequences of dementia, as well as to issues related to the care of persons with dementia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**SOCI 5352. Dementia and Caregiving.**

This course for the Dementia and Aging Studies degree covers current research on policy and support for caregivers of persons with dementia, with an emphasis on the applied sociological focus of caregiver training and education. The course also addresses broader public sociology issues of caregiving and healthcare.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5353. Seminar in the Community.**

A study of contemporary urban society with emphasis on understanding the social structure as a prerequisite to planning and problem solving at the community level. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5354. Theoretical Perspectives in Aging and Dementia.**

This course discusses theories of aging from biological, psychological, and social science perspectives. The course also demonstrates how these theories can be applied to analyzing various aging issues, particularly the social care of persons with Alzheimer's disease and other dementias.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5355. The Social Psychology of Dementia.**

This course analyzes the social construction of dementia and salient social psychological theories, concepts, and research in dementia studies. It investigates the social psychology of dementia in relation to mind, identity, stereotypes, prejudice, attributions, socialization, emotions, social interaction and the impact of institutions on the self.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5356. End of Life Care.**

This course focuses on issues of dying and death. Topics covered include symptom management, palliative care, hospice, pain control, life-sustaining treatment and spiritual, legal and ethical issues related to dying and death. Also covered will be different religious views on euthanasia, dying, death, and funerals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5357. Gender and Aging in Society.**

This course is a seminar on the study of gender and aging. This seminar will examine issues of aging identities, the aging body, sexuality, health and medicine, and caregiving among older adults. This course emphasizes the aging experience in our culture as a fundamentally gendered phenomenon. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5359. Seminar in Drugs and Society.**

A sociological examination of the use of legal and illegal drugs in society, with emphasis on topics such as the "war on drugs," the pharmaceutical industry, and drugs as technologies of medicalization, as well as incentives to social change. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5361. Aging and Dementia: Racial and Ethnic Minorities.**

This course provides an analysis of how race and ethnicity affect aging and dementia, with particular emphasis on the United States. The course examines health and quality of life of racial and ethnic minorities in later life, social factors that influence these differences, and means of intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5362. Rural Aging and Dementia.**

This graduate course examines aging and dementia issues in rural America. Demographic trends, cultural and economic changes, and intervention strategies will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5363. Seminar in Medical Sociology.**

A seminar on selected topics of human health and health care organizations. Topics to be stressed include: social causes and consequences of morbidity and mortality, professionalization and socialization of health care practitioners, organization of health institutions, and demographic changes in health problems and needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5364. Clinical Gerontology: Interventions for Elders and Persons with Dementia.**

This course takes a clinical sociology perspective in studying the issues of the aged and persons with dementia. The approach is humanistic and multidisciplinary, seeking to improve the quality of older persons' lives by assessing situations and reducing problems using analysis and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5366. Social Inequality: Race, Class, and Gender in the United States.**

This course investigates the topic of social inequality. The intersections of class, race and gender as they produce inequality are explored, along with theoretical perspectives and empirical evidence informing the study of social inequality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5367. Seminar in Sustainable Cities.**

This course analyzes the complex relationship between urbanization and environmental change from a sociological perspective. Overarching themes include sustainability and environmental justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5368. Seminar in Environmental Sociology.**

This course situates societies within their ecological context and vice versa. Focusing upon social and environmental interactions, including the interactions of social organization, inequality, and policy, provides a comprehensive understanding of the physical and social milieu. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5370. Seminar in Sociology of Racial and Ethnic Relations.**

This course examines the dynamics of dominant and subordinate social groups. The course focuses on racial, ethnic, and class differences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5371. Directed Study.**

Course of independent study open to individual students only at the invitation of the faculty member with the approval of the department chair and the graduate advisor. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5383. Seminar on Aging.**

This course provides graduate students with an opportunity to examine national and global issues involved with the aging process and population aging from a social scientific and multicultural perspective. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5388F. Seminar in Poverty.**

This course is a graduate seminar on the sociological study of US poverty and social mobility. We will examine poverty measurement and trends, poverty-related social policies, theories for explaining poverty and mobility, and the intersection of poverty and social mobility with issues of gender, race, family structure, and place. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388G. Seminar in Food and Society.**

This graduate course focuses on the sociological study of food. It examines the current food system and its interactions with macro-level social institutions, as well as individual identity and well-being. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388H. Advanced Statistical Analysis II.**

The focus of this course is advanced data analysis. This course will cover topics such as regression, limited dependent variables analysis, and time series analysis. A secondary aim is to demonstrate data analyses using popular software packages. Prerequisite: SOCI 5307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5388J. Applied Survey Research.**

This course offers an applied approach to learning about survey methods. The course links research on survey construction and implementation to practical applications in which students solve problems associated with real-world survey instruments. Students will learn appropriate survey research terminology, as well as how to communicate in an effective and non-technical manner to others in need of survey assistance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5390. Seminar in Globalization and Development.**

This seminar explores issues related to socioeconomic development and change, particularly in the "Global south." The course will focus on factors affecting development and underdevelopment around the world. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5395. Global Insecurity.**

This graduate seminar covers global, socially constructed risks perceived as threats to sustainable development. Topics include theories of globalization and insecurity; an assessment of threats to democracy and human rights, the environment, food security, public health and safety; as well as local, national and international responses to these threats. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5398A. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5398B. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SOCI 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

This interdisciplinary, online degree offers cutting-edge knowledge about dementia and aging studies, including evolving issues related to the care of persons with dementia and other topics related to aging and the life course.

Housed in the Department of Sociology, this program also includes course work from the Department of Communication Studies, the School of Health Administration, and the School of Social Work.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work: at least six hours of undergraduate sociology/social science courses related to aging or gerontology. (Two years of documented experience in the field of gerontology may be substituted for three or six hours of social science prerequisites). \*
- GRE not required
- resume/CV
- statement of purpose (two pages, double-spaced with the student's full name and contact information) that describes personal and career goals. Include academic interests and the relationship of this graduate degree to life/personal goals. Also, the statement should discuss the student's interest in this particular graduate program and the student's career goals after earning the degree. The Graduate Admissions Committee will evaluate the following:

- Did the student demonstrate a familiarity with the field?
- Did the student indicate his/her strengths (background, experience, training, and education)?
- Did the student express why the program will hone his/her skills?
- Did the student statement show excellence or promise in writing skills?
- three letters of recommendation from professionals competent to assess the student's interest in pursuing a career in this field of study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

If the student does not have sufficient background courses or work experience in social science or areas related to aging or gerontology, the student must take leveling courses prior to beginning graduate studies in the program. Courses may be completed as a non-degree seeking student (with approval from the Director of Graduate Programs in Sociology) at Texas State University or other universities.

## Degree Requirements

The Master of Science (M.S.) degree major in Dementia and Aging Studies concentration in Practitioner requires 33 semester credit hours. The Practitioner concentration offers an in-depth education involving courses from all participating departments and allowing students to work in any facility or organization whose concern is the health and well-being of the individuals affected by dementia.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SOCI 5351	Introduction to Dementia Studies	3
SOCI 5352	Dementia and Caregiving	3
SOCI 5355	The Social Psychology of Dementia	3
SOCI 5383	Seminar on Aging	3
or SOCI 5354	Theoretical Perspectives in Aging and Dementia	
<b>Concentration</b>		
Choose 21 hours from the following:		21
ADED 5314	Community Development for Educators	
ADED 5325	Teaching Adults: Principles and Practices	
CDIS 5380	Communication and Aging	
LTCA 5302	Elder Abuse and Mistreatment	
LTCA 5322	Environmental Management in Long Term Care	

LTCA 5323	Governance Management in Long Term Care
LTCA 5324	Personnel Management in Long Term Care
LTCA 5325	Resident Care Management in Long Term Care
LTCA 5335	Financial Management in Long Term Care
OCED 5311	Technology, Change, and Innovation in Organizations
OCED 5362	Leadership Development
PA 5320	Organizational Theory, Change, and Behavior
PH 5305	Grant Proposal Writing in Public Health
PHIL 5360A	Ethics and Dementia
SOCI 5309	Seminar in Qualitative Research Methods
SOCI 5354	Theoretical Perspectives in Aging and Dementia
SOCI 5356	End of Life Care
SOCI 5357	Gender and Aging in Society
SOCI 5361	Aging and Dementia: Racial and Ethnic Minorities
SOCI 5362	Rural Aging and Dementia
SOCI 5363	Seminar in Medical Sociology
SOCI 5364	Clinical Gerontology: Interventions for Elders and Persons with Dementia
SOWK 5328	Interdisciplinary Perspectives on Aging

**Total Hours** **33**

## Comprehensive Examination Requirement

Students are required to take a written comprehensive examination in their last semester of the program. Students must pass the comprehensive exam during the last semester in at most two attempts. If the student fails to pass the comprehensive exam in two attempts during the final semester, the student will retake the comprehensive exam during the next regular semester.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Sociology and related disciplines: LTCA (p. 2685), SOCI (p. 2686)

## Courses Offered

### Long Term Care Administration

#### LTCA 5302. Elder Abuse and Mistreatment.

This course provides an introductory overview of key theories, concepts/principles, issues, practices and challenges in elder abuse and mistreatment (EA/M). Course content includes: definitions and theories, incidence and prevalence, risk/protective factors, assessment, prevention, intervention, factors affecting screening/reporting, and the impact of EA/M on victims, caregivers, family and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5305. Environmental Design for Dementia.**

The potential of the physical environment to play an active role in supporting independence, stimulation, and life quality for individuals with dementia will be explored in this course. Emphasis will be placed on principles behind environmental design and the importance of utilizing the physical environment as a therapeutic tool.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5322. Environmental Management in Long Term Care.**

Students will compare performance analyses of long-term care facilities with a focus on organizational culture, and internal and external customer satisfaction. Plans of managerial action to maximize customer satisfaction will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5323. Governance Management in Long Term Care.**

Focuses on regulations for the operation of long term care facilities as promulgated by state and federal governments. Reviews the minimum requirements for licensure and the standards for Medicaid certification in Texas. Also examines specific activities and functions regarding accountability and enforcement procedures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5324. Personnel Management in Long Term Care.**

An examination of management issues in long-term care primarily in the critical areas of human resources, public relations, and marketing. Examples include staff recruitment and retention programs, training needs analysis, and marketing plan formulation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5325. Resident Care Management in Long Term Care.**

Administratively oriented content related to nursing care, quality indicator, and geriatric pharmacology utilized in long term care facilities. The course content reflects the relative legislative requirements mandated for nursing homes and other long-term care facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5335. Financial Management in Long Term Care.**

Students will examine the fiscal performance of selected facilities utilizing data from annual Medicaid cost reports with a focus on revenue enhancement and census development. Students will contrast various systems for determination of reimbursement and use reimbursement issues in a strategic planning sense.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5681. Internship in Long Term Care.**

This course is an internship where the student works directly with an administrator in a licensed nursing facility and is exposed to aspects of facility operation and management. Students are required to complete 1,000 hours. To meet 1,000 hour licensure requirement, this course can be repeated up to two semesters.

**6 Credit Hours. 0 Lecture Contact Hours. 24 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Sociology (SOCI)****SOCI 5105. Practicum in Teaching Sociology.**

An introduction to key concepts and practices in the teaching of college course in Sociology. Provides regular in-service training and planned periodic evaluations of instructional responsibilities. Required for first-year teaching and instructional assistants in the Sociology Department. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**SOCI 5110. Proseminar in Sociology.**

This course will orient new graduate students to the department and the profession. Topics include presentations at professional meetings, academic writing and publishing, and putting together curriculum vitae.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5198B. Applied Research Practicum II.**

This course represents a student's continuing enrollment to complete the practicum project. The student continues to enroll in this course until the practicum project is approved by the practicum committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**SOCI 5300. Foundation Studies in Sociology.**

This course provides prerequisite knowledge required for success in graduate-level coursework in Sociology. Course content varies depending on academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**SOCI 5306. Sociological Theory Seminar.**

This graduate theory course examines the role of social theory in the historical and contemporary quest for knowledge and understanding of society. The first half of the course emphasizes the European Classics. The second half of the course is devoted to contemporary theory. Emphasis throughout will be on using theory to better understand current events and everyday life experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5307. Advanced Statistics for the Social Sciences.**

Application of advanced statistical theory and methods to the analysis of social data. Prerequisite: SOCI 3307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5308. Seminar in Quantitative Research Methods.**

The application of research methods to social science with emphasis on direct, practical experience in research. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5309. Seminar in Qualitative Research Methods.**

This course examines qualitative methods in Sociology. Topics include examples of classical and modern qualitative research, and issues related to qualitative research. Students critique qualitative studies and conduct and defend a qualitative project. Departmental approval needed for non-majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5316. Seminar in Deviation and Social Problems.**

A systematic analysis of contemporary social problems and various types of social deviation. Emphasis is on the socialization process as it relates to social problems and human deviation. The sociological explanation of underlying factors will be stressed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5318. Seminar in Advanced Data Applications.**

This course will cover the application of various statistical techniques, such as chi-square, correlation, and regression while introducing statistical analysis to students using software such as SPSS.

Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5319. Seminar in Social Psychology.**

A critical appraisal of the major theories and theorists found in Social Psychology with emphasis on their application to contemporary social and psychological issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5320. Seminar in Demography.**

A seminar in the study of population with emphasis on sources of demographic data, techniques of demographic analysis, and population composition and forecasts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5322. Impact Analysis Research.**

This course is designed to introduce students to the assessment of organizational impact. It addresses both the historical development and social functions of evaluation, as well as practical application of assessment research. Emphasis will be on appropriate research design, implementing the design, and analysis of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5323. Grant Writing for the Social Sciences.**

This course offers an applied approach to developing grant-writing skills for the social scientist. It will cover all aspects of proposal development including idea generation, funding source identification, project description, project plan, project management, evaluation methods, and budget preparation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5350. Seminar on the Sociology of Gender.**

This course is a graduate level seminar on the study of gender in sociology with a focus on issues of race, ethnicity, social class, and sexuality. We will examine the major contemporary scholarly debates about gender and explore how gender issues are embedded in different institutions and organizations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5351. Introduction to Dementia Studies.**

This course is an introduction to the social-scientific study of the causes and consequences of dementia, as well as to issues related to the care of persons with dementia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5352. Dementia and Caregiving.**

This course for the Dementia and Aging Studies degree covers current research on policy and support for caregivers of persons with dementia, with an emphasis on the applied sociological focus of caregiver training and education. The course also addresses broader public sociology issues of caregiving and healthcare.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5353. Seminar in the Community.**

A study of contemporary urban society with emphasis on understanding the social structure as a prerequisite to planning and problem solving at the community level. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5354. Theoretical Perspectives in Aging and Dementia.**

This course discusses theories of aging from biological, psychological, and social science perspectives. The course also demonstrates how these theories can be applied to analyzing various aging issues, particularly the social care of persons with Alzheimer's disease and other dementias.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5355. The Social Psychology of Dementia.**

This course analyzes the social construction of dementia and salient social psychological theories, concepts, and research in dementia studies. It investigates the social psychology of dementia in relation to mind, identity, stereotypes, prejudice, attributions, socialization, emotions, social interaction and the impact of institutions on the self.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5356. End of Life Care.**

This course focuses on issues of dying and death. Topics covered include symptom management, palliative care, hospice, pain control, life-sustaining treatment and spiritual, legal and ethical issues related to dying and death. Also covered will be different religious views on euthanasia, dying, death, and funerals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5357. Gender and Aging in Society.**

This course is a seminar on the study of gender and aging. This seminar will examine issues of aging identities, the aging body, sexuality, health and medicine, and caregiving among older adults. This course emphasizes the aging experience in our culture as a fundamentally gendered phenomenon. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5359. Seminar in Drugs and Society.**

A sociological examination of the use of legal and illegal drugs in society, with emphasis on topics such as the "war on drugs," the pharmaceutical industry, and drugs as technologies of medicalization, as well as incentives to social change. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5361. Aging and Dementia: Racial and Ethnic Minorities.**

This course provides an analysis of how race and ethnicity affect aging and dementia, with particular emphasis on the United States. The course examines health and quality of life of racial and ethnic minorities in later life, social factors that influence these differences, and means of intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5362. Rural Aging and Dementia.**

This graduate course examines aging and dementia issues in rural America. Demographic trends, cultural and economic changes, and intervention strategies will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5363. Seminar in Medical Sociology.**

A seminar on selected topics of human health and health care organizations. Topics to be stressed include: social causes and consequences of morbidity and mortality, professionalization and socialization of health care practitioners, organization of health institutions, and demographic changes in health problems and needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5364. Clinical Gerontology: Interventions for Elders and Persons with Dementia.**

This course takes a clinical sociology perspective in studying the issues of the aged and persons with dementia. The approach is humanistic and multidisciplinary, seeking to improve the quality of older persons' lives by assessing situations and reducing problems using analysis and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5366. Social Inequality: Race, Class, and Gender in the United States.**

This course investigates the topic of social inequality. The intersections of class, race and gender as they produce inequality are explored, along with theoretical perspectives and empirical evidence informing the study of social inequality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5367. Seminar in Sustainable Cities.**

This course analyzes the complex relationship between urbanization and environmental change from a sociological perspective. Overarching themes include sustainability and environmental justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5368. Seminar in Environmental Sociology.**

This course situates societies within their ecological context and vice versa. Focusing upon social and environmental interactions, including the interactions of social organization, inequality, and policy, provides a comprehensive understanding of the physical and social milieu. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5370. Seminar in Sociology of Racial and Ethnic Relations.**

This course examines the dynamics of dominant and subordinate social groups. The course focuses on racial, ethnic, and class differences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5371. Directed Study.**

Course of independent study open to individual students only at the invitation of the faculty member with the approval of the department chair and the graduate advisor. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5383. Seminar on Aging.**

This course provides graduate students with an opportunity to examine national and global issues involved with the aging process and population aging from a social scientific and multicultural perspective. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5388F. Seminar in Poverty.**

This course is a graduate seminar on the sociological study of US poverty and social mobility. We will examine poverty measurement and trends, poverty-related social policies, theories for explaining poverty and mobility, and the intersection of poverty and social mobility with issues of gender, race, family structure, and place. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388G. Seminar in Food and Society.**

This graduate course focuses on the sociological study of food. It examines the current food system and its interactions with macro-level social institutions, as well as individual identity and well-being. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388H. Advanced Statistical Analysis II.**

The focus of this course is advanced data analysis. This course will cover topics such as regression, limited dependent variables analysis, and time series analysis. A secondary aim is to demonstrate data analyses using popular software packages. Prerequisite: SOCI 5307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5388J. Applied Survey Research.**

This course offers an applied approach to learning about survey methods. The course links research on survey construction and implementation to practical applications in which students solve problems associated with real-world survey instruments. Students will learn appropriate survey research terminology, as well as how to communicate in an effective and non-technical manner to others in need of survey assistance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5390. Seminar in Globalization and Development.**

This seminar explores issues related to socioeconomic development and change, particularly in the "Global south." The course will focus on factors affecting development and underdevelopment around the world. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5395. Global Insecurity.**

This graduate seminar covers global, socially constructed risks perceived as threats to sustainable development. Topics include theories of globalization and insecurity; an assessment of threats to democracy and human rights, the environment, food security, public health and safety; as well as local, national and international responses to these threats. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5398A. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5398B. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SOCI 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

This interdisciplinary, online degree offers cutting-edge knowledge about dementia and aging studies, including evolving issues related to the care of persons with dementia and other topics related to aging and the life course.

Housed in the Department of Sociology, this program also includes course work from the Department of Communication Studies, the School of Health Administration, and the School of Social Work.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work: at least six hours of undergraduate sociology/social science courses related to aging or gerontology. (Two years of documented experience in the field of gerontology may be substituted for three or six hours of social science prerequisites).\*
- GRE not required
- resume/CV

- statement of purpose (two pages, double-spaced with the student's full name and contact information) that describes personal and career goals. Include academic interests and the relationship of this graduate degree to life/personal goals. Also, the statement should discuss the student's interest in this particular graduate program and the student's career goals after earning the degree. The Graduate Admissions Committee will evaluate the following:
  - Did the student demonstrate a familiarity with the field?
  - Did the student indicate his/her strengths (background, experience, training, and education)?
  - Did the student express why the program will hone his/her skills?
  - Did the student statement show excellence or promise in writing skills?
- three letters of recommendation from professionals competent to assess the student's interest in pursuing a career in this field of study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

If the student does not have sufficient background courses or work experience in social science or areas related to aging or gerontology, the student must take leveling courses prior to beginning graduate studies in the program. Courses may be completed as a non-degree seeking student (with approval from the Director of Graduate Programs in Sociology) at Texas State University or other universities.

## Degree Requirements

The Master of Science (M.S.) degree major in Dementia and Aging Studies concentration in Research requires 33 semester credit hours, including a thesis. The Research concentration offers courses to prepare students for doctoral programs in gerontology, sociology, and related fields.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
SOCI 5351	Introduction to Dementia Studies	3
SOCI 5352	Dementia and Caregiving	3
SOCI 5355	The Social Psychology of Dementia	3
SOCI 5383	Seminar on Aging (Concentration)	3
or SOCI 5354	Theoretical Perspectives in Aging and Dementia	
<b>Concentration</b>		

SOCI 5307	Advanced Statistics for the Social Sciences	3
SOCI 5308	Seminar in Quantitative Research Methods	3
or SOCI 5309	Seminar in Qualitative Research Methods	

### Prescribed Electives

Choose 9 hours from the following:		9
CDIS 5380	Communication and Aging	
PHIL 5360A	Ethics and Dementia	
SOCI 5308	Seminar in Quantitative Research Methods	
SOCI 5309	Seminar in Qualitative Research Methods	
SOCI 5318	Seminar in Advanced Data Applications	
SOCI 5354	Theoretical Perspectives in Aging and Dementia	
SOCI 5356	End of Life Care	
SOCI 5357	Gender and Aging in Society	
SOCI 5361	Aging and Dementia: Racial and Ethnic Minorities	
SOCI 5362	Rural Aging and Dementia	
SOCI 5363	Seminar in Medical Sociology	
SOCI 5388I		
SOWK 5328	Interdisciplinary Perspectives on Aging	

### Thesis

SOCI 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
SOCI 5199B	Thesis	
SOCI 5299B	Thesis	
SOCI 5399B	Thesis	
SOCI 5599B	Thesis	
SOCI 5999B	Thesis	

<b>Total Hours</b>	<b>33</b>
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## Comprehensive Exams

Students are required to complete and defend their thesis in their final semester. Students have the option of an in-person thesis defense, or a synchronous or asynchronous online defense. If their performance (written response in the case of asynchronous defense) does not meet expectations per the thesis committee, students must consult readings and re-write the answer to the question(s) that do not meet expectations. The thesis committee will not sign the Master's Comprehensive Examination Report Form and the Thesis Submission Approval Form until all specified deficiencies have been resolved. Should the thesis committee decide to hold a second oral defense, the chair of the thesis committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.



## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until

the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Sociology and related disciplines: LTCA (p. 2693), SOCI (p. 2693)

## Courses Offered

### Long Term Care Administration

#### LTCA 5302. Elder Abuse and Mistreatment.

This course provides an introductory overview of key theories, concepts/principles, issues, practices and challenges in elder abuse and mistreatment (EA/M). Course content includes: definitions and theories, incidence and prevalence, risk/protective factors, assessment, prevention, intervention, factors affecting screening/reporting, and the impact of EA/M on victims, caregivers, family and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### LTCA 5305. Environmental Design for Dementia.

The potential of the physical environment to play an active role in supporting independence, stimulation, and life quality for individuals with dementia will be explored in this course. Emphasis will be placed on principles behind environmental design and the importance of utilizing the physical environment as a therapeutic tool.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### LTCA 5322. Environmental Management in Long Term Care.

Students will compare performance analyses of long-term care facilities with a focus on organizational culture, and internal and external customer satisfaction. Plans of managerial action to maximize customer satisfaction will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### LTCA 5323. Governance Management in Long Term Care.

Focuses on regulations for the operation of long term care facilities as promulgated by state and federal governments. Reviews the minimum requirements for licensure and the standards for Medicaid certification in Texas. Also examines specific activities and functions regarding accountability and enforcement procedures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### LTCA 5324. Personnel Management in Long Term Care.

An examination of management issues in long-term care primarily in the critical areas of human resources, public relations, and marketing. Examples include staff recruitment and retention programs, training needs analysis, and marketing plan formulation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### LTCA 5325. Resident Care Management in Long Term Care.

Administratively oriented content related to nursing care, quality indicator, and geriatric pharmacology utilized in long term care facilities. The course content reflects the relative legislative requirements mandated for nursing homes and other long-term care facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### LTCA 5335. Financial Management in Long Term Care.

Students will examine the fiscal performance of selected facilities utilizing data from annual Medicaid cost reports with a focus on revenue enhancement and census development. Students will contrast various systems for determination of reimbursement and use reimbursement issues in a strategic planning sense.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### LTCA 5681. Internship in Long Term Care.

This course is an internship where the student works directly with an administrator in a licensed nursing facility and is exposed to aspects of facility operation and management. Students are required to complete 1,000 hours. To meet 1,000 hour licensure requirement, this course can be repeated up to two semesters.

**6 Credit Hours. 0 Lecture Contact Hours. 24 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Sociology (SOCI)

#### SOCI 5105. Practicum in Teaching Sociology.

An introduction to key concepts and practices in the teaching of college course in Sociology. Provides regular in-service training and planned periodic evaluations of instructional responsibilities. Required for first-year teaching and instructional assistants in the Sociology Department. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### SOCI 5110. Proseminar in Sociology.

This course will orient new graduate students to the department and the profession. Topics include presentations at professional meetings, academic writing and publishing, and putting together curriculum vitae.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### SOCI 5198B. Applied Research Practicum II.

This course represents a student's continuing enrollment to complete the practicum project. The student continues to enroll in this course until the practicum project is approved by the practicum committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### SOCI 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5300. Foundation Studies in Sociology.**

This course provides prerequisite knowledge required for success in graduate-level coursework in Sociology. Course content varies depending on academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**SOCI 5306. Sociological Theory Seminar.**

This graduate theory course examines the role of social theory in the historical and contemporary quest for knowledge and understanding of society. The first half of the course emphasizes the European Classics. The second half of the course is devoted to contemporary theory. Emphasis throughout will be on using theory to better understand current events and everyday life experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5307. Advanced Statistics for the Social Sciences.**

Application of advanced statistical theory and methods to the analysis of social data. Prerequisite: SOCI 3307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5308. Seminar in Quantitative Research Methods.**

The application of research methods to social science with emphasis on direct, practical experience in research. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5309. Seminar in Qualitative Research Methods.**

This course examines qualitative methods in Sociology. Topics include examples of classical and modern qualitative research, and issues related to qualitative research. Students critique qualitative studies and conduct and defend a qualitative project. Departmental approval needed for non-majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5316. Seminar in Deviation and Social Problems.**

A systematic analysis of contemporary social problems and various types of social deviation. Emphasis is on the socialization process as it relates to social problems and human deviation. The sociological explanation of underlying factors will be stressed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5318. Seminar in Advanced Data Applications.**

This course will cover the application of various statistical techniques, such as chi-square, correlation, and regression while introducing statistical analysis to students using software such as SPSS.

Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5319. Seminar in Social Psychology.**

A critical appraisal of the major theories and theorists found in Social Psychology with emphasis on their application to contemporary social and psychological issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5320. Seminar in Demography.**

A seminar in the study of population with emphasis on sources of demographic data, techniques of demographic analysis, and population composition and forecasts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5322. Impact Analysis Research.**

This course is designed to introduce students to the assessment of organizational impact. It addresses both the historical development and social functions of evaluation, as well as practical application of assessment research. Emphasis will be on appropriate research design, implementing the design, and analysis of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5323. Grant Writing for the Social Sciences.**

This course offers an applied approach to developing grant-writing skills for the social scientist. It will cover all aspects of proposal development including idea generation, funding source identification, project description, project plan, project management, evaluation methods, and budget preparation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5350. Seminar on the Sociology of Gender.**

This course is a graduate level seminar on the study of gender in sociology with a focus on issues of race, ethnicity, social class, and sexuality. We will examine the major contemporary scholarly debates about gender and explore how gender issues are embedded in different institutions and organizations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5351. Introduction to Dementia Studies.**

This course is an introduction to the social-scientific study of the causes and consequences of dementia, as well as to issues related to the care of persons with dementia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5352. Dementia and Caregiving.**

This course for the Dementia and Aging Studies degree covers current research on policy and support for caregivers of persons with dementia, with an emphasis on the applied sociological focus of caregiver training and education. The course also addresses broader public sociology issues of caregiving and healthcare.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5353. Seminar in the Community.**

A study of contemporary urban society with emphasis on understanding the social structure as a prerequisite to planning and problem solving at the community level. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5354. Theoretical Perspectives in Aging and Dementia.**

This course discusses theories of aging from biological, psychological, and social science perspectives. The course also demonstrates how these theories can be applied to analyzing various aging issues, particularly the social care of persons with Alzheimer's disease and other dementias.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5355. The Social Psychology of Dementia.**

This course analyzes the social construction of dementia and salient social psychological theories, concepts, and research in dementia studies. It investigates the social psychology of dementia in relation to mind, identity, stereotypes, prejudice, attributions, socialization, emotions, social interaction and the impact of institutions on the self.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5356. End of Life Care.**

This course focuses on issues of dying and death. Topics covered include symptom management, palliative care, hospice, pain control, life-sustaining treatment and spiritual, legal and ethical issues related to dying and death. Also covered will be different religious views on euthanasia, dying, death, and funerals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5357. Gender and Aging in Society.**

This course is a seminar on the study of gender and aging. This seminar will examine issues of aging identities, the aging body, sexuality, health and medicine, and caregiving among older adults. This course emphasizes the aging experience in our culture as a fundamentally gendered phenomenon. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5359. Seminar in Drugs and Society.**

A sociological examination of the use of legal and illegal drugs in society, with emphasis on topics such as the "war on drugs," the pharmaceutical industry, and drugs as technologies of medicalization, as well as incentives to social change. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5361. Aging and Dementia: Racial and Ethnic Minorities.**

This course provides an analysis of how race and ethnicity affect aging and dementia, with particular emphasis on the United States. The course examines health and quality of life of racial and ethnic minorities in later life, social factors that influence these differences, and means of intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5362. Rural Aging and Dementia.**

This graduate course examines aging and dementia issues in rural America. Demographic trends, cultural and economic changes, and intervention strategies will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5363. Seminar in Medical Sociology.**

A seminar on selected topics of human health and health care organizations. Topics to be stressed include: social causes and consequences of morbidity and mortality, professionalization and socialization of health care practitioners, organization of health institutions, and demographic changes in health problems and needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5364. Clinical Gerontology: Interventions for Elders and Persons with Dementia.**

This course takes a clinical sociology perspective in studying the issues of the aged and persons with dementia. The approach is humanistic and multidisciplinary, seeking to improve the quality of older persons' lives by assessing situations and reducing problems using analysis and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5366. Social Inequality: Race, Class, and Gender in the United States.**

This course investigates the topic of social inequality. The intersections of class, race and gender as they produce inequality are explored, along with theoretical perspectives and empirical evidence informing the study of social inequality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5367. Seminar in Sustainable Cities.**

This course analyzes the complex relationship between urbanization and environmental change from a sociological perspective. Overarching themes include sustainability and environmental justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5368. Seminar in Environmental Sociology.**

This course situates societies within their ecological context and vice versa. Focusing upon social and environmental interactions, including the interactions of social organization, inequality, and policy, provides a comprehensive understanding of the physical and social milieu. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5370. Seminar in Sociology of Racial and Ethnic Relations.**

This course examines the dynamics of dominant and subordinate social groups. The course focuses on racial, ethnic, and class differences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5371. Directed Study.**

Course of independent study open to individual students only at the invitation of the faculty member with the approval of the department chair and the graduate advisor. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5383. Seminar on Aging.**

This course provides graduate students with an opportunity to examine national and global issues involved with the aging process and population aging from a social scientific and multicultural perspective. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5388F. Seminar in Poverty.**

This course is a graduate seminar on the sociological study of US poverty and social mobility. We will examine poverty measurement and trends, poverty-related social policies, theories for explaining poverty and mobility, and the intersection of poverty and social mobility with issues of gender, race, family structure, and place. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388G. Seminar in Food and Society.**

This graduate course focuses on the sociological study of food. It examines the current food system and its interactions with macro-level social institutions, as well as individual identity and well-being. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388H. Advanced Statistical Analysis II.**

The focus of this course is advanced data analysis. This course will cover topics such as regression, limited dependent variables analysis, and time series analysis. A secondary aim is to demonstrate data analyses using popular software packages. Prerequisite: SOCI 5307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**SOCI 5388J. Applied Survey Research.**

This course offers an applied approach to learning about survey methods. The course links research on survey construction and implementation to practical applications in which students solve problems associated with real-world survey instruments. Students will learn appropriate survey research terminology, as well as how to communicate in an effective and non-technical manner to others in need of survey assistance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5390. Seminar in Globalization and Development.**

This seminar explores issues related to socioeconomic development and change, particularly in the "Global south." The course will focus on factors affecting development and underdevelopment around the world. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5395. Global Insecurity.**

This graduate seminar covers global, socially constructed risks perceived as threats to sustainable development. Topics include theories of globalization and insecurity; an assessment of threats to democracy and human rights, the environment, food security, public health and safety; as well as local, national and international responses to these threats. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5398A. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5398B. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SOCI 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Sustainability Studies is specifically designed to prepare committed leaders to address emerging sustainability issues. Students completing the program will have the technical skills to formulate and solve problems at the appropriate scale, as well as the breadth of vision to recognize the inter-connectedness and complexity of human-environment systems. Graduates will be prepared for admission into strong doctoral programs or professional schools, and important positions in the growing field of sustainability-related careers within local, state, or federal government, regulatory agencies, non-governmental organizations, consulting firms and within relevant industries. The program is available to graduate students seeking a more diversified program of study than is generally available for students specializing in a single discipline. The program is open to any qualified graduate student, and is particularly relevant for those wishing to improve their subject matter competence in more than one discipline. The M.S. in Sustainability Studies is designed for students inclined toward social sciences, natural sciences, economics, policy, ethics or related fields. The program is tailored to accommodate both full-time and part-time graduate students.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://>

www.gradcollege.txstate.edu). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- current resume
- statement of purpose (approximately two pages, double-spaced with full name and contact information) regarding the student's interest in pursuing the M.A. degree and describing personal and career goals. Include academic interests and the relationship of this graduate degree to life/personal goals. Also, the statement should discuss the student's interest in this particular graduate program and the student's career goals after earning the degree. The Graduate Admissions Committee will evaluate the following:
  - Did the student demonstrate a familiarity with the field?
  - Did the student indicate his/her strengths (background, experience, training, and education)?
  - Did the student express why the program will hone his/her skills?
  - Did the student statement show excellence or promise in writing skills?
- three letters of recommendation from professionals competent to assess the student's interest in pursuing a career in this field of study. Two of the three letters must be from someone who can assess academic accomplishments and/or potential in the program.

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

Degree Requirements

The Master of Science (M.S.) degree with a major in Sustainability Studies requires 36 semester credit hours.

Course Requirements

Code	Title	Hours
Required Courses		
PHIL 5323	Environmental Ethics	3
SUST 5301	Seminar in Sustainability	3
SUST 5398	Professional Project	3
Choose 3-4 hours from the following:		3-4
ANTH 5305	Anthropological Statistics	
FCS 5302J	Statistics and Data Analysis for Family and Consumer Sciences	
GEO 5300	Applied Research Design and Techniques	
GEO 5301	Multivariate Quantitative Methods	
GEO 5415	Geographic Applications of Remote Sensing	
GEO 5418	Geographic Information Systems I	
GEO 5430	Field Methods	
PA 5390	Applied Research Methodology	
PS 5302	Political Research and Methodology	
SOCI 5307	Advanced Statistics for the Social Sciences	
SOCI 5308	Seminar in Quantitative Research Methods	
SOCI 5309	Seminar in Qualitative Research Methods	
SOCI 5388J	Applied Survey Research	
Prescribed Electives: Society and Environment		
Choose 3 hours from the following:		3
AG 5301	Agricultural Development and Policy	
AG 5302	Economics of Agricultural Production	
AG 5304	Economics of Sustainable Natural Resource Management	
AG 5355	Methods of Technological Change	
AG 5365	The Role of Animal Science in Society: An Integrated Approach	
BIO 5350M	Wildlife Policy and Law in North America	
BIO 7360U	Sustainability in a Changing World	
BLAW 5333	Legal Issues of Sustainability and Responsibility	
BLAW 5368I	International Business Ethics	
FCS 5305	Sustainable Housing	
GEO 5312	Managing Urbanization	
GEO 5313	Environmental Studies	
GEO 5314	Geographic Elements of Environmental Law	
GEO 5318	Environment Problems of the U.S.-Mexico Border	
GEO 5322	Interpretive Environmental Geography	
GEO 5323	Researching the City	
GEO 5326	Parks and Protected Places	
GEO 5329	Historical Geography of the Environment	
GEO 5330	Geography of Hazards	
GEO 5332	Environmental Geography of the Coastal Zone	
GEO 5349	Population Geography	
GEO 5351	Regional Waste Management	
GEO 5393D	Water Resource Planning	

MCS 5342	Sustainable Consumer Economy
PA 5351	Urban Sustainability Policy
PA 5353	Ecology and the Politics of Sustainability
PA 5355	Environmental Policy
PA 5380A	Texas Water Law and Policy
PHIL 5329	Food Ethics
PHIL 5360C	Philosophy, Nonviolence, Sustainability, and Social Change
SOCI 5353	Seminar in the Community
SOCI 5367	Seminar in Sustainable Cities
SOCI 5368	Seminar in Environmental Sociology
SOCI 5388G	Seminar in Food and Society
SOCI 5390	Seminar in Globalization and Development
SOCI 5395	Global Insecurity

**Prescribed Electives: Science and the Environment**

Choose 3-4 hours from the following: 3-4

AG 5320	Integrated Agricultural Production in Aquaponic Systems
AG 5323	Composting and Integrated Resource Management
AG 5324	Agroecology and Integrated Agriculture
AG 5426	Soil Health and Development
BIO 5415	Ichthyology
BIO 5470	Limnology
CSM 5368	Sustainable Construction
FCS 5307	Sustainable Lighting
MCS 5303	Sustainable Textiles
GEO 5316	Applied Physical Geography
GEO 5334	Applied Water Resources
GEO 5370	Seminar in Applied Physical Geography
GEO 5395	Problems in Applied Geography
TECH 5382	Industrial Ecology and Sustainability Engineering

**Prescribed Electives**

Choose 18 hours from the following: 18

AG 5301	Agricultural Development and Policy
AG 5302	Economics of Agricultural Production
AG 5304	Economics of Sustainable Natural Resource Management
AG 5320	Integrated Agricultural Production in Aquaponic Systems
AG 5323	Composting and Integrated Resource Management
AG 5324	Agroecology and Integrated Agriculture
AG 5355	Methods of Technological Change
AG 5365	The Role of Animal Science in Society: An Integrated Approach
AG 5426	Soil Health and Development
BIO 5350M	Wildlife Policy and Law in North America
BIO 5415	Ichthyology
BIO 5470	Limnology
BIO 7360U	Sustainability in a Changing World
BLAW 5333	Legal Issues of Sustainability and Responsibility
BLAW 5368I	International Business Ethics

CSM 5368	Sustainable Construction
ENG 5353	Studies in Medieval Literature
FCS 5305	Sustainable Housing
FCS 5307	Sustainable Lighting
GEO 5312	Managing Urbanization
GEO 5313	Environmental Studies
GEO 5314	Geographic Elements of Environmental Law
GEO 5316	Applied Physical Geography
GEO 5318	Environment Problems of the U.S.-Mexico Border
GEO 5322	Interpretive Environmental Geography
GEO 5323	Researching the City
GEO 5326	Parks and Protected Places
GEO 5329	Historical Geography of the Environment
GEO 5330	Geography of Hazards
GEO 5332	Environmental Geography of the Coastal Zone
GEO 5334	Applied Water Resources
GEO 5349	Population Geography
GEO 5351	Regional Waste Management
GEO 5370	Seminar in Applied Physical Geography
GEO 5393D	Water Resource Planning
GEO 5395	Problems in Applied Geography
MCS 5303	Sustainable Textiles
MCS 5342	Sustainable Consumer Economy
PA 5351	Urban Sustainability Policy
PA 5353	Ecology and the Politics of Sustainability
PA 5355	Environmental Policy
PA 5380A	Texas Water Law and Policy
PHIL 5329	Food Ethics
PHIL 5360C	Philosophy, Nonviolence, Sustainability, and Social Change
SOCI 5353	Seminar in the Community
SOCI 5367	Seminar in Sustainable Cities
SOCI 5368	Seminar in Environmental Sociology
SOCI 5388G	Seminar in Food and Society
SOCI 5390	Seminar in Globalization and Development
SOCI 5395	Global Insecurity
TECH 5382	Industrial Ecology and Sustainability Engineering

**Total Hours 36-38**

## Comprehensive Examination Requirement

An oral professional project defense is required. This oral defense will serve as the comprehensive examination requirement. If the project committee is not satisfied with a graduate student's oral defense, they specify all deficiencies the student must resolve. The project committee will not sign the Master's Comprehensive Examination Report Form until all specified deficiencies have been resolved. Should the project committee decide to hold a second oral defense, the chair of the project committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Sustainability Studies: SUST (p. 2700), SOCI (p. 2701)

## Courses Offered

### Sustainability Studies (SUST)

#### **SUST 5105. Practicum in Teaching.**

This course is an introduction to key concepts and practices in the teaching of college courses. It provides regular in-service training and planned periodic evaluations of instructional responsibilities. It is required for first-year teaching and instructional assistants in the MA and MS in Sustainability programs. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **SUST 5197. Directed Study.**

This course involves individual work with specific guidance from graduate faculty. Work may include participation in research, professional practice, and/or critical review of the related literature. Course may be repeated once for credit when topics vary.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **SUST 5198B. Professional Project II.**

This course represents a student's continuing enrollment to complete the professional project. The student continues to enroll in this course until the project is completed and approved by the committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **SUST 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **SUST 5297. Directed Study.**

This course involves individual work with specific guidance from graduate faculty. Work may include participation in research, professional practice, and/or critical review of the related literature. Course may be repeated once for credit when topics vary.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **SUST 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **SUST 5301. Seminar in Sustainability.**

The seminar in sustainability is an opportunity for students to learn about issues from a wide-ranging set of perspectives. The seminar is, by design, interdisciplinary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **SUST 5397. Directed Study.**

This course involves individual work with specific guidance from graduate faculty. Work may include participation in research, professional practice, and/or critical review of the related literature. Course may be repeated once for credit when topics vary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **SUST 5398. Professional Project.**

This course involves individual work related to a professional topic or project with specific guidance from graduate faculty. The project requires the completion of a rigorous paper that is the culmination of the final paper/project for the non-thesis degree in Sustainability Studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **SUST 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SUST 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **SUST 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **SUST 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## **Sociology (SOCI)**

**SOCI 5105. Practicum in Teaching Sociology.**

An introduction to key concepts and practices in the teaching of college course in Sociology. Provides regular in-service training and planned periodic evaluations of instructional responsibilities. Required for first-year teaching and instructional assistants in the Sociology Department. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**SOCI 5110. Proseminar in Sociology.**

This course will orient new graduate students to the department and the profession. Topics include presentations at professional meetings, academic writing and publishing, and putting together curriculum vitae.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5198B. Applied Research Practicum II.**

This course represents a student's continuing enrollment to complete the practicum project. The student continues to enroll in this course until the practicum project is approved by the practicum committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5300. Foundation Studies in Sociology.**

This course provides prerequisite knowledge required for success in graduate-level coursework in Sociology. Course content varies depending on academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**SOCI 5306. Sociological Theory Seminar.**

This graduate theory course examines the role of social theory in the historical and contemporary quest for knowledge and understanding of society. The first half of the course emphasizes the European Classics. The second half of the course is devoted to contemporary theory. Emphasis throughout will be on using theory to better understand current events and everyday life experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5307. Advanced Statistics for the Social Sciences.**

Application of advanced statistical theory and methods to the analysis of social data. Prerequisite: SOCI 3307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5308. Seminar in Quantitative Research Methods.**

The application of research methods to social science with emphasis on direct, practical experience in research. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5309. Seminar in Qualitative Research Methods.**

This course examines qualitative methods in Sociology. Topics include examples of classical and modern qualitative research, and issues related to qualitative research. Students critique qualitative studies and conduct and defend a qualitative project. Departmental approval needed for non-majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5316. Seminar in Deviation and Social Problems.**

A systematic analysis of contemporary social problems and various types of social deviation. Emphasis is on the socialization process as it relates to social problems and human deviation. The sociological explanation of underlying factors will be stressed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SOCI 5318. Seminar in Advanced Data Applications.**

This course will cover the application of various statistical techniques, such as chi-square, correlation, and regression while introducing statistical analysis to students using software such as SPSS.

Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5319. Seminar in Social Psychology.**

A critical appraisal of the major theories and theorists found in Social Psychology with emphasis on their application to contemporary social and psychological issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5320. Seminar in Demography.**

A seminar in the study of population with emphasis on sources of demographic data, techniques of demographic analysis, and population composition and forecasts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5322. Impact Analysis Research.**

This course is designed to introduce students to the assessment of organizational impact. It addresses both the historical development and social functions of evaluation, as well as practical application of assessment research. Emphasis will be on appropriate research design, implementing the design, and analysis of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5323. Grant Writing for the Social Sciences.**

This course offers an applied approach to developing grant-writing skills for the social scientist. It will cover all aspects of proposal development including idea generation, funding source identification, project description, project plan, project management, evaluation methods, and budget preparation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5350. Seminar on the Sociology of Gender.**

This course is a graduate level seminar on the study of gender in sociology with a focus on issues of race, ethnicity, social class, and sexuality. We will examine the major contemporary scholarly debates about gender and explore how gender issues are embedded in different institutions and organizations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5351. Introduction to Dementia Studies.**

This course is an introduction to the social-scientific study of the causes and consequences of dementia, as well as to issues related to the care of persons with dementia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5352. Dementia and Caregiving.**

This course for the Dementia and Aging Studies degree covers current research on policy and support for caregivers of persons with dementia, with an emphasis on the applied sociological focus of caregiver training and education. The course also addresses broader public sociology issues of caregiving and healthcare.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5353. Seminar in the Community.**

A study of contemporary urban society with emphasis on understanding the social structure as a prerequisite to planning and problem solving at the community level. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5354. Theoretical Perspectives in Aging and Dementia.**

This course discusses theories of aging from biological, psychological, and social science perspectives. The course also demonstrates how these theories can be applied to analyzing various aging issues, particularly the social care of persons with Alzheimer's disease and other dementias.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5355. The Social Psychology of Dementia.**

This course analyzes the social construction of dementia and salient social psychological theories, concepts, and research in dementia studies. It investigates the social psychology of dementia in relation to mind, identity, stereotypes, prejudice, attributions, socialization, emotions, social interaction and the impact of institutions on the self.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5356. End of Life Care.**

This course focuses on issues of dying and death. Topics covered include symptom management, palliative care, hospice, pain control, life-sustaining treatment and spiritual, legal and ethical issues related to dying and death. Also covered will be different religious views on euthanasia, dying, death, and funerals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5357. Gender and Aging in Society.**

This course is a seminar on the study of gender and aging. This seminar will examine issues of aging identities, the aging body, sexuality, health and medicine, and caregiving among older adults. This course emphasizes the aging experience in our culture as a fundamentally gendered phenomenon. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5359. Seminar in Drugs and Society.**

A sociological examination of the use of legal and illegal drugs in society, with emphasis on topics such as the "war on drugs," the pharmaceutical industry, and drugs as technologies of medicalization, as well as incentives to social change. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5361. Aging and Dementia: Racial and Ethnic Minorities.**

This course provides an analysis of how race and ethnicity affect aging and dementia, with particular emphasis on the United States. The course examines health and quality of life of racial and ethnic minorities in later life, social factors that influence these differences, and means of intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5362. Rural Aging and Dementia.**

This graduate course examines aging and dementia issues in rural America. Demographic trends, cultural and economic changes, and intervention strategies will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5363. Seminar in Medical Sociology.**

A seminar on selected topics of human health and health care organizations. Topics to be stressed include: social causes and consequences of morbidity and mortality, professionalization and socialization of health care practitioners, organization of health institutions, and demographic changes in health problems and needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5364. Clinical Gerontology: Interventions for Elders and Persons with Dementia.**

This course takes a clinical sociology perspective in studying the issues of the aged and persons with dementia. The approach is humanistic and multidisciplinary, seeking to improve the quality of older persons' lives by assessing situations and reducing problems using analysis and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5366. Social Inequality: Race, Class, and Gender in the United States.**

This course investigates the topic of social inequality. The intersections of class, race and gender as they produce inequality are explored, along with theoretical perspectives and empirical evidence informing the study of social inequality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5367. Seminar in Sustainable Cities.**

This course analyzes the complex relationship between urbanization and environmental change from a sociological perspective. Overarching themes include sustainability and environmental justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5368. Seminar in Environmental Sociology.**

This course situates societies within their ecological context and vice versa. Focusing upon social and environmental interactions, including the interactions of social organization, inequality, and policy, provides a comprehensive understanding of the physical and social milieu. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5370. Seminar in Sociology of Racial and Ethnic Relations.**

This course examines the dynamics of dominant and subordinate social groups. The course focuses on racial, ethnic, and class differences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5371. Directed Study.**

Course of independent study open to individual students only at the invitation of the faculty member with the approval of the department chair and the graduate advisor. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5383. Seminar on Aging.**

This course provides graduate students with an opportunity to examine national and global issues involved with the aging process and population aging from a social scientific and multicultural perspective. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5388F. Seminar in Poverty.**

This course is a graduate seminar on the sociological study of US poverty and social mobility. We will examine poverty measurement and trends, poverty-related social policies, theories for explaining poverty and mobility, and the intersection of poverty and social mobility with issues of gender, race, family structure, and place. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388G. Seminar in Food and Society.**

This graduate course focuses on the sociological study of food. It examines the current food system and its interactions with macro-level social institutions, as well as individual identity and well-being. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388H. Advanced Statistical Analysis II.**

The focus of this course is advanced data analysis. This course will cover topics such as regression, limited dependent variables analysis, and time series analysis. A secondary aim is to demonstrate data analyses using popular software packages. Prerequisite: SOCI 5307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5388J. Applied Survey Research.**

This course offers an applied approach to learning about survey methods. The course links research on survey construction and implementation to practical applications in which students solve problems associated with real-world survey instruments. Students will learn appropriate survey research terminology, as well as how to communicate in an effective and non-technical manner to others in need of survey assistance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5390. Seminar in Globalization and Development.**

This seminar explores issues related to socioeconomic development and change, particularly in the "Global south." The course will focus on factors affecting development and underdevelopment around the world. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5395. Global Insecurity.**

This graduate seminar covers global, socially constructed risks perceived as threats to sustainable development. Topics include theories of globalization and insecurity; an assessment of threats to democracy and human rights, the environment, food security, public health and safety; as well as local, national and international responses to these threats. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5398A. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5398B. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SOCI 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Sustainability Studies is specifically designed to prepare committed leaders to address emerging sustainability issues. Students completing the program will have the technical skills to formulate and solve problems at the appropriate scale, as well as the breadth of vision to recognize the inter-connectedness and complexity of human-environment systems. Graduates will be prepared for admission into strong doctoral programs or professional schools, and important positions in the growing field of sustainability-related careers within local, state, or federal government, regulatory agencies, non-governmental organizations, consulting firms and within relevant industries. The program is available to graduate students seeking a more diversified program of study than is generally available for students specializing in a single discipline. The program is open to any qualified graduate student, and is particularly relevant for those wishing to improve their subject matter competence in more than one discipline. The M.S. in Sustainability Studies is designed for students inclined toward social sciences, natural sciences, economics, policy, ethics or related fields. The program is tailored to accommodate both full-time and part-time graduate students.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- current resume
- statement of purpose (approximately two pages, double-spaced with full name and contact information) regarding the student's interest in pursuing the M.A. degree and describing personal and career goals. Include academic interests and the relationship of this graduate degree to life/personal goals. Also, the statement should discuss the student's interest in this particular graduate program and the student's career goals after earning the degree. The Graduate Admissions Committee will evaluate the following:
  - Did the student demonstrate a familiarity with the field?
  - Did the student indicate his/her strengths (background, experience, training, and education)?
  - Did the student express why the program will hone his/her skills?
  - Did the student statement show excellence or promise in writing skills?
- three letters of recommendation from professionals competent to assess the student's interest in pursuing a career in this field of study. Two of the three letters must be from someone who can assess academic accomplishments and/or potential in the program.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Science (M.S.) degree with a major in Sustainability Studies requires 36 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
PHIL 5323	Environmental Ethics	3
SUST 5301	Seminar in Sustainability	3
Choose 3-4 hours from the following:		3-4
ANTH 5305	Anthropological Statistics	
FCS 5302J	Statistics and Data Analysis for Family and Consumer Sciences	
GEO 5300	Applied Research Design and Techniques	
GEO 5301	Multivariate Quantitative Methods	
GEO 5415	Geographic Applications of Remote Sensing	

GEO 5418	Geographic Information Systems I
GEO 5430	Field Methods
PA 5390	Applied Research Methodology
PS 5302	Political Research and Methodology
SOCI 5307	Advanced Statistics for the Social Sciences
SOCI 5308	Seminar in Quantitative Research Methods
SOCI 5309	Seminar in Qualitative Research Methods
SOCI 5388J	Applied Survey Research
<b>Prescribed Electives: Society and Environment</b>	
Choose 3 hours from the following:	
AG 5301	Agricultural Development and Policy
AG 5302	Economics of Agricultural Production
AG 5304	Economics of Sustainable Natural Resource Management
AG 5355	Methods of Technological Change
AG 5365	The Role of Animal Science in Society: An Integrated Approach
BIO 5350M	Wildlife Policy and Law in North America
BIO 7360U	Sustainability in a Changing World
BLAW 5333	Legal Issues of Sustainability and Responsibility
BLAW 5368I	International Business Ethics
FCS 5305	Sustainable Housing
GEO 5312	Managing Urbanization
GEO 5313	Environmental Studies
GEO 5314	Geographic Elements of Environmental Law
GEO 5318	Environment Problems of the U.S.-Mexico Border
GEO 5322	Interpretive Environmental Geography
GEO 5323	Researching the City
GEO 5326	Parks and Protected Places
GEO 5329	Historical Geography of the Environment
GEO 5330	Geography of Hazards
GEO 5332	Environmental Geography of the Coastal Zone
GEO 5349	Population Geography
GEO 5351	Regional Waste Management
GEO 5393D	Water Resource Planning
MCS 5342	Sustainable Consumer Economy
PA 5351	Urban Sustainability Policy
PA 5353	Ecology and the Politics of Sustainability
PA 5355	Environmental Policy
PA 5380A	Texas Water Law and Policy
PHIL 5329	Food Ethics
PHIL 5360C	Philosophy, Nonviolence, Sustainability, and Social Change
SOCI 5353	Seminar in the Community
SOCI 5367	Seminar in Sustainable Cities
SOCI 5368	Seminar in Environmental Sociology
SOCI 5388G	Seminar in Food and Society
SOCI 5390	Seminar in Globalization and Development
SOCI 5395	Global Insecurity
<b>Prescribed Electives: Science and the Environment</b>	
Choose 3-4 hours from the following:	
AG 5320	Integrated Agricultural Production in Aquaponic Systems

AG 5323	Composting and Integrated Resource Management
AG 5324	Agroecology and Integrated Agriculture
AG 5426	Soil Health and Development
BIO 5415	Ichthyology
BIO 5470	Limnology
CSM 5368	Sustainable Construction
FCS 5307	Sustainable Lighting
MCS 5303	Sustainable Textiles
GEO 5316	Applied Physical Geography
GEO 5334	Applied Water Resources
GEO 5370	Seminar in Applied Physical Geography
GEO 5395	Problems in Applied Geography
TECH 5382	Industrial Ecology and Sustainability Engineering
<b>Prescribed Electives</b>	
Choose 15 hours from the following:	
AG 5301	Agricultural Development and Policy
AG 5302	Economics of Agricultural Production
AG 5304	Economics of Sustainable Natural Resource Management
AG 5320	Integrated Agricultural Production in Aquaponic Systems
AG 5323	Composting and Integrated Resource Management
AG 5324	Agroecology and Integrated Agriculture
AG 5355	Methods of Technological Change
AG 5365	The Role of Animal Science in Society: An Integrated Approach
AG 5426	Soil Health and Development
BIO 5350M	Wildlife Policy and Law in North America
BIO 5415	Ichthyology
BIO 5470	Limnology
BIO 7360U	Sustainability in a Changing World
BLAW 5333	Legal Issues of Sustainability and Responsibility
BLAW 5368I	International Business Ethics
CSM 5368	Sustainable Construction
ENG 5353	Studies in Medieval Literature
FCS 5305	Sustainable Housing
FCS 5307	Sustainable Lighting
GEO 5312	Managing Urbanization
GEO 5313	Environmental Studies
GEO 5314	Geographic Elements of Environmental Law
GEO 5316	Applied Physical Geography
GEO 5318	Environment Problems of the U.S.-Mexico Border
GEO 5322	Interpretive Environmental Geography
GEO 5323	Researching the City
GEO 5326	Parks and Protected Places
GEO 5329	Historical Geography of the Environment
GEO 5330	Geography of Hazards
GEO 5332	Environmental Geography of the Coastal Zone
GEO 5334	Applied Water Resources
GEO 5349	Population Geography
GEO 5351	Regional Waste Management



GEO 5370	Seminar in Applied Physical Geography	
GEO 5393D	Water Resource Planning	
GEO 5395	Problems in Applied Geography	
MCS 5303	Sustainable Textiles	
MCS 5342	Sustainable Consumer Economy	
PA 5351	Urban Sustainability Policy	
PA 5353	Ecology and the Politics of Sustainability	
PA 5355	Environmental Policy	
PA 5380A	Texas Water Law and Policy	
PHIL 5329	Food Ethics	
PHIL 5360C	Philosophy, Nonviolence, Sustainability, and Social Change	
SOCI 5353	Seminar in the Community	
SOCI 5367	Seminar in Sustainable Cities	
SOCI 5368	Seminar in Environmental Sociology	
SOCI 5388G	Seminar in Food and Society	
SOCI 5390	Seminar in Globalization and Development	
SOCI 5395	Global Insecurity	
TECH 5382	Industrial Ecology and Sustainability Engineering	
<b>Thesis</b>		
SUST 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
SUST 5199B	Thesis	
SUST 5299B	Thesis	
SUST 5399B	Thesis	
SUST 5599B	Thesis	
<b>Total Hours</b>		<b>36-38</b>

## Comprehensive Examination Requirement

An oral thesis defense is required. This oral defense will serve as the comprehensive examination requirement. If the thesis committee is not satisfied with a graduate student's oral defense, they specify all deficiencies the student must resolve. The thesis committee will not sign the Master's Comprehensive Examination Report Form and the Thesis Submission Approval Form until all specified deficiencies have been resolved. Should the thesis committee decide to hold a second oral defense, the chair of the thesis committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline.

Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Sustainability Studies: SUST (p. 2708), SOCI (p. 2709)

## Courses Offered

### Sustainability Studies (SUST)

#### SUST 5105. Practicum in Teaching.

This course is an introduction to key concepts and practices in the teaching of college courses. It provides regular in-service training and planned periodic evaluations of instructional responsibilities. It is required for first-year teaching and instructional assistants in the MA and MS in Sustainability programs. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### SUST 5197. Directed Study.

This course involves individual work with specific guidance from graduate faculty. Work may include participation in research, professional practice, and/or critical review of the related literature. Course may be repeated once for credit when topics vary.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### SUST 5198B. Professional Project II.

This course represents a student's continuing enrollment to complete the professional project. The student continues to enroll in this course until the project is completed and approved by the committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### SUST 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### SUST 5297. Directed Study.

This course involves individual work with specific guidance from graduate faculty. Work may include participation in research, professional practice, and/or critical review of the related literature. Course may be repeated once for credit when topics vary.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### SUST 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### SUST 5301. Seminar in Sustainability.

The seminar in sustainability is an opportunity for students to learn about issues from a wide-ranging set of perspectives. The seminar is, by design, interdisciplinary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### SUST 5397. Directed Study.

This course involves individual work with specific guidance from graduate faculty. Work may include participation in research, professional practice, and/or critical review of the related literature. Course may be repeated once for credit when topics vary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SUST 5398. Professional Project.**

This course involves individual work related to a professional topic or project with specific guidance from graduate faculty. The project requires the completion of a rigorous paper that is the culmination of the final paper/project for the non-thesis degree in Sustainability Studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SUST 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SUST 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Sociology (SOCI)****SOCI 5105. Practicum in Teaching Sociology.**

An introduction to key concepts and practices in the teaching of college course in Sociology. Provides regular in-service training and planned periodic evaluations of instructional responsibilities. Required for first-year teaching and instructional assistants in the Sociology Department. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**SOCI 5110. Proseminar in Sociology.**

This course will orient new graduate students to the department and the profession. Topics include presentations at professional meetings, academic writing and publishing, and putting together curriculum vitae.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5198B. Applied Research Practicum II.**

This course represents a student's continuing enrollment to complete the practicum project. The student continues to enroll in this course until the practicum project is approved by the practicum committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5300. Foundation Studies in Sociology.**

This course provides prerequisite knowledge required for success in graduate-level coursework in Sociology. Course content varies depending on academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**SOCI 5306. Sociological Theory Seminar.**

This graduate theory course examines the role of social theory in the historical and contemporary quest for knowledge and understanding of society. The first half of the course emphasizes the European Classics. The second half of the course is devoted to contemporary theory. Emphasis throughout will be on using theory to better understand current events and everyday life experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5307. Advanced Statistics for the Social Sciences.**

Application of advanced statistical theory and methods to the analysis of social data. Prerequisite: SOCI 3307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5308. Seminar in Quantitative Research Methods.**

The application of research methods to social science with emphasis on direct, practical experience in research. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5309. Seminar in Qualitative Research Methods.**

This course examines qualitative methods in Sociology. Topics include examples of classical and modern qualitative research, and issues related to qualitative research. Students critique qualitative studies and conduct and defend a qualitative project. Departmental approval needed for non-majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5316. Seminar in Deviation and Social Problems.**

A systematic analysis of contemporary social problems and various types of social deviation. Emphasis is on the socialization process as it relates to social problems and human deviation. The sociological explanation of underlying factors will be stressed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5318. Seminar in Advanced Data Applications.**

This course will cover the application of various statistical techniques, such as chi-square, correlation, and regression while introducing statistical analysis to students using software such as SPSS. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5319. Seminar in Social Psychology.**

A critical appraisal of the major theories and theorists found in Social Psychology with emphasis on their application to contemporary social and psychological issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5320. Seminar in Demography.**

A seminar in the study of population with emphasis on sources of demographic data, techniques of demographic analysis, and population composition and forecasts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5322. Impact Analysis Research.**

This course is designed to introduce students to the assessment of organizational impact. It addresses both the historical development and social functions of evaluation, as well as practical application of assessment research. Emphasis will be on appropriate research design, implementing the design, and analysis of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5323. Grant Writing for the Social Sciences.**

This course offers an applied approach to developing grant-writing skills for the social scientist. It will cover all aspects of proposal development including idea generation, funding source identification, project description, project plan, project management, evaluation methods, and budget preparation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5350. Seminar on the Sociology of Gender.**

This course is a graduate level seminar on the study of gender in sociology with a focus on issues of race, ethnicity, social class, and sexuality. We will examine the major contemporary scholarly debates about gender and explore how gender issues are embedded in different institutions and organizations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5351. Introduction to Dementia Studies.**

This course is an introduction to the social-scientific study of the causes and consequences of dementia, as well as to issues related to the care of persons with dementia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5352. Dementia and Caregiving.**

This course for the Dementia and Aging Studies degree covers current research on policy and support for caregivers of persons with dementia, with an emphasis on the applied sociological focus of caregiver training and education. The course also addresses broader public sociology issues of caregiving and healthcare.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5353. Seminar in the Community.**

A study of contemporary urban society with emphasis on understanding the social structure as a prerequisite to planning and problem solving at the community level. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5354. Theoretical Perspectives in Aging and Dementia.**

This course discusses theories of aging from biological, psychological, and social science perspectives. The course also demonstrates how these theories can be applied to analyzing various aging issues, particularly the social care of persons with Alzheimer's disease and other dementias.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5355. The Social Psychology of Dementia.**

This course analyzes the social construction of dementia and salient social psychological theories, concepts, and research in dementia studies. It investigates the social psychology of dementia in relation to mind, identity, stereotypes, prejudice, attributions, socialization, emotions, social interaction and the impact of institutions on the self.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5356. End of Life Care.**

This course focuses on issues of dying and death. Topics covered include symptom management, palliative care, hospice, pain control, life-sustaining treatment and spiritual, legal and ethical issues related to dying and death. Also covered will be different religious views on euthanasia, dying, death, and funerals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5357. Gender and Aging in Society.**

This course is a seminar on the study of gender and aging. This seminar will examine issues of aging identities, the aging body, sexuality, health and medicine, and caregiving among older adults. This course emphasizes the aging experience in our culture as a fundamentally gendered phenomenon. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5359. Seminar in Drugs and Society.**

A sociological examination of the use of legal and illegal drugs in society, with emphasis on topics such as the "war on drugs," the pharmaceutical industry, and drugs as technologies of medicalization, as well as incentives to social change. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5361. Aging and Dementia: Racial and Ethnic Minorities.**

This course provides an analysis of how race and ethnicity affect aging and dementia, with particular emphasis on the United States. The course examines health and quality of life of racial and ethnic minorities in later life, social factors that influence these differences, and means of intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5362. Rural Aging and Dementia.**

This graduate course examines aging and dementia issues in rural America. Demographic trends, cultural and economic changes, and intervention strategies will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5363. Seminar in Medical Sociology.**

A seminar on selected topics of human health and health care organizations. Topics to be stressed include: social causes and consequences of morbidity and mortality, professionalization and socialization of health care practitioners, organization of health institutions, and demographic changes in health problems and needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5364. Clinical Gerontology: Interventions for Elders and Persons with Dementia.**

This course takes a clinical sociology perspective in studying the issues of the aged and persons with dementia. The approach is humanistic and multidisciplinary, seeking to improve the quality of older persons' lives by assessing situations and reducing problems using analysis and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5366. Social Inequality: Race, Class, and Gender in the United States.**

This course investigates the topic of social inequality. The intersections of class, race and gender as they produce inequality are explored, along with theoretical perspectives and empirical evidence informing the study of social inequality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5367. Seminar in Sustainable Cities.**

This course analyzes the complex relationship between urbanization and environmental change from a sociological perspective. Overarching themes include sustainability and environmental justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SOCI 5368. Seminar in Environmental Sociology.**

This course situates societies within their ecological context and vice versa. Focusing upon social and environmental interactions, including the interactions of social organization, inequality, and policy, provides a comprehensive understanding of the physical and social milieu. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5370. Seminar in Sociology of Racial and Ethnic Relations.**

This course examines the dynamics of dominant and subordinate social groups. The course focuses on racial, ethnic, and class differences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5371. Directed Study.**

Course of independent study open to individual students only at the invitation of the faculty member with the approval of the department chair and the graduate advisor. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5383. Seminar on Aging.**

This course provides graduate students with an opportunity to examine national and global issues involved with the aging process and population aging from a social scientific and multicultural perspective. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5388F. Seminar in Poverty.**

This course is a graduate seminar on the sociological study of US poverty and social mobility. We will examine poverty measurement and trends, poverty-related social policies, theories for explaining poverty and mobility, and the intersection of poverty and social mobility with issues of gender, race, family structure, and place. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388G. Seminar in Food and Society.**

This graduate course focuses on the sociological study of food. It examines the current food system and its interactions with macro-level social institutions, as well as individual identity and well-being. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388H. Advanced Statistical Analysis II.**

The focus of this course is advanced data analysis. This course will cover topics such as regression, limited dependent variables analysis, and time series analysis. A secondary aim is to demonstrate data analyses using popular software packages. Prerequisite: SOCI 5307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5388J. Applied Survey Research.**

This course offers an applied approach to learning about survey methods. The course links research on survey construction and implementation to practical applications in which students solve problems associated with real-world survey instruments. Students will learn appropriate survey research terminology, as well as how to communicate in an effective and non-technical manner to others in need of survey assistance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5390. Seminar in Globalization and Development.**

This seminar explores issues related to socioeconomic development and change, particularly in the "Global south." The course will focus on factors affecting development and underdevelopment around the world. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5395. Global Insecurity.**

This graduate seminar covers global, socially constructed risks perceived as threats to sustainable development. Topics include theories of globalization and insecurity; an assessment of threats to democracy and human rights, the environment, food security, public health and safety; as well as local, national and international responses to these threats. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5398A. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5398B. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SOCI 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

The graduate minor in Sociology requires 9 semester credit hours of advisor-approved Sociology courses.

Centennial Hall Room 214

Telephone: 512-245-2360 Fax: 512-245-8298

[www.worldlang.txstate.edu](https://www.worldlang.txstate.edu) (<https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.worldlang.txstate.edu&data=02%7C01%7Csg42%40txstate.edu%7Ca0d558661d564dce78b008d6ca74f39a%7Cb19c134a14c94d4caf65c420f94c8cbb%7C0%7C0%7C636919000996726585&sdata=VxGHBfbeeOPKN6oWiMjbmX%2B9XXo1D4FOiyyw99JbE%3D&reserved=0>)

The M.A. in Spanish in the Department of World Languages & Literatures equips our graduate students with knowledge and skills required for such diverse fields as international business, international law, foreign affairs & national security, translation, interpretation, politics, publishing,

journalism, broadcasting, and teaching. The M.A. also prepares students to enter Ph.D. programs (in Spanish and other disciplines), leading to careers in higher education research, instruction, administration, and other high-level professional fields. Recent placements of our M.A. graduates in doctoral programs include the University of Miami, the University of Texas at Austin, Texas A&M, Northeastern University, the University of Houston, the University of Arizona, and the University of North Carolina at Chapel Hill.

The faculty of the Department of World Languages & Literatures publish internationally and are recognized for their expertise in literature, linguistics, cultural studies, and film. The department also publishes *Letras Hispanas: Revista de Literatura y Cultura*, a peer-reviewed, open-access online journal of scholarly essays that engage topics in connection with Spanish, Latin American, and U.S. Latino literature and cultures.

## Master of Arts (M.A.)

- Major in Spanish (33-hour Non-thesis Option) (p. 2718)
- Major in Spanish (33-hour Non-thesis Internship Option) (p. 2713)
- Major in Spanish (33-hour Thesis Option) (p. 2722)
- Major in Spanish (36-hour Non-thesis Internship Option) (p. 2727)
- Major in Spanish (36-hour Non-thesis Minor and additional Spanish hours Option) (p. 2731)
- Major in Spanish (36-hour Thesis Option) (p. 2735)

## Certificate

- Professional Spanish (<http://mycatalog.txstate.edu/graduate/liberal-arts/world-languages-literatures/professional-spanish-certificate/>)

## Minor

- Spanish (p. 2740)

## Program Overview

The master of arts (M.A.) program in Spanish is a dynamic academic unit that combines research and applied learning in order to advance knowledge of the Spanish language and the literature and cultures of the Hispanic world. Its objective is to empower individuals to be productive in a global society. At Texas State, the Spanish M.A. program provides students with the foundation they need to:

1. serve in a wide range of public and private sector professions requiring a high degree of proficiency in Spanish,
2. pursue doctoral studies, and
3. teach in institutions of higher learning.

The M.A. program is designed for students interested in advancing their skills and knowledge within the context of organized research in Spanish language, literature, and culture.

The M.A. program with minor allows students to advance their skills and knowledge within the context of organized research in Spanish language, literature, and culture and to develop a minor interest in a related area. Students may choose among minors in the humanities, social sciences, education, or other disciplines, or they may develop special emphases in literary periods or areas such as Latin American studies, Medieval/Renaissance studies, Chicano/Chicana literature, critical theory, humanities, linguistics, education, or women's studies.

Financial Assistance

Qualified graduate students in the M.A. program may apply for appointments as instructional assistants or teaching assistants. Application forms for instructional assistantships and teaching assistantships are available from the department administrative assistant. For information on other scholarship programs for graduate students, contact The Graduate College.

Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College’s website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor’s degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in 12 or more upper division undergraduate hours in Spanish, including at least six hours of Spanish literature recommended (Students lacking sufficient background course work will be required to take leveling courses. Any required leveling course work must be complete with grades of B or better prior to admission.)
- GRE not required
- resume/CV
- statement of purpose written in Spanish (600 words) explaining professional and personal interest in the M.A. in Spanish
- three letters of recommendation

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

Degree Requirements

The Master of Arts (M.A.) degree with a major in Spanish requires 33 semester credit hours, including an internship. Students who do not have the appropriate background course work may be required to complete leveling courses.

Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
Choose 27 hours from the following:		27
SPAN 5310A	Voyages and Encounters in Spanish American Literature	
SPAN 5310B	Don Quijote	
SPAN 5310C	Poetry of Spain and Spanish America	
SPAN 5310D	Hispanic Literature: Gabriel García Márquez	
SPAN 5310E	Hispanic Literature: Hispanic Film	
SPAN 5311	Studies in Medieval and Golden Age Spanish Peninsular Literature	
SPAN 5312	Studies in Spanish Peninsular Literature from the Eighteenth Century to the Present	
SPAN 5313	Studies in South American Literatures	
SPAN 5314	Studies in Central American and Caribbean Literatures	
SPAN 5315	Studies in Mexican and Mexican-American Literatures	
SPAN 5316	Studies in Spanish Peninsular Culture	
SPAN 5317	Studies in the Cultures of the Americas	
SPAN 5318	Advanced Composition and Research Methods	
SPAN 5319	Synchronic Spanish Linguistics	
SPAN 5320	Diachronic Spanish Linguistics	
SPAN 5321	Spanish Applied Linguistics	
SPAN 5322	Spanish for the Professions	
SPAN 5390	Studies in Spanish Culture, Language, or Literature	
<b>Internship</b>		
SPAN 5600	Internship	6
<b>Total Hours</b>		<b>33</b>

Comprehensive Examination Requirement

Comprehensive exams in Spanish have a written and an oral component. The written component will cover the M.A. reading list. The oral component will consist of a Thesis/Internship defense or an oral exam based on the M.A. Reading List for those on the non-thesis/internship tracks.

Should a candidate not pass the exam, the candidate may petition in writing for a retake. The Graduate Studies Committee will evaluate each case individually. If the committee grants a retake, the candidate must complete the exam the following semester. A second retake is allowed only by special permission from the Division Chair and the Graduate

Advisor, and the candidate must complete the exam the following semester. See the Spanish Graduate Handbook for more details.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Modern Languages: SPAN

## Courses Offered

### Spanish (SPAN)

#### **SPAN 5100. Practicum in Teaching Spanish.**

Required as a condition of employment for graduate teaching and instructional assistants in their initial semester of employment. The course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **SPAN 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **SPAN 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **SPAN 5303. Spanish for Health Professionals.**

This course is designed for graduate students in the health professions who require knowledge of Spanish in the professional settings of nutrition, physical therapy, nursing, and respiratory therapy. Students develop elementary communicative proficiency and accuracy in the use of the Spanish language with Spanish-speaking clients, with an emphasis on oral communication. Along with basic structures and vocabulary utilized in health-care contexts, students learn essential information about Hispanic cultures. The course cannot be counted for credit in the Spanish M.A. program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **SPAN 5310A. Voyages and Encounters in Spanish American Literature.**

Thorough analysis of historical and fictional voyages. The course will address how encounters with indigenous, ethnic minority, and foreign cultures have influenced the development of individual, national and regional identities in Spanish America. Readings will include accounts of the Conquest, colonial texts, and literature for the 19th and 20th centuries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### **SPAN 5310B. Don Quijote.**

A close reading of the classic Spanish novel Don Quijote by Miguel de Cervantes. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### **SPAN 5310C. Poetry of Spain and Spanish America.**

A focus on the genre of poetry through a close reading of a selection of classical and contemporary poets from Spain and Spanish America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### **SPAN 5310D. Hispanic Literature: Gabriel García Márquez.**

A study of selected works of Nobel Prize author Gabriel García Márquez, focusing on literature, history, politics, and popular culture of Latin America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### **SPAN 5310E. Hispanic Literature: Hispanic Film.**

A study of Hispanic cultural issues through film and additional readings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310F. Contemporary Mexican Narratives.**

This course focuses on contemporary Mexican narratives. Students will study Mexico's literary trends such as La nueva narrativa, the Crack Generation, women's literature, and the new historic and testimonial fictions, in order to better understand the cultural process of the Mexico's society in the late 20th and early 21st centuries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5311. Studies in Medieval and Golden Age Spanish Peninsular Literature.**

Selections of fiction, poetry, theatre, essay, and film of medieval and Golden Age Spain. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5312. Studies in Spanish Peninsular Literature from the Eighteenth Century to the Present.**

Selections of fiction, poetry, theatre, essay, and film of Spain from the eighteenth century to the present. May be repeated once with different emphasis of additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5313. Studies in South American Literatures.**

Selections of fiction, poetry, theatre, essay, and film of South America. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5314. Studies in Central American and Caribbean Literatures.**

Selections of fiction, poetry, theatre, essay, and film of Central America and the Caribbean. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5315. Studies in Mexican and Mexican-American Literatures.**

Selections of Mexican and Mexican-American fiction, poetry, theatre, essay, and film. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5316. Studies in Spanish Peninsular Culture.**

Culture, history, and society in literature, film, art, music, folklore, and mass media of Spain. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5317. Studies in the Cultures of the Americas.**

Culture, history, and society in literature, film, art, music, folklore, and mass media of the Americas. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5318. Advanced Composition and Research Methods.**

This course focuses on the study of composition and grammar, textual analysis, and research methods. It may be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5319. Synchronic Spanish Linguistics.**

In this course students learn about Spanish dialectology, phonology, regional variation, migration impacts on language variety, issues of language maintenance and death, syntax, and current theories of language contact and koineization (i.e., the formation of new dialects). May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter



**SPAN 5320. Diachronic Spanish Linguistics.**

Evaluation of aspects of history of the Spanish language including pronunciation, word formation, sentence structure, dialects, and relations to other languages. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5321. Spanish Applied Linguistics.**

This course provides an overview of the major areas of applied linguistic research including: current theories in second language acquisition, teaching methodologies, bilingualism, performance, syntax, and computer assisted learning. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5322. Spanish for the Professions.**

Topics vary and include the study of Spanish for business, law, medicine, criminal justice, and/or the social sciences. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5323. Translation History and Theory.**

This course introduces students to the history and theory of translation. Students analyze historical and contemporary translation practices and theories and the inherent challenges and complexities of translating a source text into a target language. Students translate texts in a variety of genres to acquire proficiency in producing accurate translations from English to Spanish and Spanish to English. Prerequisite: 3.0 GPA in 12 hours of advanced undergraduate Spanish.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5324. Applied Translation Methods.**

This course is an introduction to applied translation methods. Students practice the specific tasks involved in the vocabulary, sentence structure, and cultural complexities of the translation process in Spanish and English while acquiring the proficiency to produce professional translations in fields such as advertising, business, healthcare, law, sports, and journalism. It may be repeated once for credit when its topic varies. Prerequisite: 3.0 GPA in 12 hours of advanced undergraduate Spanish.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPAN 5325. Professional Internship in Spanish.**

This course is a supervised work experience in a Spanish-speaking professional environment. Students will work a minimum of 140 hours, performing duties at least 80% in Spanish. Other requirements include internship reports as required by course instructor. (MC).

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5390. Studies in Spanish Culture, Language, or Literature.**

Independent study under supervision of a graduate faculty member in Spanish, with in-depth readings and research on a specific topic. May be repeated once with different emphasis for additional credit. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Spanish 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5600. Internship.**

This course consists of an internship of at least four weeks duration in the United States or in a Spanish-speaking country. Interns work with organizations that use Spanish in a professional context. Internships may be complemented by lectures, observations, interviews, or other activities relevant to the student's academic and professional interests. Graduate advisor approval required. Prerequisite: Completion of 18 credit hours required for the Master of Arts with a major in Spanish.

**6 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPAN 5999B. Thesis.**

This course represents a student’s continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Program Overview**

The master of arts (M.A.) program in Spanish is a dynamic academic unit that combines research and applied learning in order to advance knowledge of the Spanish language and the literature and cultures of the Hispanic world. Its objective is to empower individuals to be productive in a global society. At Texas State, the Spanish M.A. program provides students with the foundation they need to:

- 1. serve in a wide range of public and private sector professions requiring a high degree of proficiency in Spanish,
- 2. pursue doctoral studies, and
- 3. teach in institutions of higher learning.

The M.A. program is designed for students interested in advancing their skills and knowledge within the context of organized research in Spanish language, literature, and culture.

The M.A. program with minor allows students to advance their skills and knowledge within the context of organized research in Spanish language, literature, and culture and to develop a minor interest in a related area. Students may choose among minors in the humanities, social sciences, education, or other disciplines, or they may develop special emphases in literary periods or areas such as Latin American studies, Medieval/Renaissance studies, Chicano/Chicana literature, critical theory, humanities, linguistics, education, or women’s studies.

**Financial Assistance**

Qualified graduate students in the M.A. program may apply for appointments as instructional assistants or teaching assistants. Application forms for instructional assistantships and teaching assistantships are available from the department administrative assistant. For information on other scholarship programs for graduate students, contact The Graduate College.

**Application Requirements**

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College’s website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials

- baccalaureate degree from a regionally accredited university(Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor’s degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in 12 or more upper division undergraduate hours in Spanish, including at least six hours of Spanish literature recommended (Students lacking sufficient background course work will be required to take leveling courses. Any required leveling course work must be complete with grades of B or better prior to admission.)
- GRE not required
- resume/CV
- statement of purpose written in Spanish (600 words) explaining professional and personal interest in the M.A. in Spanish
- three letters of recommendation

**Approved English Proficiency Exam Scores**

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

**Degree Requirements**

The Master of Arts (M.A.) degree with a major in Spanish requires 33 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

**Course Requirements**

Code	Title	Hours
<b>Required Courses</b>		
Choose 33 hours from the following:		33
SPAN 5310A	Voyages and Encounters in Spanish American Literature	
SPAN 5310B	Don Quijote	
SPAN 5310C	Poetry of Spain and Spanish America	
SPAN 5310D	Hispanic Literature: Gabriel García Márquez	
SPAN 5310E	Hispanic Literature: Hispanic Film	
SPAN 5311	Studies in Medieval and Golden Age Spanish Peninsular Literature	
SPAN 5312	Studies in Spanish Peninsular Literature from the Eighteenth Century to the Present	
SPAN 5313	Studies in South American Literatures	

SPAN 5314	Studies in Central American and Caribbean Literatures	
SPAN 5315	Studies in Mexican and Mexican-American Literatures	
SPAN 5316	Studies in Spanish Peninsular Culture	
SPAN 5317	Studies in the Cultures of the Americas	
SPAN 5318	Advanced Composition and Research Methods	
SPAN 5319	Synchronic Spanish Linguistics	
SPAN 5320	Diachronic Spanish Linguistics	
SPAN 5321	Spanish Applied Linguistics	
SPAN 5322	Spanish for the Professions	
SPAN 5390	Studies in Spanish Culture, Language, or Literature	
<b>Total Hours</b>		<b>33</b>

## Comprehensive Examination Requirement

Comprehensive Exams in Spanish have a written and an oral component based on the M.A. Reading List. Should a candidate not pass the exam, the candidate may petition in writing for a retake. The Graduate Studies Committee will evaluate each case individually. If the committee grants a retake, the candidate must complete the exam the following semester. A second retake is allowed only by special permission from the Division Chair and the Graduate Advisor, and the candidate must complete the exam the following semester. See the Spanish Graduate Handbook for more details.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Modern Languages:  
SPAN

## Courses Offered

### Spanish (SPAN)

#### SPAN 5100. Practicum in Teaching Spanish.

Required as a condition of employment for graduate teaching and instructional assistants in their initial semester of employment. The course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### SPAN 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### SPAN 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### SPAN 5303. Spanish for Health Professionals.

This course is designed for graduate students in the health professions who require knowledge of Spanish in the professional settings of nutrition, physical therapy, nursing, and respiratory therapy. Students develop elementary communicative proficiency and accuracy in the use of the Spanish language with Spanish-speaking clients, with an emphasis on oral communication. Along with basic structures and vocabulary utilized in health-care contexts, students learn essential information about Hispanic cultures. The course cannot be counted for credit in the Spanish M.A. program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### SPAN 5310A. Voyages and Encounters in Spanish American Literature.

Thorough analysis of historical and fictional voyages. The course will address how encounters with indigenous, ethnic minority, and foreign cultures have influenced the development of individual, national and regional identities in Spanish America. Readings will include accounts of the Conquest, colonial texts, and literature for the 19th and 20th centuries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### SPAN 5310B. Don Quijote.

A close reading of the classic Spanish novel Don Quijote by Miguel de Cervantes. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### SPAN 5310C. Poetry of Spain and Spanish America.

A focus on the genre of poetry through a close reading of a selection of classical and contemporary poets from Spain and Spanish America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310D. Hispanic Literature: Gabriel García Márquez.**

A study of selected works of Nobel Prize author Gabriel García Márquez, focusing on literature, history, politics, and popular culture of Latin America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310E. Hispanic Literature: Hispanic Film.**

A study of Hispanic cultural issues through film and additional readings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310F. Contemporary Mexican Narratives.**

This course focuses on contemporary Mexican narratives. Students will study Mexico's literary trends such as La nueva narrativa, the Crack Generation, women's literature, and the new historic and testimonial fictions, in order to better understand the cultural process of the Mexico's society in the late 20th and early 21st centuries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5311. Studies in Medieval and Golden Age Spanish Peninsular Literature.**

Selections of fiction, poetry, theatre, essay, and film of medieval and Golden Age Spain. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5312. Studies in Spanish Peninsular Literature from the Eighteenth Century to the Present.**

Selections of fiction, poetry, theatre, essay, and film of Spain from the eighteenth century to the present. May be repeated once with different emphasis of additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5313. Studies in South American Literatures.**

Selections of fiction, poetry, theatre, essay, and film of South America. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5314. Studies in Central American and Caribbean Literatures.**

Selections of fiction, poetry, theatre, essay, and film of Central America and the Caribbean. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5315. Studies in Mexican and Mexican-American Literatures.**

Selections of Mexican and Mexican-American fiction, poetry, theatre, essay, and film. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5316. Studies in Spanish Peninsular Culture.**

Culture, history, and society in literature, film, art, music, folklore, and mass media of Spain. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5317. Studies in the Cultures of the Americas.**

Culture, history, and society in literature, film, art, music, folklore, and mass media of the Americas. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5318. Advanced Composition and Research Methods.**

This course focuses on the study of composition and grammar, textual analysis, and research methods. It may be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5319. Synchronic Spanish Linguistics.**

In this course students learn about Spanish dialectology, phonology, regional variation, migration impacts on language variety, issues of language maintenance and death, syntax, and current theories of language contact and koineization (i.e., the formation of new dialects). May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5320. Diachronic Spanish Linguistics.**

Evaluation of aspects of history of the Spanish language including pronunciation, word formation, sentence structure, dialects, and relations to other languages. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5321. Spanish Applied Linguistics.**

This course provides an overview of the major areas of applied linguistic research including: current theories in second language acquisition, teaching methodologies, bilingualism, performance, syntax, and computer assisted learning. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5322. Spanish for the Professions.**

Topics vary and include the study of Spanish for business, law, medicine, criminal justice, and/or the social sciences. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5323. Translation History and Theory.**

This course introduces students to the history and theory of translation. Students analyze historical and contemporary translation practices and theories and the inherent challenges and complexities of translating a source text into a target language. Students translate texts in a variety of genres to acquire proficiency in producing accurate translations from English to Spanish and Spanish to English. Prerequisite: 3.0 GPA in 12 hours of advanced undergraduate Spanish.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5324. Applied Translation Methods.**

This course is an introduction to applied translation methods. Students practice the specific tasks involved in the vocabulary, sentence structure, and cultural complexities of the translation process in Spanish and English while acquiring the proficiency to produce professional translations in fields such as advertising, business, healthcare, law, sports, and journalism. It may be repeated once for credit when its topic varies. Prerequisite: 3.0 GPA in 12 hours of advanced undergraduate Spanish.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPAN 5325. Professional Internship in Spanish.**

This course is a supervised work experience in a Spanish-speaking professional environment. Students will work a minimum of 140 hours, performing duties at least 80% in Spanish. Other requirements include internship reports as required by course instructor. (MC).

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5390. Studies in Spanish Culture, Language, or Literature.**

Independent study under supervision of a graduate faculty member in Spanish, with in-depth readings and research on a specific topic. May be repeated once with different emphasis for additional credit. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Spanish 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**SPAN 5600. Internship.**

This course consists of an internship of at least four weeks duration in the United States or in a Spanish-speaking country. Interns work with organizations that use Spanish in a professional context. Internships may be complemented by lectures, observations, interviews, or other activities relevant to the student's academic and professional interests. Graduate advisor approval required. Prerequisite: Completion of 18 credit hours required for the Master of Arts with a major in Spanish.

**6 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The master of arts (M.A.) program in Spanish is a dynamic academic unit that combines research and applied learning in order to advance knowledge of the Spanish language and the literature and cultures of the Hispanic world. Its objective is to empower individuals to be productive in a global society. At Texas State, the Spanish M.A. program provides students with the foundation they need to:

1. serve in a wide range of public and private sector professions requiring a high degree of proficiency in Spanish,
2. pursue doctoral studies, and
3. teach in institutions of higher learning.

The M.A. program is designed for students interested in advancing their skills and knowledge within the context of organized research in Spanish language, literature, and culture.

The M.A. program with minor allows students to advance their skills and knowledge within the context of organized research in Spanish language, literature, and culture and to develop a minor interest in a related area. Students may choose among minors in the humanities, social sciences, education, or other disciplines, or they may develop special emphases in literary periods or areas such as Latin American studies, Medieval/Renaissance studies, Chicano/Chicana literature, critical theory, humanities, linguistics, education, or women's studies.

## Financial Assistance

Qualified graduate students in the M.A. program may apply for appointments as instructional assistants or teaching assistants. Application forms for instructional assistantships and teaching assistantships are available from the department administrative assistant. For information on other scholarship programs for graduate students, contact The Graduate College.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes

to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in 12 or more upper division undergraduate hours in Spanish, including at least six hours of Spanish literature recommended (Students lacking sufficient background course work will be required to take leveling courses. Any required leveling course work must be complete with grades of B or better prior to admission.)
- GRE not required
- resume/CV
- statement of purpose written in Spanish (600 words) explaining professional and personal interest in the M.A. in Spanish
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Spanish requires 33 semester credit hours, including a thesis. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
Choose 27 hours from the following:		27
SPAN 5310A	Voyages and Encounters in Spanish American Literature	
SPAN 5310B	Don Quijote	
SPAN 5310C	Poetry of Spain and Spanish America	
SPAN 5310D	Hispanic Literature: Gabriel García Márquez	
SPAN 5310E	Hispanic Literature: Hispanic Film	
SPAN 5311	Studies in Medieval and Golden Age Spanish Peninsular Literature	
SPAN 5312	Studies in Spanish Peninsular Literature from the Eighteenth Century to the Present	
SPAN 5313	Studies in South American Literatures	
SPAN 5314	Studies in Central American and Caribbean Literatures	
SPAN 5315	Studies in Mexican and Mexican-American Literatures	
SPAN 5316	Studies in Spanish Peninsular Culture	
SPAN 5317	Studies in the Cultures of the Americas	
SPAN 5318	Advanced Composition and Research Methods	
SPAN 5319	Synchronic Spanish Linguistics	
SPAN 5320	Diachronic Spanish Linguistics	
SPAN 5321	Spanish Applied Linguistics	
SPAN 5322	Spanish for the Professions	
SPAN 5390	Studies in Spanish Culture, Language, or Literature	
<b>Thesis</b>		
SPAN 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
SPAN 5199B	Thesis	
SPAN 5299B	Thesis	
SPAN 5399B	Thesis	
SPAN 5599B	Thesis	
SPAN 5999B	Thesis	
<b>Total Hours</b>		<b>33</b>

## Comprehensive Examination Requirement

Comprehensive Exams in Spanish have a written and an oral component. The written component will cover the M.A. reading list. The oral component will consist of a thesis defense. Should a candidate not pass the exam, the candidate may petition in writing for a retake. The Graduate Studies Committee will evaluate each case individually. If the committee grants a retake, the candidate must complete the exam the following semester. A second retake is allowed only by special permission from the Division Chair and the Graduate Advisor, and the candidate must complete the exam the following semester. See the Spanish Graduate Handbook for more details.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent

thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Modern Languages: SPAN

## Courses Offered Spanish (SPAN)

### SPAN 5100. Practicum in Teaching Spanish.

Required as a condition of employment for graduate teaching and instructional assistants in their initial semester of employment. The course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### SPAN 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### SPAN 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### SPAN 5303. Spanish for Health Professionals.

This course is designed for graduate students in the health professions who require knowledge of Spanish in the professional settings of nutrition, physical therapy, nursing, and respiratory therapy. Students develop elementary communicative proficiency and accuracy in the use of the Spanish language with Spanish-speaking clients, with an emphasis on oral communication. Along with basic structures and vocabulary utilized in health-care contexts, students learn essential information about Hispanic cultures. The course cannot be counted for credit in the Spanish M.A. program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### SPAN 5310A. Voyages and Encounters in Spanish American Literature.

Thorough analysis of historical and fictional voyages. The course will address how encounters with indigenous, ethnic minority, and foreign cultures have influenced the development of individual, national and regional identities in Spanish America. Readings will include accounts of the Conquest, colonial texts, and literature for the 19th and 20th centuries. (MULT)

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310B. Don Quijote.**

A close reading of the classic Spanish novel Don Quijote by Miguel de Cervantes. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310C. Poetry of Spain and Spanish America.**

A focus on the genre of poetry through a close reading of a selection of classical and contemporary poets from Spain and Spanish America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310D. Hispanic Literature: Gabriel García Márquez.**

A study of selected works of Nobel Prize author Gabriel García Márquez, focusing on literature, history, politics, and popular culture of Latin America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310E. Hispanic Literature: Hispanic Film.**

A study of Hispanic cultural issues through film and additional readings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310F. Contemporary Mexican Narratives.**

This course focuses on contemporary Mexican narratives. Students will study Mexico's literary trends such as La nueva narrativa, the Crack Generation, women's literature, and the new historic and testimonial fictions, in order to better understand the cultural process of the Mexico's society in the late 20th and early 21st centuries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5311. Studies in Medieval and Golden Age Spanish Peninsular Literature.**

Selections of fiction, poetry, theatre, essay, and film of medieval and Golden Age Spain. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5312. Studies in Spanish Peninsular Literature from the Eighteenth Century to the Present.**

Selections of fiction, poetry, theatre, essay, and film of Spain from the eighteenth century to the present. May be repeated once with different emphasis of additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5313. Studies in South American Literatures.**

Selections of fiction, poetry, theatre, essay, and film of South America. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5314. Studies in Central American and Caribbean Literatures.**

Selections of fiction, poetry, theatre, essay, and film of Central America and the Caribbean. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5315. Studies in Mexican and Mexican-American Literatures.**

Selections of Mexican and Mexican-American fiction, poetry, theatre, essay, and film. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5316. Studies in Spanish Peninsular Culture.**

Culture, history, and society in literature, film, art, music, folklore, and mass media of Spain. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5317. Studies in the Cultures of the Americas.**

Culture, history, and society in literature, film, art, music, folklore, and mass media of the Americas. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5318. Advanced Composition and Research Methods.**

This course focuses on the study of composition and grammar, textual analysis, and research methods. It may be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5319. Synchronic Spanish Linguistics.**

In this course students learn about Spanish dialectology, phonology, regional variation, migration impacts on language variety, issues of language maintenance and death, syntax, and current theories of language contact and koineization (i.e., the formation of new dialects). May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5320. Diachronic Spanish Linguistics.**

Evaluation of aspects of history of the Spanish language including pronunciation, word formation, sentence structure, dialects, and relations to other languages. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5321. Spanish Applied Linguistics.**

This course provides an overview of the major areas of applied linguistic research including: current theories in second language acquisition, teaching methodologies, bilingualism, performance, syntax, and computer assisted learning. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5322. Spanish for the Professions.**

Topics vary and include the study of Spanish for business, law, medicine, criminal justice, and/or the social sciences. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5323. Translation History and Theory.**

This course introduces students to the history and theory of translation. Students analyze historical and contemporary translation practices and theories and the inherent challenges and complexities of translating a source text into a target language. Students translate texts in a variety of genres to acquire proficiency in producing accurate translations from English to Spanish and Spanish to English. Prerequisite: 3.0 GPA in 12 hours of advanced undergraduate Spanish.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5324. Applied Translation Methods.**

This course is an introduction to applied translation methods. Students practice the specific tasks involved in the vocabulary, sentence structure, and cultural complexities of the translation process in Spanish and English while acquiring the proficiency to produce professional translations in fields such as advertising, business, healthcare, law, sports, and journalism. It may be repeated once for credit when its topic varies. Prerequisite: 3.0 GPA in 12 hours of advanced undergraduate Spanish.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPAN 5325. Professional Internship in Spanish.**

This course is a supervised work experience in a Spanish-speaking professional environment. Students will work a minimum of 140 hours, performing duties at least 80% in Spanish. Other requirements include internship reports as required by course instructor. (MC).

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5390. Studies in Spanish Culture, Language, or Literature.**

Independent study under supervision of a graduate faculty member in Spanish, with in-depth readings and research on a specific topic. May be repeated once with different emphasis for additional credit. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Spanish 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**SPAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5600. Internship.**

This course consists of an internship of at least four weeks duration in the United States or in a Spanish-speaking country. Interns work with organizations that use Spanish in a professional context. Internships may be complemented by lectures, observations, interviews, or other activities relevant to the student's academic and professional interests. Graduate advisor approval required. Prerequisite: Completion of 18 credit hours required for the Master of Arts with a major in Spanish.

**6 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The master of arts (M.A.) program in Spanish is a dynamic academic unit that combines research and applied learning in order to advance knowledge of the Spanish language and the literature and cultures of the Hispanic world. Its objective is to empower individuals to be productive in a global society. At Texas State, the Spanish M.A. program provides students with the foundation they need to:

1. serve in a wide range of public and private sector professions requiring a high degree of proficiency in Spanish,
2. pursue doctoral studies, and
3. teach in institutions of higher learning.

The M.A. program is designed for students interested in advancing their skills and knowledge within the context of organized research in Spanish language, literature, and culture.

The M.A. program with minor allows students to advance their skills and knowledge within the context of organized research in Spanish language, literature, and culture and to develop a minor interest in a related area. Students may choose among minors in the humanities,

social sciences, education, or other disciplines, or they may develop special emphases in literary periods or areas such as Latin American studies, Medieval/Renaissance studies, Chicano/Chicana literature, critical theory, humanities, linguistics, education, or women's studies.

## Financial Assistance

Qualified graduate students in the M.A. program may apply for appointments as instructional assistants or teaching assistants. Application forms for instructional assistantships and teaching assistantships are available from the department administrative assistant. For information on other scholarship programs for graduate students, contact The Graduate College.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in 12 or more upper division undergraduate hours in Spanish, including at least six hours of Spanish literature recommended (Students lacking sufficient background course work will be required to take leveling courses. Any required leveling course work must be complete with grades of B or better prior to admission.)
- GRE not required
- resume/CV
- statement of purpose written in Spanish (600 words) explaining professional and personal interest in the M.A. in Spanish
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) major in Spanish requires 36 semester credit hours, including an internship and a minor. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
Choose 24 hours from the following:		24
SPAN 5310A	Voyages and Encounters in Spanish American Literature	
SPAN 5310B	Don Quijote	
SPAN 5310C	Poetry of Spain and Spanish America	
SPAN 5310D	Hispanic Literature: Gabriel García Márquez	
SPAN 5310E	Hispanic Literature: Hispanic Film	
SPAN 5311	Studies in Medieval and Golden Age Spanish Peninsular Literature	
SPAN 5312	Studies in Spanish Peninsular Literature from the Eighteenth Century to the Present	
SPAN 5313	Studies in South American Literatures	
SPAN 5314	Studies in Central American and Caribbean Literatures	
SPAN 5315	Studies in Mexican and Mexican-American Literatures	
SPAN 5316	Studies in Spanish Peninsular Culture	
SPAN 5317	Studies in the Cultures of the Americas	
SPAN 5318	Advanced Composition and Research Methods	
SPAN 5319	Synchronic Spanish Linguistics	
SPAN 5320	Diachronic Spanish Linguistics	
SPAN 5321	Spanish Applied Linguistics	
SPAN 5322	Spanish for the Professions	
SPAN 5390	Studies in Spanish Culture, Language, or Literature	
<b>Internship</b>		
SPAN 5600	Internship	6
<b>Minor</b>		
Choose a 6-hour advisor-approved minor		6
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

Comprehensive Exams in Spanish have a written and an oral component.

The written component will cover the M.A. reading list. The oral component will consist of a Internship defense. Should a candidate not pass the exam, the candidate may petition in writing for a retake. The Graduate Studies Committee will evaluate each case individually. If the committee grants a retake, the candidate must complete the

exam the following semester. A second retake is allowed only by special permission from the Division Chair and the Graduate Advisor, and the candidate must complete the exam the following semester. See the Spanish Graduate Handbook for more details.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Modern Languages: SPAN

## Courses Offered

### Spanish (SPAN)

#### SPAN 5100. Practicum in Teaching Spanish.

Required as a condition of employment for graduate teaching and instructional assistants in their initial semester of employment. The course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### SPAN 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### SPAN 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### SPAN 5303. Spanish for Health Professionals.

This course is designed for graduate students in the health professions who require knowledge of Spanish in the professional settings of nutrition, physical therapy, nursing, and respiratory therapy. Students develop elementary communicative proficiency and accuracy in the use of the Spanish language with Spanish-speaking clients, with an emphasis on oral communication. Along with basic structures and vocabulary utilized in health-care contexts, students learn essential information about Hispanic cultures. The course cannot be counted for credit in the Spanish M.A. program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5310A. Voyages and Encounters in Spanish American Literature.**

Thorough analysis of historical and fictional voyages. The course will address how encounters with indigenous, ethnic minority, and foreign cultures have influenced the development of individual, national and regional identities in Spanish America. Readings will include accounts of the Conquest, colonial texts, and literature for the 19th and 20th centuries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310B. Don Quijote.**

A close reading of the classic Spanish novel Don Quijote by Miguel de Cervantes. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310C. Poetry of Spain and Spanish America.**

A focus on the genre of poetry through a close reading of a selection of classical and contemporary poets from Spain and Spanish America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310D. Hispanic Literature: Gabriel García Márquez.**

A study of selected works of Nobel Prize author Gabriel García Márquez, focusing on literature, history, politics, and popular culture of Latin America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310E. Hispanic Literature: Hispanic Film.**

A study of Hispanic cultural issues through film and additional readings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310F. Contemporary Mexican Narratives.**

This course focuses on contemporary Mexican narratives. Students will study Mexico's literary trends such as La nueva narrativa, the Crack Generation, women's literature, and the new historic and testimonial fictions, in order to better understand the cultural process of the Mexico's society in the late 20th and early 21st centuries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5311. Studies in Medieval and Golden Age Spanish Peninsular Literature.**

Selections of fiction, poetry, theatre, essay, and film of medieval and Golden Age Spain. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5312. Studies in Spanish Peninsular Literature from the Eighteenth Century to the Present.**

Selections of fiction, poetry, theatre, essay, and film of Spain from the eighteenth century to the present. May be repeated once with different emphasis of additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5313. Studies in South American Literatures.**

Selections of fiction, poetry, theatre, essay, and film of South America. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5314. Studies in Central American and Caribbean Literatures.**

Selections of fiction, poetry, theatre, essay, and film of Central America and the Caribbean. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5315. Studies in Mexican and Mexican-American Literatures.**

Selections of Mexican and Mexican-American fiction, poetry, theatre, essay, and film. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5316. Studies in Spanish Peninsular Culture.**

Culture, history, and society in literature, film, art, music, folklore, and mass media of Spain. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5317. Studies in the Cultures of the Americas.**

Culture, history, and society in literature, film, art, music, folklore, and mass media of the Americas. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5318. Advanced Composition and Research Methods.**

This course focuses on the study of composition and grammar, textual analysis, and research methods. It may be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5319. Synchronic Spanish Linguistics.**

In this course students learn about Spanish dialectology, phonology, regional variation, migration impacts on language variety, issues of language maintenance and death, syntax, and current theories of language contact and koineization (i.e., the formation of new dialects). May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5320. Diachronic Spanish Linguistics.**

Evaluation of aspects of history of the Spanish language including pronunciation, word formation, sentence structure, dialects, and relations to other languages. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5321. Spanish Applied Linguistics.**

This course provides an overview of the major areas of applied linguistic research including: current theories in second language acquisition, teaching methodologies, bilingualism, performance, syntax, and computer assisted learning. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5322. Spanish for the Professions.**

Topics vary and include the study of Spanish for business, law, medicine, criminal justice, and/or the social sciences. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5323. Translation History and Theory.**

This course introduces students to the history and theory of translation. Students analyze historical and contemporary translation practices and theories and the inherent challenges and complexities of translating a source text into a target language. Students translate texts in a variety of genres to acquire proficiency in producing accurate translations from English to Spanish and Spanish to English. Prerequisite: 3.0 GPA in 12 hours of advanced undergraduate Spanish.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5324. Applied Translation Methods.**

This course is an introduction to applied translation methods. Students practice the specific tasks involved in the vocabulary, sentence structure, and cultural complexities of the translation process in Spanish and English while acquiring the proficiency to produce professional translations in fields such as advertising, business, healthcare, law, sports, and journalism. It may be repeated once for credit when its topic varies. Prerequisite: 3.0 GPA in 12 hours of advanced undergraduate Spanish.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPAN 5325. Professional Internship in Spanish.**

This course is a supervised work experience in a Spanish-speaking professional environment. Students will work a minimum of 140 hours, performing duties at least 80% in Spanish. Other requirements include internship reports as required by course instructor. (MC).

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5390. Studies in Spanish Culture, Language, or Literature.**

Independent study under supervision of a graduate faculty member in Spanish, with in-depth readings and research on a specific topic. May be repeated once with different emphasis for additional credit. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Spanish 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5600. Internship.**

This course consists of an internship of at least four weeks duration in the United States or in a Spanish-speaking country. Interns work with organizations that use Spanish in a professional context. Internships may be complemented by lectures, observations, interviews, or other activities relevant to the student's academic and professional interests. Graduate advisor approval required. Prerequisite: Completion of 18 credit hours required for the Master of Arts with a major in Spanish.

**6 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The master of arts (M.A.) program in Spanish is a dynamic academic unit that combines research and applied learning in order to advance knowledge of the Spanish language and the literature and cultures of the Hispanic world. Its objective is to empower individuals to be productive in a global society. At Texas State, the Spanish M.A. program provides students with the foundation they need to:

1. serve in a wide range of public and private sector professions requiring a high degree of proficiency in Spanish,
2. pursue doctoral studies, and
3. teach in institutions of higher learning.

The M.A. program is designed for students interested in advancing their skills and knowledge within the context of organized research in Spanish language, literature, and culture.

The M.A. program with minor allows students to advance their skills and knowledge within the context of organized research in Spanish language, literature, and culture and to develop a minor interest in a related area. Students may choose among minors in the humanities, social sciences, education, or other disciplines, or they may develop special emphases in literary periods or areas such as Latin American studies, Medieval/Renaissance studies, Chicano/Chicana literature, critical theory, humanities, linguistics, education, or women's studies.

## Financial Assistance

Qualified graduate students in the M.A. program may apply for appointments as instructional assistants or teaching assistants. Application forms for instructional assistantships and teaching assistantships are available from the department administrative assistant. For information on other scholarship programs for graduate students, contact The Graduate College.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials



- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in 12 or more upper division undergraduate hours in Spanish, including at least six hours of Spanish literature recommended (Students lacking sufficient background course work will be required to take leveling courses. Any required leveling course work must be complete with grades of B or better prior to admission.)
- GRE not required
- resume/CV
- statement of purpose written in Spanish (600 words) explaining professional and personal interest in the M.A. in Spanish
- three letters of recommendation

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

Degree Requirements

The Master of Arts (M.A.) major in Spanish requires 36 semester credit hours, including a minor. Students who do not have the appropriate background course work may be required to complete leveling courses.

Course Requirements

Code	Title	Hours
Required Courses		
Choose 30 hours from the following:		30
SPAN 5310A	Voyages and Encounters in Spanish American Literature	
SPAN 5310B	Don Quijote	
SPAN 5310C	Poetry of Spain and Spanish America	
SPAN 5310D	Hispanic Literature: Gabriel García Márquez	
SPAN 5310E	Hispanic Literature: Hispanic Film	
SPAN 5311	Studies in Medieval and Golden Age Spanish Peninsular Literature	
SPAN 5312	Studies in Spanish Peninsular Literature from the Eighteenth Century to the Present	
SPAN 5313	Studies in South American Literatures	

SPAN 5314	Studies in Central American and Caribbean Literatures
SPAN 5315	Studies in Mexican and Mexican-American Literatures
SPAN 5316	Studies in Spanish Peninsular Culture
SPAN 5317	Studies in the Cultures of the Americas
SPAN 5318	Advanced Composition and Research Methods
SPAN 5319	Synchronic Spanish Linguistics
SPAN 5320	Diachronic Spanish Linguistics
SPAN 5321	Spanish Applied Linguistics
SPAN 5322	Spanish for the Professions
SPAN 5390	Studies in Spanish Culture, Language, or Literature
Minor	
Choose a 6-hour advisor-approved minor	
Total Hours	
36	

Comprehensive Examination Requirement

Comprehensive Exams in Spanish have a written and an oral component based on the M.A. Reading List. Should a candidate not pass the exam, the candidate may petition in writing for a retake. The Graduate Studies Committee will evaluate each case individually. If the committee grants a retake, the candidate must complete the exam the following semester. A second retake is allowed only by special permission from the Division Chair and the Graduate Advisor, and the candidate must complete the exam the following semester. See the Spanish Graduate Handbook for more details.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Modern Languages: SPAN

Courses Offered  
Spanish (SPAN)

**SPAN 5100. Practicum in Teaching Spanish.**  
Required as a condition of employment for graduate teaching and instructional assistants in their initial semester of employment. The course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable with different emphasis.  
**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

**SPAN 5199B. Thesis.**  
This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.  
**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Credit/No Credit

**SPAN 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5303. Spanish for Health Professionals.**

This course is designed for graduate students in the health professions who require knowledge of Spanish in the professional settings of nutrition, physical therapy, nursing, and respiratory therapy. Students develop elementary communicative proficiency and accuracy in the use of the Spanish language with Spanish-speaking clients, with an emphasis on oral communication. Along with basic structures and vocabulary utilized in health-care contexts, students learn essential information about Hispanic cultures. The course cannot be counted for credit in the Spanish M.A. program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5310A. Voyages and Encounters in Spanish American Literature.**

Thorough analysis of historical and fictional voyages. The course will address how encounters with indigenous, ethnic minority, and foreign cultures have influenced the development of individual, national and regional identities in Spanish America. Readings will include accounts of the Conquest, colonial texts, and literature for the 19th and 20th centuries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310B. Don Quijote.**

A close reading of the classic Spanish novel Don Quijote by Miguel de Cervantes. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310C. Poetry of Spain and Spanish America.**

A focus on the genre of poetry through a close reading of a selection of classical and contemporary poets from Spain and Spanish America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310D. Hispanic Literature: Gabriel García Márquez.**

A study of selected works of Nobel Prize author Gabriel García Márquez, focusing on literature, history, politics, and popular culture of Latin America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310E. Hispanic Literature: Hispanic Film.**

A study of Hispanic cultural issues through film and additional readings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310F. Contemporary Mexican Narratives.**

This course focuses on contemporary Mexican narratives. Students will study Mexico's literary trends such as La nueva narrativa, the Crack Generation, women's literature, and the new historic and testimonial fictions, in order to better understand the cultural process of the Mexico's society in the late 20th and early 21st centuries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5311. Studies in Medieval and Golden Age Spanish Peninsular Literature.**

Selections of fiction, poetry, theatre, essay, and film of medieval and Golden Age Spain. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5312. Studies in Spanish Peninsular Literature from the Eighteenth Century to the Present.**

Selections of fiction, poetry, theatre, essay, and film of Spain from the eighteenth century to the present. May be repeated once with different emphasis of additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5313. Studies in South American Literatures.**

Selections of fiction, poetry, theatre, essay, and film of South America. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5314. Studies in Central American and Caribbean Literatures.**

Selections of fiction, poetry, theatre, essay, and film of Central America and the Caribbean. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5315. Studies in Mexican and Mexican-American Literatures.**

Selections of Mexican and Mexican-American fiction, poetry, theatre, essay, and film. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5316. Studies in Spanish Peninsular Culture.**

Culture, history, and society in literature, film, art, music, folklore, and mass media of Spain. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5317. Studies in the Cultures of the Americas.**

Culture, history, and society in literature, film, art, music, folklore, and mass media of the Americas. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5318. Advanced Composition and Research Methods.**

This course focuses on the study of composition and grammar, textual analysis, and research methods. It may be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5319. Synchronic Spanish Linguistics.**

In this course students learn about Spanish dialectology, phonology, regional variation, migration impacts on language variety, issues of language maintenance and death, syntax, and current theories of language contact and koineization (i.e., the formation of new dialects). May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5320. Diachronic Spanish Linguistics.**

Evaluation of aspects of history of the Spanish language including pronunciation, word formation, sentence structure, dialects, and relations to other languages. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5321. Spanish Applied Linguistics.**

This course provides an overview of the major areas of applied linguistic research including: current theories in second language acquisition, teaching methodologies, bilingualism, performance, syntax, and computer assisted learning. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5322. Spanish for the Professions.**

Topics vary and include the study of Spanish for business, law, medicine, criminal justice, and/or the social sciences. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5323. Translation History and Theory.**

This course introduces students to the history and theory of translation. Students analyze historical and contemporary translation practices and theories and the inherent challenges and complexities of translating a source text into a target language. Students translate texts in a variety of genres to acquire proficiency in producing accurate translations from English to Spanish and Spanish to English. Prerequisite: 3.0 GPA in 12 hours of advanced undergraduate Spanish.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5324. Applied Translation Methods.**

This course is an introduction to applied translation methods. Students practice the specific tasks involved in the vocabulary, sentence structure, and cultural complexities of the translation process in Spanish and English while acquiring the proficiency to produce professional translations in fields such as advertising, business, healthcare, law, sports, and journalism. It may be repeated once for credit when its topic varies. Prerequisite: 3.0 GPA in 12 hours of advanced undergraduate Spanish.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPAN 5325. Professional Internship in Spanish.**

This course is a supervised work experience in a Spanish-speaking professional environment. Students will work a minimum of 140 hours, performing duties at least 80% in Spanish. Other requirements include internship reports as required by course instructor. (MC).

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5390. Studies in Spanish Culture, Language, or Literature.**

Independent study under supervision of a graduate faculty member in Spanish, with in-depth readings and research on a specific topic. May be repeated once with different emphasis for additional credit. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Spanish 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5600. Internship.**

This course consists of an internship of at least four weeks duration in the United States or in a Spanish-speaking country. Interns work with organizations that use Spanish in a professional context. Internships may be complemented by lectures, observations, interviews, or other activities relevant to the student's academic and professional interests. Graduate advisor approval required. Prerequisite: Completion of 18 credit hours required for the Master of Arts with a major in Spanish.

**6 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The master of arts (M.A.) program in Spanish is a dynamic academic unit that combines research and applied learning in order to advance knowledge of the Spanish language and the literature and cultures of the Hispanic world. Its objective is to empower individuals to be productive in a global society. At Texas State, the Spanish M.A. program provides students with the foundation they need to:

1. serve in a wide range of public and private sector professions requiring a high degree of proficiency in Spanish,
2. pursue doctoral studies, and
3. teach in institutions of higher learning.

The M.A. program is designed for students interested in advancing their skills and knowledge within the context of organized research in Spanish language, literature, and culture.

The M.A. program with minor allows students to advance their skills and knowledge within the context of organized research in Spanish language, literature, and culture and to develop a minor interest in a related area. Students may choose among minors in the humanities, social sciences, education, or other disciplines, or they may develop special emphases in literary periods or areas such as Latin American studies, Medieval/Renaissance studies, Chicano/Chicana literature, critical theory, humanities, linguistics, education, or women's studies.

## Financial Assistance

Qualified graduate students in the M.A. program may apply for appointments as instructional assistants or teaching assistants. Application forms for instructional assistantships and teaching assistantships are available from the department administrative assistant. For information on other scholarship programs for graduate students, contact The Graduate College.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes

to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in 12 or more upper division undergraduate hours in Spanish, including at least six hours of Spanish literature recommended (Students lacking sufficient background course work will be required to take leveling courses. Any required leveling course work must be complete with grades of B or better prior to admission.)
- GRE not required
- resume/CV
- statement of purpose written in Spanish (600 words) explaining professional and personal interest in the M.A. in Spanish
- three letters of recommendation

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

Degree Requirements

The Master of Arts (M.A.) major in Spanish requires 36 semester credit hours, including a minor and a thesis. Students who do not have the appropriate background course work may be required to complete leveling courses.

Course Requirements

Code	Title	Hours
Required Courses		
Choose 24 hours from the following:		24
SPAN 5310A	Voyages and Encounters in Spanish American Literature	
SPAN 5310B	Don Quijote	
SPAN 5310C	Poetry of Spain and Spanish America	
SPAN 5310D	Hispanic Literature: Gabriel García Márquez	
SPAN 5310E	Hispanic Literature: Hispanic Film	
SPAN 5311	Studies in Medieval and Golden Age Spanish Peninsular Literature	
SPAN 5312	Studies in Spanish Peninsular Literature from the Eighteenth Century to the Present	
SPAN 5313	Studies in South American Literatures	
SPAN 5314	Studies in Central American and Caribbean Literatures	
SPAN 5315	Studies in Mexican and Mexican-American Literatures	
SPAN 5316	Studies in Spanish Peninsular Culture	
SPAN 5317	Studies in the Cultures of the Americas	
SPAN 5318	Advanced Composition and Research Methods	
SPAN 5319	Synchronic Spanish Linguistics	
SPAN 5320	Diachronic Spanish Linguistics	
SPAN 5321	Spanish Applied Linguistics	
SPAN 5322	Spanish for the Professions	
SPAN 5390	Studies in Spanish Culture, Language, or Literature	
Thesis		
SPAN 5399A	Thesis	3
Choose a of 3 hours from the following:		3
SPAN 5199B	Thesis	
SPAN 5299B	Thesis	
SPAN 5399B	Thesis	
SPAN 5599B	Thesis	
SPAN 5999B	Thesis	
Minor		
Choose a 6-hour advisor-approved minor		6
Total Hours		36

Comprehensive Examination Requirement

Comprehensive Exams in Spanish have a written and an oral component. The written component will cover the M.A. reading list. The oral component will consist of a thesis defense. Should a candidate not pass the exam, the candidate may petition in writing for a retake. The Graduate Studies Committee will evaluate each case individually. If the committee grants a retake, the candidate must complete the exam the following semester. A second retake is allowed only by special permission from the Division Chair and the Graduate Advisor, and the candidate must complete the exam the following semester. See the Spanish Graduate Handbook for more details.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.



If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to

work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Modern Languages: SPAN

## Courses Offered

### Spanish (SPAN)

#### SPAN 5100. Practicum in Teaching Spanish.

Required as a condition of employment for graduate teaching and instructional assistants in their initial semester of employment. The course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### SPAN 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### SPAN 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### SPAN 5303. Spanish for Health Professionals.

This course is designed for graduate students in the health professions who require knowledge of Spanish in the professional settings of nutrition, physical therapy, nursing, and respiratory therapy. Students develop elementary communicative proficiency and accuracy in the use of the Spanish language with Spanish-speaking clients, with an emphasis on oral communication. Along with basic structures and vocabulary utilized in health-care contexts, students learn essential information about Hispanic cultures. The course cannot be counted for credit in the Spanish M.A. program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### SPAN 5310A. Voyages and Encounters in Spanish American Literature.

Thorough analysis of historical and fictional voyages. The course will address how encounters with indigenous, ethnic minority, and foreign cultures have influenced the development of individual, national and regional identities in Spanish America. Readings will include accounts of the Conquest, colonial texts, and literature for the 19th and 20th centuries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### SPAN 5310B. Don Quijote.

A close reading of the classic Spanish novel Don Quijote by Miguel de Cervantes. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### SPAN 5310C. Poetry of Spain and Spanish America.

A focus on the genre of poetry through a close reading of a selection of classical and contemporary poets from Spain and Spanish America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### SPAN 5310D. Hispanic Literature: Gabriel García Márquez.

A study of selected works of Nobel Prize author Gabriel García Márquez, focusing on literature, history, politics, and popular culture of Latin America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### SPAN 5310E. Hispanic Literature: Hispanic Film.

A study of Hispanic cultural issues through film and additional readings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### SPAN 5310F. Contemporary Mexican Narratives.

This course focuses on contemporary Mexican narratives. Students will study Mexico's literary trends such as La nueva narrativa, the Crack Generation, women's literature, and the new historic and testimonial fictions, in order to better understand the cultural process of the Mexico's society in the late 20th and early 21st centuries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

#### SPAN 5311. Studies in Medieval and Golden Age Spanish Peninsular Literature.

Selections of fiction, poetry, theatre, essay, and film of medieval and Golden Age Spain. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5312. Studies in Spanish Peninsular Literature from the Eighteenth Century to the Present.**

Selections of fiction, poetry, theatre, essay, and film of Spain from the eighteenth century to the present. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5313. Studies in South American Literatures.**

Selections of fiction, poetry, theatre, essay, and film of South America. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5314. Studies in Central American and Caribbean Literatures.**

Selections of fiction, poetry, theatre, essay, and film of Central America and the Caribbean. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5315. Studies in Mexican and Mexican-American Literatures.**

Selections of Mexican and Mexican-American fiction, poetry, theatre, essay, and film. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5316. Studies in Spanish Peninsular Culture.**

Culture, history, and society in literature, film, art, music, folklore, and mass media of Spain. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5317. Studies in the Cultures of the Americas.**

Culture, history, and society in literature, film, art, music, folklore, and mass media of the Americas. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5318. Advanced Composition and Research Methods.**

This course focuses on the study of composition and grammar, textual analysis, and research methods. It may be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5319. Synchronic Spanish Linguistics.**

In this course students learn about Spanish dialectology, phonology, regional variation, migration impacts on language variety, issues of language maintenance and death, syntax, and current theories of language contact and koineization (i.e., the formation of new dialects). May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5320. Diachronic Spanish Linguistics.**

Evaluation of aspects of history of the Spanish language including pronunciation, word formation, sentence structure, dialects, and relations to other languages. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5321. Spanish Applied Linguistics.**

This course provides an overview of the major areas of applied linguistic research including: current theories in second language acquisition, teaching methodologies, bilingualism, performance, syntax, and computer assisted learning. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5322. Spanish for the Professions.**

Topics vary and include the study of Spanish for business, law, medicine, criminal justice, and/or the social sciences. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5323. Translation History and Theory.**

This course introduces students to the history and theory of translation. Students analyze historical and contemporary translation practices and theories and the inherent challenges and complexities of translating a source text into a target language. Students translate texts in a variety of genres to acquire proficiency in producing accurate translations from English to Spanish and Spanish to English. Prerequisite: 3.0 GPA in 12 hours of advanced undergraduate Spanish.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5324. Applied Translation Methods.**

This course is an introduction to applied translation methods. Students practice the specific tasks involved in the vocabulary, sentence structure, and cultural complexities of the translation process in Spanish and English while acquiring the proficiency to produce professional translations in fields such as advertising, business, healthcare, law, sports, and journalism. It may be repeated once for credit when its topic varies. Prerequisite: 3.0 GPA in 12 hours of advanced undergraduate Spanish.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPAN 5325. Professional Internship in Spanish.**

This course is a supervised work experience in a Spanish-speaking professional environment. Students will work a minimum of 140 hours, performing duties at least 80% in Spanish. Other requirements include internship reports as required by course instructor. (MC).

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5390. Studies in Spanish Culture, Language, or Literature.**

Independent study under supervision of a graduate faculty member in Spanish, with in-depth readings and research on a specific topic. May be repeated once with different emphasis for additional credit. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Spanish 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5600. Internship.**

This course consists of an internship of at least four weeks duration in the United States or in a Spanish-speaking country. Interns work with organizations that use Spanish in a professional context. Internships may be complemented by lectures, observations, interviews, or other activities relevant to the student's academic and professional interests. Graduate advisor approval required. Prerequisite: Completion of 18 credit hours required for the Master of Arts with a major in Spanish.

**6 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

The graduate minor in Spanish requires 6 semester credit hours of advisor-approved courses. Students with majors other than Spanish may select Spanish as a minor. Students should have completed at least nine hours of advanced undergraduate Spanish with a GPA of 2.75 or higher (4.0 scale).

**Dean**

Barrett Bryant, Ph.D.

Centennial Hall Room 201

Telephone: 512.245.2119 Fax: 512.245.8095

[www.cose.txstate.edu](http://www.cose.txstate.edu) (<http://www.cose.txstate.edu/>)

**Associate Dean for Academic Affairs**

Chad Booth, Ph.D.

**Associate Dean for Research**

Paula Williamson, Ph.D.

**Assistant Dean for Outcomes and Assessment**

Gregory B. Passty, Ph.D.

**Department Chairs/School Directors**

Agricultural Sciences—Madan M. Dey, Ph.D.

Biology—Dittmar Hahn, Ph.D.



Chemistry and Biochemistry—William J. Brittain, Ph.D.

Computer Science—Hongchi Shi, Ph.D.

Ingram School of Engineering—Jesus Jimenez, Ph.D.

Engineering Technology—James Wilde, Ph.D.

Mathematics—Susan Morey, Ph.D.

Physics—Edwin Piner, Ph.D.

## Doctor of Philosophy (Ph.D.)

- Major in Materials Science, Engineering, and Commercialization (Entering with Master's Degree) (p. 2741)
- Major in Materials Science, Engineering, and Commercialization (<http://mycatalog.txstate.edu/graduate/science-engineering/materials-commercialization-bs-phd/>)(Entering with Bachelor's Degree)

## Program Overview

The College of Science and Engineering at Texas State offers a cutting-edge interdisciplinary Materials Science, Engineering, and Commercialization Ph.D. program. Students work with faculty in Biology, Chemistry and Biochemistry, Engineering, Engineering Technology, and Physics on the research, development, and validation of materials to be used in the next generation of electronics, medicines, plastics, sensors, infrastructure, and renewable energy. Coupling commercialization with science and engineering, the curriculum infuses an understanding of intellectual property law, skills in business planning, competency in transforming innovations from the lab to commercial production, and the ability to organize and lead interdisciplinary research teams. Our goal is to educate the next generation of scientists and engineers who will perform interdisciplinary research and will emerge as effective entrepreneurial leaders in the advancement of high tech, 21st century global discovery and innovation.

Students are classified as either full-time (minimum of nine hours per term) or part-time. All students are required to initiate, complete, present, and publish original research.

Each student develops an appropriate degree plan to meet their career and academic goals. The degree plan will include a mix of theoretical, analytical, and elective courses that will prepare students to work independently and in multidisciplinary teams.

## Educational Goal

The central educational goal of the Ph.D. major in Materials Science, Engineering, and Commercialization at Texas State is to prepare doctoral students with:

- technical skills necessary to conduct high-quality research,
- an orientation toward interdisciplinary research,
- a set of business tools and knowledge of business practice, and
- technical project and business management skills.

Graduates from the program will have:

- Technical skills enabling them to conduct high-quality research. The program has students plan and carry out cutting edge research in materials science and engineering that demonstrates the ability to think through complex problems and arrive at solutions. This goal is supported by rigorous and technically oriented course work that will equip students with the fundamental science and engineering knowledge necessary to conduct research. The student will also, in

consultation with his research advisor and dissertation committee, formulate a research project and produce a proposal for carrying out the research.

- The ability to conduct research across scientific and engineering disciplines. Breakthroughs occur when scientists from a variety of disciplines either individually or collaboratively work on important interdisciplinary and multidisciplinary problems. Therefore, we need a new generation of scientists with both rigorous disciplinary training and the ability to communicate and work across disciplines.
- Business skills and knowledge of business practice. Equipping our graduates with the business skills necessary to become entrepreneurs or leaders in industry is a central goal of the program. This educational goal is supported by the core courses in practical and leadership skills in commercialization and entrepreneurship and other elements dispersed throughout the program. These elements include a one-week intensive workshop to be completed in the summer prior to beginning the program. This introductory boot camp outlines fundamental aspects of business and commercialization and equips students with a common language and basic toolkit. A second one-week entrepreneur boot camp is required after the student's first year in the program. In addition, two of the candidacy requirements solidify business skills. The student will produce, present, and defend a full business plan for a start-up company. Students write a Small Business Innovation Research/Small Business Technology Transfer Research (SBIR/STTR) proposal. If appropriate, students are provided the opportunity to work with a small business on the proposal and to submit the final document to a funding agency. Students are further encouraged to submit their business plan to the Texas State Business Plan Competition in an oral presentation before a panel of angel investors, venture capitalists and business owners. In addition, the weekly Commercialization Forum exposes students to successful entrepreneurs and business leaders. This Commercialization Forum is also the venue for oral defense of the student business plans. These requirements ensure that students have developed the business skills necessary to succeed.
- Technical project and business management skills. The ability to manage complex technical projects and businesses is an additional skill that is core to this program. This goal is certainly supported by the core courses. In addition, the Commercialization Forum regularly exposes the students to examples of effective project management and cases of what not to do in managing projects or businesses. The ability of the students to manage projects is assessed based on how they manage the business plan, SBIR/STTR proposal, and the implementation of the proposed research plan.

## Financial Assistance

Assistantships and scholarships are available to qualified applicants. Doctoral instructional assistantships and teaching assistantships are offered on a competitive basis to full-time students enrolled in the Materials Science, Engineering, and Commercialization Ph.D. program. An offer of financial support typically will be made at the time that a student is accepted into the program. The Graduate College can provide further information regarding scholarships.

## Advising

Each student will develop a degree plan in consultation initially with the doctoral program director and, after selection, their Ph.D. advisor and committee, who identifies the appropriate doctoral prescribed electives necessary for achieving the degree. Students must complete 37 credits prior to taking a three-part Advancement to Candidacy Comprehensive



Examination. The exam will consist of the following parts: SBIR/STTR Grant Proposal, Business Plan, and Oral Examination.

Each Ph.D. student is issued a preliminary degree audit by the Graduate College, which should be used to plan the student's course of study. In the first term of enrollment, students should review the degree audit in consultation with their supervising professor and the program director.

With admission into the doctoral program, **it is expected that students will pursue their course work and research activities in an efficient and timely manner.** If it is determined that a student is not making adequate progress toward completion of the doctoral degree requirements, consultations will be undertaken with the student, their Ph.D. advisor and the program director to develop a remediation plan to revise the student's program of study or research. Failure to successfully remedy documented deficiencies will result in termination of the student's enrollment in the doctoral program at the discretion of the program director. Students removed from the doctoral program in this manner may appeal to the dean of The Graduate College for reinstatement in the program within one academic year.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university
- master's degree in biology, chemistry, engineering, materials science, physics, technology, or a closely related field from a regionally accredited university. Students will be required to take leveling courses if background is insufficient. Any required leveling course work must be completed with grades of B or better prior to admission.
- official transcripts from **each institution** where course credit was granted
- minimum 3.3 GPA (on a 4.0 scale) in all completed graduate course work.
- GRE scores are not required for applicants with a minimum 3.5 GPA (on a 4.0 scale) in all completed graduate course work.
- GRE scores (general test only) required for applicants with GPA less than 3.5 on all completed graduate course work\*
- interviews (conducted via phone, internet, or face-to-face) with core doctoral faculty
- resume/CV
- statement of purpose outlining the student's personal history and life goals that are relevant to obtaining a doctoral degree, and, in particular, the rationale for pursuing the commercialization aspect of the MSEC program

- three letters of recommendation evaluating the student's skill and potential to be successful in the MSEC Ph.D. program

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

Degree and GRE Requirement

If the GPA of all completed graduate coursework is between 3.3 and 3.5, the student must submit the following:

- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Materials Science, Engineering, and Commercialization requires 51 semester credit hours for students entering with a master's degree. Students who do not have the appropriate background course work may be required to complete leveling or prerequisite courses. Any required leveling course work must be completed with grades of B or better prior to admission.

## Course Requirements

Code	Title	Hours
Required Courses		
MSEC 7101	Commercialization Forum (Taken 2 times)	2
MSEC 7102	MSEC Seminar (Taken 2 times)	2
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship	3
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship	3
MSEC 7401	Fundamental Materials Science and Engineering	4
MSEC 7402	Advanced Materials Science and Engineering Concepts	4
Prescribed Electives		
For students entering with a master's degree choose 15 hours from the following courses:		15
MSEC 7103	Research in Materials Science, Engineering, and Commercialization	
MSEC 7203	Research in Materials Science, Engineering, and Commercialization	
MSEC 7303	Research in Materials Science, Engineering, and Commercialization	

MSEC 7304	Collaborative Research/Commercialization Experience
MSEC 7310	Nanoscale Systems and Devices
MSEC 7311	Materials Characterization
MSEC 7315	Quantum Mechanics for Materials Scientists
MSEC 7320	Nanocomposites
MSEC 7325	Principles of Technical Project Management
MSEC 7330	Computational Materials Science
MSEC 7340	Biomaterials and Biosensors
MSEC 7350	Frontiers of Nanoelectronics
MSEC 7355	Fluid Flow in Porous Media
MSEC 7360	Nanomaterials Processing
MSEC 7370	Advanced Polymer Science
MSEC 7395A	Microwave & Power Device Physics and Materials
MSEC 7395B	Thin Film Photovoltaic Devices
MSEC 7395C	Materials for Sustainable Energy
MSEC 7395D	Polymer Characterization and Processing
MSEC 7395E	Industrial Ecology and Sustainability Engineering
MSEC 7395F	Catalysis in Materials Science
MSEC 7395G	Applied Plasma Physics
MSEC 7395H	Environmental Chemistry
MSEC 7395I	Structure and Properties of Alloys
MSEC 7395J	Advanced Concrete Materials and Durability
MSEC 7395K	Electrical and Magnetic Characterization Methods
MSEC 7395L	Advanced Solid State Physics
MSEC 7395M	Semiconductor Devices and Processing
MSEC 7395N	Advanced Infrastructure Materials
MSEC 7395O	Modern Concepts in Materials Science

#### Dissertation

For students entering with a master's degree choose a minimum of 18 hours from the following courses:

MSEC 7199	Dissertation
MSEC 7299	Dissertation
MSEC 7399	Dissertation
MSEC 7599	Dissertation
MSEC 7699	Dissertation
MSEC 7999	Dissertation

**Total Hours**

**51**

## Advancement to Candidacy

### Application for Advancement to Candidacy

Students can download the "Application for Advancement to Candidacy" from The Graduate College website or they can obtain a copy from the doctoral program director. The student should complete and sign the upper portion of the form and return it to the doctoral program director. Students must complete all required course work with the exception of dissertation credit hours and pass the Advancement to Candidacy Comprehensive Examination prior to applying for candidacy. The Advancement to Candidacy Comprehensive Examination can be taken in the last semester in which the student completes all required course work (with the exception of dissertation credit hours). When all requirements for admission to candidacy have been met (completion of boot camps or equivalents, all required course work (with the exception of dissertation credit hours), prescribed electives, successful performance

on the comprehensive examination, approval of dissertation advisor/committee, and submission of an approved dissertation proposal), the doctoral program director will forward the Application for Advancement to Candidacy to the dean of The Graduate College for review and approval.

The dean of The Graduate College approves advancement to candidacy once all requirements are met.

Before advancement to candidacy can be approved, students are required to complete the following:

1. Completion of all required course work (with the exception of dissertation credit hours) toward the doctoral degree with a GPA of 3.0 or higher on a 4.0 scale with no grade earned below "B" on any graduate course work to be applied toward the Ph.D. degree.
2. Satisfactory performance on the comprehensive examination consisting of the following parts: SBIR/STTR Grant Proposal, Business Plan, and Oral Examination.
3. The student must select a dissertation advisor, and that advisor must be approved by the doctoral program director. The student also must select a dissertation committee comprised of three additional members of the College of Science and Engineering's doctoral faculty and at least one external member from outside the College of Science and Engineering or the university. Other committee compositions are possible but require the approval of the dissertation advisor and the doctoral program director.
4. The student must choose a topic with the approval of the student's dissertation advisor and committee.
5. The student will submit a title and a written proposal for the dissertation to the student's dissertation committee and successfully defend the proposal in an oral presentation with the dissertation committee. The proposal will include a statement of the problem to be studied, a discussion of the relevant literature, and the research method of the proposed dissertation topic.
6. The doctoral program director will make a recommendation to the graduate dean who makes the final decision on the student's advancement to candidacy. The Graduate College will notify the student once the decision has been made.

### Advancement to Candidacy Time Limit

Full time students are expected to advance to candidacy at the end of two years of official enrollment in the program. All full time students are required to have advanced to candidacy by the end of their third year in the program. Requests for a time extension must be submitted to the doctoral program director by the student with the concurrence of the Ph.D. research advisor and must be approved by The Graduate College. Non-traditional, part-time students may request extensions from the doctoral program director as long as they maintain a minimum GPA of 3.0 and are making consistent progress toward fulfilling their degree requirements. The doctoral executive council will review part-time students' requests for extensions on an individual, case-by-case basis.

No credit will be applied toward a student's doctoral degree for course work completed more than five years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at Texas State, as well as course credit transferred to Texas State from other accredited institutions.

## Grade-Point Requirements for Advancement to Candidacy

A minimum GPA of 3.0 on all course work undertaken as a doctoral student in the materials science, engineering, and commercialization program is required for admission to candidacy. No grade earned below "B" on any graduate course work may apply toward a Ph.D. degree at Texas State.

Incomplete grades must be cleared through the office of The Graduate College at least ten days before approval for advancement to candidacy will be granted.

## Advancement to Candidacy Comprehensive Examination

The Advancement to Candidacy Comprehensive Examination can be taken as early as the last semester in which the student completes all required course work (with the exception of dissertation credit hours) and no later than the end of their third year in the program. Students will be required to pass a comprehensive examination that will assess the student's preparedness to carry out the proposed plan of dissertation research. To be eligible to take the comprehensive examination, students must have a minimum GPA of 3.0 in all the core course work, including any course work that is transferred from another institution. The Advancement to Candidacy Comprehensive Examination will consist of two written components and one oral component. Each student will be required to take the Advancement to Candidacy Comprehensive Examination, which will be conducted by their Ph.D. dissertation committee. All committee members must be in attendance for candidacy examinations. Results of the Advancement to Candidacy Comprehensive Examination will be reported on the Doctoral Comprehensive Examination Report form and submitted to The Graduate College. The Advancement to Candidacy Comprehensive Examination will consist of the following three parts: SBIR/STTR Grant Proposal, Business Plan, and Oral Examination.

Should a student fail the exam, he or she will have the option of taking a second examination, which must be passed by the end of the following term. Failure to pass this exam on two occasions will lead to the student's dismissal from the Ph.D. program.

## Dissertation Proposal

A dissertation proposal prepared by the student and approved by the student's Ph.D. advisor and a majority of the other members of the dissertation committee is a requirement for Advancement to Candidacy status. The proposal must outline the substance and scope of the dissertation research, present the methodology to be used, and survey the relevant literature. The dissertation proposal will be defended as part of the Oral segment of the Advancement to Candidacy Comprehensive Exam. The student's Ph.D. advisor and other dissertation committee members must indicate approval of the dissertation proposal on the "Ph.D. Dissertation Proposal" form. This form can be downloaded from The Graduate College website or it can be obtained from the doctoral program director. A final copy of the dissertation proposal, accompanied by the signed approval form, must be turned in to the doctoral program director, who will forward it to the dean of The Graduate College for review and final approval.

## Recommendation for Advancement to Candidacy

The dissertation committee recommends the applicant for Advancement to Candidacy by completing the "Advancement to Candidacy Examination Report" form which can be downloaded from The Graduate College website or obtained from the doctoral program director. The results of the Advancement to Candidacy Comprehensive Examination must be filed

in the office of The Graduate College before the dean of The Graduate College gives final approval to candidacy. The doctoral program director is responsible for submitting this report to the office of The Graduate College.

## Dissertation Research and Writing

All doctoral students are required to complete a dissertation. The dissertation must represent an original contribution to scholarship based on independent investigation. Preparation of the dissertation should follow the guidelines in the current edition of the American Chemical Society (ACS) or American Institute of Physics (AIP) G37 style manual or in an appropriate professional journal in the designated field, as deemed acceptable by the dissertation committee. After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring term until the defense of their dissertation. If a student is utilizing university resources toward completion of the dissertation in the summer (including faculty supervision or the use of university facilities), or if the student is graduating in the summer, they must be enrolled in at least one hour of dissertation credit for that term. All candidates for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred. Students must complete a minimum of 18 semester hours of dissertation research credit.

The student must submit to The Graduate College the approved dissertation in electronic format for publication with the Alkek Library. The graduate dean must approve the dissertation.

## Dissertation Enrollment Requirements

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each term until the defense of their dissertation. If a student is utilizing university resources toward completion of the dissertation in the summer (including faculty supervision or the use of university facilities), or if the student is graduating in the summer, they must be enrolled in at least one hour of dissertation credit for that term. All candidates for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred. Students must complete a minimum of 18 semester hours of dissertation research and writing credit.

## Dissertation Time Limit

Students are expected to complete the dissertation within two years after Advancement to Candidacy. Any exceptions to this time limit require the approval of the doctoral program director and the dean of The Graduate College. The doctoral program director will review each student annually to ascertain their progress in pursuing the degree and will consult with the student's Ph.D. research advisor and dissertation committee on this matter as appropriate.

## Dissertation Committee

The dissertation committee will be responsible for administering the Advancement to Candidacy Comprehensive Examination and will oversee the research progress of a doctoral student and the writing of the student's dissertation. The committee will consist of at least five members, including the student's Ph.D. research advisor, three other MSEC doctoral faculty and at least one external member from outside the College of Science and Engineering or the university. Other committee compositions are possible but require the approval of the dissertation advisor and the doctoral program director. The student's Ph.D. research advisor will chair the committee. The student, doctoral program director, and the dean of The Graduate College will approve the composition of

the dissertation committee. The Dissertation/Research Advisor form and the Dissertation Committee Request form must be completed to form the committee. These forms may be downloaded from The Graduate College's website.

Any changes to the dissertation committee must be submitted using the Dissertation Advisor/Committee Member Change Request form for approval to the dissertation committee chair, the doctoral program director, and the dean of The Graduate College. Changes must be submitted no later than 60 days before the dissertation defense.

The student is responsible for obtaining committee members' signatures on the Dissertation/Research Advisor Assignment form and the Dissertation Committee Request form, which can be downloaded from The Graduate College website.

## Committee Changes

Any changes to the dissertation committee must be submitted using the Dissertation Advisor/Committee Member Change Request form for approval to the dissertation committee chair, the doctoral program director, and the dean of The Graduate College. Changes must be submitted no later than 60 days before the dissertation defense.

The Research Advisor/Committee Member Change Request form may be downloaded from The Graduate College website or obtained from the doctoral program director.

## Dissertation Defense

The dissertation defense will not be scheduled until all other academic and program requirements for advancement to candidacy have been fulfilled. A complete draft of the dissertation will be given to the members of the dissertation committee with sufficient time for review, typically two month before the date of commencement during the term in which the student intends to graduate. After committee members have reviewed the draft with the student and provided comments, the student, in consultation with the Ph.D. research advisor, will incorporate the recommended changes into a new draft of the dissertation. When each committee member is satisfied that the draft dissertation is defensible, the dissertation defense may be scheduled.

The dissertation defense will consist of two parts. The first part is a public presentation of the dissertation research. Notice of the defense presentation will be posted at least two weeks in advance. The second part of the defense will immediately follow the public presentation but will be restricted to the student's dissertation committee and entail an oral examination over the dissertation research. Approval of the dissertation requires positive votes from the student's Ph.D. research advisor and a majority of the remaining members of the dissertation committee. The Dissertation Defense Report form must be filed in The Graduate College before the dean of The Graduate College gives final approval to the dissertation. This form may be downloaded from The Graduate College website.

The student is expected to orally defend the dissertation in an announced public presentation within two years of the official date of being advanced to candidacy.

## Approval and Submission of the Dissertation

Following approval and signing of the Thesis/Dissertation Committee Approval form by the members of the dissertation committee, the student must submit one copy of the dissertation to the office of The Graduate College for final approval. Specific guidelines for approval and

submission of the dissertation can be obtained from the office of The Graduate College. Dissertations must be submitted in electronic format.

Doctoral level courses in Materials Science, Engineering and Commercialization: MSEC

## Courses Offered

### Materials Science, Engineering and Commercialization (MSEC)

#### MSEC 7100. Doctoral Assistant Development.

The course is designed to equip the doctoral students with skills and an understanding of proper procedures to be effective teaching assistants. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### MSEC 7101. Commercialization Forum.

The course is a seminar series exposing students to commercialization issues. The series includes as speakers: successful entrepreneurs, businessmen, research directors, production and process control engineers, intellectual property and licensing experts, management consultants, and technology transfer specialists. Repeatable four times for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### MSEC 7102. MSEC Seminar.

This course is an introduction to current materials science and engineering topics with presentations by subject matter experts as the basis for weekly discussions. Students participate by asking questions and actively engaging the seminar speaker. Students are also expected to give public presentations based upon their own field of research at the STAR (Student Technology and Research) Showcase. Repeatable four times for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### MSEC 7103. Research in Materials Science, Engineering, and Commercialization.

This research course is for students in Materials Science, Engineering, and Commercialization who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor. Repeatable (with MSEC 7203 & MSEC 7303 hours) for doctoral credit up to 6 hours.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**MSEC 7199. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7203. Research in Materials Science, Engineering, and Commercialization.**

This research course is for students in Materials Science, Engineering, and Commercialization who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor. Repeatable (with MSEC 7103 and MSEC 7303 hours) for doctoral credit up to 6 hours.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7299. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7301. Practical Skills in Commercialization and Entrepreneurship.**

This course is the first of a two-course series to impart business and commercialization skills by producing a business plan. Key areas covered include intellectual property law, technology transfer and licensing strategies, business plan development, business finance strategies, management structures, project management methods, statistical quality and process control.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7302. Leadership Skills in Commercialization and Entrepreneurship.**

Leadership Skills in Commercialization and Entrepreneurship (3-0). This course is the second of a two-course series to impart business and commercialization skills by producing a business plan. Key areas covered include intellectual property law, technology transfer and licensing strategies, business plan development, business finance strategies, management structures, project management methods, statistical quality and process control. Prerequisite: MSEC 7301 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7303. Research in Materials Science, Engineering, and Commercialization.**

This research course is for students in Materials Science, Engineering, and Commercialization who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor. Repeatable (with MSEC 7103 & MSEC 7203 hours) for doctoral credit up to 6 hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7304. Collaborative Research/Commercialization Experience.**

This course allows Ph.D. level graduate students to initiate, conduct and participate in a collaborative research or commercialization experience with graduate faculty in addition to research conducted under MSEC 7103, MSEC 7303, MSEC 7199 and MSEC 7399. This course recognizes the collaborative nature of the scientific and commercialization enterprise. Repeatable for doctoral credit up to 6 hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MSEC 7310. Nanoscale Systems and Devices.**

This course is an in-depth treatment of physical phenomena in nanoscale structures, and consequences for electronic, photonic, mechanical and other types of devices. The course provides a strong background in devices with applications in nanoelectronics, biomedical systems, micro- and nanoscale manipulation, adaptive optics, and microfluidics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7311. Materials Characterization.**

This course covers skills and knowledge required for microscopy methods including transmission electron microscopy, scanning electron microscopy, scanning tunneling electron microscopy, atomic force microscopy, and confocal microscopy. It covers x-ray and neutron diffraction techniques including structure analysis, powder and glancing angle diffraction, pole figure, texture analysis, and small angle scattering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MSEC 7315. Quantum Mechanics for Materials Scientists.**

This course includes quantum-mechanical foundation for study of nanometer-scale materials, principles of quantum physics, stationary-states for one-dimensional potentials, symmetry considerations, interaction with the electromagnetic radiation, scattering, reaction rate theory, spectroscopy, chemical bonding and molecular orbital theory, solids, perturbation theory, and nuclear magnetic resonance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MSEC 7320. Nanocomposites.**

Characteristics of nanoparticles utilized in nanocomposites, techniques for surface modification, methods for nanoparticle dispersion forming nanocomposites, types of nanocomposites, characteristics of nanocomposites, analytical methods for characterization of composites, and common applications will be discussed. Particular attention will be given to the science and theories explaining the unique behavior of nanocomposites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7325. Principles of Technical Project Management.**

This course includes planning, budgeting, identification of risks and risk mitigation approaches, resource allocation, review of milestones and schedules, and evaluating projects to measure success. Responsibilities of project managers in the areas of problem solving, motivating and managing creative technical staff in project and matrix organizations will be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7330. Computational Materials Science.**

Application of computational techniques to molecular and atomic modeling of materials is discussed along with quantum mechanical modeling, density functional theory approaches, forcefield based molecular modeling, mesoscale modeling, energy minimization, molecular dynamics, vibrational spectra, crystal structures, phase equilibria, physical property prediction, and electronic structure related to magnetic and electrical properties. Prerequisite: CHEM 3340 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7340. Biomaterials and Biosensors.**

The course covers the growing field of biomaterials science including materials for prosthetics and implants, mimetic materials, biosensors, diagnostic devices, and drug delivery systems. Particular attention will be given to nanomaterials for diagnosis and treatment of diseases including targeted cancer treatments, drug delivery systems, and advanced imaging methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7350. Frontiers of Nanoelectronics.**

This course provides an introduction to the operating principles of nanoscale electronic and optical devices. The emphasis is on how leading edge nano-fabrication technology takes advantage of quantum mechanics of reduced sizes and dimensions. Specific examples of devices based on quantum wells, wires, dots and molecular electronics are given.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7355. Fluid Flow in Porous Media.**

In this course, the fundamental theory of transport and fluid flow in heterogeneous porous media will be presented. First, the equations that govern transport and fluid flow processes will be derived. Both analytical and numerical methods will be used to solve these equations in order to characterize and predict flow fields in porous media. These skills will then be applied to practical problems that involve porous media such as soils, rocks, biological tissues, concrete, etc. The knowledge gained from studies of fluid flow in natural porous materials will be employed to design/optimize systems with engineered porous media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7360. Nanomaterials Processing.**

The course will cover various aspects of materials processing related to semiconductor devices. Topics covered include properties of electronic materials, thin film deposition, etching, lithography, and related device physics with an emphasis on the nanoscale. Fabrication and characterization techniques will be covered, including clean room usage. Prerequisite: MSEC 7401 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7370. Advanced Polymer Science.**

Advanced topics in polymer science are discussed with a focus on high performance polymers such as high impact, conducting, shape memory, high temperature and the underlying phenomena that provide these unusual properties, and advanced polymer topic areas such as flame retardancy, barrier properties, dielectric properties, rheology, and fiber reinforced composites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7395A. Microwave & Power Device Physics and Materials.**

This course will develop an understanding of basic microwave and power device physics and technology and the advanced materials that are used in today's cutting-edge research & development. The primary focus will be wide bandgap semiconductor materials and devices, and their performance metric versus the industry standard Si-based devices. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395B. Thin Film Photovoltaic Devices.**

This course is a survey of the Materials Science of photovoltaic devices with emphasis on device physics including the photovoltaic effect, photon absorption, electrons and holes, generation and recombination, the pn-junction, charge separation, monocrystalline solar cells, thin film solar cells, III-V solar cells, and losses. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395C. Materials for Sustainable Energy.**

This course introduces principles and applications of sustainable energy materials used for energy generation, conversion, and storage. Topics of study include principles (thermodynamics, kinetics, transport phenomena, equivalent circuits, catalysis, and electrochemistry) and selection and performance criteria important for applications including batteries, supercapacitors, fuel cells, electrolyzers, dielectrics, biomass, and piezoelectrics. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395D. Polymer Characterization and Processing.**

This course will cover the concepts critical to the characterization and processing of organic polymers. Topics critical to characterization will include molecular weight determination, thermo/mechanical characterization, X-ray scattering, and polymer spectroscopy. Processing topics will include polymer rheology, principles of polymer processing, solution processing, and extrusion. Prerequisite: CHEM 4351 or CHEM 5351 or MSEC 7370 any with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395E. Industrial Ecology and Sustainability Engineering.**

This course covers the basic principles of life cycle analysis (LCA) of engineered products, materials, and processes. Topics covered include: biological ecology, industrial ecology, resource depletion, product design, process design, material selection, energy efficiency, product delivery, use, end of life and LCA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395F. Catalysis in Materials Science.**

This course introduces principles and applications of catalysis in materials science. The primary topics of study will include catalysis as a means of synthesizing materials and materials as catalysis. Subtopics will focus on specific catalysts (Ziegler-Natta, ROMP, and cross-coupling catalysts) and specific catalytic processes (hydrogenation, photoredox, and electrocatalysis).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395G. Applied Plasma Physics.**

Applied plasma physics focusing on the broad range of technical plasma devices, and to analyze and describe the main plasma physical characteristics and principles of operation. Emphasis will be on physical insight, application, and problem solving. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395H. Environmental Chemistry.**

Advanced study in environmental chemistry, with an emphasis on aquatic resources and materials science and engineering. Principles of geochemistry and atmospheric chemistry will be covered as they relate to environmental pollution monitoring and control. Principles and applications of green chemistry will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395I. Structure and Properties of Alloys.**

This course in an advanced exploration of the structure and properties of engineering alloys. Strengthening mechanisms of alloys are explored with specific applications to the alloys studied. The processing, properties, and structure of ferrous and nonferrous alloys are explored including new and emerging alloys. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395J. Advanced Concrete Materials and Durability.**

This course delves into a comprehensive coverage of Portland cement concrete materials as well as resilient and sustainable materials used for building and transportation infrastructure. Topics include cement and aggregate properties, chemical and mineral admixtures, mixture proportioning, concrete microstructure, concrete durability, long-term performance, durability prediction and modeling, durability of alternative cement, multi-scale assessment, and dimensional stability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395K. Electrical and Magnetic Characterization Methods.**

This course introduces electric and magnetic characterization methods important to metals, magnetic and semiconductor materials and devices. Various measurement techniques and methods will be reviewed. Students will learn to work with characterization tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395L. Advanced Solid State Physics.**

This course reviews models of a solid and energy band theory. Additional topics may include interaction of electromagnetic waves with solids, lattice vibrations and phonons, many body effects in solids, device physics, quantum phenomena, carrier transport properties, current device configurations, and materials interface problems. Prerequisite: MSEC 7401 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395M. Semiconductor Devices and Processing.**

This course addresses the basics of semiconductor devices, silicon and compound semiconductor material fabrication, photolithography, etching, control of dopant profiles for the formation of shallow junctions needed for nanoscale devices, ion implantation and microstructure engineering, different types of doping phenomena, the carrier action and charge transport properties, defect microstructures, low-resistivity Ohmic contacts, and different fabrication concepts of conventional and emerging micro-/nano-electronic devices. In addition, students will be involved in laboratory projects and seminar presentations. Prerequisite: MSEC 7401 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395N. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, etc. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course. Students will be asked to solve an infrastructure material related problem using advanced analytical and simulation tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395O. Modern Concepts in Materials Science.**

This course provides an overview of the modern concepts and principles that are used to describe and predict the physical properties of materials. An emphasis will be placed on developing and applying fundamental materials science concepts: atoms and atomic bonding, fundamentals of crystallography, elementary diffraction by solid-state materials, defects, solid solution and phase equilibrium. Particular attention will be given to the science and theories explaining the unique behavior of different classes of materials, i.e. ceramics, metals, polymers, electronic materials and composites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7399. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7401. Fundamental Materials Science and Engineering.**

Course covers fundamentals of chemical kinetics, physical properties, and continuum mechanics. Topics include electronic and atomic structure, structure of crystalline materials, imperfections, thermodynamic and kinetic principles and equations for closed and open systems, statistical models, phase diagrams, diffusion, phase transformations, conservation laws, and kinematics.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7402. Advanced Materials Science and Engineering Concepts.**

Fundamentals of quantum mechanics, physics of solid state, and physical electronics and photonics for advanced materials will be discussed. Topics will include quantum basis for properties of solids, lattice vibration, free electron model for magnetism, semiconductors, nanostructures and mesoscopic phenomena, superconductivity, and recent advances in new types of materials. Prerequisite: MSEC 7401 with a grade of "C" or better.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7599. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7699. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7999. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

Agriculture Building Room 206

T: 512.245.2130

<http://www.ag.txstate.edu/>

The Department of Agricultural Sciences at Texas State prepares students to work as leaders and technical professionals in the agriculture

industry, specifically in the fields of animal science, agribusiness management/agricultural economics, agricultural education, agricultural systems (mechanics), crop and soil science, and horticulture. Because 21<sup>st</sup> century agricultural and food challenges are highly complex, an integrated and multidisciplinary approach to teaching students about agricultural sciences is emphasized. For those students who aim to be agricultural teachers in public schools or community colleges, the department also offers an emphasis on teaching development with research possibilities. The Department of Agricultural Sciences hosts laboratories where the research focus of faculty and students include nutrition and health, soil health, crop science, horticultural therapy, meat quality, big data analysis, agricultural economics and policy, and issues of importance to small and beginning farmers and ranchers, among others. Some activities take place at the Freeman Center, a 3,500-acre, university-operated teaching and research ranch that provides a unique learning environment. Agricultural education has a long history at this university. When Southwest Texas State Normal School (now Texas State University) was created in 1899, it was charged with the responsibility of teaching agriculture to educators who were training to work in rural schools. Today, agricultural sciences students, along with those focusing on animal science, agribusiness/agricultural economics, agricultural education, agricultural systems, horticulture, or crop science, enjoy an experience with practical, hands-on classes, in addition to opportunities to engage in applied research.

## Master of Science (M.S.)

- Major in Integrated Agricultural Sciences (Professional Option) (p. 2750)
- Major in Integrated Agricultural Sciences (Thesis Option) (p. 2754)

## Program Overview

Based on a multidisciplinary approach, the Master of Science (M.S.) degree with a major in Integrated Agricultural Sciences will expose students to the breadth of agriculture, and provide opportunities for them to integrate what they learn across different courses. Students will be able to enhance their depth of knowledge in the focus area of their choice: agricultural business, economics and policy; agricultural education; animal science; or crop and soil science. Graduates will develop a 21<sup>st</sup> century expertise with theoretical and practical skills necessary to analyze, optimize, and apply their knowledge to complex agro-systems. The rigorous interdisciplinary agriculture curriculum will provide exposure to real-world applications, for students to develop technical and leadership skills necessary for an effective career in addressing and solving food and agricultural issues.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in agriculture, biology, chemistry, economics, education, or a closely related field from a regionally accredited university. The degree earned should indicate the ability to conduct and complete the thesis research proposed or the non-thesis program with excellent results. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs ([https://](https://www.gradcollege.txst.edu/international/faqs.html)

[www.gradcollege.txst.edu/international/faqs.html](https://www.gradcollege.txst.edu/international/faqs.html)) for more information.)

- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- resume/CV detailing prior work experience, research experience, awards, scholarships, and other related qualifications
- statement of interest (two-page maximum) including research interests, plans for graduate study, and professional aspirations and describing how the student's scholarly interests and relevant skills can be utilized in the program to pursue those goals
- three letters of recommendation from non-related individuals familiar with the student's scholarly work and/or relevant work experience

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

**Additional Information:** You will be required to take leveling courses if you lack sufficient background course work. Any required leveling course work must be completed with grades of B or better. Contact the graduate advisor for information regarding the background course work that may be required.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Integrated Agricultural Sciences (Professional Option) requires 36 semester credit hours. The major and supportive courses are to be taken with the advice and consent of the student's advisory committee, which consists of three or more faculty selected in consultation with the graduate advisor.

Non-credit (leveling) course work may be required prior to admission into the program if the student lacks sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
AG 5300	Applied Statistics and Econometrics for Agriculture or MATH 5376E Analysis of Variance	3
AG 5310	Research Methods in Integrated Agricultural Sciences	3
<b>Elective</b>		
Choose 3 hours from the following:		3
AG 5301	Agricultural Development and Policy	
AG 5324	Agroecology and Integrated Agriculture	
AG 5350	Foundations of Ethics and Leadership in Agriculture	
AG 5365	The Role of Animal Science in Society: An Integrated Approach	
<b>Prescribed Electives</b>		
Choose 27 hours from the following:		27
AG 5101	Research Experience	
AG 5398	Professional Paper	
<b>Agricultural Business, Economic and Policy Research Area:</b>		
AG 5302	Economics of Agricultural Production	
AG 5303	Agricultural Marketing and Price Analysis	
AG 5304	Economics of Sustainable Natural Resource Management	
ANLY 5335	Forecasting and Simulation	
<b>Crops and Soils Research Area:</b>		
AG 5120	Aquaponic Internship	
AG 5320	Integrated Agricultural Production in Aquaponic Systems	
AG 5323	Composting and Integrated Resource Management	
AG 5426	Soil Health and Development	
BIO 5412	Plant Anatomy	
GEO 5415	Geographic Applications of Remote Sensing	
TECH 5382	Industrial Ecology and Sustainability Engineering	
<b>Agriculture Education and Leadership Research Area:</b>		
AG 5351	Grant Development and Management	
AG 5352	Program Development and Evaluation	
AG 5354	Instructional Design in Agricultural Education	
AG 5355	Methods of Technological Change	
ADED 5382	Foundations of Adult Education	
SOCI 5309	Seminar in Qualitative Research Methods	
<b>Animal Science Research Area:</b>		
AG 5361	Food Technology and Meat Science	
AG 5362	Advanced Animal Science: Minerals and Vitamins in Animal Nutrition	
AG 5463	Animal Molecular Genetics	
AG 5364	Biology of Reproduction in Farm Animals	
BIO 5413	Parasitology	
<b>Agricultural Sustainability Research Area:</b>		
AG 5304	Economics of Sustainable Natural Resource Management	

AG 5323	Composting and Integrated Resource Management	
AG 5370	Special Problems in Technical Agriculture	
AG 5426	Soil Health and Development	
GEO 5313	Environmental Studies	
GEO 5334	Applied Water Resources	
MCS 5342	Sustainable Consumer Economy	
SOCI 5368	Seminar in Environmental Sociology	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

All Professional Option students must pass an oral comprehensive examination to demonstrate they have mastered the main concepts covered in their courses. The comprehensive exam is comprised of questions based on research methods, statistics, theory, and topics related to the student's coursework and area(s) of specialization. Students should consult their graduate advisor and the Graduate Handbook for the M.S program in Integrated Agricultural Sciences for a detailed description of the comprehensive examination procedures. If a student fails the comprehensive examination, they will be allowed to retake it. If a student fails a second time, they may petition the Integrated Agricultural Sciences steering committee for permission to take the examination a third time. Students will not be allowed to take an examination more than three times.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

### Agriculture (AG)

#### AG 5100. Professional Development.

This course introduces key concepts and practices for teaching college courses. It provides regular in-service training and planned periodic evaluations of instructional responsibilities. It is required for first-year teaching and instructional assistants in the Master's of Science in Integrated Agricultural Sciences. Graded on a credit (CR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### AG 5101. Research Experience.

This course provides students with an opportunity to explore a focused research topic. Ideally the topic would be an emergent topic within their research area that was unplanned and resulted from their initial investigation. May be repeated twice for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**AG 5120. Aquaponic Internship.**

This course provides students with hands-on production experience in aquaculture. Students will complete 64 hours of internship with an aquaponic facility.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AG 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**AG 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**AG 5300. Applied Statistics and Econometrics for Agriculture.**

This course focuses on data analysis, modeling techniques and their applications with statistical inference for agriculture. This course will cover statistical tools applied in agriculture, including probability, sampling, principles of estimation, hypothesis testing, general linear models, multiple regression analysis, qualitative response modeling, and other related tools widely used in agriculture.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5301. Agricultural Development and Policy.**

This course focuses on current issues that integrate agricultural policy, resource development, application of welfare criteria and economic analysis, and food and rural development problems of the U.S. and the world. Course topics include integrated agricultural and rural development, food and nutrition security, commodity issues, and trade policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5302. Economics of Agricultural Production.**

This course focuses on analysis of agricultural production economic concepts and models. Topics will include traditional neo-classical theory of the firm, duality theory, resource allocation, production selection, scale of operation of agricultural firms, and risk and uncertainty associated with agricultural production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5303. Agricultural Marketing and Price Analysis.**

This course emphasizes marketing theory and structure, characteristics of demand and supply of farm products, agricultural price research techniques for evaluating marketing behavior, market legislation, and market development. The course will provide an opportunity for students to develop marketable skills in quantitative price and market analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5304. Economics of Sustainable Natural Resource Management.**

This course provides economic tools to analyze sustainable natural resources and environmental issues. It enables students to develop integrative expertise in economic analysis utilizing natural and behavioral sciences. The integrative expertise provides students with the ability to more effectively, efficiently, and sustainably manage natural resources for multiple objectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5310. Research Methods in Integrated Agricultural Sciences.**

This course covers research techniques, literature analysis, the development and implementation of experimental designs, conceptual models and survey instruments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5320. Integrated Agricultural Production in Aquaponic Systems.**

This course focuses on crop and fish production, pest management, water quality, nutrient management, and economics and marketing in aquaponic systems. Topics covered include contrasts and comparisons to soil based, hydroponic cropping and aquaculture (confined fish production without crop interactions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5323. Composting and Integrated Resource Management.**

The course provides experience and theoretical foundation for the basic design, production, management, utilization and marketing of composts, vermicomposts and related products, and non-renewable natural resource issues related to agriculture.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5324. Agroecology and Integrated Agriculture.**

This course will focus on integrative and ecological principles of agricultural production. Emphasis will be on sustainable agriculture, complex systems, production diversity, integrated animal-crop systems, resilience and small producers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5350. Foundations of Ethics and Leadership in Agriculture.**

This course prepares students for professional leadership and service in agriculture, with emphasis on applications of ethics and leadership principles. The course will focus on industry ethics and leadership theory in various professional settings in agriculture.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5351. Grant Development and Management.**

This course explores competencies of locating external agency funding for agricultural research, teaching and extension. The principles of producing a competitive proposal that includes multi-, cross and interdisciplinary collaborations are also discussed. The development of the grant proposal, implementation, budget, and evaluation plan will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5352. Program Development and Evaluation.**

This course examines philosophies of program development, implementation and evaluation to meet stakeholders' expectations. Emphasis is placed on methodologies that effectively evaluate agricultural programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5354. Instructional Design in Agricultural Education.**

This course examines instructional design models appropriate from a pedagogical and andragogical viewpoint. Emphasis is placed on theories and models to support the design of print-based, web-based, or multimedia-based instruction. Students will prepare evaluation strategies to assess comprehensive instruction in a high-tech environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5355. Methods of Technological Change.**

This course explores the dynamics and culture of technological change in agriculture. Topics covered will include ways to implement change, skills for being an innovator and a change agent, how to predict the effects of change, and the integration of other sciences into agricultural sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5360. Advancements in Animal Science.**

Survey of the current knowledge and concepts in animal production including economic considerations and current production problems in breeding and feeding livestock.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5361. Food Technology and Meat Science.**

This course explores the science and instrumentation of meat science; including food safety, processing and evaluation of wholesale and retail cuts of beef, pork, lamb, and poultry; including fresh, cooked/smoked, grilled, and pickled products. The evaluation of consumer preference and economic returns based on product presentation will be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5362. Advanced Animal Science: Minerals and Vitamins in Animal Nutrition.**

This course is an advanced study of the utilization and requirements of minerals and vitamins in farm and ranch animals. It emphasizes ruminant and non-ruminant mineral and vitamin metabolism and utilization. The utilization of specific minerals and vitamins by different species will be used to explain and predict subsequent performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5364. Biology of Reproduction in Farm Animals.**

This course will focus on animal agriculture reproduction and examine the molecular principles of reproduction. Topics will include molecular reproductive endocrinology, advanced physiology and current research in animal reproduction science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5365. The Role of Animal Science in Society: An Integrated Approach.**

This course provides students with a broad understanding of the role animals have in society, the influences of animal production on economic development, changes in policy and social viewpoints of animal production, and the development of domesticated animals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5370. Special Problems in Technical Agriculture.**

Special problems will be selected to meet the needs of the individual student. May be repeated (once) for additional credit when the problem differs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**AG 5390. Foundation Studies in Agriculture.**

This course is a leveling course to provide prerequisite knowledge necessary for graduate-level coursework in Agriculture. Course content varies depending on academic preparation. This course does not earn graduate degree credit. Repeatable up to 9 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**AG 5398. Professional Paper.**

This course is required for non-thesis students to prepare a professional paper of publishable quality. Graded on a credit (CR), no-credit (F) basis. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AG 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Integrated Agricultural Sciences. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AG 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**AG 5426. Soil Health and Development.**

This course focuses on the fundamental topics of soil health and development. These fundamentals include pedogenesis, mineral composition, tillage practices, soil ecosystem and sustainability, soil biology and soil physics.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5463. Animal Molecular Genetics.**

This course examines the theory and practice of molecular genetics of livestock. Topics covered include genetic concepts and theory, as well as applications of these concepts in animal agriculture; e.g., Mendelian genetics, genomic revolution, cloning, epigenetics and transgenics. The course emphasizes techniques and underlying biological principles in genetics.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**AG 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

Based on a multidisciplinary approach, the Master of Science (M.S.) degree with a major in Integrated Agricultural Sciences will expose students to the breadth of agriculture, and provide opportunities for them to integrate what they learn across different courses. Students will be able to enhance their depth of knowledge in the focus area of their choice: agricultural business, economics and policy; agricultural education; animal science; or crop and soil science. Graduates will develop a 21<sup>st</sup> century expertise with theoretical and practical skills necessary to analyze, optimize, and apply their knowledge to complex agro-systems. The rigorous interdisciplinary agriculture curriculum will provide exposure to real-world applications, for students to develop technical and leadership skills necessary for an effective career in addressing and solving food and agricultural issues. Each student's degree will culminate in either thesis-based research or in a non-thesis professional paper.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in agriculture, biology, chemistry, economics, education, or a closely related field from a regionally accredited university. The degree earned should indicate the ability to conduct and complete the thesis research proposed or the non-thesis program with excellent results. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- resume/CV detailing prior work experience, research experience, awards, scholarships, and other related qualifications
- statement of interest (two-page maximum) including research interests, plans for graduate study, and professional aspirations and describing how the student's scholarly interests and relevant skills can be utilized in the program to pursue those goals
- three letters of recommendation from non-related individuals familiar with the student's scholarly work and/or relevant work experience

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally

accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall and minimum individual module scores of
  - 19 listening
  - 19 reading
  - 19 speaking
  - 18 writing
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

**Additional Information:** You will be required to take leveling courses if you lack sufficient background course work. Any required leveling course work must be completed with grades of B or better. Contact the graduate advisor for information regarding the background course work that may be required.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Integrated Agricultural Sciences requires 36 semester credit hours, including a thesis. The major and supportive courses are to be taken with the advice and consent of the student's advisory committee, which consists of three or more faculty selected in consultation with the graduate advisor.

Non-credit (leveling) course work may be required prior to admission into the program if the student lacks sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
AG 5300	Applied Statistics and Econometrics for Agriculture or MATH 5376E Analysis of Variance	3
AG 5310	Research Methods in Integrated Agricultural Sciences	3
<b>Elective</b>		
Choose 3 hours from the following:		3
AG 5301	Agricultural Development and Policy	
AG 5324	Agroecology and Integrated Agriculture	
AG 5350	Foundations of Ethics and Leadership in Agriculture	
AG 5365	The Role of Animal Science in Society: An Integrated Approach	
<b>Prescribed Electives</b>		
Choose 21 hours from the following:		21
AG 5101	Research Experience	
Agricultural Business, Economic and Policy Research Area:		
AG 5302	Economics of Agricultural Production	

AG 5303	Agricultural Marketing and Price Analysis	
AG 5304	Economics of Sustainable Natural Resource Management	
ANLY 5335	Forecasting and Simulation	
Crops and Soils Research Area:		
AG 5120	Aquaponic Internship	
AG 5320	Integrated Agricultural Production in Aquaponic Systems	
AG 5323	Composting and Integrated Resource Management	
AG 5426	Soil Health and Development	
BIO 5412	Plant Anatomy	
GEO 5415	Geographic Applications of Remote Sensing	
TECH 5382	Industrial Ecology and Sustainability Engineering	
Agriculture Education and Leadership Research Area:		
AG 5351	Grant Development and Management	
AG 5352	Program Development and Evaluation	
AG 5354	Instructional Design in Agricultural Education	
AG 5355	Methods of Technological Change	
ADED 5382	Foundations of Adult Education	
SOCI 5309	Seminar in Qualitative Research Methods	
Animal Science Research Area:		
AG 5361	Food Technology and Meat Science	
AG 5362	Advanced Animal Science: Minerals and Vitamins in Animal Nutrition	
AG 5364	Biology of Reproduction in Farm Animals	
AG 5463	Animal Molecular Genetics	
BIO 5413	Parasitology	
Agricultural Sustainability Research Area:		
AG 5304	Economics of Sustainable Natural Resource Management	
AG 5323	Composting and Integrated Resource Management	
AG 5370	Special Problems in Technical Agriculture	
AG 5426	Soil Health and Development	
GEO 5313	Environmental Studies	
GEO 5334	Applied Water Resources	
MCS 5342	Sustainable Consumer Economy	
SOCI 5368	Seminar in Environmental Sociology	
Thesis		
AG 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
AG 5199B	Thesis	
AG 5299B	Thesis	
AG 5399B	Thesis	
AG 5599B	Thesis	
AG 5999B	Thesis	
Total Hours		36

## Comprehensive Examination Requirement

All thesis students must pass an oral comprehensive examination to demonstrate they have mastered the main concepts covered in their courses and research activities. The comprehensive exam is comprised

of questions based on research methods, statistics, and theory, and that also incorporate empirical research and coursework from a student's area(s) of specialization. Immediately following their thesis oral defense, each student will undertake the oral comprehensive exam as administered by the student's thesis committee. Students should consult their graduate advisor and the Graduate Handbook for the M.S. program in Integrated Agricultural Sciences for a detailed description of the comprehensive examination procedures. If a student fails the comprehensive examination, they will be allowed to retake it. If a student fails a second time, they may petition the Integrated Agricultural Sciences steering committee for permission to take the examination a third time. Students will not be allowed to take an examination more than three times.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form



- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

## Agriculture (AG)

### AG 5100. Professional Development.

This course introduces key concepts and practices for teaching college courses. It provides regular in-service training and planned periodic evaluations of instructional responsibilities. It is required for first-year teaching and instructional assistants in the Master's of Science in Integrated Agricultural Sciences. Graded on a credit (CR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### AG 5101. Research Experience.

This course provides students with an opportunity to explore a focused research topic. Ideally the topic would be an emergent topic within their research area that was unplanned and resulted from their initial investigation. May be repeated twice for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### AG 5120. Aquaponic Internship.

This course provides students with hands-on production experience in aquaculture. Students will complete 64 hours of internship with an aquaponic facility.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

### AG 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### AG 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### AG 5300. Applied Statistics and Econometrics for Agriculture.

This course focuses on data analysis, modeling techniques and their applications with statistical inference for agriculture. This course will cover statistical tools applied in agriculture, including probability, sampling, principles of estimation, hypothesis testing, general linear models, multiple regression analysis, qualitative response modeling, and other related tools widely used in agriculture.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### AG 5301. Agricultural Development and Policy.

This course focuses on current issues that integrate agricultural policy, resource development, application of welfare criteria and economic analysis, and food and rural development problems of the U.S. and

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T: 512.245.2178 F: 512.245.8713  
<http://www.bio.txstate.edu/>

## Master's Programs

The Department of Biology offers several degree options for students wishing to pursue graduate study at the master's level, including Aquatic Resources, Biology, Population and Conservation Biology, and Wildlife Ecology. Thesis-based degrees are usually chosen as preparation for professional careers or advanced graduate work (Ph.D., D.V.M., or M.D.) and by students seeking advanced training for technology-related industries. Non-thesis degrees may be chosen by students preferring broad training in biology without a formal research experience; this plan is often selected by pre-professional students or by secondary science teachers wishing to broaden their content training.

## Thesis Students

Students pursuing a master's degree with thesis should have a thesis committee approved by the end of their first long term of enrollment in the graduate program. The thesis committee comprises three or more individuals and is chaired by the thesis advisor. Committee members should be selected by the student in consultation with the thesis advisor and should be chosen on the basis of what they can contribute to the student's research and/or graduate studies. The majority of the committee members should be members of the Department of Biology. Committee members expect to be consulted about the research project and should contribute guidance and expertise to the project. A "Thesis Committee" form can be downloaded from the Biology Department website and must be approved by the chair of the department's Graduate Committee and the department chair prior to the submission of a thesis proposal.

Students working on a thesis are expected to enroll in a thesis course each term that they are actively involved in research. Students should enroll in BIO 5399A (<http://mycatalog.txstate.edu/search/?P=BIO%205399A>) for their first term of thesis research and in a Thesis B course (BIO 5199B (<http://mycatalog.txstate.edu/search/?P=BIO%205199B>), BIO 5299B (<http://mycatalog.txstate.edu/search/?P=BIO%205299B>), BIO 5399B (<http://mycatalog.txstate.edu/search/?P=BIO%205399B>), BIO 5599B (<http://mycatalog.txstate.edu/search/?P=BIO%205599B>), or BIO 5999B (<http://mycatalog.txstate.edu/search/?P=BIO%205999B>)) for all subsequent terms. While enrolled in BIO 5399A (<http://mycatalog.txstate.edu/search/?P=BIO%205399A>) the student should prepare a detailed thesis proposal that introduces the project to be investigated, summarizes the relevant background literature, and explains the methodology to be used in carrying out the research and should complete a "Thesis Proposal" form that can be downloaded from The Graduate College website. Submission of an approved thesis proposal to The Graduate College is expected before the end of the student's second term of enrollment in a thesis course. Students pursuing a thesis-based degree must be enrolled in at least one hour of thesis credit during the term in which they graduate.

All students completing a thesis are required to present the results of their research in a public seminar attended by thesis committee members and other interested individuals. Following the presentation of the thesis, the student must pass a comprehensive examination administered privately by the thesis committee.

## Non-thesis Students

Students pursuing a non-thesis degree are expected to have a supervising professor by the end of their first year of enrollment in the graduate program. The supervising professor will normally be a faculty member specializing in an area of particular interest to the student and is often the individual who oversees the required, independent study project. Prior to the final term of enrollment, the non-thesis student must, in consultation with the supervising professor, select a committee that will administer the final comprehensive examination. A "Non-Thesis Committee" form can be downloaded from the Biology Department website and must be approved by the chair of the department's graduate committee and the department chair.

Students pursuing a non-thesis degree must be enrolled in at least one hour of coursework during the term in which they graduate.

## Comprehensive Examination

All candidates for master's degrees in the Department of Biology must pass a comprehensive final examination administered by the student's committee. The examination may be oral or written and must cover, at a minimum, the student's field of concentration and the thesis if one was written. The results of this exam are reported on the "Master's Comprehensive Examination Report" form, which can be downloaded from The Graduate College website and must be filed with The Graduate College at least 10 days prior to the date of expected graduation.

## Financial Assistance

Assistantships and scholarships are available to qualified applicants on a competitive basis. In order to be considered for scholarships, applicants must have their application completed for review before the priority application deadline as specified on The Graduate College website. The Department of Biology offers a number of graduate instructional assistantships to full-time students enrolled in the master's program, and information on the availability of these positions will be provided following acceptance into the graduate program. These assistantships are renewable based upon an annual review of each student's progress and performance. Faculty members may also have funds available to support students as research assistants. Support is normally limited to two years.

The Graduate College can provide information concerning the availability of graduate scholarships.

## Doctor of Philosophy (Ph.D.)

- Major in Aquatic Resources and Integrative Biology (Entering with Master's Degree) (p. 2759)
- Major in Aquatic Resources and Integrative Biology (Entering with Bachelor's Degree) (p. 2779)

## Master of Science (M.S.)

- Major in Aquatic Resources (Aquatic Biology Concentration) (p. 2799)
- Major in Aquatic Resources (Aquatic Systems Concentration) (p. 2809)
- Major in Biology (Non-thesis Option) (p. 2819)
- Major in Biology (Non-thesis Minor Option) (p. 2827)
- Major in Biology (Thesis Option) (p. 2836)

- Major in Biology (Thesis Science or Geography Minor Option) (p. 2845)
- Major in Population and Conservation Biology (p. 2855)
- Major in Wildlife Ecology (p. 2865)

## Minors

- Aquatic Resources (p. 2875)
- Biology (p. 2875)

## Program Overview

Sustainable freshwater resources provide a foundation for aquatic and terrestrial ecosystems, as well as human use and economic development. However, inadequate understanding of aquatic resources and a prevailing inability to properly integrate scientific, technical, and socioeconomic elements continues to seriously hinder the goal of providing sustainable aquatic resources, not only in Texas but across the nation and around the world.

### Educational Goal

The doctoral program emphasizes original research and is designed to provide depth and breadth of knowledge in the field of aquatic resources and related disciplines, including basic and applied research, management, and policy. Students will work, both independently and with other specialists, in a multidisciplinary environment to identify and solve complex problems and issues relevant to the sustainable use of aquatic resources.

### Department Policies

Each doctoral student will develop a program of research and study in consultation with their Ph.D. advisor and the doctoral program director and approved by the dean of The Graduate College. This program will include a set of core courses and an appropriate selection of elective courses necessary to provide the student with the scientific expertise and knowledge to work independently and with others in a multidisciplinary environment to address the range of issues constituting sustainable aquatic resources.

Prospective students must contact doctoral faculty members to identify an individual willing to serve as their major advisor prior to submitting their application to the graduate program. A list of faculty and their research areas is available at <http://www.bio.txstate.edu/Graduate-Programs/Ph-D--Aquatic-Resources.html>.

### Financial Assistance

Assistantships and scholarships are available to qualified applicants. The Department of Biology offers doctoral instructional assistantships and teaching assistantships on a competitive basis to full-time students enrolled in the aquatic resources Ph.D. program. Detailed information on the department's assistantship policy is included in the Department's Graduate Guide. The office of The Graduate College can provide further information regarding scholarships.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review

the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- master's degree in biology, chemistry, engineering, geology, or a related natural science field from a regionally accredited university
- official transcripts from **each institution** where course credit was granted
- minimum 3.25 GPA in all completed graduate course work
- GRE not required
- mentor communication (intent to mentor letter) sent directly from a doctoral faculty member within the Aquatic Resources and Integrative Biology Program. The mentor must email their letter of support directly to The Graduate College at [gradcollege@txstate.edu](mailto:gradcollege@txstate.edu) prior to the program's deadline.
- resume/CV summarizing educational and professional accomplishments
- statement of purpose describing professional aspirations and rationale for pursuing a doctoral degree in aquatic resources
- three letters of recommendation addressing the substance and quality of the student's preparation for doctoral study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Aquatic Resources and Integrative Biology (for students entering with a master's degree) requires 61 semester credit hours, including a dissertation. The selection of electives should be made in consultation with the student's Ph.D. advisor and the program director.

Code	Title	Hours
<b>Required Courses</b>		
BIO 7102	Seminar in Aquatic Resources (Taken twice)	2
BIO 7303	Research (Taken three times)	9
BIO 7405 or BIO 7406	Statistics and Experimental Design I Statistics and Experimental Design II	4
BIO 7312		3
PHIL 7323	Environmental Ethics and Sustainable Aquatic Resources	3
<b>Prescribed Electives</b>		
Choose 25 hours from the following:		25
BIO 7114	Collaborative Research	
BIO 7120	Population Biology Seminar	
BIO 7214	Collaborative Research	
BIO 7308	History of Vegetation and Climate	
BIO 7314	Collaborative Research	
BIO 7324	Natural History and Conservation of Large Mammals	
BIO 7336	Evolutionary Ecology	
BIO 7346	Conservation Biology	
BIO 7353	Biogeography	
BIO 7355	Plant-Water Relations	
BIO 7360A	Industry and Sustainable Aquatic Resources	
BIO 7360B	Environmental Linkages and Sustainable Aquatic Resources	
BIO 7360C	Role of State and Federal Courts in Protection and Maintenance of Aquatic Resources	
BIO 7360D	Special Topics in Aquatic Resources: Evolutionary Ecology	
BIO 7360E	Advances in Water Quality Investigations	
BIO 7360F	Special Topics in Aquatic Resources: Approaches to Aquatic Resource Modeling	
BIO 7360G	Molecular Techniques in Microbial Ecology	
BIO 7360H	Parasites and Diseases of Fishes and Other Aquatic Animals	
BIO 7360I	Bayesian Statistics for Biology	
BIO 7360K	Evolution	
BIO 7360L	Special Topics in Aquatic Resources: Landscape & Biogeography of Texas	
BIO 7360P	Special Topics in Aquatic Resources: Regulation of Plant Growth and Development	
BIO 7360Q	Special Topics in Aquatic Resources: Spatial Ecology of Animals	
BIO 7360R	Special Topics in Aquatic Resources: Community and Ecosystem Ecology	
BIO 7360S	Soil Biology	
BIO 7360T	Karst Hydrogeology and Geomorphology	
BIO 7360U	Sustainability in a Changing World	
BIO 7360V	Techniques in Aquatic Biology	
BIO 7410	Aquatic Microbial Ecology	
BIO 7412	Environmental Hydrology	
BIO 7419	Stream Ecology	
BIO 7426	Ecology and Management of Aquatic Macrophytes	
BIO 7427	Principles of Population Biology I	

BIO 7428	Principles of Population Biology II
BIO 7433	Population Genetics
BIO 7434	Herpetology
BIO 7440	Aquatic Toxicology
BIO 7447	Microbial Physiology
BIO 7466	Phylogenetics
BIO 7468	Groundwater Resources
BIO 7469	Introduction to Ecological Modeling
CHEM 7330	Environmental Chemistry
ENG 7314	Specializations in Professional and Technical Communication Topics
GEO 7316	Remote Sensing and the Environment
GEO 7318	GIS and Environmental Geography
GEO 7334	Geographic Aspects of Water
GEO 7417	Geographic Information Systems
<b>Dissertation</b>	
Choose a minimum of 15 hours from the following:	
BIO 7199A	Dissertation in Aquatic Resources
BIO 7299A	Dissertation in Aquatic Resources
BIO 7399A	Dissertation
BIO 7599A	Dissertation in Aquatic Resources
BIO 7699A	Dissertation
BIO 7999A	Dissertation in Aquatic Resources
<b>Total Hours</b>	
<b>61</b>	

## Advancement to Candidacy

### Application for Advancement to Candidacy

Students can download the "Application for Advancement to Candidacy" from The Graduate College website or they can obtain a copy from the program director. The student should complete and sign the upper portion of the form and return it to the program director. When all requirements for admission to candidacy have been met (completion of core course work, submission of an approved dissertation proposal, and completion of the comprehensive examination), the program director will forward the Application for Advancement to Candidacy form to the dean of The Graduate College for review and approval.

### Advancement to Candidacy Time Limit

Students entering the doctoral program in Aquatic Resources and Integrative Biology with a master's degree and receiving departmental support are expected to take the Advancement to Candidacy Comprehensive Examination by the end of their second year in the program; students entering with a bachelor's degree and receiving departmental support are expected to take the examination by the end of their third year. All students are expected to have passed the Advancement to Candidacy Comprehensive Examination within one calendar year of completing the core course work required by their degree audit. This expectation holds for both full-time and part-time students. Requests for a time extension must be submitted to the program director by the student's Ph.D. advisor and approved by the graduate committee.

No credit will be applied toward a student's doctoral degree for course work completed more than four years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at Texas State, as well as course credit transferred to Texas State from other accredited institutions.



## Grade-Point Requirements for Advancement to Candidacy

A minimum GPA of 3.0 on all course work undertaken as a graduate student in the Aquatic Resources and Integrative Biology doctoral program is required for admission to candidacy. No grade below "B" on any graduate course work may apply toward the Ph.D. degree at Texas State.

Incomplete grades must be cleared through the office of The Graduate College at least ten days before approval for advancement to candidacy will be granted.

## Advancement to Candidacy Comprehensive Examination

Students in the doctoral program are required to pass a comprehensive examination that will assess the student's preparedness to carry out the proposed plan of dissertation research. Students taking the Advancement to Candidacy Comprehensive Examination must have completed all required core and background courses as prescribed in their degree audit. Detailed information on the examination procedure can be found in the Department of Biology's *Guide to Graduate Study* or obtained from the program director.

The Advancement to Candidacy Comprehensive Examination will consist of both written and oral components. The written component of the examination will consist of questions submitted by the dissertation committee members and will be administered by the program director. Successfully passing the written component of the examination requires positive votes from all members of the dissertation committee.

Successful completion of the written portion of the candidacy exam must be followed within thirty days by an oral presentation and defense of the dissertation proposal. The oral component of the Advancement to Candidacy Comprehensive Examination will entail a public seminar presentation of the student's dissertation proposal, followed immediately by a closed defense of the proposal attended only by the student and his or her dissertation committee. Both the presentation and defense must take place on the same day. Successfully passing the oral examination requires positive votes from all members of the student's dissertation committee.

## Dissertation Proposal

A dissertation proposal prepared by the student and approved by the student's Ph.D. advisor and all other members of the dissertation committee is a requirement for advancement to candidacy status. The proposal must outline the substance and scope of the dissertation research, present the methodology to be used, and survey the relevant literature. The student's Ph.D. advisor and other dissertation committee members must indicate approval of the dissertation proposal on the "Dissertation Proposal form" which can be downloaded from The Graduate College website or obtained from the program director. A final copy of the dissertation proposal, accompanied by the signed approval form, must be turned in to the program director, who will forward it to the dean of The Graduate College for review and final approval.

## Recommendation for Advancement to Candidacy

The dissertation committee recommends the applicant for advancement to candidacy after completing the "Doctoral Comprehensive Examination Report" which can be downloaded from The Graduate College website or obtained from the program director. The results of the Advancement to Candidacy Comprehensive Examination and the Application for Advancement to Candidacy must be filed in the office of The Graduate College before the dean of The Graduate College gives final approval

to candidacy. The program director is responsible for submitting these forms to the office of The Graduate College.

## Dissertation Research and Writing

All doctoral students are required to complete a dissertation. The dissertation must represent an original contribution to scholarship based on independent investigation. Preparation of the dissertation should follow the guidelines in the current edition of the *CBE (Council of Biology Editors) Style Manual* or in an appropriate professional journal in the designated field, as deemed acceptable by the dissertation committee.

## Dissertation Enrollment Requirements

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each term until the defense of their dissertation. If a student is receiving supervision on the dissertation during the summer or the student is graduating during the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred. Students must complete a minimum of 15 semester hours of dissertation research and writing credit.

## Dissertation Time Limit

Students are expected to complete the dissertation within three years of advancement to candidacy. Successful completion of the dissertation defense must occur within ten years of the student's entry into the Ph.D. program. Any exceptions to these time limits require the approval of the program director and the dean of The Graduate College. The dissertation committee and the program director will review each student annually to ascertain his or her progress in pursuing the degree, and will consult with the student's Ph.D. advisor and dissertation committee on this matter as appropriate.

## Dissertation Committee

The dissertation committee is responsible for the Advancement to Candidacy Comprehensive Examination and will oversee the research progress of a doctoral student and the writing of the student's dissertation. The committee will consist of at least five members, including the student's Ph.D. advisor, two other Texas State biology doctoral faculty members, and two external doctoral-level members, at least one of whom must be from an institution other than Texas State. The student's Ph.D. advisor will chair the committee and will normally be from the major department. The student, program director, department chair, and the dean of The Graduate College will approve the composition of the dissertation committee. The student is responsible for obtaining committee members' signatures on the "Dissertation/Research Advisor Assignment form" and the "Dissertation Committee Request form," which can be downloaded from The Graduate College website.

## Committee Changes

Any changes to the dissertation committee must be submitted for approval to the dissertation committee chair, the doctoral program director, the department chair, and the dean of The Graduate College. Changes must be submitted no less than sixty days before the dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be downloaded from The Graduate College website.



## Dissertation Defense

The dissertation defense will consist of two parts. The first part is an oral presentation of the dissertation research as a public seminar that should be given as part of the department's weekly seminar series. The second part of the defense is restricted to the student's dissertation committee and will entail an oral examination over the dissertation research.

The oral examination over the dissertation research may not be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least 30 days before the anticipated defense date. After committee members have reviewed the draft with the student and provided comments, the student, in consultation with the Ph.D. advisor, will incorporate the recommended changes into a second draft of the dissertation. When each committee member is satisfied that the draft dissertation is defensible, the oral examination may be scheduled. The full committee, including all external members, must be present. Approval of the dissertation requires positive votes from all members of the dissertation committee. At the conclusion of the defense, a "Dissertation Defense Report form" — which can be downloaded from The Graduate College website — must be completed, signed by all committee members, and submitted to the program director, who will forward it to the dean of The Graduate College for review and final approval. Specific information on the examination procedure can be found in the Department of Biology's *Guide to Graduate Study* or obtained from the program director.

## Approval and Submission of the Dissertation

Following approval and signing of the dissertation by the members of the dissertation committee and submission of the "Dissertation Defense Report form", the student must submit one copy of the dissertation and the signed "Thesis/Dissertation Committee Approval" form to The Graduate College. Specific guidelines for approval and submission of the dissertation can be obtained from The Graduate College.

Doctoral courses in Biology (and other related departments): BIO (p. 2762), CHEM (p. 2770), ENG (p. 2772), GEO (p. 2772), PHIL (p. 2778)

## Courses Offered Biology (BIO)

### BIO 7100. Professional Development.

This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### BIO 7102. Seminar in Aquatic Resources.

This course is an interactive discussion of timely issues and problems, designed to introduce students to the range of scientific, socioeconomic and policy issues likely to be encountered within the field of aquatic resources. All students seeking a doctoral degree in Aquatic Resources must enroll in BIO 7102 at least twice.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### BIO 7103A. Ecology and Society.

Interactive discussion on relationships between society and the life-supporting ecosystems on which humans depend. Topics include roles of natural systems in social systems; effects of social, economic and political institutions on ecological systems and services; and the means by which humans develop and sustain desired ecological and social states.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

### BIO 7103B. Aquaculture.

The course comprises a survey of aquaculture production throughout the world. It also examines and discusses the impacts of aquaculture on nutrition, fisheries and the economy.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

### BIO 7103D. Molecular Biology of the Cell.

Interactive discussion of current literature on molecular biology of the cell. The course is designed to discuss concepts and their applications and methodology associated with the structure and function of the cell at cellular and molecular level.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

### BIO 7103E. Contemporary Problems in Ecology.

This course is an interactive discussion of the theoretical foundations and empirical basis for controversial topics in ecology, designed to develop critical thinking skills, and the ability to evaluate and integrate the biological, chemical and physical factors that affect the structure, functions, and interactions characterizing communities and ecosystems.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103F. Molecular Genetics of Plant Development.**

The study of plant development is rapidly changing as plant genome projects discover a multitude of new genes, and their expression and interaction patterns are understood. This course is designed to discuss concepts in plant development, and developmental processes as pathways of gene regulatory activities.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103G. Ecohydrology.**

A review of the concept of ecohydrology, its scientific foundation, and its ecological-hydrological linkages. Current topics in ecohydrology in the literature will be discussed, including manipulation of biota and hydrology interactions in a landscape, and the possibility of augmenting the resilience of ecosystems to anthropogenic changes.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103H. Integrated Waterbird Management.**

This course focuses on the ecology and management of waterbirds, with an emphasis on the inland and coastal waterbirds of Texas. The basic ecology of waterbirds, waterbird management techniques, and waterbird habitat management will be discussed.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103I. Avian Ecology and Evolution.**

This course is an interactive discussion of avian ecology and evolution, providing students with a critical examination of theories, hypotheses, and lab and field-based data that support or refute these hypotheses. This course also discusses peer-reviewed literature that challenges some paradigms in avian ecology and evolution.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7104. Marine Pollution.**

In this course, students will read and discuss the scientific literature on the sources, bioaccumulation, trophic transfer, and health effects of contaminants in the marine environment. Papers will address a variety of marine life including plankton, crustaceans, mollusks, fishes, marine mammals, turtles, and birds. Contaminants to be reviewed include trace elements, PCBs, oil, pesticides, radionuclides, plastics, pharmaceuticals, illegal drugs, and personal care products.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7105. Environmental Issues through Documentaries.**

In this course, students will examine how environmental issues are addressed in documentaries. Students will learn how to critically evaluate documentaries for scientific content, imagery, biases, and ease of understanding. Topics to be examined include overfishing, the wildlife trade, habitat degradation, pollution, energy resources, climate change, sustainability, and conservation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7114. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7120. Population Biology Seminar.**

This course facilitates exploration of current topics in population and conservation biology through reading and discussion of contemporary primary and secondary literature.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7199A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7214. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7299A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7300. Communicating Science.**

This course explores how to successfully disseminate science through visualizations, oral presentations, and written works to multiple audiences. Special emphasis will be placed on communicating with the general public, media, granting agencies, and science peers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7301. College Science Teaching.**

This course is designed for graduate students in the sciences who are interested in improving their science teaching and/or are interested in pursuing careers in academia. This course focuses on the central question, "How do college students best learn science, and thus how do we best teach them?"

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7302. Problems in Aquatic Resources.**

Individual study on specific state, national, or international aquatic resources issues, under direct supervision of a doctoral or associate faculty member. Students may not enroll in BIO 7302 more than twice for doctoral credit without the approval of the Graduate Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7303. Research.**

Research course for students who have not yet passed their Candidacy Exam, typically under direction of research-dissertation supervisor. Pre-candidacy students must enroll in course every semester until admission to Candidacy, although it may not be taken more than three times for doctoral credit without the approval of Graduate Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7308. History of Vegetation and Climate.**

An overview of past vegetation and its relationship to changing climate. Topics include principles of paleovegetation analysis, paleoclimatology, the rise of flowering plants, vegetation during the age of dinosaurs, the rise of the grasslands, and the Quaternary Ice Age. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7310. Global Aquatic Resources.**

Introduction to global, national, and regional aquatic resource issues, including scientific, environmental policy and socioeconomic components and perspectives. Water quantity and quality issues and their root causes in different regions of the world are examined, with an emphasis on case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7311. Ecology of Temporary Waters.**

The course explores the diversity of temporary bodies of water and of the species that rely on them, including their special adaptations, population and community dynamics, the ecological role of temporary waters, and how these systems are impacted by humans. Background coursework or independent study in ecology is recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7314. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7326. Immunobiology.**

This lecture-based course will cover the mechanisms and biology of the innate and adaptive immune system. Emphasis will include relationship to cancer, transplantation, hypersensitivity (allergy), and disease. Students will evaluate current research in immunology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7327. Ecological Immunology.**

This course explores the roles of immunity in natural ecosystems, focusing on central concepts in ecological immunology. From viruses to parasites, pathogenic threats are omnipresent. As epizootic outbreaks become more common, it is important to integrate immunological knowledge with traditional ecological perspectives. Background coursework in immunology is recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7331. Human Dimensions of Wildlife and Fisheries Conservation.**

This course will provide principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will have an opportunity to integrate human dimensions into decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7332. Introduction to R Programming for Biologists.**

This course introduces the programming language R. The course will focus on best practices in programming and the use of Base-R and RStudio. Topics include navigating the R and RStudio environment, installing packages, loading, manipulating, and visualizing data, declaring variables, writing loops, and writing functions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7333. Phylogenetic Comparative Methods.**

This course introduces students to modern phylogenetic comparative methods and teaches how to perform them. Topics include constructing phylogenies, dating phylogenies, finding and using previously published phylogenetic datasets, phylogenetic data visualization, and a variety of methods to test ecological and evolutionary hypotheses in a phylogenetic framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7336. Evolutionary Ecology.**

This course will use an evolutionary perspective to explore questions provided by natural selection and sexual selection through assessment of current theory and research related to topics such as competition, coevolution, and phenotypic plasticity. Students will achieve comprehension and familiarity with the field through discussions and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7342. Virology.**

This course examines the structure, multiplication and genetics of bacterial, plant, and animal viruses as well as the role of viruses in human and plant disease. Students are expected to become familiar with the research literature in virology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7346. Conservation Biology.**

Examination of the alteration of habitats and associated biological changes threatening the continued existence of species and basic ecosystems. Topics include conservation ethics, working paradigms, levels and loss of global biodiversity, conservation at population and ecosystem levels, restoration ecology, endangered species biology and conservation laws. Recent Advances are stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7353. Biogeography.**

Examines historical and ecological explanations of the geographic distribution of organisms including the role of geologic, climatic, and biologic changes. Emphasizes the historical and philosophical development of the science and modern methods of analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7354. Applied Analyses of Populations.**

In this course students will learn and apply a variety of statistical techniques for analyzing populations. They will build code to conduct and compare statistical analyses as they apply to real population data. Students will use real-world data sets to generate objectives and test hypotheses including conducting all data visualization and validations, performing models, selecting appropriate models, and estimating latent variables and their predictors. Analyses include assessing the effects of environmental attributes on occupancy, relative abundance, abundance, space (habitat) use, home range size, local colonization, local extinction, survival, and recruitment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7355. Plant-Water Relations.**

Examination of the physiology and ecology of water use in higher plants, including the uptake, utilization, and movement of water, transpiration and adaptation to variable water availability including drought, and the ecological role of water in structuring plant communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7360A. Industry and Sustainable Aquatic Resources.**

Examination of industrial water needs and uses, the types and quantities of water pollutants produced by different industries, problems faced by industry regarding process water for different manufacturing activities, and the possibilities for industry to contribute to the goal of sustainable aquatic resources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360B. Environmental Linkages and Sustainable Aquatic Resources.**

Introduction to the environmental relationships between humans and other living beings and the ecological systems in which they exist. Emphasis will be on the potential for individual environmental problems to have serious impacts on other environmental components, as well as the nature of these impacts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360C. Role of State and Federal Courts in Protection and Maintenance of Aquatic Resources.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360D. Evolutionary Ecology.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360E. Advances in Water Quality Investigations.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360F. Approaches to Aquatic Resource Modeling.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360G. Molecular Techniques in Microbial Ecology.**

Lectures on molecular techniques used to analyze structure and function of uncultured microbial communities in the environment with selected examples of applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360H. Parasites and Diseases of Fishes and Other Aquatic Animals.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics

**Grade Mode:** Standard Letter

**BIO 7360I. Bayesian Statistics for Biology.**

This course examines the theory and mathematical foundations of Bayesian statistics and provides instruction and experience conducting Bayesian analyses using computer-based procedures. The course emphasizes practical applications for Bayesian statistical procedures for problems in biological sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360K. Evolution.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360L. Landscape and Biogeography of Texas.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360P. Regulation of Plant Growth and Development.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360Q. Spatial Ecology of Animals.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter



**BIO 7360R. Community and Ecosystem Ecology.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360S. Soil Biology.**

An introduction to the biology of soil systems, including the roles of biota in forming and maintaining soils, and the interactions between biotic and abiotic components in soils.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360T. Karst Hydrogeology and Geomorphology.**

An introduction to, and advanced understanding of, karst hydrogeology, geology, and geomorphology, with emphasis on field and theoretical applications of this information to the study of karst systems, and recognition and understanding of karst landforms at the surface and their relationships with subsurface processes. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360U. Sustainability in a Changing World.**

Understanding the ecological-social interface, including policies, product development and actions towards sustainability, with emphasis on integrating and implementing theories and methods across disciplines, and improving the knowledge and experience base for public policy and decision-making regarding human-environment linkages within the context of sustainable development. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360V. Techniques in Aquatic Biology.**

The course will provide hands on experience with a suite of physical, chemical, and biological sampling techniques and gear used in applied river studies. Students will be exposed to the fundamentals of data quality objectives, accuracy, precision, detection limits, data visualization, exploratory analysis, univariate and multivariate statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360Y. Applied Bioinformatics.**

This course provides an introduction to scripting and other computational techniques used for visualizing and analyzing large biological datasets. Computational techniques include sequence and structural alignment, data mining, phylogenetic tree construction, and data clustering using UNIX, Python, and R. Students will gain a solid foundation in broadly applicable bioinformatics skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7361A. Discipline-Based Educational Research Methods.**

This course will expose science graduate students to educational research in a practical setting, supervised by a professor experienced in conducting discipline-based educational research, focusing primarily on qualitative methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7361C. Advanced Genomics and Bioinformatics.**

This course provides hands-on experience in processing and analyzing data produced from contemporary genomics tools for thesis students with basic bioinformatics training. Prerequisite: BIO 7360Y with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7361D. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7399A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7402. Molecular Field Techniques.**

The application of molecular tools for identifying, quantifying, and interpreting biological diversity assessments in aquatic systems. The course focuses on micro organismal identification and vertebrate model systems.

**4 Credit Hours. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7405. Statistics and Experimental Design I.**

Introduction to inferential statistics, including exploratory and confirmatory data analysis, estimation and hypothesis testing, analysis of variance and regression, and non-parametric techniques, as applied to aquatic resource issues. Computer applications emphasized.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7406. Statistics and Experimental Design II.**

Introduction to the principles of experimental design, including randomization, replication, sample-size determination, completely randomized and randomized block design, factorial design, repeated measure design, and analysis of variance and covariance, as applied to aquatic resource issues. Computer applications emphasized.

Prerequisite: BIO 7405 with a grade of "C" or better or instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7410. Aquatic Microbial Ecology.**

Examination of microbial organisms, communities, and interactions affecting the form, structure, and functional aspects of aquatic ecosystems. Field trips may be required. Prerequisite: BIO 2400 with a grade of "D" or better or instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7412. Environmental Hydrology.**

Overview of the properties, distribution, and movement of water over and under the land surface and its relation to sustainable aquatic ecosystems, including quantitative methods to assess cumulative impacts of human activities on such systems. Field trips may be required. Knowledge of calculus recommended.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7414. Ecology of Infectious Diseases of Wildlife.**

Concepts of the ecology of infectious diseases in wildlife are studied in depth with emphasis on their application to the management and conservation of wildlife species and for the control of zoonotic diseases.

Prerequisite: Instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7419. Stream Ecology.**

Study of ecological theories, concepts, and processes occurring at the population, community, and ecosystem levels of organization in running water. Laboratory includes sampling methods, descriptive and comparative studies, experiments, and critical discussion of literature. Field trips may be required.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7426. Ecology and Management of Aquatic Macrophytes.**

Examination of aquatic macrophytes and their ecology, taxonomy, distribution and management. Field trips may be required.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7427. Principles of Population Biology I.**

This course provides a foundation in theory and mathematics of basic population biology. The course is divided into modular components, including defining evolutionarily significant units, ecology of populations, genetics of populations, and evolutionary genetics. A background in genetics and general ecology is recommended.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7428. Principles of Population Biology II.**

This course provides a foundation in theory and mathematics of basic population biology. The course is divided into modular components which include: 1) Ecology of Communities, 2) Evolution of Behavior, 3) Phylogenetic Methods, and 4) Biological Diversity and Conservation Biology.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7430. Mycology.**

This course provides an introduction to the organisms in the Kingdom Fungi and to fungus-like organisms, their ecology and evolution, and their role in industry and disease. Special emphasis will be placed on morphology, culturing, and using laboratory techniques for identification.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7433. Population Genetics.**

This course examines the theoretical foundations of population genetics, including the description of population genetic structure and the forces creating it. The course emphasizes application of principles to a wide range of current problems in evolution, systematics and ecology. Molecular methods, data interpretation and computer-based data analysis are emphasized.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7434. Herpetology.**

A course treating the origin and evolution of amphibians and reptiles; their reproductive and physiological tactics; taxonomy/systematics; and population biology. While cosmopolitan in scope, emphasis will be placed on North American species and those groups inhabiting Texas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7440. Aquatic Toxicology.**

Introduction to principles for identifying and assessing the adverse effects of chemicals and other compounds and mixtures on aquatic organisms and ecosystems.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7447. Microbial Physiology.**

Prokaryotes, including bacteria and archaea, are the most diverse group of organisms on earth. Many prokaryotes live in environments which are inhospitable to other life forms. This course covers major aspects of prokaryotic physiology that permit them to be so successful.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7466. Phylogenetics.**

Study of the use of phylogenetic methodologies in aquatic research, including practical data collection, management, and analysis in the reconstruction of phylogenies. Laboratory exercises will introduce phylogenetic and DNA analysis software. Prerequisite: BIO 2450 and BIO 4369 and BIO 5466 all with grades of "C" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7468. Groundwater Resources.**

Study of the geological, physical, chemical and biological factors influencing sustainable groundwater resources, including hydrologic linkages and interactions with surface aquatic resources. Emphasis will be on the karst aquifer systems of Central Texas, and other groundwater aquifer systems of the United States.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7469. Introduction to Ecological Modeling.**

Mathematical models range from simple conceptual models to complex mechanistic models for mimicking behavior of natural systems. This course provides a broad overview of modeling objectives, techniques and assumptions, as well as the practical skills needed to conduct modeling projects. Computer applications emphasized. Prerequisite: MATH 2471 with a grade of "C" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7599A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7699A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7999A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Chemistry (CHEM)

### **CHEM 7101. Doctoral Assistant Development.**

This course is designed to prepare doctoral students employed as instructional assistants to perform effectively in diverse instructional settings. This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### **CHEM 7110. Advances in Molecular and Biophysical Chemistry.**

This course is designed to provide students in the Integrated Molecular and Biophysical Chemistry PhD program a forum to discuss ongoing research progress and new discoveries through literature study. Students in the course will give informal 'work in progress' presentations and critically analyze recent publications in the field.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CHEM 7199. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **CHEM 7200. Graduate Research.**

This course is designed to provide doctoral students with an elective research option to allow them to collect preliminary data as they develop their dissertation proposal.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **CHEM 7201. Graduate Laboratory Rotations.**

This course is designed to assist students in selecting a doctoral committee chair by having them work in several laboratories during their first semester in the program.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### **CHEM 7299. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **CHEM 7300. Graduate Research.**

This course is designed to provide doctoral students with an elective research option to allow them to collect preliminary data as they develop their dissertation proposal.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **CHEM 7305A. Physico-Chemical Properties and Metabolism of Xenobiotics.**

This course is designed to introduce students to the concepts of physico-chemical properties of small molecules and how these impact the ability of these molecules to be used as probes in biological systems, focusing on the role that metabolic processes play in limiting or activating chemical probes and the role of chemical probes in investigating these processes. Students will explore experimental and computational methods for determining the relevant properties of compounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

### **CHEM 7311. Natural Products, Anti-Infective, and Anti-Cancer Agents.**

This course is designed to introduce the natural products by discussing their important classes (secondary metabolites), classification, nomenclature, structure, biosynthesis, occurrence and structure elucidation. The study of their utilization in medicine as leads for the development of new antimicrobial and anticancer agents will constitute the main focus of the course. The students will learn how to utilize their knowledge of organic chemistry and biochemistry gained in undergraduate courses toward the application of advanced research active areas on chemistry-biology interface.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CHEM 7330. Environmental Chemistry.**

An introduction to environmental chemistry, with an emphasis on aquatic resources. Basic principles of geochemistry and atmospheric chemistry, as they relate to pollutant impacts on aquatic ecosystems, also will be examined. Prerequisites: CHEM 2142 and CHEM 2342 and CHEM 3410 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7342. Bioinorganic Chemistry.**

This course is designed to provide a broad overview of metalloprotein active site design and reaction mechanisms catalyzed by metalloenzymes. Training sessions on the use of contemporary protein visualization tools will be provided and used throughout the course. Topics covered in the course include dioxygen transport and activating proteins, electron transfer proteins, dinitrogen (N<sub>2</sub>), and hydrogen (H<sub>2</sub>) activation, photosystem and oxygen evolution, zinc containing proteins, CO<sub>2</sub> reduction, and modern advancements in the field of bioinorganic chemistry. Students can expect to develop strong foundational knowledge in metalloenzyme structure, function, and reaction mechanisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7354. Eukaryotic Molecular Biology and Macromolecular Structure.**

This course is designed to cover the specific topics of the regulation of gene expression in eukaryotes, including eukaryotic DNA replication, DNA repair, DNA recombination, DNA transcription, RNA processing, translation, post-translational protein modification. This course will also introduce the application of macromolecular structure determination in eukaryotic gene expression and its regulation. Students can expect to develop a strong foundation in eukaryotic molecular biology, a strong ability to discuss literatures and some grant writing ability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7361. Quantitative Methods in Biophysical Chemistry.**

This course will integrate the physical, chemical, and biological aspects of fundamental biophysical methods, including spectroscopy, calorimetry, and hydrodynamics. Students will develop a quantitative skillset in multiple analytical methods that are used to characterize a variety of biological systems. This course will provide students with the physical and chemical foundation to quantitatively study biological macromolecules at multiple levels of complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7385. Metabolism and Metabolomics.**

This course is designed to introduce students to the metabolism of macromolecules and the principles and practice of metabolomics. It will cover (1) biosynthesis and biodegradation of carbohydrates, lipids, amino acids, proteins, and nucleic acids; (2) metabolomics principles; (3) applications of metabolomics in the biomedical field. Discussions of literature in metabolomics studies will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7391. Chemical Biology.**

This course will introduce the emerging field of chemical biology and common tools that are used to analyze and manipulate biological processes with small molecules. Students will develop a strong foundation in the design and synthesis of chemical tools to interrogate biological systems and focus on implementing and interpreting assays with these tools, using examples from the current literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7395. Fundamentals in Molecular and Biophysical Chemistry.**

This course is designed to provide a functional overview of the physics, chemistry, and biology concepts that are central to the practice of molecular biophysical chemistry. Students will develop a broad scientific foundation to pursue interdisciplinary projects within the biophysical and biochemical sciences, as well as productively interface and collaborate with colleagues across sub-disciplines throughout their doctoral studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7399. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7599. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7699. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**CHEM 7999. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## English (ENG)

**ENG 7300. Language Problems in a Multicultural Environment.**

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7314. Specializations in Professional and Technical Communication Topics.**

Provides theoretical and practical information for specialized types of technical and professional communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7316. Foundations in Rhetoric and Composition.**

A course providing students with theoretical, pedagogical, and/or methodological foundations in the field of rhetoric and composition. Emphases vary but may include Contemporary Composition Pedagogy, Basic Writing Theory and Practice, and Writing Assessment. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7317. Specializations in Rhetoric and Composition.**

A course providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Across the Curriculum, Service Learning, Writing Center Theory and Practice, Computers and Writing, Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Geography (GEO)

**GEO 7190. Independent Study.**

Research in geography under the direction of a supervising professor. Repeatable once for additional credit with a different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7199A. Dissertation.**

Original research and writing in Geography is to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7199B. Dissertation.**

Original research and writing in Geographic Education is to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7199C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7290. Independent Study.**

This course is designed to provide a student with credit while conducting independent research in consultation with his or her research advisor. Repeatable once for additional credit with a different topic.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7299A. Dissertation.**

Original research and writing in Geography to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7299B. Dissertation.**

Original research and writing in Geographic Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7299C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7300. Advanced Geographic Research Design.**

The purpose of this course is to develop an appreciation for the process of research as practiced by contemporary professional geographers. Topics covered include formulating research problems, reviewing and critiquing published literature, developing and executing a research design, and completing a research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7301. Advanced Quantitative Methods in Geography.**

How to mathematically and statistically model geographic problems is the focus of this course. The application of multivariate statistical techniques to geographic problems and the problems that spatial data create in the application of statistical and other quantitative techniques are central issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7302. Nature and Philosophy of Geography.**

This course is a critical analysis of the historical development of geographic thought: its roots, its present status, and future directions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7304. Qualitative Research Methods.**

This course introduces the qualitative research paradigm, including research design, methods of data collection, and inductive analysis. Standards of scientific research that call for a deeper evaluation of complex social relationships are emphasized. The focus and application will be oriented towards human geography and nature-society relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7305. Historical Geography of the Environment.**

This course examines the evolution of environmental problems using the techniques and analytical perspectives of historical geography. Special emphasis is given to the emergence of environmental challenges related to urbanization and climate change. Students engage with scholarship related to historical geography of the environment and develop original research related to environmental change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7308. Advanced Regional Field Studies.**

Advanced study of geographic phenomena during field excursions to a particular site or region. Course includes preparation of site inventory, site guides, and on-site presentations. Repeatable once for additional credit with a different site or region.

**3 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7313. Environmental Systems.**

Theories and concepts involved in environmental systems will be examined. Tools and research issues relevant to their analysis will also be explored. Basic principles, as well as specific research questions and techniques, will be proposed to give students a foundation for analysis of current issues involving environmental systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7316. Remote Sensing and the Environment.**

A detailed examination and implementation of sophisticated approaches for processing satellite digital images with emphasis on environmental applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7318. GIS and Environmental Geography.**

This course examines the nature of environmental problems and explores the potential of GIS for environmental modeling and management. The conceptual basis for using GIS as well as the framing of environmental research problems will be covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7330. Geography of Hazards.**

This seminar examines research on issues related to the geography of hazards. Topics will be determined by instructor and student interests. Special emphasis will be placed on conceptual, theoretical, and methodological approaches to advance the study of spatial aspects of hazards such as risk, vulnerability, resilience, relief, recovery, and change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7334. Geographic Aspects of Water.**

This seminar is a critical analysis of developmental and current literature that define water's critical role in determining the physical and cultural characteristics of the earth. Principal focus will be placed on water's role on land use and as a critical resource.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7341. Urban Environment.**

Students in this course will critically engage with scholarly and governmental research relating to urban environments, urban environmentalism, and urban environmental management. Emphasis is placed on students developing and executing a unique, topically relevant research project aimed at improving our understanding of the way in which human-environment interaction influences, and is influenced by, urban geography and the urban experience. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7342. Theories and Methods in Geographic Education.**

This seminar is a critical analysis of previous and current literature concerning problems in pedagogy, philosophy, learning theory, research methods, teaching methodologies, and techniques of geographic education. A research paper will be required of each student on a topic related to the course content. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7344. Seminar in Geographic Curriculum.**

The seminar will be a survey and discussion of major curricula in geographic education. Geography will be viewed as a school subject that is part of the social studies, as an element of interdisciplinary studies, and as a stand alone subject.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7345. Contemporary Topics in Geographic Education.**

This course is a survey of initiatives and reforms in geography education spanning from the 1980s to the present day. Students are expected to develop and carry out research plans that address current theories in geographic education. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7346. Standards and Assessment in Geography.**

An introduction to assessment procedures in geography education is central to the course. Analysis of national standards in geography and how they have affected geographic learning in grades K-12 will be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7349. Population Geography.**

An in-depth study of the growth, movement, and spatial distribution of human populations is the central theme. Students will read and discuss professional articles that stress both theory and analytical techniques. Topics will include population growth and the environment, rural and small town depopulation, spatial diffusion processes, migration trends and theories, urban population growth, and techniques such as multivariate analysis and population projections. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7350. Practicum in Teaching Geography.**

This course introduces key concepts in teaching geography and provides regular training and planned periodic evaluations of instructional responsibilities. Course topics include instructional and assessment strategies in geography and classroom management. This course is required for first-year instructional assistants in the Geography Department. Students do not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**GEO 7352. Social Theory, Space, and Geography.**

This course examines key texts and concepts in social and political theory, focusing on theories of space and their mobilization in geographical research. Space and geography are approached with respect to several topics and debates in social theory including structuralism and agency, feminist theory and embodiment, racial formations, assemblage thinking and actor-network theory, hybridity, governance, and scale.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7361. Advanced Geographic Information Systems.**

This course provides exposure to advanced topics in GIS, particularly to quantitative methods and techniques for developing and interpreting models of natural and anthropogenic phenomena over the geographical space.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7362. Geographic Visualization.**

This course focuses on the interdisciplinary field of Geographic Visualization. Students will review visualization research in computer graphics, human computer interaction, GIScience, and cartography and relate the research approaches to useful and usable geographic visualizations. Prerequisite: GEO 3411 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7364. Geocomputation.**

Geocomputation reviews and analyzes concepts of computational modeling in Geography. The course will include modeling theory and advanced topics such as parallel processing, neural networks, cellular automata, scientific visualization, and fuzzy modeling. Students will practice model development, specifically spatially explicit simulation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7365. Theoretical Cartography.**

This course focuses on theoretical developments in cartography, and in particular looks at the role of maps and other graphic devices as tools for the discovery, analysis, and communication of geographical knowledge. Prerequisite: GEO 3411 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7366. Advanced Topics in Remote Sensing.**

The course focuses on advanced topics including the theoretical basis, mathematical foundations, and current research frontiers in remote sensing. Prerequisite: GEO 5415 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7368. Lidar and SfM Data Processing and Analysis.**

This course covers doctoral level skills in Light Detection and Ranging (lidar) systems and Structure from Motion (SfM) workflows for mapping and analysis of the environment. Students learn to successfully apply knowledge of lidar data and SfM workflows for a variety of Geographic Information Science applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7369. Exploring Spatial Databases.**

This course covers principles of spatial ontologies and spatial semantics to facilitate appropriate database conceptualization, design and implementation. Course assignments and projects provide in-depth experience with database query languages. Course work is completed using a spatially-enabled Relational Database Management Systems (RDBMS). Prerequisite: GEO 7417 or equivalent with a grade of 'B' or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7370. Advanced Seminar in Environmental Geography.**

This research seminar focuses on the methods, approaches, issues, and concepts of major themes in environmental geography. Special emphasis will be placed on theoretical and conceptual understandings of how humans interact with the environment from a geographical perspective. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7371. Advanced Seminar in Geographic Education.**

This research seminar analyzes literature and research into recent trends in geographic education. Emphasis will be on new developments in curriculum, content, and teaching methodologies. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7372. Seminar in Geographic Information Science.**

This course deals with advanced and current research issues in Geographic Information Science. Based on this objective, the course aims at educating doctoral students to conduct research in Geographic Information Science as well as develop innovative applications of Geographic Information Science. May be repeated for credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7390. Independent Study.**

Research in geography under the direction of a supervising professor. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7393B. Biogeography in Mountain Environments.**

This course examines how plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms and geological factors affect spatial distribution of animals and plants; all within the environmental limitation and conditions of mountains. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393C. Managing Urbanization.**

This course examines survey methods and procedures related to managing and preparing for urban growth. Selected topics for examination include transportation planning, housing, historic preservation, and environmental design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393D. International Migration.**

This course provides a survey of geographic and social science research conducted across various topics of international migration. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393E. Geography of Land Management.**

This course explores U.S. land management philosophies, techniques, and development approaches. Major topics include land ethics/philosophies, U.S. traditions in cadastral geography, urban sprawl and green development, land conservation techniques, the role of local/state/federal regulation in land management, and the human-environment impacts of land development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393F. Gender and Development.**

This course is a survey of geographic and social science research conducted across various topics of gender studies and international development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393G. Political Geography.**

This course is a survey of geographic and social science research conducted across various topics of political geography. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393J. Soil and Society.**

This course explores the importance of soil resources for environmental and socioeconomic sustainability. Soil science will be introduced, but the majority of the course will focus on soil's value to societies. Specific topics that will be explored include soil geography, historical abuses of soil resources, and current conservation efforts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393K. Biogeomorphology.**

This course will examine the ways in which plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms, and geological factors affect spatial distributions of animals and plants. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393M. Global Climate Change.**

This course examines various implications of global climate change, including impacts on science, politics, and society. Emphasis will be placed on anthropogenic influences across the 20th and 21st centuries, contemporary mitigation options, and future adaptation strategies amidst a complex and dynamic climate system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393N. Rivers and Society.**

This course examines river system processes and how they are influenced by human activities. We will discuss the principles and practices of large-scale river basin management with an emphasis on the different perspectives and motivations driving different management goals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**GEO 7393P. Advanced Seminar in Human Geography.**

This course will engage students in systematic critical analysis of the theories and methods of human geography. The students will conduct careful research on a topic in human geography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393Q. Geomorphology in the Anthropocene.**

This course will examine the ways in which humans interact with and affect geomorphological processes and landforms, and how humans directly act as geomorphological agents. The level at which human activities have transformed the surface of the Earth will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7399A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7399B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7399C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7415. Geographic Applications of Remote Sensing.**

Students will focus on geographic applications of the principles and practices of digital image processing, classification, and modeling using satellite images.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7417. Geographic Information Systems.**

Course is concerned with the analysis of interpretation of maps stored in digital form. Students are introduced to the concepts involving computerized cartographic and geographic data input, storage and retrieval, data manipulation and analysis, graphic and tabular report generation, and cartographic modeling.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7418. Technical Foundations and Methods in Geographic Information Science.**

This course addresses technical foundations and methods in management, analysis, visualization, and dissemination of geographically-referenced data and information in digital form. Topics include data structures, algorithms, and a variety of methods used in GIS and spatial data analysis.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7419. Advanced Techniques in Geographic Information Science.**

This course develops advanced Geographic Information System (GIS) concepts and application issues, spatial data manipulation and analysis skills, and provides hands-on experience with GIS, programming, and spatial analytics hardware/software programs. Emphasis is placed on practical application of skills to real world issues using advanced GIS techniques and geoprogramming. Prerequisite: GEO 7417 or equivalent with a grade of "C" or better and instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7430. Field Methods.**

Methods and techniques for observing, measuring, recording, and reporting on geographic phenomena are investigated in this course. Students will learn the use of instruments and materials in the collection of data for mapping and field research in the local area. Prerequisites: GEO 2410 and GEO 3301 both with grades of "D" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7447. Spatial Graphics in Geographic Education.**

This course examines traditional and innovative geoinformation and geovisualization technologies and their relationship to spatial thinking and the teaching and learning of geography. The course reviews academic literature, research methods, and teaching methodologies related to spatial graphics in geographic education. The lab portion provides geovisualization design skills for geographic education.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7599A. Dissertation.**

Original research and writing in Geography to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7599B. Dissertation.**

Original research and writing in Geographic Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7599C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Philosophy (PHIL)

**PHIL 7101. Responsible Conduct of Research and Research Ethics.**

In this course students will examine issues, concepts, and cases in research ethics and the responsible conduct of research. Designed to meet NSF and NIH requirements for training, topics will include research integrity, conflicts of interest, authorship, peer review, human and animal experimentation, mentorship, data, and values in science. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**PHIL 7323. Environmental Ethics and Sustainable Aquatic Resources.**

Examination of the ethical implications of environmental use and management policies and practices, with emphasis on sustainable aquatic resources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 7355. Philosophy of Science.**

Students in this course will investigate the nature and processes of scientific inquiry; the role of values in generating and using scientific knowledge; some of the fundamental concepts in science, including relevant evidence, induction, explanation; and the intellectual commitments made when accepting a scientific theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Sustainable freshwater resources provide a foundation for aquatic and terrestrial ecosystems, as well as human use and economic development. However, inadequate understanding of aquatic resources and a prevailing inability to properly integrate scientific, technical, and socioeconomic elements continues to seriously hinder the goal of providing sustainable aquatic resources, not only in Texas but across the nation and around the world.

## Educational Goal

The doctoral program emphasizes original research and is designed to provide depth and breadth of knowledge in the field of aquatic resources and related disciplines, including basic and applied research, management, and policy. Students will work, both independently and with other specialists, in a multidisciplinary environment to identify and solve complex problems and issues relevant to the sustainable use of aquatic resources.

## Department Policies

Each doctoral student will develop a program of research and study in consultation with their Ph.D. advisor and the doctoral program director and approved by the dean of The Graduate College. This program will include a set of core courses and an appropriate selection of elective courses necessary to provide the student with the scientific expertise and knowledge to work independently and with others in a multidisciplinary environment to address the range of issues constituting sustainable aquatic resources.

Prospective students must contact doctoral faculty members to identify an individual willing to serve as their major advisor prior to submitting their application to the graduate program. A list of faculty and their research areas is available at <http://www.bio.txstate.edu/Graduate-Programs/Ph-D-Aquatic-Resources.html>.

## Financial Assistance

Assistantships and scholarships are available to qualified applicants. The Department of Biology offers doctoral instructional assistantships and teaching assistantships on a competitive basis to full-time students enrolled in the aquatic resources Ph.D. program. Detailed information on the department's assistantship policy is included in the Department's

Graduate Guide. The office of The Graduate College can provide further information regarding scholarships.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree in biology, chemistry, engineering, geology, or a related natural science field from a regionally accredited university. Applicants with backgrounds in other disciplines will be considered on a case-by-case basis. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - a minimum 3.5 overall GPA or a minimum 3.5 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - GRE not required
  - mentor communication (intent to mentor letter) sent directly from a doctoral faculty member within the Aquatic Resources and Integrative Biology Program. The mentor must email their letter of support directly to The Graduate College at [gradcollege@txstate.edu](mailto:gradcollege@txstate.edu) prior to the program's deadline.
  - resume/CV summarizing educational and professional accomplishments
  - statement of purpose describing professional aspirations and rationale for pursuing a doctoral degree in aquatic resources
  - three letters of recommendation addressing the substance and quality of the student's preparation for doctoral study

## Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Aquatic Resources and Integrative Biology requires 91 semester credit hours for students entering with a bachelor's degree (and no master's degree), including a dissertation. The selection of electives should be made in consultation with the student's Ph.D. advisor and the program director.

Code	Title	Hours
<b>Required Courses</b>		
BIO 7102	Seminar in Aquatic Resources (Taken twice)	2
BIO 7303	Research (Taken three times)	9
BIO 7405	Statistics and Experimental Design I	4
or BIO 7406	Statistics and Experimental Design II	
BIO 7312		3
BIO 7310	Global Aquatic Resources	3
PHIL 7323	Environmental Ethics and Sustainable Aquatic Resources	3
<b>Techniques</b>		
BIO 7401		4
or BIO 7402	Molecular Field Techniques	
<b>Prescribed Electives</b>		
Choose 48 hours from the following:		48
BIO 7114	Collaborative Research	
BIO 7120	Population Biology Seminar	
BIO 7214	Collaborative Research	
BIO 7308	History of Vegetation and Climate	
BIO 7314	Collaborative Research	
BIO 7324	Natural History and Conservation of Large Mammals	
BIO 7336	Evolutionary Ecology	
BIO 7346	Conservation Biology	
BIO 7353	Biogeography	
BIO 7355	Plant-Water Relations	
BIO 7360A	Industry and Sustainable Aquatic Resources	
BIO 7360B	Environmental Linkages and Sustainable Aquatic Resources	
BIO 7360C	Role of State and Federal Courts in Protection and Maintnace of Aquatic Resources	
BIO 7360D	Special Topics in Aquatic Resources: Evolutionary Ecology	
BIO 7360E	Advances in Water Quality Investigations	
BIO 7360F	Special Topics in Aquatic Resources: Approaches to Aquatic Resource Modeling	
BIO 7360G	Molecular Techniques in Microbial Ecology	
BIO 7360H	Parasites and Diseases of Fishes and Other Aquatic Animals	
BIO 7360I	Bayesian Statistics for Biology	
BIO 7360K	Evolution	
BIO 7360L	Special Topics in Aquatic Resources: Landscape & Biogeography of Texas	

BIO 7360P	Special Topics in Aquatic Resources: Regulation of Plant Growth and Development
BIO 7360Q	Special Topics in Aquatic Resources: Spatial Ecology of Animals
BIO 7360R	Special Topics in Aquatic Resources: Community and Ecosystem Ecology
BIO 7360S	Soil Biology
BIO 7360T	Karst Hydrogeology and Geomorphology
BIO 7360U	Sustainability in a Changing World
BIO 7360V	Techniques in Aquatic Biology
BIO 7410	Aquatic Microbial Ecology
BIO 7412	Environmental Hydrology
BIO 7419	Stream Ecology
BIO 7426	Ecology and Management of Aquatic Macrophytes
BIO 7427	Principles of Population Biology I
BIO 7428	Principles of Population Biology II
BIO 7433	Population Genetics
BIO 7434	Herpetology
BIO 7440	Aquatic Toxicology
BIO 7447	Microbial Physiology
BIO 7466	Phylogenetics
BIO 7468	Groundwater Resources
BIO 7469	Introduction to Ecological Modeling
CHEM 7330	Environmental Chemistry
ENG 7314	Specializations in Professional and Technical Communication Topics
GEO 7316	Remote Sensing and the Environment
GEO 7318	GIS and Environmental Geography
GEO 7334	Geographic Aspects of Water
GEO 7417	Geographic Information Systems
<b>Dissertation</b>	
Choose a minimum of 15 hours from the following:	
BIO 7199A	Dissertation in Aquatic Resources
BIO 7299A	Dissertation in Aquatic Resources
BIO 7399A	Dissertation
BIO 7599A	Dissertation in Aquatic Resources
BIO 7699A	Dissertation
BIO 7999A	Dissertation in Aquatic Resources

Total Hours

91

## Advancement to Candidacy

### Application for Advancement to Candidacy

Students can download the “Application for Advancement to Candidacy” from The Graduate College website or they can obtain a copy from the program director. The student should complete and sign the upper portion of the form and return it to the program director. When all requirements for admission to candidacy have been met (completion of core course work, submission of an approved dissertation proposal, and completion of the comprehensive examination), the program director will forward the Application for Advancement to Candidacy form to the dean of The Graduate College for review and approval.

## Advancement to Candidacy Time Limit

Students entering the doctoral program in Aquatic Resources and Integrative Biology with a master's degree and receiving departmental support are expected to take the Advancement to Candidacy Comprehensive Examination by the end of their second year in the program; students entering with a bachelor's degree and receiving departmental support are expected to take the examination by the end of their third year. All students are expected to have passed the Advancement to Candidacy Comprehensive Examination within one calendar year of completing the core course work required by their degree audit. This expectation holds for both full-time and part-time students. Requests for a time extension must be submitted to the program director by the student's Ph.D. advisor and approved by the graduate committee.

No credit will be applied toward a student's doctoral degree for course work completed more than four years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at Texas State, as well as course credit transferred to Texas State from other accredited institutions.

## Grade-Point Requirements for Advancement to Candidacy

A minimum GPA of 3.0 on all course work undertaken as a graduate student in the Aquatic Resources and Integrative Biology doctoral program is required for admission to candidacy. No grade below "B" on any graduate course work may apply toward the Ph.D. degree at Texas State.

Incomplete grades must be cleared through the office of The Graduate College at least ten days before approval for advancement to candidacy will be granted.

## Advancement to Candidacy Comprehensive Examination

Students in the doctoral program are required to pass a comprehensive examination that will assess the student's preparedness to carry out the proposed plan of dissertation research. Students taking the Advancement to Candidacy Comprehensive Examination must have completed all required core and background courses as prescribed in their degree audit. Detailed information on the examination procedure can be found in the Department of Biology's *Guide to Graduate Study* or obtained from the program director.

The Advancement to Candidacy Comprehensive Examination will consist of both written and oral components. The written component of the examination will consist of questions submitted by the dissertation committee members and will be administered by the program director. Successfully passing the written component of the examination requires positive votes from all members of the dissertation committee.

Successful completion of the written portion of the candidacy exam must be followed within thirty days by an oral presentation and defense of the dissertation proposal. The oral component of the Advancement to Candidacy Comprehensive Examination will entail a public seminar presentation of the student's dissertation proposal, followed immediately by a closed defense of the proposal attended only by the student and his or her dissertation committee. Both the presentation and defense must take place on the same day. Successfully passing the oral examination requires positive votes from all members of the student's dissertation committee.

## Dissertation Proposal

A dissertation proposal prepared by the student and approved by the student's Ph.D. advisor and all other members of the dissertation committee is a requirement for advancement to candidacy status. The proposal must outline the substance and scope of the dissertation research, present the methodology to be used, and survey the relevant literature. The student's Ph.D. advisor and other dissertation committee members must indicate approval of the dissertation proposal on the "Dissertation Proposal form" which can be downloaded from The Graduate College website or obtained from the program director. A final copy of the dissertation proposal, accompanied by the signed approval form, must be turned in to the program director, who will forward it to the dean of The Graduate College for review and final approval.

## Recommendation for Advancement to Candidacy

The dissertation committee recommends the applicant for advancement to candidacy after completing the "Doctoral Comprehensive Examination Report" which can be downloaded from The Graduate College website or obtained from the program director. The results of the Advancement to Candidacy Comprehensive Examination and the Application for Advancement to Candidacy must be filed in the office of The Graduate College before the dean of The Graduate College gives final approval to candidacy. The program director is responsible for submitting these forms to the office of The Graduate College.

## Dissertation Research and Writing

All doctoral students are required to complete a dissertation. The dissertation must represent an original contribution to scholarship based on independent investigation. Preparation of the dissertation should follow the guidelines in the current edition of the *CBE (Council of Biology Editors) Style Manual* or in an appropriate professional journal in the designated field, as deemed acceptable by the dissertation committee.

## Dissertation Enrollment Requirements

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each term until the defense of their dissertation. If a student is receiving supervision on the dissertation during the summer or the student is graduating during the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred. Students must complete a minimum of 15 semester hours of dissertation research and writing credit.

## Dissertation Time Limit

Students are expected to complete the dissertation within three years of advancement to candidacy. Successful completion of the dissertation defense must occur within ten years of the student's entry into the Ph.D. program. Any exceptions to these time limits require the approval of the program director and the dean of The Graduate College. The dissertation committee and the program director will review each student annually to ascertain his or her progress in pursuing the degree, and will consult with the student's Ph.D. advisor and dissertation committee on this matter as appropriate.

## Dissertation Committee

The dissertation committee is responsible for the Advancement to Candidacy Comprehensive Examination and will oversee the research progress of a doctoral student and the writing of the student's



dissertation. The committee will consist of at least five members, including the student's Ph.D. advisor, two other Texas State biology doctoral faculty members, and two external doctoral-level members, at least one of whom must be from an institution other than Texas State. The student's Ph.D. advisor will chair the committee and will normally be from the major department. The student, program director, department chair, and the dean of The Graduate College will approve the composition of the dissertation committee. The student is responsible for obtaining committee members' signatures on the "Dissertation/Research Advisor Assignment form" and the "Dissertation Committee Request form," which can be downloaded from The Graduate College website.

## Committee Changes

Any changes to the dissertation committee must be submitted for approval to the dissertation committee chair, the doctoral program director, the department chair, and the dean of The Graduate College. Changes must be submitted no less than sixty days before the dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be downloaded from The Graduate College website.

## Dissertation Defense

The dissertation defense will consist of two parts. The first part is an oral presentation of the dissertation research as a public seminar that should be given as part of the department's weekly seminar series. The second part of the defense is restricted to the student's dissertation committee and will entail an oral examination over the dissertation research.

The oral examination over the dissertation research may not be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least 30 days before the anticipated defense date. After committee members have reviewed the draft with the student and provided comments, the student, in consultation with the Ph.D. advisor, will incorporate the recommended changes into a second draft of the dissertation. When each committee member is satisfied that the draft dissertation is defensible, the oral examination may be scheduled. The full committee, including all external members, must be present. Approval of the dissertation requires positive votes from all members of the dissertation committee. At the conclusion of the defense, a "Dissertation Defense Report form" — which can be downloaded from The Graduate College website — must be completed, signed by all committee members, and submitted to the program director, who will forward it to the dean of The Graduate College for review and final approval. Specific information on the examination procedure can be found in the Department of Biology's *Guide to Graduate Study* or obtained from the program director.

## Approval and Submission of the Dissertation

Following approval and signing of the dissertation by the members of the dissertation committee and submission of the "Dissertation Defense Report form", the student must submit one copy of the dissertation and the signed "Thesis/Dissertation Committee Approval" form to The Graduate College. Specific guidelines for approval and submission of the dissertation can be obtained from The Graduate College.

Doctoral courses in Biology (and other related departments): BIO (p. 2782), CHEM (p. 2790), ENG (p. 2792), GEO (p. 2792), PHIL (p. 2798)

## Courses Offered

### Biology (BIO)

#### BIO 7100. Professional Development.

This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### BIO 7102. Seminar in Aquatic Resources.

This course is an interactive discussion of timely issues and problems, designed to introduce students to the range of scientific, socioeconomic and policy issues likely to be encountered within the field of aquatic resources. All students seeking a doctoral degree in Aquatic Resources must enroll in BIO 7102 at least twice.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

#### BIO 7103A. Ecology and Society.

Interactive discussion on relationships between society and the life-supporting ecosystems on which humans depend. Topics include roles of natural systems in social systems; effects of social, economic and political institutions on ecological systems and services; and the means by which humans develop and sustain desired ecological and social states.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

#### BIO 7103B. Aquaculture.

The course comprises a survey of aquaculture production throughout the world. It also examines and discusses the impacts of aquaculture on nutrition, fisheries and the economy.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

#### BIO 7103D. Molecular Biology of the Cell.

Interactive discussion of current literature on molecular biology of the cell. The course is designed to discuss concepts and their applications and methodology associated with the structure and function of the cell at cellular and molecular level.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103E. Contemporary Problems in Ecology.**

This course is an interactive discussion of the theoretical foundations and empirical basis for controversial topics in ecology, designed to develop critical thinking skills, and the ability to evaluate and integrate the biological, chemical and physical factors that affect the structure, functions, and interactions characterizing communities and ecosystems.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103F. Molecular Genetics of Plant Development.**

The study of plant development is rapidly changing as plant genome projects discover a multitude of new genes, and their expression and interaction patterns are understood. This course is designed to discuss concepts in plant development, and developmental processes as pathways of gene regulatory activities.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103G. Ecohydrology.**

A review of the concept of ecohydrology, its scientific foundation, and its ecological-hydrological linkages. Current topics in ecohydrology in the literature will be discussed, including manipulation of biota and hydrology interactions in a landscape, and the possibility of augmenting the resilience of ecosystems to anthropogenic changes.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103H. Integrated Waterbird Management.**

This course focuses on the ecology and management of waterbirds, with an emphasis on the inland and coastal waterbirds of Texas. The basic ecology of waterbirds, waterbird management techniques, and waterbird habitat management will be discussed.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103I. Avian Ecology and Evolution.**

This course is an interactive discussion of avian ecology and evolution, providing students with a critical examination of theories, hypotheses, and lab and field-based data that support or refute their hypotheses. This course also discusses peer-reviewed literature that challenges some paradigms in avian ecology and evolution.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7104. Marine Pollution.**

In this course, students will read and discuss the scientific literature on the sources, bioaccumulation, trophic transfer, and health effects of contaminants in the marine environment. Papers will address a variety of marine life including plankton, crustaceans, mollusks, fishes, marine mammals, turtles, and birds. Contaminants to be reviewed include trace elements, PCBs, oil, pesticides, radionuclides, plastics, pharmaceuticals, illegal drugs, and personal care products.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7105. Environmental Issues through Documentaries.**

In this course, students will examine how environmental issues are addressed in documentaries. Students will learn how to critically evaluate documentaries for scientific content, imagery, biases, and ease of understanding. Topics to be examined include overfishing, the wildlife trade, habitat degradation, pollution, energy resources, climate change, sustainability, and conservation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7114. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7120. Population Biology Seminar.**

This course facilitates exploration of current topics in population and conservation biology through reading and discussion of contemporary primary and secondary literature.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7199A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7214. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7299A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7300. Communicating Science.**

This course explores how to successfully disseminate science through visualizations, oral presentations, and written works to multiple audiences. Special emphasis will be placed on communicating with the general public, media, granting agencies, and science peers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7301. College Science Teaching.**

This course is designed for graduate students in the sciences who are interested in improving their science teaching and/or are interested in pursuing careers in academia. This course focuses on the central question, "How do college students best learn science, and thus how do we best teach them?"

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7302. Problems in Aquatic Resources.**

Individual study on specific state, national, or international aquatic resources issues, under direct supervision of a doctoral or associate faculty member. Students may not enroll in BIO 7302 more than twice for doctoral credit without the approval of the Graduate Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7303. Research.**

Research course for students who have not yet passed their Candidacy Exam, typically under direction of research-dissertation supervisor. Pre-candidacy students must enroll in course every semester until admission to Candidacy, although it may not be taken more than three times for doctoral credit without the approval of Graduate Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7308. History of Vegetation and Climate.**

An overview of past vegetation and its relationship to changing climate. Topics include principles of paleovegetation analysis, paleoclimatology, the rise of flowering plants, vegetation during the age of dinosaurs, the rise of the grasslands, and the Quaternary Ice Age. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7310. Global Aquatic Resources.**

Introduction to global, national, and regional aquatic resource issues, including scientific, environmental policy and socioeconomic components and perspectives. Water quantity and quality issues and their root causes in different regions of the world are examined, with an emphasis on case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7311. Ecology of Temporary Waters.**

The course explores the diversity of temporary bodies of water and of the species that rely on them, including their special adaptations, population and community dynamics, the ecological role of temporary waters, and how these systems are impacted by humans. Background coursework or independent study in ecology is recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7314. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7326. Immunobiology.**

This lecture-based course will cover the mechanisms and biology of the innate and adaptive immune system. Emphasis will include relationship to cancer, transplantation, hypersensitivity (allergy), and disease. Students will evaluate current research in immunology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7327. Ecological Immunology.**

This course explores the roles of immunity in natural ecosystems, focusing on central concepts in ecological immunology. From viruses to parasites, pathogenic threats are omnipresent. As epizootic outbreaks become more common, it is important to integrate immunological knowledge with traditional ecological perspectives. Background coursework in immunology is recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7331. Human Dimensions of Wildlife and Fisheries Conservation.**

This course will provide principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will have an opportunity to integrate human dimensions into decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7332. Introduction to R Programming for Biologists.**

This course introduces the programming language R. The course will focus on best practices in programming and the use of Base-R and RStudio. Topics include navigating the R and RStudio environment, installing packages, loading, manipulating, and visualizing data, declaring variables, writing loops, and writing functions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7333. Phylogenetic Comparative Methods.**

This course introduces students to modern phylogenetic comparative methods and teaches how to perform them. Topics include constructing phylogenies, dating phylogenies, finding and using previously published phylogenetic datasets, phylogenetic data visualization, and a variety of methods to test ecological and evolutionary hypotheses in a phylogenetic framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7336. Evolutionary Ecology.**

This course will use an evolutionary perspective to explore questions provided by natural selection and sexual selection through assessment of current theory and research related to topics such as competition, coevolution, and phenotypic plasticity. Students will achieve comprehension and familiarity with the field through discussions and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7342. Virology.**

This course examines the structure, multiplication and genetics of bacterial, plant, and animal viruses as well as the role of viruses in human and plant disease. Students are expected to become familiar with the research literature in virology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7346. Conservation Biology.**

Examination of the alteration of habitats and associated biological changes threatening the continued existence of species and basic ecosystems. Topics include conservation ethics, working paradigms, levels and loss of global biodiversity, conservation at population and ecosystem levels, restoration ecology, endangered species biology and conservation laws. Recent Advances are stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7353. Biogeography.**

Examines historical and ecological explanations of the geographic distribution of organisms including the role of geologic, climatic, and biologic changes. Emphasizes the historical and philosophical development of the science and modern methods of analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7354. Applied Analyses of Populations.**

In this course students will learn and apply a variety of statistical techniques for analyzing populations. They will build code to conduct and compare statistical analyses as they apply to real population data. Students will use real-world data sets to generate objectives and test hypotheses including conducting all data visualization and validations, performing models, selecting appropriate models, and estimating latent variables and their predictors. Analyses include assessing the effects of environmental attributes on occupancy, relative abundance, abundance, space (habitat) use, home range size, local colonization, local extinction, survival, and recruitment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7355. Plant-Water Relations.**

Examination of the physiology and ecology of water use in higher plants, including the uptake, utilization, and movement of water, transpiration and adaptation to variable water availability including drought, and the ecological role of water in structuring plant communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7360A. Industry and Sustainable Aquatic Resources.**

Examination of industrial water needs and uses, the types and quantities of water pollutants produced by different industries, problems faced by industry regarding process water for different manufacturing activities, and the possibilities for industry to contribute to the goal of sustainable aquatic resources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360B. Environmental Linkages and Sustainable Aquatic Resources.**

Introduction to the environmental relationships between humans and other living beings and the ecological systems in which they exist. Emphasis will be on the potential for individual environmental problems to have serious impacts on other environmental components, as well as the nature of these impacts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360C. Role of State and Federal Courts in Protection and Maintenance of Aquatic Resources.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360D. Evolutionary Ecology.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360E. Advances in Water Quality Investigations.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360F. Approaches to Aquatic Resource Modeling.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360G. Molecular Techniques in Microbial Ecology.**

Lectures on molecular techniques used to analyze structure and function of uncultured microbial communities in the environment with selected examples of applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360H. Parasites and Diseases of Fishes and Other Aquatic Animals.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics

**Grade Mode:** Standard Letter

**BIO 7360I. Bayesian Statistics for Biology.**

This course examines the theory and mathematical foundations of Bayesian statistics and provides instruction and experience conducting Bayesian analyses using computer-based procedures. The course emphasizes practical applications for Bayesian statistical procedures for problems in biological sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360K. Evolution.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360L. Landscape and Biogeography of Texas.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360P. Regulation of Plant Growth and Development.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter



**BIO 7360Q. Spatial Ecology of Animals.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360R. Community and Ecosystem Ecology.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360S. Soil Biology.**

An introduction to the biology of soil systems, including the roles of biota in forming and maintaining soils, and the interactions between biotic and abiotic components in soils.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360T. Karst Hydrogeology and Geomorphology.**

An introduction to, and advanced understanding of, karst hydrogeology, geology, and geomorphology, with emphasis on field and theoretical applications of this information to the study of karst systems, and recognition and understanding of karst landforms at the surface and their relationships with subsurface processes. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360U. Sustainability in a Changing World.**

Understanding the ecological-social interface, including policies, product development and actions towards sustainability, with emphasis on integrating and implementing theories and methods across disciplines, and improving the knowledge and experience base for public policy and decision-making regarding human-environment linkages within the context of sustainable development. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360V. Techniques in Aquatic Biology.**

The course will provide hands on experience with a suite of physical, chemical, and biological sampling techniques and gear used in applied river studies. Students will be exposed to the fundamentals of data quality objectives, accuracy, precision, detection limits, data visualization, exploratory analysis, univariate and multivariate statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360Y. Applied Bioinformatics.**

This course provides an introduction to scripting and other computational techniques used for visualizing and analyzing large biological datasets. Computational techniques include sequence and structural alignment, data mining, phylogenetic tree construction, and data clustering using UNIX, Python, and R. Students will gain a solid foundation in broadly applicable bioinformatics skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7361A. Discipline-Based Educational Research Methods.**

This course will expose science graduate students to educational research in a practical setting, supervised by a professor experienced in conducting discipline-based educational research, focusing primarily on qualitative methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7361C. Advanced Genomics and Bioinformatics.**

This course provides hands-on experience in processing and analyzing data produced from contemporary genomics tools for thesis students with basic bioinformatics training. Prerequisite: BIO 7360Y with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7361D. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7399A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7402. Molecular Field Techniques.**

The application of molecular tools for identifying, quantifying, and interpreting biological diversity assessments in aquatic systems. The course focuses on micro organismal identification and vertebrate model systems.

**4 Credit Hours. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7405. Statistics and Experimental Design I.**

Introduction to inferential statistics, including exploratory and confirmatory data analysis, estimation and hypothesis testing, analysis of variance and regression, and non-parametric techniques, as applied to aquatic resource issues. Computer applications emphasized.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7406. Statistics and Experimental Design II.**

Introduction to the principles of experimental design, including randomization, replication, sample-size determination, completely randomized and randomized block design, factorial design, repeated measure design, and analysis of variance and covariance, as applied to aquatic resource issues. Computer applications emphasized.

Prerequisite: BIO 7405 with a grade of "C" or better or instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7410. Aquatic Microbial Ecology.**

Examination of microbial organisms, communities, and interactions affecting the form, structure, and functional aspects of aquatic ecosystems. Field trips may be required. Prerequisite: BIO 2400 with a grade of "D" or better or instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7412. Environmental Hydrology.**

Overview of the properties, distribution, and movement of water over and under the land surface and its relation to sustainable aquatic ecosystems, including quantitative methods to assess cumulative impacts of human activities on such systems. Field trips may be required. Knowledge of calculus recommended.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7414. Ecology of Infectious Diseases of Wildlife.**

Concepts of the ecology of infectious diseases in wildlife are studied in depth with emphasis on their application to the management and conservation of wildlife species and for the control of zoonotic diseases. Prerequisite: Instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7419. Stream Ecology.**

Study of ecological theories, concepts, and processes occurring at the population, community, and ecosystem levels of organization in running water. Laboratory includes sampling methods, descriptive and comparative studies, experiments, and critical discussion of literature. Field trips may be required.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7426. Ecology and Management of Aquatic Macrophytes.**

Examination of aquatic macrophytes and their ecology, taxonomy, distribution and management. Field trips may be required.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7427. Principles of Population Biology I.**

This course provides a foundation in theory and mathematics of basic population biology. The course is divided into modular components, including defining evolutionarily significant units, ecology of populations, genetics of populations, and evolutionary genetics. A background in genetics and general ecology is recommended.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7428. Principles of Population Biology II.**

This course provides a foundation in theory and mathematics of basic population biology. The course is divided into modular components which include: 1) Ecology of Communities, 2) Evolution of Behavior, 3) Phylogenetic Methods, and 4) Biological Diversity and Conservation Biology.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7430. Mycology.**

This course provides an introduction to the organisms in the Kingdom Fungi and to fungus-like organisms, their ecology and evolution, and their role in industry and disease. Special emphasis will be placed on morphology, culturing, and using laboratory techniques for identification.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7433. Population Genetics.**

This course examines the theoretical foundations of population genetics, including the description of population genetic structure and the forces creating it. The course emphasizes application of principles to a wide range of current problems in evolution, systematics and ecology. Molecular methods, data interpretation and computer-based data analysis are emphasized.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7434. Herpetology.**

A course treating the origin and evolution of amphibians and reptiles; their reproductive and physiological tactics; taxonomy/systematics; and population biology. While cosmopolitan in scope, emphasis will be placed on North American species and those groups inhabiting Texas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7440. Aquatic Toxicology.**

Introduction to principles for identifying and assessing the adverse effects of chemicals and other compounds and mixtures on aquatic organisms and ecosystems.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7447. Microbial Physiology.**

Prokaryotes, including bacteria and archaea, are the most diverse group of organisms on earth. Many prokaryotes live in environments which are inhospitable to other life forms. This course covers major aspects of prokaryotic physiology that permit them to be so successful.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7466. Phylogenetics.**

Study of the use of phylogenetic methodologies in aquatic research, including practical data collection, management, and analysis in the reconstruction of phylogenies. Laboratory exercises will introduce phylogenetic and DNA analysis software. Prerequisite: BIO 2450 and BIO 4369 and BIO 5466 all with grades of "C" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7468. Groundwater Resources.**

Study of the geological, physical, chemical and biological factors influencing sustainable groundwater resources, including hydrologic linkages and interactions with surface aquatic resources. Emphasis will be on the karst aquifer systems of Central Texas, and other groundwater aquifer systems of the United States.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7469. Introduction to Ecological Modeling.**

Mathematical models range from simple conceptual models to complex mechanistic models for mimicking behavior of natural systems. This course provides a broad overview of modeling objectives, techniques and assumptions, as well as the practical skills needed to conduct modeling projects. Computer applications emphasized. Prerequisite: MATH 2471 with a grade of "C" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7599A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7699A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7999A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Chemistry (CHEM)

### **CHEM 7101. Doctoral Assistant Development.**

This course is designed to prepare doctoral students employed as instructional assistants to perform effectively in diverse instructional settings. This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### **CHEM 7110. Advances in Molecular and Biophysical Chemistry.**

This course is designed to provide students in the Integrated Molecular and Biophysical Chemistry PhD program a forum to discuss ongoing research progress and new discoveries through literature study. Students in the course will give informal 'work in progress' presentations and critically analyze recent publications in the field.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CHEM 7199. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **CHEM 7200. Graduate Research.**

This course is designed to provide doctoral students with an elective research option to allow them to collect preliminary data as they develop their dissertation proposal.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **CHEM 7201. Graduate Laboratory Rotations.**

This course is designed to assist students in selecting a doctoral committee chair by having them work in several laboratories during their first semester in the program.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### **CHEM 7299. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **CHEM 7300. Graduate Research.**

This course is designed to provide doctoral students with an elective research option to allow them to collect preliminary data as they develop their dissertation proposal.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **CHEM 7305A. Physico-Chemical Properties and Metabolism of Xenobiotics.**

This course is designed to introduce students to the concepts of physico-chemical properties of small molecules and how these impact the ability of these molecules to be used as probes in biological systems, focusing on the role that metabolic processes play in limiting or activating chemical probes and the role of chemical probes in investigating these processes. Students will explore experimental and computational methods for determining the relevant properties of compounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

### **CHEM 7311. Natural Products, Anti-Infective, and Anti-Cancer Agents.**

This course is designed to introduce the natural products by discussing their important classes (secondary metabolites), classification, nomenclature, structure, biosynthesis, occurrence and structure elucidation. The study of their utilization in medicine as leads for the development of new antimicrobial and anticancer agents will constitute the main focus of the course. The students will learn how to utilize their knowledge of organic chemistry and biochemistry gained in undergraduate courses toward the application of advanced research active areas on chemistry-biology interface.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CHEM 7330. Environmental Chemistry.**

An introduction to environmental chemistry, with an emphasis on aquatic resources. Basic principles of geochemistry and atmospheric chemistry, as they relate to pollutant impacts on aquatic ecosystems, also will be examined. Prerequisites: CHEM 2142 and CHEM 2342 and CHEM 3410 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7342. Bioinorganic Chemistry.**

This course is designed to provide a broad overview of metalloprotein active site design and reaction mechanisms catalyzed by metalloenzymes. Training sessions on the use of contemporary protein visualization tools will be provided and used throughout the course. Topics covered in the course include dioxygen transport and activating proteins, electron transfer proteins, dinitrogen (N<sub>2</sub>), and hydrogen (H<sub>2</sub>) activation, photosystem and oxygen evolution, zinc containing proteins, CO<sub>2</sub> reduction, and modern advancements in the field of bioinorganic chemistry. Students can expect to develop strong foundational knowledge in metalloenzyme structure, function, and reaction mechanisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7354. Eukaryotic Molecular Biology and Macromolecular Structure.**

This course is designed to cover the specific topics of the regulation of gene expression in eukaryotes, including eukaryotic DNA replication, DNA repair, DNA recombination, DNA transcription, RNA processing, translation, post-translational protein modification. This course will also introduce the application of macromolecular structure determination in eukaryotic gene expression and its regulation. Students can expect to develop a strong foundation in eukaryotic molecular biology, a strong ability to discuss literatures and some grant writing ability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7361. Quantitative Methods in Biophysical Chemistry.**

This course will integrate the physical, chemical, and biological aspects of fundamental biophysical methods, including spectroscopy, calorimetry, and hydrodynamics. Students will develop a quantitative skillset in multiple analytical methods that are used to characterize a variety of biological systems. This course will provide students with the physical and chemical foundation to quantitatively study biological macromolecules at multiple levels of complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7385. Metabolism and Metabolomics.**

This course is designed to introduce students to the metabolism of macromolecules and the principles and practice of metabolomics. It will cover (1) biosynthesis and biodegradation of carbohydrates, lipids, amino acids, proteins, and nucleic acids; (2) metabolomics principles; (3) applications of metabolomics in the biomedical field. Discussions of literature in metabolomics studies will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7391. Chemical Biology.**

This course will introduce the emerging field of chemical biology and common tools that are used to analyze and manipulate biological processes with small molecules. Students will develop a strong foundation in the design and synthesis of chemical tools to interrogate biological systems and focus on implementing and interpreting assays with these tools, using examples from the current literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7395. Fundamentals in Molecular and Biophysical Chemistry.**

This course is designed to provide a functional overview of the physics, chemistry, and biology concepts that are central to the practice of molecular biophysical chemistry. Students will develop a broad scientific foundation to pursue interdisciplinary projects within the biophysical and biochemical sciences, as well as productively interface and collaborate with colleagues across sub-disciplines throughout their doctoral studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7399. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7599. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7699. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**CHEM 7999. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## English (ENG)

**ENG 7300. Language Problems in a Multicultural Environment.**

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7314. Specializations in Professional and Technical Communication Topics.**

Provides theoretical and practical information for specialized types of technical and professional communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7316. Foundations in Rhetoric and Composition.**

A course providing students with theoretical, pedagogical, and/or methodological foundations in the field of rhetoric and composition. Emphases vary but may include Contemporary Composition Pedagogy, Basic Writing Theory and Practice, and Writing Assessment. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7317. Specializations in Rhetoric and Composition.**

A course providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Across the Curriculum, Service Learning, Writing Center Theory and Practice, Computers and Writing, Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Geography (GEO)

**GEO 7190. Independent Study.**

Research in geography under the direction of a supervising professor. Repeatable once for additional credit with a different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7199A. Dissertation.**

Original research and writing in Geography is to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7199B. Dissertation.**

Original research and writing in Geographic Education is to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7199C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7290. Independent Study.**

This course is designed to provide a student with credit while conducting independent research in consultation with his or her research advisor. Repeatable once for additional credit with a different topic.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7299A. Dissertation.**

Original research and writing in Geography to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7299B. Dissertation.**

Original research and writing in Geographic Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7299C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7300. Advanced Geographic Research Design.**

The purpose of this course is to develop an appreciation for the process of research as practiced by contemporary professional geographers. Topics covered include formulating research problems, reviewing and critiquing published literature, developing and executing a research design, and completing a research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7301. Advanced Quantitative Methods in Geography.**

How to mathematically and statistically model geographic problems is the focus of this course. The application of multivariate statistical techniques to geographic problems and the problems that spatial data create in the application of statistical and other quantitative techniques are central issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7302. Nature and Philosophy of Geography.**

This course is a critical analysis of the historical development of geographic thought: its roots, its present status, and future directions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7304. Qualitative Research Methods.**

This course introduces the qualitative research paradigm, including research design, methods of data collection, and inductive analysis. Standards of scientific research that call for a deeper evaluation of complex social relationships are emphasized. The focus and application will be oriented towards human geography and nature-society relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7305. Historical Geography of the Environment.**

This course examines the evolution of environmental problems using the techniques and analytical perspectives of historical geography. Special emphasis is given to the emergence of environmental challenges related to urbanization and climate change. Students engage with scholarship related to historical geography of the environment and develop original research related to environmental change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7308. Advanced Regional Field Studies.**

Advanced study of geographic phenomena during field excursions to a particular site or region. Course includes preparation of site inventory, site guides, and on-site presentations. Repeatable once for additional credit with a different site or region.

**3 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7313. Environmental Systems.**

Theories and concepts involved in environmental systems will be examined. Tools and research issues relevant to their analysis will also be explored. Basic principles, as well as specific research questions and techniques, will be proposed to give students a foundation for analysis of current issues involving environmental systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7316. Remote Sensing and the Environment.**

A detailed examination and implementation of sophisticated approaches for processing satellite digital images with emphasis on environmental applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7318. GIS and Environmental Geography.**

This course examines the nature of environmental problems and explores the potential of GIS for environmental modeling and management. The conceptual basis for using GIS as well as the framing of environmental research problems will be covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7330. Geography of Hazards.**

This seminar examines research on issues related to the geography of hazards. Topics will be determined by instructor and student interests. Special emphasis will be placed on conceptual, theoretical, and methodological approaches to advance the study of spatial aspects of hazards such as risk, vulnerability, resilience, relief, recovery, and change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7334. Geographic Aspects of Water.**

This seminar is a critical analysis of developmental and current literature that define water's critical role in determining the physical and cultural characteristics of the earth. Principal focus will be placed on water's role on land use and as a critical resource.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7341. Urban Environment.**

Students in this course will critically engage with scholarly and governmental research relating to urban environments, urban environmentalism, and urban environmental management. Emphasis is placed on students developing and executing a unique, topically relevant research project aimed at improving our understanding of the way in which human-environment interaction influences, and is influenced by, urban geography and the urban experience. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7342. Theories and Methods in Geographic Education.**

This seminar is a critical analysis of previous and current literature concerning problems in pedagogy, philosophy, learning theory, research methods, teaching methodologies, and techniques of geographic education. A research paper will be required of each student on a topic related to the course content. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7344. Seminar in Geographic Curriculum.**

The seminar will be a survey and discussion of major curricula in geographic education. Geography will be viewed as a school subject that is part of the social studies, as an element of interdisciplinary studies, and as a stand alone subject.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7345. Contemporary Topics in Geographic Education.**

This course is a survey of initiatives and reforms in geography education spanning from the 1980s to the present day. Students are expected to develop and carry out research plans that address current theories in geographic education. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7346. Standards and Assessment in Geography.**

An introduction to assessment procedures in geography education is central to the course. Analysis of national standards in geography and how they have affected geographic learning in grades K-12 will be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7349. Population Geography.**

An in-depth study of the growth, movement, and spatial distribution of human populations is the central theme. Students will read and discuss professional articles that stress both theory and analytical techniques. Topics will include population growth and the environment, rural and small town depopulation, spatial diffusion processes, migration trends and theories, urban population growth, and techniques such as multivariate analysis and population projections. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7350. Practicum in Teaching Geography.**

This course introduces key concepts in teaching geography and provides regular training and planned periodic evaluations of instructional responsibilities. Course topics include instructional and assessment strategies in geography and classroom management. This course is required for first-year instructional assistants in the Geography Department. Students do not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**GEO 7352. Social Theory, Space, and Geography.**

This course examines key texts and concepts in social and political theory, focusing on theories of space and their mobilization in geographical research. Space and geography are approached with respect to several topics and debates in social theory including structuralism and agency, feminist theory and embodiment, racial formations, assemblage thinking and actor-network theory, hybridity, governance, and scale.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7361. Advanced Geographic Information Systems.**

This course provides exposure to advanced topics in GIS, particularly to quantitative methods and techniques for developing and interpreting models of natural and anthropogenic phenomena over the geographical space.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7362. Geographic Visualization.**

This course focuses on the interdisciplinary field of Geographic Visualization. Students will review visualization research in computer graphics, human computer interaction, GIScience, and cartography and relate the research approaches to useful and usable geographic visualizations. Prerequisite: GEO 3411 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7364. Geocomputation.**

Geocomputation reviews and analyzes concepts of computational modeling in Geography. The course will include modeling theory and advanced topics such as parallel processing, neural networks, cellular automata, scientific visualization, and fuzzy modeling. Students will practice model development, specifically spatially explicit simulation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7365. Theoretical Cartography.**

This course focuses on theoretical developments in cartography, and in particular looks at the role of maps and other graphic devices as tools for the discovery, analysis, and communication of geographical knowledge. Prerequisite: GEO 3411 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7366. Advanced Topics in Remote Sensing.**

The course focuses on advanced topics including the theoretical basis, mathematical foundations, and current research frontiers in remote sensing. Prerequisite: GEO 5415 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7368. Lidar and SfM Data Processing and Analysis.**

This course covers doctoral level skills in Light Detection and Ranging (lidar) systems and Structure from Motion (SfM) workflows for mapping and analysis of the environment. Students learn to successfully apply knowledge of lidar data and SfM workflows for a variety of Geographic Information Science applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7369. Exploring Spatial Databases.**

This course covers principles of spatial ontologies and spatial semantics to facilitate appropriate database conceptualization, design and implementation. Course assignments and projects provide in-depth experience with database query languages. Course work is completed using a spatially-enabled Relational Database Management Systems (RDBMS). Prerequisite: GEO 7417 or equivalent with a grade of 'B' or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7370. Advanced Seminar in Environmental Geography.**

This research seminar focuses on the methods, approaches, issues, and concepts of major themes in environmental geography. Special emphasis will be placed on theoretical and conceptual understandings of how humans interact with the environment from a geographical perspective. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7371. Advanced Seminar in Geographic Education.**

This research seminar analyzes literature and research into recent trends in geographic education. Emphasis will be on new developments in curriculum, content, and teaching methodologies. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7372. Seminar in Geographic Information Science.**

This course deals with advanced and current research issues in Geographic Information Science. Based on this objective, the course aims at educating doctoral students to conduct research in Geographic Information Science as well as develop innovative applications of Geographic Information Science. May be repeated for credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7390. Independent Study.**

Research in geography under the direction of a supervising professor. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7393B. Biogeography in Mountain Environments.**

This course examines how plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms and geological factors affect spatial distribution of animals and plants; all within the environmental limitation and conditions of mountains. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393C. Managing Urbanization.**

This course examines survey methods and procedures related to managing and preparing for urban growth. Selected topics for examination include transportation planning, housing, historic preservation, and environmental design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393D. International Migration.**

This course provides a survey of geographic and social science research conducted across various topics of international migration. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393E. Geography of Land Management.**

This course explores U.S. land management philosophies, techniques, and development approaches. Major topics include land ethics/philosophies, U.S. traditions in cadastral geography, urban sprawl and green development, land conservation techniques, the role of local/state/federal regulation in land management, and the human-environment impacts of land development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393F. Gender and Development.**

This course is a survey of geographic and social science research conducted across various topics of gender studies and international development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393G. Political Geography.**

This course is a survey of geographic and social science research conducted across various topics of political geography. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393J. Soil and Society.**

This course explores the importance of soil resources for environmental and socioeconomic sustainability. Soil science will be introduced, but the majority of the course will focus on soil's value to societies. Specific topics that will be explored include soil geography, historical abuses of soil resources, and current conservation efforts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393K. Biogeomorphology.**

This course will examine the ways in which plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms, and geological factors affect spatial distributions of animals and plants. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393M. Global Climate Change.**

This course examines various implications of global climate change, including impacts on science, politics, and society. Emphasis will be placed on anthropogenic influences across the 20th and 21st centuries, contemporary mitigation options, and future adaptation strategies amidst a complex and dynamic climate system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393N. Rivers and Society.**

This course examines river system processes and how they are influenced by human activities. We will discuss the principles and practices of large-scale river basin management with an emphasis on the different perspectives and motivations driving different management goals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**GEO 7393P. Advanced Seminar in Human Geography.**

This course will engage students in systematic critical analysis of the theories and methods of human geography. The students will conduct careful research on a topic in human geography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393Q. Geomorphology in the Anthropocene.**

This course will examine the ways in which humans interact with and affect geomorphological processes and landforms, and how humans directly act as geomorphological agents. The level at which human activities have transformed the surface of the Earth will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7399A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7399B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7399C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7415. Geographic Applications of Remote Sensing.**

Students will focus on geographic applications of the principles and practices of digital image processing, classification, and modeling using satellite images.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7417. Geographic Information Systems.**

Course is concerned with the analysis of interpretation of maps stored in digital form. Students are introduced to the concepts involving computerized cartographic and geographic data input, storage and retrieval, data manipulation and analysis, graphic and tabular report generation, and cartographic modeling.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7418. Technical Foundations and Methods in Geographic Information Science.**

This course addresses technical foundations and methods in management, analysis, visualization, and dissemination of geographically-referenced data and information in digital form. Topics include data structures, algorithms, and a variety of methods used in GIS and spatial data analysis.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7419. Advanced Techniques in Geographic Information Science.**

This course develops advanced Geographic Information System (GIS) concepts and application issues, spatial data manipulation and analysis skills, and provides hands-on experience with GIS, programming, and spatial analytics hardware/software programs. Emphasis is placed on practical application of skills to real world issues using advanced GIS techniques and geoprocessing. Prerequisite: GEO 7417 or equivalent with a grade of "C" or better and instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7430. Field Methods.**

Methods and techniques for observing, measuring, recording, and reporting on geographic phenomena are investigated in this course. Students will learn the use of instruments and materials in the collection of data for mapping and field research in the local area. Prerequisites: GEO 2410 and GEO 3301 both with grades of "D" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7447. Spatial Graphics in Geographic Education.**

This course examines traditional and innovative geoinformation and geovisualization technologies and their relationship to spatial thinking and the teaching and learning of geography. The course reviews academic literature, research methods, and teaching methodologies related to spatial graphics in geographic education. The lab portion provides geovisualization design skills for geographic education.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7599A. Dissertation.**

Original research and writing in Geography to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7599B. Dissertation.**

Original research and writing in Geographic Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7599C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Philosophy (PHIL)

**PHIL 7101. Responsible Conduct of Research and Research Ethics.**

In this course students will examine issues, concepts, and cases in research ethics and the responsible conduct of research. Designed to meet NSF and NIH requirements for training, topics will include research integrity, conflicts of interest, authorship, peer review, human and animal experimentation, mentorship, data, and values in science. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**PHIL 7323. Environmental Ethics and Sustainable Aquatic Resources.**

Examination of the ethical implications of environmental use and management policies and practices, with emphasis on sustainable aquatic resources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 7355. Philosophy of Science.**

Students in this course will investigate the nature and processes of scientific inquiry; the role of values in generating and using scientific knowledge; some of the fundamental concepts in science, including relevant evidence, induction, explanation; and the intellectual commitments made when accepting a scientific theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

The Master of Science (M.S.) degree with a major in Aquatic Resources is a thesis-based degree that emphasizes research in Aquatic Ecosystems and the biological communities that they support.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in biology or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.) Leveling courses will be required if the student lacks sufficient background course work
- official transcripts from **each institution** where course credit was granted
- a minimum 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- mentor communication (intent to mentor letter) sent directly from a Biology Department faculty member.
- resume/CV
- statement of purpose describing professional aspirations and rationale for pursuing graduate study

- three letters of recommendation addressing the substance and quality of the student's preparation for graduate study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Aquatic Resources concentration in Aquatic Biology requires 30 semester credit hours, including a thesis. All elective course work should be chosen in consultation with the thesis advisor, thesis committee, and program director to fulfill the requirements for the degree. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
BIO 7405	Statistics and Experimental Design I	4
BIO 7406	Statistics and Experimental Design II	4
Choose 2 hours from the following:		2
BIO 5110	Seminar in Biology (repeatable for credit)	
BIO 7102	Seminar in Aquatic Resources (repeatable for credit)	
BIO 7103C		
BIO 7120	Population Biology Seminar	
<b>Elective Courses</b>		
Choose 14 hours from the following:		14
BIO 5301	Evolution	
BIO 5331	Human Dimensions of Wildlife and Fisheries Conservation	
BIO 5351I	Global Change Biology	
BIO 5413	Parasitology	
BIO 5415	Ichthyology	
BIO 5424D	Vertebrate Endocrinology	
BIO 5443	Fish Physiology	
BIO 5470	Limnology	
BIO 7311	Ecology of Temporary Waters	
BIO 7346	Conservation Biology	
BIO 7360R	Special Topics in Aquatic Resources: Community and Ecosystem Ecology	
BIO 7360T	Karst Hydrogeology and Geomorphology	

BIO 7361E		
BIO 7419	Stream Ecology	
BIO 7426	Ecology and Management of Aquatic Macrophytes	
BIO 7440	Aquatic Toxicology	
BIO 7468	Groundwater Resources	
GEO 5418	Geographic Information Systems I	
GEOL 5421	Hydrogeology	
This may include up to 6 hours from the following:		
BIO 5114	Collaborative Research	
BIO 5214	Collaborative Research	
BIO 5314	Collaborative Research	
<b>Thesis</b>		
BIO 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
BIO 5199B	Thesis	
BIO 5299B	Thesis	
BIO 5399B	Thesis	
BIO 5599B	Thesis	
BIO 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

All master's students are required to take a final, comprehensive examination. In the Biology Department this exam is administered by the student's committee. Students on academic probation or conditional status are not permitted to take the final, comprehensive examination.

Grading of the final exam is "pass" or "fail." In order to pass, a student must receive votes of confidence from the major professor and a majority of the committee members (including the major professor). A student can be failed over the advisor's positive vote if the majority of the committee votes not to pass. Such outcomes may be appealed to the Graduate Committee, whose decision is final.

For thesis students, the comprehensive examination is oral and is scheduled after the thesis is complete. This examination will normally take the form of a thesis defense and will be immediately preceded by a public presentation of the thesis work. Students should discuss the exam with their committee members beforehand to know their expectations and how best to prepare.

The time and place of the thesis presentation and defense must be announced to the Biology Department and the general public at least two weeks before the actual event. A link for electronic submission of this information is available on the Biology Department web site. It is the student's responsibility to schedule this exam after receiving permission to proceed from his or her major professor.

The thesis defense is in two stages, a public, 30 to 40-minute presentation of the thesis work followed by a closed examination by the thesis committee. After the presentation, questions from the audience will be entertained, but the actual examination phase will not begin until after the general audience has been excused. The exam performance is graded by the committee as "pass" or "fail." A grade of "pass" means that the thesis requires no or only minor revisions. Under such circumstances, the thesis committee signs the examination report and entrusts oversight of any needed revisions to the major professor. In the event a student fails the exam, the committee may recommend revisions to the thesis and upon the completion of these revisions, a new defense and oral

examination; or the committee may require the student to undertake a new thesis under the supervision of the same, or a different, thesis committee; or the committee may recommend the student be dismissed from the Biology graduate program. Only one re-examination is permitted.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer

than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Biology: BIO

## Courses Offered

### Biology (BIO)

#### BIO 5100. Professional Development.

This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis. Graded on a credit (CR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### BIO 5110. Seminar in Biology.

Interactive discussion of timely issues and problems, designed to expose students to the current literature in their fields of interest and its critical analysis. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Header

**Grade Mode:** Standard Letter

#### BIO 5114. Collaborative Research.

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5214 and BIO 5314.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### BIO 5166. Medical Microbiology Laboratory.

This graduate laboratory-based course will cover pathogenic bacteria emphasizing identification of selected groups of pathogens and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### BIO 5176. Microbial Biotechnology Laboratory.

This laboratory-based course will cover use of microbes for biotechnological applications and is designed to provide practical explorations into fields of biotechnology. Topics include laboratory techniques for recombinant protein purification, fermentation, identification of markers in genetically modified food and bio-remediation of pollutants. Corequisite: BIO 5376.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**BIO 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5214. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5314.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5295. Fundamentals of Research.**

Designed to acquaint the beginning graduate student with materials and methods of research in the biological sciences. It is recommended that a graduate student take this course the first semester in residence.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5300. Neurobiology.**

This course presents the biology of the nervous system with emphasis on the human nervous system. Topics presented in lecture include neuroanatomy, cellular neurobiology, neurophysiology, developmental neurobiology, and neuronal plasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5301. Evolution.**

Basic genetic principles applied to natural selection, adaptation, populations, and speciation. Consideration is given to the origin of life, nature of chromosomal variation, evolution of genetic systems, and certain other selected topics.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5304. Wildlife and Recreation: Impact and Management.**

Students will be introduced to the impact human recreational activities have on wildlife habitats and populations. Management practices to enhance human-wildlife encounters or to minimize detrimental effects on wildlife populations will be presented.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5305. Methods of Nature Study for Teachers.**

This course provides a comprehensive survey of natural events. It includes laboratory and field work emphasizing observation, collection and discovery of relationships. It is creditable only for those seeking elementary or middle school certification and is required for those seeking grade 4-8 Science or Science/Mathematics teaching certification. This course must be taken the semester immediately prior to student teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5307. Ecology of Rarity.**

This course will examine the ecology of rarity and its ability to inform public awareness and environmental policy. This course will explore how we define rarity, persistence and viability. Is rarity more or less common than might be expected, and is there anything we can or should do about it?

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 5311. Cancer Biology.**

Cancer Biology provides a foundation for understanding the complex molecular, biochemical, and cellular processes associated with cancer development. Topics include the role of tumor suppressor genes, oncogenes, DNA repair, apoptosis, ECM, cell-cycle control, cell signaling pathways, immune function and cancer-causing viruses. Emerging diagnostics and/or therapeutics will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5314. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5317. Interpretive Biology Programming and Design.**

In this course, students will explore the methods and principles used by the National Park Service, museums, environmental centers, and state park systems to interest a variety of audiences as well as interpret biology and natural environments effectively. Students will practice skills in both personal and non-personal interpretation by creating science outreach programs, interpretive literature, brochures, path waysides, and other interpretive media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5319C. Ecotoxicology.**

Topics to be covered include sources, types, and fates of toxicants, organism response to toxicants, toxicant effects at the population, community, and ecosystem levels, and monitoring and risk assessment. Examination of current literature will form the core of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5319F. Watershed Management Frameworks and Applications.**

Introduction to integrated watershed assessment and management tools for identifying programmatic water quality and quantity issues and their root causes and solutions, and their practical application. The scientific and socio-economic elements are considered within the context of planning and developing watershed protection plans and programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5327. Issues in Irish Biodiversity and Conservation.**

In this course, students will learn about Irish flora and fauna, ecosystems, conservation strategies in areas of high ecological concern, and public involvement. Emphasis will be placed on case studies and service-learning opportunities. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5328. Field Biology of Ireland.**

In this course, students will use multiple techniques to explore biodiversity across multiple ecosystems in Ireland. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5329. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5331. Human Dimensions of Wildlife and Fisheries Conservation.**

Humans play a role in nearly every aspect of wildlife and fisheries conservation. This course will provide students with principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will also have an opportunity to integrate human dimensions into local decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5332. Biology in Film and Television: An Analysis of the Biology in Fiction and Non-Fiction Film and TV.**

This course explores how biology is portrayed in popular motion pictures with an emphasis on analyzing biological accuracy, misconceptions perpetuated or portrayed, and investigating the rationale behind motion picture directors' and writers' decisions about how they portray biological content in the final product. As part of this course students will watch and discuss a curated list of films and television shows and write an analysis of each film or TV episode.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5350G. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their ability to cause disease, emphasizing the biological basis for virulence, and research strategies for investigating infectious diseases. Students may take only one of BIO 5350G or BIO 5445 for credit. Prerequisite: BIO 2400 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350I. Emerging Infectious Diseases.**

Current topics in the emergence of viral and bacterial diseases in humans. This course will include new diseases, diseases previously seen and increasing in incidence, and diseases not previously seen in this country. This course will be of interest to students who are pursuing advanced degrees and courses in microbiology, biochemistry, and cell and molecular biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5350J. Environmental Physiology of Animals.**

This course is a study of how animals respond physiologically to changes in environmental temperature, moisture, salinity, partial pressure of gases, and toxins. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350K. Genomics.**

The course is a lecture course in modern genomics, including principles of genome function, the human genome, comparative genomics, genome sequencing, evolution and genomic change, databases and medicine, ethical, legal and social issues. The course also includes discussion of transcriptomics, proteomics, metabolomics, directed evolution, protein design, and systems biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350M. Wildlife Policy and Law in North America.**

This course provides the student with a historical and cultural context within which wildlife policy and law (federal treaties, statutes, case law, and regulations) have developed in North America, particularly in the United States. Graduate students will research the development of Wildlife law in representative states as well.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350O. Tropical Ecology and Conservation.**

Students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems.

**3 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350P. Tropical Ecology and Conservation Lab.**

This laboratory course complements the lecture course BIO 5350O, in which students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems. Corequisite: BIO 5350O.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Co-requisite(s):** BIO 5350O

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350Z. Diversity and Cultural Impact of Geoparks.**

Students will explore biological differences in diversity across Geoparks in the United States and Ireland. Additionally, students will study the cultural impact that Geoparks have on the local community and national policy by focusing on differences between science communication strategies and community engagement practices conducted at the parks. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351G. Omics Approach to Microbiology.**

This course covers contemporary approaches, techniques and bioinformatic tools used to study function and ecology in microbial communities. Topics covered will include microbiome, next-generation sequencing, metaproteomics, and their applications to clinical, agricultural, environmental and industrial needs.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351I. Global Change Biology.**

This course will give an in-depth analysis of the major global changes occurring in present day biological systems. The focus of the course will be on climate change, invasive species, eutrophication, land use change and biodiversity loss. Emphasis will be placed on peer-reviewed literature to better understand how biologists study processes at the global scale. Potential solutions to these global challenges will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351J. Comparative Immunology.**

While most textbooks would present the immune system of animals as a monolith with little variation between species, we are quickly learning that this is not the case. Indeed animal immune systems are immensely diverse. This class will consist of a taxonomic survey of metazoan immune systems, focusing on the evolutionary causes and ecological consequences of this diversity in immune systems across animals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351P. Ecology and Conservation Abroad.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351Q with a grade of "C" or better.

**3 Credit Hours. 20 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351Q. Ecology and Conservation Abroad Lab.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351P with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5356. Plant Physiology.**

Basic principles of plant physiology are studied in lecture and laboratory. Previous courses in biochemistry and genetics are strongly recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5363. History of Medicine.**

This course covers significant concepts, developments, individuals, and events in the history of medicine from antiquity to modern day. Topics include the impact of disease on medical practice, the development of hospitals as sites for care, teaching, and research, how medical science and technology are continuously defined by social, cultural, and political ideas, and the historical roots of several themes in medical ethics. This course will be delivered as an Education Abroad course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5364. Explorations in Physiology.**

This course will cover the basic principles of physiological systems and the function of organ systems with an emphasis on humans and other mammals. The focus will be on the interplay between and among multiple organ systems and holistic systems integration. Other topics include the pathophysiology underlying common diseases, drug therapies and treatments, and emerging physiological research. This course will also provide the opportunity for experiential learning gained in diverse cultural settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5366. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their relationship to disease, emphasizing critical evaluation of research literature, disease transmission and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5374. Principles of Zoo Management.**

This course is designed to introduce the principles of captive animal management within conservation and education-based zoos. Zoo management requires a broad understanding of the life history and biological needs of many different species; we will explore the ways modern zoos address these needs and the ways in which future zoos could address them more effectively. Specific topics will include animal husbandry, welfare, nutrition, and behavior as well as environmental enrichment, captive breeding, conservation, zoo regulatory frameworks, ethical concerns, and zoo careers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5376. Microbial Biotechnology.**

This course provides an overview of how microbes (e.g., bacteria, viruses and yeast) are manipulated to solve practical problems through biotechnology. This course design is based on topics of applied microbiology as recommended by American society of Microbiology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5377. Genome Informatics.**

The course will cover basic knowledge on genomics and its bioinformatics tools. Students will learn current topics on genomics and bioinformatics, and will analyze genomic data using statistical software. All the analyses will be performed using a personal and a cluster computer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5388. Habitat Ecology.**

The course will emphasize and reinforce in students an appreciation for the importance of habitat in understanding a wide range of processes and patterns in Ecology. Course will explore the process of habitat selection, in the context of animal behavior, population dynamics, and modeling. Students will learn and apply methods and techniques of statistically analyzing the habitat associations of species. The central role of habitat in species conservation will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5390. Problems in the Biological Sciences.**

Open to graduate students on an individual basis by arrangement with the faculty member concerned.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in BIO 5399B. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5400. Plants Important for Wildlife.**

This course explores plant and plant part (specifically gall, fruit, seed, and twig) identification, phylogenetics, co-evolution of plant defenses, economic and ecological impacts of plant uses by wildlife.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5402. Earth Science I.**

A study of astronomy and meteorology through observation, description, and interpretation of earth phenomena. Includes field observations, methods of measurement and interpretation of data related to the physical environment and space technology. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5403. Earth Science II.**

The description and interpretation of earth phenomena considered from the standpoint of geology and oceanography. Includes field observations, methods of sampling and interpretation of data related to the physical environment. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5408. Science Processes and Research.**

Students will analyze scientific research design, design research, interpret data, and communicate results. Stress will be placed on broad-field structure and integration of major science concepts and research-based science pedagogy. This course must be taken the semester prior to student teaching and is required for those seeking 7-12 Life Science or Science teacher certification. This course may not count as one of the four upper-level Biology courses required of general Biology majors, or one of the three upper-level Biology courses required of Biology minors.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5410. Field Biology of Plants.**

Ecological relationships and natural history of plants, including historical geology, geography, soils, and vegetational regions of Central Texas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5411. Morphology of the Vascular Plants.**

A phylogenetic survey of living and fossil vascular plants that focuses on external morphology and reproductive biology. Topics include phylogenetic reconstruction, the origin of vascular plants, seed reproduction, and the origin of angiosperms. Emphasis is on broad-scale evolutionary patterns and origin of major taxonomic groups.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5412. Plant Anatomy.**

A descriptive and functional analysis of seed plants that focuses on internal structure. Topics include recognition and characterization of plant tissues, the structure of plant organs, and organ development. Emphasis is on pattern of tissue organization common to all seed plants and the functional basis for anatomical structure.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5413. Parasitology.**

The biology and biological significance of the common parasites of man and animals.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter



**BIO 5415. Ichthyology.**

An introduction to the morphology, taxonomy, natural history, and evolution of fishes. Field trips will be made to collect specimens, and laboratory periods will be devoted to morphological and systematic analyses.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5418. Field Ornithology.**

This course is designed to introduce and provide an advanced knowledge of the application of various field, laboratory, and statistical methods and techniques in the study of avian species. The course will include topics related to survey methodology, sampling design, marking/banding, measurement/sample extraction, and aging/sexing of avian species.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5420. Natural History of the Vertebrates.**

Environmental relationships and natural history of vertebrates. Emphasis is on evolution taxonomy, speciation, behavior, and morphology. Laboratory will include field trips for the study and collection of vertebrates in their natural habitats. Students will assemble a representative collection of vertebrates.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5421. Ornithology.**

Introduction to anatomy, behavior, ecology, and identification of the birds of Texas. Laboratory will emphasize field studies of birds and their habitat requirements.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5422. Mammalogy.**

The taxonomy, distribution, ecology, behavior, and evolution of mammals with particular emphasis on wild mammals of the Southwest. Laboratory will emphasize anatomy, identification, preparation of specimens, and field exercises in methods of population analysis. Students may assemble representative mammal collection.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5423. Wildlife Management.**

Application of ecological principles and natural history concepts to the management of wildlife habitats and populations. Laboratory will involve demonstrations and practice exercises with wildlife management techniques and instrumentation, and field trips to observe wildlife management projects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5424D. Vertebrate Endocrinology.**

This course teaches function and organization of the endocrine system. It describes the major endocrine glands, the synthesis and release of their hormone products, and the interaction with target tissues. Endocrine control of digestion, growth, reproduction, and homeostasis will be compared between mammals and other vertebrate groups.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5432. Bacterial Genomics.**

The course will offer hands-on training on contemporary approaches, techniques, and bioinformatic tools used to study bacterial genomes. Topics covered include DNA sequencing, assembling and annotating genomes, all with a strong emphasis on computational biology. At the end of this course, students will be familiar with bioinformatics tools used to analyze genes and genomes.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5435. Techniques in Wildlife Management.**

The basic methodology of practical wildlife management. This involves techniques in monitoring and data collection related to population dynamics and habitat parameters of wildlife species as well as field research.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5436. Tropical Biology.**

This course entails an analysis and evaluation of the governing principles of tropical ecosystems, including wildlife ecologies, geological processes, and environmental-cultural interactions. In the laboratories, students will compare ecological relationships that influence tropical biology, discuss peer-reviewed literature and examine tropical flora and fauna during field trips to regional sub-tropical areas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5441. Cellular Physiology.**

Advanced cellular biology, including membrane physiology, thermodynamics, energy transduction and distribution, and cellular movement in non-muscle and muscle cells. Laboratory includes discussion of current research and exercises in cellular physiology.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5443. Fish Physiology.**

This course examines the primary physiological functions in fish including how fish sense and interact with the environment, maintain their energetic metabolism (respiration, digestion and excretion), reproduce and maintain water balance. Students will learn about the diverse adaptations fish use to cope with environmental and physiological challenges.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5448. Bacterial Genetics.**

This course will cover concepts and mechanisms involved in the genetics of Archaea and Bacteria. Graduate students will learn current strategies dealing with traditional molecular genetics including post-transcriptional regulation involving small non-coding RNA. In addition graduate students will also write a critical review on a research article from relevant topic.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5454. Plant Ecology.**

Functional ecology of terrestrial plants, plant populations, and communities. Laboratory emphasizes quantitative and experimental approaches to plant ecology and the use of field and laboratory physiology equipment.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5465. General Entomology.**

Principles of morphology, physiology, and taxonomy of insects. Laboratory time will be devoted to a taxonomic study of the common orders and families of insects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5466. Phylogenetic Methods.**

Reconstructing phylogenies is important in most fields of biology. Course emphasis is on practical data collection, management, and analysis. Laboratory exercises will introduce phylogenetic and DNA analysis software, and WWW resources. Students will learn how to address questions in their own research using phylogenetic methodologies.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5470. Limnology.**

Physical, chemical, and biological factors affecting productivity in lakes, ponds, and streams. Limnology sampling methods, chemical and biological analysis of samples, and hydrographic surveying are included in the laboratory.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5472. Animal Behavior.**

This course presents all the major facets of the study of animal behavior, giving special attention to its evolution and ecological significance. We will discuss major conceptual models guiding past and present research in the field. Laboratories will emphasize experimental techniques and statistical analysis.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5480. Cytology and Micro-technique.**

Study of cellular ultra-structure and electron micro technique. Lecture portion of course will cover cytology of all cell types and theoretical aspects of light microscopy and electron microscopy. Laboratory portion will train students to proficiency in microscopy.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5481. Internship in Biological Laboratory Technologies.**

The student will participate in the work of a selected biology unit (private, commercial, or governmental). A research paper reporting the internship experience conducted at the biological unit under the supervision of a faculty member will be required. This course may be credited toward a biology major with prior approval of the graduate advisor and department chair.

**4 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5490. Principles of Developmental Biology.**

This course will cover basic principles of developmental biology in both plant and animal systems. The course will mainly address cell, molecular and genetic mechanisms underlying the development of model organisms, mainly focusing on *Drosophila* (animal) and *Arabidopsis* (plant).

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Aquatic Resources is a thesis-based degree that emphasizes research in aquatic ecosystems and the biological communities that they support.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in biology or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.) Leveling courses will be required if the student lacks sufficient background course work.
- official transcripts from **each institution** where course credit was granted
- a minimum 3.0 overall GPA or 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- mentor communication (intent to mentor letter) sent directly from a Biology Department faculty member
- resume/CV

- statement of purpose describing professional aspirations and rationale for pursuing graduate study
- three letters of recommendation addressing the substance and quality of the student's preparation for graduate study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

Students in the The Master of Science (M.S.) degree with a major in Aquatic Resources concentration in Aquatic Systems requires 30 semester credit hours, including a thesis. All elective course work should be chosen in consultation with the thesis advisor, thesis committee, and program director to fulfill the requirements for the degree. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
BIO 7405	Statistics and Experimental Design I	4
BIO 7406	Statistics and Experimental Design II	4
Choose 2 hours from the following:		2
BIO 5110	Seminar in Biology	
BIO 7102	Seminar in Aquatic Resources	
BIO 7103C		
BIO 7120	Population Biology Seminar	
<b>Elective Courses</b>		
Choose 14 hours from the following:		14
BIO 5301	Evolution	
BIO 5331	Human Dimensions of Wildlife and Fisheries Conservation	
BIO 5351I	Global Change Biology	
BIO 5413	Parasitology	
BIO 5415	Ichthyology	
BIO 5424D	Vertebrate Endocrinology	
BIO 5443	Fish Physiology	
BIO 5470	Limnology	
BIO 7346	Conservation Biology	
BIO 7360R	Special Topics in Aquatic Resources: Community and Ecosystem Ecology	
BIO 7360T	Karst Hydrogeology and Geomorphology	

BIO 7361E		
BIO 7419	Stream Ecology	
BIO 7426	Ecology and Management of Aquatic Macrophytes	
BIO 7440	Aquatic Toxicology	
BIO 7468	Groundwater Resources	
GEO 5418	Geographic Information Systems I	
GEOL 5421	Hydrogeology	
This may include up to 6 hours from the following:		
BIO 5114	Collaborative Research	
BIO 5214	Collaborative Research	
BIO 5314	Collaborative Research	
<b>Thesis</b>		
BIO 5399A	Thesis	3
Choose a minimum of 3 hours from the following		3
BIO 5199B	Thesis	
BIO 5299B	Thesis	
BIO 5399B	Thesis	
BIO 5599B	Thesis	
BIO 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

All master's students are required to take a final comprehensive examination. In the Biology Department this exam is administered by the student's committee. Students on academic probation or conditional status are not permitted to take the final examination.

Grading of the final exam is "pass" or "fail." In order to pass, a student must receive votes of confidence from the major professor and a majority of the committee members (including the major professor). A student can be failed over the advisor's positive vote if the majority of the committee votes not to pass. Such outcomes may be appealed to the Graduate Committee, whose decision is final.

For thesis students, the comprehensive examination is oral and is scheduled after the thesis is complete. This examination will normally take the form of a thesis defense and will be immediately preceded by a public presentation of the thesis work. Students should discuss the exam with their committee members beforehand to know their expectations and how best to prepare.

The time and place of the thesis presentation and defense must be announced to the Biology Department and the general public at least two weeks before the actual event. A link for electronic submission of this information is available on the Biology Department web site. It is the student's responsibility to schedule this exam after receiving permission to proceed from his or her major professor.

The thesis defense is in two stages, a public, 30 to 40-minute presentation of the thesis work followed by a closed examination by the thesis committee. After the presentation, questions from the audience will be entertained, but the actual examination phase will not begin until after the general audience has been excused. The exam performance is graded by the committee as "pass" or "fail." A grade of "pass" means that the thesis requires no or only minor revisions. Under such circumstances, the thesis committee signs the examination report and entrusts oversight of any needed revisions to the major professor. In the event a student fails the exam, the committee may recommend revisions to the thesis and upon the completion of these revisions, a new defense and oral

examination; or the committee may require the student to undertake a new thesis under the supervision of the same, or a different, thesis committee; or the committee may recommend the student be dismissed from the Biology graduate program. Only one re-examination is permitted.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer

than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Biology: BIO

## Courses Offered

### Biology (BIO)

#### BIO 5100. Professional Development.

This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis. Graded on a credit (CR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### BIO 5110. Seminar in Biology.

Interactive discussion of timely issues and problems, designed to expose students to the current literature in their fields of interest and its critical analysis. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Header

**Grade Mode:** Standard Letter

#### BIO 5114. Collaborative Research.

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5214 and BIO 5314.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### BIO 5166. Medical Microbiology Laboratory.

This graduate laboratory-based course will cover pathogenic bacteria emphasizing identification of selected groups of pathogens and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### BIO 5176. Microbial Biotechnology Laboratory.

This laboratory-based course will cover use of microbes for biotechnological applications and is designed to provide practical explorations into fields of biotechnology. Topics include laboratory techniques for recombinant protein purification, fermentation, identification of markers in genetically modified food and bio-remediation of pollutants. Corequisite: BIO 5376.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**BIO 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5214. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5314.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5295. Fundamentals of Research.**

Designed to acquaint the beginning graduate student with materials and methods of research in the biological sciences. It is recommended that a graduate student take this course the first semester in residence.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5300. Neurobiology.**

This course presents the biology of the nervous system with emphasis on the human nervous system. Topics presented in lecture include neuroanatomy, cellular neurobiology, neurophysiology, developmental neurobiology, and neuronal plasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5301. Evolution.**

Basic genetic principles applied to natural selection, adaptation, populations, and speciation. Consideration is given to the origin of life, nature of chromosomal variation, evolution of genetic systems, and certain other selected topics.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5304. Wildlife and Recreation: Impact and Management.**

Students will be introduced to the impact human recreational activities have on wildlife habitats and populations. Management practices to enhance human-wildlife encounters or to minimize detrimental effects on wildlife populations will be presented.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5305. Methods of Nature Study for Teachers.**

This course provides a comprehensive survey of natural events. It includes laboratory and field work emphasizing observation, collection and discovery of relationships. It is creditable only for those seeking elementary or middle school certification and is required for those seeking grade 4-8 Science or Science/Mathematics teaching certification. This course must be taken the semester immediately prior to student teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5307. Ecology of Rarity.**

This course will examine the ecology of rarity and its ability to inform public awareness and environmental policy. This course will explore how we define rarity, persistence and viability. Is rarity more or less common than might be expected, and is there anything we can or should do about it?

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 5311. Cancer Biology.**

Cancer Biology provides a foundation for understanding the complex molecular, biochemical, and cellular processes associated with cancer development. Topics include the role of tumor suppressor genes, oncogenes, DNA repair, apoptosis, ECM, cell-cycle control, cell signaling pathways, immune function and cancer-causing viruses. Emerging diagnostics and/or therapeutics will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5314. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5317. Interpretive Biology Programming and Design.**

In this course, students will explore the methods and principles used by the National Park Service, museums, environmental centers, and state park systems to interest a variety of audiences as well as interpret biology and natural environments effectively. Students will practice skills in both personal and non-personal interpretation by creating science outreach programs, interpretive literature, brochures, path waysides, and other interpretive media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5319C. Ecotoxicology.**

Topics to be covered include sources, types, and fates of toxicants, organism response to toxicants, toxicant effects at the population, community, and ecosystem levels, and monitoring and risk assessment. Examination of current literature will form the core of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5319F. Watershed Management Frameworks and Applications.**

Introduction to integrated watershed assessment and management tools for identifying programmatic water quality and quantity issues and their root causes and solutions, and their practical application. The scientific and socio-economic elements are considered within the context of planning and developing watershed protection plans and programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5327. Issues in Irish Biodiversity and Conservation.**

In this course, students will learn about Irish flora and fauna, ecosystems, conservation strategies in areas of high ecological concern, and public involvement. Emphasis will be placed on case studies and service-learning opportunities. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5328. Field Biology of Ireland.**

In this course, students will use multiple techniques to explore biodiversity across multiple ecosystems in Ireland. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5329. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5331. Human Dimensions of Wildlife and Fisheries Conservation.**

Humans play a role in nearly every aspect of wildlife and fisheries conservation. This course will provide students with principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will also have an opportunity to integrate human dimensions into local decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5332. Biology in Film and Television: An Analysis of the Biology in Fiction and Non-Fiction Film and TV.**

This course explores how biology is portrayed in popular motion pictures with an emphasis on analyzing biological accuracy, misconceptions perpetuated or portrayed, and investigating the rationale behind motion picture directors' and writers' decisions about how they portray biological content in the final product. As part of this course students will watch and discuss a curated list of films and television shows and write an analysis of each film or TV episode.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5350G. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their ability to cause disease, emphasizing the biological basis for virulence, and research strategies for investigating infectious diseases. Students may take only one of BIO 5350G or BIO 5445 for credit. Prerequisite: BIO 2400 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350I. Emerging Infectious Diseases.**

Current topics in the emergence of viral and bacterial diseases in humans. This course will include new diseases, diseases previously seen and increasing in incidence, and diseases not previously seen in this country. This course will be of interest to students who are pursuing advanced degrees and courses in microbiology, biochemistry, and cell and molecular biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5350J. Environmental Physiology of Animals.**

This course is a study of how animals respond physiologically to changes in environmental temperature, moisture, salinity, partial pressure of gases, and toxins. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350K. Genomics.**

The course is a lecture course in modern genomics, including principles of genome function, the human genome, comparative genomics, genome sequencing, evolution and genomic change, databases and medicine, ethical, legal and social issues. The course also includes discussion of transcriptomics, proteomics, metabolomics, directed evolution, protein design, and systems biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350M. Wildlife Policy and Law in North America.**

This course provides the student with a historical and cultural context within which wildlife policy and law (federal treaties, statutes, case law, and regulations) have developed in North America, particularly in the United States. Graduate students will research the development of Wildlife law in representative states as well.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350O. Tropical Ecology and Conservation.**

Students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems.

**3 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350P. Tropical Ecology and Conservation Lab.**

This laboratory course complements the lecture course BIO 5350O, in which students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems. Corequisite: BIO 5350O.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Co-requisite(s):** BIO 5350O

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350Z. Diversity and Cultural Impact of Geoparks.**

Students will explore biological differences in diversity across Geoparks in the United States and Ireland. Additionally, students will study the cultural impact that Geoparks have on the local community and national policy by focusing on differences between science communication strategies and community engagement practices conducted at the parks. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351G. Omics Approach to Microbiology.**

This course covers contemporary approaches, techniques and bioinformatic tools used to study function and ecology in microbial communities. Topics covered will include microbiome, next-generation sequencing, metaproteomics, and their applications to clinical, agricultural, environmental and industrial needs.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351I. Global Change Biology.**

This course will give an in-depth analysis of the major global changes occurring in present day biological systems. The focus of the course will be on climate change, invasive species, eutrophication, land use change and biodiversity loss. Emphasis will be placed on peer-reviewed literature to better understand how biologists study processes at the global scale. Potential solutions to these global challenges will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351J. Comparative Immunology.**

While most textbooks would present the immune system of animals as a monolith with little variation between species, we are quickly learning that this is not the case. Indeed animal immune systems are immensely diverse. This class will consist of a taxonomic survey of metazoan immune systems, focusing on the evolutionary causes and ecological consequences of this diversity in immune systems across animals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351P. Ecology and Conservation Abroad.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351Q with a grade of "C" or better.

**3 Credit Hours. 20 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351Q. Ecology and Conservation Abroad Lab.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351P with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5356. Plant Physiology.**

Basic principles of plant physiology are studied in lecture and laboratory. Previous courses in biochemistry and genetics are strongly recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5363. History of Medicine.**

This course covers significant concepts, developments, individuals, and events in the history of medicine from antiquity to modern day. Topics include the impact of disease on medical practice, the development of hospitals as sites for care, teaching, and research, how medical science and technology are continuously defined by social, cultural, and political ideas, and the historical roots of several themes in medical ethics. This course will be delivered as an Education Abroad course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5364. Explorations in Physiology.**

This course will cover the basic principles of physiological systems and the function of organ systems with an emphasis on humans and other mammals. The focus will be on the interplay between and among multiple organ systems and holistic systems integration. Other topics include the pathophysiology underlying common diseases, drug therapies and treatments, and emerging physiological research. This course will also provide the opportunity for experiential learning gained in diverse cultural settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5366. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their relationship to disease, emphasizing critical evaluation of research literature, disease transmission and the biological basis for virulence.

Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5374. Principles of Zoo Management.**

This course is designed to introduce the principles of captive animal management within conservation and education-based zoos. Zoo management requires a broad understanding of the life history and biological needs of many different species; we will explore the ways modern zoos address these needs and the ways in which future zoos could address them more effectively. Specific topics will include animal husbandry, welfare, nutrition, and behavior as well as environmental enrichment, captive breeding, conservation, zoo regulatory frameworks, ethical concerns, and zoo careers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5376. Microbial Biotechnology.**

This course provides an overview of how microbes (e.g., bacteria, viruses and yeast) are manipulated to solve practical problems through biotechnology. This course design is based on topics of applied microbiology as recommended by American society of Microbiology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5377. Genome Informatics.**

The course will cover basic knowledge on genomics and its bioinformatics tools. Students will learn current topics on genomics and bioinformatics, and will analyze genomic data using statistical software. All the analyses will be performed using a personal and a cluster computer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5388. Habitat Ecology.**

The course will emphasize and reinforce in students an appreciation for the importance of habitat in understanding a wide range of processes and patterns in Ecology. Course will explore the process of habitat selection, in the context of animal behavior, population dynamics, and modeling. Students will learn and apply methods and techniques of statistically analyzing the habitat associations of species. The central role of habitat in species conservation will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5390. Problems in the Biological Sciences.**

Open to graduate students on an individual basis by arrangement with the faculty member concerned.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in BIO 5399B. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5400. Plants Important for Wildlife.**

This course explores plant and plant part (specifically gall, fruit, seed, and twig) identification, phylogenetics, co-evolution of plant defenses, economic and ecological impacts of plant uses by wildlife.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5402. Earth Science I.**

A study of astronomy and meteorology through observation, description, and interpretation of earth phenomena. Includes field observations, methods of measurement and interpretation of data related to the physical environment and space technology. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5403. Earth Science II.**

The description and interpretation of earth phenomena considered from the standpoint of geology and oceanography. Includes field observations, methods of sampling and interpretation of data related to the physical environment. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5408. Science Processes and Research.**

Students will analyze scientific research design, design research, interpret data, and communicate results. Stress will be placed on broad-field structure and integration of major science concepts and research-based science pedagogy. This course must be taken the semester prior to student teaching and is required for those seeking 7-12 Life Science or Science teacher certification. This course may not count as one of the four upper-level Biology courses required of general Biology majors, or one of the three upper-level Biology courses required of Biology minors.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5410. Field Biology of Plants.**

Ecological relationships and natural history of plants, including historical geology, geography, soils, and vegetational regions of Central Texas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5411. Morphology of the Vascular Plants.**

A phylogenetic survey of living and fossil vascular plants that focuses on external morphology and reproductive biology. Topics include phylogenetic reconstruction, the origin of vascular plants, seed reproduction, and the origin of angiosperms. Emphasis is on broad-scale evolutionary patterns and origin of major taxonomic groups.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5412. Plant Anatomy.**

A descriptive and functional analysis of seed plants that focuses on internal structure. Topics include recognition and characterization of plant tissues, the structure of plant organs, and organ development. Emphasis is on pattern of tissue organization common to all seed plants and the functional basis for anatomical structure.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5413. Parasitology.**

The biology and biological significance of the common parasites of man and animals.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter



**BIO 5415. Ichthyology.**

An introduction to the morphology, taxonomy, natural history, and evolution of fishes. Field trips will be made to collect specimens, and laboratory periods will be devoted to morphological and systematic analyses.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5418. Field Ornithology.**

This course is designed to introduce and provide an advanced knowledge of the application of various field, laboratory, and statistical methods and techniques in the study of avian species. The course will include topics related to survey methodology, sampling design, marking/banding, measurement/sample extraction, and aging/sexing of avian species.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5420. Natural History of the Vertebrates.**

Environmental relationships and natural history of vertebrates. Emphasis is on evolution taxonomy, speciation, behavior, and morphology. Laboratory will include field trips for the study and collection of vertebrates in their natural habitats. Students will assemble a representative collection of vertebrates.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5421. Ornithology.**

Introduction to anatomy, behavior, ecology, and identification of the birds of Texas. Laboratory will emphasize field studies of birds and their habitat requirements.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5422. Mammalogy.**

The taxonomy, distribution, ecology, behavior, and evolution of mammals with particular emphasis on wild mammals of the Southwest. Laboratory will emphasize anatomy, identification, preparation of specimens, and field exercises in methods of population analysis. Students may assemble representative mammal collection.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5423. Wildlife Management.**

Application of ecological principles and natural history concepts to the management of wildlife habitats and populations. Laboratory will involve demonstrations and practice exercises with wildlife management techniques and instrumentation, and field trips to observe wildlife management projects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5424D. Vertebrate Endocrinology.**

This course teaches function and organization of the endocrine system. It describes the major endocrine glands, the synthesis and release of their hormone products, and the interaction with target tissues. Endocrine control of digestion, growth, reproduction, and homeostasis will be compared between mammals and other vertebrate groups.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5432. Bacterial Genomics.**

The course will offer hands-on training on contemporary approaches, techniques, and bioinformatic tools used to study bacterial genomes. Topics covered include DNA sequencing, assembling and annotating genomes, all with a strong emphasis on computational biology. At the end of this course, students will be familiar with bioinformatics tools used to analyze genes and genomes.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5435. Techniques in Wildlife Management.**

The basic methodology of practical wildlife management. This involves techniques in monitoring and data collection related to population dynamics and habitat parameters of wildlife species as well as field research.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5436. Tropical Biology.**

This course entails an analysis and evaluation of the governing principles of tropical ecosystems, including wildlife ecologies, geological processes, and environmental-cultural interactions. In the laboratories, students will compare ecological relationships that influence tropical biology, discuss peer-reviewed literature and examine tropical flora and fauna during field trips to regional sub-tropical areas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5441. Cellular Physiology.**

Advanced cellular biology, including membrane physiology, thermodynamics, energy transduction and distribution, and cellular movement in non-muscle and muscle cells. Laboratory includes discussion of current research and exercises in cellular physiology.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5443. Fish Physiology.**

This course examines the primary physiological functions in fish including how fish sense and interact with the environment, maintain their energetic metabolism (respiration, digestion and excretion), reproduce and maintain water balance. Students will learn about the diverse adaptations fish use to cope with environmental and physiological challenges.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5448. Bacterial Genetics.**

This course will cover concepts and mechanisms involved in the genetics of Archaea and Bacteria. Graduate students will learn current strategies dealing with traditional molecular genetics including post-transcriptional regulation involving small non-coding RNA. In addition graduate students will also write a critical review on a research article from relevant topic.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5454. Plant Ecology.**

Functional ecology of terrestrial plants, plant populations, and communities. Laboratory emphasizes quantitative and experimental approaches to plant ecology and the use of field and laboratory physiology equipment.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5465. General Entomology.**

Principles of morphology, physiology, and taxonomy of insects. Laboratory time will be devoted to a taxonomic study of the common orders and families of insects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5466. Phylogenetic Methods.**

Reconstructing phylogenies is important in most fields of biology. Course emphasis is on practical data collection, management, and analysis. Laboratory exercises will introduce phylogenetic and DNA analysis software, and WWW resources. Students will learn how to address questions in their own research using phylogenetic methodologies.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5470. Limnology.**

Physical, chemical, and biological factors affecting productivity in lakes, ponds, and streams. Limnology sampling methods, chemical and biological analysis of samples, and hydrographic surveying are included in the laboratory.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5472. Animal Behavior.**

This course presents all the major facets of the study of animal behavior, giving special attention to its evolution and ecological significance. We will discuss major conceptual models guiding past and present research in the field. Laboratories will emphasize experimental techniques and statistical analysis.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5480. Cytology and Micro-technique.**

Study of cellular ultra-structure and electron micro technique. Lecture portion of course will cover cytology of all cell types and theoretical aspects of light microscopy and electron microscopy. Laboratory portion will train students to proficiency in microscopy.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5481. Internship in Biological Laboratory Technologies.**

The student will participate in the work of a selected biology unit (private, commercial, or governmental). A research paper reporting the internship experience conducted at the biological unit under the supervision of a faculty member will be required. This course may be credited toward a biology major with prior approval of the graduate advisor and department chair.

**4 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5490. Principles of Developmental Biology.**

This course will cover basic principles of developmental biology in both plant and animal systems. The course will mainly address cell, molecular and genetic mechanisms underlying the development of model organisms, mainly focusing on *Drosophila* (animal) and *Arabidopsis* (plant).

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

Graduate study in biology integrates classroom and field or laboratory experience to help meet the current and future scientific needs of society.

The Biology department offers students opportunities to study in the field or in modern facilities with up-to-date instrumentation and resources, including a DNA-sequencing unit, an integrated microscopy facility, high-speed digital networks and computing centers, a GIS lab, greenhouses, wet labs and extensive plant, animal and paleobotanical collections.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in biology or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)

- GRE not required
- resume/CV
- statement of purpose describing professional aspirations and rationale for pursuing graduate study in biology
- three letters of recommendation addressing the substance and quality of the student's preparation for graduate study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Science (M.S.) degree with a major in Biology requires 36 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
BIO 5390	Problems in the Biological Sciences (at least one term of an independent study project)	3
Select one of the following seminar options:		3-4
Option A - Take 3 hours from the following:		
BIO 5110	Seminar in Biology	
BIO 7102	Seminar in Aquatic Resources	
BIO 7120	Population Biology Seminar	
Option B - Take two seminars from Option A and:		
BIO 5295	Fundamentals of Research	
<b>Electives</b>		
Choose 30 hours of advisor-approved electives		30
May choose 2 advisor-approved courses outside the department		
<b>Total Hours</b>		<b>36-37</b>

### Non-thesis Students

Students pursuing a non-thesis degree are required to have a major professor by the end of their first long term of enrollment in the graduate program. The major professor will normally be a faculty member specializing in an area of particular interest to the student and is often the individual who supervises the required independent study project. Prior to the final term of enrollment the non-thesis student must, in consultation with the major professor, select a committee that will administer the final comprehensive examination.

## Comprehensive Examination Requirement

All master's students are required to take a final, comprehensive examination. In the Biology Department this exam is administered by

the student's committee. Students on academic probation or conditional status are not permitted to take the final examination.

Grading of the final exam is "pass" or "fail." In order to pass, a student must receive votes of confidence from the major professor and a majority of the committee members (including the major professor). A student can be failed over the advisor's positive vote if the majority of the committee votes not to pass. Such outcomes may be appealed to the Graduate Committee, whose decision is final.

Non-thesis students may choose to take an oral or written comprehensive exam; this option should be discussed by the student and the supervising professor and a decision made at least two weeks prior to the examination date. This exam should be administered in the final semester after most course work has been completed. The exam performance is graded by the committee as "pass" or "fail." In the event a student fails this exam, the committee may allow a re-examination if time permits before the end of the semester; may recommend additional course work and re-examination after the course work is successfully completed; or may recommend the student be removed from the Biology graduate program. Only one re-examination is permitted.

Master's level courses in Biology: BIO

## Courses Offered

### Biology (BIO)

#### BIO 5100. Professional Development.

This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis. Graded on a credit (CR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### BIO 5110. Seminar in Biology.

Interactive discussion of timely issues and problems, designed to expose students to the current literature in their fields of interest and its critical analysis. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Header

**Grade Mode:** Standard Letter

#### BIO 5114. Collaborative Research.

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5214 and BIO 5314.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### BIO 5166. Medical Microbiology Laboratory.

This graduate laboratory-based course will cover pathogenic bacteria emphasizing identification of selected groups of pathogens and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### BIO 5176. Microbial Biotechnology Laboratory.

This laboratory-based course will cover use of microbes for biotechnological applications and is designed to provide practical explorations into fields of biotechnology. Topics include laboratory techniques for recombinant protein purification, fermentation, identification of markers in genetically modified food and bio-remediation of pollutants. Corequisite: BIO 5376.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### BIO 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### BIO 5214. Collaborative Research.

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5314.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### BIO 5295. Fundamentals of Research.

Designed to acquaint the beginning graduate student with materials and methods of research in the biological sciences. It is recommended that a graduate student take this course the first semester in residence.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### BIO 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5300. Neurobiology.**

This course presents the biology of the nervous system with emphasis on the human nervous system. Topics presented in lecture include neuroanatomy, cellular neurobiology, neurophysiology, developmental neurobiology, and neuronal plasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5301. Evolution.**

Basic genetic principles applied to natural selection, adaptation, populations, and speciation. Consideration is given to the origin of life, nature of chromosomal variation, evolution of genetic systems, and certain other selected topics.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5304. Wildlife and Recreation: Impact and Management.**

Students will be introduced to the impact human recreational activities have on wildlife habitats and populations. Management practices to enhance human-wildlife encounters or to minimize detrimental effects on wildlife populations will be presented.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5305. Methods of Nature Study for Teachers.**

This course provides a comprehensive survey of natural events. It includes laboratory and field work emphasizing observation, collection and discovery of relationships. It is creditable only for those seeking elementary or middle school certification and is required for those seeking grade 4-8 Science or Science/Mathematics teaching certification. This course must be taken the semester immediately prior to student teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5307. Ecology of Rarity.**

This course will examine the ecology of rarity and its ability to inform public awareness and environmental policy. This course will explore how we define rarity, persistence and viability. Is rarity more or less common than might be expected, and is there anything we can or should do about it?

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 5311. Cancer Biology.**

Cancer Biology provides a foundation for understanding the complex molecular, biochemical, and cellular processes associated with cancer development. Topics include the role of tumor suppressor genes, oncogenes, DNA repair, apoptosis, ECM, cell-cycle control, cell signaling pathways, immune function and cancer-causing viruses. Emerging diagnostics and/or therapeutics will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5314. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5317. Interpretive Biology Programming and Design.**

In this course, students will explore the methods and principles used by the National Park Service, museums, environmental centers, and state park systems to interest a variety of audiences as well as interpret biology and natural environments effectively. Students will practice skills in both personal and non-personal interpretation by creating science outreach programs, interpretive literature, brochures, path waysides, and other interpretive media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5319C. Ecotoxicology.**

Topics to be covered include sources, types, and fates of toxicants, organism response to toxicants, toxicant effects at the population, community, and ecosystem levels, and monitoring and risk assessment. Examination of current literature will form the core of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5319F. Watershed Management Frameworks and Applications.**

Introduction to integrated watershed assessment and management tools for identifying programmatic water quality and quantity issues and their root causes and solutions, and their practical application. The scientific and socio-economic elements are considered within the context of planning and developing watershed protection plans and programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**BIO 5324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5327. Issues in Irish Biodiversity and Conservation.**

In this course, students will learn about Irish flora and fauna, ecosystems, conservation strategies in areas of high ecological concern, and public involvement. Emphasis will be placed on case studies and service-learning opportunities. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5328. Field Biology of Ireland.**

In this course, students will use multiple techniques to explore biodiversity across multiple ecosystems in Ireland. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5329. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5331. Human Dimensions of Wildlife and Fisheries Conservation.**

Humans play a role in nearly every aspect of wildlife and fisheries conservation. This course will provide students with principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will also have an opportunity to integrate human dimensions into local decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5332. Biology in Film and Television: An Analysis of the Biology in Fiction and Non-Fiction Film and TV.**

This course explores how biology is portrayed in popular motion pictures with an emphasis on analyzing biological accuracy, misconceptions perpetuated or portrayed, and investigating the rationale behind motion picture directors' and writers' decisions about how they portray biological content in the final product. As part of this course students will watch and discuss a curated list of films and television shows and write an analysis of each film or TV episode.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5350G. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their ability to cause disease, emphasizing the biological basis for virulence, and research strategies for investigating infectious diseases. Students may take only one of BIO 5350G or BIO 5445 for credit. Prerequisite: BIO 2400 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350I. Emerging Infectious Diseases.**

Current topics in the emergence of viral and bacterial diseases in humans. This course will include new diseases, diseases previously seen and increasing in incidence, and diseases not previously seen in this country. This course will be of interest to students who are pursuing advanced degrees and courses in microbiology, biochemistry, and cell and molecular biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5350J. Environmental Physiology of Animals.**

This course is a study of how animals respond physiologically to changes in environmental temperature, moisture, salinity, partial pressure of gases, and toxins. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350K. Genomics.**

The course is a lecture course in modern genomics, including principles of genome function, the human genome, comparative genomics, genome sequencing, evolution and genomic change, databases and medicine, ethical, legal and social issues. The course also includes discussion of transcriptomics, proteomics, metabolomics, directed evolution, protein design, and systems biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350M. Wildlife Policy and Law in North America.**

This course provides the student with a historical and cultural context within which wildlife policy and law (federal treaties, statutes, case law, and regulations) have developed in North America, particularly in the United States. Graduate students will research the development of Wildlife law in representative states as well.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 53500. Tropical Ecology and Conservation.**

Students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems.

**3 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350P. Tropical Ecology and Conservation Lab.**

This laboratory course complements the lecture course BIO 53500, in which students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems.

Corequisite: BIO 53500.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Co-requisite(s):** BIO 53500

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350Z. Diversity and Cultural Impact of Geoparks.**

Students will explore biological differences in diversity across Geoparks in the United States and Ireland. Additionally, students will study the cultural impact that Geoparks have on the local community and national policy by focusing on differences between science communication strategies and community engagement practices conducted at the parks. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351G. Omics Approach to Microbiology.**

This course covers contemporary approaches, techniques and bioinformatic tools used to study function and ecology in microbial communities. Topics covered will include microbiome, next-generation sequencing, metaproteomics, and their applications to clinical, agricultural, environmental and industrial needs.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351I. Global Change Biology.**

This course will give an in-depth analysis of the major global changes occurring in present day biological systems. The focus of the course will be on climate change, invasive species, eutrophication, land use change and biodiversity loss. Emphasis will be placed on peer-reviewed literature to better understand how biologists study processes at the global scale. Potential solutions to these global challenges will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351J. Comparative Immunology.**

While most textbooks would present the immune system of animals as a monolith with little variation between species, we are quickly learning that this is not the case. Indeed animal immune systems are immensely diverse. This class will consist of a taxonomic survey of metazoan immune systems, focusing on the evolutionary causes and ecological consequences of this diversity in immune systems across animals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351P. Ecology and Conservation Abroad.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351Q with a grade of "C" or better.

**3 Credit Hours. 20 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351Q. Ecology and Conservation Abroad Lab.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351P with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5356. Plant Physiology.**

Basic principles of plant physiology are studied in lecture and laboratory. Previous courses in biochemistry and genetics are strongly recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5363. History of Medicine.**

This course covers significant concepts, developments, individuals, and events in the history of medicine from antiquity to modern day. Topics include the impact of disease on medical practice, the development of hospitals as sites for care, teaching, and research, how medical science and technology are continuously defined by social, cultural, and political ideas, and the historical roots of several themes in medical ethics. This course will be delivered as an Education Abroad course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5364. Explorations in Physiology.**

This course will cover the basic principles of physiological systems and the function of organ systems with an emphasis on humans and other mammals. The focus will be on the interplay between and among multiple organ systems and holistic systems integration. Other topics include the pathophysiology underlying common diseases, drug therapies and treatments, and emerging physiological research. This course will also provide the opportunity for experiential learning gained in diverse cultural settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5366. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their relationship to disease, emphasizing critical evaluation of research literature, disease transmission and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5374. Principles of Zoo Management.**

This course is designed to introduce the principles of captive animal management within conservation and education-based zoos. Zoo management requires a broad understanding of the life history and biological needs of many different species; we will explore the ways modern zoos address these needs and the ways in which future zoos could address them more effectively. Specific topics will include animal husbandry, welfare, nutrition, and behavior as well as environmental enrichment, captive breeding, conservation, zoo regulatory frameworks, ethical concerns, and zoo careers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5376. Microbial Biotechnology.**

This course provides an overview of how microbes (e.g., bacteria, viruses and yeast) are manipulated to solve practical problems through biotechnology. This course design is based on topics of applied microbiology as recommended by American society of Microbiology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5377. Genome Informatics.**

The course will cover basic knowledge on genomics and its bioinformatics tools. Students will learn current topics on genomics and bioinformatics, and will analyze genomic data using statistical software. All the analyses will be performed using a personal and a cluster computer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5388. Habitat Ecology.**

The course will emphasize and reinforce in students an appreciation for the importance of habitat in understanding a wide range of processes and patterns in Ecology. Course will explore the process of habitat selection, in the context of animal behavior, population dynamics, and modeling. Students will learn and apply methods and techniques of statistically analyzing the habitat associations of species. The central role of habitat in species conservation will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5390. Problems in the Biological Sciences.**

Open to graduate students on an individual basis by arrangement with the faculty member concerned.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in BIO 5399B. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5400. Plants Important for Wildlife.**

This course explores plant and plant part (specifically gall, fruit, seed, and twig) identification, phylogenetics, co-evolution of plant defenses, economic and ecological impacts of plant uses by wildlife.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5402. Earth Science I.**

A study of astronomy and meteorology through observation, description, and interpretation of earth phenomena. Includes field observations, methods of measurement and interpretation of data related to the physical environment and space technology. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5403. Earth Science II.**

The description and interpretation of earth phenomena considered from the standpoint of geology and oceanography. Includes field observations, methods of sampling and interpretation of data related to the physical environment. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5408. Science Processes and Research.**

Students will analyze scientific research design, design research, interpret data, and communicate results. Stress will be placed on broad-field structure and integration of major science concepts and research-based science pedagogy. This course must be taken the semester prior to student teaching and is required for those seeking 7-12 Life Science or Science teacher certification. This course may not count as one of the four upper-level Biology courses required of general Biology majors, or one of the three upper-level Biology courses required of Biology minors.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5410. Field Biology of Plants.**

Ecological relationships and natural history of plants, including historical geology, geography, soils, and vegetational regions of Central Texas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5411. Morphology of the Vascular Plants.**

A phylogenetic survey of living and fossil vascular plants that focuses on external morphology and reproductive biology. Topics include phylogenetic reconstruction, the origin of vascular plants, seed reproduction, and the origin of angiosperms. Emphasis is on broad-scale evolutionary patterns and origin of major taxonomic groups.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5412. Plant Anatomy.**

A descriptive and functional analysis of seed plants that focuses on internal structure. Topics include recognition and characterization of plant tissues, the structure of plant organs, and organ development. Emphasis is on pattern of tissue organization common to all seed plants and the functional basis for anatomical structure.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5413. Parasitology.**

The biology and biological significance of the common parasites of man and animals.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5415. Ichthyology.**

An introduction to the morphology, taxonomy, natural history, and evolution of fishes. Field trips will be made to collect specimens, and laboratory periods will be devoted to morphological and systematic analyses.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5418. Field Ornithology.**

This course is designed to introduce and provide an advanced knowledge of the application of various field, laboratory, and statistical methods and techniques in the study of avian species. The course will include topics related to survey methodology, sampling design, marking/banding, measurement/sample extraction, and aging/sexing of avian species.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5420. Natural History of the Vertebrates.**

Environmental relationships and natural history of vertebrates. Emphasis is on evolution taxonomy, speciation, behavior, and morphology. Laboratory will include field trips for the study and collection of vertebrates in their natural habitats. Students will assemble a representative collection of vertebrates.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5421. Ornithology.**

Introduction to anatomy, behavior, ecology, and identification of the birds of Texas. Laboratory will emphasize field studies of birds and their habitat requirements.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5422. Mammalogy.**

The taxonomy, distribution, ecology, behavior, and evolution of mammals with particular emphasis on wild mammals of the Southwest. Laboratory will emphasize anatomy, identification, preparation of specimens, and field exercises in methods of population analysis. Students may assemble representative mammal collection.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5423. Wildlife Management.**

Application of ecological principles and natural history concepts to the management of wildlife habitats and populations. Laboratory will involve demonstrations and practice exercises with wildlife management techniques and instrumentation, and field trips to observe wildlife management projects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5424D. Vertebrate Endocrinology.**

This course teaches function and organization of the endocrine system. It describes the major endocrine glands, the synthesis and release of their hormone products, and the interaction with target tissues. Endocrine control of digestion, growth, reproduction, and homeostasis will be compared between mammals and other vertebrate groups.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5432. Bacterial Genomics.**

The course will offer hands-on training on contemporary approaches, techniques, and bioinformatic tools used to study bacterial genomes. Topics covered include DNA sequencing, assembling and annotating genomes, all with a strong emphasis on computational biology. At the end of this course, students will be familiar with bioinformatics tools used to analyze genes and genomes.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5435. Techniques in Wildlife Management.**

The basic methodology of practical wildlife management. This involves techniques in monitoring and data collection related to population dynamics and habitat parameters of wildlife species as well as field research.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5436. Tropical Biology.**

This course entails an analysis and evaluation of the governing principles of tropical ecosystems, including wildlife ecologies, geological processes, and environmental-cultural interactions. In the laboratories, students will compare ecological relationships that influence tropical biology, discuss peer-reviewed literature and examine tropical flora and fauna during field trips to regional sub-tropical areas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5441. Cellular Physiology.**

Advanced cellular biology, including membrane physiology, thermodynamics, energy transduction and distribution, and cellular movement in non-muscle and muscle cells. Laboratory includes discussion of current research and exercises in cellular physiology.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5443. Fish Physiology.**

This course examines the primary physiological functions in fish including how fish sense and interact with the environment, maintain their energetic metabolism (respiration, digestion and excretion), reproduce and maintain water balance. Students will learn about the diverse adaptations fish use to cope with environmental and physiological challenges.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5448. Bacterial Genetics.**

This course will cover concepts and mechanisms involved in the genetics of Archaea and Bacteria. Graduate students will learn current strategies dealing with traditional molecular genetics including post-transcriptional regulation involving small non-coding RNA. In addition graduate students will also write a critical review on a research article from relevant topic.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5454. Plant Ecology.**

Functional ecology of terrestrial plants, plant populations, and communities. Laboratory emphasizes quantitative and experimental approaches to plant ecology and the use of field and laboratory physiology equipment.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5465. General Entomology.**

Principles of morphology, physiology, and taxonomy of insects. Laboratory time will be devoted to a taxonomic study of the common orders and families of insects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5466. Phylogenetic Methods.**

Reconstructing phylogenies is important in most fields of biology. Course emphasis is on practical data collection, management, and analysis. Laboratory exercises will introduce phylogenetic and DNA analysis software, and WWW resources. Students will learn how to address questions in their own research using phylogenetic methodologies.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter



**BIO 5470. Limnology.**

Physical, chemical, and biological factors affecting productivity in lakes, ponds, and streams. Limnology sampling methods, chemical and biological analysis of samples, and hydrographic surveying are included in the laboratory.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5472. Animal Behavior.**

This course presents all the major facets of the study of animal behavior, giving special attention to its evolution and ecological significance. We will discuss major conceptual models guiding past and present research in the field. Laboratories will emphasize experimental techniques and statistical analysis.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5480. Cytology and Micro-technique.**

Study of cellular ultra-structure and electron micro technique. Lecture portion of course will cover cytology of all cell types and theoretical aspects of light microscopy and electron microscopy. Laboratory portion will train students to proficiency in microscopy.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5481. Internship in Biological Laboratory Technologies.**

The student will participate in the work of a selected biology unit (private, commercial, or governmental). A research paper reporting the internship experience conducted at the biological unit under the supervision of a faculty member will be required. This course may be credited toward a biology major with prior approval of the graduate advisor and department chair.

**4 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5490. Principles of Developmental Biology.**

This course will cover basic principles of developmental biology in both plant and animal systems. The course will mainly address cell, molecular and genetic mechanisms underlying the development of model organisms, mainly focusing on *Drosophila* (animal) and *Arabidopsis* (plant).

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

Graduate study in biology integrates classroom and field or laboratory experience to help meet the current and future scientific needs of society.

The Biology department offers students opportunities to study in the field or in modern facilities with up-to-date instrumentation and resources, including a DNA-sequencing unit, an integrated microscopy facility, high-speed digital networks and computing centers, a GIS lab, greenhouses, wet labs and extensive plant, animal and paleobotanical collections.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in biology or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)

- GRE not required
- resume/CV
- statement of purpose describing professional aspirations and rationale for pursuing graduate study in biology
- three letters of recommendation addressing the substance and quality of the student’s preparation for graduate study

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

Degree Requirements

The Master of Science (M.S.) degree with a major in Biology requires 36 semester credit hours.

Course Requirements

Code	Title	Hours
Required Courses		
BIO 5390	Problems in the Biological Sciences (at least one term of an independent study project)	3
Select one of the following seminar options:		3-4
Option A - Take 3 hours from the following:		
BIO 5110	Seminar in Biology	
BIO 7102	Seminar in Aquatic Resources	
BIO 7120	Population Biology Seminar	
Option B - Take two seminars from Option A and:		
BIO 5295	Fundamentals of Research	
Electives		
Choose 18 advisor-approved electives		18
May choose 2 advisor-approved electives outside the department		
Minor		
Choose a 12-hour advisor-approved minor		12
Total Hours		36-37

Non-thesis Students

Students pursuing a non-thesis degree are required to have a major professor by the end of their first long term of enrollment in the graduate program. The major professor will normally be a faculty member specializing in an area of particular interest to the student and is often the individual who supervises the required independent study project. Prior to the final term of enrollment the non-thesis student must, in consultation with the major professor, select a committee that will administer the final comprehensive examination.

Comprehensive Examination Requirement

All master’s students are required to take a final, comprehensive examination. In the Biology Department this exam is administered by the student’s committee. Students on academic probation or conditional status are not permitted to take the final, comprehensive examination.

Grading of the final exam is “pass” or “fail.” In order to pass, a student must receive votes of confidence from the major professor and a majority of the committee members (including the major professor). A student can be failed over the advisor’s positive vote if the majority of the committee votes not to pass. Such outcomes may be appealed to the Graduate Committee, whose decision is final.

Non-thesis students may choose to take an oral or written comprehensive exam; this option should be discussed by the student and the supervising professor and a decision made at least two weeks prior to the examination date. This exam should be administered in the final semester after most course work has been completed. The exam performance is graded by the committee as “pass” or “fail.” In the event a student fails this exam, the committee may allow a re-examination if time permits before the end of the semester; may recommend additional course work and re-examination after the course work is successfully completed; or may recommend the student be removed from the Biology graduate program. Only one re-examination is permitted.

Master’s level courses in Biology: BIO

Courses Offered

Biology (BIO)

BIO 5100. Professional Development.

This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis. Graded on a credit (CR), no-credit (F) basis.

1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.

Course Attribute(s): Graduate Assistantship|Exclude from Graduate GPA  
Grade Mode: Leveling/Assistantships

BIO 5110. Seminar in Biology.

Interactive discussion of timely issues and problems, designed to expose students to the current literature in their fields of interest and its critical analysis. This course is repeatable for credit.

1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Header

Grade Mode: Standard Letter

BIO 5114. Collaborative Research.

This course allows master’s level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5214 and BIO 5314.

1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.

Grade Mode: Standard Letter

**BIO 5166. Medical Microbiology Laboratory.**

This graduate laboratory-based course will cover pathogenic bacteria emphasizing identification of selected groups of pathogens and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5176. Microbial Biotechnology Laboratory.**

This laboratory-based course will cover use of microbes for biotechnological applications and is designed to provide practical explorations into fields of biotechnology. Topics include laboratory techniques for recombinant protein purification, fermentation, identification of markers in genetically modified food and bio-remediation of pollutants. Corequisite: BIO 5376.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5214. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5314.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5295. Fundamentals of Research.**

Designed to acquaint the beginning graduate student with materials and methods of research in the biological sciences. It is recommended that a graduate student take this course the first semester in residence.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5300. Neurobiology.**

This course presents the biology of the nervous system with emphasis on the human nervous system. Topics presented in lecture include neuroanatomy, cellular neurobiology, neurophysiology, developmental neurobiology, and neuronal plasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5301. Evolution.**

Basic genetic principles applied to natural selection, adaptation, populations, and speciation. Consideration is given to the origin of life, nature of chromosomal variation, evolution of genetic systems, and certain other selected topics.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5304. Wildlife and Recreation: Impact and Management.**

Students will be introduced to the impact human recreational activities have on wildlife habitats and populations. Management practices to enhance human-wildlife encounters or to minimize detrimental effects on wildlife populations will be presented.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5305. Methods of Nature Study for Teachers.**

This course provides a comprehensive survey of natural events. It includes laboratory and field work emphasizing observation, collection and discovery of relationships. It is creditable only for those seeking elementary or middle school certification and is required for those seeking grade 4-8 Science or Science/Mathematics teaching certification. This course must be taken the semester immediately prior to student teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5307. Ecology of Rarity.**

This course will examine the ecology of rarity and its ability to inform public awareness and environmental policy. This course will explore how we define rarity, persistence and viability. Is rarity more or less common than might be expected, and is there anything we can or should do about it?

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 5311. Cancer Biology.**

Cancer Biology provides a foundation for understanding the complex molecular, biochemical, and cellular processes associated with cancer development. Topics include the role of tumor suppressor genes, oncogenes, DNA repair, apoptosis, ECM, cell-cycle control, cell signaling pathways, immune function and cancer-causing viruses. Emerging diagnostics and/or therapeutics will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5314. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5317. Interpretive Biology Programming and Design.**

In this course, students will explore the methods and principles used by the National Park Service, museums, environmental centers, and state park systems to interest a variety of audiences as well as interpret biology and natural environments effectively. Students will practice skills in both personal and non-personal interpretation by creating science outreach programs, interpretive literature, brochures, path waysides, and other interpretive media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5319C. Ecotoxicology.**

Topics to be covered include sources, types, and fates of toxicants, organism response to toxicants, toxicant effects at the population, community, and ecosystem levels, and monitoring and risk assessment. Examination of current literature will form the core of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5319F. Watershed Management Frameworks and Applications.**

Introduction to integrated watershed assessment and management tools for identifying programmatic water quality and quantity issues and their root causes and solutions, and their practical application. The scientific and socio-economic elements are considered within the context of planning and developing watershed protection plans and programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5327. Issues in Irish Biodiversity and Conservation.**

In this course, students will learn about Irish flora and fauna, ecosystems, conservation strategies in areas of high ecological concern, and public involvement. Emphasis will be placed on case studies and service-learning opportunities. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5328. Field Biology of Ireland.**

In this course, students will use multiple techniques to explore biodiversity across multiple ecosystems in Ireland. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5329. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5331. Human Dimensions of Wildlife and Fisheries Conservation.**

Humans play a role in nearly every aspect of wildlife and fisheries conservation. This course will provide students with principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will also have an opportunity to integrate human dimensions into local decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5332. Biology in Film and Television: An Analysis of the Biology in Fiction and Non-Fiction Film and TV.**

This course explores how biology is portrayed in popular motion pictures with an emphasis on analyzing biological accuracy, misconceptions perpetuated or portrayed, and investigating the rationale behind motion picture directors' and writers' decisions about how they portray biological content in the final product. As part of this course students will watch and discuss a curated list of films and television shows and write an analysis of each film or TV episode.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5350G. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their ability to cause disease, emphasizing the biological basis for virulence, and research strategies for investigating infectious diseases. Students may take only one of BIO 5350G or BIO 5445 for credit. Prerequisite: BIO 2400 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350I. Emerging Infectious Diseases.**

Current topics in the emergence of viral and bacterial diseases in humans. This course will include new diseases, diseases previously seen and increasing in incidence, and diseases not previously seen in this country. This course will be of interest to students who are pursuing advanced degrees and courses in microbiology, biochemistry, and cell and molecular biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5350J. Environmental Physiology of Animals.**

This course is a study of how animals respond physiologically to changes in environmental temperature, moisture, salinity, partial pressure of gases, and toxins. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350K. Genomics.**

The course is a lecture course in modern genomics, including principles of genome function, the human genome, comparative genomics, genome sequencing, evolution and genomic change, databases and medicine, ethical, legal and social issues. The course also includes discussion of transcriptomics, proteomics, metabolomics, directed evolution, protein design, and systems biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350M. Wildlife Policy and Law in North America.**

This course provides the student with a historical and cultural context within which wildlife policy and law (federal treaties, statutes, case law, and regulations) have developed in North America, particularly in the United States. Graduate students will research the development of Wildlife law in representative states as well.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350O. Tropical Ecology and Conservation.**

Students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems.

**3 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350P. Tropical Ecology and Conservation Lab.**

This laboratory course complements the lecture course BIO 5350O, in which students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems.

Corequisite: BIO 5350O.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Co-requisite(s):** BIO 5350O

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350Z. Diversity and Cultural Impact of Geoparks.**

Students will explore biological differences in diversity across Geoparks in the United States and Ireland. Additionally, students will study the cultural impact that Geoparks have on the local community and national policy by focusing on differences between science communication strategies and community engagement practices conducted at the parks. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351G. Omics Approach to Microbiology.**

This course covers contemporary approaches, techniques and bioinformatic tools used to study function and ecology in microbial communities. Topics covered will include microbiome, next-generation sequencing, metaproteomics, and their applications to clinical, agricultural, environmental and industrial needs.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351I. Global Change Biology.**

This course will give an in-depth analysis of the major global changes occurring in present day biological systems. The focus of the course will be on climate change, invasive species, eutrophication, land use change and biodiversity loss. Emphasis will be placed on peer-reviewed literature to better understand how biologists study processes at the global scale. Potential solutions to these global challenges will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**BIO 5351J. Comparative Immunology.**

While most textbooks would present the immune system of animals as a monolith with little variation between species, we are quickly learning that this is not the case. Indeed animal immune systems are immensely diverse. This class will consist of a taxonomic survey of metazoan immune systems, focusing on the evolutionary causes and ecological consequences of this diversity in immune systems across animals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351P. Ecology and Conservation Abroad.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351Q with a grade of "C" or better.

**3 Credit Hours. 20 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351Q. Ecology and Conservation Abroad Lab.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351P with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5356. Plant Physiology.**

Basic principles of plant physiology are studied in lecture and laboratory. Previous courses in biochemistry and genetics are strongly recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5363. History of Medicine.**

This course covers significant concepts, developments, individuals, and events in the history of medicine from antiquity to modern day. Topics include the impact of disease on medical practice, the development of hospitals as sites for care, teaching, and research, how medical science and technology are continuously defined by social, cultural, and political ideas, and the historical roots of several themes in medical ethics. This course will be delivered as an Education Abroad course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5364. Explorations in Physiology.**

This course will cover the basic principles of physiological systems and the function of organ systems with an emphasis on humans and other mammals. The focus will be on the interplay between and among multiple organ systems and holistic systems integration. Other topics include the pathophysiology underlying common diseases, drug therapies and treatments, and emerging physiological research. This course will also provide the opportunity for experiential learning gained in diverse cultural settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5366. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their relationship to disease, emphasizing critical evaluation of research literature, disease transmission and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5374. Principles of Zoo Management.**

This course is designed to introduce the principles of captive animal management within conservation and education-based zoos. Zoo management requires a broad understanding of the life history and biological needs of many different species; we will explore the ways modern zoos address these needs and the ways in which future zoos could address them more effectively. Specific topics will include animal husbandry, welfare, nutrition, and behavior as well as environmental enrichment, captive breeding, conservation, zoo regulatory frameworks, ethical concerns, and zoo careers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5376. Microbial Biotechnology.**

This course provides an overview of how microbes (e.g., bacteria, viruses and yeast) are manipulated to solve practical problems through biotechnology. This course design is based on topics of applied microbiology as recommended by American society of Microbiology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5377. Genome Informatics.**

The course will cover basic knowledge on genomics and its bioinformatics tools. Students will learn current topics on genomics and bioinformatics, and will analyze genomic data using statistical software. All the analyses will be performed using a personal and a cluster computer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5388. Habitat Ecology.**

The course will emphasize and reinforce in students an appreciation for the importance of habitat in understanding a wide range of processes and patterns in Ecology. Course will explore the process of habitat selection, in the context of animal behavior, population dynamics, and modeling. Students will learn and apply methods and techniques of statistically analyzing the habitat associations of species. The central role of habitat in species conservation will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5390. Problems in the Biological Sciences.**

Open to graduate students on an individual basis by arrangement with the faculty member concerned.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in BIO 5399B. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5400. Plants Important for Wildlife.**

This course explores plant and plant part (specifically gall, fruit, seed, and twig) identification, phylogenetics, co-evolution of plant defenses, economic and ecological impacts of plant uses by wildlife.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5402. Earth Science I.**

A study of astronomy and meteorology through observation, description, and interpretation of earth phenomena. Includes field observations, methods of measurement and interpretation of data related to the physical environment and space technology. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5403. Earth Science II.**

The description and interpretation of earth phenomena considered from the standpoint of geology and oceanography. Includes field observations, methods of sampling and interpretation of data related to the physical environment. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5408. Science Processes and Research.**

Students will analyze scientific research design, design research, interpret data, and communicate results. Stress will be placed on broad-field structure and integration of major science concepts and research-based science pedagogy. This course must be taken the semester prior to student teaching and is required for those seeking 7-12 Life Science or Science teacher certification. This course may not count as one of the four upper-level Biology courses required of general Biology majors, or one of the three upper-level Biology courses required of Biology minors.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5410. Field Biology of Plants.**

Ecological relationships and natural history of plants, including historical geology, geography, soils, and vegetational regions of Central Texas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5411. Morphology of the Vascular Plants.**

A phylogenetic survey of living and fossil vascular plants that focuses on external morphology and reproductive biology. Topics include phylogenetic reconstruction, the origin of vascular plants, seed reproduction, and the origin of angiosperms. Emphasis is on broad-scale evolutionary patterns and origin of major taxonomic groups.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5412. Plant Anatomy.**

A descriptive and functional analysis of seed plants that focuses on internal structure. Topics include recognition and characterization of plant tissues, the structure of plant organs, and organ development. Emphasis is on pattern of tissue organization common to all seed plants and the functional basis for anatomical structure.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5413. Parasitology.**

The biology and biological significance of the common parasites of man and animals.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5415. Ichthyology.**

An introduction to the morphology, taxonomy, natural history, and evolution of fishes. Field trips will be made to collect specimens, and laboratory periods will be devoted to morphological and systematic analyses.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5418. Field Ornithology.**

This course is designed to introduce and provide an advanced knowledge of the application of various field, laboratory, and statistical methods and techniques in the study of avian species. The course will include topics related to survey methodology, sampling design, marking/banding, measurement/sample extraction, and aging/sexing of avian species.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5420. Natural History of the Vertebrates.**

Environmental relationships and natural history of vertebrates. Emphasis is on evolution taxonomy, speciation, behavior, and morphology. Laboratory will include field trips for the study and collection of vertebrates in their natural habitats. Students will assemble a representative collection of vertebrates.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5421. Ornithology.**

Introduction to anatomy, behavior, ecology, and identification of the birds of Texas. Laboratory will emphasize field studies of birds and their habitat requirements.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5422. Mammalogy.**

The taxonomy, distribution, ecology, behavior, and evolution of mammals with particular emphasis on wild mammals of the Southwest. Laboratory will emphasize anatomy, identification, preparation of specimens, and field exercises in methods of population analysis. Students may assemble representative mammal collection.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5423. Wildlife Management.**

Application of ecological principles and natural history concepts to the management of wildlife habitats and populations. Laboratory will involve demonstrations and practice exercises with wildlife management techniques and instrumentation, and field trips to observe wildlife management projects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5424D. Vertebrate Endocrinology.**

This course teaches function and organization of the endocrine system. It describes the major endocrine glands, the synthesis and release of their hormone products, and the interaction with target tissues. Endocrine control of digestion, growth, reproduction, and homeostasis will be compared between mammals and other vertebrate groups.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5432. Bacterial Genomics.**

The course will offer hands-on training on contemporary approaches, techniques, and bioinformatic tools used to study bacterial genomes. Topics covered include DNA sequencing, assembling and annotating genomes, all with a strong emphasis on computational biology. At the end of this course, students will be familiar with bioinformatics tools used to analyze genes and genomes.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5435. Techniques in Wildlife Management.**

The basic methodology of practical wildlife management. This involves techniques in monitoring and data collection related to population dynamics and habitat parameters of wildlife species as well as field research.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5436. Tropical Biology.**

This course entails an analysis and evaluation of the governing principles of tropical ecosystems, including wildlife ecologies, geological processes, and environmental-cultural interactions. In the laboratories, students will compare ecological relationships that influence tropical biology, discuss peer-reviewed literature and examine tropical flora and fauna during field trips to regional sub-tropical areas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5441. Cellular Physiology.**

Advanced cellular biology, including membrane physiology, thermodynamics, energy transduction and distribution, and cellular movement in non-muscle and muscle cells. Laboratory includes discussion of current research and exercises in cellular physiology.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5443. Fish Physiology.**

This course examines the primary physiological functions in fish including how fish sense and interact with the environment, maintain their energetic metabolism (respiration, digestion and excretion), reproduce and maintain water balance. Students will learn about the diverse adaptations fish use to cope with environmental and physiological challenges.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5448. Bacterial Genetics.**

This course will cover concepts and mechanisms involved in the genetics of Archaea and Bacteria. Graduate students will learn current strategies dealing with traditional molecular genetics including post-transcriptional regulation involving small non-coding RNA. In addition graduate students will also write a critical review on a research article from relevant topic.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5454. Plant Ecology.**

Functional ecology of terrestrial plants, plant populations, and communities. Laboratory emphasizes quantitative and experimental approaches to plant ecology and the use of field and laboratory physiology equipment.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5465. General Entomology.**

Principles of morphology, physiology, and taxonomy of insects. Laboratory time will be devoted to a taxonomic study of the common orders and families of insects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5466. Phylogenetic Methods.**

Reconstructing phylogenies is important in most fields of biology. Course emphasis is on practical data collection, management, and analysis. Laboratory exercises will introduce phylogenetic and DNA analysis software, and WWW resources. Students will learn how to address questions in their own research using phylogenetic methodologies.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5470. Limnology.**

Physical, chemical, and biological factors affecting productivity in lakes, ponds, and streams. Limnology sampling methods, chemical and biological analysis of samples, and hydrographic surveying are included in the laboratory.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5472. Animal Behavior.**

This course presents all the major facets of the study of animal behavior, giving special attention to its evolution and ecological significance. We will discuss major conceptual models guiding past and present research in the field. Laboratories will emphasize experimental techniques and statistical analysis.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5480. Cytology and Micro-technique.**

Study of cellular ultra-structure and electron micro technique. Lecture portion of course will cover cytology of all cell types and theoretical aspects of light microscopy and electron microscopy. Laboratory portion will train students to proficiency in microscopy.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5481. Internship in Biological Laboratory Technologies.**

The student will participate in the work of a selected biology unit (private, commercial, or governmental). A research paper reporting the internship experience conducted at the biological unit under the supervision of a faculty member will be required. This course may be credited toward a biology major with prior approval of the graduate advisor and department chair.

**4 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5490. Principles of Developmental Biology.**

This course will cover basic principles of developmental biology in both plant and animal systems. The course will mainly address cell, molecular and genetic mechanisms underlying the development of model organisms, mainly focusing on *Drosophila* (animal) and *Arabidopsis* (plant).

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5599B. Thesis.**

This course represents a student’s continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**BIO 5999B. Thesis.**

This course represents a student’s continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**Program Overview**

Graduate study in biology integrates classroom and field or laboratory experience to help meet the current and future scientific needs of society. The Biology department offers students opportunities to study in the field or in modern facilities with up-to-date instrumentation and resources, including a DNA-sequencing unit, an integrated microscopy facility, high-speed digital networks and computing centers, a GIS lab, greenhouses, wet labs and extensive plant, animal and paleobotanical collections.

**Application Requirements**

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College’s website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in biology or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor’s degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a minimum 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)

- GRE not required
- resume/CV
- statement of purpose describing professional aspirations and rationale for pursuing graduate study in biology
- three letters of recommendation addressing the substance and quality of the student’s preparation for graduate study
- mentor communication (intent to mentor letter) from a Biology Department faculty member.

**Approved English Proficiency Exam Scores**

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

**Degree Requirements**

The Master of Science (M.S.) degree with a major in Biology requires 30 semester credit hours, including a thesis.

**Course Requirements**

Code	Title	Hours
<b>Required Courses</b>		
Select one of the following seminar options:		3-4
Option A - Take 3 hours from the following:		
BIO 5110	Seminar in Biology	
BIO 7102	Seminar in Aquatic Resources	
BIO 7120	Population Biology Seminar	
Option B - Take 2 seminar courses from Option A and:		
BIO 5295	Fundamentals of Research	
<b>Electives</b>		
Choose 21 hours of 5000- or 7000-level courses		21
May choose 2 advisor-approved courses outside the department		
<b>Thesis</b>		
BIO 5399A	Thesis	3
Choose a minimum of 3 hours from the following		3
BIO 5199B	Thesis	
BIO 5299B	Thesis	
BIO 5399B	Thesis	
BIO 5599B	Thesis	
BIO 5999B	Thesis	
<b>Total Hours</b>		<b>30-31</b>

**Comprehensive Examination Requirement**

All master’s students are required to take a final, comprehensive examination. In the Biology Department this exam is administered by



the student's committee. Students on academic probation or conditional status are not permitted to take the final, comprehensive examination.

Grading of the final exam is "pass" or "fail." In order to pass, a student must receive votes of confidence from the major professor and a majority of the committee members (including the major professor). A student can be failed over the advisor's positive vote if the majority of the committee votes not to pass. Such outcomes may be appealed to the Graduate Committee, whose decision is final.

For thesis students, the comprehensive examination is oral and is scheduled after the thesis is complete. This examination will normally take the form of a thesis defense and will be immediately preceded by a public presentation of the thesis work. Students should discuss the exam with their committee members beforehand to know their expectations and how best to prepare.

The time and place of the thesis presentation and defense must be announced to the Biology Department and the general public at least two weeks before the actual event. A link for electronic submission of this information is available on the Biology Department web site. It is the student's responsibility to schedule this exam after receiving permission to proceed from his or her major professor.

The thesis defense is in two stages, a public, 30 to 40-minute presentation of the thesis work followed by a closed examination by the thesis committee. After the presentation, questions from the audience will be entertained, but the actual examination phase will not begin until after the general audience has been excused. The exam performance is graded by the committee as "pass" or "fail." A grade of "pass" means that the thesis requires no or only minor revisions. Under such circumstances, the thesis committee signs the examination report and entrusts oversight of any needed revisions to the major professor. In the event a student fails the exam, the committee may recommend revisions to the thesis and upon the completion of these revisions, a new defense and oral examination; or the committee may require the student to undertake a new thesis under the supervision of the same, or a different, thesis committee; or the committee may recommend the student be dismissed from the Biology graduate program. Only one re-examination is permitted.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review

Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Biology: BIO

## Courses Offered

### Biology (BIO)

#### BIO 5100. Professional Development.

This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis. Graded on a credit (CR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

#### BIO 5110. Seminar in Biology.

Interactive discussion of timely issues and problems, designed to expose students to the current literature in their fields of interest and its critical analysis. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Header

**Grade Mode:** Standard Letter

#### BIO 5114. Collaborative Research.

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5214 and BIO 5314.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### BIO 5166. Medical Microbiology Laboratory.

This graduate laboratory-based course will cover pathogenic bacteria emphasizing identification of selected groups of pathogens and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### BIO 5176. Microbial Biotechnology Laboratory.

This laboratory-based course will cover use of microbes for biotechnological applications and is designed to provide practical explorations into fields of biotechnology. Topics include laboratory techniques for recombinant protein purification, fermentation, identification of markers in genetically modified food and bio-remediation of pollutants. Corequisite: BIO 5376.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### BIO 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### BIO 5214. Collaborative Research.

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5314.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### BIO 5295. Fundamentals of Research.

Designed to acquaint the beginning graduate student with materials and methods of research in the biological sciences. It is recommended that a graduate student take this course the first semester in residence.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5300. Neurobiology.**

This course presents the biology of the nervous system with emphasis on the human nervous system. Topics presented in lecture include neuroanatomy, cellular neurobiology, neurophysiology, developmental neurobiology, and neuronal plasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5301. Evolution.**

Basic genetic principles applied to natural selection, adaptation, populations, and speciation. Consideration is given to the origin of life, nature of chromosomal variation, evolution of genetic systems, and certain other selected topics.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5304. Wildlife and Recreation: Impact and Management.**

Students will be introduced to the impact human recreational activities have on wildlife habitats and populations. Management practices to enhance human-wildlife encounters or to minimize detrimental effects on wildlife populations will be presented.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5305. Methods of Nature Study for Teachers.**

This course provides a comprehensive survey of natural events. It includes laboratory and field work emphasizing observation, collection and discovery of relationships. It is creditable only for those seeking elementary or middle school certification and is required for those seeking grade 4-8 Science or Science/Mathematics teaching certification. This course must be taken the semester immediately prior to student teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5307. Ecology of Rarity.**

This course will examine the ecology of rarity and its ability to inform public awareness and environmental policy. This course will explore how we define rarity, persistence and viability. Is rarity more or less common than might be expected, and is there anything we can or should do about it?

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 5311. Cancer Biology.**

Cancer Biology provides a foundation for understanding the complex molecular, biochemical, and cellular processes associated with cancer development. Topics include the role of tumor suppressor genes, oncogenes, DNA repair, apoptosis, ECM, cell-cycle control, cell signaling pathways, immune function and cancer-causing viruses. Emerging diagnostics and/or therapeutics will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5314. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5317. Interpretive Biology Programming and Design.**

In this course, students will explore the methods and principles used by the National Park Service, museums, environmental centers, and state park systems to interest a variety of audiences as well as interpret biology and natural environments effectively. Students will practice skills in both personal and non-personal interpretation by creating science outreach programs, interpretive literature, brochures, path waysides, and other interpretive media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5319C. Ecotoxicology.**

Topics to be covered include sources, types, and fates of toxicants, organism response to toxicants, toxicant effects at the population, community, and ecosystem levels, and monitoring and risk assessment. Examination of current literature will form the core of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5319F. Watershed Management Frameworks and Applications.**

Introduction to integrated watershed assessment and management tools for identifying programmatic water quality and quantity issues and their root causes and solutions, and their practical application. The scientific and socio-economic elements are considered within the context of planning and developing watershed protection plans and programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5327. Issues in Irish Biodiversity and Conservation.**

In this course, students will learn about Irish flora and fauna, ecosystems, conservation strategies in areas of high ecological concern, and public involvement. Emphasis will be placed on case studies and service-learning opportunities. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5328. Field Biology of Ireland.**

In this course, students will use multiple techniques to explore biodiversity across multiple ecosystems in Ireland. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5329. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5331. Human Dimensions of Wildlife and Fisheries Conservation.**

Humans play a role in nearly every aspect of wildlife and fisheries conservation. This course will provide students with principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will also have an opportunity to integrate human dimensions into local decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5332. Biology in Film and Television: An Analysis of the Biology in Fiction and Non-Fiction Film and TV.**

This course explores how biology is portrayed in popular motion pictures with an emphasis on analyzing biological accuracy, misconceptions perpetuated or portrayed, and investigating the rationale behind motion picture directors' and writers' decisions about how they portray biological content in the final product. As part of this course students will watch and discuss a curated list of films and television shows and write an analysis of each film or TV episode.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5350G. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their ability to cause disease, emphasizing the biological basis for virulence, and research strategies for investigating infectious diseases. Students may take only one of BIO 5350G or BIO 5445 for credit. Prerequisite: BIO 2400 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350I. Emerging Infectious Diseases.**

Current topics in the emergence of viral and bacterial diseases in humans. This course will include new diseases, diseases previously seen and increasing in incidence, and diseases not previously seen in this country. This course will be of interest to students who are pursuing advanced degrees and courses in microbiology, biochemistry, and cell and molecular biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5350J. Environmental Physiology of Animals.**

This course is a study of how animals respond physiologically to changes in environmental temperature, moisture, salinity, partial pressure of gases, and toxins. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350K. Genomics.**

The course is a lecture course in modern genomics, including principles of genome function, the human genome, comparative genomics, genome sequencing, evolution and genomic change, databases and medicine, ethical, legal and social issues. The course also includes discussion of transcriptomics, proteomics, metabolomics, directed evolution, protein design, and systems biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350M. Wildlife Policy and Law in North America.**

This course provides the student with a historical and cultural context within which wildlife policy and law (federal treaties, statutes, case law, and regulations) have developed in North America, particularly in the United States. Graduate students will research the development of Wildlife law in representative states as well.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350O. Tropical Ecology and Conservation.**

Students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems.

**3 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350P. Tropical Ecology and Conservation Lab.**

This laboratory course complements the lecture course BIO 5350O, in which students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems. Corequisite: BIO 5350O.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Co-requisite(s):** BIO 5350O

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350Z. Diversity and Cultural Impact of Geoparks.**

Students will explore biological differences in diversity across Geoparks in the United States and Ireland. Additionally, students will study the cultural impact that Geoparks have on the local community and national policy by focusing on differences between science communication strategies and community engagement practices conducted at the parks. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351G. Omics Approach to Microbiology.**

This course covers contemporary approaches, techniques and bioinformatic tools used to study function and ecology in microbial communities. Topics covered will include microbiome, next-generation sequencing, metaproteomics, and their applications to clinical, agricultural, environmental and industrial needs.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351I. Global Change Biology.**

This course will give an in-depth analysis of the major global changes occurring in present day biological systems. The focus of the course will be on climate change, invasive species, eutrophication, land use change and biodiversity loss. Emphasis will be placed on peer-reviewed literature to better understand how biologists study processes at the global scale. Potential solutions to these global challenges will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351J. Comparative Immunology.**

While most textbooks would present the immune system of animals as a monolith with little variation between species, we are quickly learning that this is not the case. Indeed animal immune systems are immensely diverse. This class will consist of a taxonomic survey of metazoan immune systems, focusing on the evolutionary causes and ecological consequences of this diversity in immune systems across animals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351P. Ecology and Conservation Abroad.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351Q with a grade of "C" or better.

**3 Credit Hours. 20 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351Q. Ecology and Conservation Abroad Lab.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351P with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5356. Plant Physiology.**

Basic principles of plant physiology are studied in lecture and laboratory. Previous courses in biochemistry and genetics are strongly recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**BIO 5363. History of Medicine.**

This course covers significant concepts, developments, individuals, and events in the history of medicine from antiquity to modern day. Topics include the impact of disease on medical practice, the development of hospitals as sites for care, teaching, and research, how medical science and technology are continuously defined by social, cultural, and political ideas, and the historical roots of several themes in medical ethics. This course will be delivered as an Education Abroad course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5364. Explorations in Physiology.**

This course will cover the basic principles of physiological systems and the function of organ systems with an emphasis on humans and other mammals. The focus will be on the interplay between and among multiple organ systems and holistic systems integration. Other topics include the pathophysiology underlying common diseases, drug therapies and treatments, and emerging physiological research. This course will also provide the opportunity for experiential learning gained in diverse cultural settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5366. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their relationship to disease, emphasizing critical evaluation of research literature, disease transmission and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5374. Principles of Zoo Management.**

This course is designed to introduce the principles of captive animal management within conservation and education-based zoos. Zoo management requires a broad understanding of the life history and biological needs of many different species; we will explore the ways modern zoos address these needs and the ways in which future zoos could address them more effectively. Specific topics will include animal husbandry, welfare, nutrition, and behavior as well as environmental enrichment, captive breeding, conservation, zoo regulatory frameworks, ethical concerns, and zoo careers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5376. Microbial Biotechnology.**

This course provides an overview of how microbes (e.g., bacteria, viruses and yeast) are manipulated to solve practical problems through biotechnology. This course design is based on topics of applied microbiology as recommended by American society of Microbiology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5377. Genome Informatics.**

The course will cover basic knowledge on genomics and its bioinformatics tools. Students will learn current topics on genomics and bioinformatics, and will analyze genomic data using statistical software. All the analyses will be performed using a personal and a cluster computer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5388. Habitat Ecology.**

The course will emphasize and reinforce in students an appreciation for the importance of habitat in understanding a wide range of processes and patterns in Ecology. Course will explore the process of habitat selection, in the context of animal behavior, population dynamics, and modeling. Students will learn and apply methods and techniques of statistically analyzing the habitat associations of species. The central role of habitat in species conservation will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5390. Problems in the Biological Sciences.**

Open to graduate students on an individual basis by arrangement with the faculty member concerned.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in BIO 5399B. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5400. Plants Important for Wildlife.**

This course explores plant and plant part (specifically gall, fruit, seed, and twig) identification, phylogenetics, co-evolution of plant defenses, economic and ecological impacts of plant uses by wildlife.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5402. Earth Science I.**

A study of astronomy and meteorology through observation, description, and interpretation of earth phenomena. Includes field observations, methods of measurement and interpretation of data related to the physical environment and space technology. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5403. Earth Science II.**

The description and interpretation of earth phenomena considered from the standpoint of geology and oceanography. Includes field observations, methods of sampling and interpretation of data related to the physical environment. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5408. Science Processes and Research.**

Students will analyze scientific research design, design research, interpret data, and communicate results. Stress will be placed on broad-field structure and integration of major science concepts and research-based science pedagogy. This course must be taken the semester prior to student teaching and is required for those seeking 7-12 Life Science or Science teacher certification. This course may not count as one of the four upper-level Biology courses required of general Biology majors, or one of the three upper-level Biology courses required of Biology minors.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5410. Field Biology of Plants.**

Ecological relationships and natural history of plants, including historical geology, geography, soils, and vegetational regions of Central Texas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5411. Morphology of the Vascular Plants.**

A phylogenetic survey of living and fossil vascular plants that focuses on external morphology and reproductive biology. Topics include phylogenetic reconstruction, the origin of vascular plants, seed reproduction, and the origin of angiosperms. Emphasis is on broad-scale evolutionary patterns and origin of major taxonomic groups.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5412. Plant Anatomy.**

A descriptive and functional analysis of seed plants that focuses on internal structure. Topics include recognition and characterization of plant tissues, the structure of plant organs, and organ development. Emphasis is on pattern of tissue organization common to all seed plants and the functional basis for anatomical structure.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5413. Parasitology.**

The biology and biological significance of the common parasites of man and animals.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5415. Ichthyology.**

An introduction to the morphology, taxonomy, natural history, and evolution of fishes. Field trips will be made to collect specimens, and laboratory periods will be devoted to morphological and systematic analyses.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5418. Field Ornithology.**

This course is designed to introduce and provide an advanced knowledge of the application of various field, laboratory, and statistical methods and techniques in the study of avian species. The course will include topics related to survey methodology, sampling design, marking/banding, measurement/sample extraction, and aging/sexing of avian species.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5420. Natural History of the Vertebrates.**

Environmental relationships and natural history of vertebrates. Emphasis is on evolution taxonomy, speciation, behavior, and morphology. Laboratory will include field trips for the study and collection of vertebrates in their natural habitats. Students will assemble a representative collection of vertebrates.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5421. Ornithology.**

Introduction to anatomy, behavior, ecology, and identification of the birds of Texas. Laboratory will emphasize field studies of birds and their habitat requirements.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5422. Mammalogy.**

The taxonomy, distribution, ecology, behavior, and evolution of mammals with particular emphasis on wild mammals of the Southwest. Laboratory will emphasize anatomy, identification, preparation of specimens, and field exercises in methods of population analysis. Students may assemble representative mammal collection.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5423. Wildlife Management.**

Application of ecological principles and natural history concepts to the management of wildlife habitats and populations. Laboratory will involve demonstrations and practice exercises with wildlife management techniques and instrumentation, and field trips to observe wildlife management projects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5424D. Vertebrate Endocrinology.**

This course teaches function and organization of the endocrine system. It describes the major endocrine glands, the synthesis and release of their hormone products, and the interaction with target tissues. Endocrine control of digestion, growth, reproduction, and homeostasis will be compared between mammals and other vertebrate groups.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5432. Bacterial Genomics.**

The course will offer hands-on training on contemporary approaches, techniques, and bioinformatic tools used to study bacterial genomes. Topics covered include DNA sequencing, assembling and annotating genomes, all with a strong emphasis on computational biology. At the end of this course, students will be familiar with bioinformatics tools used to analyze genes and genomes.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5435. Techniques in Wildlife Management.**

The basic methodology of practical wildlife management. This involves techniques in monitoring and data collection related to population dynamics and habitat parameters of wildlife species as well as field research.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5436. Tropical Biology.**

This course entails an analysis and evaluation of the governing principles of tropical ecosystems, including wildlife ecologies, geological processes, and environmental-cultural interactions. In the laboratories, students will compare ecological relationships that influence tropical biology, discuss peer-reviewed literature and examine tropical flora and fauna during field trips to regional sub-tropical areas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5441. Cellular Physiology.**

Advanced cellular biology, including membrane physiology, thermodynamics, energy transduction and distribution, and cellular movement in non-muscle and muscle cells. Laboratory includes discussion of current research and exercises in cellular physiology.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5443. Fish Physiology.**

This course examines the primary physiological functions in fish including how fish sense and interact with the environment, maintain their energetic metabolism (respiration, digestion and excretion), reproduce and maintain water balance. Students will learn about the diverse adaptations fish use to cope with environmental and physiological challenges.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5448. Bacterial Genetics.**

This course will cover concepts and mechanisms involved in the genetics of Archaea and Bacteria. Graduate students will learn current strategies dealing with traditional molecular genetics including post-transcriptional regulation involving small non-coding RNA. In addition graduate students will also write a critical review on a research article from relevant topic.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5454. Plant Ecology.**

Functional ecology of terrestrial plants, plant populations, and communities. Laboratory emphasizes quantitative and experimental approaches to plant ecology and the use of field and laboratory physiology equipment.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5465. General Entomology.**

Principles of morphology, physiology, and taxonomy of insects. Laboratory time will be devoted to a taxonomic study of the common orders and families of insects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5466. Phylogenetic Methods.**

Reconstructing phylogenies is important in most fields of biology. Course emphasis is on practical data collection, management, and analysis. Laboratory exercises will introduce phylogenetic and DNA analysis software, and WWW resources. Students will learn how to address questions in their own research using phylogenetic methodologies.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5470. Limnology.**

Physical, chemical, and biological factors affecting productivity in lakes, ponds, and streams. Limnology sampling methods, chemical and biological analysis of samples, and hydrographic surveying are included in the laboratory.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5472. Animal Behavior.**

This course presents all the major facets of the study of animal behavior, giving special attention to its evolution and ecological significance. We will discuss major conceptual models guiding past and present research in the field. Laboratories will emphasize experimental techniques and statistical analysis.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5480. Cytology and Micro-technique.**

Study of cellular ultra-structure and electron micro technique. Lecture portion of course will cover cytology of all cell types and theoretical aspects of light microscopy and electron microscopy. Laboratory portion will train students to proficiency in microscopy.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5481. Internship in Biological Laboratory Technologies.**

The student will participate in the work of a selected biology unit (private, commercial, or governmental). A research paper reporting the internship experience conducted at the biological unit under the supervision of a faculty member will be required. This course may be credited toward a biology major with prior approval of the graduate advisor and department chair.

**4 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5490. Principles of Developmental Biology.**

This course will cover basic principles of developmental biology in both plant and animal systems. The course will mainly address cell, molecular and genetic mechanisms underlying the development of model organisms, mainly focusing on *Drosophila* (animal) and *Arabidopsis* (plant).

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

Graduate study in biology integrates classroom and field or laboratory experience to help meet the current and future scientific needs of society.

The Biology department offers students opportunities to study in the field or in modern facilities with up-to-date instrumentation and resources, including a DNA-sequencing unit, an integrated microscopy facility, high-speed digital networks and computing centers, a GIS lab, greenhouses, wet labs and extensive plant, animal and paleobotanical collections.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials

- baccalaureate degree in biology or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a minimum 3.0 overall GPA or 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV
- statement of purpose describing professional aspirations and rationale for pursuing graduate study in biology
- three letters of recommendation addressing the substance and quality of the student's preparation for graduate study
- mentor communication (intent to mentor letter) from a Biology Department faculty member.

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

Degree Requirements

The Master of Science (M.S.) degree with a major in Biology requires 30 semester credit hours, including a thesis.

Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
Select one of the following seminar options:		3-4
Option A - Take 3 hours from the following:		
BIO 5110	Seminar in Biology	
BIO 7102	Seminar in Aquatic Resources	
BIO 7120	Population Biology Seminar	
Option B - Take 2 seminar courses from Option A and:		
BIO 5295	Fundamentals of Research	
<b>Electives</b>		
Choose 15 hours of 5000- or 7000-level courses		15
May choose 2 advisor-approved electives outside the department		
<b>Minor</b>		
Choose a 6-hour advisor-approved minor from the College of Science and Engineering or the Department of Geography		6
<b>Thesis</b>		
BIO 5399A	Thesis	3

Select a minimum of 3 hours from the following		3
BIO 5199B	Thesis	
BIO 5299B	Thesis	
BIO 5399B	Thesis	
BIO 5599B	Thesis	
BIO 5999B	Thesis	
<b>Total Hours</b>		<b>30-31</b>

Comprehensive Examination Requirement

All master's students are required to take a final, comprehensive examination. In the Biology Department this exam is administered by the student's committee. Students on academic probation or conditional status are not permitted to take the final, comprehensive examination.

Grading of the final exam is "pass" or "fail." In order to pass, a student must receive votes of confidence from the major professor and a majority of the committee members (including the major professor). A student can be failed over the advisor's positive vote if the majority of the committee votes not to pass. Such outcomes may be appealed to the Graduate Committee, whose decision is final.

For thesis students, the comprehensive examination is oral and is scheduled after the thesis is complete. This examination will normally take the form of a thesis defense and will be immediately preceded by a public presentation of the thesis work. Students should discuss the exam with their committee members beforehand to know their expectations and how best to prepare.

The time and place of the thesis presentation and defense must be announced to the Biology Department and the general public at least two weeks before the actual event. A link for electronic submission of this information is available on the Biology Department web site. It is the student's responsibility to schedule this exam after receiving permission to proceed from his or her major professor.

The thesis defense is in two stages, a public, 30 to 40-minute presentation of the thesis work followed by a closed examination by the thesis committee. After the presentation, questions from the audience will be entertained, but the actual examination phase will not begin until after the general audience has been excused. The exam performance is graded by the committee as "pass" or "fail." A grade of "pass" means that the thesis requires no or only minor revisions. Under such circumstances, the thesis committee signs the examination report and entrusts oversight of any needed revisions to the major professor. In the event a student fails the exam, the committee may recommend revisions to the thesis and upon the completion of these revisions, a new defense and oral examination; or the committee may require the student to undertake a new thesis under the supervision of the same, or a different, thesis committee; or the committee may recommend the student be dismissed from the Biology graduate program. Only one re-examination is permitted.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.



## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until

the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Biology: BIO

## Courses Offered

### Biology (BIO)

#### **BIO 5100. Professional Development.**

This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis. Graded on a credit (CR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **BIO 5110. Seminar in Biology.**

Interactive discussion of timely issues and problems, designed to expose students to the current literature in their fields of interest and its critical analysis. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Header

**Grade Mode:** Standard Letter

#### **BIO 5114. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5214 and BIO 5314.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### **BIO 5166. Medical Microbiology Laboratory.**

This graduate laboratory-based course will cover pathogenic bacteria emphasizing identification of selected groups of pathogens and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### **BIO 5176. Microbial Biotechnology Laboratory.**

This laboratory-based course will cover use of microbes for biotechnological applications and is designed to provide practical explorations into fields of biotechnology. Topics include laboratory techniques for recombinant protein purification, fermentation, identification of markers in genetically modified food and bio-remediation of pollutants. Corequisite: BIO 5376.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **BIO 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **BIO 5214. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5314.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **BIO 5295. Fundamentals of Research.**

Designed to acquaint the beginning graduate student with materials and methods of research in the biological sciences. It is recommended that a graduate student take this course the first semester in residence.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **BIO 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **BIO 5300. Neurobiology.**

This course presents the biology of the nervous system with emphasis on the human nervous system. Topics presented in lecture include neuroanatomy, cellular neurobiology, neurophysiology, developmental neurobiology, and neuronal plasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **BIO 5301. Evolution.**

Basic genetic principles applied to natural selection, adaptation, populations, and speciation. Consideration is given to the origin of life, nature of chromosomal variation, evolution of genetic systems, and certain other selected topics.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5304. Wildlife and Recreation: Impact and Management.**

Students will be introduced to the impact human recreational activities have on wildlife habitats and populations. Management practices to enhance human-wildlife encounters or to minimize detrimental effects on wildlife populations will be presented.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5305. Methods of Nature Study for Teachers.**

This course provides a comprehensive survey of natural events. It includes laboratory and field work emphasizing observation, collection and discovery of relationships. It is creditable only for those seeking elementary or middle school certification and is required for those seeking grade 4-8 Science or Science/Mathematics teaching certification. This course must be taken the semester immediately prior to student teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5307. Ecology of Rarity.**

This course will examine the ecology of rarity and its ability to inform public awareness and environmental policy. This course will explore how we define rarity, persistence and viability. Is rarity more or less common than might be expected, and is there anything we can or should do about it?

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 5311. Cancer Biology.**

Cancer Biology provides a foundation for understanding the complex molecular, biochemical, and cellular processes associated with cancer development. Topics include the role of tumor suppressor genes, oncogenes, DNA repair, apoptosis, ECM, cell-cycle control, cell signaling pathways, immune function and cancer-causing viruses. Emerging diagnostics and/or therapeutics will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5314. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5317. Interpretive Biology Programming and Design.**

In this course, students will explore the methods and principles used by the National Park Service, museums, environmental centers, and state park systems to interest a variety of audiences as well as interpret biology and natural environments effectively. Students will practice skills in both personal and non-personal interpretation by creating science outreach programs, interpretive literature, brochures, path waysides, and other interpretive media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5319C. Ecotoxicology.**

Topics to be covered include sources, types, and fates of toxicants, organism response to toxicants, toxicant effects at the population, community, and ecosystem levels, and monitoring and risk assessment. Examination of current literature will form the core of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5319F. Watershed Management Frameworks and Applications.**

Introduction to integrated watershed assessment and management tools for identifying programmatic water quality and quantity issues and their root causes and solutions, and their practical application. The scientific and socio-economic elements are considered within the context of planning and developing watershed protection plans and programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5327. Issues in Irish Biodiversity and Conservation.**

In this course, students will learn about Irish flora and fauna, ecosystems, conservation strategies in areas of high ecological concern, and public involvement. Emphasis will be placed on case studies and service-learning opportunities. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5328. Field Biology of Ireland.**

In this course, students will use multiple techniques to explore biodiversity across multiple ecosystems in Ireland. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5329. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5331. Human Dimensions of Wildlife and Fisheries Conservation.**

Humans play a role in nearly every aspect of wildlife and fisheries conservation. This course will provide students with principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will also have an opportunity to integrate human dimensions into local decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5332. Biology in Film and Television: An Analysis of the Biology in Fiction and Non-Fiction Film and TV.**

This course explores how biology is portrayed in popular motion pictures with an emphasis on analyzing biological accuracy, misconceptions perpetuated or portrayed, and investigating the rationale behind motion picture directors' and writers' decisions about how they portray biological content in the final product. As part of this course students will watch and discuss a curated list of films and television shows and write an analysis of each film or TV episode.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5350G. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their ability to cause disease, emphasizing the biological basis for virulence, and research strategies for investigating infectious diseases. Students may take only one of BIO 5350G or BIO 5445 for credit. Prerequisite: BIO 2400 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350I. Emerging Infectious Diseases.**

Current topics in the emergence of viral and bacterial diseases in humans. This course will include new diseases, diseases previously seen and increasing in incidence, and diseases not previously seen in this country. This course will be of interest to students who are pursuing advanced degrees and courses in microbiology, biochemistry, and cell and molecular biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5350J. Environmental Physiology of Animals.**

This course is a study of how animals respond physiologically to changes in environmental temperature, moisture, salinity, partial pressure of gases, and toxins. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350K. Genomics.**

The course is a lecture course in modern genomics, including principles of genome function, the human genome, comparative genomics, genome sequencing, evolution and genomic change, databases and medicine, ethical, legal and social issues. The course also includes discussion of transcriptomics, proteomics, metabolomics, directed evolution, protein design, and systems biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350M. Wildlife Policy and Law in North America.**

This course provides the student with a historical and cultural context within which wildlife policy and law (federal treaties, statutes, case law, and regulations) have developed in North America, particularly in the United States. Graduate students will research the development of Wildlife law in representative states as well.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350O. Tropical Ecology and Conservation.**

Students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems.

**3 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350P. Tropical Ecology and Conservation Lab.**

This laboratory course complements the lecture course BIO 5350O, in which students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems. Corequisite: BIO 5350O.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Co-requisite(s):** BIO 5350O

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350Z. Diversity and Cultural Impact of Geoparks.**

Students will explore biological differences in diversity across Geoparks in the United States and Ireland. Additionally, students will study the cultural impact that Geoparks have on the local community and national policy by focusing on differences between science communication strategies and community engagement practices conducted at the parks. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351G. Omics Approach to Microbiology.**

This course covers contemporary approaches, techniques and bioinformatic tools used to study function and ecology in microbial communities. Topics covered will include microbiome, next-generation sequencing, metaproteomics, and their applications to clinical, agricultural, environmental and industrial needs.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351I. Global Change Biology.**

This course will give an in-depth analysis of the major global changes occurring in present day biological systems. The focus of the course will be on climate change, invasive species, eutrophication, land use change and biodiversity loss. Emphasis will be placed on peer-reviewed literature to better understand how biologists study processes at the global scale. Potential solutions to these global challenges will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351J. Comparative Immunology.**

While most textbooks would present the immune system of animals as a monolith with little variation between species, we are quickly learning that this is not the case. Indeed animal immune systems are immensely diverse. This class will consist of a taxonomic survey of metazoan immune systems, focusing on the evolutionary causes and ecological consequences of this diversity in immune systems across animals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351P. Ecology and Conservation Abroad.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351Q with a grade of "C" or better.

**3 Credit Hours. 20 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351Q. Ecology and Conservation Abroad Lab.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351P with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5356. Plant Physiology.**

Basic principles of plant physiology are studied in lecture and laboratory. Previous courses in biochemistry and genetics are strongly recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5363. History of Medicine.**

This course covers significant concepts, developments, individuals, and events in the history of medicine from antiquity to modern day. Topics include the impact of disease on medical practice, the development of hospitals as sites for care, teaching, and research, how medical science and technology are continuously defined by social, cultural, and political ideas, and the historical roots of several themes in medical ethics. This course will be delivered as an Education Abroad course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5364. Explorations in Physiology.**

This course will cover the basic principles of physiological systems and the function of organ systems with an emphasis on humans and other mammals. The focus will be on the interplay between and among multiple organ systems and holistic systems integration. Other topics include the pathophysiology underlying common diseases, drug therapies and treatments, and emerging physiological research. This course will also provide the opportunity for experiential learning gained in diverse cultural settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5366. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their relationship to disease, emphasizing critical evaluation of research literature, disease transmission and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**BIO 5374. Principles of Zoo Management.**

This course is designed to introduce the principles of captive animal management within conservation and education-based zoos. Zoo management requires a broad understanding of the life history and biological needs of many different species; we will explore the ways modern zoos address these needs and the ways in which future zoos could address them more effectively. Specific topics will include animal husbandry, welfare, nutrition, and behavior as well as environmental enrichment, captive breeding, conservation, zoo regulatory frameworks, ethical concerns, and zoo careers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5376. Microbial Biotechnology.**

This course provides an overview of how microbes (e.g., bacteria, viruses and yeast) are manipulated to solve practical problems through biotechnology. This course design is based on topics of applied microbiology as recommended by American society of Microbiology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5377. Genome Informatics.**

The course will cover basic knowledge on genomics and its bioinformatics tools. Students will learn current topics on genomics and bioinformatics, and will analyze genomic data using statistical software. All the analyses will be performed using a personal and a cluster computer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5388. Habitat Ecology.**

The course will emphasize and reinforce in students an appreciation for the importance of habitat in understanding a wide range of processes and patterns in Ecology. Course will explore the process of habitat selection, in the context of animal behavior, population dynamics, and modeling. Students will learn and apply methods and techniques of statistically analyzing the habitat associations of species. The central role of habitat in species conservation will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5390. Problems in the Biological Sciences.**

Open to graduate students on an individual basis by arrangement with the faculty member concerned.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in BIO 5399B. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5400. Plants Important for Wildlife.**

This course explores plant and plant part (specifically gall, fruit, seed, and twig) identification, phylogenetics, co-evolution of plant defenses, economic and ecological impacts of plant uses by wildlife.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5402. Earth Science I.**

A study of astronomy and meteorology through observation, description, and interpretation of earth phenomena. Includes field observations, methods of measurement and interpretation of data related to the physical environment and space technology. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5403. Earth Science II.**

The description and interpretation of earth phenomena considered from the standpoint of geology and oceanography. Includes field observations, methods of sampling and interpretation of data related to the physical environment. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5408. Science Processes and Research.**

Students will analyze scientific research design, design research, interpret data, and communicate results. Stress will be placed on broad-field structure and integration of major science concepts and research-based science pedagogy. This course must be taken the semester prior to student teaching and is required for those seeking 7-12 Life Science or Science teacher certification. This course may not count as one of the four upper-level Biology courses required of general Biology majors, or one of the three upper-level Biology courses required of Biology minors.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5410. Field Biology of Plants.**

Ecological relationships and natural history of plants, including historical geology, geography, soils, and vegetational regions of Central Texas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5411. Morphology of the Vascular Plants.**

A phylogenetic survey of living and fossil vascular plants that focuses on external morphology and reproductive biology. Topics include phylogenetic reconstruction, the origin of vascular plants, seed reproduction, and the origin of angiosperms. Emphasis is on broad-scale evolutionary patterns and origin of major taxonomic groups.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5412. Plant Anatomy.**

A descriptive and functional analysis of seed plants that focuses on internal structure. Topics include recognition and characterization of plant tissues, the structure of plant organs, and organ development. Emphasis is on pattern of tissue organization common to all seed plants and the functional basis for anatomical structure.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5413. Parasitology.**

The biology and biological significance of the common parasites of man and animals.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5415. Ichthyology.**

An introduction to the morphology, taxonomy, natural history, and evolution of fishes. Field trips will be made to collect specimens, and laboratory periods will be devoted to morphological and systematic analyses.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5418. Field Ornithology.**

This course is designed to introduce and provide an advanced knowledge of the application of various field, laboratory, and statistical methods and techniques in the study of avian species. The course will include topics related to survey methodology, sampling design, marking/banding, measurement/sample extraction, and aging/sexing of avian species.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5420. Natural History of the Vertebrates.**

Environmental relationships and natural history of vertebrates. Emphasis is on evolution taxonomy, speciation, behavior, and morphology. Laboratory will include field trips for the study and collection of vertebrates in their natural habitats. Students will assemble a representative collection of vertebrates.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5421. Ornithology.**

Introduction to anatomy, behavior, ecology, and identification of the birds of Texas. Laboratory will emphasize field studies of birds and their habitat requirements.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5422. Mammalogy.**

The taxonomy, distribution, ecology, behavior, and evolution of mammals with particular emphasis on wild mammals of the Southwest. Laboratory will emphasize anatomy, identification, preparation of specimens, and field exercises in methods of population analysis. Students may assemble representative mammal collection.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5423. Wildlife Management.**

Application of ecological principles and natural history concepts to the management of wildlife habitats and populations. Laboratory will involve demonstrations and practice exercises with wildlife management techniques and instrumentation, and field trips to observe wildlife management projects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5424D. Vertebrate Endocrinology.**

This course teaches function and organization of the endocrine system. It describes the major endocrine glands, the synthesis and release of their hormone products, and the interaction with target tissues. Endocrine control of digestion, growth, reproduction, and homeostasis will be compared between mammals and other vertebrate groups.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5432. Bacterial Genomics.**

The course will offer hands-on training on contemporary approaches, techniques, and bioinformatic tools used to study bacterial genomes. Topics covered include DNA sequencing, assembling and annotating genomes, all with a strong emphasis on computational biology. At the end of this course, students will be familiar with bioinformatics tools used to analyze genes and genomes.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5435. Techniques in Wildlife Management.**

The basic methodology of practical wildlife management. This involves techniques in monitoring and data collection related to population dynamics and habitat parameters of wildlife species as well as field research.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5436. Tropical Biology.**

This course entails an analysis and evaluation of the governing principles of tropical ecosystems, including wildlife ecologies, geological processes, and environmental-cultural interactions. In the laboratories, students will compare ecological relationships that influence tropical biology, discuss peer-reviewed literature and examine tropical flora and fauna during field trips to regional sub-tropical areas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5441. Cellular Physiology.**

Advanced cellular biology, including membrane physiology, thermodynamics, energy transduction and distribution, and cellular movement in non-muscle and muscle cells. Laboratory includes discussion of current research and exercises in cellular physiology.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5443. Fish Physiology.**

This course examines the primary physiological functions in fish including how fish sense and interact with the environment, maintain their energetic metabolism (respiration, digestion and excretion), reproduce and maintain water balance. Students will learn about the diverse adaptations fish use to cope with environmental and physiological challenges.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5448. Bacterial Genetics.**

This course will cover concepts and mechanisms involved in the genetics of Archaea and Bacteria. Graduate students will learn current strategies dealing with traditional molecular genetics including post-transcriptional regulation involving small non-coding RNA. In addition graduate students will also write a critical review on a research article from relevant topic.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5454. Plant Ecology.**

Functional ecology of terrestrial plants, plant populations, and communities. Laboratory emphasizes quantitative and experimental approaches to plant ecology and the use of field and laboratory physiology equipment.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5465. General Entomology.**

Principles of morphology, physiology, and taxonomy of insects. Laboratory time will be devoted to a taxonomic study of the common orders and families of insects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5466. Phylogenetic Methods.**

Reconstructing phylogenies is important in most fields of biology. Course emphasis is on practical data collection, management, and analysis. Laboratory exercises will introduce phylogenetic and DNA analysis software, and WWW resources. Students will learn how to address questions in their own research using phylogenetic methodologies.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5470. Limnology.**

Physical, chemical, and biological factors affecting productivity in lakes, ponds, and streams. Limnology sampling methods, chemical and biological analysis of samples, and hydrographic surveying are included in the laboratory.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5472. Animal Behavior.**

This course presents all the major facets of the study of animal behavior, giving special attention to its evolution and ecological significance. We will discuss major conceptual models guiding past and present research in the field. Laboratories will emphasize experimental techniques and statistical analysis.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5480. Cytology and Micro-technique.**

Study of cellular ultra-structure and electron micro technique. Lecture portion of course will cover cytology of all cell types and theoretical aspects of light microscopy and electron microscopy. Laboratory portion will train students to proficiency in microscopy.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5481. Internship in Biological Laboratory Technologies.**

The student will participate in the work of a selected biology unit (private, commercial, or governmental). A research paper reporting the internship experience conducted at the biological unit under the supervision of a faculty member will be required. This course may be credited toward a biology major with prior approval of the graduate advisor and department chair.

**4 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5490. Principles of Developmental Biology.**

This course will cover basic principles of developmental biology in both plant and animal systems. The course will mainly address cell, molecular and genetic mechanisms underlying the development of model organisms, mainly focusing on *Drosophila* (animal) and *Arabidopsis* (plant).

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The program represents an interdisciplinary course of study that combines principles of population biology with strong training in measurement and analysis of biological systems augmented with the student's choice of study in particular specialties.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in biology or related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a minimum 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- mentor communication (intent to mentor letter) from a Biology Department faculty member.
- resume/CV

- statement of purpose describing professional aspirations and rationale for pursuing graduate study
- three letters of recommendation addressing the substance and quality of the student’s preparation for graduate study

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

Degree Requirements

The Master of Science (M.S.) degree with a major in Population and Conservation Biology requires 30 semester credit hours, including a thesis.

Course Requirements

Code	Title	Hours
Required Courses		
BIO 7120	Population Biology Seminar (Taken twice)	2
BIO 7405	Statistics and Experimental Design I	4
BIO 7406	Statistics and Experimental Design II	4
Choose 6-8 hours from the following: <sup>1</sup>		6-8
BIO 7336	Evolutionary Ecology	
BIO 7346	Conservation Biology	
BIO 7360R	Special Topics in Aquatic Resources: Community and Ecosystem Ecology	
BIO 7367		
BIO 7427	Principles of Population Biology I	
BIO 7428	Principles of Population Biology II	
BIO 7433	Population Genetics	
BIO 7466	Phylogenetics	
BIO 7469	Introduction to Ecological Modeling	
Prescribed Electives		
Choose 6-8 hours from the following: <sup>1, 2</sup>		6-8
BIO 5295	Fundamentals of Research	
BIO 5301	Evolution	
BIO 5410	Field Biology of Plants	
BIO 5423	Wildlife Management	
BIO 5435	Techniques in Wildlife Management	
BIO 5454	Plant Ecology	
BIO 5472	Animal Behavior	
BIO 7308	History of Vegetation and Climate	
BIO 7353	Biogeography	
BIO 7402	Molecular Field Techniques	
BIO 7410	Aquatic Microbial Ecology	

BIO 7414	Ecology of Infectious Diseases of Wildlife	
BIO 7419	Stream Ecology	
GEO 5415	Geographic Applications of Remote Sensing	
GEO 5417	Advanced Cartographic Design	
GEO 5418	Geographic Information Systems I	
GEO 5419	Geographic Information Systems II	
Thesis		
BIO 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
BIO 5199B	Thesis	
BIO 5299B	Thesis	
BIO 5399B	Thesis	
BIO 5599B	Thesis	
BIO 5999B	Thesis	
Total hours 30-32		

- <sup>1</sup> Students choosing 6 hours from the list in required courses must choose 8 from the electives, while students choosing 8 hours from the list in required courses must choose 6 hours from the electives.
- <sup>2</sup> Electives should be chosen in consultation with the graduate advisor and major professor to allow students to specialize in particular sub-disciplines of the field, including the ecology of populations, population management, conservation biology or evolutionary ecology and genetics.

Comprehensive Examination Requirement

All master’s students are required to take a final, comprehensive examination. In the Biology Department this exam is administered by the student’s committee. Students on academic probation or conditional status are not permitted to take the final, comprehensive examination.

Grading of the final exam is “pass” or “fail.” In order to pass, a student must receive votes of confidence from the major professor and a majority of the committee members (including the major professor). A student can be failed over the advisor’s positive vote if the majority of the committee votes not to pass. Such outcomes may be appealed to the Graduate Committee, whose decision is final.

The comprehensive examination is oral and is scheduled after the thesis is complete. This examination will normally take the form of a thesis defense and will be immediately preceded by a public presentation of the thesis work. Students should discuss the exam with their committee members beforehand to know their expectations and how best to prepare.

The time and place of the thesis presentation and defense must be announced to the Biology Department and the general public at least two weeks before the actual event. A link for electronic submission of this information is available on the Biology Department web site. It is the student’s responsibility to schedule this exam after receiving permission to proceed from his or her major professor.

The thesis defense is in two stages, a public, 30 to 40-minute presentation of the thesis work followed by a closed examination by the thesis committee. After the presentation, questions from the audience will be entertained, but the actual examination phase will not begin until after the general audience has been excused. The exam performance is graded by the committee as “pass” or “fail.” A grade of “pass” means that the thesis requires no or only minor revisions. Under such circumstances,



the thesis committee signs the examination report and entrusts oversight of any needed revisions to the major professor. In the event a student fails the exam, the committee may recommend revisions to the thesis and upon the completion of these revisions, a new defense and oral examination; or the committee may require the student to undertake a new thesis under the supervision of the same, or a different, thesis committee; or the committee may recommend the student be dismissed from the Biology graduate program. Only one re-examination is permitted.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial

enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for

personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Biology: BIO

## Courses Offered

### Biology (BIO)

#### BIO 5100. Professional Development.

This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis. Graded on a credit (CR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### BIO 5110. Seminar in Biology.

Interactive discussion of timely issues and problems, designed to expose students to the current literature in their fields of interest and its critical analysis. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Header

**Grade Mode:** Standard Letter

#### BIO 5114. Collaborative Research.

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5214 and BIO 5314.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### BIO 5166. Medical Microbiology Laboratory.

This graduate laboratory-based course will cover pathogenic bacteria emphasizing identification of selected groups of pathogens and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### BIO 5176. Microbial Biotechnology Laboratory.

This laboratory-based course will cover use of microbes for biotechnological applications and is designed to provide practical explorations into fields of biotechnology. Topics include laboratory techniques for recombinant protein purification, fermentation, identification of markers in genetically modified food and bio-remediation of pollutants. Corequisite: BIO 5376.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### BIO 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### BIO 5214. Collaborative Research.

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5314.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### BIO 5295. Fundamentals of Research.

Designed to acquaint the beginning graduate student with materials and methods of research in the biological sciences. It is recommended that a graduate student take this course the first semester in residence.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### BIO 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### BIO 5300. Neurobiology.

This course presents the biology of the nervous system with emphasis on the human nervous system. Topics presented in lecture include neuroanatomy, cellular neurobiology, neurophysiology, developmental neurobiology, and neuronal plasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### BIO 5301. Evolution.

Basic genetic principles applied to natural selection, adaptation, populations, and speciation. Consideration is given to the origin of life, nature of chromosomal variation, evolution of genetic systems, and certain other selected topics.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5304. Wildlife and Recreation: Impact and Management.**

Students will be introduced to the impact human recreational activities have on wildlife habitats and populations. Management practices to enhance human-wildlife encounters or to minimize detrimental effects on wildlife populations will be presented.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5305. Methods of Nature Study for Teachers.**

This course provides a comprehensive survey of natural events. It includes laboratory and field work emphasizing observation, collection and discovery of relationships. It is creditable only for those seeking elementary or middle school certification and is required for those seeking grade 4-8 Science or Science/Mathematics teaching certification. This course must be taken the semester immediately prior to student teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5307. Ecology of Rarity.**

This course will examine the ecology of rarity and its ability to inform public awareness and environmental policy. This course will explore how we define rarity, persistence and viability. Is rarity more or less common than might be expected, and is there anything we can or should do about it?

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 5311. Cancer Biology.**

Cancer Biology provides a foundation for understanding the complex molecular, biochemical, and cellular processes associated with cancer development. Topics include the role of tumor suppressor genes, oncogenes, DNA repair, apoptosis, ECM, cell-cycle control, cell signaling pathways, immune function and cancer-causing viruses. Emerging diagnostics and/or therapeutics will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5314. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5317. Interpretive Biology Programming and Design.**

In this course, students will explore the methods and principles used by the National Park Service, museums, environmental centers, and state park systems to interest a variety of audiences as well as interpret biology and natural environments effectively. Students will practice skills in both personal and non-personal interpretation by creating science outreach programs, interpretive literature, brochures, path waysides, and other interpretive media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5319C. Ecotoxicology.**

Topics to be covered include sources, types, and fates of toxicants, organism response to toxicants, toxicant effects at the population, community, and ecosystem levels, and monitoring and risk assessment. Examination of current literature will form the core of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5319F. Watershed Management Frameworks and Applications.**

Introduction to integrated watershed assessment and management tools for identifying programmatic water quality and quantity issues and their root causes and solutions, and their practical application. The scientific and socio-economic elements are considered within the context of planning and developing watershed protection plans and programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5327. Issues in Irish Biodiversity and Conservation.**

In this course, students will learn about Irish flora and fauna, ecosystems, conservation strategies in areas of high ecological concern, and public involvement. Emphasis will be placed on case studies and service-learning opportunities. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5328. Field Biology of Ireland.**

In this course, students will use multiple techniques to explore biodiversity across multiple ecosystems in Ireland. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5329. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5331. Human Dimensions of Wildlife and Fisheries Conservation.**

Humans play a role in nearly every aspect of wildlife and fisheries conservation. This course will provide students with principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will also have an opportunity to integrate human dimensions into local decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5332. Biology in Film and Television: An Analysis of the Biology in Fiction and Non-Fiction Film and TV.**

This course explores how biology is portrayed in popular motion pictures with an emphasis on analyzing biological accuracy, misconceptions perpetuated or portrayed, and investigating the rationale behind motion picture directors' and writers' decisions about how they portray biological content in the final product. As part of this course students will watch and discuss a curated list of films and television shows and write an analysis of each film or TV episode.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5350G. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their ability to cause disease, emphasizing the biological basis for virulence, and research strategies for investigating infectious diseases. Students may take only one of BIO 5350G or BIO 5445 for credit. Prerequisite: BIO 2400 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350I. Emerging Infectious Diseases.**

Current topics in the emergence of viral and bacterial diseases in humans. This course will include new diseases, diseases previously seen and increasing in incidence, and diseases not previously seen in this country. This course will be of interest to students who are pursuing advanced degrees and courses in microbiology, biochemistry, and cell and molecular biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5350J. Environmental Physiology of Animals.**

This course is a study of how animals respond physiologically to changes in environmental temperature, moisture, salinity, partial pressure of gases, and toxins. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350K. Genomics.**

The course is a lecture course in modern genomics, including principles of genome function, the human genome, comparative genomics, genome sequencing, evolution and genomic change, databases and medicine, ethical, legal and social issues. The course also includes discussion of transcriptomics, proteomics, metabolomics, directed evolution, protein design, and systems biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350M. Wildlife Policy and Law in North America.**

This course provides the student with a historical and cultural context within which wildlife policy and law (federal treaties, statutes, case law, and regulations) have developed in North America, particularly in the United States. Graduate students will research the development of Wildlife law in representative states as well.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350O. Tropical Ecology and Conservation.**

Students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems.

**3 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350P. Tropical Ecology and Conservation Lab.**

This laboratory course complements the lecture course BIO 5350O, in which students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems. Corequisite: BIO 5350O.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Co-requisite(s):** BIO 5350O

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350Z. Diversity and Cultural Impact of Geoparks.**

Students will explore biological differences in diversity across Geoparks in the United States and Ireland. Additionally, students will study the cultural impact that Geoparks have on the local community and national policy by focusing on differences between science communication strategies and community engagement practices conducted at the parks. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351G. Omics Approach to Microbiology.**

This course covers contemporary approaches, techniques and bioinformatic tools used to study function and ecology in microbial communities. Topics covered will include microbiome, next-generation sequencing, metaproteomics, and their applications to clinical, agricultural, environmental and industrial needs.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351I. Global Change Biology.**

This course will give an in-depth analysis of the major global changes occurring in present day biological systems. The focus of the course will be on climate change, invasive species, eutrophication, land use change and biodiversity loss. Emphasis will be placed on peer-reviewed literature to better understand how biologists study processes at the global scale. Potential solutions to these global challenges will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351J. Comparative Immunology.**

While most textbooks would present the immune system of animals as a monolith with little variation between species, we are quickly learning that this is not the case. Indeed animal immune systems are immensely diverse. This class will consist of a taxonomic survey of metazoan immune systems, focusing on the evolutionary causes and ecological consequences of this diversity in immune systems across animals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351P. Ecology and Conservation Abroad.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351Q with a grade of "C" or better.

**3 Credit Hours. 20 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351Q. Ecology and Conservation Abroad Lab.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351P with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5356. Plant Physiology.**

Basic principles of plant physiology are studied in lecture and laboratory. Previous courses in biochemistry and genetics are strongly recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5363. History of Medicine.**

This course covers significant concepts, developments, individuals, and events in the history of medicine from antiquity to modern day. Topics include the impact of disease on medical practice, the development of hospitals as sites for care, teaching, and research, how medical science and technology are continuously defined by social, cultural, and political ideas, and the historical roots of several themes in medical ethics. This course will be delivered as an Education Abroad course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5364. Explorations in Physiology.**

This course will cover the basic principles of physiological systems and the function of organ systems with an emphasis on humans and other mammals. The focus will be on the interplay between and among multiple organ systems and holistic systems integration. Other topics include the pathophysiology underlying common diseases, drug therapies and treatments, and emerging physiological research. This course will also provide the opportunity for experiential learning gained in diverse cultural settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5366. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their relationship to disease, emphasizing critical evaluation of research literature, disease transmission and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**BIO 5374. Principles of Zoo Management.**

This course is designed to introduce the principles of captive animal management within conservation and education-based zoos. Zoo management requires a broad understanding of the life history and biological needs of many different species; we will explore the ways modern zoos address these needs and the ways in which future zoos could address them more effectively. Specific topics will include animal husbandry, welfare, nutrition, and behavior as well as environmental enrichment, captive breeding, conservation, zoo regulatory frameworks, ethical concerns, and zoo careers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5376. Microbial Biotechnology.**

This course provides an overview of how microbes (e.g., bacteria, viruses and yeast) are manipulated to solve practical problems through biotechnology. This course design is based on topics of applied microbiology as recommended by American society of Microbiology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5377. Genome Informatics.**

The course will cover basic knowledge on genomics and its bioinformatics tools. Students will learn current topics on genomics and bioinformatics, and will analyze genomic data using statistical software. All the analyses will be performed using a personal and a cluster computer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5388. Habitat Ecology.**

The course will emphasize and reinforce in students an appreciation for the importance of habitat in understanding a wide range of processes and patterns in Ecology. Course will explore the process of habitat selection, in the context of animal behavior, population dynamics, and modeling. Students will learn and apply methods and techniques of statistically analyzing the habitat associations of species. The central role of habitat in species conservation will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5390. Problems in the Biological Sciences.**

Open to graduate students on an individual basis by arrangement with the faculty member concerned.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in BIO 5399B. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5400. Plants Important for Wildlife.**

This course explores plant and plant part (specifically gall, fruit, seed, and twig) identification, phylogenetics, co-evolution of plant defenses, economic and ecological impacts of plant uses by wildlife.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5402. Earth Science I.**

A study of astronomy and meteorology through observation, description, and interpretation of earth phenomena. Includes field observations, methods of measurement and interpretation of data related to the physical environment and space technology. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5403. Earth Science II.**

The description and interpretation of earth phenomena considered from the standpoint of geology and oceanography. Includes field observations, methods of sampling and interpretation of data related to the physical environment. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5408. Science Processes and Research.**

Students will analyze scientific research design, design research, interpret data, and communicate results. Stress will be placed on broad-field structure and integration of major science concepts and research-based science pedagogy. This course must be taken the semester prior to student teaching and is required for those seeking 7-12 Life Science or Science teacher certification. This course may not count as one of the four upper-level Biology courses required of general Biology majors, or one of the three upper-level Biology courses required of Biology minors.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5410. Field Biology of Plants.**

Ecological relationships and natural history of plants, including historical geology, geography, soils, and vegetational regions of Central Texas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5411. Morphology of the Vascular Plants.**

A phylogenetic survey of living and fossil vascular plants that focuses on external morphology and reproductive biology. Topics include phylogenetic reconstruction, the origin of vascular plants, seed reproduction, and the origin of angiosperms. Emphasis is on broad-scale evolutionary patterns and origin of major taxonomic groups.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5412. Plant Anatomy.**

A descriptive and functional analysis of seed plants that focuses on internal structure. Topics include recognition and characterization of plant tissues, the structure of plant organs, and organ development. Emphasis is on pattern of tissue organization common to all seed plants and the functional basis for anatomical structure.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5413. Parasitology.**

The biology and biological significance of the common parasites of man and animals.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5415. Ichthyology.**

An introduction to the morphology, taxonomy, natural history, and evolution of fishes. Field trips will be made to collect specimens, and laboratory periods will be devoted to morphological and systematic analyses.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5418. Field Ornithology.**

This course is designed to introduce and provide an advanced knowledge of the application of various field, laboratory, and statistical methods and techniques in the study of avian species. The course will include topics related to survey methodology, sampling design, marking/banding, measurement/sample extraction, and aging/sexing of avian species.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5420. Natural History of the Vertebrates.**

Environmental relationships and natural history of vertebrates. Emphasis is on evolution taxonomy, speciation, behavior, and morphology. Laboratory will include field trips for the study and collection of vertebrates in their natural habitats. Students will assemble a representative collection of vertebrates.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5421. Ornithology.**

Introduction to anatomy, behavior, ecology, and identification of the birds of Texas. Laboratory will emphasize field studies of birds and their habitat requirements.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5422. Mammalogy.**

The taxonomy, distribution, ecology, behavior, and evolution of mammals with particular emphasis on wild mammals of the Southwest. Laboratory will emphasize anatomy, identification, preparation of specimens, and field exercises in methods of population analysis. Students may assemble representative mammal collection.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5423. Wildlife Management.**

Application of ecological principles and natural history concepts to the management of wildlife habitats and populations. Laboratory will involve demonstrations and practice exercises with wildlife management techniques and instrumentation, and field trips to observe wildlife management projects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5424D. Vertebrate Endocrinology.**

This course teaches function and organization of the endocrine system. It describes the major endocrine glands, the synthesis and release of their hormone products, and the interaction with target tissues. Endocrine control of digestion, growth, reproduction, and homeostasis will be compared between mammals and other vertebrate groups.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5432. Bacterial Genomics.**

The course will offer hands-on training on contemporary approaches, techniques, and bioinformatic tools used to study bacterial genomes. Topics covered include DNA sequencing, assembling and annotating genomes, all with a strong emphasis on computational biology. At the end of this course, students will be familiar with bioinformatics tools used to analyze genes and genomes.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5435. Techniques in Wildlife Management.**

The basic methodology of practical wildlife management. This involves techniques in monitoring and data collection related to population dynamics and habitat parameters of wildlife species as well as field research.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5436. Tropical Biology.**

This course entails an analysis and evaluation of the governing principles of tropical ecosystems, including wildlife ecologies, geological processes, and environmental-cultural interactions. In the laboratories, students will compare ecological relationships that influence tropical biology, discuss peer-reviewed literature and examine tropical flora and fauna during field trips to regional sub-tropical areas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5441. Cellular Physiology.**

Advanced cellular biology, including membrane physiology, thermodynamics, energy transduction and distribution, and cellular movement in non-muscle and muscle cells. Laboratory includes discussion of current research and exercises in cellular physiology.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5443. Fish Physiology.**

This course examines the primary physiological functions in fish including how fish sense and interact with the environment, maintain their energetic metabolism (respiration, digestion and excretion), reproduce and maintain water balance. Students will learn about the diverse adaptations fish use to cope with environmental and physiological challenges.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5448. Bacterial Genetics.**

This course will cover concepts and mechanisms involved in the genetics of Archaea and Bacteria. Graduate students will learn current strategies dealing with traditional molecular genetics including post-transcriptional regulation involving small non-coding RNA. In addition graduate students will also write a critical review on a research article from relevant topic.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5454. Plant Ecology.**

Functional ecology of terrestrial plants, plant populations, and communities. Laboratory emphasizes quantitative and experimental approaches to plant ecology and the use of field and laboratory physiology equipment.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5465. General Entomology.**

Principles of morphology, physiology, and taxonomy of insects. Laboratory time will be devoted to a taxonomic study of the common orders and families of insects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5466. Phylogenetic Methods.**

Reconstructing phylogenies is important in most fields of biology. Course emphasis is on practical data collection, management, and analysis. Laboratory exercises will introduce phylogenetic and DNA analysis software, and WWW resources. Students will learn how to address questions in their own research using phylogenetic methodologies.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5470. Limnology.**

Physical, chemical, and biological factors affecting productivity in lakes, ponds, and streams. Limnology sampling methods, chemical and biological analysis of samples, and hydrographic surveying are included in the laboratory.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5472. Animal Behavior.**

This course presents all the major facets of the study of animal behavior, giving special attention to its evolution and ecological significance. We will discuss major conceptual models guiding past and present research in the field. Laboratories will emphasize experimental techniques and statistical analysis.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5480. Cytology and Micro-technique.**

Study of cellular ultra-structure and electron micro technique. Lecture portion of course will cover cytology of all cell types and theoretical aspects of light microscopy and electron microscopy. Laboratory portion will train students to proficiency in microscopy.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5481. Internship in Biological Laboratory Technologies.**

The student will participate in the work of a selected biology unit (private, commercial, or governmental). A research paper reporting the internship experience conducted at the biological unit under the supervision of a faculty member will be required. This course may be credited toward a biology major with prior approval of the graduate advisor and department chair.

**4 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5490. Principles of Developmental Biology.**

This course will cover basic principles of developmental biology in both plant and animal systems. The course will mainly address cell, molecular and genetic mechanisms underlying the development of model organisms, mainly focusing on *Drosophila* (animal) and *Arabidopsis* (plant).

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in in wildlife ecology is a thesis-based degree with an emphasis on the application of ecological principles to studies in the fields of wildlife ecology and natural resource management.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in biology or related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.) Leveling courses will be required if the student lacks sufficient background course work.
- official transcripts from **each institution** where course credit was granted
- a minimum 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- mentor communication (intent to mentor letter) from a Biology Department faculty member

- resume/CV
- statement of purpose describing professional aspirations and rationale for pursuing graduate study
- three letters of recommendation addressing the substance and quality of the student's preparation for graduate study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

## Degree Requirements

The Master of Science (M.S.) degree with a major in Wildlife Ecology requires 30 semester credit hours, including a thesis. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
BIO 7405	Statistics and Experimental Design I	4
BIO 7406	Statistics and Experimental Design II	4
<b>Seminars</b>		
Choose one of the following seminar options:		3-4
Option A - Choose 3 hours from the following:		
BIO 5110	Seminar in Biology (Repeatable for credit)	
BIO 7102	Seminar in Aquatic Resources (Repeatable for credit)	
Option B - Choose 2 seminars from Option A and:		
BIO 5295	Fundamentals of Research	
<b>Electives</b>		
Choose a minimum of 13 hours of advisor-approved electives		13
<b>Thesis</b>		
BIO 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
BIO 5199B	Thesis	
BIO 5299B	Thesis	
BIO 5399B	Thesis	
BIO 5599B	Thesis	
BIO 5999B	Thesis	
<b>Total Hours</b>		<b>30-31</b>

## Comprehensive Examination Requirement

All master's students are required to take a final, comprehensive examination. In the Biology Department this exam is administered by

the student's committee. Students on academic probation or conditional status are not permitted to take the final, comprehensive examination.

Grading of the final exam is "pass" or "fail." In order to pass, a student must receive votes of confidence from the major professor and a majority of the committee members (including the major professor). A student can be failed over the advisor's positive vote if the majority of the committee votes not to pass. Such outcomes may be appealed to the Graduate Committee, whose decision is final.

The comprehensive examination is oral and is scheduled after the thesis is complete. This examination will normally take the form of a thesis defense and will be immediately preceded by a public presentation of the thesis work. Students should discuss the exam with their committee members beforehand to know their expectations and how best to prepare.

The time and place of the thesis presentation and defense must be announced to the Biology Department and the general public at least two weeks before the actual event. A link for electronic submission of this information is available on the Biology Department web site. It is the student's responsibility to schedule this exam after receiving permission to proceed from his or her major professor.

The thesis defense is in two stages, a public, 30 to 40-minute presentation of the thesis work followed by a closed examination by the thesis committee. After the presentation, questions from the audience will be entertained, but the actual examination phase will not begin until after the general audience has been excused. The exam performance is graded by the committee as "pass" or "fail." A grade of "pass" means that the thesis requires no or only minor revisions. Under such circumstances, the thesis committee signs the examination report and entrusts oversight of any needed revisions to the major professor. In the event a student fails the exam, the committee may recommend revisions to the thesis and upon the completion of these revisions, a new defense and oral examination; or the committee may require the student to undertake a new thesis under the supervision of the same, or a different, thesis committee; or the committee may recommend the student be dismissed from the Biology graduate program. Only one re-examination is permitted.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review



Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Biology: BIO

## Courses Offered

### Biology (BIO)

#### BIO 5100. Professional Development.

This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis. Graded on a credit (CR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

#### BIO 5110. Seminar in Biology.

Interactive discussion of timely issues and problems, designed to expose students to the current literature in their fields of interest and its critical analysis. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Header

**Grade Mode:** Standard Letter

**BIO 5114. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5214 and BIO 5314.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5166. Medical Microbiology Laboratory.**

This graduate laboratory-based course will cover pathogenic bacteria emphasizing identification of selected groups of pathogens and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5176. Microbial Biotechnology Laboratory.**

This laboratory-based course will cover use of microbes for biotechnological applications and is designed to provide practical explorations into fields of biotechnology. Topics include laboratory techniques for recombinant protein purification, fermentation, identification of markers in genetically modified food and bio-remediation of pollutants. Corequisite: BIO 5376.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5214. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5314.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5295. Fundamentals of Research.**

Designed to acquaint the beginning graduate student with materials and methods of research in the biological sciences. It is recommended that a graduate student take this course the first semester in residence.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5300. Neurobiology.**

This course presents the biology of the nervous system with emphasis on the human nervous system. Topics presented in lecture include neuroanatomy, cellular neurobiology, neurophysiology, developmental neurobiology, and neuronal plasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5301. Evolution.**

Basic genetic principles applied to natural selection, adaptation, populations, and speciation. Consideration is given to the origin of life, nature of chromosomal variation, evolution of genetic systems, and certain other selected topics.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5304. Wildlife and Recreation: Impact and Management.**

Students will be introduced to the impact human recreational activities have on wildlife habitats and populations. Management practices to enhance human-wildlife encounters or to minimize detrimental effects on wildlife populations will be presented.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5305. Methods of Nature Study for Teachers.**

This course provides a comprehensive survey of natural events. It includes laboratory and field work emphasizing observation, collection and discovery of relationships. It is creditable only for those seeking elementary or middle school certification and is required for those seeking grade 4-8 Science or Science/Mathematics teaching certification. This course must be taken the semester immediately prior to student teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5307. Ecology of Rarity.**

This course will examine the ecology of rarity and its ability to inform public awareness and environmental policy. This course will explore how we define rarity, persistence and viability. Is rarity more or less common than might be expected, and is there anything we can or should do about it?

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 5311. Cancer Biology.**

Cancer Biology provides a foundation for understanding the complex molecular, biochemical, and cellular processes associated with cancer development. Topics include the role of tumor suppressor genes, oncogenes, DNA repair, apoptosis, ECM, cell-cycle control, cell signaling pathways, immune function and cancer-causing viruses. Emerging diagnostics and/or therapeutics will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5314. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5317. Interpretive Biology Programming and Design.**

In this course, students will explore the methods and principles used by the National Park Service, museums, environmental centers, and state park systems to interest a variety of audiences as well as interpret biology and natural environments effectively. Students will practice skills in both personal and non-personal interpretation by creating science outreach programs, interpretive literature, brochures, path waysides, and other interpretive media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5319C. Ecotoxicology.**

Topics to be covered include sources, types, and fates of toxicants, organism response to toxicants, toxicant effects at the population, community, and ecosystem levels, and monitoring and risk assessment. Examination of current literature will form the core of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5319F. Watershed Management Frameworks and Applications.**

Introduction to integrated watershed assessment and management tools for identifying programmatic water quality and quantity issues and their root causes and solutions, and their practical application. The scientific and socio-economic elements are considered within the context of planning and developing watershed protection plans and programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5327. Issues in Irish Biodiversity and Conservation.**

In this course, students will learn about Irish flora and fauna, ecosystems, conservation strategies in areas of high ecological concern, and public involvement. Emphasis will be placed on case studies and service-learning opportunities. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5328. Field Biology of Ireland.**

In this course, students will use multiple techniques to explore biodiversity across multiple ecosystems in Ireland. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5329. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5331. Human Dimensions of Wildlife and Fisheries Conservation.**

Humans play a role in nearly every aspect of wildlife and fisheries conservation. This course will provide students with principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will also have an opportunity to integrate human dimensions into local decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5332. Biology in Film and Television: An Analysis of the Biology in Fiction and Non-Fiction Film and TV.**

This course explores how biology is portrayed in popular motion pictures with an emphasis on analyzing biological accuracy, misconceptions perpetuated or portrayed, and investigating the rationale behind motion picture directors' and writers' decisions about how they portray biological content in the final product. As part of this course students will watch and discuss a curated list of films and television shows and write an analysis of each film or TV episode.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5350G. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their ability to cause disease, emphasizing the biological basis for virulence, and research strategies for investigating infectious diseases. Students may take only one of BIO 5350G or BIO 5445 for credit. Prerequisite: BIO 2400 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350I. Emerging Infectious Diseases.**

Current topics in the emergence of viral and bacterial diseases in humans. This course will include new diseases, diseases previously seen and increasing in incidence, and diseases not previously seen in this country. This course will be of interest to students who are pursuing advanced degrees and courses in microbiology, biochemistry, and cell and molecular biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5350J. Environmental Physiology of Animals.**

This course is a study of how animals respond physiologically to changes in environmental temperature, moisture, salinity, partial pressure of gases, and toxins. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350K. Genomics.**

The course is a lecture course in modern genomics, including principles of genome function, the human genome, comparative genomics, genome sequencing, evolution and genomic change, databases and medicine, ethical, legal and social issues. The course also includes discussion of transcriptomics, proteomics, metabolomics, directed evolution, protein design, and systems biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350M. Wildlife Policy and Law in North America.**

This course provides the student with a historical and cultural context within which wildlife policy and law (federal treaties, statutes, case law, and regulations) have developed in North America, particularly in the United States. Graduate students will research the development of Wildlife law in representative states as well.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350O. Tropical Ecology and Conservation.**

Students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems.

**3 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350P. Tropical Ecology and Conservation Lab.**

This laboratory course complements the lecture course BIO 5350O, in which students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems. Corequisite: BIO 5350O.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Co-requisite(s):** BIO 5350O

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350Z. Diversity and Cultural Impact of Geoparks.**

Students will explore biological differences in diversity across Geoparks in the United States and Ireland. Additionally, students will study the cultural impact that Geoparks have on the local community and national policy by focusing on differences between science communication strategies and community engagement practices conducted at the parks. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351G. Omics Approach to Microbiology.**

This course covers contemporary approaches, techniques and bioinformatic tools used to study function and ecology in microbial communities. Topics covered will include microbiome, next-generation sequencing, metaproteomics, and their applications to clinical, agricultural, environmental and industrial needs.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351I. Global Change Biology.**

This course will give an in-depth analysis of the major global changes occurring in present day biological systems. The focus of the course will be on climate change, invasive species, eutrophication, land use change and biodiversity loss. Emphasis will be placed on peer-reviewed literature to better understand how biologists study processes at the global scale. Potential solutions to these global challenges will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351J. Comparative Immunology.**

While most textbooks would present the immune system of animals as a monolith with little variation between species, we are quickly learning that this is not the case. Indeed animal immune systems are immensely diverse. This class will consist of a taxonomic survey of metazoan immune systems, focusing on the evolutionary causes and ecological consequences of this diversity in immune systems across animals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351P. Ecology and Conservation Abroad.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351Q with a grade of "C" or better.

**3 Credit Hours. 20 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351Q. Ecology and Conservation Abroad Lab.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351P with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5356. Plant Physiology.**

Basic principles of plant physiology are studied in lecture and laboratory. Previous courses in biochemistry and genetics are strongly recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5363. History of Medicine.**

This course covers significant concepts, developments, individuals, and events in the history of medicine from antiquity to modern day. Topics include the impact of disease on medical practice, the development of hospitals as sites for care, teaching, and research, how medical science and technology are continuously defined by social, cultural, and political ideas, and the historical roots of several themes in medical ethics. This course will be delivered as an Education Abroad course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5364. Explorations in Physiology.**

This course will cover the basic principles of physiological systems and the function of organ systems with an emphasis on humans and other mammals. The focus will be on the interplay between and among multiple organ systems and holistic systems integration. Other topics include the pathophysiology underlying common diseases, drug therapies and treatments, and emerging physiological research. This course will also provide the opportunity for experiential learning gained in diverse cultural settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5366. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their relationship to disease, emphasizing critical evaluation of research literature, disease transmission and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5374. Principles of Zoo Management.**

This course is designed to introduce the principles of captive animal management within conservation and education-based zoos. Zoo management requires a broad understanding of the life history and biological needs of many different species; we will explore the ways modern zoos address these needs and the ways in which future zoos could address them more effectively. Specific topics will include animal husbandry, welfare, nutrition, and behavior as well as environmental enrichment, captive breeding, conservation, zoo regulatory frameworks, ethical concerns, and zoo careers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5376. Microbial Biotechnology.**

This course provides an overview of how microbes (e.g., bacteria, viruses and yeast) are manipulated to solve practical problems through biotechnology. This course design is based on topics of applied microbiology as recommended by American society of Microbiology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**BIO 5377. Genome Informatics.**

The course will cover basic knowledge on genomics and its bioinformatics tools. Students will learn current topics on genomics and bioinformatics, and will analyze genomic data using statistical software. All the analyses will be performed using a personal and a cluster computer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5388. Habitat Ecology.**

The course will emphasize and reinforce in students an appreciation for the importance of habitat in understanding a wide range of processes and patterns in Ecology. Course will explore the process of habitat selection, in the context of animal behavior, population dynamics, and modeling. Students will learn and apply methods and techniques of statistically analyzing the habitat associations of species. The central role of habitat in species conservation will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5390. Problems in the Biological Sciences.**

Open to graduate students on an individual basis by arrangement with the faculty member concerned.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in BIO 5399B. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5400. Plants Important for Wildlife.**

This course explores plant and plant part (specifically gall, fruit, seed, and twig) identification, phylogenetics, co-evolution of plant defenses, economic and ecological impacts of plant uses by wildlife.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5402. Earth Science I.**

A study of astronomy and meteorology through observation, description, and interpretation of earth phenomena. Includes field observations, methods of measurement and interpretation of data related to the physical environment and space technology. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5403. Earth Science II.**

The description and interpretation of earth phenomena considered from the standpoint of geology and oceanography. Includes field observations, methods of sampling and interpretation of data related to the physical environment. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5408. Science Processes and Research.**

Students will analyze scientific research design, design research, interpret data, and communicate results. Stress will be placed on broad-field structure and integration of major science concepts and research-based science pedagogy. This course must be taken the semester prior to student teaching and is required for those seeking 7-12 Life Science or Science teacher certification. This course may not count as one of the four upper-level Biology courses required of general Biology majors, or one of the three upper-level Biology courses required of Biology minors.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5410. Field Biology of Plants.**

Ecological relationships and natural history of plants, including historical geology, geography, soils, and vegetational regions of Central Texas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5411. Morphology of the Vascular Plants.**

A phylogenetic survey of living and fossil vascular plants that focuses on external morphology and reproductive biology. Topics include phylogenetic reconstruction, the origin of vascular plants, seed reproduction, and the origin of angiosperms. Emphasis is on broad-scale evolutionary patterns and origin of major taxonomic groups.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5412. Plant Anatomy.**

A descriptive and functional analysis of seed plants that focuses on internal structure. Topics include recognition and characterization of plant tissues, the structure of plant organs, and organ development. Emphasis is on pattern of tissue organization common to all seed plants and the functional basis for anatomical structure.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5413. Parasitology.**

The biology and biological significance of the common parasites of man and animals.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5415. Ichthyology.**

An introduction to the morphology, taxonomy, natural history, and evolution of fishes. Field trips will be made to collect specimens, and laboratory periods will be devoted to morphological and systematic analyses.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5418. Field Ornithology.**

This course is designed to introduce and provide an advanced knowledge of the application of various field, laboratory, and statistical methods and techniques in the study of avian species. The course will include topics related to survey methodology, sampling design, marking/banding, measurement/sample extraction, and aging/sexing of avian species.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5420. Natural History of the Vertebrates.**

Environmental relationships and natural history of vertebrates. Emphasis is on evolution taxonomy, speciation, behavior, and morphology. Laboratory will include field trips for the study and collection of vertebrates in their natural habitats. Students will assemble a representative collection of vertebrates.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5421. Ornithology.**

Introduction to anatomy, behavior, ecology, and identification of the birds of Texas. Laboratory will emphasize field studies of birds and their habitat requirements.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5422. Mammalogy.**

The taxonomy, distribution, ecology, behavior, and evolution of mammals with particular emphasis on wild mammals of the Southwest. Laboratory will emphasize anatomy, identification, preparation of specimens, and field exercises in methods of population analysis. Students may assemble representative mammal collection.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5423. Wildlife Management.**

Application of ecological principles and natural history concepts to the management of wildlife habitats and populations. Laboratory will involve demonstrations and practice exercises with wildlife management techniques and instrumentation, and field trips to observe wildlife management projects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5424D. Vertebrate Endocrinology.**

This course teaches function and organization of the endocrine system. It describes the major endocrine glands, the synthesis and release of their hormone products, and the interaction with target tissues. Endocrine control of digestion, growth, reproduction, and homeostasis will be compared between mammals and other vertebrate groups.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5432. Bacterial Genomics.**

The course will offer hands-on training on contemporary approaches, techniques, and bioinformatic tools used to study bacterial genomes. Topics covered include DNA sequencing, assembling and annotating genomes, all with a strong emphasis on computational biology. At the end of this course, students will be familiar with bioinformatics tools used to analyze genes and genomes.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5435. Techniques in Wildlife Management.**

The basic methodology of practical wildlife management. This involves techniques in monitoring and data collection related to population dynamics and habitat parameters of wildlife species as well as field research.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5436. Tropical Biology.**

This course entails an analysis and evaluation of the governing principles of tropical ecosystems, including wildlife ecologies, geological processes, and environmental-cultural interactions. In the laboratories, students will compare ecological relationships that influence tropical biology, discuss peer-reviewed literature and examine tropical flora and fauna during field trips to regional sub-tropical areas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5441. Cellular Physiology.**

Advanced cellular biology, including membrane physiology, thermodynamics, energy transduction and distribution, and cellular movement in non-muscle and muscle cells. Laboratory includes discussion of current research and exercises in cellular physiology.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5443. Fish Physiology.**

This course examines the primary physiological functions in fish including how fish sense and interact with the environment, maintain their energetic metabolism (respiration, digestion and excretion), reproduce and maintain water balance. Students will learn about the diverse adaptations fish use to cope with environmental and physiological challenges.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5448. Bacterial Genetics.**

This course will cover concepts and mechanisms involved in the genetics of Archaea and Bacteria. Graduate students will learn current strategies dealing with traditional molecular genetics including post-transcriptional regulation involving small non-coding RNA. In addition graduate students will also write a critical review on a research article from relevant topic.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5454. Plant Ecology.**

Functional ecology of terrestrial plants, plant populations, and communities. Laboratory emphasizes quantitative and experimental approaches to plant ecology and the use of field and laboratory physiology equipment.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5465. General Entomology.**

Principles of morphology, physiology, and taxonomy of insects. Laboratory time will be devoted to a taxonomic study of the common orders and families of insects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5466. Phylogenetic Methods.**

Reconstructing phylogenies is important in most fields of biology. Course emphasis is on practical data collection, management, and analysis. Laboratory exercises will introduce phylogenetic and DNA analysis software, and WWW resources. Students will learn how to address questions in their own research using phylogenetic methodologies.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5470. Limnology.**

Physical, chemical, and biological factors affecting productivity in lakes, ponds, and streams. Limnology sampling methods, chemical and biological analysis of samples, and hydrographic surveying are included in the laboratory.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5472. Animal Behavior.**

This course presents all the major facets of the study of animal behavior, giving special attention to its evolution and ecological significance. We will discuss major conceptual models guiding past and present research in the field. Laboratories will emphasize experimental techniques and statistical analysis.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5480. Cytology and Micro-technique.**

Study of cellular ultra-structure and electron micro technique. Lecture portion of course will cover cytology of all cell types and theoretical aspects of light microscopy and electron microscopy. Laboratory portion will train students to proficiency in microscopy.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5481. Internship in Biological Laboratory Technologies.**

The student will participate in the work of a selected biology unit (private, commercial, or governmental). A research paper reporting the internship experience conducted at the biological unit under the supervision of a faculty member will be required. This course may be credited toward a biology major with prior approval of the graduate advisor and department chair.

**4 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5490. Principles of Developmental Biology.**

This course will cover basic principles of developmental biology in both plant and animal systems. The course will mainly address cell, molecular and genetic mechanisms underlying the development of model organisms, mainly focusing on *Drosophila* (animal) and *Arabidopsis* (plant).

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

The graduate minor in Aquatic Resources requires 6 semester credit hours. This minor is only available for graduate students seeking a Biology major.

Code	Title	Hours
<b>Required Courses</b>		
Choose 6 hours from the following:		6
BIO 5319C	Ecotoxicology	
BIO 5319F	Watershed Management Frameworks and Applications	
BIO 5335		
BIO 5362		
BIO 5390	Problems in the Biological Sciences	
BIO 5415	Ichthyology	
BIO 5419		
BIO 5470	Limnology	
<b>Total Hours</b>		<b>6</b>

The graduate minor in Biology requires 15 semester credit hours.

Code	Title	Hours
<b>Electives</b>		
Choose 15 hours of advisor approved 5000- or 7000-level BIO courses		15
<b>Total Hours</b>		<b>15</b>

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[www.txstate.edu/chemistry](http://www.txstate.edu/chemistry) (<http://www.txstate.edu/chemistry/>)

The department offers M.S. degree programs in both Chemistry and Biochemistry. In addition, the department offers a M.A. degree program in Chemistry. The M.S. degrees are research-based and require a thesis while the M.A. degree is course-based and requires successful completion of a cumulative examination. Our faculty are dedicated to maintaining excellence in education and research to serve the people of Texas and beyond. The department fosters innovative research programs that expand knowledge through discovery and development, actively contribute to the broader scientific community, and address critical global needs. We are committed to the professional development and mentoring of a diverse and inclusive community of faculty, staff, and students. The curriculum provides opportunities for research and learning in all areas of chemistry and biochemistry and encourages a hands-on approach to the use of a wide variety of modern instrumentation. Many of our graduates have advanced to industrial positions and/or professional and doctoral programs.

## Research Areas

The department's graduate faculty conducts research in numerous areas of the five subdisciplines of chemistry. Specific research areas include:

Field of Chemistry	Research Areas
<b>Analytical</b>	mass spectrometry, chromatography, electrochemistry, spectral methods
<b>Biochemistry</b>	enzyme isolation, and mechanisms, protein structure-function relationships, molecular genetics, gene delivery, nucleic acid biochemistry, ribonucleoprotein complex function and regulation, genomics, biophysical chemistry, biomaterials
<b>Inorganic</b>	synthesis and structure of high conductivity solid-state electrolyte compounds, bioinorganic chemistry, solid state synthesis, metal complex catalysis, intercalation chemistry, crystallography, synthetic main group organometallic chemistry
<b>Organic</b>	medicinal chemistry, small molecule synthesis, physical organic chemistry, reactive intermediates, polymer synthesis, photochromism
<b>Physical</b>	nanocomposites, thin organic films, structure-property relationships, electronic polymers, computational chemistry

## Research Facilities

Research instruments available include 400 and 500 MHz NMR, X-ray Diffractometer, UV and IR spectrophotometers, atomic absorption, liquid and gas chromatographs, electrospray ionization/mass spectrometer, high-speed centrifuges, TGA, DSC, DMA, particle size analyzer, GPC, epi-fluorescent microscope, CO<sub>2</sub> incubators, and multi-well plate

readers. A complete list of instrumentation can be found here (<https://www.txstate.edu/chemistry/research/facilities.html>).

## Financial Assistance

Graduate students are encouraged to work as graduate instructional assistants. Applications can be obtained from the Department of Chemistry and Biochemistry website. A limited number of research assistantships are also available based on available funding from individual research advisors. The Graduate College can provide information about the availability of graduate scholarships. To be considered for assistantships or scholarships, applicants must have submitted a completed application for review by the priority application deadline.

## Doctor of Philosophy (Ph.D.)

- Major in Integrated Molecular and Biophysical Chemistry

## Master of Arts (M.A.)

- Major in Chemistry (p. 2881)

## Master of Science (M.S.)

- Major in Biochemistry (p. 2885)
- Major in Chemistry (p. 2890)

## Bachelor of Science (B.S.) and Master of Science (M.S.)

- Major in Biochemistry (Early-Entry Program) (p. 2896)
- Major in Chemistry (Early-Entry Program) (p. 2896)

## Minors

- Biochemistry (p. 2896)
- Chemistry (p. 2896)

### Program Overview

The Integrated Molecular and Biophysical Chemistry PhD program emphasizes the chemistry and biochemistry of natural systems. This is an interdisciplinary program that spans biochemistry, biophysics, organic synthesis, medicinal chemistry, biological chemistry, cell biology, and molecular genetics. The curriculum is designed to develop deep technical and research skills coupled with leadership, communication, and business fundamental skills to prepare students for careers within and beyond the rapidly growing biotechnology sector.

### Educational Goals

Based on the curricular areas and expectations described above, the main educational objectives of this program are to equip graduates with:

1. comprehensive technical knowledge spanning synthesis, biochemistry, and biophysics.
2. advanced research skills to allow students to design and implement experiments to test hypothesis and engage in multidisciplinary research.
3. leadership, innovation, communication, business, and entrepreneurial skills to prepare students for multiple career environments.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 non-refundable application fee

or

- \$90 non-refundable application fee for applicants with international credentials
- completed bachelor's degree in chemistry, biochemistry, molecular biology, or a closely related discipline from an accredited college or university. At a minimum, students must have completed at least one year each of biology, organic chemistry, calculus, and physics. Additional advanced coursework and research experience is highly encouraged. Students who have earned a master's degree or completed some graduate coursework at an accredited college or university may apply to have up to 21 credits applied toward their degree.
- official transcripts from **each institution** where course credit was granted
- competitive GPA
- GRE not required
- resume/CV outlining education, work experience, scholarships/grants, publications/presentations, other accomplishments
- statement of purpose outlining the applicant's personal history, goals that are relevant to obtaining this doctoral degree, and how this degree will help the applicant achieve these goals
- three letters of recommendation evaluating the applicant's skill and potential in this degree program

### TOEFL, PTE, IELTS or Duolingo Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall.
- official PTE scores required with a 52 overall.
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall.
- official TOEFL Essentials scores required with an 8.5 overall.

This program does not offer admission if these scores are not met.

### Additional Information:

The program will admit full-time students for fall admission.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Integrated Molecular and Biophysical Chemistry requires 72 semester credit hours.



## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CHEM 7110	Advances in Molecular and Biophysical Chemistry <sup>1</sup>	4
CHEM 7201	Graduate Laboratory Rotations	2
CHEM 7395	Fundamentals in Molecular and Biophysical Chemistry	3
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship	3
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship	3
<b>Prescribed Electives</b>		
Choose 21 hours from the following:		21
BIO 7360I	Bayesian Statistics for Biology	
BIO 7360Y	Applied Bioinformatics	
CHEM 5310	Medicinal Chemistry	
CHEM 5312	Organometallic Chemistry	
CHEM 5313	Principles and Applications of Mass Spectrometry	
CHEM 5321	Advanced Organic Chemistry	
CHEM 5330	Physical Chemistry	
CHEM 5341	Inorganic Chemistry	
CHEM 5365	Separation Methods in Chemical Analysis	
CHEM 5381	Physical Biochemistry	
CHEM 5382	Enzymology	
CHEM 5383	Molecular Biology & Molecular Genetics	
CHEM 5386	Proteins	
CHEM 5387	Nucleic Acids Chemistry	
CHEM 5390	Supramolecular Chemistry	
CHEM 7200	Graduate Research <sup>2</sup>	
CHEM 7300	Graduate Research <sup>2</sup>	
CHEM 7305	Special Topics in Molecular and Biophysical Chemistry	
CHEM 7311	Natural Products, Anti-Infective, and Anti-Cancer Agents	
CHEM 7342	Bioinorganic Chemistry	
CHEM 7361	Quantitative Methods in Biophysical Chemistry	
CHEM 7385	Metabolism and Metabolomics	
CHEM 7391	Chemical Biology	
MSEC 7304	Collaborative Research/Commercialization Experience <sup>2</sup>	
MSEC 7340	Biomaterials and Biosensors	
<b>Dissertation</b>		
Choose a minimum of 36 hours from the following:		36
CHEM 7199	Dissertation	
CHEM 7299	Dissertation	
CHEM 7399	Dissertation	
CHEM 7599	Dissertation	
CHEM 7699	Dissertation	
CHEM 7999	Dissertation	
<b>Total Hours</b>		<b>72</b>

<sup>1</sup> This course must be repeated each semester for the first four semesters.

<sup>2</sup> These courses may be taken for up to 9 semester credit hours to satisfy the prescribed electives.

### Candidacy Criteria

Students will advance to candidacy after they have completed all required and elective course work (except for dissertation credit hours), passed their comprehensive exam, and successfully defended their dissertation proposal. This should be done after the student has completed 36 credit hours and before they have completed 45 credit hours. Once all requirements are met, the doctoral program director will forward the Application for Advancement to Candidacy form to the Dean of The Graduate College for review and approval.

### Comprehensive Exam

Each doctoral student must pass a comprehensive oral examination that takes place in conjunction with the dissertation proposal defense.

Committee members will ask the student to answer questions based on prior coursework, fundamental principles related to their project, and topics related to the student's independently researched seminar. The student is considered to have passed this exam with a majority vote of the committee.

This exam should take place commensurate with the dissertation proposal defense following the completion of all core requirements. It can only be done after identifying the dissertation committee, presenting an independently researched seminar, and completing all required courses and boot camps. If the comprehensive exam is not passed, the student will have the option of taking a second and final comprehensive exam within one long semester. Students will be dismissed from the program if they do not pass the comprehensive exam the second time. Any student who has not taken the comprehensive exam or has not passed the comprehensive exam by the time 45 semester credit hours have been accrued will be dismissed from the program.

### Dissertation Proposal and Proposal Defense

Each PhD student must prepare a written dissertation proposal and defend it orally. This should be done commensurate with the comprehensive exam after the student has completed 36 semester credit hours. The same requirements are in place as per the comprehensive exam: the student must have completed all required courses and boot camps and presented their seminar. Any student who does not defend his/her dissertation proposal by the time 45 semester credit hours have been accrued will be dismissed from the program. If the proposal defense is not passed, the student will have the option of taking a second and final proposal defense in the following long semester. Students will be dismissed from the PhD program if they do not pass the proposal defense the second time. Students in good standing that are dismissed from the program will be encouraged to complete a degree in our master's program using a thesis or non-thesis option, depending on the status of their research.

The dissertation proposal must outline the substance and scope of the planned dissertation research and explain its merits. It has to include at least an introduction, methodology to be used, a survey of the relevant literature, and preliminary results that demonstrate the feasibility of the research project. The goal of the proposal is to establish that the student

has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

The proposal defense entails a public presentation of the student's dissertation proposal followed immediately by a closed defense of the proposal attended only by the student and their dissertation committee. The dissertation proposal must be approved by the majority of the members of the dissertation committee. The student's dissertation committee members must indicate their approvals on the doctoral Dissertation Proposal Form as well as on the Defense of Dissertation Proposal Form. These forms are available on The Graduate College's website.

A final copy of the dissertation proposal, accompanied by the signed approval forms, must be turned in to the doctoral program director, who will forward them to the dean of The Graduate College for review and final approval.

### **Candidacy and Dissertation**

When all requirements for admission to candidacy have been met, the doctoral program director will forward the Application for Advancement to Candidacy to the Dean of The Graduate College for review and approval. This application form is available on The Graduate College's website.

A minimum GPA of 3.0 on all coursework undertaken in the doctoral program is required for admission to candidacy. Grades below a B on any graduate coursework cannot be applied toward the doctoral degree. Incomplete grades must have been cleared before approval for advancement to candidacy can be granted. No more than six semester credit hours of dissertation research can be taken before advancing to candidacy. No credit will be applied toward a student's doctoral degree for coursework completed more than five years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at Texas State as well as course credit transferred to Texas State from other institutions.

All doctoral students must complete a dissertation that consists of original research and demonstrates mature scholarship and critical judgment in addition to familiarity with tools and methods in the chosen area. The dissertation project should result in at least one peer-reviewed publication. The dissertation project must adhere to the dissertation proposal and cover the topic approved by the student's dissertation committee.

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. At least 36 semester credit hours of dissertation research must be taken after having advanced to candidacy. If a student is receiving supervision on a dissertation during the summer or if the student is graduating in the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours.

All doctoral students must complete a dissertation that consists of original research and demonstrates mature scholarship and critical judgment in addition to familiarity with tools and methods in the chosen area. The dissertation project should result in at least one peer-reviewed publication. The dissertation project must adhere to the dissertation

proposal and cover the topic approved by the student's dissertation committee.

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least two weeks before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the dissertation is defensible, and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of their dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense once they have addressed issues as determined by the committee. Students who do not pass the dissertation defense the second time will be dismissed from the program.

### **Dissertation Committee**

A student will select their dissertation advisor, who will serve as their dissertation committee chair, following laboratory rotations (CHEM 7201). The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the doctoral program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

The Dissertation Committee will be responsible for administering the Comprehensive Exam and the Dissertation Proposal Defense and will oversee the research and writing of the student's dissertation. The committee will consist of 4 members, including the student's dissertation committee chair who must be a regular graduate faculty member in the program, two other graduate faculty members from the chemistry and biochemistry department, and one graduate faculty from another department at Texas State University or an adjunct graduate faculty member (as defined by the Graduate College) from outside of the university. The student's dissertation advisor will chair the committee.

The student, the dissertation committee chair, and the Dean of The Graduate College will approve the composition of the dissertation committee.

As per Graduate College policy, the Dissertation Committee Chair Assignment form and the Dissertation Committee Request form must be completed and approved by the Dean of The Graduate College to form the dissertation committee. Any changes to the dissertation committee must be submitted using the Dissertation Committee Chair/Committee Member Change Request form for approval of the dissertation committee

chair, the doctoral program director, and the Dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense.

### Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least two weeks before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the dissertation is defensible, and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of their dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense once they have addressed issues as determined by the committee. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's website. The student must submit his/her dissertation to The Graduate College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Students must pass the dissertation defense by the time 99 semester credit hours have been accrued. The doctoral program will review each student annually to ascertain his/her progress towards the degree and will consult the student's dissertation advisor and dissertation committee on this matter as needed. Any student who does not pass the dissertation defense by the time 99 semester credit hours have been accrued will be dismissed from the program.

Doctoral level courses in Chemistry: CHEM (p. 2879)

## Courses Offered Chemistry, (CHEM)

### CHEM 7101. Doctoral Assistant Development.

This course is designed to prepare doctoral students employed as instructional assistants to perform effectively in diverse instructional settings. This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### CHEM 7110. Advances in Molecular and Biophysical Chemistry.

This course is designed to provide students in the Integrated Molecular and Biophysical Chemistry PhD program a forum to discuss ongoing research progress and new discoveries through literature study. Students in the course will give informal 'work in progress' presentations and critically analyze recent publications in the field.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CHEM 7199. Dissertation.

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### CHEM 7200. Graduate Research.

This course is designed to provide doctoral students with an elective research option to allow them to collect preliminary data as they develop their dissertation proposal.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### CHEM 7201. Graduate Laboratory Rotations.

This course is designed to assist students in selecting a doctoral committee chair by having them work in several laboratories during their first semester in the program.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 7299. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7300. Graduate Research.**

This course is designed to provide doctoral students with an elective research option to allow them to collect preliminary data as they develop their dissertation proposal.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7305A. Physico-Chemical Properties and Metabolism of Xenobiotics.**

This course is designed to introduce students to the concepts of physico-chemical properties of small molecules and how these impact the ability of these molecules to be used as probes in biological systems, focusing on the role that metabolic processes play in limiting or activating chemical probes and the role of chemical probes in investigating these processes. Students will explore experimental and computational methods for determining the relevant properties of compounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CHEM 7311. Natural Products, Anti-Infective, and Anti-Cancer Agents.**

This course is designed to introduce the natural products by discussing their important classes (secondary metabolites), classification, nomenclature, structure, biosynthesis, occurrence and structure elucidation. The study of their utilization in medicine as leads for the development of new antimicrobial and anticancer agents will constitute the main focus of the course. The students will learn how to utilize their knowledge of organic chemistry and biochemistry gained in undergraduate courses toward the application of advanced research active areas on chemistry-biology interface.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7330. Environmental Chemistry.**

An introduction to environmental chemistry, with an emphasis on aquatic resources. Basic principles of geochemistry and atmospheric chemistry, as they relate to pollutant impacts on aquatic ecosystems, also will be examined. Prerequisites: CHEM 2142 and CHEM 2342 and CHEM 3410 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7342. Bioinorganic Chemistry.**

This course is designed to provide a broad overview of metalloprotein active site design and reaction mechanisms catalyzed by metalloenzymes. Training sessions on the use of contemporary protein visualization tools will be provided and used throughout the course. Topics covered in the course include dioxygen transport and activating proteins, electron transfer proteins, dinitrogen (N<sub>2</sub>), and hydrogen (H<sub>2</sub>) activation, photosystem and oxygen evolution, zinc containing proteins, CO<sub>2</sub> reduction, and modern advancements in the field of bioinorganic chemistry. Students can expect to develop strong foundational knowledge in metalloenzyme structure, function, and reaction mechanisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7354. Eukaryotic Molecular Biology and Macromolecular Structure.**

This course is designed to cover the specific topics of the regulation of gene expression in eukaryotes, including eukaryotic DNA replication, DNA repair, DNA recombination, DNA transcription, RNA processing, translation, post-translational protein modification. This course will also introduce the application of macromolecular structure determination in eukaryotic gene expression and its regulation. Students can expect to develop a strong foundation in eukaryotic molecular biology, a strong ability to discuss literatures and some grant writing ability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7361. Quantitative Methods in Biophysical Chemistry.**

This course will integrate the physical, chemical, and biological aspects of fundamental biophysical methods, including spectroscopy, calorimetry, and hydrodynamics. Students will develop a quantitative skillset in multiple analytical methods that are used to characterize a variety of biological systems. This course will provide students with the physical and chemical foundation to quantitatively study biological macromolecules at multiple levels of complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7385. Metabolism and Metabolomics.**

This course is designed to introduce students to the metabolism of macromolecules and the principles and practice of metabolomics. It will cover (1) biosynthesis and biodegradation of carbohydrates, lipids, amino acids, proteins, and nucleic acids; (2) metabolomics principles; (3) applications of metabolomics in the biomedical field. Discussions of literature in metabolomics studies will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7391. Chemical Biology.**

This course will introduce the emerging field of chemical biology and common tools that are used to analyze and manipulate biological processes with small molecules. Students will develop a strong foundation in the design and synthesis of chemical tools to interrogate biological systems and focus on implementing and interpreting assays with these tools, using examples from the current literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7395. Fundamentals in Molecular and Biophysical Chemistry.**

This course is designed to provide a functional overview of the physics, chemistry, and biology concepts that are central to the practice of molecular biophysical chemistry. Students will develop a broad scientific foundation to pursue interdisciplinary projects within the biophysical and biochemical sciences, as well as productively interface and collaborate with colleagues across sub-disciplines throughout their doctoral studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7399. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7599. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7699. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7999. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

Students will gain a specialized body of knowledge that furthers their academic development, proficiency in laboratory techniques, and professional growth.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in chemistry from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose discussing career goals and undergraduate experiences
- two letters of recommendation regarding the student's academic potential and undergraduate research experience

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall



- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Chemistry requires 30 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CHEM 5321	Advanced Organic Chemistry	3
or CHEM 5330	Physical Chemistry	
CHEM 5365	Separation Methods in Chemical Analysis	3
CHEM 5370	Problems in Chemistry	3
CHEM 5395	Fundamentals of Research	3
<b>Electives</b>		
Choose 18 hours of advisor-approved electives		18
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

A written comprehensive examination given by three graduate faculty members is required. A second attempt is allowed if the student fails to pass.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Chemistry and Biochemistry: CHEM

## Courses Offered

### Chemistry (CHEM)

#### CHEM 5110. Seminar in Chemistry.

A course designed to acquaint the graduate student with current research areas in chemistry. May be repeated twice for total of 3 semester hour credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CHEM 5195. Professional Development of Graduate Assistants.

This course is designed to develop and enhance graduate assistants' laboratory instruction abilities. Topics covered in the course include effective lecture techniques, laboratory safety, theory and practical knowledge on laboratory experiments and laboratory section management. This course does not earn graduate credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CHEM 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CHEM 5285. Laboratory Development Practice.

This course develops the laboratory instructional abilities of post-baccalaureate students seeking either 8-12 Chemistry or 8-12 Physical Science Teaching Certification. Topics include both traditional laboratory techniques and guided inquiry techniques, safety, laboratory management, pedagogical theory and practical knowledge of laboratory experiments.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

#### CHEM 5295. Professional Development of Graduate Assistants.

This course is designed to develop and enhance graduate assistants' laboratory instruction abilities. Topics covered in the course include effective lecture techniques, laboratory safety, theory and practical knowledge on laboratory experiments and laboratory section management. This course does not earn graduate credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CHEM 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CHEM 5310. Medicinal Chemistry.

This course surveys modern approaches to drug discovery and mechanisms of drug action with the focus on molecular structures of drugs. Examples of drug discovery for the chemotherapy of cancer, microbial and cardiovascular diseases will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5311. Natural Products, Anti-Infective, and Anti-Cancer Agents.**

This course is designed to introduce natural products by discussing their important classes (secondary metabolites), classification, nomenclature, structure, biosynthesis, occurrence and structure elucidation. The study of their utilization in medicine as leads for the development of new antimicrobial and anticancer agents will constitute the main focus of the course. The students will learn how to utilize their knowledge of organic chemistry and biochemistry gained in undergraduate courses toward the application of advanced research active areas at the chemistry-biology interface.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5312. Organometallic Chemistry.**

This course will survey the structure, bonding, and reactivity of organometallic complexes. Homogeneous catalysis of the transition metals as well as the main group elements along with specialized "seminal research papers" in the field of organometallic chemistry will also be presented.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5313. Principles and Applications of Mass Spectrometry.**

This course is designed for graduate chemistry and biochemistry majors. Sections of the course are devoted to the theory and practice of mass spectrometry. Application to chemistry, biochemistry, biology and materials science will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5320. Modern Molecular Modeling.**

The application of computational techniques to molecular modeling. Topics covered include quantum mechanical modeling, force field based molecular modeling, energy minimization, molecular dynamics, vibrational spectra, solution of crystalline structures, diffraction patterns, molecular blends, phase equilibria, crystal morphology, physical property prediction, and mesoscale modeling. Prerequisites: CHEM 3340 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5321. Advanced Organic Chemistry.**

Study of the relation of the following topics to structure and reactions of organic compounds: bonding, stereochemistry, acid-base concepts, physical organic chemistry, reactive species, and mechanisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5330. Physical Chemistry.**

Fundamentals of physical chemistry are surveyed, emphasizing application in the other chemical sub-disciplines. Topics include classical thermodynamics, kinetics, atomic structure, and molecular spectroscopy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5333. Spectroscopy.**

Study of various spectrometric techniques in qualitative and structural analysis of chemical substances. Students who have completed CHEM 4333 or its equivalent may not take this course for master's credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5341. Inorganic Chemistry.**

This course will review essential concepts in inorganic chemistry including atomic structure, bonding theory, acid-base chemistry, solid state structures, and coordination chemistry. Analytical techniques for characterizing inorganic structures will be discussed along with current topics in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5342. Bioinorganic Chemistry.**

This course is designed to provide a broad overview of metalloprotein active site design and reaction mechanisms catalyzed by metalloenzymes. Training sessions on the use of contemporary protein visualization tools will be provided and used throughout the course. Topics covered in the course include dioxygen transport and activating proteins, electron transfer proteins, dinitrogen (N<sub>2</sub>), and hydrogen (H<sub>2</sub>) activation, photosystem and oxygen evolution, zinc containing proteins, CO<sub>2</sub> reduction, and modern advancements in the field of bioinorganic chemistry. Students can expect to develop strong foundational knowledge in metalloenzyme structure, function, and reaction mechanisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5351. Introduction to Polymers and Polymer Synthesis.**

This course is designed to develop the student's general understanding of polymer history and importance as well as terminology, structure, and synthesis. The overall scope of the course will be to develop the student's general knowledge of polymer synthesis and structure. Students who have completed CHEM 4351 or its equivalent may not take this course for master's credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5353. Polymer Processing and Characterization.**

This course is designed to explore the areas of polymer processing and characterization. Students will be introduced to extrusion, injection molding, film formation, thermoforming, thermal-mechanical measurements, classical mechanical testing, thermal-optical measurements, and methods for determination of polymer molecular weight. Prerequisites: CHEM 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5355. Physical Chemistry of Polymers.**

A study of the physical chemistry of polymers. Subjects covered include thermodynamics, kinetic polymerization, phase relationships, molecular geometry, spectroscopy of polymers, polymer physics and mechanical behavior, polymer blends, rheology, and polymer composites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5365. Separation Methods in Chemical Analysis.**

The principles of gas chromatography, capillary electrophoresis, and mass spectrometry are discussed with a balance among theory, practice, and application.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5366. Quantitative Methods in Biophysical Chemistry.**

This course will integrate the physical, chemical, and biological aspects of fundamental biophysical methods, including spectroscopy, calorimetry, and hydrodynamics. Students will develop a quantitative skillset in multiple analytical methods that are used to characterize a variety of biological systems. This course will provide students with the physical and chemical foundation to quantitatively study biological macromolecules at multiple levels of complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5370. Problems in Chemistry.**

Open to graduate students on an individual basis by arrangement with the faculty member concerned. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5375. Biochemistry.**

A course devoted to a study of the chemistry of carbohydrates, lipids, proteins, enzymes, and nucleic acids. A study of enzyme kinetics and thermodynamics of coupled reactions is included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5381. Physical Biochemistry.**

An introduction to the physical techniques of biochemistry with emphasis on the interpretation of experimental data obtained from electrophoresis, chromatography, immunological methods, ultracentrifugation, spectroscopy and emerging techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5382. Enzymology.**

A study of the chemical and physical properties of enzymes. Topics will include structure-function relationships, elucidation of chemical and kinetic mechanisms, and the role of enzymes in metabolism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5383. Molecular Biology & Molecular Genetics.**

This course addresses the basic genetic mechanisms of bacteria and eukaryotes and introduces some examples of the biochemical and genetic techniques employed to study cells, tissues, and organisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5384. Current Topics in Biochemistry and Molecular Biology.**

Course provides students with advanced knowledge in the areas of biochemistry and molecular biology. Topics include signal transduction and the molecular biology of cancer, as well as emerging topics in Genomics, Proteomics, and other new developments in biochemistry. May be repeated once for credit. Prerequisites: CHEM 5381 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CHEM 5385. Metabolism.**

A study of biodegradation and biosynthesis of carbohydrates, lipids, amino acids, proteins, and nucleic acids. Students who have completed CHEM 4385 or its equivalent may not take this course for master's credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5386. Proteins.**

This course will cover advanced biochemistry topics related to proteins. Topics will include protein structure, structure-function relationships, and current methodologies for examining proteins in addition to current findings in primary literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5387. Nucleic Acids Chemistry.**

This course will cover advanced biochemistry topics related to nucleic acids. Topics will include nucleic acid structures and properties, catalytic nucleic acids, protein-nucleic acid interactions, higher order complexes of protein-nucleic acids, and current methodologies for examining nucleic acids in addition to current findings in primary literature. Prerequisite: CHEM 5383 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5390. Supramolecular Chemistry.**

This course is designed to be a survey of the nature of non-covalent interactions between host and guest species. Emphasis will be focused on the rational design of hosts, thermodynamic and kinetic parameters involved in binding and the applications of various binding/recognition phenomena.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5391. Chemical Biology.**

This course will introduce the emerging field of chemical biology and common tools that are used to analyze and manipulate biological processes with small molecules. Students will develop a strong foundation in the design and synthesis of chemical tools to interrogate biological systems and focus on implementing and interpreting assays with these tools, using examples from the current literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5395. Fundamentals of Research.**

Course is designed to acquaint the beginning graduate student with materials and methods of chemical research. (MULT & MUDP).

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CHEM 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in CHEM 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Biochemistry is designed for students who have undergraduate degrees in Biology, Biochemistry, or Chemistry and wish to pursue advanced studies in Biochemistry.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in chemistry, biochemistry, or a closely related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose discussing career goals and undergraduate experiences
- two letters of recommendation regarding the student's academic potential and undergraduate research experience

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Biochemistry requires 30 semester credit hours including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CHEM 5110	Seminar in Chemistry (Taken three times)	3
CHEM 5381	Physical Biochemistry	3
CHEM 5384	Current Topics in Biochemistry and Molecular Biology	3
CHEM 5386	Proteins	3
CHEM 5387	Nucleic Acids Chemistry	3
CHEM 5395	Fundamentals of Research	3
<b>Prescribed Electives</b>		
Choose 6 hours from the following:		6
CHEM 5310	Medicinal Chemistry	
CHEM 5312	Organometallic Chemistry	
CHEM 5313	Principles and Applications of Mass Spectrometry	
CHEM 5320	Modern Molecular Modeling	
CHEM 5321	Advanced Organic Chemistry	
CHEM 5330	Physical Chemistry	
CHEM 5333	Spectroscopy	
CHEM 5341	Inorganic Chemistry	
CHEM 5351	Introduction to Polymers and Polymer Synthesis	
CHEM 5353	Polymer Processing and Characterization	
CHEM 5355	Physical Chemistry of Polymers	
CHEM 5365	Separation Methods in Chemical Analysis	
CHEM 5382	Enzymology	
CHEM 5383	Molecular Biology & Molecular Genetics	
CHEM 5385	MPMetabolism	
CHEM 5390	Supramolecular Chemistry	
BIO 5300	Neurobiology	
BIO 5311	Cancer Biology	
BIO 5480	Cytology and Micro-technique	
BIO 7361C	Advanced Genomics and Bioinformatics	
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship	
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship	
MSEC 7325	Principles of Technical Project Management	
MSEC 7340	Biomaterials and Biosensors	
<b>Thesis</b>		
CHEM 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
CHEM 5199B	Thesis	
CHEM 5299B	Thesis	
CHEM 5399B	Thesis	
CHEM 5599B	Thesis	
CHEM 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

An oral thesis defense is required to serve as the comprehensive examination. The thesis committee will decide whether the student passes or fails the defense. Should the student fail, a second oral defense is allowed.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision



is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Chemistry and Biochemistry: CHEM

## Courses Offered

### Chemistry (CHEM)

#### **CHEM 5110. Seminar in Chemistry.**

A course designed to acquaint the graduate student with current research areas in chemistry. May be repeated twice for total of 3 semester hour credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CHEM 5195. Professional Development of Graduate Assistants.**

This course is designed to develop and enhance graduate assistants' laboratory instruction abilities. Topics covered in the course include effective lecture techniques, laboratory safety, theory and practical knowledge on laboratory experiments and laboratory section management. This course does not earn graduate credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **CHEM 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **CHEM 5285. Laboratory Development Practice.**

This course develops the laboratory instructional abilities of post-baccalaureate students seeking either 8-12 Chemistry or 8-12 Physical Science Teaching Certification. Topics include both traditional laboratory techniques and guided inquiry techniques, safety, laboratory management, pedagogical theory and practical knowledge of laboratory experiments.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

#### **CHEM 5295. Professional Development of Graduate Assistants.**

This course is designed to develop and enhance graduate assistants' laboratory instruction abilities. Topics covered in the course include effective lecture techniques, laboratory safety, theory and practical knowledge on laboratory experiments and laboratory section management. This course does not earn graduate credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CHEM 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5310. Medicinal Chemistry.**

This course surveys modern approaches to drug discovery and mechanisms of drug action with the focus on molecular structures of drugs. Examples of drug discovery for the chemotherapy of cancer, microbial and cardiovascular diseases will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5311. Natural Products, Anti-Infective, and Anti-Cancer Agents.**

This course is designed to introduce natural products by discussing their important classes (secondary metabolites), classification, nomenclature, structure, biosynthesis, occurrence and structure elucidation. The study of their utilization in medicine as leads for the development of new antimicrobial and anticancer agents will constitute the main focus of the course. The students will learn how to utilize their knowledge of organic chemistry and biochemistry gained in undergraduate courses toward the application of advanced research active areas at the chemistry-biology interface.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5312. Organometallic Chemistry.**

This course will survey the structure, bonding, and reactivity of organometallic complexes. Homogeneous catalysis of the transition metals as well as the main group elements along with specialized "seminal research papers" in the field of organometallic chemistry will also be presented.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5313. Principles and Applications of Mass Spectrometry.**

This course is designed for graduate chemistry and biochemistry majors. Sections of the course are devoted to the theory and practice of mass spectrometry. Application to chemistry, biochemistry, biology and materials science will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5320. Modern Molecular Modeling.**

The application of computational techniques to molecular modeling. Topics covered include quantum mechanical modeling, force field based molecular modeling, energy minimization, molecular dynamics, vibrational spectra, solution of crystalline structures, diffraction patterns, molecular blends, phase equilibria, crystal morphology, physical property prediction, and mesoscale modeling. Prerequisites: CHEM 3340 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5321. Advanced Organic Chemistry.**

Study of the relation of the following topics to structure and reactions of organic compounds: bonding, stereochemistry, acid-base concepts, physical organic chemistry, reactive species, and mechanisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5330. Physical Chemistry.**

Fundamentals of physical chemistry are surveyed, emphasizing application in the other chemical sub-disciplines. Topics include classical thermodynamics, kinetics, atomic structure, and molecular spectroscopy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5333. Spectroscopy.**

Study of various spectrometric techniques in qualitative and structural analysis of chemical substances. Students who have completed CHEM 4333 or its equivalent may not take this course for master's credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5341. Inorganic Chemistry.**

This course will review essential concepts in inorganic chemistry including atomic structure, bonding theory, acid-base chemistry, solid state structures, and coordination chemistry. Analytical techniques for characterizing inorganic structures will be discussed along with current topics in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5342. Bioinorganic Chemistry.**

This course is designed to provide a broad overview of metalloprotein active site design and reaction mechanisms catalyzed by metalloenzymes. Training sessions on the use of contemporary protein visualization tools will be provided and used throughout the course. Topics covered in the course include dioxygen transport and activating proteins, electron transfer proteins, dinitrogen (N<sub>2</sub>), and hydrogen (H<sub>2</sub>) activation, photosystem and oxygen evolution, zinc containing proteins, CO<sub>2</sub> reduction, and modern advancements in the field of bioinorganic chemistry. Students can expect to develop strong foundational knowledge in metalloenzyme structure, function, and reaction mechanisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5351. Introduction to Polymers and Polymer Synthesis.**

This course is designed to develop the student's general understanding of polymer history and importance as well as terminology, structure, and synthesis. The overall scope of the course will be to develop the student's general knowledge of polymer synthesis and structure. Students who have completed CHEM 4351 or its equivalent may not take this course for master's credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5353. Polymer Processing and Characterization.**

This course is designed to explore the areas of polymer processing and characterization. Students will be introduced to extrusion, injection molding, film formation, thermoforming, thermal-mechanical measurements, classical mechanical testing, thermal-optical measurements, and methods for determination of polymer molecular weight. Prerequisites: CHEM 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5355. Physical Chemistry of Polymers.**

A study of the physical chemistry of polymers. Subjects covered include thermodynamics, kinetic polymerization, phase relationships, molecular geometry, spectroscopy of polymers, polymer physics and mechanical behavior, polymer blends, rheology, and polymer composites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5365. Separation Methods in Chemical Analysis.**

The principles of gas chromatography, capillary electrophoresis, and mass spectrometry are discussed with a balance among theory, practice, and application.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5366. Quantitative Methods in Biophysical Chemistry.**

This course will integrate the physical, chemical, and biological aspects of fundamental biophysical methods, including spectroscopy, calorimetry, and hydrodynamics. Students will develop a quantitative skillset in multiple analytical methods that are used to characterize a variety of biological systems. This course will provide students with the physical and chemical foundation to quantitatively study biological macromolecules at multiple levels of complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5370. Problems in Chemistry.**

Open to graduate students on an individual basis by arrangement with the faculty member concerned. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5375. Biochemistry.**

A course devoted to a study of the chemistry of carbohydrates, lipids, proteins, enzymes, and nucleic acids. A study of enzyme kinetics and thermodynamics of coupled reactions is included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5381. Physical Biochemistry.**

An introduction to the physical techniques of biochemistry with emphasis on the interpretation of experimental data obtained from electrophoresis, chromatography, immunological methods, ultracentrifugation, spectroscopy and emerging techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5382. Enzymology.**

A study of the chemical and physical properties of enzymes. Topics will include structure-function relationships, elucidation of chemical and kinetic mechanisms, and the role of enzymes in metabolism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5383. Molecular Biology & Molecular Genetics.**

This course addresses the basic genetic mechanisms of bacteria and eukaryotes and introduces some examples of the biochemical and genetic techniques employed to study cells, tissues, and organisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5384. Current Topics in Biochemistry and Molecular Biology.**

Course provides students with advanced knowledge in the areas of biochemistry and molecular biology. Topics include signal transduction and the molecular biology of cancer, as well as emerging topics in Genomics, Proteomics, and other new developments in biochemistry. May be repeated once for credit. Prerequisites: CHEM 5381 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CHEM 5385. Metabolism.**

A study of biodegradation and biosynthesis of carbohydrates, lipids, amino acids, proteins, and nucleic acids. Students who have completed CHEM 4385 or its equivalent may not take this course for master's credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5386. Proteins.**

This course will cover advanced biochemistry topics related to proteins. Topics will include protein structure, structure-function relationships, and current methodologies for examining proteins in addition to current findings in primary literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5387. Nucleic Acids Chemistry.**

This course will cover advanced biochemistry topics related to nucleic acids. Topics will include nucleic acid structures and properties, catalytic nucleic acids, protein-nucleic acid interactions, higher order complexes of protein-nucleic acids, and current methodologies for examining nucleic acids in addition to current findings in primary literature. Prerequisite: CHEM 5383 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5390. Supramolecular Chemistry.**

This course is designed to be a survey of the nature of non-covalent interactions between host and guest species. Emphasis will be focused on the rational design of hosts, thermodynamic and kinetic parameters involved in binding and the applications of various binding/recognition phenomena.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5391. Chemical Biology.**

This course will introduce the emerging field of chemical biology and common tools that are used to analyze and manipulate biological processes with small molecules. Students will develop a strong foundation in the design and synthesis of chemical tools to interrogate biological systems and focus on implementing and interpreting assays with these tools, using examples from the current literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5395. Fundamentals of Research.**

Course is designed to acquaint the beginning graduate student with materials and methods of chemical research. (MULT & Mulp).

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CHEM 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in CHEM 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Chemistry is designed to train professional chemists, enhance the training of chemistry teachers, and provide adequate background for further advanced study.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in chemistry from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- statement of purpose discussing career goals and undergraduate experiences
- two letters of recommendation regarding the student's academic potential and undergraduate research experience

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Chemistry requires 30 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CHEM 5110	Seminar in Chemistry (Taken 3 times)	3
CHEM 5395	Fundamentals of Research	3
<b>Core Courses</b>		
Choose 9 hours from the following:		9
CHEM 5321	Advanced Organic Chemistry	
CHEM 5330	Physical Chemistry	
CHEM 5341	Inorganic Chemistry	
CHEM 5365	Separation Methods in Chemical Analysis	
<b>Prescribed Electives</b>		
Choose 9 hours from the following: <sup>1</sup>		9
CHEM 5321	Advanced Organic Chemistry	
CHEM 5330	Physical Chemistry	
CHEM 5341	Inorganic Chemistry	
CHEM 5365	Separation Methods in Chemical Analysis	

CHEM 5310	Medicinal Chemistry
CHEM 5312	Organometallic Chemistry
CHEM 5313	Principles and Applications of Mass Spectrometry
CHEM 5320	Modern Molecular Modeling
CHEM 5333	Spectroscopy
CHEM 5351	Introduction to Polymers and Polymer Synthesis
CHEM 5353	Polymer Processing and Characterization
CHEM 5355	Physical Chemistry of Polymers
CHEM 5382	Enzymology
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CHEM 5385	MPMetabolism
CHEM 5390	Supramolecular Chemistry
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship
MSEC 7311	Materials Characterization
MSEC 7320	Nanocomposites
MSEC 7325	Principles of Technical Project Management
MSEC 7340	Biomaterials and Biosensors
MSEC 7370	Advanced Polymer Science

### Thesis

CHEM 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
CHEM 5199B	Thesis	
CHEM 5299B	Thesis	
CHEM 5399B	Thesis	
CHEM 5599B	Thesis	
CHEM 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> Cannot count courses taken for core credit.

## Comprehensive Examination Requirement

An oral thesis defense is required to serve as the comprehensive examination. The thesis committee will decide whether the student passes or fails the defense. Should the student fail, a second oral defense is allowed.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her



thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis

course runs ten weeks for both sessions) in which the degree will be conferred.

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The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Chemistry and Biochemistry: CHEM

## Courses Offered

### Chemistry (CHEM)

#### CHEM 5110. Seminar in Chemistry.

A course designed to acquaint the graduate student with current research areas in chemistry. May be repeated twice for total of 3 semester hour credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5195. Professional Development of Graduate Assistants.**

This course is designed to develop and enhance graduate assistants' laboratory instruction abilities. Topics covered in the course include effective lecture techniques, laboratory safety, theory and practical knowledge on laboratory experiments and laboratory section management. This course does not earn graduate credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

**CHEM 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5285. Laboratory Development Practice.**

This course develops the laboratory instructional abilities of post-baccalaureate students seeking either 8-12 Chemistry or 8-12 Physical Science Teaching Certification. Topics include both traditional laboratory techniques and guided inquiry techniques, safety, laboratory management, pedagogical theory and practical knowledge of laboratory experiments.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CHEM 5295. Professional Development of Graduate Assistants.**

This course is designed to develop and enhance graduate assistants' laboratory instruction abilities. Topics covered in the course include effective lecture techniques, laboratory safety, theory and practical knowledge on laboratory experiments and laboratory section management. This course does not earn graduate credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CHEM 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5310. Medicinal Chemistry.**

This course surveys modern approaches to drug discovery and mechanisms of drug action with the focus on molecular structures of drugs. Examples of drug discovery for the chemotherapy of cancer, microbial and cardiovascular diseases will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5311. Natural Products, Anti-Infective, and Anti-Cancer Agents.**

This course is designed to introduce natural products by discussing their important classes (secondary metabolites), classification, nomenclature, structure, biosynthesis, occurrence and structure elucidation. The study of their utilization in medicine as leads for the development of new antimicrobial and anticancer agents will constitute the main focus of the course. The students will learn how to utilize their knowledge of organic chemistry and biochemistry gained in undergraduate courses toward the application of advanced research active areas at the chemistry-biology interface.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5312. Organometallic Chemistry.**

This course will survey the structure, bonding, and reactivity of organometallic complexes. Homogeneous catalysis of the transition metals as well as the main group elements along with specialized "seminal research papers" in the field of organometallic chemistry will also be presented.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5313. Principles and Applications of Mass Spectrometry.**

This course is designed for graduate chemistry and biochemistry majors. Sections of the course are devoted to the theory and practice of mass spectrometry. Application to chemistry, biochemistry, biology and materials science will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5320. Modern Molecular Modeling.**

The application of computational techniques to molecular modeling. Topics covered include quantum mechanical modeling, force field based molecular modeling, energy minimization, molecular dynamics, vibrational spectra, solution of crystalline structures, diffraction patterns, molecular blends, phase equilibria, crystal morphology, physical property prediction, and mesoscale modeling. Prerequisites: CHEM 3340 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5321. Advanced Organic Chemistry.**

Study of the relation of the following topics to structure and reactions of organic compounds: bonding, stereochemistry, acid-base concepts, physical organic chemistry, reactive species, and mechanisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5330. Physical Chemistry.**

Fundamentals of physical chemistry are surveyed, emphasizing application in the other chemical sub-disciplines. Topics include classical thermodynamics, kinetics, atomic structure, and molecular spectroscopy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5333. Spectroscopy.**

Study of various spectrometric techniques in qualitative and structural analysis of chemical substances. Students who have completed CHEM 4333 or its equivalent may not take this course for master's credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5341. Inorganic Chemistry.**

This course will review essential concepts in inorganic chemistry including atomic structure, bonding theory, acid-base chemistry, solid state structures, and coordination chemistry. Analytical techniques for characterizing inorganic structures will be discussed along with current topics in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5342. Bioinorganic Chemistry.**

This course is designed to provide a broad overview of metalloprotein active site design and reaction mechanisms catalyzed by metalloenzymes. Training sessions on the use of contemporary protein visualization tools will be provided and used throughout the course. Topics covered in the course include dioxygen transport and activating proteins, electron transfer proteins, dinitrogen (N<sub>2</sub>), and hydrogen (H<sub>2</sub>) activation, photosystem and oxygen evolution, zinc containing proteins, CO<sub>2</sub> reduction, and modern advancements in the field of bioinorganic chemistry. Students can expect to develop strong foundational knowledge in metalloenzyme structure, function, and reaction mechanisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5351. Introduction to Polymers and Polymer Synthesis.**

This course is designed to develop the student's general understanding of polymer history and importance as well as terminology, structure, and synthesis. The overall scope of the course will be to develop the student's general knowledge of polymer synthesis and structure. Students who have completed CHEM 4351 or its equivalent may not take this course for master's credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5353. Polymer Processing and Characterization.**

This course is designed to explore the areas of polymer processing and characterization. Students will be introduced to extrusion, injection molding, film formation, thermoforming, thermal-mechanical measurements, classical mechanical testing, thermal-optical measurements, and methods for determination of polymer molecular weight. Prerequisites: CHEM 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5355. Physical Chemistry of Polymers.**

A study of the physical chemistry of polymers. Subjects covered include thermodynamics, kinetic polymerization, phase relationships, molecular geometry, spectroscopy of polymers, polymer physics and mechanical behavior, polymer blends, rheology, and polymer composites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5365. Separation Methods in Chemical Analysis.**

The principles of gas chromatography, capillary electrophoresis, and mass spectrometry are discussed with a balance among theory, practice, and application.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5366. Quantitative Methods in Biophysical Chemistry.**

This course will integrate the physical, chemical, and biological aspects of fundamental biophysical methods, including spectroscopy, calorimetry, and hydrodynamics. Students will develop a quantitative skillset in multiple analytical methods that are used to characterize a variety of biological systems. This course will provide students with the physical and chemical foundation to quantitatively study biological macromolecules at multiple levels of complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5370. Problems in Chemistry.**

Open to graduate students on an individual basis by arrangement with the faculty member concerned. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5375. Biochemistry.**

A course devoted to a study of the chemistry of carbohydrates, lipids, proteins, enzymes, and nucleic acids. A study of enzyme kinetics and thermodynamics of coupled reactions is included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5381. Physical Biochemistry.**

An introduction to the physical techniques of biochemistry with emphasis on the interpretation of experimental data obtained from electrophoresis, chromatography, immunological methods, ultracentrifugation, spectroscopy and emerging techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5382. Enzymology.**

A study of the chemical and physical properties of enzymes. Topics will include structure-function relationships, elucidation of chemical and kinetic mechanisms, and the role of enzymes in metabolism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5383. Molecular Biology & Molecular Genetics.**

This course addresses the basic genetic mechanisms of bacteria and eukaryotes and introduces some examples of the biochemical and genetic techniques employed to study cells, tissues, and organisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5384. Current Topics in Biochemistry and Molecular Biology.**

Course provides students with advanced knowledge in the areas of biochemistry and molecular biology. Topics include signal transduction and the molecular biology of cancer, as well as emerging topics in Genomics, Proteomics, and other new developments in biochemistry. May be repeated once for credit. Prerequisites: CHEM 5381 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CHEM 5385. Metabolism.**

A study of biodegradation and biosynthesis of carbohydrates, lipids, amino acids, proteins, and nucleic acids. Students who have completed CHEM 4385 or its equivalent may not take this course for master's credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5386. Proteins.**

This course will cover advanced biochemistry topics related to proteins. Topics will include protein structure, structure-function relationships, and current methodologies for examining proteins in addition to current findings in primary literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5387. Nucleic Acids Chemistry.**

This course will cover advanced biochemistry topics related to nucleic acids. Topics will include nucleic acid structures and properties, catalytic nucleic acids, protein-nucleic acid interactions, higher order complexes of protein-nucleic acids, and current methodologies for examining nucleic acids in addition to current findings in primary literature. Prerequisite: CHEM 5383 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5390. Supramolecular Chemistry.**

This course is designed to be a survey of the nature of non-covalent interactions between host and guest species. Emphasis will be focused on the rational design of hosts, thermodynamic and kinetic parameters involved in binding and the applications of various binding/recognition phenomena.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5391. Chemical Biology.**

This course will introduce the emerging field of chemical biology and common tools that are used to analyze and manipulate biological processes with small molecules. Students will develop a strong foundation in the design and synthesis of chemical tools to interrogate biological systems and focus on implementing and interpreting assays with these tools, using examples from the current literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5395. Fundamentals of Research.**

Course is designed to acquaint the beginning graduate student with materials and methods of chemical research. (MULT & MULP).

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CHEM 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in CHEM 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

Qualified biochemistry majors completing their junior year of biochemistry courses who plan to pursue advanced studies in Biochemistry have the opportunity to complete both a Bachelor of Science and a Master of Science degree with two additional years (including summers) of course work and research in chemistry. Students may be admitted to the M.S. program without entrance qualification exams if they have a 3.00 GPA or higher in all chemistry and biochemistry courses, have completed CHEM 3381, CHEM 3380, and two semesters of CHEM 4299, have taken the Graduate Record Exam, and have been accepted by a graduate thesis advisor. Applicants will be evaluated by the Graduate Evaluation Committee to determine their suitability to enter the program. The application process is the same as for other graduate applicants to The Graduate College. Graduate status is provisional until the B.S. degree is awarded. The B.S. degree will be certified as approved by the American Chemical Society for students completing CHEM 3341 (fall only course) as an advanced elective.

Qualified chemistry majors completing their junior year of chemistry courses who plan to pursue advanced studies in Chemistry have the opportunity to complete both a Bachelor of Science and a Master of Science degree with two additional years (including summers) of course work and research in chemistry. Students may be admitted to the M.S. program without entrance qualification exams if they have a 3.00 GPA or higher in all chemistry courses, have completed CHEM 3381, CHEM 3380, and two semesters of CHEM 4299, have taken the Graduate Record Exam, and have been accepted by a graduate thesis advisor. Applicants will be evaluated by the Graduate Evaluation Committee to determine their suitability to enter the program. The application process is the same as for other graduate applicants to The Graduate College. Graduate status is provisional until the B.S. degree is awarded. The B.S. degree will be certified as approved by the American Chemical Society for students completing CHEM 3341 (fall only course) as an advanced elective.

The graduate minor in Biochemistry requires 9 semester credit hours. This minor is only available for graduate students in the College of Science and Engineering.

Code	Title	Hours
<b>Required Courses</b>		
CHEM 5381	Physical Biochemistry	3
CHEM 5386	Proteins	3
CHEM 5387	Nucleic Acids Chemistry	3
<b>Total Hours</b>		<b>9</b>

The graduate minor in Chemistry requires 6 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
Choose 6 hours of advisor-approved master's level CHEM courses		6

Comal Building Room 211  
PH: 512.245.3409 FAX: 512.245.8750  
www.cs.txst.edu (<http://www.cs.txst.edu/>)

The Department of Computer Science at Texas State is the hub of computing related education and research activities on the campus.

The department is on a mission to advance the knowledge of computer science and technology through education, research, and service for the betterment of society.

The department is a doctoral-granting department, and the faculty are actively pursuing research in artificial intelligence, computer communication and networking, computer vision, cyber security and trustworthy computing, database and information systems, data science, distributed and parallel computing, high performance computing, human computer interaction, machine learning, data mining, multimedia computing, real time systems, sensor networks, smart health, software engineering, and sustainable computing. The faculty's research has been supported by federal and state agencies and industry such as NSF, NIST, DoD, DoE, LLNL, TxDOT, Semiconductor Research Consortium, IBM, Intel, NVidia, Google, Meta, Cisco, AMD, and Emerson. Our faculty members have obtained prestigious awards such as the PECASE Award, NSF CAREER Awards, DoE Early Career award, IBM Faculty Fellowship, Mata Faculty Research Award, and Google Faculty Research Awards.

Computer science students take courses in a well-designed curriculum taught by the department's faculty members who are accessible, nurturing, and eager to engage students in learning and research. Students have access to an array of hardware, system software, and applications in our first-class computing laboratories.

Individuals with limited computer science background may apply for "non-degree seeking student" admission through The Graduate College to prepare for graduate study in computer science. Please refer to the "Non-Degree-Seeking Applicants (<http://mycatalog.txstate.edu/graduate/admission-information/non-degree-seeking-applicants/>)" section of this catalog.

Please note: International students must meet specific admission requirements, including acceptable TOEFL or IELTS scores.

## Doctor of Philosophy (Ph.D.)

- Major in Computer Science (Information Management Concentration Entering with Master's Degree) (p. 2897)
- Major in Computer Science (Information Management Concentration Entering with Bachelor's Degree) (p. 2904)
- Major in Computer Science (Software Systems Concentration Entering with Master's Degree) (p. 2912)
- Major in Computer Science (Software Systems Concentration Entering with Bachelor's Degree) (p. 2920)

## Master of Arts (M.A.)

- Major in Computer Science (Non-thesis Option) (p. 2928)
- Major in Computer Science (Thesis Option) (p. 2933)

## Master of Science (M.S.)

- Major in Computer Science (Data Science Concentration Non-thesis Option) (p. 2939)
- Major in Computer Science (Data Science Concentration Thesis Option) (p. 2945)
- Major in Computer Science (Non-thesis Option) (p. 2951)
- Major in Computer Science (Non-thesis Science Minor Option) (p. 2957)
- Major in Computer Science (Software Engineering Concentration Thesis Option) (p. 2968)



- Major in Computer Science (Software Engineering Concentration Non-thesis Option) (p. 2962)
- Major in Computer Science (Thesis Option) (p. 2973)
- Major in Computer Science (Thesis Science Minor Option) (p. 2980)

## Minors

- Computer Science (p. 2986)
- Software Engineering (p. 2986)

## Program Overview

The Department of Computer Science offers an applied computer science Ph.D. program that incorporates leadership, innovation, and communication to prepare students to navigate multiple career environments. The program combines the application of computer science practice and theory. Students are encouraged, but not required to take electives in entrepreneurship and commercialization skills. The curriculum is centered on two technical tracks that align with faculty research interests: Information Management and Software Systems. The Information Management track encompasses research topics in data analytics and management, human computer interaction, and informatics. The Software Systems track covers topics in computer security and networking, high-performance computing, and software engineering. In addition, the program has a programming requirement to ensure that students can implement a substantial piece of software.

Program focuses on key areas of applied computing of national priority: data science and machine learning, human-computer interaction, computer vision and multimedia, computer security and networking, high-performance computing, and software engineering and realtime systems

## Educational Goal

Based on the curricular areas and expectations described above, the main educational objectives of the Texas State program are to equip program graduates with:

1. technical knowledge in complementary areas of applied computing,
2. skills for conducting cutting-edge research that advances the current state-of-the-art in applied computing, and
3. leadership, innovation, communication skills that prepare students to take on challenges in multiple career environments.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials

### Transcripts & GPA for applicants with a bachelor's and master's degree

- baccalaureate degree in computer science or related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- master's degree in computer science or related field from a regionally accredited university
- official transcripts from **each institution** where course credit was granted
- competitive GPA, which typically means an overall GPA of 3.3 or higher, in all completed graduate courses
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
- resume/CV
- mentor recommendation letter from a current Texas State doctoral faculty member in the Computer Science program. Visit the faculty list (<https://cs.txstate.edu/accounts/faculty/>) for current faculty and their research interests and contact information. Your mentor must email their letter of support directly to The Graduate College at [gradcollege@txstate.edu](mailto:gradcollege@txstate.edu) ([gradcollege@txstate.edu](mailto:gradcollege@txstate.edu)). This letter must be on file before the program's deadline.
  - Since admission to this thesis-/dissertation-based program requires an intent to mentor letter (an agreement from one of our faculty members to supervise your research project) as part of the application process, we strongly recommend that applicants contact potential mentors by sending their CV and research interests and securing that agreement prior to submitting an admission application. The department cannot guarantee that a suitable mentor will always be available.
- three letters of recommendation submitted directly from professionals who are qualified to assess the student's academic abilities
- written statement of research interests and goals
- interview (top-ranking applicants only.)
  - Applicants are independently reviewed and ranked by each member of the admissions committee based on a defined set of criteria. Those that are top-rated will be contacted for an interview via Skype or phone and asked a pre-determined set of questions. Based on the results of the interviews, the committee will rank the applicants again to determine the final list for admission.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 85 overall
- official PTE scores required with a 57 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 115 overall
- official TOEFL Essentials scores required 9.5 overall

- This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Computer Science concentration in Information Management requires 54 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CS 7300	Introduction to Research in Computer Science	3
<b>Breadth Requirement</b>		
Information Management		
Choose 6 hours from the following:		6
CS 7311	Data-Driven Computational Methods and Infrastructure	
CS 7312	Advanced Data Mining	
CS 7313	Advanced Machine Learning and Pattern Recognition	
CS 7314	Bioinformatics	
CS 7321	Human Computer Interaction: Concepts, Models, and Methodologies	
CS 7322	Human Factors and Ergonomics	
CS 7323	Image Processing and Computer Vision	
CS 7324	HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality	
CS 7389A	Service Computing	
CS 7389E		
Software Systems		
Choose 6 hours from the following:		6
CS 7331	High-Performance Computing	
CS 7332	Advanced Parallel Computing	
CS 7333	Advanced Green Computing	
CS 7341	Cyberspace Security	
CS 7342	Advanced Computer Networking	
CS 7343	Mobile Networks and Computing	
CS 7351	Advanced Software Engineering	
CS 7389B	Advanced Software Evolution	
CS 7389C		
CS 7389D		
<b>Technical Depth</b>		
Choose 9 hours from the following: <sup>1</sup>		9
CS 7100	Graduate Computer Science Internship	
CS 7311	Data-Driven Computational Methods and Infrastructure	
CS 7312	Advanced Data Mining	
CS 7313	Advanced Machine Learning and Pattern Recognition	
CS 7314	Bioinformatics	
CS 7321	Human Computer Interaction: Concepts, Models, and Methodologies	
CS 7322	Human Factors and Ergonomics	

CS 7323	Image Processing and Computer Vision
CS 7324	HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality
CS 7387	Research in Computer Science
CS 7389A	Service Computing
CS 7389C	
CS 7389D	
Up to two graduate-level courses outside of the Computer Science department can be taken if the dissertation project requires multidisciplinary knowledge as determined by the dissertation advisor. The dissertation advisor must approve the courses.	
<b>Prescribed Electives</b>	
Choose a minimum of 6 hours from the following:	
CS 7100	Graduate Computer Science Internship
CS 7311	Data-Driven Computational Methods and Infrastructure
CS 7312	Advanced Data Mining
CS 7313	Advanced Machine Learning and Pattern Recognition
CS 7314	Bioinformatics
CS 7321	Human Computer Interaction: Concepts, Models, and Methodologies
CS 7322	Human Factors and Ergonomics
CS 7323	Image Processing and Computer Vision
CS 7324	HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality
CS 7331	High-Performance Computing
CS 7332	Advanced Parallel Computing
CS 7333	Advanced Green Computing
CS 7341	Cyberspace Security
CS 7342	Advanced Computer Networking
CS 7343	Mobile Networks and Computing
CS 7351	Advanced Software Engineering
CS 7387	Research in Computer Science
CS 7389A	Service Computing
CS 7389B	Advanced Software Evolution
CS 7389C	
CS 7389D	
CS 7389E	
ED 7359	Seminar in Quantitative Research
MATH 7321	Graph Theory
MATH 7325	Statistics 1
MATH 7335	Statistics II: Linear Modeling
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship
<b>Dissertation</b>	
Choose a minimum of 24 hours from the following:	
CS 7199	Dissertation
CS 7299	Dissertation
CS 7399	Dissertation
CS 7599	Dissertation
CS 7699	Dissertation

<sup>1</sup> Only courses which have not been completed in the breadth requirement may be completed in the depth requirement.

## Procedures for Prior Learning Assessment Course Credit:

Students in the Ph.D. program in Computer Science can apply up to a maximum of 12 hours of coursework through a prior learning assessment (PLA) evaluation process when they demonstrate mastery of applicable skills and learning outcomes. PLA course credit can be satisfied through experiential learning students gained through work, non-course-based advanced studies, internships, or externships prior to beginning the Computer Science Ph.D. Program. Note that the total number of credits earned through PLA and course transfer must not exceed 12 semester credit hours (for criteria and processes for earning transfer credit, see the relevant section in the catalog). Students who apply for PLA credit must meet the following conditions:

- Full-time students must make the request for PLA credit in their first year in the program. Part-time students must make the request before completing a total of 18 credits.
- The PLA experiences on which the student is basing the request for PLA credits must have occurred within five years of when the request is made.

The process of applying for PLA credit includes the following:

- A portfolio of written work is used to evaluate a student's work and experience for course credit.
- The student provides a summary document that includes the course description for each course for which they are requesting PLA credit, the student learning outcomes for the course (SLOs), and a numbered and detailed explanation of how their experience demonstrates expertise in the subject matter.
- The explanation should include the SLOs for each course under consideration and explicitly map them to parts of the student's supported materials that demonstrate mastery of the SLO. There should be no "double dipping" of a single aspect of a student's supporting materials, i.e., materials cannot be mapped to more than one course SLO. In addition, if credit for several courses is requested, a single aspect of a student's supporting materials cannot be used for more than one course.
- In addition to the summary document, the student will include supporting materials in the form of appendices, which contain reports, peer-reviewed publications, contracts, grant proposals, certificates, official transcripts, etc.

The portfolio is evaluated by a PLA evaluation committee, constituted and chaired by the director of the doctoral program. In addition to the director of the doctoral program, the committee will include two core doctoral faculty (appointed by the department chair) and one faculty member in the student's subfield, also with appropriate doctoral faculty status. If one or more of the courses for which the student is requesting PLA credit are not Computer Science courses (e.g., an MSEC course), an external faculty responsible for the non-CS course will be invited to serve on the committee in place of the member representing the student's subfield. Approval of the portfolio is required by the doctoral program director and a majority of the evaluation committee. Once

approval is recommended by the department, the Ph.D. program director submits a written petition to the Dean of The Graduate College to grant course credit for prior learning assessment. The petition must include the courses for which credit is requested. The petition also includes the decision of the evaluating committee and the summary document created by the student. The appendices are made available on request.

## Application for Advancement to Candidacy

When all requirements for admission to candidacy have been met (completion of boot camps, completion of required coursework, passing of the qualifying and comprehensive exams, completion of the programming requirement, and submission of an approved dissertation proposal) the Ph.D. program director forwards the Application for Advancement to Candidacy to the dean of The Graduate College for review and approval. This application form is available on The Graduate College website.

## Grade-Point Requirements for Advancement to Candidacy

A minimum GPA of 3.0 on all coursework undertaken in the doctoral program is required for admission to candidacy. Grades below a B on any graduate coursework cannot be applied toward the Ph.D. degree. Incomplete grades must have been cleared before approval for advancement to candidacy can be granted. No more than six semester credit hours of dissertation research can be taken before advancing to candidacy.

## Advancement to Candidacy Time Limit

No credit will be applied toward a student's doctoral degree for coursework completed more than five years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at Texas State as well as course credit transferred to Texas State from other institutions.

## Dissertation Proposal

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It has to include at least an introduction, methodology to be used, a survey of the relevant literature, and preliminary results that demonstrate the feasibility. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

## Comprehensive Examination

The comprehensive examination consists of a written and an oral component. The qualifying exam serves as the written component. The oral component is administered by the dissertation committee, typically right after the dissertation proposal. Completion of both the business plan and a grant proposal are required for advancing to candidacy and is part of the comprehensive examination.

## Dissertation Enrollment Requirements

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. At least 18 semester credit hours of dissertation research must be taken after having advanced to candidacy. If a student is receiving supervision on the dissertation during the summer or if the student is graduating in the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours (e.g., CS 7199) during

the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours.

## Dissertation Time Limit

Each Ph.D. student must prepare a written dissertation proposal and defend it orally. This should be done by the time the student has completed 36 semester credit hours and after identifying the dissertation committee, passing the qualifying exam, fulfilling the programming requirement, and completing all required courses and boot camps. Any student who does not defend his/her dissertation proposal by the time 45 semester credit hours have been accrued will be dismissed from the program. After advancing to candidacy a student should complete their dissertation within five years, keeping in mind the ten year total time limit.

If the proposal defense is not passed, the student will have the option of taking a second and final defense in the following long semester. Students will be dismissed from the program if they do not pass the proposal defense the second time.

## Dissertation Committee

The student, in consultation with his/her dissertation advisor, must establish a dissertation committee that consists of the dissertation advisor, two other doctoral faculty members from the Department, and one faculty member with at least adjunct doctoral faculty status either from another department within the university or from another institution who would be selected based on the relevancy of their research to the student's dissertation. The dissertation advisor serves as the chair of the committee.

## Committee Changes

Any change to the dissertation committee must be submitted using the Dissertation Advisor/Committee Member Change Request Form for approval by the Dean of The Graduate College. Changes must be submitted no later than sixty days before the dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be downloaded from The Graduate College's website.

## Dissertation Proposal

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It has to include at least an introduction, methodology to be used, a survey of the relevant literature, and preliminary results that demonstrate the feasibility. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

## Dissertation Research and Writing

All doctoral students must complete a dissertation that consists of original research and demonstrates mature scholarship and critical judgment in addition to familiarity with tools and methods in the chosen area. The dissertation project must adhere to the dissertation proposal and cover the topic approved by the student's dissertation committee.

## Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least one month before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the

dissertation is defensible and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of the dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense in the following long semester. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's website. The student must submit his/her dissertation to The Graduate College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Students must pass the dissertation defense by the time 90 semester credit hours have been accrued. The Ph.D. program director will review each student annually to ascertain his/her progress towards the degree and will consult the student's dissertation advisor and dissertation committee on this matter as needed. Any student who does not pass the dissertation defense by the time 90 semester credit hours have been accrued will be dismissed from the program.

## Approval and Submission of the Dissertation

A final copy of the dissertation proposal, accompanied by the signed approval forms, must be turned in to the Ph.D. program director, who will forward them to the Dean of The Graduate College for review and final approval.

Doctorate level courses in Computer Science: CS

## Courses Offered

### Computer Science (CS)

**CS 7100. Graduate Computer Science Internship.**

This course provides advanced training supervised by computer scientists in internship programs approved by the department.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7199. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7299. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7300. Introduction to Research in Computer Science.**

This credit/no credit course is designed to develop research and communication skills for Ph.D. students. Topics covered include research processes, research methods, ethics, conducting literature review, critiquing papers, preparing research proposals, faculty research presentations, and the software tools and platforms available for conducting applied computing research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 7308. Computer Science Studies.**

This course provides foundations in computer science for students entering the doctoral program who may need certain background or leveling coursework. The course does not earn graduate degree credit. It is repeatable with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CS 7309. Professional Development of Doctoral Assistants.**

This course is designed to equip the doctoral students with skills and an understanding of the proper procedures to be effective doctoral instructional and teaching assistants. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 7311. Data-Driven Computational Methods and Infrastructure.**

This course covers computational and statistical methods for using large-scale data sets ('big data') to answer scientific and business questions. It focuses on framing research questions, understanding how data can answer them, and using modern software tools for scalable data storage, processing, and analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7312. Advanced Data Mining.**

This course provides in-depth coverage of advanced data mining and information retrieval principles and techniques. It also offers extensive training and practice opportunities in frontier research directions.

Prerequisite: CS 5316 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7313. Advanced Machine Learning and Pattern Recognition.**

This course provides students advanced theoretical and practical skills to learn, design, implement, and apply machine learning and pattern recognition approaches. The students will gain analytical and problem-solving skills by studying machine learning and pattern recognition techniques and applying them to solve real problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7314. Bioinformatics.**

This course introduces advanced algorithms for data-intensive computational analysis targeting biological applications such as drug response prediction, gene network analysis, and protein/RNA structure prediction. Main techniques include greedy search, linear regression, clustering, network analysis, expectation maximization, and Hidden Markov models, which are widely applicable beyond biological data.

Prerequisite: CS 5329 or CS 5369L either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7315. Network Science.**

This course provides in-depth coverage of the fundamentals and research frontiers of network science. The main topics include mathematical models and computational algorithms for analyzing the structure of complex networks and predicting dynamic processes on networks. Other topics include machine learning and data mining on graphs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CS 7321. Human Computer Interaction: Concepts, Models, and Methodologies.**

This course provides an introduction to Human Computer Interaction (HCI) research, methods, and topics, including fundamentals of user interface and experimental design, usability, evaluation methods, software toolkits for interactive applications, graphics, visualization, mobile design, collaborative and social computing, biological factors, and human computation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7322. Human Factors and Ergonomics.**

This course combines knowledge in the fields of intelligent user interfaces, human factors, ergonomics, and environmental psychology. Topics include HCI principles, human information processing, anthropometry, principles of eye tracking and their effects on human factors research, as well as operations of biometrics systems and human factors influencing those systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7323. Image Processing and Computer Vision.**

Image Processing and Computer Vision are research areas with a variety of modern applications ranging from the analysis of images and videos to real-time processing of image streams coming from self-driving vehicles and robotic agents. This course will prepare students with advanced state of the art knowledge in those fields. Prerequisite: CS 5329 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7324. HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality.**

This course introduces advanced methods for enhancing user experience and presents effective HCI models via computer graphics, imaging, animation, simulation, visualization, augmented reality, and immersive virtual reality. Additionally, the course presents related science and engineering foundations as well as graphic design, cognitive science, and perceptual psychology theories and models. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7331. High-Performance Computing.**

This course covers the advanced design, analysis, and optimization of high-performance applications. Topics include high-performance computer architectures, including accelerators and systems-on-chip, performance modeling and benchmarking, data and control dependence analysis, data locality estimation, memory hierarchy management, techniques for exposing parallelism, and code transformations. Different workloads are studied. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7332. Advanced Parallel Computing.**

This course covers advanced design of parallel algorithms, performance modeling, parallel hardware, language support for parallel programming, and programming models for shared- and distributed-memory systems ranging from handheld multicore devices to large-scale clusters and accelerators. The students will gain applied knowledge and skills by developing parallel software for multiple platforms. Prerequisite: CS 5351 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7333. Advanced Green Computing.**

This course covers hardware and software techniques to improve the energy-efficiency of computing systems. Topics include best practices in building energy-efficient data centers and mobile devices, current trends in reducing the energy consumption of processors and storage components, energy-aware resource management, software optimizations, and hands-on experience on power-measurable systems. Prerequisite: CS 5351 and CS 5369Y both with grades of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7334. Scalable Systems for Supercomputing.**

This course will teach basic aspects of building a scalable high performance computing (HPC) system. Specifically, it will focus on the design principles for scaling parallel communication and I/O operations for accessing HPC storage using a message-passing programming model. The course will use two large-scale systems—checkpointing for resilience and a parallel file system for storage as use cases to demonstrate how these principles are used in practice. Students will develop components of a scalable system and use software tools to measure and analyze their performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7341. Cyberspace Security.**

This course presents recent advances in methodologies, models, systems and applications of cyberspace security research. Topics include in-depth coverage of the state-of-the-art security technologies and research issues on information security, software security, network security, secure system design, secure programming, applied cryptography, vulnerability, and threats. Prerequisite: CS 5378 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7342. Advanced Computer Networking.**

This course covers recent research ideas, methodologies and approaches in networking research. The course focuses on the development of protocols and the analysis of related algorithms. Topics include new network architectures, cloud computing, software defined networking, wireless systems, social networks, and security and privacy. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7343. Mobile Networks and Computing.**

This course provides an in-depth study of wireless mobile communication networks, wireless network measurements and modeling, channel assignments and coverage, wireless network protocols, mobile data management, wireless security, and various wireless network applications including ad hoc, sensor networks, delay-tolerant networks, and mobile social networks. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7351. Advanced Software Engineering.**

Software engineering is the application of scientific methods to software development and maintenance. This course provides an in-depth study of advanced concepts and techniques of automatic software generation and analysis. Topics include software process programming, symbolic execution, model checking, property generation and checking, and runtime verification of complex software systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7352. Real-time Systems.**

This course covers issues related to the design and analysis of systems with real-time constraints. The problem of ensuring such constraints is ultimately a scheduling problem, so much attention is devoted to such problems. This course aims to provide a solid foundation for conducting research in real-time systems or related areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7387. Research in Computer Science.**

This course covers current research topics in computer science under the direction of a supervising professor. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7389A. Service Computing.**

This course introduces concepts and principles for enabling the development of software as a service based on Service-Oriented Architecture (SOA), methodology of SOA systems development, the main technologies used in achieving SOA, and state of the art techniques and advances in emerging cloud and edge (Internet of Things) services. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389B. Advanced Software Evolution.**

This topics course provides an in-depth study of state-of-the-art software evolution techniques and tools based on the current research literature. Software evolution has become increasingly important in software development. Software systems often evolve to fix defects, to improve performance, or to adapt to various other requirements. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389F. Secure Cyber-Physical Systems: Cryptography and Machine Learning.**

This course is designed to introduce students to the fundamentals of cryptography and machine learning and how they can be used to ensure security and privacy in cyber-physical systems (CPS). Topics will include an overview of cyber-physical systems, cryptographic techniques, machine learning algorithms, and security threats and attacks on CPS. The course will also cover privacy-preserving machine learning techniques and design principles for secure CPS. Students who successfully complete this course will be well-versed in cryptography and machine learning approaches for cybersecurity in CPS and be able to use these techniques to address practical real-world issues. Prerequisite: CS 3354 and CS 3358 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389G. Human-Centered Data Science.**

This course is to study the process of deriving insights from data in order to make optimal decisions. Human-Centered Data Science addresses various data science problems with attention to improve the quality of decisions by incorporating human experts in the learning process, e.g., interactive Machine Learning and eXplainable Artificial Intelligence. Prerequisite: CS 3358 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389H. Human-Centric Deep Learning.**

This course provides an in-depth exploration of deep learning, emphasizing multi-layer neural networks and their applications. Students will explore core topics like convolutional, recurrent, and graph neural networks, along with optimization algorithms and generative models. The curriculum uniquely integrates multimedia processing, Human-Computer Interaction (HCI), and "human in the loop" approaches, demonstrating how deep learning can be applied to image, video, and audio analysis, as well as to create user-centric and interactive systems. Practical aspects, including data preprocessing, model evaluation, and framework implementation, will also be covered, equipping students with the skills to apply deep learning techniques in a human-centered context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389J. Advanced Natural Language Processing.**

This course is an interdisciplinary field that combines computational linguistics with statistical and machine learning techniques to enable the computer to understand, interpret, generate, and learn natural language. Natural Language Processing (NLP) introduces key concepts, tasks, and techniques, including recent advancements such as neural networks and large language models. It covers applications such as question answering, automatic speech recognition, and machine translation. Students will gain an understanding of fundamental concepts, advanced algorithms, and practical applications, and will also learn methods for acquiring and annotating text data, and representing linguistic structures. Familiarity with Linear Algebra and Python Programming is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7399. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7599. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7699. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7999. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Department of Computer Science offers an applied computer science Ph.D. program that incorporates leadership, innovation, and communication skills necessary to prepare students to navigate multiple career environments. The program combines the application of computer science practice and theory. Students are encouraged but not required to take electives in entrepreneurship and commercialization skills. The curriculum is centered on two technical tracks that align with faculty research interests: Information Management and Software Systems. The Information Management track encompasses research topics in data analytics and management, human computer interaction, and informatics. The Software Systems track covers topics in computer security and networking, high-performance computing, and software engineering. In addition, the program has a programming requirement to ensure that students can implement a substantial piece of software.

The program focuses on key areas of applied computing of national priority: data science and machine learning, human-computer interaction, computer vision and multimedia, computer security and networking, high-performance computing, and software engineering and real-time systems.

## Educational Goal

Based on the curricular areas and expectations described above, the main educational objectives of the Texas State program are to equip program graduates with:

1. technical knowledge in complementary areas of applied computing,
2. skills for conducting cutting-edge research that advances the current state-of-the-art in applied computing, and
3. leadership, innovation, and communication skills that prepare students to take on challenges in multiple career environments.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic

year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- **Transcripts & GPA for applicants with a bachelor's degree only**
  - baccalaureate degree in computer science or related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate courses (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
- resume/CV
- mentor recommendation letter from a current Texas State doctoral faculty member in the Computer Science program. Visit the faculty list (<https://cs.txstate.edu/accounts/faculty/>) for current faculty and their research interests and contact information. Your mentor must email their letter of support directly to The Graduate College at [gradcollege@txstate.edu](mailto:gradcollege@txstate.edu) ([gradcollege@txstate.edu](mailto:gradcollege@txstate.edu)). This letter must be on file before the program's deadline.
  - Since admission to this thesis-/dissertation-based program requires an intent to mentor letter (an agreement from one of our faculty members to supervise your research project) as part of the application process, we strongly recommend that applicants contact potential mentors by sending their CV and research interests and securing that agreement prior to submitting an admission application. The department cannot guarantee that a suitable mentor will always be available.
- three letters of recommendation submitted directly from professionals who are qualified to assess the student's academic abilities
- written statement of research interests and goals
- interview (top-ranking applicants only.)
  - Applicants are independently reviewed and ranked by each member of the admissions committee based on a defined set of criteria. Those that are top-rated will be contacted for an interview via Skype or phone and asked a pre-determined set of questions. Based on the results of the interviews, the committee will rank the applicants again to determine the final list for admission.

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 85 overall
- official PTE scores required with a 57 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 115 overall
- official TOEFL Essentials scores required 9.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Computer Science concentration in Information Management requires 78 semester credit hours for students entering with a bachelor's degree, up to 24 hours of which can be from 5000 level master's Computer Science courses (the selection of courses in this category should be made in consultation with the student's Ph.D. advisor and the program director). Students interested in entrepreneurship and commercialization can participate in two boot camps and two entrepreneurship and commercialization courses as electives.

Code	Title	Hours
<b>Required Courses</b>		
CS 7300	Introduction to Research in Computer Science	3
<b>Breadth Requirement</b>		
Information Management		
Choose 6 hours from the following:		6
CS 7311	Data-Driven Computational Methods and Infrastructure	
CS 7312	Advanced Data Mining	
CS 7313	Advanced Machine Learning and Pattern Recognition	
CS 7314	Bioinformatics	
CS 7321	Human Computer Interaction: Concepts, Models, and Methodologies	
CS 7322	Human Factors and Ergonomics	
CS 7323	Image Processing and Computer Vision	
CS 7324	HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality	
CS 7389A	Service Computing	
CS 7389E		
<b>Software Systems</b>		
Choose 6 hours from the following:		6
CS 7331	High-Performance Computing	
CS 7332	Advanced Parallel Computing	
CS 7333	Advanced Green Computing	
CS 7341	Cyberspace Security	
CS 7342	Advanced Computer Networking	
CS 7343	Mobile Networks and Computing	
CS 7351	Advanced Software Engineering	
CS 7389C		

CS 7389D	
<b>Technical Depth</b>	
Choose 9 hours from the following: <sup>1</sup>	9
CS 7100	Graduate Computer Science Internship
CS 7311	Data-Driven Computational Methods and Infrastructure
CS 7312	Advanced Data Mining
CS 7313	Advanced Machine Learning and Pattern Recognition
CS 7314	Bioinformatics
CS 7321	Human Computer Interaction: Concepts, Models, and Methodologies
CS 7322	Human Factors and Ergonomics
CS 7323	Image Processing and Computer Vision
CS 7324	HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality
CS 7387	Research in Computer Science
CS 7389A	Service Computing
Up to two graduate-level courses outside of the Computer Science department can be taken if the dissertation project requires multidisciplinary knowledge as determined by the dissertation advisor. The dissertation advisor must approve the courses.	
<b>Prescribed Electives</b>	
Choose 30 hours from the following 7000 and 5000 level courses: <sup>2</sup>	30
CS 7100	Graduate Computer Science Internship
CS 7311	Data-Driven Computational Methods and Infrastructure
CS 7312	Advanced Data Mining
CS 7313	Advanced Machine Learning and Pattern Recognition
CS 7314	Bioinformatics
CS 7321	Human Computer Interaction: Concepts, Models, and Methodologies
CS 7322	Human Factors and Ergonomics
CS 7323	Image Processing and Computer Vision
CS 7324	HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality
CS 7331	High-Performance Computing
CS 7332	Advanced Parallel Computing
CS 7333	Advanced Green Computing
CS 7341	Cyberspace Security
CS 7342	Advanced Computer Networking
CS 7343	Mobile Networks and Computing
CS 7351	Advanced Software Engineering
CS 7387	Research in Computer Science
CS 7389A	Service Computing
CS 7389B	Advanced Software Evolution
CS 7389C	
CS 7389D	
CS 7389E	
CS 5306	Advanced Operating Systems
CS 5310	Network and Communication Systems
CS 5318	Principles of Programming Languages

CS 5326	Advanced Studies in Human Factors of Computer Science
CS 5329	Algorithm Design and Analysis
CS 5332	Data Base Theory and Design
CS 5334	Advanced Internet Information Processing
CS 5338	Formal Languages
CS 5341	Advanced Network Programming
CS 5343	Wireless Communications and Networks
CS 5346	Advanced Artificial Intelligence
CS 5351	Parallel Processing
CS 5352	Distributed Computing
CS 5391	Survey of Software Engineering
CS 5392	Formal Methods in Software Engineering
CS 5393	Software Quality
CS 5394	Advanced Software Engineering Project
CS 5395	Independent Study in Advanced Computer Science
CS 5396	Advanced Software Engineering Processes and Methods
ED 7359	Seminar in Quantitative Research
MATH 7321	Graph Theory
MATH 7325	Statistics 1
MATH 7335	Statistics II: Linear Modeling
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship
<b>Dissertation</b>	
Choose a minimum of 24 hours from the following:	24
CS 7199	Dissertation
CS 7299	Dissertation
CS 7399	Dissertation
CS 7599	Dissertation
CS 7699	Dissertation
CS 7999	Dissertation
<b>Total Hours</b>	<b>78</b>

<sup>1</sup> Only courses which have not been completed in the breadth requirement may be completed in the depth requirement.

<sup>2</sup> Courses that are already used to satisfy the breadth and technical depth cannot be used for other elective requirements.

## Procedures for Prior Learning Assessment Course Credit:

Students in the Ph.D. program in Computer Science can apply up to 12 hours of coursework through a prior learning assessment (PLA) evaluation process when they demonstrate mastery of applicable skills and learning outcomes. PLA course credit can be satisfied through experiential learning students gained through work, non-course-based advanced studies, internships, or externships prior to beginning the Computer Science Ph.D. Program. Note that the total number of credits earned through PLA and course transfer must not exceed 12 semester credit hours (for criteria and processes for earning transfer credit, see the relevant section in the catalog). Students who apply for PLA credit must meet the following conditions:



- Full-time students must make the request for PLA credit in their first year in the program. Part-time students must make the request before completing a total of 18 credits.
- The PLA experiences on which the student is basing the request for PLA credits must have occurred within five years of when the request is made.

The process of applying for PLA credit includes the following:

- A portfolio of written work is used to evaluate a student's work and experience for course credit.
- The student provides a summary document that includes the course description for each course for which they are requesting PLA credit, the student learning outcomes for the course (SLOs), and a numbered and detailed explanation of how their experience demonstrates expertise in the subject matter.
- The explanation should include the SLOs for each course under consideration and explicitly map them to parts of the student's supported materials that demonstrate mastery of the SLO. There should be no "double dipping" of a single aspect of a student's supporting materials, i.e., materials cannot be mapped to more than one course SLO. In addition, if credit for several courses is requested, a single aspect of a student's supporting materials cannot be used for more than one course.
- In addition to the summary document, the student will include supporting materials in the form of appendices, which contain reports, peer-reviewed publications, contracts, grant proposals, certificates, official transcripts, etc.

The portfolio is evaluated by a PLA evaluation committee, constituted and chaired by the director of the doctoral program. In addition to the director of the doctoral program, the committee will include two core doctoral faculty (appointed by the department chair) and one faculty member in the student's subfield, with appropriate doctoral faculty status. If one or more of the courses for which the student is requesting PLA credit are not Computer Science courses (e.g., an MSEC course), an external faculty responsible for the non-CS course will be invited to serve on the committee in place of the member representing the student's subfield. Approval of the portfolio is required by the doctoral program director and a majority of the evaluation committee. Once approval is recommended by the department, the Ph.D. program director submits a written petition to the Dean of The Graduate College to grant course credit for prior learning assessment. The petition must include the courses for which credit is requested. The petition also includes the decision of the evaluating committee and the summary document created by the student. The appendices are made available on request.

## Application for Advancement to Candidacy

When all requirements for admission to candidacy have been met (completion of boot camps, completion of required coursework, passing of the qualifying and comprehensive exams, completion of the programming requirement, and submission of an approved dissertation proposal) the Ph.D. program director forwards the Application for Advancement to Candidacy to the dean of The Graduate College for review and approval. This application form is available on The Graduate College website.

## Grade-Point Requirements for Advancement to Candidacy

A minimum GPA of 3.0 on all coursework undertaken in the doctoral program is required for admission to candidacy. Grades below a B

on any graduate coursework cannot be applied toward the Ph.D. degree. Incomplete grades must have been cleared before approval for advancement to candidacy can be granted. No more than six semester credit hours of dissertation research can be taken before advancing to candidacy.

## Advancement to Candidacy Time Limit

No credit will be applied toward a student's doctoral degree for coursework completed more than five years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at Texas State as well as course credit transferred to Texas State from other institutions.

## Dissertation Proposal

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It has to include at least an introduction, methodology to be used, a survey of the relevant literature, and preliminary results that demonstrate the feasibility. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

## Comprehensive Examination

The comprehensive examination consists of a written and an oral component. The qualifying exam serves as the written component. The oral component is administered by the dissertation committee, typically right after the dissertation proposal. Completion of both the business plan and a grant proposal are required for advancing to candidacy and is part of the comprehensive examination.

## Dissertation Enrollment Requirements

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. At least 18 semester credit hours of dissertation research must be taken after having advanced to candidacy. If a student is receiving supervision on the dissertation during the summer or if the student is graduating in the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours (e.g., CS 7199) during the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours.

## Dissertation Time Limit

Each Ph.D. student must prepare a written dissertation proposal and defend it orally. This should be done by the time the student has completed 36 semester credit hours and after identifying the dissertation committee, passing the qualifying exam, fulfilling the programming requirement, and completing all required courses and boot camps. Any student who does not defend his/her dissertation proposal by the time 45 semester credit hours have been accrued will be dismissed from the program. After advancing to candidacy a student should complete their dissertation within five years, keeping in mind the ten year total time limit.

If the proposal defense is not passed, the student will have the option of taking a second and final defense in the following long semester. Students will be dismissed from the program if they do not pass the proposal defense the second time.

## Dissertation Committee

The student, in consultation with his/her dissertation advisor, must establish a dissertation committee that consists of the dissertation advisor, two other doctoral faculty members from the Department, and one faculty member with at least adjunct doctoral faculty status either

from another department within the university or from another institution who would be selected based on the relevancy of their research to the student's dissertation. The dissertation advisor serves as the chair of the committee.

## Committee Changes

Any change to the dissertation committee must be submitted using the Dissertation Advisor/Committee Member Change Request Form for approval by the Dean of The Graduate College. Changes must be submitted no later than sixty days before the dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be downloaded from The Graduate College's website.

## Dissertation Proposal

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It has to include at least an introduction, methodology to be used, a survey of the relevant literature, and preliminary results that demonstrate the feasibility. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

## Dissertation Research and Writing

All doctoral students must complete a dissertation that consists of original research and demonstrates mature scholarship and critical judgment in addition to familiarity with tools and methods in the chosen area. The dissertation project must adhere to the dissertation proposal and cover the topic approved by the student's dissertation committee.

## Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least one month before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the dissertation is defensible and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of the dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense in the following long semester. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's website. The student must submit his/her dissertation to The Graduate

College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Students must pass the dissertation defense by the time 90 semester credit hours have been accrued. The Ph.D. program director will review each student annually to ascertain his/her progress towards the degree and will consult the student's dissertation advisor and dissertation committee on this matter as needed. Any student who does not pass the dissertation defense by the time 90 semester credit hours have been accrued will be dismissed from the program.

## Approval and Submission of the Dissertation

A final copy of the dissertation proposal, accompanied by the signed approval forms, must be turned in to the Ph.D. program director, who will forward them to the Dean of The Graduate College for review and final approval.

Doctorate level courses in Computer Science: CS

## Courses Offered

### Computer Science (CS)

#### CS 7100. Graduate Computer Science Internship.

This course provides advanced training supervised by computer scientists in internship programs approved by the department.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CS 7199. Dissertation.

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CS 7299. Dissertation.

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7300. Introduction to Research in Computer Science.**

This credit/no credit course is designed to develop research and communication skills for Ph.D. students. Topics covered include research processes, research methods, ethics, conducting literature review, critiquing papers, preparing research proposals, faculty research presentations, and the software tools and platforms available for conducting applied computing research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 7308. Computer Science Studies.**

This course provides foundations in computer science for students entering the doctoral program who may need certain background or leveling coursework. The course does not earn graduate degree credit. It is repeatable with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CS 7309. Professional Development of Doctoral Assistants.**

This course is designed to equip the doctoral students with skills and an understanding of the proper procedures to be effective doctoral instructional and teaching assistants. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 7311. Data-Driven Computational Methods and Infrastructure.**

This course covers computational and statistical methods for using large-scale data sets ('big data') to answer scientific and business questions. It focuses on framing research questions, understanding how data can answer them, and using modern software tools for scalable data storage, processing, and analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7312. Advanced Data Mining.**

This course provides in-depth coverage of advanced data mining and information retrieval principles and techniques. It also offers extensive training and practice opportunities in frontier research directions.

Prerequisite: CS 5316 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7313. Advanced Machine Learning and Pattern Recognition.**

This course provides students advanced theoretical and practical skills to learn, design, implement, and apply machine learning and pattern recognition approaches. The students will gain analytical and problem-solving skills by studying machine learning and pattern recognition techniques and applying them to solve real problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7314. Bioinformatics.**

This course introduces advanced algorithms for data-intensive computational analysis targeting biological applications such as drug response prediction, gene network analysis, and protein/RNA structure prediction. Main techniques include greedy search, linear regression, clustering, network analysis, expectation maximization, and Hidden Markov models, which are widely applicable beyond biological data.

Prerequisite: CS 5329 or CS 5369L either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7315. Network Science.**

This course provides in-depth coverage of the fundamentals and research frontiers of network science. The main topics include mathematical models and computational algorithms for analyzing the structure of complex networks and predicting dynamic processes on networks. Other topics include machine learning and data mining on graphs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7321. Human Computer Interaction: Concepts, Models, and Methodologies.**

This course provides an introduction to Human Computer Interaction (HCI) research, methods, and topics, including fundamentals of user interface and experimental design, usability, evaluation methods, software toolkits for interactive applications, graphics, visualization, mobile design, collaborative and social computing, biological factors, and human computation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7322. Human Factors and Ergonomics.**

This course combines knowledge in the fields of intelligent user interfaces, human factors, ergonomics, and environmental psychology. Topics include HCI principles, human information processing, anthropometry, principles of eye tracking and their effects on human factors research, as well as operations of biometrics systems and human factors influencing those systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7323. Image Processing and Computer Vision.**

Image Processing and Computer Vision are research areas with a variety of modern applications ranging from the analysis of images and videos to real-time processing of image streams coming from self-driving vehicles and robotic agents. This course will prepare students with advanced state of the art knowledge in those fields. Prerequisite: CS 5329 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7324. HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality.**

This course introduces advanced methods for enhancing user experience and presents effective HCI models via computer graphics, imaging, animation, simulation, visualization, augmented reality, and immersive virtual reality. Additionally, the course presents related science and engineering foundations as well as graphic design, cognitive science, and perceptual psychology theories and models. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7331. High-Performance Computing.**

This course covers the advanced design, analysis, and optimization of high-performance applications. Topics include high-performance computer architectures, including accelerators and systems-on-chip, performance modeling and benchmarking, data and control dependence analysis, data locality estimation, memory hierarchy management, techniques for exposing parallelism, and code transformations. Different workloads are studied. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7332. Advanced Parallel Computing.**

This course covers advanced design of parallel algorithms, performance modeling, parallel hardware, language support for parallel programming, and programming models for shared- and distributed-memory systems ranging from handheld multicore devices to large-scale clusters and accelerators. The students will gain applied knowledge and skills by developing parallel software for multiple platforms. Prerequisite: CS 5351 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7333. Advanced Green Computing.**

This course covers hardware and software techniques to improve the energy-efficiency of computing systems. Topics include best practices in building energy-efficient data centers and mobile devices, current trends in reducing the energy consumption of processors and storage components, energy-aware resource management, software optimizations, and hands-on experience on power-measurable systems. Prerequisite: CS 5351 and CS 5369Y both with grades of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7334. Scalable Systems for Supercomputing.**

This course will teach basic aspects of building a scalable high performance computing (HPC) system. Specifically, it will focus on the design principles for scaling parallel communication and I/O operations for accessing HPC storage using a message-passing programming model. The course will use two large-scale systems—checkpointing for resilience and a parallel file system for storage as use cases to demonstrate how these principles are used in practice. Students will develop components of a scalable system and use software tools to measure and analyze their performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7341. Cyberspace Security.**

This course presents recent advances in methodologies, models, systems and applications of cyberspace security research. Topics include in-depth coverage of the state-of-the-art security technologies and research issues on information security, software security, network security, secure system design, secure programming, applied cryptography, vulnerability, and threats. Prerequisite: CS 5378 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7342. Advanced Computer Networking.**

This course covers recent research ideas, methodologies and approaches in networking research. The course focuses on the development of protocols and the analysis of related algorithms. Topics include new network architectures, cloud computing, software defined networking, wireless systems, social networks, and security and privacy. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7343. Mobile Networks and Computing.**

This course provides an in-depth study of wireless mobile communication networks, wireless network measurements and modeling, channel assignments and coverage, wireless network protocols, mobile data management, wireless security, and various wireless network applications including ad hoc, sensor networks, delay-tolerant networks, and mobile social networks. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7351. Advanced Software Engineering.**

Software engineering is the application of scientific methods to software development and maintenance. This course provides an in-depth study of advanced concepts and techniques of automatic software generation and analysis. Topics include software process programming, symbolic execution, model checking, property generation and checking, and runtime verification of complex software systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7352. Real-time Systems.**

This course covers issues related to the design and analysis of systems with real-time constraints. The problem of ensuring such constraints is ultimately a scheduling problem, so much attention is devoted to such problems. This course aims to provide a solid foundation for conducting research in real-time systems or related areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7387. Research in Computer Science.**

This course covers current research topics in computer science under the direction of a supervising professor. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7389A. Service Computing.**

This course introduces concepts and principles for enabling the development of software as a service based on Service-Oriented Architecture (SOA), methodology of SOA systems development, the main technologies used in achieving SOA, and state of the art techniques and advances in emerging cloud and edge (Internet of Things) services. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389B. Advanced Software Evolution.**

This topics course provides an in-depth study of state-of-the-art software evolution techniques and tools based on the current research literature. Software evolution has become increasingly important in software development. Software systems often evolve to fix defects, to improve performance, or to adapt to various other requirements. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389F. Secure Cyber-Physical Systems: Cryptography and Machine Learning.**

This course is designed to introduce students to the fundamentals of cryptography and machine learning and how they can be used to ensure security and privacy in cyber-physical systems (CPS). Topics will include an overview of cyber-physical systems, cryptographic techniques, machine learning algorithms, and security threats and attacks on CPS. The course will also cover privacy-preserving machine learning techniques and design principles for secure CPS. Students who successfully complete this course will be well-versed in cryptography and machine learning approaches for cybersecurity in CPS and be able to use these techniques to address practical real-world issues. Prerequisite: CS 3354 and CS 3358 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389G. Human-Centered Data Science.**

This course is to study the process of deriving insights from data in order to make optimal decisions. Human-Centered Data Science addresses various data science problems with attention to improve the quality of decisions by incorporating human experts in the learning process, e.g., interactive Machine Learning and eXplainable Artificial Intelligence. Prerequisite: CS 3358 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389H. Human-Centric Deep Learning.**

This course provides an in-depth exploration of deep learning, emphasizing multi-layer neural networks and their applications. Students will explore core topics like convolutional, recurrent, and graph neural networks, along with optimization algorithms and generative models. The curriculum uniquely integrates multimedia processing, Human-Computer Interaction (HCI), and "human in the loop" approaches, demonstrating how deep learning can be applied to image, video, and audio analysis, as well as to create user-centric and interactive systems. Practical aspects, including data preprocessing, model evaluation, and framework implementation, will also be covered, equipping students with the skills to apply deep learning techniques in a human-centered context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**CS 7389J. Advanced Natural Language Processing.**

This course is an interdisciplinary field that combines computational linguistics with statistical and machine learning techniques to enable the computer to understand, interpret, generate, and learn natural language. Natural Language Processing (NLP) introduces key concepts, tasks, and techniques, including recent advancements such as neural networks and large language models. It covers applications such as question answering, automatic speech recognition, and machine translation. Students will gain an understanding of fundamental concepts, advanced algorithms, and practical applications, and will also learn methods for acquiring and annotating text data, and representing linguistic structures. Familiarity with Linear Algebra and Python Programming is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7399. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7599. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7699. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7999. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Department of Computer Science offers an applied computer science Ph.D. program that incorporates leadership, innovation, and communication to prepare students to navigate multiple career environments. The program combines the application of computer science practice and theory. Students are encouraged, but not required to take electives in entrepreneurship and commercialization skills. The curriculum is centered on two technical tracks that align with faculty research interests: Information Management and Software Systems. The Information Management track encompasses research topics in data analytics and management, human computer interaction, and informatics. The Software Systems track covers topics in computer security and networking, high-performance computing, and software engineering. In addition, the program has a programming requirement to ensure that students can implement a substantial piece of software.

The program focuses on key areas of applied computing of national priority: data science and machine learning, human-computer interaction, computer vision and multimedia, computer security and networking, high-performance computing, and software engineering and realtime systems.

## Educational Goal

Based on the curricular areas and expectations described above, the main educational objectives of the Texas State program are to equip program graduates with:

1. technical knowledge in complementary areas of applied computing,
2. skills for conducting cutting-edge research that advances the current state-of-the-art in applied computing, and
3. leadership, innovation, and communication skills that prepare students to take on challenges in multiple career environments.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- **Transcripts & GPA for applicants with a bachelor's and master's degree**
  - baccalaureate degree in computer science or related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - master's degree in computer science or related field from a regionally accredited university
  - official transcripts from **each institution** where course credit was granted
  - competitive GPA, which typically means an overall GPA of 3.3 or higher, in all completed graduate courses
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
- resume/CV
- Mentor recommendation letter from a current Texas State doctoral faculty member in the Computer Science program. Visit the faculty list (<https://cs.txstate.edu/accounts/faculty/>) for current faculty and their research interests and contact information. Your mentor must email their letter of support directly to The Graduate College at [gradcollege@txstate.edu](mailto:gradcollege@txstate.edu) ([gradcollege@txstate.edu](mailto:gradcollege@txstate.edu)). This letter must be on file before the program's deadline.
  - Since admission to this thesis-/dissertation-based program requires an intent to mentor letter (an agreement from one of our faculty members to supervise your research project) as part of the application process, we strongly recommend that applicants contact potential mentors by sending their CV and research interests and securing that agreement prior to submitting an admission application. The department cannot guarantee that a suitable mentor will always be available.
- three letters of recommendation submitted directly from professionals who are qualified to assess the student's academic abilities
- written statement of research interests and goals
- interview (top-ranking applicants only.)
  - Applicants are independently reviewed and ranked by each member of the admissions committee based on a defined set of criteria. Those that are top-rated will be contacted for an interview via Skype or phone and asked a pre-determined set of questions. Based on the results of the interviews, the committee will rank the applicants again to determine the final list for admission.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 85 overall
- official PTE scores required with a 57 overall

- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 115 overall
- official TOEFL Essentials scores required 9.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Computer Science concentration in Software Systems requires 54 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CS 7300	Introduction to Research in Computer Science	3
<b>Breadth Requirement</b>		
Information Management		
Choose 6 hours from the following:		6
CS 7311	Data-Driven Computational Methods and Infrastructure	
CS 7312	Advanced Data Mining	
CS 7313	Advanced Machine Learning and Pattern Recognition	
CS 7314	Bioinformatics	
CS 7321	Human Computer Interaction: Concepts, Models, and Methodologies	
CS 7322	Human Factors and Ergonomics	
CS 7323	Image Processing and Computer Vision	
CS 7324	HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality	
CS 7389A	Service Computing	
CS 7389D		
CS 7389E		
Software Systems		
Choose 6 hours from the following:		6
CS 7331	High-Performance Computing	
CS 7332	Advanced Parallel Computing	
CS 7333	Advanced Green Computing	
CS 7341	Cyberspace Security	
CS 7342	Advanced Computer Networking	
CS 7343	Mobile Networks and Computing	
CS 7351	Advanced Software Engineering	
CS 7389B	Advanced Software Evolution	
CS 7389C		
CS 7389D		
<b>Technical Depth</b>		
Choose 9 hours from the following: <sup>1</sup>		9
CS 7100	Graduate Computer Science Internship	
CS 7331	High-Performance Computing	
CS 7332	Advanced Parallel Computing	
CS 7333	Advanced Green Computing	
CS 7341	Cyberspace Security	
CS 7342	Advanced Computer Networking	

CS 7343	Mobile Networks and Computing
CS 7351	Advanced Software Engineering
CS 7387	Research in Computer Science
CS 7389B	Advanced Software Evolution
CS 7389C	
CS 7389D	
Up to two graduate-level courses outside of the Computer Science department can be taken if the dissertation project requires multidisciplinary knowledge as determined by the dissertation advisor. The dissertation advisor must approve the courses.	
<b>Prescribed Electives</b>	
Choose a minimum of 6 hours from the following:	
CS 7100	Graduate Computer Science Internship
CS 7311	Data-Driven Computational Methods and Infrastructure
CS 7312	Advanced Data Mining
CS 7313	Advanced Machine Learning and Pattern Recognition
CS 7314	Bioinformatics
CS 7321	Human Computer Interaction: Concepts, Models, and Methodologies
CS 7322	Human Factors and Ergonomics
CS 7323	Image Processing and Computer Vision
CS 7324	HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality
CS 7331	High-Performance Computing
CS 7332	Advanced Parallel Computing
CS 7333	Advanced Green Computing
CS 7341	Cyberspace Security
CS 7342	Advanced Computer Networking
CS 7343	Mobile Networks and Computing
CS 7351	Advanced Software Engineering
CS 7387	Research in Computer Science
CS 7389A	Service Computing
CS 7389B	Advanced Software Evolution
CS 7389C	
CS 7389D	
CS 7389E	
ED 7359	Seminar in Quantitative Research
MATH 7321	Graph Theory
MATH 7325	Statistics I
MATH 7335	Statistics II: Linear Modeling
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship
<b>Dissertation</b>	
Choose a minimum of 24 hours from the following:	
CS 7199	Dissertation
CS 7299	Dissertation
CS 7399	Dissertation
CS 7599	Dissertation
CS 7699	Dissertation

CS 7999	Dissertation
<b>Total Hours</b>	<b>54</b>

<sup>1</sup> Only courses which have not been completed in the breadth requirement may be completed in the depth requirement.

## Procedures for Prior Learning Assessment Course Credit:

Students in the Ph.D. program in Computer Science can apply up to a maximum of 12 hours of coursework through a prior learning assessment (PLA) evaluation process when they demonstrate mastery of applicable skills and learning outcomes. PLA course credit can be satisfied through experiential learning students gained through work, non-course-based advanced studies, internships, or externships prior to beginning the Computer Science Ph.D. Program. Note that the total number of credits earned through PLA and course transfer must not exceed 12 semester credit hours (for criteria and processes for earning transfer credit, see the relevant section in the catalog). Students who apply for PLA credit must meet the following conditions:

- Full-time students must make the request for PLA credit in their first year in the program. Part-time students must make the request before completing a total of 18 credits.
- The PLA experiences on which the student is basing the request for PLA credits must have occurred within five years of when the request is made.

The process of applying for PLA credit includes the following:

- A portfolio of written work is used to evaluate a student's work and experience for course credit.
- The student provides a summary document that includes the course description for each course for which they are requesting PLA credit, the student learning outcomes for the course (SLOs), and a numbered and detailed explanation of how their experience demonstrates expertise in the subject matter.
- The explanation should include the SLOs for each course under consideration and explicitly map them to parts of the student's supported materials that demonstrate mastery of the SLO. There should be no "double dipping" of a single aspect of a student's supporting materials, i.e., materials cannot be mapped to more than one course SLO. In addition, if credit for several courses is requested, a single aspect of a student's supporting materials cannot be used for more than one course.
- In addition to the summary document, the student will include supporting materials in the form of appendices, which contain reports, peer-reviewed publications, contracts, grant proposals, certificates, official transcripts, etc.

The portfolio is evaluated by a PLA evaluation committee, constituted and chaired by the director of the doctoral program. In addition to the director of the doctoral program, the committee will include two core doctoral faculty (appointed by the department chair) and one faculty member in the student's subfield, also with appropriate doctoral faculty status. If one or more of the courses for which the student is requesting PLA credit are not Computer Science courses (e.g., an MSEC course), an external faculty responsible for the non-CS course will be invited to serve on the committee in place of the member representing the student's subfield. Approval of the portfolio is required by the doctoral program director and a majority of the evaluation committee. Once

approval is recommended by the department, the Ph.D. program director submits a written petition to the Dean of The Graduate College to grant course credit for prior learning assessment. The petition must include the courses for which credit is requested. The petition also includes the decision of the evaluating committee and the summary document created by the student. The appendices are made available on request.

## Application for Advancement to Candidacy

When all requirements for admission to candidacy have been met (completion of boot camps, completion of required coursework, passing of the qualifying and comprehensive exams, completion of the programming requirement, and submission of an approved dissertation proposal) the Ph.D. program director forwards the Application for Advancement to Candidacy to the dean of The Graduate College for review and approval. This application form is available on The Graduate College website.

## Grade-Point Requirements for Advancement to Candidacy

A minimum GPA of 3.0 on all coursework undertaken in the doctoral program is required for admission to candidacy. Grades below a B on any graduate coursework cannot be applied toward the Ph.D. degree. Incomplete grades must have been cleared before approval for advancement to candidacy can be granted. No more than six semester credit hours of dissertation research can be taken before advancing to candidacy.

## Advancement to Candidacy Time Limit

No credit will be applied toward a student's doctoral degree for coursework completed more than five years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at Texas State as well as course credit transferred to Texas State from other institutions.

## Dissertation Proposal

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It has to include at least an introduction, methodology to be used, a survey of the relevant literature, and preliminary results that demonstrate the feasibility. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

## Comprehensive Examination

The comprehensive examination consists of a written and an oral component. The qualifying exam serves as the written component. The oral component is administered by the dissertation committee, typically right after the dissertation proposal. Completion of both the business plan and a grant proposal are required for advancing to candidacy and is part of the comprehensive examination.

## Dissertation Enrollment Requirements

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. At least 18 semester credit hours of dissertation research must be taken after having advanced to candidacy. If a student is receiving supervision on the dissertation during the summer or if the student is graduating in the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours (e.g., CS 7199) during

the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours.

## Dissertation Time Limit

Each Ph.D. student must prepare a written dissertation proposal and defend it orally. This should be done by the time the student has completed 36 semester credit hours and after identifying the dissertation committee, passing the qualifying exam, fulfilling the programming requirement, and completing all required courses and boot camps. Any student who does not defend his/her dissertation proposal by the time 45 semester credit hours have been accrued will be dismissed from the program. After advancing to candidacy a student should complete their dissertation within five years, keeping in mind the ten year total time limit.

If the proposal defense is not passed, the student will have the option of taking a second and final defense in the following long semester. Students will be dismissed from the program if they do not pass the proposal defense the second time.

## Dissertation Committee

The student, in consultation with his/her dissertation advisor, must establish a dissertation committee that consists of the dissertation advisor, two other doctoral faculty members from the Department, and one faculty member with at least adjunct doctoral faculty status either from another department within the university or from another institution who would be selected based on the relevancy of their research to the student's dissertation. The dissertation advisor serves as the chair of the committee.

## Committee Changes

Any change to the dissertation committee must be submitted using the Dissertation Advisor/Committee Member Change Request Form for approval by the Dean of The Graduate College. Changes must be submitted no later than sixty days before the dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be downloaded from The Graduate College's website.

## Dissertation Proposal

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It has to include at least an introduction, methodology to be used, a survey of the relevant literature, and preliminary results that demonstrate the feasibility. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

## Dissertation Research and Writing

All doctoral students must complete a dissertation that consists of original research and demonstrates mature scholarship and critical judgment in addition to familiarity with tools and methods in the chosen area. The dissertation project must adhere to the dissertation proposal and cover the topic approved by the student's dissertation committee.

## Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least one month before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the



dissertation is defensible and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of the dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense in the following long semester. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's website. The student must submit his/her dissertation to The Graduate College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Students must pass the dissertation defense by the time 90 semester credit hours have been accrued. The Ph.D. program director will review each student annually to ascertain his/her progress towards the degree and will consult the student's dissertation advisor and dissertation committee on this matter as needed. Any student who does not pass the dissertation defense by the time 90 semester credit hours have been accrued will be dismissed from the program.

## Approval and Submission of the Dissertation

A final copy of the dissertation proposal, accompanied by the signed approval forms, must be turned in to the Ph.D. program director, who will forward them to the Dean of The Graduate College for review and final approval.

Doctorate level courses in Computer Science: CS

## Courses Offered

### Computer Science (CS)

#### CS 7100. Graduate Computer Science Internship.

This course provides advanced training supervised by computer scientists in internship programs approved by the department.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CS 7199. Dissertation.

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CS 7299. Dissertation.

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CS 7300. Introduction to Research in Computer Science.

This credit/no credit course is designed to develop research and communication skills for Ph.D. students. Topics covered include research processes, research methods, ethics, conducting literature review, critiquing papers, preparing research proposals, faculty research presentations, and the software tools and platforms available for conducting applied computing research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 7308. Computer Science Studies.

This course provides foundations in computer science for students entering the doctoral program who may need certain background or leveling coursework. The course does not earn graduate degree credit. It is repeatable with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CS 7309. Professional Development of Doctoral Assistants.

This course is designed to equip the doctoral students with skills and an understanding of the proper procedures to be effective doctoral instructional and teaching assistants. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships



**CS 7311. Data-Driven Computational Methods and Infrastructure.**

This course covers computational and statistical methods for using large-scale data sets ('big data') to answer scientific and business questions. It focuses on framing research questions, understanding how data can answer them, and using modern software tools for scalable data storage, processing, and analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7312. Advanced Data Mining.**

This course provides in-depth coverage of advanced data mining and information retrieval principles and techniques. It also offers extensive training and practice opportunities in frontier research directions.

Prerequisite: CS 5316 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7313. Advanced Machine Learning and Pattern Recognition.**

This course provides students advanced theoretical and practical skills to learn, design, implement, and apply machine learning and pattern recognition approaches. The students will gain analytical and problem-solving skills by studying machine learning and pattern recognition techniques and applying them to solve real problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7314. Bioinformatics.**

This course introduces advanced algorithms for data-intensive computational analysis targeting biological applications such as drug response prediction, gene network analysis, and protein/RNA structure prediction. Main techniques include greedy search, linear regression, clustering, network analysis, expectation maximization, and Hidden Markov models, which are widely applicable beyond biological data.

Prerequisite: CS 5329 or CS 5369L either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7315. Network Science.**

This course provides in-depth coverage of the fundamentals and research frontiers of network science. The main topics include mathematical models and computational algorithms for analyzing the structure of complex networks and predicting dynamic processes on networks. Other topics include machine learning and data mining on graphs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7321. Human Computer Interaction: Concepts, Models, and Methodologies.**

This course provides an introduction to Human Computer Interaction (HCI) research, methods, and topics, including fundamentals of user interface and experimental design, usability, evaluation methods, software toolkits for interactive applications, graphics, visualization, mobile design, collaborative and social computing, biological factors, and human computation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7322. Human Factors and Ergonomics.**

This course combines knowledge in the fields of intelligent user interfaces, human factors, ergonomics, and environmental psychology. Topics include HCI principles, human information processing, anthropometry, principles of eye tracking and their effects on human factors research, as well as operations of biometrics systems and human factors influencing those systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7323. Image Processing and Computer Vision.**

Image Processing and Computer Vision are research areas with a variety of modern applications ranging from the analysis of images and videos to real-time processing of image streams coming from self-driving vehicles and robotic agents. This course will prepare students with advanced state of the art knowledge in those fields. Prerequisite: CS 5329 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7324. HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality.**

This course introduces advanced methods for enhancing user experience and presents effective HCI models via computer graphics, imaging, animation, simulation, visualization, augmented reality, and immersive virtual reality. Additionally, the course presents related science and engineering foundations as well as graphic design, cognitive science, and perceptual psychology theories and models. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7331. High-Performance Computing.**

This course covers the advanced design, analysis, and optimization of high-performance applications. Topics include high-performance computer architectures, including accelerators and systems-on-chip, performance modeling and benchmarking, data and control dependence analysis, data locality estimation, memory hierarchy management, techniques for exposing parallelism, and code transformations. Different workloads are studied. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7332. Advanced Parallel Computing.**

This course covers advanced design of parallel algorithms, performance modeling, parallel hardware, language support for parallel programming, and programming models for shared- and distributed-memory systems ranging from handheld multicore devices to large-scale clusters and accelerators. The students will gain applied knowledge and skills by developing parallel software for multiple platforms. Prerequisite: CS 5351 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7333. Advanced Green Computing.**

This course covers hardware and software techniques to improve the energy-efficiency of computing systems. Topics include best practices in building energy-efficient data centers and mobile devices, current trends in reducing the energy consumption of processors and storage components, energy-aware resource management, software optimizations, and hands-on experience on power-measurable systems. Prerequisite: CS 5351 and CS 5369Y both with grades of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7334. Scalable Systems for Supercomputing.**

This course will teach basic aspects of building a scalable high performance computing (HPC) system. Specifically, it will focus on the design principles for scaling parallel communication and I/O operations for accessing HPC storage using a message-passing programming model. The course will use two large-scale systems—checkpointing for resilience and a parallel file system for storage as use cases to demonstrate how these principles are used in practice. Students will develop components of a scalable system and use software tools to measure and analyze their performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7341. Cyberspace Security.**

This course presents recent advances in methodologies, models, systems and applications of cyberspace security research. Topics include in-depth coverage of the state-of-the-art security technologies and research issues on information security, software security, network security, secure system design, secure programming, applied cryptography, vulnerability, and threats. Prerequisite: CS 5378 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7342. Advanced Computer Networking.**

This course covers recent research ideas, methodologies and approaches in networking research. The course focuses on the development of protocols and the analysis of related algorithms. Topics include new network architectures, cloud computing, software defined networking, wireless systems, social networks, and security and privacy. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7343. Mobile Networks and Computing.**

This course provides an in-depth study of wireless mobile communication networks, wireless network measurements and modeling, channel assignments and coverage, wireless network protocols, mobile data management, wireless security, and various wireless network applications including ad hoc, sensor networks, delay-tolerant networks, and mobile social networks. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7351. Advanced Software Engineering.**

Software engineering is the application of scientific methods to software development and maintenance. This course provides an in-depth study of advanced concepts and techniques of automatic software generation and analysis. Topics include software process programming, symbolic execution, model checking, property generation and checking, and runtime verification of complex software systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7352. Real-time Systems.**

This course covers issues related to the design and analysis of systems with real-time constraints. The problem of ensuring such constraints is ultimately a scheduling problem, so much attention is devoted to such problems. This course aims to provide a solid foundation for conducting research in real-time systems or related areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7387. Research in Computer Science.**

This course covers current research topics in computer science under the direction of a supervising professor. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7389A. Service Computing.**

This course introduces concepts and principles for enabling the development of software as a service based on Service-Oriented Architecture (SOA), methodology of SOA systems development, the main technologies used in achieving SOA, and state of the art techniques and advances in emerging cloud and edge (Internet of Things) services. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389B. Advanced Software Evolution.**

This topics course provides an in-depth study of state-of-the-art software evolution techniques and tools based on the current research literature. Software evolution has become increasingly important in software development. Software systems often evolve to fix defects, to improve performance, or to adapt to various other requirements. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389F. Secure Cyber-Physical Systems: Cryptography and Machine Learning.**

This course is designed to introduce students to the fundamentals of cryptography and machine learning and how they can be used to ensure security and privacy in cyber-physical systems (CPS). Topics will include an overview of cyber-physical systems, cryptographic techniques, machine learning algorithms, and security threats and attacks on CPS. The course will also cover privacy-preserving machine learning techniques and design principles for secure CPS. Students who successfully complete this course will be well-versed in cryptography and machine learning approaches for cybersecurity in CPS and be able to use these techniques to address practical real-world issues. Prerequisite: CS 3354 and CS 3358 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389G. Human-Centered Data Science.**

This course is to study the process of deriving insights from data in order to make optimal decisions. Human-Centered Data Science addresses various data science problems with attention to improve the quality of decisions by incorporating human experts in the learning process, e.g., interactive Machine Learning and eXplainable Artificial Intelligence. Prerequisite: CS 3358 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389H. Human-Centric Deep Learning.**

This course provides an in-depth exploration of deep learning, emphasizing multi-layer neural networks and their applications. Students will explore core topics like convolutional, recurrent, and graph neural networks, along with optimization algorithms and generative models. The curriculum uniquely integrates multimedia processing, Human-Computer Interaction (HCI), and "human in the loop" approaches, demonstrating how deep learning can be applied to image, video, and audio analysis, as well as to create user-centric and interactive systems. Practical aspects, including data preprocessing, model evaluation, and framework implementation, will also be covered, equipping students with the skills to apply deep learning techniques in a human-centered context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389J. Advanced Natural Language Processing.**

This course is an interdisciplinary field that combines computational linguistics with statistical and machine learning techniques to enable the computer to understand, interpret, generate, and learn natural language. Natural Language Processing (NLP) introduces key concepts, tasks, and techniques, including recent advancements such as neural networks and large language models. It covers applications such as question answering, automatic speech recognition, and machine translation. Students will gain an understanding of fundamental concepts, advanced algorithms, and practical applications, and will also learn methods for acquiring and annotating text data, and representing linguistic structures. Familiarity with Linear Algebra and Python Programming is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7399. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7599. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7699. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7999. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Department of Computer Science offers an applied computer science Ph.D. program that incorporates leadership, innovation, and communication skills to prepare students to navigate multiple career environments. The program combines the application of computer science practice and theory. Students are encouraged but not required to take electives in entrepreneurship and commercialization skills. The curriculum is centered on two technical tracks that align with faculty research interests: Information Management and Software Systems. The Information Management track encompasses research topics in data analytics and management, human computer interaction, and informatics. The Software Systems track covers topics in computer security and networking, high-performance computing, and software engineering. In addition, the program has a programming requirement to ensure that students can implement a substantial piece of software.

The program focuses on key areas of applied computing of national priority: data science and machine learning, human-computer interaction, computer vision and multimedia, computer security and networking, high-performance computing, and software engineering and real-time systems.

### Educational Goal

Based on the curricular areas and expectations described above, the main educational objectives of the Texas State program are to equip program graduates with:

1. technical knowledge in complementary areas of applied computing,
2. skills for conducting cutting-edge research that advances the current state-of-the-art in applied computing, and
3. leadership, innovation, and communication skills that prepare students to take on challenges in multiple career environments.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic

year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- **Transcripts & GPA for applicants with a bachelor's degree only**
  - baccalaureate degree in computer science or related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate courses (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
- resume/CV
- mentor recommendation letter from a current Texas State doctoral faculty member in the Computer Science program. Visit the faculty list (<https://cs.txstate.edu/accounts/faculty/>) for current faculty and their research interests and contact information. Your mentor must email their letter of support directly to The Graduate College at [gradcollege@txstate.edu](mailto:gradcollege@txstate.edu) ([gradcollege@txstate.edu](mailto:gradcollege@txstate.edu)). This letter must be on file before the program's deadline.
  - Since admission to this thesis-/dissertation-based program requires an intent to mentor letter (an agreement from one of our faculty members to supervise your research project) as part of the application process, we strongly recommend that applicants contact potential mentors by sending their CV and research interests and securing that agreement prior to submitting an admission application. The department cannot guarantee that a suitable mentor will always be available.
- three letters of recommendation submitted directly from professionals who are qualified to assess the student's academic abilities
- written statement of research interests and goals
- interview (top-ranking applicants only.)
  - Applicants are independently reviewed and ranked by each member of the admissions committee based on a defined set of criteria. Those that are top-rated will be contacted for an interview via Skype or phone and asked a pre-determined set of questions. Based on the results of the interviews, the committee will rank the applicants again to determine the final list for admission.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below

unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 85 overall
- official PTE scores required with a 57 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 115 overall
- official TOEFL Essentials scores required 9.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Computer Science concentration in Software Systems requires 78 semester credit hours for students entering with a bachelor's degree, up to 24 hours of which can be from 5000 level master's Computer Science courses (the selection of courses in this category should be made in consultation with the student's Ph.D. advisor and the program director). Students interested in entrepreneurship and commercialization can participate in two boot camps and two entrepreneurship and commercialization courses as electives.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CS 7300	Introduction to Research in Computer Science	3
<b>Breadth Requirement</b>		
Information Management		
Choose 6 hours from the following:		6
CS 7311	Data-Driven Computational Methods and Infrastructure	
CS 7312	Advanced Data Mining	
CS 7313	Advanced Machine Learning and Pattern Recognition	
CS 7314	Bioinformatics	
CS 7321	Human Computer Interaction: Concepts, Models, and Methodologies	
CS 7322	Human Factors and Ergonomics	
CS 7323	Image Processing and Computer Vision	
CS 7324	HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality	
CS 7389A	Service Computing	
CS 7389E		
Software Systems		
Choose 6 hours from the following:		6
CS 7331	High-Performance Computing	
CS 7332	Advanced Parallel Computing	
CS 7333	Advanced Green Computing	
CS 7341	Cyberspace Security	
CS 7342	Advanced Computer Networking	
CS 7343	Mobile Networks and Computing	
CS 7351	Advanced Software Engineering	
CS 7389B	Advanced Software Evolution	

CS 7389C	
CS 7389D	
<b>Technical Depth</b>	
Choose 9 hours from the following: <sup>1</sup>	
CS 7100	Graduate Computer Science Internship
CS 7331	High-Performance Computing
CS 7332	Advanced Parallel Computing
CS 7333	Advanced Green Computing
CS 7341	Cyberspace Security
CS 7342	Advanced Computer Networking
CS 7343	Mobile Networks and Computing
CS 7351	Advanced Software Engineering
CS 7387	Research in Computer Science
CS 7389B	Advanced Software Evolution
Up to two graduate-level courses outside of the Computer Science department can be taken if the dissertation project requires multidisciplinary knowledge as determined by the dissertation advisor. The dissertation advisor must approve the courses.	
<b>Prescribed Electives</b>	
Choose 30 hours from the following 7000 and 5000 level courses: <sup>2</sup>	
CS 7100	Graduate Computer Science Internship
CS 7311	Data-Driven Computational Methods and Infrastructure
CS 7312	Advanced Data Mining
CS 7313	Advanced Machine Learning and Pattern Recognition
CS 7314	Bioinformatics
CS 7321	Human Computer Interaction: Concepts, Models, and Methodologies
CS 7322	Human Factors and Ergonomics
CS 7323	Image Processing and Computer Vision
CS 7324	HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality
CS 7331	High-Performance Computing
CS 7332	Advanced Parallel Computing
CS 7333	Advanced Green Computing
CS 7341	Cyberspace Security
CS 7342	Advanced Computer Networking
CS 7343	Mobile Networks and Computing
CS 7351	Advanced Software Engineering
CS 7387	Research in Computer Science
CS 7389A	Service Computing
CS 7389B	Advanced Software Evolution
CS 7389C	
CS 7389D	
CS 7389E	
CS 5306	Advanced Operating Systems
CS 5310	Network and Communication Systems
CS 5318	Principles of Programming Languages
CS 5326	Advanced Studies in Human Factors of Computer Science
CS 5329	Algorithm Design and Analysis
CS 5332	Data Base Theory and Design



CS 5334	Advanced Internet Information Processing
CS 5338	Formal Languages
CS 5341	Advanced Network Programming
CS 5343	Wireless Communications and Networks
CS 5346	Advanced Artificial Intelligence
CS 5351	Parallel Processing
CS 5352	Distributed Computing
CS 5391	Survey of Software Engineering
CS 5392	Formal Methods in Software Engineering
CS 5393	Software Quality
CS 5394	Advanced Software Engineering Project
CS 5395	Independent Study in Advanced Computer Science
CS 5396	Advanced Software Engineering Processes and Methods
ED 7359	Seminar in Quantitative Research
MATH 7321	Graph Theory
MATH 7325	Statistics I
MATH 7335	Statistics II: Linear Modeling
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship
<b>Dissertation</b>	
Choose a minimum of 24 hours from the following:	
CS 7199	Dissertation
CS 7299	Dissertation
CS 7399	Dissertation
CS 7599	Dissertation
CS 7699	Dissertation
CS 7999	Dissertation
<b>Total Hours</b>	<b>78</b>

<sup>1</sup> Only courses which have not been completed in the breadth requirement may be completed in the depth requirement.

<sup>2</sup> Courses that are already used to satisfy the breadth and technical depth cannot be used for other elective requirements.

## Procedures for Prior Learning Assessment Course Credit:

Students in the Ph.D. program in Computer Science can apply up to 12 hours of coursework through a prior learning assessment (PLA) evaluation process when they demonstrate mastery of applicable skills and learning outcomes. PLA course credit can be satisfied through experiential learning students gained through work, non-course-based advanced studies, internships, or externships prior to beginning the Computer Science Ph.D. Program. Note that the total number of credits earned through PLA and course transfer must not exceed 12 semester credit hours (for criteria and processes for earning transfer credit, see the relevant section in the catalog). Students who apply for PLA credit must meet the following conditions:

- Full-time students must make the request for PLA credit in their first year in the program. Part-time students must make the request before completing a total of 18 credits.

- The PLA experiences on which the student is basing the request for PLA credits must have occurred within five years of when the request is made.

The process of applying for PLA credit includes the following:

- A portfolio of written work is used to evaluate a student's work and experience for course credit.
- The student provides a summary document that includes the course description for each course for which they are requesting PLA credit, the student learning outcomes for the course (SLOs), and a numbered and detailed explanation of how their experience demonstrates expertise in the subject matter.
- The explanation should include the SLOs for each course under consideration and explicitly map them to parts of the student's supported materials that demonstrate mastery of the SLO. There should be no "double dipping" of a single aspect of a student's supporting materials, i.e., materials cannot be mapped to more than one course SLO. In addition, if credit for several courses is requested, a single aspect of a student's supporting materials cannot be used for more than one course.
- In addition to the summary document, the student will include supporting materials in the form of appendices, which contain reports, peer-reviewed publications, contracts, grant proposals, certificates, official transcripts, etc.

The portfolio is evaluated by a PLA evaluation committee, constituted and chaired by the director of the doctoral program. In addition to the director of the doctoral program, the committee will include two core doctoral faculty (appointed by the department chair) and one faculty member in the student's subfield, with appropriate doctoral faculty status. If one or more of the courses for which the student is requesting PLA credit are not Computer Science courses (e.g., an MSEC course), an external faculty responsible for the non-CS course will be invited to serve on the committee in place of the member representing the student's subfield. Approval of the portfolio is required by the doctoral program director and a majority of the evaluation committee. Once approval is recommended by the department, the Ph.D. program director submits a written petition to the Dean of The Graduate College to grant course credit for prior learning assessment. The petition must include the courses for which credit is requested. The petition also includes the decision of the evaluating committee and the summary document created by the student. The appendices are made available on request.

## Application for Advancement to Candidacy

When all requirements for admission to candidacy have been met (completion of boot camps, completion of required coursework, passing of the qualifying and comprehensive exams, completion of the programming requirement, and submission of an approved dissertation proposal) the Ph.D. program director forwards the Application for Advancement to Candidacy to the dean of The Graduate College for review and approval. This application form is available on The Graduate College website.

## Grade-Point Requirements for Advancement to Candidacy

A minimum GPA of 3.0 on all coursework undertaken in the doctoral program is required for admission to candidacy. Grades below a B on any graduate coursework cannot be applied toward the Ph.D. degree. Incomplete grades must have been cleared before approval for advancement to candidacy can be granted. No more than six semester

credit hours of dissertation research can be taken before advancing to candidacy.

## Advancement to Candidacy Time Limit

No credit will be applied toward a student's doctoral degree for coursework completed more than five years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at Texas State as well as course credit transferred to Texas State from other institutions.

## Dissertation Proposal

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It has to include at least an introduction, methodology to be used, a survey of the relevant literature, and preliminary results that demonstrate the feasibility. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

## Comprehensive Examination

The comprehensive examination consists of a written and an oral component. The qualifying exam serves as the written component. The oral component is administered by the dissertation committee, typically right after the dissertation proposal. Completion of both the business plan and a grant proposal are required for advancing to candidacy and is part of the comprehensive examination.

## Dissertation Enrollment Requirements

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. At least 18 semester credit hours of dissertation research must be taken after having advanced to candidacy. If a student is receiving supervision on the dissertation during the summer or if the student is graduating in the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours (e.g., CS 7199) during the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours.

## Dissertation Time Limit

Each Ph.D. student must prepare a written dissertation proposal and defend it orally. This should be done by the time the student has completed 36 semester credit hours and after identifying the dissertation committee, passing the qualifying exam, fulfilling the programming requirement, and completing all required courses and boot camps. Any student who does not defend his/her dissertation proposal by the time 45 semester credit hours have been accrued will be dismissed from the program. After advancing to candidacy a student should complete their dissertation within five years, keeping in mind the ten year total time limit.

If the proposal defense is not passed, the student will have the option of taking a second and final defense in the following long semester. Students will be dismissed from the program if they do not pass the proposal defense the second time.

## Dissertation Committee

The student, in consultation with his/her dissertation advisor, must establish a dissertation committee that consists of the dissertation advisor, two other doctoral faculty members from the Department, and one faculty member with at least adjunct doctoral faculty status either from another department within the university or from another institution who would be selected based on the relevancy of their research to the

student's dissertation. The dissertation advisor serves as the chair of the committee.

## Committee Changes

Any change to the dissertation committee must be submitted using the Dissertation Advisor/Committee Member Change Request Form for approval by the Dean of The Graduate College. Changes must be submitted no later than sixty days before the dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be downloaded from The Graduate College's website.

## Dissertation Proposal

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It has to include at least an introduction, methodology to be used, a survey of the relevant literature, and preliminary results that demonstrate the feasibility. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

## Dissertation Research and Writing

All doctoral students must complete a dissertation that consists of original research and demonstrates mature scholarship and critical judgment in addition to familiarity with tools and methods in the chosen area. The dissertation project must adhere to the dissertation proposal and cover the topic approved by the student's dissertation committee.

## Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least one month before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the dissertation is defensible and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of the dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense in the following long semester. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's website. The student must submit his/her dissertation to The Graduate College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Students must pass the dissertation defense by the time 90 semester credit hours have been accrued. The Ph.D. program director will review each student annually to ascertain his/her progress towards the degree and will consult the student's dissertation advisor and dissertation committee on this matter as needed. Any student who does not pass the dissertation defense by the time 90 semester credit hours have been accrued will be dismissed from the program.

## Approval and Submission of the Dissertation

A final copy of the dissertation proposal, accompanied by the signed approval forms, must be turned in to the Ph.D. program director, who will forward them to the Dean of The Graduate College for review and final approval.

Doctorate level courses in Computer Science: CS

## Courses Offered

### Computer Science (CS)

#### CS 7100. Graduate Computer Science Internship.

This course provides advanced training supervised by computer scientists in internship programs approved by the department.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CS 7199. Dissertation.

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CS 7299. Dissertation.

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CS 7300. Introduction to Research in Computer Science.

This credit/no credit course is designed to develop research and communication skills for Ph.D. students. Topics covered include research processes, research methods, ethics, conducting literature review, critiquing papers, preparing research proposals, faculty research presentations, and the software tools and platforms available for conducting applied computing research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 7308. Computer Science Studies.

This course provides foundations in computer science for students entering the doctoral program who may need certain background or leveling coursework. The course does not earn graduate degree credit. It is repeatable with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CS 7309. Professional Development of Doctoral Assistants.

This course is designed to equip the doctoral students with skills and an understanding of the proper procedures to be effective doctoral instructional and teaching assistants. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 7311. Data-Driven Computational Methods and Infrastructure.

This course covers computational and statistical methods for using large-scale data sets ('big data') to answer scientific and business questions. It focuses on framing research questions, understanding how data can answer them, and using modern software tools for scalable data storage, processing, and analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CS 7312. Advanced Data Mining.

This course provides in-depth coverage of advanced data mining and information retrieval principles and techniques. It also offers extensive training and practice opportunities in frontier research directions. Prerequisite: CS 5316 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CS 7313. Advanced Machine Learning and Pattern Recognition.

This course provides students advanced theoretical and practical skills to learn, design, implement, and apply machine learning and pattern recognition approaches. The students will gain analytical and problem-solving skills by studying machine learning and pattern recognition techniques and applying them to solve real problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7314. Bioinformatics.**

This course introduces advanced algorithms for data-intensive computational analysis targeting biological applications such as drug response prediction, gene network analysis, and protein/RNA structure prediction. Main techniques include greedy search, linear regression, clustering, network analysis, expectation maximization, and Hidden Markov models, which are widely applicable beyond biological data. Prerequisite: CS 5329 or CS 5369L either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7315. Network Science.**

This course provides in-depth coverage of the fundamentals and research frontiers of network science. The main topics include mathematical models and computational algorithms for analyzing the structure of complex networks and predicting dynamic processes on networks. Other topics include machine learning and data mining on graphs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7321. Human Computer Interaction: Concepts, Models, and Methodologies.**

This course provides an introduction to Human Computer Interaction (HCI) research, methods, and topics, including fundamentals of user interface and experimental design, usability, evaluation methods, software toolkits for interactive applications, graphics, visualization, mobile design, collaborative and social computing, biological factors, and human computation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7322. Human Factors and Ergonomics.**

This course combines knowledge in the fields of intelligent user interfaces, human factors, ergonomics, and environmental psychology. Topics include HCI principles, human information processing, anthropometry, principles of eye tracking and their effects on human factors research, as well as operations of biometrics systems and human factors influencing those systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7323. Image Processing and Computer Vision.**

Image Processing and Computer Vision are research areas with a variety of modern applications ranging from the analysis of images and videos to real-time processing of image streams coming from self-driving vehicles and robotic agents. This course will prepare students with advanced state of the art knowledge in those fields. Prerequisite: CS 5329 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7324. HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality.**

This course introduces advanced methods for enhancing user experience and presents effective HCI models via computer graphics, imaging, animation, simulation, visualization, augmented reality, and immersive virtual reality. Additionally, the course presents related science and engineering foundations as well as graphic design, cognitive science, and perceptual psychology theories and models. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7331. High-Performance Computing.**

This course covers the advanced design, analysis, and optimization of high-performance applications. Topics include high-performance computer architectures, including accelerators and systems-on-chip, performance modeling and benchmarking, data and control dependence analysis, data locality estimation, memory hierarchy management, techniques for exposing parallelism, and code transformations. Different workloads are studied. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7332. Advanced Parallel Computing.**

This course covers advanced design of parallel algorithms, performance modeling, parallel hardware, language support for parallel programming, and programming models for shared- and distributed-memory systems ranging from handheld multicore devices to large-scale clusters and accelerators. The students will gain applied knowledge and skills by developing parallel software for multiple platforms. Prerequisite: CS 5351 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7333. Advanced Green Computing.**

This course covers hardware and software techniques to improve the energy-efficiency of computing systems. Topics include best practices in building energy-efficient data centers and mobile devices, current trends in reducing the energy consumption of processors and storage components, energy-aware resource management, software optimizations, and hands-on experience on power-measurable systems. Prerequisite: CS 5351 and CS 5369Y both with grades of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7334. Scalable Systems for Supercomputing.**

This course will teach basic aspects of building a scalable high performance computing (HPC) system. Specifically, it will focus on the design principles for scaling parallel communication and I/O operations for accessing HPC storage using a message-passing programming model. The course will use two large-scale systems—checkpointing for resilience and a parallel file system for storage as use cases to demonstrate how these principles are used in practice. Students will develop components of a scalable system and use software tools to measure and analyze their performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7341. Cyberspace Security.**

This course presents recent advances in methodologies, models, systems and applications of cyberspace security research. Topics include in-depth coverage of the state-of-the-art security technologies and research issues on information security, software security, network security, secure system design, secure programming, applied cryptography, vulnerability, and threats. Prerequisite: CS 5378 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7342. Advanced Computer Networking.**

This course covers recent research ideas, methodologies and approaches in networking research. The course focuses on the development of protocols and the analysis of related algorithms. Topics include new network architectures, cloud computing, software defined networking, wireless systems, social networks, and security and privacy. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7343. Mobile Networks and Computing.**

This course provides an in-depth study of wireless mobile communication networks, wireless network measurements and modeling, channel assignments and coverage, wireless network protocols, mobile data management, wireless security, and various wireless network applications including ad hoc, sensor networks, delay-tolerant networks, and mobile social networks. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7351. Advanced Software Engineering.**

Software engineering is the application of scientific methods to software development and maintenance. This course provides an in-depth study of advanced concepts and techniques of automatic software generation and analysis. Topics include software process programming, symbolic execution, model checking, property generation and checking, and runtime verification of complex software systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7352. Real-time Systems.**

This course covers issues related to the design and analysis of systems with real-time constraints. The problem of ensuring such constraints is ultimately a scheduling problem, so much attention is devoted to such problems. This course aims to provide a solid foundation for conducting research in real-time systems or related areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7387. Research in Computer Science.**

This course covers current research topics in computer science under the direction of a supervising professor. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7389A. Service Computing.**

This course introduces concepts and principles for enabling the development of software as a service based on Service-Oriented Architecture (SOA), methodology of SOA systems development, the main technologies used in achieving SOA, and state of the art techniques and advances in emerging cloud and edge (Internet of Things) services. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389B. Advanced Software Evolution.**

This topics course provides an in-depth study of state-of-the-art software evolution techniques and tools based on the current research literature. Software evolution has become increasingly important in software development. Software systems often evolve to fix defects, to improve performance, or to adapt to various other requirements. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**CS 7389F. Secure Cyber-Physical Systems: Cryptography and Machine Learning.**

This course is designed to introduce students to the fundamentals of cryptography and machine learning and how they can be used to ensure security and privacy in cyber-physical systems (CPS). Topics will include an overview of cyber-physical systems, cryptographic techniques, machine learning algorithms, and security threats and attacks on CPS. The course will also cover privacy-preserving machine learning techniques and design principles for secure CPS. Students who successfully complete this course will be well-versed in cryptography and machine learning approaches for cybersecurity in CPS and be able to use these techniques to address practical real-world issues. Prerequisite: CS 3354 and CS 3358 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389G. Human-Centered Data Science.**

This course is to study the process of deriving insights from data in order to make optimal decisions. Human-Centered Data Science addresses various data science problems with attention to improve the quality of decisions by incorporating human experts in the learning process, e.g., interactive Machine Learning and eXplainable Artificial Intelligence. Prerequisite: CS 3358 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389H. Human-Centric Deep Learning.**

This course provides an in-depth exploration of deep learning, emphasizing multi-layer neural networks and their applications. Students will explore core topics like convolutional, recurrent, and graph neural networks, along with optimization algorithms and generative models. The curriculum uniquely integrates multimedia processing, Human-Computer Interaction (HCI), and "human in the loop" approaches, demonstrating how deep learning can be applied to image, video, and audio analysis, as well as to create user-centric and interactive systems. Practical aspects, including data preprocessing, model evaluation, and framework implementation, will also be covered, equipping students with the skills to apply deep learning techniques in a human-centered context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389J. Advanced Natural Language Processing.**

This course is an interdisciplinary field that combines computational linguistics with statistical and machine learning techniques to enable the computer to understand, interpret, generate, and learn natural language. Natural Language Processing (NLP) introduces key concepts, tasks, and techniques, including recent advancements such as neural networks and large language models. It covers applications such as question answering, automatic speech recognition, and machine translation. Students will gain an understanding of fundamental concepts, advanced algorithms, and practical applications, and will also learn methods for acquiring and annotating text data, and representing linguistic structures. Familiarity with Linear Algebra and Python Programming is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7399. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7599. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7699. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7999. Dissertation.**  
Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no–credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Credit/No Credit

Program Overview

The Master of Arts (M.A.) degree with a major in Computer Science is designed to prepare students for doctoral research, college teaching, careers in computer science and software engineering, and careers in digital forensics.

Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College’s website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor’s degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - background course work\*
  - official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
    - The GRE may be waived if the student holds a master’s or doctoral degree from a regionally accredited U.S. institution. If the student holds a master’s or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
- resume/CV
  - statement of purpose
  - three letters of recommendation

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

\*Additional Information

Students admitted to the program will participate in a diagnostic interview with the graduate advisor. This interview will include a review of test scores, grades, and work history. In some cases, additional courses may be added to the degree program.

Degree Requirements

The Master of Arts (M.A.) degree with a major in Computer Science requires 36 semester credit hours.

Background

Students are required to fulfill background course work if they do not have adequate undergraduate computer science background. The background requirements may be reduced if evidence is presented which shows that the applicant has taken equivalent courses elsewhere prior to enrollment at Texas State. Background work must be completed before enrolling in graduate courses.

The minimum undergraduate background requirements for computer science and software engineering majors are:

Code	Title	Hours
<b>Computer Science</b> <sup>1</sup>		
CS 1428	Foundations of Computer Science I	4
CS 2308	Foundations of Computer Science II	3
CS 2318	Assembly Language	3
CS 3339	Computer Architecture	3
CS 3358	Data Structures and Algorithms	3
CS 4318	Compiler Construction	3
or CS 4328	Operating Systems	
Advanced computer science electives (CS 3000-4000 level)		6
<b>Mathematics</b> <sup>2</sup>		
MATH 5358	Applied Discrete Mathematics (or equivalent)	3
Calculus		8

<sup>1</sup> These courses must be completed with no grade less than "C" and no more than two "Cs."  
<sup>2</sup> These courses must be completed with no grade less than "C."

Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CS 5306	Advanced Operating Systems	3

or CS 5310	Network and Communication Systems	
or CS 5332	Data Base Theory and Design	
CS 5318	Principles of Programming Languages	3
or CS 5338	Formal Languages	
CS 5329	Algorithm Design and Analysis	3
CS 5346	Advanced Artificial Intelligence	3
CS 5391	Survey of Software Engineering	3

#### Electives

Choose 12 hours from the following:		12
CS 5306	Advanced Operating Systems	
CS 5310	Network and Communication Systems	
CS 5318	Principles of Programming Languages	
CS 5326	Advanced Studies in Human Factors of Computer Science	
CS 5332	Data Base Theory and Design	
CS 5338	Formal Languages	
CS 5343	Wireless Communications and Networks	
CS 5352	Distributed Computing	
CS 5369J	Advanced Human Computer Interaction	
CS 5369L	Machine Learning and Applications	
CS 5369Q	Recommender Systems	
CS 5369Y	Green Computing	
CS 5375	Multimedia Computing	
CS 5378	Advanced Computer Security	
CS 5388	Advanced Computer Graphics	
CS 5389	Graphical User Interfaces	
CS 5392	Formal Methods in Software Engineering	
CS 5393	Software Quality	
CS 5394	Advanced Software Engineering Project	
CS 5395	Independent Study in Advanced Computer Science	

#### Minor

Choose a 9-hour advisor-approved minor	9
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<b>Total Hours</b>	<b>36</b>
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## Comprehensive Examination Requirement

The comprehensive exams of computer science master programs consist of multiple components. Specifically, all Computer Science graduate students must complete/pass:

1. **Degree Outline:** Have a degree outline prepared before the end of their first semester. Currently this is done during the mandatory diagnostic interview sessions for newly admitted CS master degree students.
2. **Programming exam:** Pass a written exam in programming.
3. **Communication exam:** Pass a written exam in communication.
4. **Attendance requirement of computer science seminars.**
5. For non-thesis students, the **written core course exam**.

Failure to complete 1, 2, or 3 will result in a "hold" on registration and may cause delays in taking/passing the comprehensive examination. Details of 2, 3, 4, and 5 are described below.

#### Programming Exam

The Programming Exam integrates problem-solving and technical abilities to write clear and logical code. The exam format is written.

- The allowable programming languages are C++/Java. Students can elect either of the two.
- This exam is given to newly admitted graduate students twice a year. Students are notified of the registration by the department for the exam. A student who doesn't participate in the exam without the department approval forfeits the opportunity of taking the exam and must take the remedy course CS 5301.
- The exam is typically administrated during the week before the fall or spring semester starts.
- Students who fail the Programming Exam are required to take the remedy course CS 5301 immediately. Students must obtain a grade C or higher of CS 5301 in order to satisfy the programming exam requirement. Students are allowed to take CS 5301 twice.
- Students who have not passed the Programming Exam or the remedy course, CS 5301, are not eligible to take classes during the summer semesters.

#### Communication Exam

The Communication Exam tests the ability to write clear technical English on computer science topics. All students must satisfy one of the following three options:

- Have a score of 3.5 or higher on the Analytical Writing section of the Graduate Record Examination (GRE).
- Take the Communication Exam and earn a passing score in the first long semester.
  - a. This exam is given to newly admitted graduate students during their first semester (Spring or Fall semester only).
  - b. Students are registered and notified by the department for this exam.
  - c. This exam can only be taken once during the first semester of initial enrollment.
- Complete one of the following Texas State English courses, ENG 3313, ENG 3311, or ENG 3303, and earn a grade of B or higher. Students must register for one of the English courses by the end of the student's first year in the graduate program. There is no limit on the number of times the students can take those English courses.

#### Seminar Attendance

All computer science master students are required to attend at least **four** computer science departmental seminars. All seminars that can be counted toward this requirement are announced by the department through emails to all active students and on the department website. Students are strongly recommended to plan and participate in seminars earlier and not to wait until the final semester of their study.

#### Written Core Course Exam (Non-Thesis Students)

All non-thesis students are required to take a departmental written core course exam after having completed the core courses in computer science (including all concentrations) or software engineering and accumulating at least 18 graduate hours of credit.

- The exam covers all concepts from core course CS 5329.
- The questions are graded on computer science or software engineering content.

- Students who perform unacceptably on the exam may take the exam a second time. A third test administration is at the discretion of the committee that administers the exams, based on intensive and documented justification provided by the student.
- Exams are given during the fall and spring semesters.
- Students are required to register for the exam a week in advance of the announced exam date.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Computer Science: CS

## Courses Offered

### Computer Science (CS)

#### CS 5100. Advanced Computer Science Internship.

This course provides advanced training supervised by computer scientists in internship programs approved by the department. Course cannot be counted toward any graduate degree, is open only to majors in the Department of Computer Science. May be repeated once. This course does not earn graduate degree credit. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 5300. Professional Development of Graduate Assistants.

This course is designed to develop and enhance the professional and technical skills of graduate teaching and instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5301. Programming Practicum.

This course provides an intensive review of programming through data structures. Topics include syntax, semantics, problem-solving, and algorithm development. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CS 5302. Foundations of Data Structures and Algorithm Design.

This course serves as a foundation course for computer science master's degree students who need reinforcement of fundamental concepts covered by CS 3358. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5303. Foundations of Computer Architecture.

This foundation course for CS master's degree students who need CS 3339 concept reinforcement covers fundamental hardware components. Topics include ALUs, single and multiple cycle datapath and control, RISC vs. CISC, pipelining, caches, I/O, virtual memory, and related performance issues. It may be repeated once and is non-graduate degree credit. Prerequisite: Instructor Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5305. Foundations of Operating Systems.

This course serves as a foundation course for computer science master's students who need reinforcement of fundamental concepts covered by CS 4328. Topics include the principles of operating systems, central processing unit scheduling algorithms, memory management, cooperating sequential processes, and device management. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5306. Advanced Operating Systems.

This course provides a study of modern operating systems, including network, distributed, and real-time systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CS 5310. Network and Communication Systems.

This course provides a study of network and communication systems. Students will be required to perform verification and implementation of protocols.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5316. Data Mining.**

This course covers fundamental concepts and techniques, plus recent developments in data mining and information retrieval. It provides relevant research training and practice opportunities. May not be taken for credit if the student has received credit for CS 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5318. Principles of Programming Languages.**

This course focuses on the principles of programming languages. Topics covered include programming paradigms, concepts of programming languages, formal syntax and semantics, and language implementation issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5326. Advanced Studies in Human Factors of Computer Science.**

This course provides a professional-level presentation of techniques and research findings related to human-computer interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5329. Algorithm Design and Analysis.**

This course provides an introduction to algorithm design and analysis, computational complexity, and NP-completeness theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5331. Crafting Compilers.**

Overview of the internal structure of modern compilers. Research on compilation techniques. Topics include lexical scanning, parsing techniques, static type checking, code generation, dataflow analysis, storage management, and execution environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5332. Data Base Theory and Design.**

This course covers computer system organization for the management of data. Topics include data models, data model theory, optimization and normalization, integrity constraints, query languages, and intelligent database systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5334. Advanced Internet Information Processing.**

This course integrates popular scripting and database programming languages to provide advanced information processing for Internet applications that demand database support and sophisticated, application-specific information processing. Prerequisite: CS 5332 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5338. Formal Languages.**

This course covers advanced topics in automata theory, grammars, Turing machines, decidability, and algorithmic complexity. A strong background in both data structures and discrete mathematics is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5341. Advanced Network Programming.**

Study of advanced concepts and programming skills in computer networks such as advanced TCP/IP, API, multicasting and broadcasting, reliable communications, advanced I/O functions and options.

Prerequisite: CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5343. Wireless Communications and Networks.**

Study of the fundamental aspects of wireless communications and wireless/mobile networks, introduction of wireless/mobile networking APIs. Prerequisites: CS 3358 with a grade of "B" or better and CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5346. Advanced Artificial Intelligence.**

This course covers knowledge representation, knowledge engineering, parallel and distributed artificial intelligence (AI), heuristic searches, machine learning and intelligent databases, and implementation of systems in high-level AI languages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5351. Parallel Processing.**

This course provides an introduction to the design and analysis of parallel algorithms, parallel architectures, and computers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5352. Distributed Computing.**

This course provides studies in advanced topics in distributed systems: concurrency control and failure recovery, management of replicated data, distributed consensus and fault tolerance, remote procedure calls, naming, and security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5369J. Advanced Human Computer Interaction.**

This course will cover state of the art human computer interaction topics such as perceptual compression, eye-gaze, and brain computer interfaces with emphasis on the human visual system, eye-tracking, and electroencephalography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**CS 5369L. Machine Learning and Applications.**

Provides broad introduction to machine learning, including learning theory, and recent topics like support vector machines and feature selection. Covers basic ideas, intuition, and understanding behind modern machine learning methods. Discusses applications like face recognition, text recognition, biometrics, bioinformatics, and multimedia retrieval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Q. Recommender Systems.**

This course covers various concepts of recommender systems, including personalization algorithms, evaluation tools, and user experiences. Discussion of how recommender systems are deployed in business applications, design of new recommender experiences, and how to conduct and evaluate research in recommender systems. Cannot take for credit if already took CS 4379Q.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Y. Green Computing.**

Reducing mobile device, cloud computing platform, and supercomputer energy consumption is a paramount, daunting problem. This course covers state-of-the-art green computing research, including energy-efficient hardware and software design, power-aware resource management and storage solutions, green data centers and mobile computing. Cannot be taken for credit if received CS 4379Y credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Z. Distributed Ledger Systems and Blockchains: Theory and Applications.**

This course covers fundamental concepts underlying the design, implementation, research, and applications of Distributed Ledger Technology (DLT) systems (e.g., blockchains). It introduces implementations, applications, and performance evaluation of DLT systems. Additionally, through homework projects, the students will be introduced to current research on DLT systems and perform independent study and small-scale research on selected topics. Course topics include cryptography encryption, security, anonymity, cryptographic data structures, DLT performance evaluation, DLT applications, and current DLT research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5375. Multimedia Computing.**

This course provides a study of the digital representation and processing of the three principal multimedia data types: image, audio, and video. Standards, storage media, and compression techniques for the three data types are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5378. Advanced Computer Security.**

This course covers various aspects of producing secure computer information systems that provide guaranteed controlled sharing. Emphasis is on software models and design, including discovery and prevention of computing systems security vulnerabilities. Current systems and methods are examined and critiqued.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5388. Advanced Computer Graphics.**

This course covers the algorithms and data structures used in representing and processing visual data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5389. Graphical User Interfaces.**

This course covers both abstract and practical treatments of using graphics to implement interactive computer/human interfaces. It includes a survey of the major GUI standards and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5391. Survey of Software Engineering.**

The course covers the software life cycle, emphasizing system analysis and design, including a survey of methodologies based on data flows and objects. The course includes a professional ethics component.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5392. Formal Methods in Software Engineering.**

The use of design and specification languages in producing software systems. Emphasis is placed on proving correctness of designs and implementations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5393. Software Quality.**

The latter half of the software life cycle is discussed. Topics include testing, performance evaluation, and software metrics. Appropriate software tools are studied and used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5394. Advanced Software Engineering Project.**

Students produce a software project of significant size in a team environment. All aspects of the software engineering course sequence are integrated and put into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5395. Independent Study in Advanced Computer Science.**

Open to graduate students on an independent basis by arrangement with the faculty member concerned. Course is not repeatable for credit. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5396. Advanced Software Engineering Processes and Methods.**

The essentials of software engineering processes, methods, and tools for the evolutionary design of complex interactive software are discussed. Overviews of other topics like quality concepts, SEI CMM, information technology, and network technology are covered. Student completes a literature survey of the latest software engineering analysis and design processes, methods, and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in CS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Arts (M.A.) degree with a major in Computer Science is designed to prepare students for doctoral research, college teaching, careers in computer science and software engineering, and careers in digital forensics.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic

year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work\*
- GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
  - The GRE may be waived if the student holds a master's or doctoral degree from a regionally accredited U.S. institution. If the student holds a master's or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
- resume/CV
- statement of purpose
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

### \*Additional Information

Students admitted to the program will participate in a diagnostic interview with the graduate advisor. This interview will include a review of test scores, grades, and work history. In some cases, additional courses may be added to the degree program.

## Degree Requirements

The Master of Arts (M.A.) degree with a major in Computer Science requires 30 semester credit hours, including a thesis.

### Background

Students are required to fulfill background course work if they do not have adequate undergraduate computer science background. The background requirements may be reduced if evidence is presented which shows that the applicant has taken equivalent courses elsewhere prior to enrollment at Texas State. Background work must be completed before enrolling in graduate courses.

The minimum undergraduate background requirements for computer science and software engineering majors are:

Code	Title	Hours
<b>Computer Science</b> <sup>1</sup>		
CS 1428	Foundations of Computer Science I	4
CS 2308	Foundations of Computer Science II	3
CS 2318	Assembly Language	3
CS 3339	Computer Architecture	3
CS 3358	Data Structures and Algorithms	3
CS 4318	Compiler Construction	3
or CS 4328	Operating Systems	3
Advanced computer science electives (CS 3000-4000 level)		6
<b>Mathematics</b> <sup>2</sup>		
MATH 5358	Applied Discrete Mathematics (or equivalent)	3
Calculus		8

<sup>1</sup> These courses must be completed with no grade less than "C" and no more than two "Cs."  
<sup>2</sup> These courses must be completed with no grade less than "C."

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CS 5306	Advanced Operating Systems	3
or CS 5310	Network and Communication Systems	
or CS 5332	Data Base Theory and Design	
CS 5318	Principles of Programming Languages	3
or CS 5338	Formal Languages	
CS 5329	Algorithm Design and Analysis	3
CS 5346	Advanced Artificial Intelligence	3
CS 5391	Survey of Software Engineering	3
<b>Electives</b>		
Choose 3 hours of advisor-approved electives		3
CS 5306	Advanced Operating Systems	
CS 5310	Network and Communication Systems	
CS 5318	Principles of Programming Languages	
CS 5326	Advanced Studies in Human Factors of Computer Science	
CS 5331	Crafting Compilers	
CS 5332	Data Base Theory and Design	
CS 5334	Advanced Internet Information Processing	

CS 5338	Formal Languages
CS 5341	Advanced Network Programming
CS 5343	Wireless Communications and Networks
CS 5351	Parallel Processing
CS 5352	Distributed Computing
CS 5369J	Advanced Human Computer Interaction
CS 5369L	Machine Learning and Applications
CS 5369Q	Recommender Systems
CS 5369Y	Green Computing
CS 5375	Multimedia Computing
CS 5378	Advanced Computer Security
CS 5388	Advanced Computer Graphics
CS 5389	Graphical User Interfaces
CS 5392	Formal Methods in Software Engineering
CS 5393	Software Quality
CS 5394	Advanced Software Engineering Project
CS 5395	Independent Study in Advanced Computer Science

<b>Minor</b>	
Choose a 6-hour advisor-approved minor	6
<b>Thesis</b>	
CS 5399A	Thesis
3	
Select a minimum of 3 hours from the following:	
3	
CS 5199B	Thesis
CS 5299B	Thesis
CS 5399B	Thesis
CS 5599B	Thesis
CS 5999B	Thesis

<b>Total Hours</b>	<b>30</b>
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## Comprehensive Examination Requirement

The comprehensive exams of computer science master programs consist of multiple components. Specifically, all graduate students must complete/pass:

1. **Degree Outline:** Have a degree outline prepared before the end of their first semester. Currently this is done during the mandatory diagnostic interview sessions for newly admitted CS master degree students.
2. **Programming exam:** Pass a written exam in programming.
3. **Communication exam:** Pass a written exam in communication.
4. **Attendance requirement of computer science seminars.**
5. For thesis students, the **master thesis defense exam**.

Failure to complete 1, 2, or 3 will result in a "hold" on registration and may cause delays in taking/passing the comprehensive examination. Details of 2, 3, 4, and 5 are described below.

### Programming Exam

The Programming Exam integrates problem-solving and technical abilities to write clear and logical code. The exam format is written.

- The allowable programming languages are C++/Java. Students can elect either of the two.
- This exam is given to newly admitted graduate students twice a year. Students are notified of the registration by the department for the exam. A student who doesn't participate in the exam without the

department approval forfeits the opportunity of taking the exam and must take the remedy course CS 5301.

- The exam is typically administrated during the week before the Fall or Spring semester starts.
- Students who fail the Programming Exam are required to take the remedy course CS 5301 immediately. Students must obtain a grade C or higher of CS 5301 in order to satisfy the programming exam requirement. Students are allowed to take CS 5301 twice.
- Students who have not passed the Programming Exam or the remedy course, CS 5301, are not eligible to take classes during the summer semesters.

### Communication Exam

The Communication Exam tests the ability to write clear technical English on computer science topics. All students must satisfy one of the following three options:

- Have a score of 3.5 or higher on the Analytical Writing section of the Graduate Record Examination (GRE).
- Take the Communication Exam and earn a passing score in the first long semester.
  - a. This exam is given to newly admitted graduate students during their first semester (spring or fall semester only).
  - b. Students are registered and notified by the department for this exam.
  - c. This exam can only be taken once during the first semester of initial enrollment.
- Complete one of the following Texas State English courses, ENG 3313, ENG 3311, or ENG 3303, and earn a grade of B or higher. Students must register for one of the English courses by the end of the student's first year in the graduate program. There is no limit on the number of times the students can take those English courses.

### Seminar Attendance

All computer science master students are required to attend at least **four** computer science departmental seminars. All seminars that can be counted toward this requirement are announced by the department through emails to all active students and on the department website. Students are strongly recommended to plan and participate in seminars earlier and not to wait until the final semester of their study.

### Oral Master Thesis Defense Exam

All thesis students are required to take an oral exam at the time of their public thesis defense.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until

the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Computer Science: CS

## Courses Offered

### Computer Science (CS)

#### CS 5100. Advanced Computer Science Internship.

This course provides advanced training supervised by computer scientists in internship programs approved by the department. Course cannot be counted toward any graduate degree, is open only to majors in the Department of Computer Science. May be repeated once. This course does not earn graduate degree credit. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 5300. Professional Development of Graduate Assistants.

This course is designed to develop and enhance the professional and technical skills of graduate teaching and instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5301. Programming Practicum.

This course provides an intensive review of programming through data structures. Topics include syntax, semantics, problem-solving, and algorithm development. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CS 5302. Foundations of Data Structures and Algorithm Design.

This course serves as a foundation course for computer science master's degree students who need reinforcement of fundamental concepts covered by CS 3358. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships



**CS 5303. Foundations of Computer Architecture.**

This foundation course for CS master's degree students who need CS 3339 concept reinforcement covers fundamental hardware components. Topics include ALUs, single and multiple cycle datapath and control, RISC vs. CISC, pipelining, caches, I/O, virtual memory, and related performance issues. It may be repeated once and is non-graduate degree credit. Prerequisite: Instructor Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5305. Foundations of Operating Systems.**

This course serves as a foundation course for computer science master's students who need reinforcement of fundamental concepts covered by CS 4328. Topics include the principles of operating systems, central processing unit scheduling algorithms, memory management, cooperating sequential processes, and device management. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5306. Advanced Operating Systems.**

This course provides a study of modern operating systems, including network, distributed, and real-time systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5310. Network and Communication Systems.**

This course provides a study of network and communication systems. Students will be required to perform verification and implementation of protocols.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5316. Data Mining.**

This course covers fundamental concepts and techniques, plus recent developments in data mining and information retrieval. It provides relevant research training and practice opportunities. May not be taken for credit if the student has received credit for CS 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5318. Principles of Programming Languages.**

This course focuses on the principles of programming languages. Topics covered include programming paradigms, concepts of programming languages, formal syntax and semantics, and language implementation issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5326. Advanced Studies in Human Factors of Computer Science.**

This course provides a professional-level presentation of techniques and research findings related to human-computer interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5329. Algorithm Design and Analysis.**

This course provides an introduction to algorithm design and analysis, computational complexity, and NP-completeness theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5331. Crafting Compilers.**

Overview of the internal structure of modern compilers. Research on compilation techniques. Topics include lexical scanning, parsing techniques, static type checking, code generation, dataflow analysis, storage management, and execution environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5332. Data Base Theory and Design.**

This course covers computer system organization for the management of data. Topics include data models, data model theory, optimization and normalization, integrity constraints, query languages, and intelligent database systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5334. Advanced Internet Information Processing.**

This course integrates popular scripting and database programming languages to provide advanced information processing for Internet applications that demand database support and sophisticated, application-specific information processing. Prerequisite: CS 5332 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5338. Formal Languages.**

This course covers advanced topics in automata theory, grammars, Turing machines, decidability, and algorithmic complexity. A strong background in both data structures and discrete mathematics is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5341. Advanced Network Programming.**

Study of advanced concepts and programming skills in computer networks such as advanced TCP/IP, API, multicasting and broadcasting, reliable communications, advanced I/O functions and options.

Prerequisite: CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5343. Wireless Communications and Networks.**

Study of the fundamental aspects of wireless communications and wireless/mobile networks, introduction of wireless/mobile networking APIs. Prerequisites: CS 3358 with a grade of "B" or better and CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5346. Advanced Artificial Intelligence.**

This course covers knowledge representation, knowledge engineering, parallel and distributed artificial intelligence (AI), heuristic searches, machine learning and intelligent databases, and implementation of systems in high-level AI languages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5351. Parallel Processing.**

This course provides an introduction to the design and analysis of parallel algorithms, parallel architectures, and computers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5352. Distributed Computing.**

This course provides studies in advanced topics in distributed systems: concurrency control and failure recovery, management of replicated data, distributed consensus and fault tolerance, remote procedure calls, naming, and security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5369J. Advanced Human Computer Interaction.**

This course will cover state of the art human computer interaction topics such as perceptual compression, eye-gaze, and brain computer interfaces with emphasis on the human visual system, eye-tracking, and electroencephalography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369L. Machine Learning and Applications.**

Provides broad introduction to machine learning, including learning theory, and recent topics like support vector machines and feature selection. Covers basic ideas, intuition, and understanding behind modern machine learning methods. Discusses applications like face recognition, text recognition, biometrics, bioinformatics, and multimedia retrieval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Q. Recommender Systems.**

This course covers various concepts of recommender systems, including personalization algorithms, evaluation tools, and user experiences. Discussion of how recommender systems are deployed in business applications, design of new recommender experiences, and how to conduct and evaluate research in recommender systems. Cannot take for credit if already took CS 4379Q.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Y. Green Computing.**

Reducing mobile device, cloud computing platform, and supercomputer energy consumption is a paramount, daunting problem. This course covers state-of-the-art green computing research, including energy-efficient hardware and software design, power-aware resource management and storage solutions, green data centers and mobile computing. Cannot be taken for credit if received CS 4379Y credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Z. Distributed Ledger Systems and Blockchains: Theory and Applications.**

This course covers fundamental concepts underlying the design, implementation, research, and applications of Distributed Ledger Technology (DLT) systems (e.g., blockchains). It introduces implementations, applications, and performance evaluation of DLT systems. Additionally, through homework projects, the students will be introduced to current research on DLT systems and perform independent study and small-scale research on selected topics. Course topics include cryptography encryption, security, anonymity, cryptographic data structures, DLT performance evaluation, DLT applications, and current DLT research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5375. Multimedia Computing.**

This course provides a study of the digital representation and processing of the three principal multimedia data types: image, audio, and video. Standards, storage media, and compression techniques for the three data types are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5378. Advanced Computer Security.**

This course covers various aspects of producing secure computer information systems that provide guaranteed controlled sharing. Emphasis is on software models and design, including discovery and prevention of computing systems security vulnerabilities. Current systems and methods are examined and critiqued.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5388. Advanced Computer Graphics.**

This course covers the algorithms and data structures used in representing and processing visual data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5389. Graphical User Interfaces.**

This course covers both abstract and practical treatments of using graphics to implement interactive computer/human interfaces. It includes a survey of the major GUI standards and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5391. Survey of Software Engineering.**

The course covers the software life cycle, emphasizing system analysis and design, including a survey of methodologies based on data flows and objects. The course includes a professional ethics component.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5392. Formal Methods in Software Engineering.**

The use of design and specification languages in producing software systems. Emphasis is placed on proving correctness of designs and implementations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5393. Software Quality.**

The latter half of the software life cycle is discussed. Topics include testing, performance evaluation, and software metrics. Appropriate software tools are studied and used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5394. Advanced Software Engineering Project.**

Students produce a software project of significant size in a team environment. All aspects of the software engineering course sequence are integrated and put into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5395. Independent Study in Advanced Computer Science.**

Open to graduate students on an independent basis by arrangement with the faculty member concerned. Course is not repeatable for credit. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5396. Advanced Software Engineering Processes and Methods.**

The essentials of software engineering processes, methods, and tools for the evolutionary design of complex interactive software are discussed. Overviews of other topics like quality concepts, SEI CMM, information technology, and network technology are covered. Student completes a literature survey of the latest software engineering analysis and design processes, methods, and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in CS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Computer Science concentration in Data Science covers the foundations of data science and exposes students to up to date theories, techniques, and practices of data science field.

Data science, which encompasses big data, employs machine learning, artificial intelligence (AI), statistical and other advanced models and techniques on big data. The work of data science can help identify valuable knowledge that is impossible or extremely difficult to obtain previously. Those knowledge and findings can help organizations understand their strengths and weakness and make meaningful and effective changes.

As such, data science has emerged as one of hottest areas in computer science and demand for computer science professionals with expertise in data science has been rising constantly and rapidly. Major tech companies all actively recruit computer science professionals with

data science expertise. Students who graduate with the proposed concentration will work as data scientists, data science engineers, data analysts, big data system analysts, and software developers.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College’s website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor’s degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work\*
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
  - The GRE may be waived if the student holds a master’s or doctoral degree from a regionally accredited U.S. institution. If the student holds a master’s or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
- resume/CV
- statement of purpose
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- [official Duolingo scores required with a 110 overall](#)
- [official TOEFL Essentials scores required with an 8.5 overall](#)

### \*Additional Information

Students admitted to the program will participate in a diagnostic interview with the graduate advisor. This interview will include a review of test scores, grades, and work history. In some cases, additional courses may be added to the degree program.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Computer Science concentration in Data Science requires 36 semester credit hours.

### Background Requirements

Students are required to fulfill background course work if they do not have adequate undergraduate computer science background. The background requirements may be reduced if evidence is presented which shows that the applicant has taken equivalent courses elsewhere prior to enrollment at Texas State. Background work must be completed before enrolling in graduate courses.

The minimum undergraduate background requirements for computer science majors are:

Code	Title	Hours
<b>Computer Science</b> <sup>1</sup>		
CS 1428	Foundations of Computer Science I	4
CS 2308	Foundations of Computer Science II	3
CS 2318	Assembly Language	3
CS 3339	Computer Architecture	3
CS 3358	Data Structures and Algorithms	3
CS 4318	Compiler Construction	3
or CS 4328	Operating Systems	
Advanced computer science electives (3000-4000 level)		6
<b>Mathematics</b> <sup>2</sup>		
MATH 5358	Applied Discrete Mathematics	3
Calculus		8

<sup>1</sup> These courses must be completed with no grade less than "C" and no more than two "Cs."

<sup>2</sup> These courses must be completed with no grade less than "C."

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CS 5318	Principles of Programming Languages	3
or CS 5338	Formal Languages	
or CS 5351	Parallel Processing	
CS 5329	Algorithm Design and Analysis	3
CS 5332	Data Base Theory and Design	3
CS 5346	Advanced Artificial Intelligence	3
<b>Concentration</b>		
CS 7311	Data-Driven Computational Methods and Infrastructure	3
CS 7312	Advanced Data Mining	3
CS 7313	Advanced Machine Learning and Pattern Recognition	3
<b>Electives</b>		

Choose 15 hours from the following: 15

CS 5306	Advanced Operating Systems
CS 5310	Network and Communication Systems
CS 5316	Data Mining
CS 5318	Principles of Programming Languages
CS 5326	Advanced Studies in Human Factors of Computer Science
CS 5331	Crafting Compilers
CS 5334	Advanced Internet Information Processing
CS 5338	Formal Languages
CS 5341	Advanced Network Programming
CS 5343	Wireless Communications and Networks
CS 5351	Parallel Processing
CS 5352	Distributed Computing
CS 5369J	Advanced Human Computer Interaction
CS 5369L	Machine Learning and Applications
CS 5369Q	Recommender Systems
CS 5369Y	Green Computing
CS 5375	Multimedia Computing
CS 5378	Advanced Computer Security
CS 5388	Advanced Computer Graphics
CS 5389	Graphical User Interfaces
CS 5391	Survey of Software Engineering
CS 5392	Formal Methods in Software Engineering
CS 5393	Software Quality
CS 5394	Advanced Software Engineering Project
CS 5395	Independent Study in Advanced Computer Science

**Total Hours** 36

## Comprehensive Examination Requirement

The comprehensive exams of computer science master programs consist of multiple components. Specifically, all Computer Science graduate students must complete/pass:

1. **Degree Outline:** Have a degree outline prepared before the end of their first semester. Currently this is done during the mandatory diagnostic interview sessions for newly admitted CS master degree students.
2. **Programming exam:** Pass a written exam in programming.
3. **Communication exam:** Pass a written exam in communication.
4. **Attendance requirement of computer science seminars.**
5. For non-thesis students, the **written core course exam**.

Failure to complete 1, 2, or 3 will result in a "hold" on registration and may cause delays in taking/passing the comprehensive examination. Details of 2, 3, 4, and 5 are described below.

### Programming Exam

The Programming Exam integrates problem-solving and technical abilities to write clear and logical code. The exam format is written.

- The allowable programming languages are C++/Java. Students can elect either of the two.
- This exam is given to newly admitted graduate students twice a year. Students are notified of the registration by the department for the exam. A student who doesn't participate in the exam without the

department approval forfeits the opportunity of taking the exam and must take the remedy course CS 5301.

- The exam is typically administrated during the week before the Fall or Spring semester starts.
- Students who fail the Programming Exam are required to take the remedy course CS 5301 immediately. Students must obtain a grade C or higher of CS 5301 in order to satisfy the programming exam requirement. Students are allowed to take CS 5301 twice.
- Students who have not passed the Programming Exam or the remedy course, CS 5301, are not eligible to take classes during the summer semesters.

### Communication Exam

The Communication Exam tests the ability to write clear technical English on computer science topics. All students must satisfy one of the following three options:

- Have a score of 3.5 or higher on the Analytical Writing section of the Graduate Record Examination (GRE).
- Take the Communication Exam and earn a passing score in the first long semester.
  - a. This exam is given to newly admitted graduate students during their first semester (Spring or Fall semester only).
  - b. Students are registered and notified by the department for this exam.
  - c. This exam can only be taken once during the first semester of initial enrollment.
- Complete one of the following Texas State English courses, ENG 3313, ENG 3311, or ENG 3303, and earn a grade of B or higher. Students must register for one of the English courses by the end of the student's first year in the graduate program. There is no limit on the number of times the students can take those English courses.

### Seminar Attendance

All computer science master students are required to attend at least **four** computer science departmental seminars. All seminars that can be counted toward this requirement are announced by the department through emails to all active students and on the department website. Students are strongly recommended to plan and participate in seminars earlier and not to wait until the final semester of their study.

### Written Core Course Exam (Non-Thesis Students)

All non-thesis students are required to take a departmental written core course exam after having completed the core courses in computer science (including all concentrations) or software engineering and accumulating at least 18 graduate hours of credit.

- The exam covers all concepts from core course CS 5329.
- The questions are graded on computer science or software engineering content.
- Students who perform unacceptably on the exam may take the exam a second time. A third test administration is at the discretion of the committee that administers the exams, based on intensive and documented justification provided by the student.
- Exams are given during the fall and spring semesters.
- Students are required to register for the exam a week in advance of the announced exam date.



Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Computer Science: CS

## Courses Offered

### Computer Science (CS)

#### CS 5100. Advanced Computer Science Internship.

This course provides advanced training supervised by computer scientists in internship programs approved by the department. Course cannot be counted toward any graduate degree, is open only to majors in the Department of Computer Science. May be repeated once. This course does not earn graduate degree credit. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 5300. Professional Development of Graduate Assistants.

This course is designed to develop and enhance the professional and technical skills of graduate teaching and instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5301. Programming Practicum.

This course provides an intensive review of programming through data structures. Topics include syntax, semantics, problem-solving, and algorithm development. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CS 5302. Foundations of Data Structures and Algorithm Design.

This course serves as a foundation course for computer science master's degree students who need reinforcement of fundamental concepts covered by CS 3358. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5303. Foundations of Computer Architecture.

This foundation course for CS master's degree students who need CS 3339 concept reinforcement covers fundamental hardware components. Topics include ALUs, single and multiple cycle datapath and control, RISC vs. CISC, pipelining, caches, I/O, virtual memory, and related performance issues. It may be repeated once and is non-graduate degree credit. Prerequisite: Instructor Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5305. Foundations of Operating Systems.

This course serves as a foundation course for computer science master's students who need reinforcement of fundamental concepts covered by CS 4328. Topics include the principles of operating systems, central processing unit scheduling algorithms, memory management, cooperating sequential processes, and device management. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5306. Advanced Operating Systems.

This course provides a study of modern operating systems, including network, distributed, and real-time systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CS 5310. Network and Communication Systems.

This course provides a study of network and communication systems. Students will be required to perform verification and implementation of protocols.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CS 5316. Data Mining.

This course covers fundamental concepts and techniques, plus recent developments in data mining and information retrieval. It provides relevant research training and practice opportunities. May not be taken for credit if the student has received credit for CS 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5318. Principles of Programming Languages.**

This course focuses on the principles of programming languages. Topics covered include programming paradigms, concepts of programming languages, formal syntax and semantics, and language implementation issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5326. Advanced Studies in Human Factors of Computer Science.**

This course provides a professional-level presentation of techniques and research findings related to human-computer interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5329. Algorithm Design and Analysis.**

This course provides an introduction to algorithm design and analysis, computational complexity, and NP-completeness theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5331. Crafting Compilers.**

Overview of the internal structure of modern compilers. Research on compilation techniques. Topics include lexical scanning, parsing techniques, static type checking, code generation, dataflow analysis, storage management, and execution environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5332. Data Base Theory and Design.**

This course covers computer system organization for the management of data. Topics include data models, data model theory, optimization and normalization, integrity constraints, query languages, and intelligent database systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5334. Advanced Internet Information Processing.**

This course integrates popular scripting and database programming languages to provide advanced information processing for Internet applications that demand database support and sophisticated, application-specific information processing. Prerequisite: CS 5332 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5338. Formal Languages.**

This course covers advanced topics in automata theory, grammars, Turing machines, decidability, and algorithmic complexity. A strong background in both data structures and discrete mathematics is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5341. Advanced Network Programming.**

Study of advanced concepts and programming skills in computer networks such as advanced TCP/IP, API, multicasting and broadcasting, reliable communications, advanced I/O functions and options.

Prerequisite: CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5343. Wireless Communications and Networks.**

Study of the fundamental aspects of wireless communications and wireless/mobile networks, introduction of wireless/mobile networking APIs. Prerequisites: CS 3358 with a grade of "B" or better and CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5346. Advanced Artificial Intelligence.**

This course covers knowledge representation, knowledge engineering, parallel and distributed artificial intelligence (AI), heuristic searches, machine learning and intelligent databases, and implementation of systems in high-level AI languages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5351. Parallel Processing.**

This course provides an introduction to the design and analysis of parallel algorithms, parallel architectures, and computers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5352. Distributed Computing.**

This course provides studies in advanced topics in distributed systems: concurrency control and failure recovery, management of replicated data, distributed consensus and fault tolerance, remote procedure calls, naming, and security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5369J. Advanced Human Computer Interaction.**

This course will cover state of the art human computer interaction topics such as perceptual compression, eye-gaze, and brain computer interfaces with emphasis on the human visual system, eye-tracking, and electroencephalography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369L. Machine Learning and Applications.**

Provides broad introduction to machine learning, including learning theory, and recent topics like support vector machines and feature selection. Covers basic ideas, intuition, and understanding behind modern machine learning methods. Discusses applications like face recognition, text recognition, biometrics, bioinformatics, and multimedia retrieval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Q. Recommender Systems.**

This course covers various concepts of recommender systems, including personalization algorithms, evaluation tools, and user experiences. Discussion of how recommender systems are deployed in business applications, design of new recommender experiences, and how to conduct and evaluate research in recommender systems. Cannot take for credit if already took CS 4379Q.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Y. Green Computing.**

Reducing mobile device, cloud computing platform, and supercomputer energy consumption is a paramount, daunting problem. This course covers state-of-the-art green computing research, including energy-efficient hardware and software design, power-aware resource management and storage solutions, green data centers and mobile computing. Cannot be taken for credit if received CS 4379Y credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Z. Distributed Ledger Systems and Blockchains: Theory and Applications.**

This course covers fundamental concepts underlying the design, implementation, research, and applications of Distributed Ledger Technology (DLT) systems (e.g., blockchains). It introduces implementations, applications, and performance evaluation of DLT systems. Additionally, through homework projects, the students will be introduced to current research on DLT systems and perform independent study and small-scale research on selected topics. Course topics include cryptography encryption, security, anonymity, cryptographic data structures, DLT performance evaluation, DLT applications, and current DLT research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5375. Multimedia Computing.**

This course provides a study of the digital representation and processing of the three principal multimedia data types: image, audio, and video. Standards, storage media, and compression techniques for the three data types are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5378. Advanced Computer Security.**

This course covers various aspects of producing secure computer information systems that provide guaranteed controlled sharing. Emphasis is on software models and design, including discovery and prevention of computing systems security vulnerabilities. Current systems and methods are examined and critiqued.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5388. Advanced Computer Graphics.**

This course covers the algorithms and data structures used in representing and processing visual data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5389. Graphical User Interfaces.**

This course covers both abstract and practical treatments of using graphics to implement interactive computer/human interfaces. It includes a survey of the major GUI standards and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5391. Survey of Software Engineering.**

The course covers the software life cycle, emphasizing system analysis and design, including a survey of methodologies based on data flows and objects. The course includes a professional ethics component.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5392. Formal Methods in Software Engineering.**

The use of design and specification languages in producing software systems. Emphasis is placed on proving correctness of designs and implementations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5393. Software Quality.**

The latter half of the software life cycle is discussed. Topics include testing, performance evaluation, and software metrics. Appropriate software tools are studied and used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5394. Advanced Software Engineering Project.**

Students produce a software project of significant size in a team environment. All aspects of the software engineering course sequence are integrated and put into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5395. Independent Study in Advanced Computer Science.**

Open to graduate students on an independent basis by arrangement with the faculty member concerned. Course is not repeatable for credit. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5396. Advanced Software Engineering Processes and Methods.**

The essentials of software engineering processes, methods, and tools for the evolutionary design of complex interactive software are discussed. Overviews of other topics like quality concepts, SEI CMM, information technology, and network technology are covered. Student completes a literature survey of the latest software engineering analysis and design processes, methods, and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in CS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Data Science concentration covers the foundations of data science and exposes students to up to date theories, techniques, and practices of data science field.

Data science, which encompasses big data, employs machine learning, artificial intelligence (AI), statistical and other advanced models and techniques on big data. The work of data science can help identify valuable knowledge that is impossible or extremely difficult to obtain previously. Those knowledge and findings can help organizations

understand their strengths and weakness and make meaningful and effective changes.

As such, data science has emerged as one of hottest areas in computer science and demand for computer science professionals with expertise in data science has been rising constantly and rapidly. Major tech companies all actively recruit computer science professionals with data science expertise. Students who graduate with the proposed concentration will work as data scientists, data science engineers, data analysts, big data system analysts, and software developers.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work\*
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
  - The GRE may be waived if the student holds a master's or doctoral degree from a regionally accredited U.S. institution. If the student holds a master's or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
- resume/CV
- statement of purpose
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waveir>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall

- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- [official Duolingo scores required with a 110 overall](#)
- [official TOEFL Essentials scores required with an 8.5 overall](#)

\*Additional Information

Students admitted to the program will participate in a diagnostic interview with the graduate advisor. This interview will include a review of test scores, grades, and work history. In some cases, additional courses may be added to the degree program.

Degree Requirements

The Master of Science (M.S.) degree with a major in Computer Science concentration in Data Science requires 30 semester credit hours, including a thesis.

Background Requirements

Students are required to fulfill background course work if they do not have adequate undergraduate computer science background. The background requirements may be reduced if evidence is presented which shows that the applicant has taken equivalent courses elsewhere prior to enrollment at Texas State. Background work must be completed before enrolling in graduate courses.

The minimum undergraduate background requirements for computer science majors are:

Code	Title	Hours
<b>Computer Science</b> <sup>1</sup>		
CS 1428	Foundations of Computer Science I	4
CS 2308	Foundations of Computer Science II	3
CS 2318	Assembly Language	3
CS 3339	Computer Architecture	3
CS 3358	Data Structures and Algorithms	3
CS 4318	Compiler Construction	3
or CS 4328	Operating Systems	
Advanced computer science electives (3000-4000 level)		6
<b>Mathematics</b> <sup>2</sup>		
MATH 5358	Applied Discrete Mathematics	3
Calculus		8

<sup>1</sup> These courses must be completed with no grade less than "C" and no more than two "Cs."  
<sup>2</sup> These courses must be completed with no grade less than "C."

Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CS 5318	Principles of Programming Languages	3
or CS 5338	Formal Languages	
or CS 5351	Parallel Processing	
CS 5329	Algorithm Design and Analysis	3
CS 5332	Data Base Theory and Design	3
CS 5346	Advanced Artificial Intelligence	3
<b>Concentration</b>		

CS 7311	Data-Driven Computational Methods and Infrastructure	3
CS 7312	Advanced Data Mining	3
CS 7313	Advanced Machine Learning and Pattern Recognition	3

<b>Electives</b>		
Choose 3 hours from the following:		3
CS 5306	Advanced Operating Systems	
CS 5310	Network and Communication Systems	
CS 5316	Data Mining	
CS 5318	Principles of Programming Languages	
CS 5326	Advanced Studies in Human Factors of Computer Science	
CS 5331	Crafting Compilers	
CS 5334	Advanced Internet Information Processing	
CS 5338	Formal Languages	
CS 5341	Advanced Network Programming	
CS 5343	Wireless Communications and Networks	
CS 5351	Parallel Processing	
CS 5352	Distributed Computing	
CS 5369J	Advanced Human Computer Interaction	
CS 5369L	Machine Learning and Applications	
CS 5369Q	Recommender Systems	
CS 5369Y	Green Computing	
CS 5375	Multimedia Computing	
CS 5378	Advanced Computer Security	
CS 5388	Advanced Computer Graphics	
CS 5389	Graphical User Interfaces	
CS 5391	Survey of Software Engineering	
CS 5392	Formal Methods in Software Engineering	
CS 5393	Software Quality	
CS 5394	Advanced Software Engineering Project	
CS 5395	Independent Study in Advanced Computer Science	

<b>Thesis</b>		
CS 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
CS 5199B	Thesis	
CS 5299B	Thesis	
CS 5399B	Thesis	
CS 5599B	Thesis	
CS 5999B	Thesis	

<b>Total Hours</b>	<b>30</b>
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Comprehensive Examination Requirement

The comprehensive exams of computer science master programs consist of multiple components. Specifically, all Computer Science graduate students must complete/pass:

1. **Degree Outline:** Have a degree outline prepared before the end of their first semester. Currently, this is done during the mandatory diagnostic interview sessions for newly admitted CS master degree students.
2. **Programming exam:** Pass a written exam in programming.
3. **Communication exam:** Pass a written exam in communication.



4. Attendance requirement of computer science seminars.
5. For non-thesis students, the written core course exam.

Failure to complete 1, 2, or 3 will result in a "hold" on registration and may cause delays in taking/passing the comprehensive examination. Details of 2, 3, 4, and 5 are described below.

### Programming Exam

The Programming Exam integrates problem-solving and technical abilities to write clear and logical code. The exam format is written.

- The allowable programming languages are C++/Java. Students can elect either of the two.
- This exam is given to newly admitted graduate students twice a year. Students are notified of the registration by the department for the exam. A student who doesn't participate in the exam without the department approval forfeits the opportunity of taking the exam and must take the remedy course CS 5301.
- The exam is typically administrated during the week before the fall or spring semester starts.
- Students who fail the Programming Exam are required to take the remedy course CS 5301 immediately. Students must obtain a grade C or higher of CS 5301 in order to satisfy the programming exam requirement. Students are allowed to take CS 5301 twice.
- Students who have not passed the Programming Exam or the remedy course, CS 5301, are not eligible to take classes during the summer semesters.

### Communication Exam

The Communication Exam tests the ability to write clear technical English on computer science topics. All students must satisfy one of the following three options:

- Have a score of 3.5 or higher on the Analytical Writing section of the Graduate Record Examination (GRE).
- Take the Communication Exam and earn a passing score in the first long semester.
  1. This exam is given to newly admitted graduate students during their first semester (Spring or Fall semester only).
  2. Students are registered and notified by the department for this exam.
  3. This exam can only be taken once during the first semester of initial enrollment.
- Complete one of the following Texas State English courses, ENG 3313, ENG 3311, or ENG 3303, and earn a grade of B or higher. Students must register for one of the English courses by the end of the student's first year in the graduate program. There is no limit on the number of times the students can take those English courses.

### Seminar Attendance

All computer science master students are required to attend at least **four** computer science departmental seminars. All seminars that can be counted toward this requirement are announced by the department through emails to all active students and on the department website. Students are strongly recommended to plan and participate in seminars earlier and not to wait until the final semester of their study.

### **Oral Master Thesis Defense Exam**

All thesis students are required to take an oral exam at the time of their public thesis defense.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## **Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))**

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## **Thesis Committee**

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## **Thesis Enrollment and Credit**

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B

course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival

quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Computer Science: CS

## Courses Offered

### Computer Science (CS)

#### CS 5100. Advanced Computer Science Internship.

This course provides advanced training supervised by computer scientists in internship programs approved by the department. Course cannot be counted toward any graduate degree, is open only to majors in the Department of Computer Science. May be repeated once. This course does not earn graduate degree credit. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 5300. Professional Development of Graduate Assistants.

This course is designed to develop and enhance the professional and technical skills of graduate teaching and instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5301. Programming Practicum.

This course provides an intensive review of programming through data structures. Topics include syntax, semantics, problem-solving, and algorithm development. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CS 5302. Foundations of Data Structures and Algorithm Design.**

This course serves as a foundation course for computer science master's degree students who need reinforcement of fundamental concepts covered by CS 3358. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5303. Foundations of Computer Architecture.**

This foundation course for CS master's degree students who need CS 3339 concept reinforcement covers fundamental hardware components. Topics include ALUs, single and multiple cycle datapath and control, RISC vs. CISC, pipelining, caches, I/O, virtual memory, and related performance issues. It may be repeated once and is non-graduate degree credit. Prerequisite: Instructor Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5305. Foundations of Operating Systems.**

This course serves as a foundation course for computer science master's students who need reinforcement of fundamental concepts covered by CS 4328. Topics include the principles of operating systems, central processing unit scheduling algorithms, memory management, cooperating sequential processes, and device management. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5306. Advanced Operating Systems.**

This course provides a study of modern operating systems, including network, distributed, and real-time systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5310. Network and Communication Systems.**

This course provides a study of network and communication systems. Students will be required to perform verification and implementation of protocols.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5316. Data Mining.**

This course covers fundamental concepts and techniques, plus recent developments in data mining and information retrieval. It provides relevant research training and practice opportunities. May not be taken for credit if the student has received credit for CS 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5318. Principles of Programming Languages.**

This course focuses on the principles of programming languages. Topics covered include programming paradigms, concepts of programming languages, formal syntax and semantics, and language implementation issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5326. Advanced Studies in Human Factors of Computer Science.**

This course provides a professional-level presentation of techniques and research findings related to human-computer interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5329. Algorithm Design and Analysis.**

This course provides an introduction to algorithm design and analysis, computational complexity, and NP-completeness theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5331. Crafting Compilers.**

Overview of the internal structure of modern compilers. Research on compilation techniques. Topics include lexical scanning, parsing techniques, static type checking, code generation, dataflow analysis, storage management, and execution environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5332. Data Base Theory and Design.**

This course covers computer system organization for the management of data. Topics include data models, data model theory, optimization and normalization, integrity constraints, query languages, and intelligent database systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5334. Advanced Internet Information Processing.**

This course integrates popular scripting and database programming languages to provide advanced information processing for Internet applications that demand database support and sophisticated, application-specific information processing. Prerequisite: CS 5332 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5338. Formal Languages.**

This course covers advanced topics in automata theory, grammars, Turing machines, decidability, and algorithmic complexity. A strong background in both data structures and discrete mathematics is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5341. Advanced Network Programming.**

Study of advanced concepts and programming skills in computer networks such as advanced TCP/IP, API, multicasting and broadcasting, reliable communications, advanced I/O functions and options.

Prerequisite: CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5343. Wireless Communications and Networks.**

Study of the fundamental aspects of wireless communications and wireless/mobile networks, introduction of wireless/mobile networking APIs. Prerequisites: CS 3358 with a grade of "B" or better and CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5346. Advanced Artificial Intelligence.**

This course covers knowledge representation, knowledge engineering, parallel and distributed artificial intelligence (AI), heuristic searches, machine learning and intelligent databases, and implementation of systems in high-level AI languages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5351. Parallel Processing.**

This course provides an introduction to the design and analysis of parallel algorithms, parallel architectures, and computers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5352. Distributed Computing.**

This course provides studies in advanced topics in distributed systems: concurrency control and failure recovery, management of replicated data, distributed consensus and fault tolerance, remote procedure calls, naming, and security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5369J. Advanced Human Computer Interaction.**

This course will cover state of the art human computer interaction topics such as perceptual compression, eye-gaze, and brain computer interfaces with emphasis on the human visual system, eye-tracking, and electroencephalography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369L. Machine Learning and Applications.**

Provides broad introduction to machine learning, including learning theory, and recent topics like support vector machines and feature selection. Covers basic ideas, intuition, and understanding behind modern machine learning methods. Discusses applications like face recognition, text recognition, biometrics, bioinformatics, and multimedia retrieval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Q. Recommender Systems.**

This course covers various concepts of recommender systems, including personalization algorithms, evaluation tools, and user experiences. Discussion of how recommender systems are deployed in business applications, design of new recommender experiences, and how to conduct and evaluate research in recommender systems. Cannot take for credit if already took CS 4379Q.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Y. Green Computing.**

Reducing mobile device, cloud computing platform, and supercomputer energy consumption is a paramount, daunting problem. This course covers state-of-the-art green computing research, including energy-efficient hardware and software design, power-aware resource management and storage solutions, green data centers and mobile computing. Cannot be taken for credit if received CS 4379Y credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Z. Distributed Ledger Systems and Blockchains: Theory and Applications.**

This course covers fundamental concepts underlying the design, implementation, research, and applications of Distributed Ledger Technology (DLT) systems (e.g., blockchains). It introduces implementations, applications, and performance evaluation of DLT systems. Additionally, through homework projects, the students will be introduced to current research on DLT systems and perform independent study and small-scale research on selected topics. Course topics include cryptography encryption, security, anonymity, cryptographic data structures, DLT performance evaluation, DLT applications, and current DLT research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5375. Multimedia Computing.**

This course provides a study of the digital representation and processing of the three principal multimedia data types: image, audio, and video. Standards, storage media, and compression techniques for the three data types are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5378. Advanced Computer Security.**

This course covers various aspects of producing secure computer information systems that provide guaranteed controlled sharing. Emphasis is on software models and design, including discovery and prevention of computing systems security vulnerabilities. Current systems and methods are examined and critiqued.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5388. Advanced Computer Graphics.**

This course covers the algorithms and data structures used in representing and processing visual data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5389. Graphical User Interfaces.**

This course covers both abstract and practical treatments of using graphics to implement interactive computer/human interfaces. It includes a survey of the major GUI standards and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5391. Survey of Software Engineering.**

The course covers the software life cycle, emphasizing system analysis and design, including a survey of methodologies based on data flows and objects. The course includes a professional ethics component.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5392. Formal Methods in Software Engineering.**

The use of design and specification languages in producing software systems. Emphasis is placed on proving correctness of designs and implementations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5393. Software Quality.**

The latter half of the software life cycle is discussed. Topics include testing, performance evaluation, and software metrics. Appropriate software tools are studied and used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5394. Advanced Software Engineering Project.**

Students produce a software project of significant size in a team environment. All aspects of the software engineering course sequence are integrated and put into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5395. Independent Study in Advanced Computer Science.**

Open to graduate students on an independent basis by arrangement with the faculty member concerned. Course is not repeatable for credit. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5396. Advanced Software Engineering Processes and Methods.**

The essentials of software engineering processes, methods, and tools for the evolutionary design of complex interactive software are discussed. Overviews of other topics like quality concepts, SEI CMM, information technology, and network technology are covered. Student completes a literature survey of the latest software engineering analysis and design processes, methods, and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in CS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Computer Science is designed to prepare students for doctoral research, college teaching, careers in computer science and software engineering, and careers in digital forensics.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic



year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work\*
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
  - The GRE may be waived if the student holds a master's or doctoral degree from a regionally accredited U.S. institution. If the student holds a master's or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
- resume/CV
- statement of purpose
- three letters of recommendation

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#walver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- [official Duolingo scores required with a 110 overall](#)
- [official TOEFL Essentials scores required with an 8.5 overall](#)

\*Additional Information

Students admitted to the program will participate in a diagnostic interview with the graduate advisor. This interview will include a review of test scores, grades, and work history. In some cases, additional courses may be added to the degree program.

Degree Requirements

The Master of Science (M.S.) major in Computer Science requires 36 semester credit hours.

Background Requirements

Students are required to fulfill background course work if they do not have adequate undergraduate computer science background. The background requirements may be reduced if evidence is presented which shows that the applicant has taken equivalent courses elsewhere prior to enrollment at Texas State. Background work must be completed before enrolling in graduate courses.

The minimum undergraduate background requirements for computer science majors are:

Code	Title	Hours
<b>Computer Science</b> <sup>1</sup>		
CS 1428	Foundations of Computer Science I	4
CS 2308	Foundations of Computer Science II	3
CS 2318	Assembly Language	3
CS 3339	Computer Architecture	3
CS 3358	Data Structures and Algorithms	3
CS 4318	Compiler Construction	3
or CS 4328	Operating Systems	
Advanced computer science electives (CS 3000-4000 level)		6
<b>Mathematics</b> <sup>2</sup>		
MATH 5358	Applied Discrete Mathematics (or equivalent)	3
Calculus		8

<sup>1</sup> These courses must be completed with no grade less than "C" and no more than two "Cs."

<sup>2</sup> This course must be completed with no grade less than "C."

Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CS 5306	Advanced Operating Systems	3
or CS 5310	Network and Communication Systems	
or CS 5332	Data Base Theory and Design	
CS 5318	Principles of Programming Languages	3
or CS 5338	Formal Languages	
or CS 5351	Parallel Processing	
CS 5329	Algorithm Design and Analysis	3
CS 5346	Advanced Artificial Intelligence	3
or CS 5391	Survey of Software Engineering	
<b>Electives</b>		
Choose 24 hours from the following:		24
CS 5306	Advanced Operating Systems	
CS 5310	Network and Communication Systems	
CS 5316	Data Mining	
CS 5318	Principles of Programming Languages	
CS 5326	Advanced Studies in Human Factors of Computer Science	
CS 5331	Crafting Compilers	

CS 5332	Data Base Theory and Design
CS 5334	Advanced Internet Information Processing
CS 5338	Formal Languages
CS 5341	Advanced Network Programming
CS 5343	Wireless Communications and Networks
CS 5346	Advanced Artificial Intelligence
CS 5351	Parallel Processing
CS 5352	Distributed Computing
CS 5369J	Advanced Human Computer Interaction
CS 5369L	Machine Learning and Applications
CS 5369Q	Recommender Systems
CS 5369Y	Green Computing
CS 5375	Multimedia Computing
CS 5378	Advanced Computer Security
CS 5388	Advanced Computer Graphics
CS 5389	Graphical User Interfaces
CS 5391	Survey of Software Engineering
CS 5392	Formal Methods in Software Engineering
CS 5393	Software Quality
CS 5394	Advanced Software Engineering Project
CS 5395	Independent Study in Advanced Computer Science

Total Hours

36

## Comprehensive Examination Requirement

The comprehensive exams of computer science master programs consist of multiple components. Specifically, all Computer Science graduate students must complete/pass:

1. **Degree Outline:** Have a degree outline prepared before the end of their first semester. Currently this is done during the mandatory diagnostic interview sessions for newly admitted CS master degree students.
2. **Programming exam:** Pass a written exam in programming.
3. **Communication exam:** Pass a written exam in communication.
4. **Attendance requirement of computer science seminars.**
5. For non-thesis students, the **written core course exam**.

Failure to complete 1, 2, or 3 will result in a "hold" on registration and may cause delays in taking/passing the comprehensive examination. Details of 2, 3, 4, and 5 are described below.

### Programming Exam

The Programming Exam integrates problem-solving and technical abilities to write clear and logical code. The exam format is written.

- The allowable programming languages are C++/Java. Students can elect either of the two.
- This exam is given to newly admitted graduate students twice a year. Students are notified of the registration by the department for the exam. A student who doesn't participate in the exam without the department approval forfeits the opportunity of taking the exam and must take the remedy course CS 5301.
- The exam is typically administrated during the week before the Fall or Spring semester starts.
- Students who fail the Programming Exam are required to take the remedy course CS 5301 immediately. Students must obtain a grade

C or higher of CS 5301 in order to satisfy the programming exam requirement. Students are allowed to take CS 5301 twice.

- Students who have not passed the Programming Exam or the remedy course, CS 5301, are not eligible to take classes during the summer semesters.

### Communication Exam

The Communication Exam tests the ability to write clear technical English on computer science topics. All students must satisfy one of the following three options:

- Have a score of 3.5 or higher on the Analytical Writing section of the Graduate Record Examination (GRE).
- Take the Communication Exam and earn a passing score in the first long semester.
  - a. This exam is given to newly admitted graduate students during their first semester (Spring or Fall semester only).
  - b. Students are registered and notified by the department for this exam.
  - c. This exam can only be taken once during the first semester of initial enrollment.
- Complete one of the following Texas State English courses, ENG 3313, ENG 3311, or ENG 3303, and earn a grade of B or higher. Students must register for one of the English courses by the end of the student's first year in the graduate program. There is no limit on the number of times the students can take those English courses.

### Seminar Attendance

All computer science master students are required to attend at least **four** computer science departmental seminars. All seminars that can be counted toward this requirement are announced by the department through emails to all active students and on the department website. Students are strongly recommended to plan and participate in seminars earlier and not to wait until the final semester of their study.

### Written Core Course Exam (Non-Thesis Students)

All non-thesis students are required to take a departmental written core course exam after having completed the core courses in computer science (including all concentrations) or software engineering and accumulating at least 18 graduate hours of credit.

- The exam covers all concepts from core course CS 5329.
- The questions are graded on computer science or software engineering content.
- Students who perform unacceptably on the exam may take the exam a second time. A third test administration is at the discretion of the committee that administers the exams, based on intensive and documented justification provided by the student.
- Exams are given during the fall and spring semesters.
- Students are required to register for the exam a week in advance of the announced exam date.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Computer Science: CS

## Courses Offered

### Computer Science (CS)

#### CS 5100. Advanced Computer Science Internship.

This course provides advanced training supervised by computer scientists in internship programs approved by the department. Course cannot be counted toward any graduate degree, is open only to majors in the Department of Computer Science. May be repeated once. This course does not earn graduate degree credit. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 5300. Professional Development of Graduate Assistants.

This course is designed to develop and enhance the professional and technical skills of graduate teaching and instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5301. Programming Practicum.

This course provides an intensive review of programming through data structures. Topics include syntax, semantics, problem-solving, and algorithm development. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CS 5302. Foundations of Data Structures and Algorithm Design.

This course serves as a foundation course for computer science master's degree students who need reinforcement of fundamental concepts covered by CS 3358. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5303. Foundations of Computer Architecture.

This foundation course for CS master's degree students who need CS 3339 concept reinforcement covers fundamental hardware components. Topics include ALUs, single and multiple cycle datapath and control, RISC vs. CISC, pipelining, caches, I/O, virtual memory, and related performance issues. It may be repeated once and is non-graduate degree credit. Prerequisite: Instructor Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5305. Foundations of Operating Systems.

This course serves as a foundation course for computer science master's students who need reinforcement of fundamental concepts covered by CS 4328. Topics include the principles of operating systems, central processing unit scheduling algorithms, memory management, cooperating sequential processes, and device management. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5306. Advanced Operating Systems.

This course provides a study of modern operating systems, including network, distributed, and real-time systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CS 5310. Network and Communication Systems.

This course provides a study of network and communication systems. Students will be required to perform verification and implementation of protocols.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CS 5316. Data Mining.

This course covers fundamental concepts and techniques, plus recent developments in data mining and information retrieval. It provides relevant research training and practice opportunities. May not be taken for credit if the student has received credit for CS 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CS 5318. Principles of Programming Languages.

This course focuses on the principles of programming languages. Topics covered include programming paradigms, concepts of programming languages, formal syntax and semantics, and language implementation issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5326. Advanced Studies in Human Factors of Computer Science.**

This course provides a professional-level presentation of techniques and research findings related to human-computer interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5329. Algorithm Design and Analysis.**

This course provides an introduction to algorithm design and analysis, computational complexity, and NP-completeness theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5331. Crafting Compilers.**

Overview of the internal structure of modern compilers. Research on compilation techniques. Topics include lexical scanning, parsing techniques, static type checking, code generation, dataflow analysis, storage management, and execution environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5332. Data Base Theory and Design.**

This course covers computer system organization for the management of data. Topics include data models, data model theory, optimization and normalization, integrity constraints, query languages, and intelligent database systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5334. Advanced Internet Information Processing.**

This course integrates popular scripting and database programming languages to provide advanced information processing for Internet applications that demand database support and sophisticated, application-specific information processing. Prerequisite: CS 5332 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5338. Formal Languages.**

This course covers advanced topics in automata theory, grammars, Turing machines, decidability, and algorithmic complexity. A strong background in both data structures and discrete mathematics is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5341. Advanced Network Programming.**

Study of advanced concepts and programming skills in computer networks such as advanced TCP/IP, API, multicasting and broadcasting, reliable communications, advanced I/O functions and options.

Prerequisite: CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5343. Wireless Communications and Networks.**

Study of the fundamental aspects of wireless communications and wireless/mobile networks, introduction of wireless/mobile networking APIs. Prerequisites: CS 3358 with a grade of "B" or better and CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5346. Advanced Artificial Intelligence.**

This course covers knowledge representation, knowledge engineering, parallel and distributed artificial intelligence (AI), heuristic searches, machine learning and intelligent databases, and implementation of systems in high-level AI languages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5351. Parallel Processing.**

This course provides an introduction to the design and analysis of parallel algorithms, parallel architectures, and computers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5352. Distributed Computing.**

This course provides studies in advanced topics in distributed systems: concurrency control and failure recovery, management of replicated data, distributed consensus and fault tolerance, remote procedure calls, naming, and security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5369J. Advanced Human Computer Interaction.**

This course will cover state of the art human computer interaction topics such as perceptual compression, eye-gaze, and brain computer interfaces with emphasis on the human visual system, eye-tracking, and electroencephalography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369L. Machine Learning and Applications.**

Provides broad introduction to machine learning, including learning theory, and recent topics like support vector machines and feature selection. Covers basic ideas, intuition, and understanding behind modern machine learning methods. Discusses applications like face recognition, text recognition, biometrics, bioinformatics, and multimedia retrieval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Q. Recommender Systems.**

This course covers various concepts of recommender systems, including personalization algorithms, evaluation tools, and user experiences. Discussion of how recommender systems are deployed in business applications, design of new recommender experiences, and how to conduct and evaluate research in recommender systems. Cannot take for credit if already took CS 4379Q.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Y. Green Computing.**

Reducing mobile device, cloud computing platform, and supercomputer energy consumption is a paramount, daunting problem. This course covers state-of-the-art green computing research, including energy-efficient hardware and software design, power-aware resource management and storage solutions, green data centers and mobile computing. Cannot be taken for credit if received CS 4379Y credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Z. Distributed Ledger Systems and Blockchains: Theory and Applications.**

This course covers fundamental concepts underlying the design, implementation, research, and applications of Distributed Ledger Technology (DLT) systems (e.g., blockchains). It introduces implementations, applications, and performance evaluation of DLT systems. Additionally, through homework projects, the students will be introduced to current research on DLT systems and perform independent study and small-scale research on selected topics. Course topics include cryptography encryption, security, anonymity, cryptographic data structures, DLT performance evaluation, DLT applications, and current DLT research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5375. Multimedia Computing.**

This course provides a study of the digital representation and processing of the three principal multimedia data types: image, audio, and video. Standards, storage media, and compression techniques for the three data types are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5378. Advanced Computer Security.**

This course covers various aspects of producing secure computer information systems that provide guaranteed controlled sharing. Emphasis is on software models and design, including discovery and prevention of computing systems security vulnerabilities. Current systems and methods are examined and critiqued.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5388. Advanced Computer Graphics.**

This course covers the algorithms and data structures used in representing and processing visual data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5389. Graphical User Interfaces.**

This course covers both abstract and practical treatments of using graphics to implement interactive computer/human interfaces. It includes a survey of the major GUI standards and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5391. Survey of Software Engineering.**

The course covers the software life cycle, emphasizing system analysis and design, including a survey of methodologies based on data flows and objects. The course includes a professional ethics component.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

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**CS 5392. Formal Methods in Software Engineering.**

The use of design and specification languages in producing software systems. Emphasis is placed on proving correctness of designs and implementations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

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**CS 5393. Software Quality.**

The latter half of the software life cycle is discussed. Topics include testing, performance evaluation, and software metrics. Appropriate software tools are studied and used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5394. Advanced Software Engineering Project.**

Students produce a software project of significant size in a team environment. All aspects of the software engineering course sequence are integrated and put into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5395. Independent Study in Advanced Computer Science.**

Open to graduate students on an independent basis by arrangement with the faculty member concerned. Course is not repeatable for credit. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**CS 5396. Advanced Software Engineering Processes and Methods.**

The essentials of software engineering processes, methods, and tools for the evolutionary design of complex interactive software are discussed. Overviews of other topics like quality concepts, SEI CMM, information technology, and network technology are covered. Student completes a literature survey of the latest software engineering analysis and design processes, methods, and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in CS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Computer Science is designed to prepare students for doctoral research, college teaching, careers in computer science and software engineering, and careers in digital forensics.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application

- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work\*
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
  - The GRE may be waived if the student holds a master's or doctoral degree from a regionally accredited U.S. institution. If the student holds a master's or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.

- resume/CV
- statement of purpose
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- [official Duolingo scores required with a 110 overall](#)
- [official TOEFL Essentials scores required with an 8.5 overall](#)

### \*Additional Information

Students admitted to the program will participate in a diagnostic interview with the graduate advisor. This interview will include a review of test scores, grades, and work history. In some cases, additional courses may be added to the degree program.

## Degree Requirements

The Master of Science (M.S.) major in Computer Science requires 36 semester credit hours.

## Background

Students are required to fulfill background course work if they do not have adequate undergraduate computer science background. The background requirements may be reduced if evidence is presented which

shows that the applicant has taken equivalent courses elsewhere prior to enrollment at Texas State. Background work must be completed before enrolling in graduate courses.

The minimum undergraduate background requirements for **computer science** majors are:

Code	Title	Hours
<b>Computer Science</b> <sup>1</sup>		
CS 1428	Foundations of Computer Science I	4
CS 2308	Foundations of Computer Science II	3
CS 2318	Assembly Language	3
CS 3339	Computer Architecture	3
CS 3358	Data Structures and Algorithms	3
CS 4318	Compiler Construction	3
or CS 4328	Operating Systems	
Advanced computer science electives (CS 3000-4000 level)		6
<b>Mathematics</b> <sup>2</sup>		
MATH 5358	Applied Discrete Mathematics (or equivalent)	3
Calculus		8

<sup>1</sup> These courses must be completed with no grade less than "C" and no more than two "Cs."

<sup>2</sup> This course must be completed with no grade less than "C."

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CS 5306	Advanced Operating Systems	3
or CS 5310	Network and Communication Systems	
or CS 5332	Data Base Theory and Design	
CS 5318	Principles of Programming Languages	3
or CS 5338	Formal Languages	
or CS 5351	Parallel Processing	
CS 5329	Algorithm Design and Analysis	3
CS 5346	Advanced Artificial Intelligence	3
or CS 5391	Survey of Software Engineering	
<b>Electives</b>		
Choose 15 hours from the following:		15
CS 5306	Advanced Operating Systems	
CS 5310	Network and Communication Systems	
CS 5316	Data Mining	
CS 5318	Principles of Programming Languages	
CS 5326	Advanced Studies in Human Factors of Computer Science	
CS 5331	Crafting Compilers	
CS 5332	Data Base Theory and Design	
CS 5334	Advanced Internet Information Processing	
CS 5338	Formal Languages	
CS 5341	Advanced Network Programming	
CS 5343	Wireless Communications and Networks	
CS 5346	Advanced Artificial Intelligence	
CS 5351	Parallel Processing	
CS 5352	Distributed Computing	

CS 5369J	Advanced Human Computer Interaction
CS 5369L	Machine Learning and Applications
CS 5369Q	Recommender Systems
CS 5369Y	Green Computing
CS 5375	Multimedia Computing
CS 5378	Advanced Computer Security
CS 5388	Advanced Computer Graphics
CS 5389	Graphical User Interfaces
CS 5391	Survey of Software Engineering
CS 5392	Formal Methods in Software Engineering
CS 5393	Software Quality
CS 5394	Advanced Software Engineering Project
CS 5395	Independent Study in Advanced Computer Science

### Minor

Choose a 9-hour advisor-approved science minor	9
<b>Total Hours</b>	<b>36</b>

## Comprehensive Examination Requirement

The comprehensive exams of computer science master programs consist of multiple components. Specifically, all Computer Science graduate students must complete/pass:

1. **Degree Outline:** Have a degree outline prepared before the end of their first semester. Currently this is done during the mandatory diagnostic interview sessions for newly admitted CS master degree students.
2. **Programming exam:** Pass a written exam in programming.
3. **Communication exam:** Pass a written exam in communication.
4. **Attendance requirement of computer science seminars.**
5. For non-thesis students, the **written core course exam**.

Failure to complete 1, 2, or 3 will result in a "hold" on registration and may cause delays in taking/passing the comprehensive examination. Details of 2, 3, 4, and 5 are described below.

### Programming Exam

The Programming Exam integrates problem-solving and technical abilities to write clear and logical code. The exam format is written.

- The allowable programming languages are C++/Java. Students can elect either of the two.
- This exam is given to newly admitted graduate students twice a year. Students are notified of the registration by the department for the exam. A student who doesn't participate in the exam without the department approval forfeits the opportunity of taking the exam and must take the remedy course CS 5301.
- The exam is typically administrated during the week before the Fall or Spring semester starts.
- Students who fail the Programming Exam are required to take the remedy course CS 5301 immediately. Students must obtain a grade C or higher of CS 5301 in order to satisfy the programming exam requirement. Students are allowed to take CS 5301 twice.
- Students who have not passed the Programming Exam or the remedy course, CS 5301, are not eligible to take classes during the summer semesters.

### Communication Exam

The Communication Exam tests the ability to write clear technical English on computer science topics. All students must satisfy one of the following three options:

- Have a score of 3.5 or higher on the Analytical Writing section of the Graduate Record Examination (GRE).
- Take the Communication Exam and earn a passing score in the first long semester.
  - a. This exam is given to newly admitted graduate students during their first semester (spring or fall semester only).
  - b. Students are registered and notified by the department for this exam.
  - c. This exam can only be taken once during the first semester of initial enrollment.
- Complete one of the following Texas State English courses, ENG 3313, ENG 3311, or ENG 3303, and earn a grade of B or higher. Students must register for one of the English courses by the end of the student's first year in the graduate program. There is no limit on the number of times the students can take those English courses.

#### Seminar Attendance

All computer science master students are required to attend at least **four** computer science departmental seminars. All seminars that can be counted toward this requirement are announced by the department through emails to all active students and on the department website. Students are strongly recommended to plan and participate in seminars earlier and not to wait until the final semester of their study.

#### Written Core Course Exam (Non-Thesis Students)

All non-thesis students are required to take a departmental written core course exam after having completed the core courses in computer science (including all concentrations) or software engineering and accumulating at least 18 graduate hours of credit.

- The exam covers all concepts from core course CS 5329.
- The questions are graded on computer science or software engineering content.
- Students who perform unacceptably on the exam may take the exam a second time. A third test administration is at the discretion of the committee that administers the exams, based on intensive and documented justification provided by the student.
- Exams are given during the fall and spring semesters.
- Students are required to register for the exam a week in advance of the announced exam date.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Computer Science: CS

## Courses Offered

### Computer Science (CS)

#### CS 5100. Advanced Computer Science Internship.

This course provides advanced training supervised by computer scientists in internship programs approved by the department. Course cannot be counted toward any graduate degree, is open only to majors in the Department of Computer Science. May be repeated once. This course does not earn graduate degree credit. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 5300. Professional Development of Graduate Assistants.

This course is designed to develop and enhance the professional and technical skills of graduate teaching and instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5301. Programming Practicum.

This course provides an intensive review of programming through data structures. Topics include syntax, semantics, problem-solving, and algorithm development. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CS 5302. Foundations of Data Structures and Algorithm Design.

This course serves as a foundation course for computer science master's degree students who need reinforcement of fundamental concepts covered by CS 3358. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5303. Foundations of Computer Architecture.**

This foundation course for CS master's degree students who need CS 3339 concept reinforcement covers fundamental hardware components. Topics include ALUs, single and multiple cycle datapath and control, RISC vs. CISC, pipelining, caches, I/O, virtual memory, and related performance issues. It may be repeated once and is non-graduate degree credit. Prerequisite: Instructor Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5305. Foundations of Operating Systems.**

This course serves as a foundation course for computer science master's students who need reinforcement of fundamental concepts covered by CS 4328. Topics include the principles of operating systems, central processing unit scheduling algorithms, memory management, cooperating sequential processes, and device management. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5306. Advanced Operating Systems.**

This course provides a study of modern operating systems, including network, distributed, and real-time systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5310. Network and Communication Systems.**

This course provides a study of network and communication systems. Students will be required to perform verification and implementation of protocols.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5316. Data Mining.**

This course covers fundamental concepts and techniques, plus recent developments in data mining and information retrieval. It provides relevant research training and practice opportunities. May not be taken for credit if the student has received credit for CS 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5318. Principles of Programming Languages.**

This course focuses on the principles of programming languages. Topics covered include programming paradigms, concepts of programming languages, formal syntax and semantics, and language implementation issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5326. Advanced Studies in Human Factors of Computer Science.**

This course provides a professional-level presentation of techniques and research findings related to human-computer interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5329. Algorithm Design and Analysis.**

This course provides an introduction to algorithm design and analysis, computational complexity, and NP-completeness theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5331. Crafting Compilers.**

Overview of the internal structure of modern compilers. Research on compilation techniques. Topics include lexical scanning, parsing techniques, static type checking, code generation, dataflow analysis, storage management, and execution environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5332. Data Base Theory and Design.**

This course covers computer system organization for the management of data. Topics include data models, data model theory, optimization and normalization, integrity constraints, query languages, and intelligent database systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5334. Advanced Internet Information Processing.**

This course integrates popular scripting and database programming languages to provide advanced information processing for Internet applications that demand database support and sophisticated, application-specific information processing. Prerequisite: CS 5332 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5338. Formal Languages.**

This course covers advanced topics in automata theory, grammars, Turing machines, decidability, and algorithmic complexity. A strong background in both data structures and discrete mathematics is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5341. Advanced Network Programming.**

Study of advanced concepts and programming skills in computer networks such as advanced TCP/IP, API, multicasting and broadcasting, reliable communications, advanced I/O functions and options.

Prerequisite: CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5343. Wireless Communications and Networks.**

Study of the fundamental aspects of wireless communications and wireless/mobile networks, introduction of wireless/mobile networking APIs. Prerequisites: CS 3358 with a grade of "B" or better and CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5346. Advanced Artificial Intelligence.**

This course covers knowledge representation, knowledge engineering, parallel and distributed artificial intelligence (AI), heuristic searches, machine learning and intelligent databases, and implementation of systems in high-level AI languages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5351. Parallel Processing.**

This course provides an introduction to the design and analysis of parallel algorithms, parallel architectures, and computers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5352. Distributed Computing.**

This course provides studies in advanced topics in distributed systems: concurrency control and failure recovery, management of replicated data, distributed consensus and fault tolerance, remote procedure calls, naming, and security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5369J. Advanced Human Computer Interaction.**

This course will cover state of the art human computer interaction topics such as perceptual compression, eye-gaze, and brain computer interfaces with emphasis on the human visual system, eye-tracking, and electroencephalography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369L. Machine Learning and Applications.**

Provides broad introduction to machine learning, including learning theory, and recent topics like support vector machines and feature selection. Covers basic ideas, intuition, and understanding behind modern machine learning methods. Discusses applications like face recognition, text recognition, biometrics, bioinformatics, and multimedia retrieval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Q. Recommender Systems.**

This course covers various concepts of recommender systems, including personalization algorithms, evaluation tools, and user experiences. Discussion of how recommender systems are deployed in business applications, design of new recommender experiences, and how to conduct and evaluate research in recommender systems. Cannot take for credit if already took CS 4379Q.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Y. Green Computing.**

Reducing mobile device, cloud computing platform, and supercomputer energy consumption is a paramount, daunting problem. This course covers state-of-the-art green computing research, including energy-efficient hardware and software design, power-aware resource management and storage solutions, green data centers and mobile computing. Cannot be taken for credit if received CS 4379Y credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Z. Distributed Ledger Systems and Blockchains: Theory and Applications.**

This course covers fundamental concepts underlying the design, implementation, research, and applications of Distributed Ledger Technology (DLT) systems (e.g., blockchains). It introduces implementations, applications, and performance evaluation of DLT systems. Additionally, through homework projects, the students will be introduced to current research on DLT systems and perform independent study and small-scale research on selected topics. Course topics include cryptography encryption, security, anonymity, cryptographic data structures, DLT performance evaluation, DLT applications, and current DLT research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5375. Multimedia Computing.**

This course provides a study of the digital representation and processing of the three principal multimedia data types: image, audio, and video. Standards, storage media, and compression techniques for the three data types are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5378. Advanced Computer Security.**

This course covers various aspects of producing secure computer information systems that provide guaranteed controlled sharing. Emphasis is on software models and design, including discovery and prevention of computing systems security vulnerabilities. Current systems and methods are examined and critiqued.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CS 5388. Advanced Computer Graphics.**

This course covers the algorithms and data structures used in representing and processing visual data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5389. Graphical User Interfaces.**

This course covers both abstract and practical treatments of using graphics to implement interactive computer/human interfaces. It includes a survey of the major GUI standards and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5391. Survey of Software Engineering.**

The course covers the software life cycle, emphasizing system analysis and design, including a survey of methodologies based on data flows and objects. The course includes a professional ethics component.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5392. Formal Methods in Software Engineering.**

The use of design and specification languages in producing software systems. Emphasis is placed on proving correctness of designs and implementations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5393. Software Quality.**

The latter half of the software life cycle is discussed. Topics include testing, performance evaluation, and software metrics. Appropriate software tools are studied and used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5394. Advanced Software Engineering Project.**

Students produce a software project of significant size in a team environment. All aspects of the software engineering course sequence are integrated and put into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5395. Independent Study in Advanced Computer Science.**

Open to graduate students on an independent basis by arrangement with the faculty member concerned. Course is not repeatable for credit. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5396. Advanced Software Engineering Processes and Methods.**

The essentials of software engineering processes, methods, and tools for the evolutionary design of complex interactive software are discussed. Overviews of other topics like quality concepts, SEI CMM, information technology, and network technology are covered. Student completes a literature survey of the latest software engineering analysis and design processes, methods, and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in CS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

Software engineering is the application of scientific knowledge to the development and maintenance of software systems. The Software Engineering concentration covers the methods of software synthesis and analysis and exposes students to rigorous software processes, automated process enactment, program analysis algorithms, in particular model checking, verification by proof, symbolic evaluation, runtime verification and test generation techniques.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review

the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - background course work\*
  - official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
    - The GRE may be waived if the student holds a master's or doctoral degree from a regionally accredited U.S. institution. If the student holds a master's or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
  - resume/CV
  - statement of purpose
  - three letters of recommendation

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- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- [official Duolingo scores required with a 110 overall](#)
- [official TOEFL Essentials scores required with an 8.5 overall](#)

### \*Additional Information

Students admitted to the program will participate in a diagnostic interview with the graduate advisor. This interview will include a review of test scores, grades, and work history. In some cases, additional courses may be added to the degree program.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Computer Science concentration in Software Engineering requires 36 semester credit hours.

## Background Requirements

Students are required to fulfill background course work if they do not have adequate undergraduate computer science background. The background requirements may be reduced if evidence is presented which shows that the applicant has taken equivalent courses elsewhere prior to enrollment at Texas State. Background work must be completed before enrolling in graduate courses.

The minimum undergraduate background requirements for computer science majors are:

Code	Title	Hours
<b>Computer Science</b> <sup>1</sup>		
CS 1428	Foundations of Computer Science I	4
CS 2308	Foundations of Computer Science II	3
CS 2318	Assembly Language	3
CS 3339	Computer Architecture	3
CS 3358	Data Structures and Algorithms	3
CS 4318	Compiler Construction	3
or CS 4328	Operating Systems	
Advanced computer science electives (3000-4000 level)		6
<b>Mathematics</b> <sup>2</sup>		
MATH 5358	Applied Discrete Mathematics	3
Calculus		8

<sup>1</sup> These courses must be completed with no grade less than "C" and no more than two "Cs."

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## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CS 5306	Advanced Operating Systems	3
or CS 5310	Network and Communication Systems	
or CS 5332	Data Base Theory and Design	
CS 5318	Principles of Programming Languages	3
or CS 5338	Formal Languages	
or CS 5351	Parallel Processing	
CS 5329	Algorithm Design and Analysis	3
CS 5346	Advanced Artificial Intelligence	3
or CS 5391	Survey of Software Engineering	
<b>Concentration</b>		
CS 5392	Formal Methods in Software Engineering	3
CS 5393	Software Quality	3
CS 5394	Advanced Software Engineering Project	3
or CS 5396	Advanced Software Engineering Processes and Methods	
<b>Electives</b>		
Choose 15 hours from the following:		15
CS 5306	Advanced Operating Systems	
CS 5310	Network and Communication Systems	
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CS 5318	Principles of Programming Languages	

CS 5326	Advanced Studies in Human Factors of Computer Science
CS 5331	Crafting Compilers
CS 5332	Data Base Theory and Design
CS 5334	Advanced Internet Information Processing
CS 5338	Formal Languages
CS 5341	Advanced Network Programming
CS 5343	Wireless Communications and Networks
CS 5346	Advanced Artificial Intelligence
CS 5351	Parallel Processing
CS 5352	Distributed Computing
CS 5369J	Advanced Human Computer Interaction
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CS 5369Q	Recommender Systems
CS 5369Y	Green Computing
CS 5375	Multimedia Computing
CS 5378	Advanced Computer Security
CS 5388	Advanced Computer Graphics
CS 5389	Graphical User Interfaces
CS 5391	Survey of Software Engineering
CS 5394	Advanced Software Engineering Project
CS 5395	Independent Study in Advanced Computer Science
CS 5396	Advanced Software Engineering Processes and Methods

**Total Hours** **36**

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3. **Communication exam:** Pass a written exam in communication.
4. **Attendance requirement of computer science seminars.**
5. For non-thesis students, the **written core course exam**.

Failure to complete 1, 2, or 3 will result in a "hold" on registration and may cause delays in taking/passing the comprehensive examination. Details of 2, 3, 4, and 5 are described below.

### Programming Exam

The Programming Exam integrates problem-solving and technical abilities to write clear and logical code. The exam format is written.

- The allowable programming languages are C++/Java. Students can elect either of the two.
- This exam is given to newly admitted graduate students twice a year. Students are notified of the registration by the department for the exam. A student who doesn't participate in the exam without the department approval forfeits the opportunity of taking the exam and must take the remedy course CS 5301.
- The exam is typically administrated during the week before the Fall or Spring semester starts.

- Students who fail the Programming Exam are required to take the remedy course CS 5301 immediately. Students must obtain a grade C or higher of CS 5301 in order to satisfy the programming exam requirement. Students are allowed to take CS 5301 twice.
- Students who have not passed the Programming Exam or the remedy course, CS 5301, are not eligible to take classes during the summer semesters.

### Communication Exam

The Communication Exam tests the ability to write clear technical English on computer science topics. All students must satisfy one of the following three options:

- Have a score of 3.5 or higher on the Analytical Writing section of the Graduate Record Examination (GRE).
- Take the Communication Exam and earn a passing score in the first long semester.
  - a. This exam is given to newly admitted graduate students during their first semester (Spring or Fall semester only).
  - b. Students are registered and notified by the department for this exam.
  - c. This exam can only be taken once during the first semester of initial enrollment.
- Complete one of the following Texas State English courses, ENG 3313, ENG 3311, or ENG 3303, and earn a grade of B or higher. Students must register for one of the English courses by the end of the student's first year in the graduate program. There is no limit on the number of times the students can take those English courses.

### Seminar Attendance

All computer science master students are required to attend at least **four** computer science departmental seminars. All seminars that can be counted toward this requirement are announced by the department through emails to all active students and on the department website. Students are strongly recommended to plan and participate in seminars earlier and not to wait until the final semester of their study.

### Written Core Course Exam (Non-Thesis Students)

All non-thesis students are required to take a departmental written core course exam after having completed the core courses in computer science (including all concentrations) or software engineering and accumulating at least 18 graduate hours of credit.

- The exam covers all concepts from core course CS 5329.
- The questions are graded on computer science or software engineering content.
- Students who perform unacceptably on the exam may take the exam a second time. A third test administration is at the discretion of the committee that administers the exams, based on intensive and documented justification provided by the student.
- Exams are given during the fall and spring semesters.
- Students are required to register for the exam a week in advance of the announced exam date.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

**CS 5100. Advanced Computer Science Internship.**

This course provides advanced training supervised by computer scientists in internship programs approved by the department. Course cannot be counted toward any graduate degree, is open only to majors in the Department of Computer Science. May be repeated once. This course does not earn graduate degree credit. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5300. Professional Development of Graduate Assistants.**

This course is designed to develop and enhance the professional and technical skills of graduate teaching and instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5301. Programming Practicum.**

This course provides an intensive review of programming through data structures. Topics include syntax, semantics, problem-solving, and algorithm development. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CS 5302. Foundations of Data Structures and Algorithm Design.**

This course serves as a foundation course for computer science master's degree students who need reinforcement of fundamental concepts covered by CS 3358. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5303. Foundations of Computer Architecture.**

This foundation course for CS master's degree students who need CS 3339 concept reinforcement covers fundamental hardware components. Topics include ALUs, single and multiple cycle datapath and control, RISC vs. CISC, pipelining, caches, I/O, virtual memory, and related performance issues. It may be repeated once and is non-graduate degree credit. Prerequisite: Instructor Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5305. Foundations of Operating Systems.**

This course serves as a foundation course for computer science master's students who need reinforcement of fundamental concepts covered by CS 4328. Topics include the principles of operating systems, central processing unit scheduling algorithms, memory management, cooperating sequential processes, and device management. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5306. Advanced Operating Systems.**

This course provides a study of modern operating systems, including network, distributed, and real-time systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5310. Network and Communication Systems.**

This course provides a study of network and communication systems. Students will be required to perform verification and implementation of protocols.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5316. Data Mining.**

This course covers fundamental concepts and techniques, plus recent developments in data mining and information retrieval. It provides relevant research training and practice opportunities. May not be taken for credit if the student has received credit for CS 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5318. Principles of Programming Languages.**

This course focuses on the principles of programming languages. Topics covered include programming paradigms, concepts of programming languages, formal syntax and semantics, and language implementation issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5326. Advanced Studies in Human Factors of Computer Science.**

This course provides a professional-level presentation of techniques and research findings related to human-computer interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5329. Algorithm Design and Analysis.**

This course provides an introduction to algorithm design and analysis, computational complexity, and NP-completeness theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5331. Crafting Compilers.**

Overview of the internal structure of modern compilers. Research on compilation techniques. Topics include lexical scanning, parsing techniques, static type checking, code generation, dataflow analysis, storage management, and execution environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5332. Data Base Theory and Design.**

This course covers computer system organization for the management of data. Topics include data models, data model theory, optimization and normalization, integrity constraints, query languages, and intelligent database systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5334. Advanced Internet Information Processing.**

This course integrates popular scripting and database programming languages to provide advanced information processing for Internet applications that demand database support and sophisticated, application-specific information processing. Prerequisite: CS 5332 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5338. Formal Languages.**

This course covers advanced topics in automata theory, grammars, Turing machines, decidability, and algorithmic complexity. A strong background in both data structures and discrete mathematics is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5341. Advanced Network Programming.**

Study of advanced concepts and programming skills in computer networks such as advanced TCP/IP, API, multicasting and broadcasting, reliable communications, advanced I/O functions and options.

Prerequisite: CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5343. Wireless Communications and Networks.**

Study of the fundamental aspects of wireless communications and wireless/mobile networks, introduction of wireless/mobile networking APIs. Prerequisites: CS 3358 with a grade of "B" or better and CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5346. Advanced Artificial Intelligence.**

This course covers knowledge representation, knowledge engineering, parallel and distributed artificial intelligence (AI), heuristic searches, machine learning and intelligent databases, and implementation of systems in high-level AI languages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5351. Parallel Processing.**

This course provides an introduction to the design and analysis of parallel algorithms, parallel architectures, and computers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5352. Distributed Computing.**

This course provides studies in advanced topics in distributed systems: concurrency control and failure recovery, management of replicated data, distributed consensus and fault tolerance, remote procedure calls, naming, and security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5369J. Advanced Human Computer Interaction.**

This course will cover state of the art human computer interaction topics such as perceptual compression, eye-gaze, and brain computer interfaces with emphasis on the human visual system, eye-tracking, and electroencephalography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369L. Machine Learning and Applications.**

Provides broad introduction to machine learning, including learning theory, and recent topics like support vector machines and feature selection. Covers basic ideas, intuition, and understanding behind modern machine learning methods. Discusses applications like face recognition, text recognition, biometrics, bioinformatics, and multimedia retrieval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**CS 5369Q. Recommender Systems.**

This course covers various concepts of recommender systems, including personalization algorithms, evaluation tools, and user experiences. Discussion of how recommender systems are deployed in business applications, design of new recommender experiences, and how to conduct and evaluate research in recommender systems. Cannot take for credit if already took CS 4379Q.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Y. Green Computing.**

Reducing mobile device, cloud computing platform, and supercomputer energy consumption is a paramount, daunting problem. This course covers state-of-the-art green computing research, including energy-efficient hardware and software design, power-aware resource management and storage solutions, green data centers and mobile computing. Cannot be taken for credit if received CS 4379Y credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Z. Distributed Ledger Systems and Blockchains: Theory and Applications.**

This course covers fundamental concepts underlying the design, implementation, research, and applications of Distributed Ledger Technology (DLT) systems (e.g., blockchains). It introduces implementations, applications, and performance evaluation of DLT systems. Additionally, through homework projects, the students will be introduced to current research on DLT systems and perform independent study and small-scale research on selected topics. Course topics include cryptography encryption, security, anonymity, cryptographic data structures, DLT performance evaluation, DLT applications, and current DLT research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5375. Multimedia Computing.**

This course provides a study of the digital representation and processing of the three principal multimedia data types: image, audio, and video. Standards, storage media, and compression techniques for the three data types are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5378. Advanced Computer Security.**

This course covers various aspects of producing secure computer information systems that provide guaranteed controlled sharing. Emphasis is on software models and design, including discovery and prevention of computing systems security vulnerabilities. Current systems and methods are examined and critiqued.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5388. Advanced Computer Graphics.**

This course covers the algorithms and data structures used in representing and processing visual data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5389. Graphical User Interfaces.**

This course covers both abstract and practical treatments of using graphics to implement interactive computer/human interfaces. It includes a survey of the major GUI standards and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5391. Survey of Software Engineering.**

The course covers the software life cycle, emphasizing system analysis and design, including a survey of methodologies based on data flows and objects. The course includes a professional ethics component.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5392. Formal Methods in Software Engineering.**

The use of design and specification languages in producing software systems. Emphasis is placed on proving correctness of designs and implementations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5393. Software Quality.**

The latter half of the software life cycle is discussed. Topics include testing, performance evaluation, and software metrics. Appropriate software tools are studied and used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5394. Advanced Software Engineering Project.**

Students produce a software project of significant size in a team environment. All aspects of the software engineering course sequence are integrated and put into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5395. Independent Study in Advanced Computer Science.**

Open to graduate students on an independent basis by arrangement with the faculty member concerned. Course is not repeatable for credit. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5396. Advanced Software Engineering Processes and Methods.**

The essentials of software engineering processes, methods, and tools for the evolutionary design of complex interactive software are discussed. Overviews of other topics like quality concepts, SEI CMM, information technology, and network technology are covered. Student completes a literature survey of the latest software engineering analysis and design processes, methods, and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in CS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

Software engineering is the application of scientific knowledge to the development and maintenance of software systems. The Software Engineering concentration covers the methods of software synthesis and analysis and exposes students to rigorous software processes, automated process enactment, program analysis algorithms, in particular model checking, verification by proof, symbolic evaluation, runtime verification and test generation techniques.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review

the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work\*
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
  - The GRE may be waived if the student holds a master's or doctoral degree from a regionally accredited U.S. institution. If the student holds a master's or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
- resume/CV
- statement of purpose
- three letters of recommendation

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waveir>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- [official Duolingo scores required with a 110 overall](#)
- [official TOEFL Essentials scores required with an 8.5 overall](#)

### \*Additional Information

Students admitted to the program will participate in a diagnostic interview with the graduate advisor. This interview will include a review of test scores, grades, and work history. In some cases, additional courses may be added to the degree program.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Computer Science concentration in Software Engineering requires 30 semester credit hours, including a thesis.

## Background Requirements

Students are required to fulfill background course work if they do not have adequate undergraduate computer science background. The background requirements may be reduced if evidence is presented which shows that the applicant has taken equivalent courses elsewhere prior to enrollment at Texas State. Background work must be completed before enrolling in graduate courses.

The minimum undergraduate background requirements for computer science majors are:

Code	Title	Hours
<b>Computer Science</b> <sup>1</sup>		
CS 1428	Foundations of Computer Science I	4
CS 2308	Foundations of Computer Science II	3
CS 2318	Assembly Language	3
CS 3339	Computer Architecture	3
CS 3358	Data Structures and Algorithms	3
CS 4318	Compiler Construction	3
or CS 4328	Operating Systems	
Advanced computer science electives (3000-4000 level)		6
<b>Mathematics</b> <sup>2</sup>		
MATH 5358	Applied Discrete Mathematics	3
Calculus		8

<sup>1</sup> These courses must be completed with no grade less than "C" and no more than two "Cs."

<sup>2</sup> These courses must be completed with no grade less than "C."

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CS 5306	Advanced Operating Systems	3
or CS 5310	Network and Communication Systems	
or CS 5332	Data Base Theory and Design	
CS 5318	Principles of Programming Languages	3
or CS 5338	Formal Languages	
or CS 5351	Parallel Processing	
CS 5329	Algorithm Design and Analysis	3
CS 5346	Advanced Artificial Intelligence	3
or CS 5391	Survey of Software Engineering	
<b>Concentration</b>		
CS 5392	Formal Methods in Software Engineering	3
CS 5393	Software Quality	3
CS 5394	Advanced Software Engineering Project	3
or CS 5396	Advanced Software Engineering Processes and Methods	
<b>Electives</b>		
Choose 3 hours from the following:		3
CS 5306	Advanced Operating Systems	
CS 5310	Network and Communication Systems	
CS 5316	Data Mining	
CS 5318	Principles of Programming Languages	

CS 5326	Advanced Studies in Human Factors of Computer Science
CS 5331	Crafting Compilers
CS 5332	Data Base Theory and Design
CS 5334	Advanced Internet Information Processing
CS 5338	Formal Languages
CS 5341	Advanced Network Programming
CS 5343	Wireless Communications and Networks
CS 5346	Advanced Artificial Intelligence
CS 5351	Parallel Processing
CS 5352	Distributed Computing
CS 5369J	Advanced Human Computer Interaction
CS 5369L	Machine Learning and Applications
CS 5369Q	Recommender Systems
CS 5369Y	Green Computing
CS 5375	Multimedia Computing
CS 5378	Advanced Computer Security
CS 5388	Advanced Computer Graphics
CS 5389	Graphical User Interfaces
CS 5391	Survey of Software Engineering
CS 5394	Advanced Software Engineering Project
CS 5395	Independent Study in Advanced Computer Science
CS 5396	Advanced Software Engineering Processes and Methods

<b>Thesis</b>		
CS 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
CS 5199B	Thesis	
CS 5299B	Thesis	
CS 5399B	Thesis	
CS 5599B	Thesis	
CS 5999B	Thesis	

**Total Hours** 30

## Comprehensive Examination Requirement

The comprehensive exams of computer science master programs consist of multiple components. Specifically, all Computer Science graduate students must complete/pass:

- Degree Outline:** Have a degree outline prepared before the end of their first semester. Currently, this is done during the mandatory diagnostic interview sessions for newly admitted CS master degree students.
- Programming exam:** Pass a written exam in programming.
- Communication exam:** Pass a written exam in communication.
- Attendance requirement of computer science seminars.**
- For non-thesis students, the written core course exam.**

Failure to complete 1, 2, or 3 will result in a "hold" on registration and may cause delays in taking/passing the comprehensive examination. Details of 2, 3, 4, and 5 are described below.

### Programming Exam

The Programming Exam integrates problem-solving and technical abilities to write clear and logical code. The exam format is written.

- The allowable programming languages are C++/Java. Students can elect either of the two.
- This exam is given to newly admitted graduate students twice a year. Students are notified of the registration by the department for the exam. A student who doesn't participate in the exam without the department approval forfeits the opportunity of taking the exam and must take the remedy course CS 5301.
- The exam is typically administrated during the week before the fall or spring semester starts.
- Students who fail the Programming Exam are required to take the remedy course CS 5301 immediately. Students must obtain a grade C or higher of CS 5301 in order to satisfy the programming exam requirement. Students are allowed to take CS 5301 twice.

### Communication Exam

The Communication Exam tests the ability to write clear technical English on computer science topics. All students must satisfy one of the following three options:

- Have a score of 3.5 or higher on the Analytical Writing section of the Graduate Record Examination (GRE).
- Take the Communication Exam and earn a passing score in the first long semester.
- This exam is given to newly admitted graduate students during their first semester (Spring or Fall semester only).
- Students are registered and notified by the department for this exam.
- This exam can only be taken once during the first semester of initial enrollment.
- Complete one of the following Texas State English courses, ENG 3313, ENG 3311, or ENG 3303, and earn a grade of B or higher. Students must register for one of the English courses by the end of the student's first year in the graduate program. There is no limit on the number of times the students can take those English courses.
- Students who have not passed the Programming Exam or the remedy course, CS 5301, are not eligible to take classes during the summer semesters.

### Seminar Attendance

All computer science master students are required to attend at least **four** computer science departmental seminars. All seminars that can be counted toward this requirement are announced by the department through emails to all active students and on the department website. Students are strongly recommended to plan and participate in seminars earlier and not to wait until the final semester of their study.

### Oral Master Thesis Defense Exam

All thesis students are required to take an oral exam at the time of their public thesis defense.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

### **CS 5100. Advanced Computer Science Internship.**

This course provides advanced training supervised by computer scientists in internship programs approved by the department. Course cannot be counted toward any graduate degree, is open only to majors in the Department of Computer Science. May be repeated once. This course does not earn graduate degree credit. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### **CS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### **CS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### **CS 5300. Professional Development of Graduate Assistants.**

This course is designed to develop and enhance the professional and technical skills of graduate teaching and instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### **CS 5301. Programming Practicum.**

This course provides an intensive review of programming through data structures. Topics include syntax, semantics, problem-solving, and algorithm development. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

### **CS 5302. Foundations of Data Structures and Algorithm Design.**

This course serves as a foundation course for computer science master's degree students who need reinforcement of fundamental concepts covered by CS 3358. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5303. Foundations of Computer Architecture.**

This foundation course for CS master's degree students who need CS 3339 concept reinforcement covers fundamental hardware components. Topics include ALUs, single and multiple cycle datapath and control, RISC vs. CISC, pipelining, caches, I/O, virtual memory, and related performance issues. It may be repeated once and is non-graduate degree credit. Prerequisite: Instructor Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5305. Foundations of Operating Systems.**

This course serves as a foundation course for computer science master's students who need reinforcement of fundamental concepts covered by CS 4328. Topics include the principles of operating systems, central processing unit scheduling algorithms, memory management, cooperating sequential processes, and device management. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5306. Advanced Operating Systems.**

This course provides a study of modern operating systems, including network, distributed, and real-time systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5310. Network and Communication Systems.**

This course provides a study of network and communication systems. Students will be required to perform verification and implementation of protocols.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5316. Data Mining.**

This course covers fundamental concepts and techniques, plus recent developments in data mining and information retrieval. It provides relevant research training and practice opportunities. May not be taken for credit if the student has received credit for CS 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5318. Principles of Programming Languages.**

This course focuses on the principles of programming languages. Topics covered include programming paradigms, concepts of programming languages, formal syntax and semantics, and language implementation issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5326. Advanced Studies in Human Factors of Computer Science.**

This course provides a professional-level presentation of techniques and research findings related to human-computer interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5329. Algorithm Design and Analysis.**

This course provides an introduction to algorithm design and analysis, computational complexity, and NP-completeness theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5331. Crafting Compilers.**

Overview of the internal structure of modern compilers. Research on compilation techniques. Topics include lexical scanning, parsing techniques, static type checking, code generation, dataflow analysis, storage management, and execution environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5332. Data Base Theory and Design.**

This course covers computer system organization for the management of data. Topics include data models, data model theory, optimization and normalization, integrity constraints, query languages, and intelligent database systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5334. Advanced Internet Information Processing.**

This course integrates popular scripting and database programming languages to provide advanced information processing for Internet applications that demand database support and sophisticated, application-specific information processing. Prerequisite: CS 5332 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5338. Formal Languages.**

This course covers advanced topics in automata theory, grammars, Turing machines, decidability, and algorithmic complexity. A strong background in both data structures and discrete mathematics is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5341. Advanced Network Programming.**

Study of advanced concepts and programming skills in computer networks such as advanced TCP/IP, API, multicasting and broadcasting, reliable communications, advanced I/O functions and options.

Prerequisite: CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CS 5343. Wireless Communications and Networks.**

Study of the fundamental aspects of wireless communications and wireless/mobile networks, introduction of wireless/mobile networking APIs. Prerequisites: CS 3358 with a grade of "B" or better and CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5346. Advanced Artificial Intelligence.**

This course covers knowledge representation, knowledge engineering, parallel and distributed artificial intelligence (AI), heuristic searches, machine learning and intelligent databases, and implementation of systems in high-level AI languages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5351. Parallel Processing.**

This course provides an introduction to the design and analysis of parallel algorithms, parallel architectures, and computers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5352. Distributed Computing.**

This course provides studies in advanced topics in distributed systems: concurrency control and failure recovery, management of replicated data, distributed consensus and fault tolerance, remote procedure calls, naming, and security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5369J. Advanced Human Computer Interaction.**

This course will cover state of the art human computer interaction topics such as perceptual compression, eye-gaze, and brain computer interfaces with emphasis on the human visual system, eye-tracking, and electroencephalography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369L. Machine Learning and Applications.**

Provides broad introduction to machine learning, including learning theory, and recent topics like support vector machines and feature selection. Covers basic ideas, intuition, and understanding behind modern machine learning methods. Discusses applications like face recognition, text recognition, biometrics, bioinformatics, and multimedia retrieval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Q. Recommender Systems.**

This course covers various concepts of recommender systems, including personalization algorithms, evaluation tools, and user experiences. Discussion of how recommender systems are deployed in business applications, design of new recommender experiences, and how to conduct and evaluate research in recommender systems. Cannot take for credit if already took CS 4379Q.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Y. Green Computing.**

Reducing mobile device, cloud computing platform, and supercomputer energy consumption is a paramount, daunting problem. This course covers state-of-the-art green computing research, including energy-efficient hardware and software design, power-aware resource management and storage solutions, green data centers and mobile computing. Cannot be taken for credit if received CS 4379Y credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Z. Distributed Ledger Systems and Blockchains: Theory and Applications.**

This course covers fundamental concepts underlying the design, implementation, research, and applications of Distributed Ledger Technology (DLT) systems (e.g., blockchains). It introduces implementations, applications, and performance evaluation of DLT systems. Additionally, through homework projects, the students will be introduced to current research on DLT systems and perform independent study and small-scale research on selected topics. Course topics include cryptography encryption, security, anonymity, cryptographic data structures, DLT performance evaluation, DLT applications, and current DLT research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5375. Multimedia Computing.**

This course provides a study of the digital representation and processing of the three principal multimedia data types: image, audio, and video. Standards, storage media, and compression techniques for the three data types are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5378. Advanced Computer Security.**

This course covers various aspects of producing secure computer information systems that provide guaranteed controlled sharing. Emphasis is on software models and design, including discovery and prevention of computing systems security vulnerabilities. Current systems and methods are examined and critiqued.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5388. Advanced Computer Graphics.**

This course covers the algorithms and data structures used in representing and processing visual data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5389. Graphical User Interfaces.**

This course covers both abstract and practical treatments of using graphics to implement interactive computer/human interfaces. It includes a survey of the major GUI standards and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5391. Survey of Software Engineering.**

The course covers the software life cycle, emphasizing system analysis and design, including a survey of methodologies based on data flows and objects. The course includes a professional ethics component.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5392. Formal Methods in Software Engineering.**

The use of design and specification languages in producing software systems. Emphasis is placed on proving correctness of designs and implementations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5393. Software Quality.**

The latter half of the software life cycle is discussed. Topics include testing, performance evaluation, and software metrics. Appropriate software tools are studied and used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5394. Advanced Software Engineering Project.**

Students produce a software project of significant size in a team environment. All aspects of the software engineering course sequence are integrated and put into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5395. Independent Study in Advanced Computer Science.**

Open to graduate students on an independent basis by arrangement with the faculty member concerned. Course is not repeatable for credit. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5396. Advanced Software Engineering Processes and Methods.**

The essentials of software engineering processes, methods, and tools for the evolutionary design of complex interactive software are discussed. Overviews of other topics like quality concepts, SEI CMM, information technology, and network technology are covered. Student completes a literature survey of the latest software engineering analysis and design processes, methods, and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in CS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Computer Science is designed to prepare students for doctoral research, college teaching, careers in computer science and software engineering, and careers in digital forensics.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application

- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work\*
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
  - The GRE may be waived if the student holds a master's or doctoral degree from a regionally accredited U.S. institution. If the student holds a master's or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
- resume/CV
- statement of purpose
- three letters of recommendation

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

#### \*Additional Information

Students admitted to the program will participate in a diagnostic interview with the graduate advisor. This interview will include a review of test scores, grades, and work history. In some cases, additional courses may be added to the degree program.

## Degree Requirements

The Master of Science (M.S.) major in Computer Science requires 30 semester credit hours, including thesis.

### Background

Students are required to fulfill background course work if they do not have adequate undergraduate computer science background. The background requirements may be reduced if evidence is presented which shows that the applicant has taken equivalent courses elsewhere prior to

enrollment at Texas State. Background work must be completed before enrolling in graduate courses.

The minimum undergraduate background requirements for **computer science** majors are:

Code	Title	Hours
<b>Computer Science</b> <sup>1</sup>		
CS 1428	Foundations of Computer Science I	4
CS 2308	Foundations of Computer Science II	3
CS 2318	Assembly Language	3
CS 3339	Computer Architecture	3
CS 3358	Data Structures and Algorithms	3
CS 4318	Compiler Construction	3
or CS 4328	Operating Systems	
Advanced computer science electives (CS 3000-4000 level)		6
<b>Mathematics</b> <sup>2</sup>		
MATH 5358	Applied Discrete Mathematics (or equivalent)	3
Calculus		8

<sup>1</sup> These courses must be completed with no grade less than "C" and no more than two "Cs."

<sup>2</sup> These courses must be completed with no grade less than "C."

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CS 5306	Advanced Operating Systems	3
or CS 5310	Network and Communication Systems	
or CS 5332	Data Base Theory and Design	
CS 5318	Principles of Programming Languages	3
or CS 5338	Formal Languages	
or CS 5351	Parallel Processing	
CS 5329	Algorithm Design and Analysis	3
CS 5346	Advanced Artificial Intelligence	3
or CS 5391	Survey of Software Engineering	
<b>Electives</b>		
Choose 12 hours from the following:		12
CS 5306	Advanced Operating Systems	
CS 5310	Network and Communication Systems	
CS 5316	Data Mining	
CS 5318	Principles of Programming Languages	
CS 5326	Advanced Studies in Human Factors of Computer Science	
CS 5331	Crafting Compilers	
CS 5332	Data Base Theory and Design	
CS 5334	Advanced Internet Information Processing	
CS 5338	Formal Languages	
CS 5341	Advanced Network Programming	
CS 5343	Wireless Communications and Networks	
CS 5346	Advanced Artificial Intelligence	
CS 5351	Parallel Processing	
CS 5352	Distributed Computing	
CS 5369J	Advanced Human Computer Interaction	

CS 5369L	Machine Learning and Applications
CS 5369Q	Recommender Systems
CS 5369Y	Green Computing
CS 5375	Multimedia Computing
CS 5378	Advanced Computer Security
CS 5388	Advanced Computer Graphics
CS 5389	Graphical User Interfaces
CS 5391	Survey of Software Engineering
CS 5392	Formal Methods in Software Engineering
CS 5393	Software Quality
CS 5394	Advanced Software Engineering Project
CS 5395	Independent Study in Advanced Computer Science

#### Thesis

CS 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3

CS 5199B	Thesis
CS 5299B	Thesis
CS 5399B	Thesis
CS 5599B	Thesis
CS 5999B	Thesis

**Total Hours** 30

## Comprehensive Examination Requirement

The comprehensive exams of computer science master programs consist of multiple components. Specifically, all graduate students must complete/pass:

1. **Degree Outline:** Have a degree outline prepared before the end of their first semester. Currently this is done during the mandatory diagnostic interview sessions for newly admitted CS master degree students.
2. **Programming exam:** Pass a written exam in programming.
3. **Communication exam:** Pass a written exam in communication.
4. **Attendance requirement of computer science seminars.**
5. For thesis students, the **master thesis defense exam**.

Failure to complete 1, 2, or 3 will result in a "hold" on registration and may cause delays in taking/passing the comprehensive examination. Details of 2, 3, 4, and 5 are described below.

#### Programming Exam

The Programming Exam integrates problem-solving and technical abilities to write clear and logical code. The exam format is written.

- The allowable programming languages are C++/Java. Students can elect either of the two.
- This exam is given to newly admitted graduate students twice a year. Students are notified of the registration by the department for the exam. A student who doesn't participate in the exam without the department approval forfeits the opportunity of taking the exam and must take the remedy course CS 5301.
- The exam is typically administrated during the week before the Fall or Spring semester starts.
- Students who fail the Programming Exam are required to take the remedy course CS 5301 immediately. Students must obtain a grade "C" or better in CS 5301 in order to satisfy the programming exam requirement. Students are allowed to take CS 5301 twice.

- Students who have not passed the Programming Exam or the remedy course, CS 5301, are not eligible to take classes during the summer semesters.

#### Communication Exam

The Communication Exam tests the ability to write clear technical English on computer science topics. All students must satisfy one of the following three options:

- Have a score of 3.5 or higher on the Analytical Writing section of the Graduate Record Examination (GRE).
- Take the Communication Exam and earn a passing score in the first long semester.
  - a. This exam is given to newly admitted graduate students during their first semester (spring or fall semester only).
  - b. Students are registered and notified by the department for this exam.
  - c. This exam can only be taken once during the first semester of initial enrollment.
- Complete one of the following Texas State English courses, ENG 3313, ENG 3311, or ENG 3303, and earn a grade of "B" or better. Students must register for one of the English courses by the end of the student's first year in the graduate program. There is no limit on the number of times the students can take those English courses.

#### Seminar Attendance

All computer science master students are required to attend at least **four** computer science departmental seminars. All seminars that can be counted toward this requirement are announced by the department through emails to all active students and on the department website. Students are strongly recommended to plan and participate in seminars earlier and not to wait until the final semester of their study.

#### Oral Master Thesis Defense Exam

All thesis students are required to take an oral exam at the time of their public thesis defense.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the

thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The

completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Computer Science: CS

## Courses Offered

### Computer Science (CS)

#### CS 5100. Advanced Computer Science Internship.

This course provides advanced training supervised by computer scientists in internship programs approved by the department. Course cannot be counted toward any graduate degree, is open only to majors in the Department of Computer Science. May be repeated once. This course does not earn graduate degree credit. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships



**CS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5300. Professional Development of Graduate Assistants.**

This course is designed to develop and enhance the professional and technical skills of graduate teaching and instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5301. Programming Practicum.**

This course provides an intensive review of programming through data structures. Topics include syntax, semantics, problem-solving, and algorithm development. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CS 5302. Foundations of Data Structures and Algorithm Design.**

This course serves as a foundation course for computer science master's degree students who need reinforcement of fundamental concepts covered by CS 3358. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5303. Foundations of Computer Architecture.**

This foundation course for CS master's degree students who need CS 3339 concept reinforcement covers fundamental hardware components. Topics include ALUs, single and multiple cycle datapath and control, RISC vs. CISC, pipelining, caches, I/O, virtual memory, and related performance issues. It may be repeated once and is non-graduate degree credit. Prerequisite: Instructor Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5305. Foundations of Operating Systems.**

This course serves as a foundation course for computer science master's students who need reinforcement of fundamental concepts covered by CS 4328. Topics include the principles of operating systems, central processing unit scheduling algorithms, memory management, cooperating sequential processes, and device management. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5306. Advanced Operating Systems.**

This course provides a study of modern operating systems, including network, distributed, and real-time systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5310. Network and Communication Systems.**

This course provides a study of network and communication systems. Students will be required to perform verification and implementation of protocols.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5316. Data Mining.**

This course covers fundamental concepts and techniques, plus recent developments in data mining and information retrieval. It provides relevant research training and practice opportunities. May not be taken for credit if the student has received credit for CS 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5318. Principles of Programming Languages.**

This course focuses on the principles of programming languages. Topics covered include programming paradigms, concepts of programming languages, formal syntax and semantics, and language implementation issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5326. Advanced Studies in Human Factors of Computer Science.**

This course provides a professional-level presentation of techniques and research findings related to human-computer interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5329. Algorithm Design and Analysis.**

This course provides an introduction to algorithm design and analysis, computational complexity, and NP-completeness theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5331. Crafting Compilers.**

Overview of the internal structure of modern compilers. Research on compilation techniques. Topics include lexical scanning, parsing techniques, static type checking, code generation, dataflow analysis, storage management, and execution environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5332. Data Base Theory and Design.**

This course covers computer system organization for the management of data. Topics include data models, data model theory, optimization and normalization, integrity constraints, query languages, and intelligent database systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5334. Advanced Internet Information Processing.**

This course integrates popular scripting and database programming languages to provide advanced information processing for Internet applications that demand database support and sophisticated, application-specific information processing. Prerequisite: CS 5332 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5338. Formal Languages.**

This course covers advanced topics in automata theory, grammars, Turing machines, decidability, and algorithmic complexity. A strong background in both data structures and discrete mathematics is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5341. Advanced Network Programming.**

Study of advanced concepts and programming skills in computer networks such as advanced TCP/IP, API, multicasting and broadcasting, reliable communications, advanced I/O functions and options. Prerequisite: CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5343. Wireless Communications and Networks.**

Study of the fundamental aspects of wireless communications and wireless/mobile networks, introduction of wireless/mobile networking APIs. Prerequisites: CS 3358 with a grade of "B" or better and CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5346. Advanced Artificial Intelligence.**

This course covers knowledge representation, knowledge engineering, parallel and distributed artificial intelligence (AI), heuristic searches, machine learning and intelligent databases, and implementation of systems in high-level AI languages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5351. Parallel Processing.**

This course provides an introduction to the design and analysis of parallel algorithms, parallel architectures, and computers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5352. Distributed Computing.**

This course provides studies in advanced topics in distributed systems: concurrency control and failure recovery, management of replicated data, distributed consensus and fault tolerance, remote procedure calls, naming, and security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5369J. Advanced Human Computer Interaction.**

This course will cover state of the art human computer interaction topics such as perceptual compression, eye-gaze, and brain computer interfaces with emphasis on the human visual system, eye-tracking, and electroencephalography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369L. Machine Learning and Applications.**

Provides broad introduction to machine learning, including learning theory, and recent topics like support vector machines and feature selection. Covers basic ideas, intuition, and understanding behind modern machine learning methods. Discusses applications like face recognition, text recognition, biometrics, bioinformatics, and multimedia retrieval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Q. Recommender Systems.**

This course covers various concepts of recommender systems, including personalization algorithms, evaluation tools, and user experiences. Discussion of how recommender systems are deployed in business applications, design of new recommender experiences, and how to conduct and evaluate research in recommender systems. Cannot take for credit if already took CS 4379Q.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Y. Green Computing.**

Reducing mobile device, cloud computing platform, and supercomputer energy consumption is a paramount, daunting problem. This course covers state-of-the-art green computing research, including energy-efficient hardware and software design, power-aware resource management and storage solutions, green data centers and mobile computing. Cannot be taken for credit if received CS 4379Y credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Z. Distributed Ledger Systems and Blockchains: Theory and Applications.**

This course covers fundamental concepts underlying the design, implementation, research, and applications of Distributed Ledger Technology (DLT) systems (e.g., blockchains). It introduces implementations, applications, and performance evaluation of DLT systems. Additionally, through homework projects, the students will be introduced to current research on DLT systems and perform independent study and small-scale research on selected topics. Course topics include cryptography encryption, security, anonymity, cryptographic data structures, DLT performance evaluation, DLT applications, and current DLT research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5375. Multimedia Computing.**

This course provides a study of the digital representation and processing of the three principal multimedia data types: image, audio, and video. Standards, storage media, and compression techniques for the three data types are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5378. Advanced Computer Security.**

This course covers various aspects of producing secure computer information systems that provide guaranteed controlled sharing. Emphasis is on software models and design, including discovery and prevention of computing systems security vulnerabilities. Current systems and methods are examined and critiqued.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5388. Advanced Computer Graphics.**

This course covers the algorithms and data structures used in representing and processing visual data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5389. Graphical User Interfaces.**

This course covers both abstract and practical treatments of using graphics to implement interactive computer/human interfaces. It includes a survey of the major GUI standards and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5391. Survey of Software Engineering.**

The course covers the software life cycle, emphasizing system analysis and design, including a survey of methodologies based on data flows and objects. The course includes a professional ethics component.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5392. Formal Methods in Software Engineering.**

The use of design and specification languages in producing software systems. Emphasis is placed on proving correctness of designs and implementations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5393. Software Quality.**

The latter half of the software life cycle is discussed. Topics include testing, performance evaluation, and software metrics. Appropriate software tools are studied and used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5394. Advanced Software Engineering Project.**

Students produce a software project of significant size in a team environment. All aspects of the software engineering course sequence are integrated and put into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5395. Independent Study in Advanced Computer Science.**

Open to graduate students on an independent basis by arrangement with the faculty member concerned. Course is not repeatable for credit. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5396. Advanced Software Engineering Processes and Methods.**

The essentials of software engineering processes, methods, and tools for the evolutionary design of complex interactive software are discussed. Overviews of other topics like quality concepts, SEI CMM, information technology, and network technology are covered. Student completes a literature survey of the latest software engineering analysis and design processes, methods, and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in CS 5399B.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**CS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**CS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.  
**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**CS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.  
**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**Program Overview**

The Master of Science (M.S.) degree with a major in Computer Science is designed to prepare students for doctoral research, college teaching, careers in computer science and software engineering, and careers in digital forensics.

**Application Requirements**

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university(Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)

- official transcripts from **each institution** where course credit was granted
- 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work\*
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
  - The GRE may be waived if the student holds a master's or doctoral degree from a regionally accredited U.S. institution. If the student holds a master's or doctoral degree (or the equivalent thereof) from an accredited international institution, the GRE may be waived on an individual basis.
- resume/CV
- statement of purpose
- three letters of recommendation

**Approved English Proficiency Exam Scores**

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waveir>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

**\*Additional Information**

Students admitted to the program will participate in a diagnostic interview with the graduate advisor. This interview will include a review of test scores, grades, and work history. In some cases, additional courses may be added to the degree program.

**Degree Requirements**

The Master of Science (M.S.) major in Computer Science requires 30 semester credit hours, including a thesis.

**Background**

Students are required to fulfill background course work if they do not have adequate undergraduate computer science background. The background requirements may be reduced if evidence is presented which shows that the applicant has taken equivalent courses elsewhere prior to enrollment at Texas State. Background work must be completed before enrolling in graduate courses.

The minimum undergraduate background requirements for **computer science** majors are:

Code	Title	Hours
<b>Computer Science<sup>1</sup></b>		
CS 1428	Foundations of Computer Science I	4
CS 2308	Foundations of Computer Science II	3
CS 2318	Assembly Language	3

CS 3339	Computer Architecture	3
CS 3358	Data Structures and Algorithms	3
CS 4318	Compiler Construction	3
or CS 4328	Operating Systems	
Advanced computer science electives (CS 3000-4000 level)		6
<b>Mathematics</b> <sup>2</sup>		
MATH 5358	Applied Discrete Mathematics (or equivalent)	3
Calculus		8

<sup>1</sup> These courses must be completed with no grade less than "C" and no more than two "Cs."

<sup>2</sup> These courses must be completed with no grade less than "C."

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CS 5306	Advanced Operating Systems	3
or CS 5310	Network and Communication Systems	
or CS 5332	Data Base Theory and Design	
CS 5318	Principles of Programming Languages	3
or CS 5338	Formal Languages	
or CS 5351	Parallel Processing	
CS 5329	Algorithm Design and Analysis	3
CS 5346	Advanced Artificial Intelligence	3
or CS 5391	Survey of Software Engineering	
<b>Electives</b>		
Choose 6 hours from the following:		6
CS 5306	Advanced Operating Systems	
CS 5310	Network and Communication Systems	
CS 5316	Data Mining	
CS 5318	Principles of Programming Languages	
CS 5326	Advanced Studies in Human Factors of Computer Science	
CS 5331	Crafting Compilers	
CS 5332	Data Base Theory and Design	
CS 5334	Advanced Internet Information Processing	
CS 5338	Formal Languages	
CS 5341	Advanced Network Programming	
CS 5343	Wireless Communications and Networks	
CS 5346	Advanced Artificial Intelligence	
CS 5351	Parallel Processing	
CS 5352	Distributed Computing	
CS 5369J	Advanced Human Computer Interaction	
CS 5369L	Machine Learning and Applications	
CS 5369Q	Recommender Systems	
CS 5369Y	Green Computing	
CS 5375	Multimedia Computing	
CS 5378	Advanced Computer Security	
CS 5388	Advanced Computer Graphics	
CS 5389	Graphical User Interfaces	
CS 5391	Survey of Software Engineering	
CS 5392	Formal Methods in Software Engineering	

CS 5393	Software Quality	
CS 5394	Advanced Software Engineering Project	
CS 5395	Independent Study in Advanced Computer Science	
<b>Minor</b>		
Choose a 6-hour advisor-approved science minor		6
<b>Thesis</b>		
CS 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
CS 5199B	Thesis	
CS 5299B	Thesis	
CS 5399B	Thesis	
CS 5599B	Thesis	
CS 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

The comprehensive exams of computer science master programs consist of multiple components. Specifically, all graduate students must complete/pass:

1. **Degree Outline:** Have a degree outline prepared before the end of their first semester. Currently this is done during the mandatory diagnostic interview sessions for newly admitted CS master degree students.
2. **Programming exam:** Pass a written exam in programming.
3. **Communication exam:** Pass a written exam in communication.
4. **Attendance requirement of computer science seminars.**
5. For thesis students, the **master thesis defense exam**.

Failure to complete 1, 2, or 3 will result in a "hold" on registration and may cause delays in taking/passing the comprehensive examination. Details of 2, 3, 4, and 5 are described below.

### Programming Exam

The Programming Exam integrates problem-solving and technical abilities to write clear and logical code. The exam format is written.

- The allowable programming languages are C++/Java. Students can elect either of the two.
- This exam is given to newly admitted graduate students twice a year. Students are notified of the registration by the department for the exam. A student who doesn't participate in the exam without the department approval forfeits the opportunity of taking the exam and must take the remedy course CS 5301.
- The exam is typically administrated during the week before the Fall or Spring semester starts.
- Students who fail the Programming Exam are required to take the remedy course CS 5301 immediately. Students must obtain a grade of "C" or better in CS 5301 in order to satisfy the programming exam requirement. Students are allowed to take CS 5301 twice.
- Students who have not passed the Programming Exam or the remedy course, CS 5301, are not eligible to take classes during the summer semesters.

### Communication Exam



The Communication Exam tests the ability to write clear technical English on computer science topics. All students must satisfy one of the following three options:

- Have a score of 3.5 or higher on the Analytical Writing section of the Graduate Record Examination (GRE).
- Take the Communication Exam and earn a passing score in the first long semester.
  - a. This exam is given to newly admitted graduate students during their first semester (spring or fall semester only).
  - b. Students are registered and notified by the department for this exam.
  - c. This exam can only be taken once during the first semester of initial enrollment.
- Complete one of the following Texas State English courses, ENG 3313, ENG 3311, or ENG 3303, and earn a grade of "B" or better. Students must register for one of the English courses by the end of the student's first year in the graduate program. There is no limit on the number of times the students can take those English courses.

### Seminar Attendance

All computer science master students are required to attend at least **four** computer science departmental seminars. All seminars that can be counted toward this requirement are announced by the department through emails to all active students and on the department website. Students are strongly recommended to plan and participate in seminars earlier and not to wait until the final semester of their study.

### Oral Master Thesis Defense Exam

All thesis students are required to take an oral exam at the time of their public thesis defense.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must

include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Computer Science: CS

## Courses Offered

### Computer Science (CS)

#### CS 5100. Advanced Computer Science Internship.

This course provides advanced training supervised by computer scientists in internship programs approved by the department. Course cannot be counted toward any graduate degree, is open only to majors in the Department of Computer Science. May be repeated once. This course does not earn graduate degree credit. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### CS 5300. Professional Development of Graduate Assistants.

This course is designed to develop and enhance the professional and technical skills of graduate teaching and instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5301. Programming Practicum.

This course provides an intensive review of programming through data structures. Topics include syntax, semantics, problem-solving, and algorithm development. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CS 5302. Foundations of Data Structures and Algorithm Design.

This course serves as a foundation course for computer science master's degree students who need reinforcement of fundamental concepts covered by CS 3358. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### CS 5303. Foundations of Computer Architecture.

This foundation course for CS master's degree students who need CS 3339 concept reinforcement covers fundamental hardware components. Topics include ALUs, single and multiple cycle datapath and control, RISC vs. CISC, pipelining, caches, I/O, virtual memory, and related performance issues. It may be repeated once and is non-graduate degree credit. Prerequisite: Instructor Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5305. Foundations of Operating Systems.**

This course serves as a foundation course for computer science master's students who need reinforcement of fundamental concepts covered by CS 4328. Topics include the principles of operating systems, central processing unit scheduling algorithms, memory management, cooperating sequential processes, and device management. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5306. Advanced Operating Systems.**

This course provides a study of modern operating systems, including network, distributed, and real-time systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5310. Network and Communication Systems.**

This course provides a study of network and communication systems. Students will be required to perform verification and implementation of protocols.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5316. Data Mining.**

This course covers fundamental concepts and techniques, plus recent developments in data mining and information retrieval. It provides relevant research training and practice opportunities. May not be taken for credit if the student has received credit for CS 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5318. Principles of Programming Languages.**

This course focuses on the principles of programming languages. Topics covered include programming paradigms, concepts of programming languages, formal syntax and semantics, and language implementation issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5326. Advanced Studies in Human Factors of Computer Science.**

This course provides a professional-level presentation of techniques and research findings related to human-computer interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5329. Algorithm Design and Analysis.**

This course provides an introduction to algorithm design and analysis, computational complexity, and NP-completeness theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5331. Crafting Compilers.**

Overview of the internal structure of modern compilers. Research on compilation techniques. Topics include lexical scanning, parsing techniques, static type checking, code generation, dataflow analysis, storage management, and execution environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5332. Data Base Theory and Design.**

This course covers computer system organization for the management of data. Topics include data models, data model theory, optimization and normalization, integrity constraints, query languages, and intelligent database systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5334. Advanced Internet Information Processing.**

This course integrates popular scripting and database programming languages to provide advanced information processing for Internet applications that demand database support and sophisticated, application-specific information processing. Prerequisite: CS 5332 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5338. Formal Languages.**

This course covers advanced topics in automata theory, grammars, Turing machines, decidability, and algorithmic complexity. A strong background in both data structures and discrete mathematics is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5341. Advanced Network Programming.**

Study of advanced concepts and programming skills in computer networks such as advanced TCP/IP, API, multicasting and broadcasting, reliable communications, advanced I/O functions and options. Prerequisite: CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5343. Wireless Communications and Networks.**

Study of the fundamental aspects of wireless communications and wireless/mobile networks, introduction of wireless/mobile networking APIs. Prerequisites: CS 3358 with a grade of "B" or better and CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5346. Advanced Artificial Intelligence.**

This course covers knowledge representation, knowledge engineering, parallel and distributed artificial intelligence (AI), heuristic searches, machine learning and intelligent databases, and implementation of systems in high-level AI languages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5351. Parallel Processing.**

This course provides an introduction to the design and analysis of parallel algorithms, parallel architectures, and computers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5352. Distributed Computing.**

This course provides studies in advanced topics in distributed systems: concurrency control and failure recovery, management of replicated data, distributed consensus and fault tolerance, remote procedure calls, naming, and security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5369J. Advanced Human Computer Interaction.**

This course will cover state of the art human computer interaction topics such as perceptual compression, eye-gaze, and brain computer interfaces with emphasis on the human visual system, eye-tracking, and electroencephalography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369L. Machine Learning and Applications.**

Provides broad introduction to machine learning, including learning theory, and recent topics like support vector machines and feature selection. Covers basic ideas, intuition, and understanding behind modern machine learning methods. Discusses applications like face recognition, text recognition, biometrics, bioinformatics, and multimedia retrieval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Q. Recommender Systems.**

This course covers various concepts of recommender systems, including personalization algorithms, evaluation tools, and user experiences. Discussion of how recommender systems are deployed in business applications, design of new recommender experiences, and how to conduct and evaluate research in recommender systems. Cannot take for credit if already took CS 4379Q.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Y. Green Computing.**

Reducing mobile device, cloud computing platform, and supercomputer energy consumption is a paramount, daunting problem. This course covers state-of-the-art green computing research, including energy-efficient hardware and software design, power-aware resource management and storage solutions, green data centers and mobile computing. Cannot be taken for credit if received CS 4379Y credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Z. Distributed Ledger Systems and Blockchains: Theory and Applications.**

This course covers fundamental concepts underlying the design, implementation, research, and applications of Distributed Ledger Technology (DLT) systems (e.g., blockchains). It introduces implementations, applications, and performance evaluation of DLT systems. Additionally, through homework projects, the students will be introduced to current research on DLT systems and perform independent study and small-scale research on selected topics. Course topics include cryptography encryption, security, anonymity, cryptographic data structures, DLT performance evaluation, DLT applications, and current DLT research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5375. Multimedia Computing.**

This course provides a study of the digital representation and processing of the three principal multimedia data types: image, audio, and video. Standards, storage media, and compression techniques for the three data types are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5378. Advanced Computer Security.**

This course covers various aspects of producing secure computer information systems that provide guaranteed controlled sharing. Emphasis is on software models and design, including discovery and prevention of computing systems security vulnerabilities. Current systems and methods are examined and critiqued.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5388. Advanced Computer Graphics.**

This course covers the algorithms and data structures used in representing and processing visual data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5389. Graphical User Interfaces.**

This course covers both abstract and practical treatments of using graphics to implement interactive computer/human interfaces. It includes a survey of the major GUI standards and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5391. Survey of Software Engineering.**

The course covers the software life cycle, emphasizing system analysis and design, including a survey of methodologies based on data flows and objects. The course includes a professional ethics component.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5392. Formal Methods in Software Engineering.**

The use of design and specification languages in producing software systems. Emphasis is placed on proving correctness of designs and implementations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5393. Software Quality.**

The latter half of the software life cycle is discussed. Topics include testing, performance evaluation, and software metrics. Appropriate software tools are studied and used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5394. Advanced Software Engineering Project.**

Students produce a software project of significant size in a team environment. All aspects of the software engineering course sequence are integrated and put into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5395. Independent Study in Advanced Computer Science.**

Open to graduate students on an independent basis by arrangement with the faculty member concerned. Course is not repeatable for credit. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5396. Advanced Software Engineering Processes and Methods.**

The essentials of software engineering processes, methods, and tools for the evolutionary design of complex interactive software are discussed. Overviews of other topics like quality concepts, SEI CMM, information technology, and network technology are covered. Student completes a literature survey of the latest software engineering analysis and design processes, methods, and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in CS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

The graduate minor in Computer Science requires 6 semester credit hours of advisor-approved courses for thesis students or 9 hours for non-thesis students.

A graduate minor in Software Engineering requires 6-9 semester credit hours:

**Thesis Majors**

Code	Title	Hours
CS 5391	Survey of Software Engineering	3
CS 5392 or CS 5393	Formal Methods in Software Engineering Software Quality	3
<b>Total Hours</b>		<b>6</b>

**Non-thesis Majors**

Code	Title	Hours
CS 5391	Survey of Software Engineering	3
CS 5392	Formal Methods in Software Engineering	3
CS 5393	Software Quality	3
<b>Total Hours</b>		<b>9</b>

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## Mission

To provide students with an exceptional education in various disciplines of engineering,

To establish, through dedication faculty, a nationally recognized research program, preparing interested students to achieve excellence in graduate studies and research, and

To serve the State of Texas and the nation by creating highly skilled, diverse, and motivated professionals capable of technological innovation and dedicated to the improvement of society.

## Vision

The Ingram School of Engineering will be a nationally recognized institution of higher education, serving students and employers with a complete set of accredited engineering programs supported by a faculty which maintains high standards of teaching, research, and service. To accomplish this vision, we will:

- Engage undergraduate and graduate students with innovative, multidisciplinary, and nationally recognized funded research programs.
- Emphasize quality undergraduate and graduate education using a practical, interactive, and contemporary learning environment.
- Produce first-generation professional college graduates as part of an HSI-designated university; be recognized for exceptional community service; and create tight bonds with alumni who will serve as professional mentors, sponsors, and advisors.
- Promote a student-centered culture based on collegiality, scholarship, enthusiasm, integrity, and mutual respect among diverse faculty, staff, and students.

## Financial Assistance

### Graduate Instructional and Research Assistantships

A limited number of paid graduate assistantships are available. Research assistants work with faculty on research and other special projects. Instructional assistants work with undergraduates in grading and in laboratory settings. Contact the program's graduate advisor for details and application instructions.

### Graduate College Scholarships and Fellowships

For more information about scholarships, fellowships, financial aid and application deadlines, visit The Graduate College website at <http://www.gradcollege.txstate.edu/> and click on the *Funding* tab.

## Doctor of Philosophy (Ph.D.)

- Major in Civil Engineering (Environmental and Water Resources Engineering Entering with Bachelor's Degree)
- Major in Civil Engineering (Environmental and Water Resources Engineering Entering with Master's Degree) (p. 2995)
- Major in Civil Engineering (Geotechnical-Geosystem Engineering Entering with a Bachelor's Degree) (p. 3001)
- Major in Civil Engineering (Geotechnical-Geosystem Engineering Entering with a Master's Degree) (p. 3009)
- Major in Civil Engineering (Structural and Materials Engineering Entering with Bachelor's Degree) (p. 3016)
- Major in Civil Engineering (Structural and Materials Engineering Entering with a Master's Degree) (p. 3023)

- Major in Civil Engineering (Transportation Engineering Entering with a Bachelor's Degree) (p. 3030)
- Major in Civil Engineering (Transportation Engineering Entering with a Master's Degree) (p. 3037)

## Master of Science (M.S.)

- Major in Engineering (Civil Engineering Project Option) (p. 3044)
- Major in Engineering (Civil Engineering Thesis Option) (p. 3054)
- Major in Engineering (Electrical Engineering Project Option) (p. 3065)
- Major in Engineering (Electrical Engineering Thesis Option) (p. 3076)
- Major in Engineering (Industrial Engineering Project Option) (p. 3087)
- Major in Engineering (Industrial Engineering Thesis Option) (p. 3098)
- Major in Engineering (Mechanical and Manufacturing Engineering Project Option) (p. 3109)
- Major in Engineering (Mechanical and Manufacturing Engineering Thesis Option) (p. 3120)

The program incorporates components aimed at training students for research-oriented professions in both industry and academia, encompassing traditional Civil Engineering pathways, including environmental and water resources engineering. By fostering a symbiotic relationship between academia and industry, it will establish a model of a technology-enhanced Civil Engineering program.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 non-refundable application fee
- or
- \$90 non-refundable application fee for applicants with international credentials
- exceptional applicants with a bachelor's degree in Civil Engineering or a closely related discipline, from a regionally accredited university will be considered for admission but will be required to complete an additional 24 semester credit hours of master's level courses when admitted.
- official transcripts from **each institution** where course credit was granted
- competitive GPA
- official GRE (general test) with a preferred score of 146 or higher for verbal and 160 or higher for quantitative.
- resume/CV outlining education, work experience, scholarships/grants, publications/presentations, other accomplishments
- statement of purpose outlining the applicant's personal history and goals that are relevant to obtaining this doctoral degree, explaining why the applicant wants to pursue this degree at TXST
- three letters of recommendation evaluating applicant's skill and potential in this degree program, preferably from academic sources

- interview for top ranked applicants who meet the minimum preferred credentials; interviewed by the Ph.D. program director and other committee members via online tools such as Zoom or MS Teams

TOEFL, PTE, or IELTS Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

Additional Information:

The program will admit full-time and part-time Ph.D. students twice a year.

Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Civil Engineering concentration Environmental and Water Resources Engineering requires 78 semester credit hours.

Course Requirements

Code	Title	Hours
Required Courses		
CE 7393	Artificial Intelligence Applications in Civil Engineering	3
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship	3
Bachelor's Entry		
Choose 24 hours from the following:		24
CE 5320	Water Quality Management	
CE 5331	Computational Methods in Geosystems	
CE 5340	Advanced Infrastructure Materials	
CE 5350	Highway Bridge Design	
CE 5360	Pavement Design	
CE 5370	Urban Stormwater Management	
CE 5390	Infrastructure Systems Analysis	
CE 5391	Advanced Mechanics of Materials	
ENGR 5310	Probability, Random Variables, & Stochastic Processes for Engineers	
ENGR 5321	Environmental Chemistry	
ENGR 5322	Low Impact Development and Green Infrastructure	
ENGR 5323	Soil and Groundwater Remediation	
ENGR 5330	Advanced Soil Mechanics	
ENGR 5332	Earth retaining structures and slopes	
ENGR 5333	Fluid Flow in Porous Media	
ENGR 5334	Advanced Foundation Engineering	
ENGR 5341	Advanced Bituminous Materials	
ENGR 5351	Advanced Reinforced Concrete Members	
ENGR 5352	Advanced Prestressed Concrete	
ENGR 5361	Pavement Asset Management	

ENGR 5362	Advanced Traffic Engineering	
ENGR 5363	Road Infrastructure Safety	
ENGR 5384	Problems in Engineering	
ISAN 5357	Computing for Data Analytics	
ISAN 5367	Machine Learning	
CS 5316	Data Mining	
CS 5346	Advanced Artificial Intelligence	
CSM 5366	Soils in Construction	
CSM 5368	Sustainable Construction	
EE 5323	Digital Image Processing	
EE 5331	Machine Learning for Engineering Applications	
GEO 5309	Geographical Analysis	
GEO 5336	Transportation Systems	
GEO 5352	Air Quality Management	
GEO 5367	Exploring Spatial Databases	
GEO 5393K	Advanced Web Cartography and Data Visualization	
GEO 5418	Geographic Information Systems I	
IE 5310	Advanced Statistical Design of Experiments for Engineers	
IE 5330	Advanced Quality Control and Reliability Engineering	
MATH 5315	Mathematical Statistics	
MATH 5345	Regression Analysis	
MATH 5376A	Design and Analysis of Experiments	
Concentration		
CE 7322	Low Impact Development and Green Infrastructure	3
CE 7394	Climate Change Impact and Adaptation in Civil Engineering	3
Choose 3 hours from the following:		3
CE 7330	Advanced Soil Mechanics	
CE 7340	Advanced Infrastructure Materials	
CE 7351	Advanced Reinforced Concrete Members	
CE 7361	Pavement Asset Management	
CE 7363	Road Infrastructure Safety	
CE 7395	Finite Element Modeling in Civil Engineering	
Prescribed Electives		
Choose 15 hours from the following:		15
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship	
MSEC 7395H	Environmental Chemistry	
CE 7320	Water Quality Management	
CE 7323	Soil and Groundwater Remediation	
CE 7330	Advanced Soil Mechanics	
CE 7332	Earth Retaining Structures and Slopes	
CE 7333	Fluid Flow in Porous Media	
CE 7334	Advanced Foundation Engineering	
CE 7336	Discrete Element Methods for Granular Materials	
CE 7340	Advanced Infrastructure Materials	
CE 7341	Advanced Bituminous Materials	
CE 7350	Highway Bridge Design	
CE 7351	Advanced Reinforced Concrete Members	
CE 7352	Advanced Prestressed Concrete	
CE 7353	Earthquake Engineering	

CE 7360	Pavement Design
CE 7361	Pavement Asset Management
CE 7362	Advanced Traffic Engineering
CE 7363	Road Infrastructure Safety
CE 7364	Non Destructive Testing and Forensic Studies
CE 7366	Advanced Statistical and Econometric Modeling
CE 7370	Urban Stormwater Management
CE 7371	Remote Sensing in Hydrology
CE 7372	Water, Climate, and Disasters
CE 7390	Infrastructure Systems Analysis
CE 7391	Advanced Mechanics of Materials
CE 7395	Finite Element Modeling in Civil Engineering
CE 7396	Life Cycle Assessment of Infrastructure
CS 7312	Advanced Data Mining
CS 7313	Advanced Machine Learning and Pattern Recognition
CS 7323	Image Processing and Computer Vision
GEO 7316	Remote Sensing and the Environment
GEO 7368	Lidar and SfM Data Processing and Analysis
MATH 7335	Statistics II: Linear Modeling
MATH 7375C	Time Series Analysis
MATH 7375D	Advanced linear Modeling
<b>Dissertation</b>	
Choose a minimum of 24 hours from the following:	
CE 7199	Dissertation
CE 7299	Dissertation
CE 7399	Dissertation
CE 7599	Dissertation
CE 7699	Dissertation
CE 7999	Dissertation

## Qualifying Exam

The Qualifying (preliminary) Exam is required for doctoral students entering with a bachelor's degree. It usually consists of a written and/or oral exam in a given area of Civil Engineering and related field, administered by a committee consisting of at least three members, with at least two members from Civil Engineering. It will typically be taken after completion of 24 semester credit hours. The students will take the exam through the individual concentration of study. The qualifying exam is a 3-hour written exam that is offered at the end of each academic year or scheduled based on needs. A list of the general topics to be covered, along with a corresponding reading list, will be available to the students. This exam has any of three possible outcomes: 1-Pass, 2-Pass with recommendations regarding the student's program of work, 3-No Pass but one re-examination permitted.

## Candidacy Criteria

Students will advance to candidacy after they have completed all required and elective course work (except for dissertation credit hours), passed their qualifying exam (entering with a bachelor's degree), passed the comprehensive exam, and successfully defended their dissertation proposal. It is expected that the students will enter their candidacy three years after they are enrolled into the program.

When all requirements for admission to candidacy have been met, the doctoral program director forwards the Application for Advancement to

Candidacy to the Dean of The Graduate College for review and approval. This application form is available on The Graduate College's website.

A minimum GPA of 3.0 on all coursework undertaken in the doctoral program is required for admission to candidacy. Grades below a B on any graduate coursework cannot be applied toward the doctoral degree. Incomplete grades must have been cleared before approval for advancement to candidacy can be granted. No more than 6 semester credit hours of dissertation research can be taken before advancing to candidacy. No credit will be applied toward a student's doctoral degree for coursework completed more than five years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at TXST as well as course credit transferred to TXST from other institutions.

All doctoral students must complete a dissertation that consists of original research and demonstrates mature scholarship and critical judgment in addition to familiarity with tools and methods in the chosen area. The dissertation project must adhere to the dissertation proposal and cover the topic approved by the student's dissertation committee.

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. At least 18 semester credit hours of dissertation research must be taken after having advanced to candidacy. If a student is receiving supervision on a dissertation during the summer or if the student is graduating in the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours.

## Comprehensive Exam

Each doctoral student must pass a comprehensive examination consisting of a written and an oral component. This should be done by the time the student has completed 36 semester credit hours of 7000-series courses if admitted with a master's degree, (or 60 if admitted with the bachelor's degree), identified the dissertation committee, passed the qualifying exam (entering with a bachelor's degree), and fulfilled the programming requirement. Any student who does not pass the comprehensive exam by the time 45 semester credit hours for students entering with a master's degree (or 69 for students entering with a bachelor's degree) have been accrued will be dismissed from the program. If the comprehensive exam is not passed, the student will have the option of taking a second and final comprehensive exam in the following long semester. Students will be dismissed from the program if they do not pass the comprehensive exam the second time.

The comprehensive examination consists of a written and an oral component. The oral component is administered by the dissertation committee, typically right after the dissertation proposal (see below). The exam consists of questions covering Civil Engineering knowledge from all the Civil Engineering courses in the student's concentration. To pass the oral exam, the student's dissertation advisor and a majority of the remaining members on the dissertation committee must agree that the student has passed. The student's dissertation committee members must indicate the result on the Doctoral Comprehensive Form, which is to be submitted to The Graduate College. This form is available on The Graduate College's website.

## Dissertation Proposal and Proposal Defense

Each Ph.D. student must prepare a written dissertation proposal and defend it orally. This should be done by the time the student has

completed 36 semester credit hours and after identifying the dissertation committee, passing the comprehensive exam, and completing all required courses and Boot Camp. Any student who does not defend his/her dissertation proposal by the time 45 semester credit hours have been accrued will be dismissed from the program. If the proposal defense is not passed, the student will have the option of taking a second and final defense in the following long semester. Students will be dismissed from the program if they do not pass the proposal defense the second time.

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It must include at least a short introduction to the topic, an overview of the methodology to be used, a preliminary survey of the relevant literature, and preliminary results that demonstrate the feasibility of the project to be undertaken. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

The proposal defense entails a public presentation of the student's dissertation proposal followed immediately by a closed defense of the proposal attended only by the student and his/her dissertation committee. The dissertation proposal must be approved by the student's dissertation advisor and a majority of the remaining members on the dissertation committee. The student's dissertation committee members must indicate their approvals on the doctoral Dissertation Proposal Form as well as on the Defense of Dissertation Proposal Form. These forms are available on The Graduate College's website.

A final copy of the dissertation proposal, accompanied by the signed approval forms, must be turned in to the doctoral program director, who will forward them to the dean of The Graduate College for review and final approval.

## Dissertation Research and Writing

All doctoral students must complete a dissertation that must represent an original contribution to scholarship based on independent investigation. The style, organization, and mechanics of the dissertation should follow the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*. Referencing guidelines should either follow the American Anthropological Association or the guidelines from an appropriate professional journal, as deemed acceptable by the dissertation committee.

## Dissertation Committee

The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the doctoral program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

The Dissertation Committee will be responsible for administering the Comprehensive Exam and the Dissertation Proposal Defense and will oversee the research and writing of the student's dissertation. The committee will consist of 4 members, including the student's dissertation committee chair who must be a regular graduate faculty member in the program, two other graduate faculty members from the School of Engineering, and one doctoral graduate faculty from another department at TXST or from outside TXST. All members must have a Ph.D. degree. The student's dissertation committee chair will chair the committee. The

student, the dissertation committee chair, and the Dean of The Graduate College will approve the composition of the dissertation committee.

As per Graduate College policy, the Dissertation Committee Chair Assignment form and the Dissertation Committee Request form must be completed and approved by the Dean of The Graduate College to form the dissertation committee. Any changes to the dissertation committee must be submitted using the Dissertation Committee Chair/Committee Member Change Request form for approval of the dissertation committee chair, the doctoral program director, and the Dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense.

## Dissertation Committee Chair

The Ph.D. program director serves as initial advisor of each student accepted into the program. The director then works with the student and the faculty to identify possible dissertation advisors. By the time 18 semester credit hours have been accrued, each doctoral student is expected to have secured a qualified dissertation advisor who agrees to advise and mentor the student. The mentoring by the dissertation advisor should include providing regular feedback to students and supervising them throughout the Ph.D. program – specifically in the execution of the dissertation research – and helping them identify short- and long-term career goals. The Ph.D. Dissertation Committee Chair Form must be completed by the student and the dissertation committee chair and approved by Doctoral Program Director and Department Chair or School Director, and the Dean of The Graduate College. This form may be downloaded from The Graduate College's website. If a student has not identified a willing and qualified dissertation committee chair by the time he/she has accrued 27 semester credit hours, the student will be dismissed from the program.

## Committee Changes

Any change to the dissertation committee must be submitted using the Dissertation Advisor/Committee Member Change Request Form for approval by the dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be downloaded from The Graduate College's website. The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the Ph.D. program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

## Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least one month before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the dissertation is defensible, and each committee member is satisfied before the dissertation defense takes place.



The dissertation defense consists of two parts. The first part is a public presentation of their dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense in the following long semester. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's website. The student must submit his/her dissertation to The Graduate College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Students must pass the dissertation defense by the time 90 semester credit hours have been accrued. The doctoral program will review each student annually to ascertain his/her progress towards the degree and will consult the student's dissertation advisor and dissertation committee on this matter as needed. Any student who does not pass the dissertation defense by the time 90 semester credit hours have been accrued will be dismissed from the program.

## Approval and Submission of the Dissertation

Following approval and signing of the Thesis/Dissertation Committee Approval form by the members of the dissertation committee, the student must submit one copy of the dissertation to the office of The Graduate College for final approval. Specific guidelines for approval and submission of the dissertation can be obtained from the office of The Graduate College. Dissertations must be submitted in electronic format.

Doctoral level courses in Civil Engineering: CE (p. 2991)

## Courses Offered

### Civil Engineering (CE)

#### CE 7199. Dissertation.

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the PhD research advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CE 7299. Dissertation.

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CE 7320. Water Quality Management.

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CE 7322. Low Impact Development and Green Infrastructure.

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development including water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CE 7323. Soil and Groundwater Remediation.

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. The significance of subsurface contamination and importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CE 7330. Advanced Soil Mechanics.

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter



**CE 7332. Earth Retaining Structures and Slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7333. Fluid Flow in Porous Media.**

In this course, the fundamental theory of transport and fluid flow in heterogeneous porous media will be presented. First, the equations that govern transport and fluid flow processes will be derived. Both analytical and numerical methods will be used to solve these equations in order to characterize and predict flow fields in porous media. These skills will then be applied to practical problems that involve porous media such as soils, rocks, biological tissues, concrete, etc. The knowledge gained from studies of fluid flow in natural porous materials will be employed to design/optimize systems with engineered porous media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7336. Discrete Element Methods for Granular Materials.**

This course is an introduction to discrete element methods (DEM) as applicable to a range of problems in physics and engineering that deal with granular materials. It brings together various methods and skills for particle-scale or discrete-element numerical simulation of granular media. It covers a broad range of topics from basic concepts and methods towards more advanced aspects and technical details applicable to the current research on granular materials. This course particularly focuses on the transient motion of hard and soft particles encountered in geotechnical, geomechanical, geomaterial, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, and others. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course. Students will be asked to solve an infrastructure material related problem using advanced analytical and simulation tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics include the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7353. Earthquake Engineering.**

This course covers the theories, principles, and concepts of earthquake waves and wave equations, structural dynamics, and the effect of earthquakes on structures, including modal analysis and linear and nonlinear analyses of single- and multi-degree of freedom systems. Additionally, different earthquake-resistant design principles (e.g., force-based, displacement-based, and energy-based) will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7361. Pavement Asset Management.**

This course discusses applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. Topics include methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7362. Advanced Traffic Engineering.**

This course evaluates components of transportation systems by applying principles of transportation engineering, geometric design of highways, and study of warrants for traffic control devices. Additional topics include analysis of traffic flow theory and characteristics, levels of service, and capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7363. Road Infrastructure Safety.**

This course provides an introduction to road infrastructure safety. Topics include fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and design based on safe system approach (SSA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7364. Non Destructive Testing and Forensic Studies.**

This course focuses on applications of non-destructive testing (NDT) technologies in pavement infrastructure forensic studies. The course covers typical modern NDT devices employed in transportation testing and evaluation including ground penetrating radar, 3-D laser scanning, falling weight deflectometer, traffic-speed deflectometer, high-speed inertial profiler, and impact echo. The course will provide in-depth content on the principles of these NDT technologies. Based on these technologies, a series of real-world projects will be comprehensively discussed as forensic study cases. The objective is to develop engineering decision making skills in effectively identifying the root-course of distresses or failures based on the NDT test results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7366. Advanced Statistical and Econometric Modeling.**

This course focuses on a comprehensive understanding of statistical and econometric analysis techniques, emphasizing their application in civil engineering and scientific data analysis. It covers model-estimation methods that extend beyond traditional statistics courses, providing students with a broad range of data-analysis applications while discussing underlying theories and limitations for proper comprehension and application. Prerequisite: CE 7363 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship

**Grade Mode:** Standard Letter

**CE 7370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7371. Remote Sensing in Hydrology.**

This course focuses on the basics of remote sensing, data collection, processing, and analysis for a wide range of applications for hydrology and water resources at different scales. Topics include the hydrologic cycle, relevant sensor types, the electromagnetic spectrum, active/passive microwave remote sensing (precipitation, soil moisture, snow, vegetation water content, etc.), thermal sensing of evapotranspiration, and the gravity method of groundwater. This course also covers an introduction to data assimilation and practical approaches with remote sensing data for water resources management including floods and drought monitoring.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7372. Water, Climate, and Disasters.**

This course introduces the interactions between water and climate systems and their relationship with occurrences, magnitude, and frequencies of natural disasters with a focus on climate impacts on hydrology, water resources, and extreme events (e.g., floods, drought, heat waves, landslides, and wildfires). This course covers disaster risk management and adaptation strategies for a sustainable and resilient natural environment and human society against weather and climate extreme disasters.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7393. Artificial Intelligence Applications in Civil Engineering.**

This course explores the interface between artificial intelligence (AI) and civil engineering. The course covers foundational topics including civil engineering basics, AI fundamentals, matrix algebra, and data preprocessing. The curriculum also includes specific AI methodologies, like supervised, unsupervised, deep learning, and explainable AI, in addition to natural language processing. It highlights emerging technologies in civil engineering and the ethical and social implications of AI in the sector.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7394. Climate Change Impact and Adaptation in Civil Engineering.**

This course provides an introduction to global and regional climate change processes, drivers, and impacts. Case studies are presented for the regional impacts of climate change on extreme weather, water availability, and energy and transportation systems. Students are introduced to a variety of natural hazards and possible mitigation approaches as well as principles of design, including adaptable design and design for failure. Students select the problems they want to solve and develop their projects. Students carry out exercises with relevant data sets, write critiques of key issues, and complete a focused term project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7395. Finite Element Modeling in Civil Engineering.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered. This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7396. Life Cycle Assessment of Infrastructure.**

This course provides analytical tools and methods for implementing principles of life cycle analysis for civil engineering infrastructure. Civil infrastructure systems are critical assets that are subjected to damage, service-life deterioration, and increasing maintenance and rehabilitation cost. Effective infrastructure management and principles of sustainable development can help to find an optimal compromise between economic growth and environmental protection for all stakeholders. Life cycle assessment (LCA) is an important decision support framework for estimating and assessing the environmental impacts attributable to the life cycle of civil infrastructure systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7399. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7599. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7699. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7999. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

The program incorporates components aimed at training students for research-oriented professions in both industry and academia, encompassing traditional Civil Engineering pathways, including environmental and water resources engineering. By fostering a symbiotic relationship between academia and industry, it will establish a model of a technology-enhanced Civil Engineering program.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 non-refundable application fee
- or
- \$90 non-refundable application fee for applicants with international credentials
- completed master's degree in Civil Engineering or a closely related discipline, from an accredited college or university
- official transcripts from **each institution** where course credit was granted
- competitive GPA
- official GRE (general test) with a preferred score of 146 or higher for verbal and 160 or higher for quantitative
- resume/CV outlining education, work experience, scholarships/grants, publications/presentations, other accomplishments
- statement of purpose outlining the applicant's personal history and goals that are relevant to obtaining this doctoral degree, explaining why the applicant wants to pursue this degree at TXST
- three letters of recommendation evaluating applicant's skill and potential in this degree program, preferably from academic sources
- interview for top ranked applicants who meet the minimum preferred credentials; interviewed by the Ph.D. program director and other committee members via online tools such as Zoom or MS Teams

### TOEFL, PTE, or IELTS Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall

- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

### Additional Information:

The program will admit full-time and part-time Ph.D. students twice a year.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Civil Engineering concentration Environmental and Water Resources Engineering requires 54 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CE 7393	Artificial Intelligence Applications in Civil Engineering	3
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship	3
<b>Concentration</b>		
CE 7322	Low Impact Development and Green Infrastructure	3
CE 7394	Climate Change Impact and Adaptation in Civil Engineering	3
Choose 3 hours from the following:		3
CE 7330	Advanced Soil Mechanics	
CE 7340	Advanced Infrastructure Materials	
CE 7351	Advanced Reinforced Concrete Members	
CE 7361	Pavement Asset Management	
CE 7363	Road Infrastructure Safety	
CE 7395	Finite Element Modeling in Civil Engineering	
<b>Prescribed Electives</b>		
Choose 15 hours from the following:		15
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship	
MSEC 7395H	Environmental Chemistry	
CE 7320	Water Quality Management	
CE 7323	Soil and Groundwater Remediation	
CE 7330	Advanced Soil Mechanics	
CE 7332	Earth Retaining Structures and Slopes	
CE 7333	Fluid Flow in Porous Media	
CE 7334	Advanced Foundation Engineering	
CE 7336	Discrete Element Methods for Granular Materials	
CE 7340	Advanced Infrastructure Materials	
CE 7341	Advanced Bituminous Materials	
CE 7350	Highway Bridge Design	
CE 7351	Advanced Reinforced Concrete Members	
CE 7352	Advanced Prestressed Concrete	
CE 7353	Earthquake Engineering	
CE 7360	Pavement Design	
CE 7361	Pavement Asset Management	
CE 7362	Advanced Traffic Engineering	
CE 7363	Road Infrastructure Safety	

CE 7364	Non Destructive Testing and Forensic Studies	
CE 7366	Advanced Statistical and Econometric Modeling	
CE 7370	Urban Stormwater Management	
CE 7371	Remote Sensing in Hydrology	
CE 7372	Water, Climate, and Disasters	
CE 7390	Infrastructure Systems Analysis	
CE 7391	Advanced Mechanics of Materials	
CE 7395	Finite Element Modeling in Civil Engineering	
CE 7396	Life Cycle Assessment of Infrastructure	
CS 7312	Advanced Data Mining	
CS 7313	Advanced Machine Learning and Pattern Recognition	
CS 7323	Image Processing and Computer Vision	
GEO 7316	Remote Sensing and the Environment	
GEO 7368	Lidar and SfM Data Processing and Analysis	
MATH 7335	Statistics II: Linear Modeling	
MATH 7375C	Time Series Analysis	
MATH 7375D	Advanced linear Modeling	
<b>Dissertation</b>		
Choose a minimum of 24 hours from the following:		24
CE 7199	Dissertation	
CE 7299	Dissertation	
CE 7399	Dissertation	
CE 7599	Dissertation	
CE 7699	Dissertation	
CE 7999	Dissertation	
<b>Total Hours</b>		<b>54</b>

## Candidacy Criteria

Students will advance to candidacy after they have completed all required and elective course work (except for dissertation credit hours), passed their qualifying exam (entering with a bachelor's degree), passed the comprehensive exam, and successfully defended their dissertation proposal. It is expected that the students will enter their candidacy three years after they are enrolled into the program.

When all requirements for admission to candidacy have been met, the doctoral program director forwards the Application for Advancement to Candidacy to the Dean of The Graduate College for review and approval. This application form is available on The Graduate College's website.

A minimum GPA of 3.0 on all coursework undertaken in the doctoral program is required for admission to candidacy. Grades below a B on any graduate coursework cannot be applied toward the doctoral degree. Incomplete grades must have been cleared before approval for advancement to candidacy can be granted. No more than 6 semester credit hours of dissertation research can be taken before advancing to candidacy. No credit will be applied toward a student's doctoral degree for coursework completed more than five years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at TXST as well as course credit transferred to TXST from other institutions.

All doctoral students must complete a dissertation that consists of original research and demonstrates mature scholarship and critical judgment in addition to familiarity with tools and methods in the chosen

area. The dissertation project must adhere to the dissertation proposal and cover the topic approved by the student's dissertation committee.

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. At least 18 semester credit hours of dissertation research must be taken after having advanced to candidacy. If a student is receiving supervision on a dissertation during the summer or if the student is graduating in the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours.

## Comprehensive Exam

Each doctoral student must pass a comprehensive examination consisting of a written and an oral component. This should be done by the time the student has completed 36 semester credit hours of 7000-series courses if admitted with a master's degree, (or 60 if admitted with the bachelor's degree), identified the dissertation committee, passed the qualifying exam (entering with a bachelor's degree), and fulfilled the programming requirement. Any student who does not pass the comprehensive exam by the time 45 semester credit hours for students entering with a master's degree (or 69 for students entering with a bachelor's degree) have been accrued will be dismissed from the program. If the comprehensive exam is not passed, the student will have the option of taking a second and final comprehensive exam in the following long semester. Students will be dismissed from the program if they do not pass the comprehensive exam the second time.

The comprehensive examination consists of a written and an oral component. The oral component is administered by the dissertation committee, typically right after the dissertation proposal (see below). The exam consists of questions covering Civil Engineering knowledge from all the Civil Engineering courses in the student's concentration. To pass the oral exam, the student's dissertation advisor and a majority of the remaining members on the dissertation committee must agree that the student has passed. The student's dissertation committee members must indicate the result on the Doctoral Comprehensive Form, which is to be submitted to The Graduate College. This form is available on The Graduate College's website.

## Dissertation Proposal and Proposal Defense

Each Ph.D. student must prepare a written dissertation proposal and defend it orally. This should be done by the time the student has completed 36 semester credit hours and after identifying the dissertation committee, passing the comprehensive exam, and completing all required courses and Boot Camp. Any student who does not defend his/her dissertation proposal by the time 45 semester credit hours have been accrued will be dismissed from the program. If the proposal defense is not passed, the student will have the option of taking a second and final defense in the following long semester. Students will be dismissed from the program if they do not pass the proposal defense the second time.

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It must include at least a short introduction to the topic, an overview of the methodology to be used, a preliminary survey of the relevant literature, and preliminary results that demonstrate the feasibility of the project to be undertaken. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.



The proposal defense entails a public presentation of the student's dissertation proposal followed immediately by a closed defense of the proposal attended only by the student and his/her dissertation committee. The dissertation proposal must be approved by the student's dissertation advisor and a majority of the remaining members on the dissertation committee. The student's dissertation committee members must indicate their approvals on the doctoral Dissertation Proposal Form as well as on the Defense of Dissertation Proposal Form. These forms are available on The Graduate College's website.

A final copy of the dissertation proposal, accompanied by the signed approval forms, must be turned in to the doctoral program director, who will forward them to the dean of The Graduate College for review and final approval.

## Dissertation Research and Writing

All doctoral students must complete a dissertation that must represent an original contribution to scholarship based on independent investigation. The style, organization, and mechanics of the dissertation should follow the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*. Referencing guidelines should either follow the American Anthropological Association or the guidelines from an appropriate professional journal, as deemed acceptable by the dissertation committee.

## Dissertation Committee

The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the doctoral program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

The Dissertation Committee will be responsible for administering the Comprehensive Exam and the Dissertation Proposal Defense and will oversee the research and writing of the student's dissertation. The committee will consist of 4 members, including the student's dissertation committee chair who must be a regular graduate faculty member in the program, two other graduate faculty members from the School of Engineering, and one doctoral graduate faculty from another department at TXST or from outside TXST. All members must have a Ph.D. degree. The student's dissertation committee chair will chair the committee. The student, the dissertation committee chair, and the Dean of The Graduate College will approve the composition of the dissertation committee.

As per Graduate College policy, the Dissertation Committee Chair Assignment form and the Dissertation Committee Request form must be completed and approved by the Dean of The Graduate College to form the dissertation committee. Any changes to the dissertation committee must be submitted using the Dissertation Committee Chair/Committee Member Change Request form for approval of the dissertation committee chair, the doctoral program director, and the Dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense.

## Dissertation Committee Chair

The Ph.D. program director serves as initial advisor of each student accepted into the program. The director then works with the student and the faculty to identify possible dissertation advisors. By the time 18 semester credit hours have been accrued, each doctoral student is

expected to have secured a qualified dissertation advisor who agrees to advise and mentor the student. The mentoring by the dissertation advisor should include providing regular feedback to students and supervising them throughout the Ph.D. program – specifically in the execution of the dissertation research – and helping them identify short- and long-term career goals. The Ph.D. Dissertation Committee Chair Form must be completed by the student and the dissertation committee chair and approved by Doctoral Program Director and Department Chair or School Director, and the Dean of The Graduate College. This form may be downloaded from The Graduate College's website. If a student has not identified a willing and qualified dissertation committee chair by the time he/she has accrued 27 semester credit hours, the student will be dismissed from the program.

## Committee Changes

Any change to the dissertation committee must be submitted using the Dissertation Advisor/Committee Member Change Request Form for approval by the dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be downloaded from The Graduate College's website. The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the Ph.D. program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

## Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least one month before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the dissertation is defensible, and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of their dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense in the following long semester. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's

website. The student must submit his/her dissertation to The Graduate College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Students must pass the dissertation defense by the time 90 semester credit hours have been accrued. The doctoral program will review each student annually to ascertain his/her progress towards the degree and will consult the student's dissertation advisor and dissertation committee on this matter as needed. Any student who does not pass the dissertation defense by the time 90 semester credit hours have been accrued will be dismissed from the program.

## Approval and Submission of the Dissertation

Following approval and signing of the Thesis/Dissertation Committee Approval form by the members of the dissertation committee, the student must submit one copy of the dissertation to the office of The Graduate College for final approval. Specific guidelines for approval and submission of the dissertation can be obtained from the office of The Graduate College. Dissertations must be submitted in electronic format.

Doctoral level courses in Civil Engineering: CE (p. 2998)

## Courses Offered Civil Engineering (CE)

### CE 7199. Dissertation.

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the PhD research advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### CE 7299. Dissertation.

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### CE 7320. Water Quality Management.

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CE 7322. Low Impact Development and Green Infrastructure.

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development including water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CE 7323. Soil and Groundwater Remediation.

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. The significance of subsurface contamination and importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CE 7330. Advanced Soil Mechanics.

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

### CE 7332. Earth Retaining Structures and Slopes.

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CE 7333. Fluid Flow in Porous Media.

In this course, the fundamental theory of transport and fluid flow in heterogeneous porous media will be presented. First, the equations that govern transport and fluid flow processes will be derived. Both analytical and numerical methods will be used to solve these equations in order to characterize and predict flow fields in porous media. These skills will then be applied to practical problems that involve porous media such as soils, rocks, biological tissues, concrete, etc. The knowledge gained from studies of fluid flow in natural porous materials will be employed to design/optimize systems with engineered porous media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7336. Discrete Element Methods for Granular Materials.**

This course is an introduction to discrete element methods (DEM) as applicable to a range of problems in physics and engineering that deal with granular materials. It brings together various methods and skills for particle-scale or discrete-element numerical simulation of granular media. It covers a broad range of topics from basic concepts and methods towards more advanced aspects and technical details applicable to the current research on granular materials. This course particularly focuses on the transient motion of hard and soft particles encountered in geotechnical, geomechanical, geomaterial, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, and others. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course. Students will be asked to solve an infrastructure material related problem using advanced analytical and simulation tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics include the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7353. Earthquake Engineering.**

This course covers the theories, principles, and concepts of earthquake waves and wave equations, structural dynamics, and the effect of earthquakes on structures, including modal analysis and linear and nonlinear analyses of single- and multi-degree of freedom systems. Additionally, different earthquake-resistant design principles (e.g., force-based, displacement-based, and energy-based) will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7361. Pavement Asset Management.**

This course discusses applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. Topics include methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7362. Advanced Traffic Engineering.**

This course evaluates components of transportation systems by applying principles of transportation engineering, geometric design of highways, and study of warrants for traffic control devices. Additional topics include analysis of traffic flow theory and characteristics, levels of service, and capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7363. Road Infrastructure Safety.**

This course provides an introduction to road infrastructure safety. Topics include fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and design based on safe system approach (SSA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7364. Non Destructive Testing and Forensic Studies.**

This course focuses on applications of non-destructive testing (NDT) technologies in pavement infrastructure forensic studies. The course covers typical modern NDT devices employed in transportation testing and evaluation including ground penetrating radar, 3-D laser scanning, falling weight deflectometer, traffic-speed deflectometer, high-speed inertial profiler, and impact echo. The course will provide in-depth content on the principles of these NDT technologies. Based on these technologies, a series of real-world projects will be comprehensively discussed as forensic study cases. The objective is to develop engineering decision making skills in effectively identifying the root-cause of distresses or failures based on the NDT test results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7366. Advanced Statistical and Econometric Modeling.**

This course focuses on a comprehensive understanding of statistical and econometric analysis techniques, emphasizing their application in civil engineering and scientific data analysis. It covers model-estimation methods that extend beyond traditional statistics courses, providing students with a broad range of data-analysis applications while discussing underlying theories and limitations for proper comprehension and application. Prerequisite: CE 7363 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship

**Grade Mode:** Standard Letter

**CE 7370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7371. Remote Sensing in Hydrology.**

This course focuses on the basics of remote sensing, data collection, processing, and analysis for a wide range of applications for hydrology and water resources at different scales. Topics include the hydrologic cycle, relevant sensor types, the electromagnetic spectrum, active/passive microwave remote sensing (precipitation, soil moisture, snow, vegetation water content, etc.), thermal sensing of evapotranspiration, and the gravity method of groundwater. This course also covers an introduction to data assimilation and practical approaches with remote sensing data for water resources management including floods and drought monitoring.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7372. Water, Climate, and Disasters.**

This course introduces the interactions between water and climate systems and their relationship with occurrences, magnitude, and frequencies of natural disasters with a focus on climate impacts on hydrology, water resources, and extreme events (e.g., floods, drought, heat waves, landslides, and wildfires). This course covers disaster risk management and adaptation strategies for a sustainable and resilient natural environment and human society against weather and climate extreme disasters.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7393. Artificial Intelligence Applications in Civil Engineering.**

This course explores the interface between artificial intelligence (AI) and civil engineering. The course covers foundational topics including civil engineering basics, AI fundamentals, matrix algebra, and data preprocessing. The curriculum also includes specific AI methodologies, like supervised, unsupervised, deep learning, and explainable AI, in addition to natural language processing. It highlights emerging technologies in civil engineering and the ethical and social implications of AI in the sector.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7394. Climate Change Impact and Adaptation in Civil Engineering.**

This course provides an introduction to global and regional climate change processes, drivers, and impacts. Case studies are presented for the regional impacts of climate change on extreme weather, water availability, and energy and transportation systems. Students are introduced to a variety of natural hazards and possible mitigation approaches as well as principles of design, including adaptable design and design for failure. Students select the problems they want to solve and develop their projects. Students carry out exercises with relevant data sets, write critiques of key issues, and complete a focused term project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7395. Finite Element Modeling in Civil Engineering.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered. This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7396. Life Cycle Assessment of Infrastructure.**

This course provides analytical tools and methods for implementing principles of life cycle analysis for civil engineering infrastructure. Civil infrastructure systems are critical assets that are subjected to damage, service-life deterioration, and increasing maintenance and rehabilitation cost. Effective infrastructure management and principles of sustainable development can help to find an optimal compromise between economic growth and environmental protection for all stakeholders. Life cycle assessment (LCA) is an important decision support framework for estimating and assessing the environmental impacts attributable to the life cycle of civil infrastructure systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7399. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7599. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7699. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7999. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

The program incorporates components aimed at training students for research-oriented professions in both industry and academia, encompassing traditional Civil Engineering pathways, including Geotechnical-geosystem Engineering. By fostering a symbiotic relationship between academia and industry, it will establish a model of a technology-enhanced Civil Engineering program.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 non-refundable application fee



- or
- \$90 non-refundable application fee for applicants with international credentials
  - exceptional applicants with a bachelor's degree in Civil Engineering or a closely related discipline, from a regionally accredited university, will be considered for admission but will be required to complete an additional 24 semester credit hours of master's level courses when admitted
  - official transcripts from **each institution** where course credit was granted
  - competitive GPA
  - official GRE (general test) with a preferred score of 146 or higher for verbal and 160 or higher for quantitative.
  - resume/CV outlining education, work experience, scholarships/ grants, publications/presentations, other accomplishments
  - statement of purpose outlining the applicant's personal history and goals that are relevant to obtaining this doctoral degree, explaining why the applicant wants to pursue this degree at TXST
  - three letters of recommendation evaluating applicant's skill and potential in this degree program, preferably from academic sources
  - interview for top ranked applicants who meet the minimum preferred credentials; interviewed by the Ph.D. program director and other committee members via online tools such as Zoom or MS Teams

TOEFL, PTE, or IELTS Scores

- Non-native English speakers who do not qualify for an English proficiency waiver:
- official TOEFL iBT scores required with a 78 overall
  - official PTE scores required with a 52 overall
  - official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
  - official Duolingo Scores required with a 110 overall
  - official TOEFL Essentials scores required with an 8.5 overall

Additional Information:

The program will admit full-time and part-time Ph.D. students twice a year.

Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Civil Engineering concentration Geotechnical-Geosystem Engineering requires 78 semester credit hours.

Course Requirements

Code	Title	Hours
Required Courses		
CE 7393	Artificial Intelligence Applications in Civil Engineering	3
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship	3
Bachelor's Entry		
Choose 24 hours from the following:		24
CE 5320	Water Quality Management	
CE 5331	Computational Methods in Geosystems	
CE 5340	Advanced Infrastructure Materials	

CE 5360	Pavement Design
CE 5370	Urban Stormwater Management
CE 5390	Infrastructure Systems Analysis
CE 5391	Advanced Mechanics of Materials
ISAN 5357	Computing for Data Analytics
ISAN 5367	Machine Learning
CS 5316	Data Mining
CS 5346	Advanced Artificial Intelligence
CSM 5366	Soils in Construction
CSM 5368	Sustainable Construction
EE 5323	Digital Image Processing
EE 5331	Machine Learning for Engineering Applications
ENGR 5310	Probability, Random Variables, & Stochastic Processes for Engineers
ENGR 5321	Environmental Chemistry
ENGR 5322	Low Impact Development and Green Infrastructure
ENGR 5323	Soil and Groundwater Remediation
ENGR 5330	Advanced Soil Mechanics
ENGR 5332	Earth retaining structures and slopes
ENGR 5333	Fluid Flow in Porous Media
ENGR 5334	Advanced Foundation Engineering
ENGR 5341	Advanced Bituminous Materials
ENGR 5351	Advanced Reinforced Concrete Members
ENGR 5352	Advanced Prestressed Concrete
ENGR 5361	Pavement Asset Management
ENGR 5362	Advanced Traffic Engineering
ENGR 5363	Road Infrastructure Safety
ENGR 5384	Problems in Engineering
GEO 5309	Geographical Analysis
GEO 5336	Transportation Systems
GEO 5352	Air Quality Management
GEO 5367	Exploring Spatial Databases
GEO 5393K	Advanced Web Cartography and Data Visualization
GEO 5418	Geographic Information Systems I
IE 5310	Advanced Statistical Design of Experiments for Engineers
IE 5330	Advanced Quality Control and Reliability Engineering
MATH 5315	Mathematical Statistics
MATH 5345	Regression Analysis
MATH 5376A	Design and Analysis of Experiments

Concentration		
CE 7330	Advanced Soil Mechanics	3
CE 7395	Finite Element Modeling in Civil Engineering	3
Choose 3 hours from the following:		3
CE 7322	Low Impact Development and Green Infrastructure	
CE 7340	Advanced Infrastructure Materials	
CE 7351	Advanced Reinforced Concrete Members	
CE 7361	Pavement Asset Management	
CE 7363	Road Infrastructure Safety	
CE 7394	Climate Change Impact and Adaptation in Civil Engineering	

Presribed Electives

Choose 15 hours from the following:		15
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship	
MSEC 7395H	Environmental Chemistry	
CE 7320	Water Quality Management	
CE 7323	Soil and Groundwater Remediation	
CE 7332	Earth Retaining Structures and Slopes	
CE 7333	Fluid Flow in Porous Media	
CE 7334	Advanced Foundation Engineering	
CE 7336	Discrete Element Methods for Granular Materials	
CE 7340	Advanced Infrastructure Materials	
CE 7341	Advanced Bituminous Materials	
CE 7350	Highway Bridge Design	
CE 7351	Advanced Reinforced Concrete Members	
CE 7352	Advanced Prestressed Concrete	
CE 7353	Earthquake Engineering	
CE 7360	Pavement Design	
CE 7361	Pavement Asset Management	
CE 7362	Advanced Traffic Engineering	
CE 7363	Road Infrastructure Safety	
CE 7364	Non Destructive Testing and Forensic Studies	
CE 7366	Advanced Statistical and Econometric Modeling	
CE 7370	Urban Stormwater Management	
CE 7371	Remote Sensing in Hydrology	
CE 7372	Water, Climate, and Disasters	
CE 7390	Infrastructure Systems Analysis	
CE 7391	Advanced Mechanics of Materials	
CE 7394	Climate Change Impact and Adaptation in Civil Engineering	
CE 7396	Life Cycle Assessment of Infrastructure	
CS 7312	Advanced Data Mining	
CS 7313	Advanced Machine Learning and Pattern Recognition	
CS 7323	Image Processing and Computer Vision	
GEO 7316	Remote Sensing and the Environment	
GEO 7368	Lidar and SfM Data Processing and Analysis	
MATH 7335	Statistics II: Linear Modeling	
MATH 7375C	Time Series Analysis	
MATH 7375D	Advanced linear Modeling	
<b>Dissertation</b>		
Choose a minimum of 24 hours from the following:		24
CE 7199	Dissertation	
CE 7299	Dissertation	
CE 7399	Dissertation	
CE 7599	Dissertation	
CE 7699	Dissertation	
CE 7999	Dissertation	
<b>Total Hours</b>		<b>78</b>

## Qualifying Exam

The Qualifying (preliminary) Exam is required for doctoral students entering with a bachelor's degree. It usually consists of a written and/or oral exam in a given area of Civil Engineering and related field,

administered by a committee consisting of at least three members, with at least two members from Civil Engineering. It will typically be taken after completion of 24 semester credit hours. The students will take the exam through the individual concentration of study. The qualifying exam is a 3-hour written exam that is offered at the end of each academic year or scheduled based on needs. A list of the general topics to be covered, along with a corresponding reading list, will be available to the students. This exam has any of three possible outcomes: 1-Pass, 2-Pass with recommendations regarding the student's program of work, 3-No Pass but one re-examination permitted.

## Candidacy Criteria

Students will advance to candidacy after they have completed all required and elective course work (except for dissertation credit hours), passed their qualifying exam (entering with a bachelor's degree), passed the comprehensive exam, and successfully defended their dissertation proposal. It is expected that the students will enter their candidacy three years after they are enrolled into the program.

When all requirements for admission to candidacy have been met, the doctoral program director forwards the Application for Advancement to Candidacy to the Dean of The Graduate College for review and approval. This application form is available on The Graduate College's website.

A minimum GPA of 3.0 on all coursework undertaken in the doctoral program is required for admission to candidacy. Grades below a B on any graduate coursework cannot be applied toward the doctoral degree. Incomplete grades must have been cleared before approval for advancement to candidacy can be granted. No more than 6 semester credit hours of dissertation research can be taken before advancing to candidacy. No credit will be applied toward a student's doctoral degree for coursework completed more than five years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at TXST as well as course credit transferred to TXST from other institutions.

All doctoral students must complete a dissertation that consists of original research and demonstrates mature scholarship and critical judgment in addition to familiarity with tools and methods in the chosen area. The dissertation project must adhere to the dissertation proposal and cover the topic approved by the student's dissertation committee.

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. At least 18 semester credit hours of dissertation research must be taken after having advanced to candidacy. If a student is receiving supervision on a dissertation during the summer or if the student is graduating in the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours.

## Comprehensive Exam

Each doctoral student must pass a comprehensive examination consisting of a written and an oral component. This should be done by the time the student has completed 36 semester credit hours of 7000-series courses if admitted with a master's degree, (or 60 if admitted with the bachelor's degree), identified the dissertation committee, passed the qualifying exam (entering with a bachelor's degree), and fulfilled the programming requirement. Any student who does not pass the comprehensive exam by the time 45 semester credit hours for students entering with a master's degree (or 69 for students entering

with a bachelor's degree) have been accrued will be dismissed from the program. If the comprehensive exam is not passed, the student will have the option of taking a second and final comprehensive exam in the following long semester. Students will be dismissed from the program if they do not pass the comprehensive exam the second time.

The comprehensive examination consists of a written and an oral component. The oral component is administered by the dissertation committee, typically right after the dissertation proposal (see below). The exam consists of questions covering Civil Engineering knowledge from all the Civil Engineering courses in the student's concentration. To pass the oral exam, the student's dissertation advisor and a majority of the remaining members on the dissertation committee must agree that the student has passed. The student's dissertation committee members must indicate the result on the Doctoral Comprehensive Form, which is to be submitted to The Graduate College. This form is available on The Graduate College's website.

## Dissertation Proposal and Proposal Defense

Each Ph.D. student must prepare a written dissertation proposal and defend it orally. This should be done by the time the student has completed 36 semester credit hours and after identifying the dissertation committee, passing the comprehensive exam, and completing all required courses and Boot Camp. Any student who does not defend his/her dissertation proposal by the time 45 semester credit hours have been accrued will be dismissed from the program. If the proposal defense is not passed, the student will have the option of taking a second and final defense in the following long semester. Students will be dismissed from the program if they do not pass the proposal defense the second time.

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It must include at least a short introduction to the topic, an overview of the methodology to be used, a preliminary survey of the relevant literature, and preliminary results that demonstrate the feasibility of the project to be undertaken. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

The proposal defense entails a public presentation of the student's dissertation proposal followed immediately by a closed defense of the proposal attended only by the student and his/her dissertation committee. The dissertation proposal must be approved by the student's dissertation advisor and a majority of the remaining members on the dissertation committee. The student's dissertation committee members must indicate their approvals on the doctoral Dissertation Proposal Form as well as on the Defense of Dissertation Proposal Form. These forms are available on The Graduate College's website.

A final copy of the dissertation proposal, accompanied by the signed approval forms, must be turned in to the doctoral program director, who will forward them to the dean of The Graduate College for review and final approval.

## Dissertation Research and Writing

All doctoral students must complete a dissertation that must represent an original contribution to scholarship based on independent investigation. The style, organization, and mechanics of the dissertation should follow the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*. Referencing guidelines should either follow the American Anthropological Association or the guidelines from

an appropriate professional journal, as deemed acceptable by the dissertation committee.

## Dissertation Committee

The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the doctoral program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

The Dissertation Committee will be responsible for administering the Comprehensive Exam and the Dissertation Proposal Defense and will oversee the research and writing of the student's dissertation. The committee will consist of 4 members, including the student's dissertation committee chair who must be a regular graduate faculty member in the program, two other graduate faculty members from the School of Engineering, and one doctoral graduate faculty from another department at TXST or from outside TXST. All members must have a Ph.D. degree. The student's dissertation committee chair will chair the committee. The student, the dissertation committee chair, and the Dean of The Graduate College will approve the composition of the dissertation committee.

As per Graduate College policy, the Dissertation Committee Chair Assignment form and the Dissertation Committee Request form must be completed and approved by the Dean of The Graduate College to form the dissertation committee. Any changes to the dissertation committee must be submitted using the Dissertation Committee Chair/Committee Member Change Request form for approval of the dissertation committee chair, the doctoral program director, and the Dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense.

## Dissertation Committee Chair

The Ph.D. program director serves as initial advisor of each student accepted into the program. The director then works with the student and the faculty to identify possible dissertation advisors. By the time 18 semester credit hours have been accrued, each doctoral student is expected to have secured a qualified dissertation advisor who agrees to advise and mentor the student. The mentoring by the dissertation advisor should include providing regular feedback to students and supervising them throughout the Ph.D. program – specifically in the execution of the dissertation research – and helping them identify short- and long-term career goals. The Ph.D. Dissertation Committee Chair Form must be completed by the student and the dissertation committee chair and approved by Doctoral Program Director and Department Chair or School Director, and the Dean of The Graduate College. This form may be downloaded from The Graduate College's website. If a student has not identified a willing and qualified dissertation committee chair by the time he/she has accrued 27 semester credit hours, the student will be dismissed from the program.

## Committee Changes

Any change to the dissertation committee must be submitted using the Dissertation Advisor/Committee Member Change Request Form for approval by the dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be downloaded from The Graduate College's website. The initial dissertation committee chair assignment, and its continuation, is subject to the

approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the Ph.D. program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

## Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least one month before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the dissertation is defensible, and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of their dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense in the following long semester. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's website. The student must submit his/her dissertation to The Graduate College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Students must pass the dissertation defense by the time 90 semester credit hours have been accrued. The doctoral program will review each student annually to ascertain his/her progress towards the degree and will consult the student's dissertation advisor and dissertation committee on this matter as needed. Any student who does not pass the dissertation defense by the time 90 semester credit hours have been accrued will be dismissed from the program.

## Approval and Submission of the Dissertation

Following approval and signing of the Thesis/Dissertation Committee Approval form by the members of the dissertation committee, the student must submit one copy of the dissertation to the office of The Graduate College for final approval. Specific guidelines for approval and submission of the dissertation can be obtained from the office of The Graduate College. Dissertations must be submitted in electronic format.

Doctoral level courses in Civil Engineering: CE (p. 3005)

## Courses Offered Civil Engineering (CE)

### CE 7199. Dissertation.

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the PhD research advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### CE 7299. Dissertation.

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### CE 7320. Water Quality Management.

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CE 7322. Low Impact Development and Green Infrastructure.

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development including water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CE 7323. Soil and Groundwater Remediation.

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. The significance of subsurface contamination and importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CE 7330. Advanced Soil Mechanics.**

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CE 7332. Earth Retaining Structures and Slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7333. Fluid Flow in Porous Media.**

In this course, the fundamental theory of transport and fluid flow in heterogeneous porous media will be presented. First, the equations that govern transport and fluid flow processes will be derived. Both analytical and numerical methods will be used to solve these equations in order to characterize and predict flow fields in porous media. These skills will then be applied to practical problems that involve porous media such as soils, rocks, biological tissues, concrete, etc. The knowledge gained from studies of fluid flow in natural porous materials will be employed to design/optimize systems with engineered porous media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7336. Discrete Element Methods for Granular Materials.**

This course is an introduction to discrete element methods (DEM) as applicable to a range of problems in physics and engineering that deal with granular materials. It brings together various methods and skills for particle-scale or discrete-element numerical simulation of granular media. It covers a broad range of topics from basic concepts and methods towards more advanced aspects and technical details applicable to the current research on granular materials. This course particularly focuses on the transient motion of hard and soft particles encountered in geotechnical, geomechanical, geomaterial, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, and others. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course. Students will be asked to solve an infrastructure material related problem using advanced analytical and simulation tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics include the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CE 7352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7353. Earthquake Engineering.**

This course covers the theories, principles, and concepts of earthquake waves and wave equations, structural dynamics, and the effect of earthquakes on structures, including modal analysis and linear and nonlinear analyses of single- and multi-degree of freedom systems. Additionally, different earthquake-resistant design principles (e.g., force-based, displacement-based, and energy-based) will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7361. Pavement Asset Management.**

This course discusses applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. Topics include methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7362. Advanced Traffic Engineering.**

This course evaluates components of transportation systems by applying principles of transportation engineering, geometric design of highways, and study of warrants for traffic control devices. Additional topics include analysis of traffic flow theory and characteristics, levels of service, and capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7363. Road Infrastructure Safety.**

This course provides an introduction to road infrastructure safety. Topics include fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and design based on safe system approach (SSA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7364. Non Destructive Testing and Forensic Studies.**

This course focuses on applications of non-destructive testing (NDT) technologies in pavement infrastructure forensic studies. The course covers typical modern NDT devices employed in transportation testing and evaluation including ground penetrating radar, 3-D laser scanning, falling weight deflectometer, traffic-speed deflectometer, high-speed inertial profiler, and impact echo. The course will provide in-depth content on the principles of these NDT technologies. Based on these technologies, a series of real-world projects will be comprehensively discussed as forensic study cases. The objective is to develop engineering decision making skills in effectively identifying the root-course of distresses or failures based on the NDT test results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7366. Advanced Statistical and Econometric Modeling.**

This course focuses on a comprehensive understanding of statistical and econometric analysis techniques, emphasizing their application in civil engineering and scientific data analysis. It covers model-estimation methods that extend beyond traditional statistics courses, providing students with a broad range of data-analysis applications while discussing underlying theories and limitations for proper comprehension and application. Prerequisite: CE 7363 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship

**Grade Mode:** Standard Letter

**CE 7370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7371. Remote Sensing in Hydrology.**

This course focuses on the basics of remote sensing, data collection, processing, and analysis for a wide range of applications for hydrology and water resources at different scales. Topics include the hydrologic cycle, relevant sensor types, the electromagnetic spectrum, active/passive microwave remote sensing (precipitation, soil moisture, snow, vegetation water content, etc.), thermal sensing of evapotranspiration, and the gravity method of groundwater. This course also covers an introduction to data assimilation and practical approaches with remote sensing data for water resources management including floods and drought monitoring.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7372. Water, Climate, and Disasters.**

This course introduces the interactions between water and climate systems and their relationship with occurrences, magnitude, and frequencies of natural disasters with a focus on climate impacts on hydrology, water resources, and extreme events (e.g., floods, drought, heat waves, landslides, and wildfires). This course covers disaster risk management and adaptation strategies for a sustainable and resilient natural environment and human society against weather and climate extreme disasters.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7393. Artificial Intelligence Applications in Civil Engineering.**

This course explores the interface between artificial intelligence (AI) and civil engineering. The course covers foundational topics including civil engineering basics, AI fundamentals, matrix algebra, and data preprocessing. The curriculum also includes specific AI methodologies, like supervised, unsupervised, deep learning, and explainable AI, in addition to natural language processing. It highlights emerging technologies in civil engineering and the ethical and social implications of AI in the sector.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7394. Climate Change Impact and Adaptation in Civil Engineering.**

This course provides an introduction to global and regional climate change processes, drivers, and impacts. Case studies are presented for the regional impacts of climate change on extreme weather, water availability, and energy and transportation systems. Students are introduced to a variety of natural hazards and possible mitigation approaches as well as principles of design, including adaptable design and design for failure. Students select the problems they want to solve and develop their projects. Students carry out exercises with relevant data sets, write critiques of key issues, and complete a focused term project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7395. Finite Element Modeling in Civil Engineering.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered. This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7396. Life Cycle Assessment of Infrastructure.**

This course provides analytical tools and methods for implementing principles of life cycle analysis for civil engineering infrastructure. Civil infrastructure systems are critical assets that are subjected to damage, service-life deterioration, and increasing maintenance and rehabilitation cost. Effective infrastructure management and principles of sustainable development can help to find an optimal compromise between economic growth and environmental protection for all stakeholders. Life cycle assessment (LCA) is an important decision support framework for estimating and assessing the environmental impacts attributable to the life cycle of civil infrastructure systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7399. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7599. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7699. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7999. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

The program incorporates components aimed at training students for research-oriented professions in both industry and academia, encompassing traditional Civil Engineering pathways, including Geotechnical-geosystem Engineering. By fostering a symbiotic relationship between academia and industry, it will establish a model of a technology-enhanced Civil Engineering program.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 non-refundable application fee
- or
- \$90 non-refundable application fee for applicants with international credentials
- completed master's degree in Civil Engineering or a closely related discipline, from an accredited college or university
- official transcripts from **each institution** where course credit was granted
- competitive GPA

- official GRE (general test) with a preferred score of 146 or higher for verbal and 160 or higher for quantitative.
- resume/CV outlining education, work experience, scholarships/grants, publications/presentations, other accomplishments
- statement of purpose outlining the applicant's personal history and goals that are relevant to obtaining this doctoral degree, explaining why the applicant wants to pursue this degree at TXST
- three letters of recommendation evaluating applicant's skill and potential in this degree program, preferably from academic sources
- interview for top ranked applicants who meet the minimum preferred credentials; interviewed by the Ph.D. program director and other committee members via online tools such as Zoom or MS Teams

### TOEFL, PTE, or IELTS Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall
- **Additional Information:**

The program will admit full-time and part-time Ph.D. students twice a year.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Civil Engineering concentration Geotechnical-Geosystem Engineering requires 54 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CE 7393	Artificial Intelligence Applications in Civil Engineering	3
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship	3
<b>Concentration</b>		
CE 7330	Advanced Soil Mechanics	3
CE 7395	Finite Element Modeling in Civil Engineering	3
Choose 3 hours from the following:		3
CE 7322	Low Impact Development and Green Infrastructure	
CE 7340	Advanced Infrastructure Materials	
CE 7351	Advanced Reinforced Concrete Members	
CE 7361	Pavement Asset Management	
CE 7363	Road Infrastructure Safety	
CE 7394	Climate Change Impact and Adaptation in Civil Engineering	
<b>Prescribed Electives</b>		
Choose 15 hours from the following:		15
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship	

MSEC 7395H	Environmental Chemistry	
CE 7320	Water Quality Management	
CE 7322	Low Impact Development and Green Infrastructure	
CE 7323	Soil and Groundwater Remediation	
CE 7332	Earth Retaining Structures and Slopes	
CE 7333	Fluid Flow in Porous Media	
CE 7334	Advanced Foundation Engineering	
CE 7336	Discrete Element Methods for Granular Materials	
CE 7340	Advanced Infrastructure Materials	
CE 7341	Advanced Bituminous Materials	
CE 7350	Highway Bridge Design	
CE 7351	Advanced Reinforced Concrete Members	
CE 7352	Advanced Prestressed Concrete	
CE 7353	Earthquake Engineering	
CE 7360	Pavement Design	
CE 7361	Pavement Asset Management	
CE 7362	Advanced Traffic Engineering	
CE 7363	Road Infrastructure Safety	
CE 7364	Non Destructive Testing and Forensic Studies	
CE 7366	Advanced Statistical and Econometric Modeling	
CE 7370	Urban Stormwater Management	
CE 7371	Remote Sensing in Hydrology	
CE 7372	Water, Climate, and Disasters	
CE 7390	Infrastructure Systems Analysis	
CE 7391	Advanced Mechanics of Materials	
CE 7394	Climate Change Impact and Adaptation in Civil Engineering	
CE 7396	Life Cycle Assessment of Infrastructure	
CS 7312	Advanced Data Mining	
CS 7313	Advanced Machine Learning and Pattern Recognition	
CS 7323	Image Processing and Computer Vision	
GEO 7316	Remote Sensing and the Environment	
GEO 7368	Lidar and SfM Data Processing and Analysis	
MATH 7335	Statistics II: Linear Modeling	
MATH 7375C	Time Series Analysis	
MATH 7375D	Advanced linear Modeling	
<b>Dissertation</b>		
Choose a minimum of 24 hours from the following:		24
CE 7199	Dissertation	
CE 7299	Dissertation	
CE 7399	Dissertation	
CE 7599	Dissertation	
CE 7699	Dissertation	
CE 7999	Dissertation	
<b>Total Hours</b>		<b>54</b>

## Candidacy Criteria

Students will advance to candidacy after they have completed all required and elective course work (except for dissertation credit hours), passed their qualifying exam (entering with a bachelor's degree), passed the comprehensive exam, and successfully defended their dissertation

proposal. It is expected that the students will enter their candidacy three years after they are enrolled into the program.

When all requirements for admission to candidacy have been met, the doctoral program director forwards the Application for Advancement to Candidacy to the Dean of The Graduate College for review and approval. This application form is available on The Graduate College's website.

A minimum GPA of 3.0 on all coursework undertaken in the doctoral program is required for admission to candidacy. Grades below a B on any graduate coursework cannot be applied toward the doctoral degree. Incomplete grades must have been cleared before approval for advancement to candidacy can be granted. No more than 6 semester credit hours of dissertation research can be taken before advancing to candidacy. No credit will be applied toward a student's doctoral degree for coursework completed more than five years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at TXST as well as course credit transferred to TXST from other institutions.

All doctoral students must complete a dissertation that consists of original research and demonstrates mature scholarship and critical judgment in addition to familiarity with tools and methods in the chosen area. The dissertation project must adhere to the dissertation proposal and cover the topic approved by the student's dissertation committee.

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. At least 18 semester credit hours of dissertation research must be taken after having advanced to candidacy. If a student is receiving supervision on a dissertation during the summer or if the student is graduating in the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours.

## Comprehensive Exam

Each doctoral student must pass a comprehensive examination consisting of a written and an oral component. This should be done by the time the student has completed 36 semester credit hours of 7000-series courses if admitted with a master's degree, (or 60 if admitted with the bachelor's degree), identified the dissertation committee, passed the qualifying exam (entering with a bachelor's degree), and fulfilled the programming requirement. Any student who does not pass the comprehensive exam by the time 45 semester credit hours for students entering with a master's degree (or 69 for students entering with a bachelor's degree) have been accrued will be dismissed from the program. If the comprehensive exam is not passed, the student will have the option of taking a second and final comprehensive exam in the following long semester. Students will be dismissed from the program if they do not pass the comprehensive exam the second time.

The comprehensive examination consists of a written and an oral component. The oral component is administered by the dissertation committee, typically right after the dissertation proposal (see below). The exam consists of questions covering Civil Engineering knowledge from all the Civil Engineering courses in the student's concentration. To pass the oral exam, the student's dissertation advisor and a majority of the remaining members on the dissertation committee must agree that the student has passed. The student's dissertation committee members must indicate the result on the Doctoral Comprehensive Form, which is



to be submitted to The Graduate College. This form is available on The Graduate College's website.

## Dissertation Proposal and Proposal Defense

Each Ph.D. student must prepare a written dissertation proposal and defend it orally. This should be done by the time the student has completed 36 semester credit hours and after identifying the dissertation committee, passing the comprehensive exam, and completing all required courses and Boot Camp. Any student who does not defend his/her dissertation proposal by the time 45 semester credit hours have been accrued will be dismissed from the program. If the proposal defense is not passed, the student will have the option of taking a second and final defense in the following long semester. Students will be dismissed from the program if they do not pass the proposal defense the second time.

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It must include at least a short introduction to the topic, an overview of the methodology to be used, a preliminary survey of the relevant literature, and preliminary results that demonstrate the feasibility of the project to be undertaken. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

The proposal defense entails a public presentation of the student's dissertation proposal followed immediately by a closed defense of the proposal attended only by the student and his/her dissertation committee. The dissertation proposal must be approved by the student's dissertation advisor and a majority of the remaining members on the dissertation committee. The student's dissertation committee members must indicate their approvals on the doctoral Dissertation Proposal Form as well as on the Defense of Dissertation Proposal Form. These forms are available on The Graduate College's website.

A final copy of the dissertation proposal, accompanied by the signed approval forms, must be turned in to the doctoral program director, who will forward them to the dean of The Graduate College for review and final approval.

## Dissertation Research and Writing

All doctoral students must complete a dissertation that must represent an original contribution to scholarship based on independent investigation. The style, organization, and mechanics of the dissertation should follow the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*. Referencing guidelines should either follow the American Anthropological Association or the guidelines from an appropriate professional journal, as deemed acceptable by the dissertation committee.

## Dissertation Committee

The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the doctoral program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

The Dissertation Committee will be responsible for administering the Comprehensive Exam and the Dissertation Proposal Defense and will oversee the research and writing of the student's dissertation. The committee will consist of 4 members, including the student's dissertation

committee chair who must be a regular graduate faculty member in the program, two other graduate faculty members from the School of Engineering, and one doctoral graduate faculty from another department at TXST or from outside TXST. All members must have a Ph.D. degree. The student's dissertation committee chair will chair the committee. The student, the dissertation committee chair, and the Dean of The Graduate College will approve the composition of the dissertation committee.

As per Graduate College policy, the Dissertation Committee Chair Assignment form and the Dissertation Committee Request form must be completed and approved by the Dean of The Graduate College to form the dissertation committee. Any changes to the dissertation committee must be submitted using the Dissertation Committee Chair/Committee Member Change Request form for approval of the dissertation committee chair, the doctoral program director, and the Dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense.

## Dissertation Committee Chair

The Ph.D. program director serves as initial advisor of each student accepted into the program. The director then works with the student and the faculty to identify possible dissertation advisors. By the time 18 semester credit hours have been accrued, each doctoral student is expected to have secured a qualified dissertation advisor who agrees to advise and mentor the student. The mentoring by the dissertation advisor should include providing regular feedback to students and supervising them throughout the Ph.D. program – specifically in the execution of the dissertation research – and helping them identify short- and long-term career goals. The Ph.D. Dissertation Committee Chair Form must be completed by the student and the dissertation committee chair and approved by Doctoral Program Director and Department Chair or School Director, and the Dean of The Graduate College. This form may be downloaded from The Graduate College's website. If a student has not identified a willing and qualified dissertation committee chair by the time he/she has accrued 27 semester credit hours, the student will be dismissed from the program.

## Committee Changes

Any change to the dissertation committee must be submitted using the Dissertation Advisor/Committee Member Change Request Form for approval by the dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be downloaded from The Graduate College's website. The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the Ph.D. program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

## Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least one month before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with



the dissertation advisor, will address in later drafts to ensure that the dissertation is defensible, and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of their dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense in the following long semester. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's website. The student must submit his/her dissertation to The Graduate College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Students must pass the dissertation defense by the time 90 semester credit hours have been accrued. The doctoral program will review each student annually to ascertain his/her progress towards the degree and will consult the student's dissertation advisor and dissertation committee on this matter as needed. Any student who does not pass the dissertation defense by the time 90 semester credit hours have been accrued will be dismissed from the program.

## Approval and Submission of the Dissertation

Following approval and signing of the Thesis/Dissertation Committee Approval form by the members of the dissertation committee, the student must submit one copy of the dissertation to the office of The Graduate College for final approval. Specific guidelines for approval and submission of the dissertation can be obtained from the office of The Graduate College. Dissertations must be submitted in electronic format.

Doctoral level courses in Civil Engineering: CE (p. 3012)

## Courses Offered

### Civil Engineering (CE)

#### CE 7199. Dissertation.

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the PhD research advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CE 7299. Dissertation.

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CE 7320. Water Quality Management.

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CE 7322. Low Impact Development and Green Infrastructure.

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development including water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CE 7323. Soil and Groundwater Remediation.

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. The significance of subsurface contamination and importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CE 7330. Advanced Soil Mechanics.

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CE 7332. Earth Retaining Structures and Slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7333. Fluid Flow in Porous Media.**

In this course, the fundamental theory of transport and fluid flow in heterogeneous porous media will be presented. First, the equations that govern transport and fluid flow processes will be derived. Both analytical and numerical methods will be used to solve these equations in order to characterize and predict flow fields in porous media. These skills will then be applied to practical problems that involve porous media such as soils, rocks, biological tissues, concrete, etc. The knowledge gained from studies of fluid flow in natural porous materials will be employed to design/optimize systems with engineered porous media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7336. Discrete Element Methods for Granular Materials.**

This course is an introduction to discrete element methods (DEM) as applicable to a range of problems in physics and engineering that deal with granular materials. It brings together various methods and skills for particle-scale or discrete-element numerical simulation of granular media. It covers a broad range of topics from basic concepts and methods towards more advanced aspects and technical details applicable to the current research on granular materials. This course particularly focuses on the transient motion of hard and soft particles encountered in geotechnical, geomechanical, geomaterial, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, and others. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course. Students will be asked to solve an infrastructure material related problem using advanced analytical and simulation tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics include the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7353. Earthquake Engineering.**

This course covers the theories, principles, and concepts of earthquake waves and wave equations, structural dynamics, and the effect of earthquakes on structures, including modal analysis and linear and nonlinear analyses of single- and multi-degree of freedom systems. Additionally, different earthquake-resistant design principles (e.g., force-based, displacement-based, and energy-based) will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7361. Pavement Asset Management.**

This course discusses applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. Topics include methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7362. Advanced Traffic Engineering.**

This course evaluates components of transportation systems by applying principles of transportation engineering, geometric design of highways, and study of warrants for traffic control devices. Additional topics include analysis of traffic flow theory and characteristics, levels of service, and capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7363. Road Infrastructure Safety.**

This course provides an introduction to road infrastructure safety. Topics include fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and design based on safe system approach (SSA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7364. Non Destructive Testing and Forensic Studies.**

This course focuses on applications of non-destructive testing (NDT) technologies in pavement infrastructure forensic studies. The course covers typical modern NDT devices employed in transportation testing and evaluation including ground penetrating radar, 3-D laser scanning, falling weight deflectometer, traffic-speed deflectometer, high-speed inertial profiler, and impact echo. The course will provide in-depth content on the principles of these NDT technologies. Based on these technologies, a series of real-world projects will be comprehensively discussed as forensic study cases. The objective is to develop engineering decision making skills in effectively identifying the root-course of distresses or failures based on the NDT test results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7366. Advanced Statistical and Econometric Modeling.**

This course focuses on a comprehensive understanding of statistical and econometric analysis techniques, emphasizing their application in civil engineering and scientific data analysis. It covers model-estimation methods that extend beyond traditional statistics courses, providing students with a broad range of data-analysis applications while discussing underlying theories and limitations for proper comprehension and application. Prerequisite: CE 7363 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship

**Grade Mode:** Standard Letter

**CE 7370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7371. Remote Sensing in Hydrology.**

This course focuses on the basics of remote sensing, data collection, processing, and analysis for a wide range of applications for hydrology and water resources at different scales. Topics include the hydrologic cycle, relevant sensor types, the electromagnetic spectrum, active/passive microwave remote sensing (precipitation, soil moisture, snow, vegetation water content, etc.), thermal sensing of evapotranspiration, and the gravity method of groundwater. This course also covers an introduction to data assimilation and practical approaches with remote sensing data for water resources management including floods and drought monitoring.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7372. Water, Climate, and Disasters.**

This course introduces the interactions between water and climate systems and their relationship with occurrences, magnitude, and frequencies of natural disasters with a focus on climate impacts on hydrology, water resources, and extreme events (e.g., floods, drought, heat waves, landslides, and wildfires). This course covers disaster risk management and adaptation strategies for a sustainable and resilient natural environment and human society against weather and climate extreme disasters.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7393. Artificial Intelligence Applications in Civil Engineering.**

This course explores the interface between artificial intelligence (AI) and civil engineering. The course covers foundational topics including civil engineering basics, AI fundamentals, matrix algebra, and data preprocessing. The curriculum also includes specific AI methodologies, like supervised, unsupervised, deep learning, and explainable AI, in addition to natural language processing. It highlights emerging technologies in civil engineering and the ethical and social implications of AI in the sector.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7394. Climate Change Impact and Adaptation in Civil Engineering.**

This course provides an introduction to global and regional climate change processes, drivers, and impacts. Case studies are presented for the regional impacts of climate change on extreme weather, water availability, and energy and transportation systems. Students are introduced to a variety of natural hazards and possible mitigation approaches as well as principles of design, including adaptable design and design for failure. Students select the problems they want to solve and develop their projects. Students carry out exercises with relevant data sets, write critiques of key issues, and complete a focused term project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7395. Finite Element Modeling in Civil Engineering.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered. This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7396. Life Cycle Assessment of Infrastructure.**

This course provides analytical tools and methods for implementing principles of life cycle analysis for civil engineering infrastructure. Civil infrastructure systems are critical assets that are subjected to damage, service-life deterioration, and increasing maintenance and rehabilitation cost. Effective infrastructure management and principles of sustainable development can help to find an optimal compromise between economic growth and environmental protection for all stakeholders. Life cycle assessment (LCA) is an important decision support framework for estimating and assessing the environmental impacts attributable to the life cycle of civil infrastructure systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7399. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7599. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7699. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7999. Dissertation.**  
This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Credit/No Credit

The program incorporates components aimed at training students for research-oriented professions in both industry and academia, encompassing traditional Civil Engineering pathways, including Structural & Materials Engineering. By fostering a symbiotic relationship between academia and industry, it will establish a model of a technology-enhanced Civil Engineering program.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 non-refundable application fee
- or
- \$90 non-refundable application fee for applicants with international credentials
- exceptional applicants with a bachelor's degree in Civil Engineering or a closely related discipline, from a regionally accredited university will be considered for admission but will be required to complete an additional 24 semester credit hours of master's level courses when admitted
- official transcripts from **each institution** where course credit was granted
- competitive GPA
- official GRE (general test) with a preferred score of 146 or higher for verbal and 160 or higher for quantitative
- resume/CV outlining education, work experience, scholarships/ grants, publications/presentations, other accomplishments
- statement of purpose outlining the applicant's personal history and goals that are relevant to obtaining this doctoral degree, explaining why the applicant wants to pursue this degree at TXST
- three letters of recommendation evaluating applicant's skill and potential in this degree program, preferably from academic sources
- interview for top ranked applicants who meet the minimum preferred credentials; interviewed by the Ph.D. program director and other committee members via online tools such as Zoom or MS Teams

### TOEFL, PTE, or IELTS Scores

- Non-native English speakers who do not qualify for an English proficiency waiver:
- official TOEFL iBT scores required with a 78 overall
  - official PTE scores required with a 52 overall
  - official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
  - official Duolingo Scores required with a 110 overall
  - official TOEFL Essentials scores required with an 8.5 overall

### Additional Information:

The program will admit full-time and part-time Ph.D. students twice a year.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Civil Engineering concentration Structural and Materials Engineering requires 78 semester credit hours.

## Course Requirements

Code	Title	Hours
Required Courses		
CE 7393	Artificial Intelligence Applications in Civil Engineering	3
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship	3
Bachelor's Entry		
Choose 24 hours from the following:		24
CE 5320	Water Quality Management	
CE 5331	Computational Methods in Geosystems	
CE 5340	Advanced Infrastructure Materials	
CE 5350	Highway Bridge Design	
CE 5360	Pavement Design	
CE 5370	Urban Stormwater Management	
CE 5390	Infrastructure Systems Analysis	
CE 5391	Advanced Mechanics of Materials	
CIS 5357		
CIS 5367		
CS 5316	Data Mining	
CS 5346	Advanced Artificial Intelligence	
CSM 5366	Soils in Construction	
CSM 5368	Sustainable Construction	
EE 5323	Digital Image Processing	
EE 5331	Machine Learning for Engineering Applications	
ENGR 5310	Probability, Random Variables, & Stochastic Processes for Engineers	
ENGR 5321	Environmental Chemistry	
ENGR 5322	Low Impact Development and Green Infrastructure	
ENGR 5323	Soil and Groundwater Remediation	
ENGR 5330	Advanced Soil Mechanics	
ENGR 5332	Earth retaining structures and slopes	
ENGR 5333	Fluid Flow in Porous Media	
ENGR 5334	Advanced Foundation Engineering	
ENGR 5341	Advanced Bituminous Materials	



ENGR 5351	Advanced Reinforced Concrete Members	
ENGR 5352	Advanced Prestressed Concrete	
ENGR 5361	Pavement Asset Management	
ENGR 5362	Advanced Traffic Engineering	
ENGR 5363	Road Infrastructure Safety	
ENGR 5384	Problems in Engineering	
GEO 5309	Geographical Analysis	
GEO 5336	Transportation Systems	
GEO 5352	Air Quality Management	
GEO 5367	Exploring Spatial Databases	
GEO 5393K	Advanced Web Cartography and Data Visualization	
GEO 5418	Geographic Information Systems I	
IE 5310	Advanced Statistical Design of Experiments for Engineers	
IE 5330	Advanced Quality Control and Reliability Engineering	
MATH 5315	Mathematical Statistics	
MATH 5345	Regression Analysis	
MATH 5376A	Design and Analysis of Experiments	
<b>Concentration</b>		
CE 7340	Advanced Infrastructure Materials	3
CE 7351	Advanced Reinforced Concrete Members	3
Choose 3 hours from the following:		3
CE 7322	Low Impact Development and Green Infrastructure	
CE 7330	Advanced Soil Mechanics	
CE 7361	Pavement Asset Management	
CE 7363	Road Infrastructure Safety	
CE 7394	Climate Change Impact and Adaptation in Civil Engineering	
CE 7395	Finite Element Modeling in Civil Engineering	
<b>Prescribed Electives</b>		
Choose 15 hours from the following:		15
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship	
MSEC 7395H	Environmental Chemistry	
CE 7320	Water Quality Management	
CE 7322	Low Impact Development and Green Infrastructure	
CE 7323	Soil and Groundwater Remediation	
CE 7330	Advanced Soil Mechanics	
CE 7332	Earth Retaining Structures and Slopes	
CE 7333	Fluid Flow in Porous Media	
CE 7334	Advanced Foundation Engineering	
CE 7336	Discrete Element Methods for Granular Materials	
CE 7341	Advanced Bituminous Materials	
CE 7350	Highway Bridge Design	
CE 7352	Advanced Prestressed Concrete	
CE 7353	Earthquake Engineering	
CE 7360	Pavement Design	
CE 7361	Pavement Asset Management	
CE 7362	Advanced Traffic Engineering	
CE 7363	Road Infrastructure Safety	
CE 7364	Non Destructive Testing and Forensic Studies	
CE 7366	Advanced Statistical and Econometric Modeling	

CE 7370	Urban Stormwater Management
CE 7371	Remote Sensing in Hydrology
CE 7372	Water, Climate, and Disasters
CE 7390	Infrastructure Systems Analysis
CE 7391	Advanced Mechanics of Materials
CE 7394	Climate Change Impact and Adaptation in Civil Engineering
CE 7395	Finite Element Modeling in Civil Engineering
CE 7396	Life Cycle Assessment of Infrastructure
CS 7312	Advanced Data Mining
CS 7313	Advanced Machine Learning and Pattern Recognition
CS 7323	Image Processing and Computer Vision
GEO 7316	Remote Sensing and the Environment
GEO 7368	Lidar and SfM Data Processing and Analysis
MATH 7335	Statistics II: Linear Modeling
MATH 7375C	Time Series Analysis
MATH 7375D	Advanced linear Modeling
<b>Dissertation</b>	
Choose a minimum of 24 hours from the following:	
CE 7199	Dissertation
CE 7299	Dissertation
CE 7399	Dissertation
CE 7599	Dissertation
CE 7699	Dissertation
CE 7999	Dissertation
<b>Total Hours</b>	

24

78

## Qualifying Exam

The Qualifying (preliminary) Exam is required for doctoral students entering with a bachelor's degree. It usually consists of a written and/or oral exam in a given area of Civil Engineering and related field, administered by a committee consisting of at least three members, with at least two members from Civil Engineering. It will typically be taken after completion of 24 semester credit hours. The students will take the exam through the individual concentration of study. The qualifying exam is a 3-hour written exam that is offered at the end of each academic year or scheduled based on needs. A list of the general topics to be covered, along with a corresponding reading list, will be available to the students. This exam has any of three possible outcomes: 1-Pass, 2-Pass with recommendations regarding the student's program of work, 3-No Pass but one re-examination permitted.

## Candidacy Criteria

Students will advance to candidacy after they have completed all required and elective course work (except for dissertation credit hours), passed their qualifying exam (entering with a bachelor's degree), passed the comprehensive exam, and successfully defended their dissertation proposal. It is expected that the students will enter their candidacy three years after they are enrolled into the program.

When all requirements for admission to candidacy have been met, the doctoral program director forwards the Application for Advancement to Candidacy to the Dean of The Graduate College for review and approval. This application form is available on The Graduate College's website.

A minimum GPA of 3.0 on all coursework undertaken in the doctoral program is required for admission to candidacy. Grades below a B on any graduate coursework cannot be applied toward the doctoral degree. Incomplete grades must have been cleared before approval for advancement to candidacy can be granted. No more than 6 semester credit hours of dissertation research can be taken before advancing to candidacy. No credit will be applied toward a student's doctoral degree for coursework completed more than five years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at TXST as well as course credit transferred to TXST from other institutions.

All doctoral students must complete a dissertation that consists of original research and demonstrates mature scholarship and critical judgment in addition to familiarity with tools and methods in the chosen area. The dissertation project must adhere to the dissertation proposal and cover the topic approved by the student's dissertation committee.

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. At least 18 semester credit hours of dissertation research must be taken after having advanced to candidacy. If a student is receiving supervision on a dissertation during the summer or if the student is graduating in the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours.

## Comprehensive Exam

Each doctoral student must pass a comprehensive examination consisting of a written and an oral component. This should be done by the time the student has completed 36 semester credit hours of 7000-series courses if admitted with a master's degree, (or 60 if admitted with the bachelor's degree), identified the dissertation committee, passed the qualifying exam (entering with a bachelor's degree), and fulfilled the programming requirement. Any student who does not pass the comprehensive exam by the time 45 semester credit hours for students entering with a master's degree (or 69 for students entering with a bachelor's degree) have been accrued will be dismissed from the program. If the comprehensive exam is not passed, the student will have the option of taking a second and final comprehensive exam in the following long semester. Students will be dismissed from the program if they do not pass the comprehensive exam the second time.

The comprehensive examination consists of a written and an oral component. The oral component is administered by the dissertation committee, typically right after the dissertation proposal (see below). The exam consists of questions covering Civil Engineering knowledge from all the Civil Engineering courses in the student's concentration. To pass the oral exam, the student's dissertation advisor and a majority of the remaining members on the dissertation committee must agree that the student has passed. The student's dissertation committee members must indicate the result on the Doctoral Comprehensive Form, which is to be submitted to The Graduate College. This form is available on The Graduate College's website.

## Dissertation Proposal and Proposal Defense

Each Ph.D. student must prepare a written dissertation proposal and defend it orally. This should be done by the time the student has completed 36 semester credit hours and after identifying the dissertation committee, passing the comprehensive exam, and completing all required

courses and Boot Camp. Any student who does not defend his/her dissertation proposal by the time 45 semester credit hours have been accrued will be dismissed from the program. If the proposal defense is not passed, the student will have the option of taking a second and final defense in the following long semester. Students will be dismissed from the program if they do not pass the proposal defense the second time.

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It must include at least a short introduction to the topic, an overview of the methodology to be used, a preliminary survey of the relevant literature, and preliminary results that demonstrate the feasibility of the project to be undertaken. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

The proposal defense entails a public presentation of the student's dissertation proposal followed immediately by a closed defense of the proposal attended only by the student and his/her dissertation committee. The dissertation proposal must be approved by the student's dissertation advisor and a majority of the remaining members on the dissertation committee. The student's dissertation committee members must indicate their approvals on the doctoral Dissertation Proposal Form as well as on the Defense of Dissertation Proposal Form. These forms are available on The Graduate College's website.

A final copy of the dissertation proposal, accompanied by the signed approval forms, must be turned in to the doctoral program director, who will forward them to the dean of The Graduate College for review and final approval.

## Dissertation Research and Writing

All doctoral students must complete a dissertation that must represent an original contribution to scholarship based on independent investigation. The style, organization, and mechanics of the dissertation should follow the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*. Referencing guidelines should either follow the American Anthropological Association or the guidelines from an appropriate professional journal, as deemed acceptable by the dissertation committee.

## Dissertation Committee

The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the doctoral program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

The Dissertation Committee will be responsible for administering the Comprehensive Exam and the Dissertation Proposal Defense and will oversee the research and writing of the student's dissertation. The committee will consist of 4 members, including the student's dissertation committee chair who must be a regular graduate faculty member in the program, two other graduate faculty members from the School of Engineering, and one doctoral graduate faculty from another department at TXST or from outside TXST. All members must have a Ph.D. degree. The student's dissertation committee chair will chair the committee. The student, the dissertation committee chair, and the Dean of The Graduate College will approve the composition of the dissertation committee.

As per Graduate College policy, the Dissertation Committee Chair Assignment form and the Dissertation Committee Request form must be completed and approved by the Dean of The Graduate College to form the dissertation committee. Any changes to the dissertation committee must be submitted using the Dissertation Committee Chair/Committee Member Change Request form for approval of the dissertation committee chair, the doctoral program director, and the Dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense.

## Dissertation Committee Chair

The Ph.D. program director serves as initial advisor of each student accepted into the program. The director then works with the student and the faculty to identify possible dissertation advisors. By the time 18 semester credit hours have been accrued, each doctoral student is expected to have secured a qualified dissertation advisor who agrees to advise and mentor the student. The mentoring by the dissertation advisor should include providing regular feedback to students and supervising them throughout the Ph.D. program – specifically in the execution of the dissertation research – and helping them identify short- and long-term career goals. The Ph.D. Dissertation Committee Chair Form must be completed by the student and the dissertation committee chair and approved by Doctoral Program Director and Department Chair or School Director, and the Dean of The Graduate College. This form may be downloaded from The Graduate College's website. If a student has not identified a willing and qualified dissertation committee chair by the time he/she has accrued 27 semester credit hours, the student will be dismissed from the program.

## Committee Changes

Any change to the dissertation committee must be submitted using the Dissertation Advisor/Committee Member Change Request Form for approval by the dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be downloaded from The Graduate College's website. The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the Ph.D. program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

## Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least one month before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the dissertation is defensible, and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of their dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral

examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense in the following long semester. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's website. The student must submit his/her dissertation to The Graduate College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Students must pass the dissertation defense by the time 90 semester credit hours have been accrued. The doctoral program will review each student annually to ascertain his/her progress towards the degree and will consult the student's dissertation advisor and dissertation committee on this matter as needed. Any student who does not pass the dissertation defense by the time 90 semester credit hours have been accrued will be dismissed from the program.

## Approval and Submission of the Dissertation

Following approval and signing of the Thesis/Dissertation Committee Approval form by the members of the dissertation committee, the student must submit one copy of the dissertation to the office of The Graduate College for final approval. Specific guidelines for approval and submission of the dissertation can be obtained from the office of The Graduate College. Dissertations must be submitted in electronic format.

Doctoral level courses in Civil Engineering: CE (p. 3019)

## Courses Offered

### Civil Engineering (CE)

#### CE 7199. Dissertation.

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the PhD research advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CE 7299. Dissertation.

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7320. Water Quality Management.**

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7322. Low Impact Development and Green Infrastructure.**

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development including water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7323. Soil and Groundwater Remediation.**

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment.

The significance of subsurface contamination and importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7330. Advanced Soil Mechanics.**

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CE 7332. Earth Retaining Structures and Slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7333. Fluid Flow in Porous Media.**

In this course, the fundamental theory of transport and fluid flow in heterogeneous porous media will be presented. First, the equations that govern transport and fluid flow processes will be derived. Both analytical and numerical methods will be used to solve these equations in order to characterize and predict flow fields in porous media. These skills will then be applied to practical problems that involve porous media such as soils, rocks, biological tissues, concrete, etc. The knowledge gained from studies of fluid flow in natural porous materials will be employed to design/optimize systems with engineered porous media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7336. Discrete Element Methods for Granular Materials.**

This course is an introduction to discrete element methods (DEM) as applicable to a range of problems in physics and engineering that deal with granular materials. It brings together various methods and skills for particle-scale or discrete-element numerical simulation of granular media. It covers a broad range of topics from basic concepts and methods towards more advanced aspects and technical details applicable to the current research on granular materials. This course particularly focuses on the transient motion of hard and soft particles encountered in geotechnical, geomechanical, geomaterial, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, and others. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course. Students will be asked to solve an infrastructure material related problem using advanced analytical and simulation tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CE 7341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics include the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7353. Earthquake Engineering.**

This course covers the theories, principles, and concepts of earthquake waves and wave equations, structural dynamics, and the effect of earthquakes on structures, including modal analysis and linear and nonlinear analyses of single- and multi-degree of freedom systems. Additionally, different earthquake-resistant design principles (e.g., force-based, displacement-based, and energy-based) will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7361. Pavement Asset Management.**

This course discusses applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. Topics include methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7362. Advanced Traffic Engineering.**

This course evaluates components of transportation systems by applying principles of transportation engineering, geometric design of highways, and study of warrants for traffic control devices. Additional topics include analysis of traffic flow theory and characteristics, levels of service, and capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7363. Road Infrastructure Safety.**

This course provides an introduction to road infrastructure safety. Topics include fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and design based on safe system approach (SSA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7364. Non Destructive Testing and Forensic Studies.**

This course focuses on applications of non-destructive testing (NDT) technologies in pavement infrastructure forensic studies. The course covers typical modern NDT devices employed in transportation testing and evaluation including ground penetrating radar, 3-D laser scanning, falling weight deflectometer, traffic-speed deflectometer, high-speed inertial profiler, and impact echo. The course will provide in-depth content on the principles of these NDT technologies. Based on these technologies, a series of real-world projects will be comprehensively discussed as forensic study cases. The objective is to develop engineering decision making skills in effectively identifying the root-course of distresses or failures based on the NDT test results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CE 7366. Advanced Statistical and Econometric Modeling.**

This course focuses on a comprehensive understanding of statistical and econometric analysis techniques, emphasizing their application in civil engineering and scientific data analysis. It covers model-estimation methods that extend beyond traditional statistics courses, providing students with a broad range of data-analysis applications while discussing underlying theories and limitations for proper comprehension and application. Prerequisite: CE 7363 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship

**Grade Mode:** Standard Letter

**CE 7370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7371. Remote Sensing in Hydrology.**

This course focuses on the basics of remote sensing, data collection, processing, and analysis for a wide range of applications for hydrology and water resources at different scales. Topics include the hydrologic cycle, relevant sensor types, the electromagnetic spectrum, active/passive microwave remote sensing (precipitation, soil moisture, snow, vegetation water content, etc.), thermal sensing of evapotranspiration, and the gravity method of groundwater. This course also covers an introduction to data assimilation and practical approaches with remote sensing data for water resources management including floods and drought monitoring.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7372. Water, Climate, and Disasters.**

This course introduces the interactions between water and climate systems and their relationship with occurrences, magnitude, and frequencies of natural disasters with a focus on climate impacts on hydrology, water resources, and extreme events (e.g., floods, drought, heat waves, landslides, and wildfires). This course covers disaster risk management and adaptation strategies for a sustainable and resilient natural environment and human society against weather and climate extreme disasters.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7393. Artificial Intelligence Applications in Civil Engineering.**

This course explores the interface between artificial intelligence (AI) and civil engineering. The course covers foundational topics including civil engineering basics, AI fundamentals, matrix algebra, and data preprocessing. The curriculum also includes specific AI methodologies, like supervised, unsupervised, deep learning, and explainable AI, in addition to natural language processing. It highlights emerging technologies in civil engineering and the ethical and social implications of AI in the sector.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7394. Climate Change Impact and Adaptation in Civil Engineering.**

This course provides an introduction to global and regional climate change processes, drivers, and impacts. Case studies are presented for the regional impacts of climate change on extreme weather, water availability, and energy and transportation systems. Students are introduced to a variety of natural hazards and possible mitigation approaches as well as principles of design, including adaptable design and design for failure. Students select the problems they want to solve and develop their projects. Students carry out exercises with relevant data sets, write critiques of key issues, and complete a focused term project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7395. Finite Element Modeling in Civil Engineering.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered. This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7396. Life Cycle Assessment of Infrastructure.**

This course provides analytical tools and methods for implementing principles of life cycle analysis for civil engineering infrastructure. Civil infrastructure systems are critical assets that are subjected to damage, service-life deterioration, and increasing maintenance and rehabilitation cost. Effective infrastructure management and principles of sustainable development can help to find an optimal compromise between economic growth and environmental protection for all stakeholders. Life cycle assessment (LCA) is an important decision support framework for estimating and assessing the environmental impacts attributable to the life cycle of civil infrastructure systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7399. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7599. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7699. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7999. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

The program incorporates components aimed at training students for research-oriented professions in both industry and academia, encompassing traditional Civil Engineering pathways, including Structural & Materials Engineering. By fostering a symbiotic relationship between

academia and industry, it will establish a model of a technology-enhanced Civil Engineering program.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 non-refundable application fee
- or
- \$90 non-refundable application fee for applicants with international credentials
- completed master's degree in Civil Engineering or a closely related discipline, from an accredited college or university
- official transcripts from **each institution** where course credit was granted
- competitive GPA
- official GRE (general test) with a preferred score of 146 or higher for verbal and 160 or higher for quantitative
- resume/CV outlining education, work experience, scholarships/grants, publications/presentations, other accomplishments
- statement of purpose outlining the applicant's personal history and goals that are relevant to obtaining this doctoral degree, explaining why the applicant wants to pursue this degree at TXST
- three letters of recommendation evaluating applicant's skill and potential in this degree program, preferably from academic sources
- interview for top ranked applicants who meet the minimum preferred credentials; interviewed by the Ph.D. program director and other committee members via online tools such as Zoom or MS Teams

### TOEFL, PTE, or IELTS Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

### Additional Information:

The program will admit full-time and part-time Ph.D. students twice a year.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Civil Engineering concentration Structural and Materials Engineering requires 54 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CE 7393	Artificial Intelligence Applications in Civil Engineering	3
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship	3
<b>Concentration</b>		
CE 7340	Advanced Infrastructure Materials	3
CE 7351	Advanced Reinforced Concrete Members	3
Choose 3 hours from the following:		3
CE 7322	Low Impact Development and Green Infrastructure	
CE 7330	Advanced Soil Mechanics	
CE 7361	Pavement Asset Management	
CE 7363	Road Infrastructure Safety	
CE 7394	Climate Change Impact and Adaptation in Civil Engineering	
CE 7395	Finite Element Modeling in Civil Engineering	
<b>Prescribed Electives</b>		
Choose 15 hours from the following:		15
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship	
MSEC 7395H	Environmental Chemistry	
CE 7320	Water Quality Management	
CE 7322	Low Impact Development and Green Infrastructure	
CE 7323	Soil and Groundwater Remediation	
CE 7330	Advanced Soil Mechanics	
CE 7332	Earth Retaining Structures and Slopes	
CE 7333	Fluid Flow in Porous Media	
CE 7334	Advanced Foundation Engineering	
CE 7336	Discrete Element Methods for Granular Materials	
CE 7341	Advanced Bituminous Materials	
CE 7350	Highway Bridge Design	
CE 7352	Advanced Prestressed Concrete	
CE 7353	Earthquake Engineering	
CE 7360	Pavement Design	
CE 7361	Pavement Asset Management	
CE 7362	Advanced Traffic Engineering	
CE 7363	Road Infrastructure Safety	
CE 7364	Non Destructive Testing and Forensic Studies	
CE 7366	Advanced Statistical and Econometric Modeling	
CE 7370	Urban Stormwater Management	
CE 7371	Remote Sensing in Hydrology	
CE 7372	Water, Climate, and Disasters	
CE 7390	Infrastructure Systems Analysis	
CE 7391	Advanced Mechanics of Materials	
CE 7394	Climate Change Impact and Adaptation in Civil Engineering	
CE 7395	Finite Element Modeling in Civil Engineering	
CE 7396	Life Cycle Assessment of Infrastructure	
CS 7312	Advanced Data Mining	
CS 7313	Advanced Machine Learning and Pattern Recognition	

CS 7323	Image Processing and Computer Vision
GEO 7316	Remote Sensing and the Environment
GEO 7368	Lidar and SfM Data Processing and Analysis
MATH 7335	Statistics II: Linear Modeling
MATH 7375C	Time Series Analysis
MATH 7375D	Advanced linear Modeling
<b>Dissertation</b>	
Choose a minimum of 24 hours from the following:	
CE 7199	Dissertation
CE 7299	Dissertation
CE 7399	Dissertation
CE 7599	Dissertation
CE 7699	Dissertation
CE 7999	Dissertation
<b>Total Hours</b>	<b>54</b>

## Candidacy Criteria

Students will advance to candidacy after they have completed all required and elective course work (except for dissertation credit hours), passed their qualifying exam (entering with a bachelor's degree), passed the comprehensive exam, and successfully defended their dissertation proposal. It is expected that the students will enter their candidacy three years after they are enrolled into the program.

When all requirements for admission to candidacy have been met, the doctoral program director forwards the Application for Advancement to Candidacy to the Dean of The Graduate College for review and approval. This application form is available on The Graduate College's website.

A minimum GPA of 3.0 on all coursework undertaken in the doctoral program is required for admission to candidacy. Grades below a B on any graduate coursework cannot be applied toward the doctoral degree. Incomplete grades must have been cleared before approval for advancement to candidacy can be granted. No more than 6 semester credit hours of dissertation research can be taken before advancing to candidacy. No credit will be applied toward a student's doctoral degree for coursework completed more than five years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at TXST as well as course credit transferred to TXST from other institutions.

All doctoral students must complete a dissertation that consists of original research and demonstrates mature scholarship and critical judgment in addition to familiarity with tools and methods in the chosen area. The dissertation project must adhere to the dissertation proposal and cover the topic approved by the student's dissertation committee.

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. At least 18 semester credit hours of dissertation research must be taken after having advanced to candidacy. If a student is receiving supervision on a dissertation during the summer or if the student is graduating in the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours.

## Comprehensive Exam

Each doctoral student must pass a comprehensive examination consisting of a written and an oral component. This should be done by the time the student has completed 36 semester credit hours of 7000-series courses if admitted with a master's degree, (or 60 if admitted with the bachelor's degree), identified the dissertation committee, passed the qualifying exam (entering with a bachelor's degree), and fulfilled the programming requirement. Any student who does not pass the comprehensive exam by the time 45 semester credit hours for students entering with a master's degree (or 69 for students entering with a bachelor's degree) have been accrued will be dismissed from the program. If the comprehensive exam is not passed, the student will have the option of taking a second and final comprehensive exam in the following long semester. Students will be dismissed from the program if they do not pass the comprehensive exam the second time.

The comprehensive examination consists of a written and an oral component. The oral component is administered by the dissertation committee, typically right after the dissertation proposal (see below). The exam consists of questions covering Civil Engineering knowledge from all the Civil Engineering courses in the student's concentration. To pass the oral exam, the student's dissertation advisor and a majority of the remaining members on the dissertation committee must agree that the student has passed. The student's dissertation committee members must indicate the result on the Doctoral Comprehensive Form, which is to be submitted to The Graduate College. This form is available on The Graduate College's website.

## Dissertation Proposal and Proposal Defense

Each Ph.D. student must prepare a written dissertation proposal and defend it orally. This should be done by the time the student has completed 36 semester credit hours and after identifying the dissertation committee, passing the comprehensive exam, and completing all required courses and Boot Camp. Any student who does not defend his/her dissertation proposal by the time 45 semester credit hours have been accrued will be dismissed from the program. If the proposal defense is not passed, the student will have the option of taking a second and final defense in the following long semester. Students will be dismissed from the program if they do not pass the proposal defense the second time.

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It must include at least a short introduction to the topic, an overview of the methodology to be used, a preliminary survey of the relevant literature, and preliminary results that demonstrate the feasibility of the project to be undertaken. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

The proposal defense entails a public presentation of the student's dissertation proposal followed immediately by a closed defense of the proposal attended only by the student and his/her dissertation committee. The dissertation proposal must be approved by the student's dissertation advisor and a majority of the remaining members on the dissertation committee. The student's dissertation committee members must indicate their approvals on the doctoral Dissertation Proposal Form as well as on the Defense of Dissertation Proposal Form. These forms are available on The Graduate College's website.

A final copy of the dissertation proposal, accompanied by the signed approval forms, must be turned in to the doctoral program director, who

will forward them to the dean of The Graduate College for review and final approval.

## Dissertation Research and Writing

All doctoral students must complete a dissertation that must represent an original contribution to scholarship based on independent investigation. The style, organization, and mechanics of the dissertation should follow the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*. Referencing guidelines should either follow the American Anthropological Association or the guidelines from an appropriate professional journal, as deemed acceptable by the dissertation committee.

## Dissertation Committee

The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the doctoral program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

The Dissertation Committee will be responsible for administering the Comprehensive Exam and the Dissertation Proposal Defense and will oversee the research and writing of the student's dissertation. The committee will consist of 4 members, including the student's dissertation committee chair who must be a regular graduate faculty member in the program, two other graduate faculty members from the School of Engineering, and one doctoral graduate faculty from another department at TXST or from outside TXST. All members must have a Ph.D. degree. The student's dissertation committee chair will chair the committee. The student, the dissertation committee chair, and the Dean of The Graduate College will approve the composition of the dissertation committee.

As per Graduate College policy, the Dissertation Committee Chair Assignment form and the Dissertation Committee Request form must be completed and approved by the Dean of The Graduate College to form the dissertation committee. Any changes to the dissertation committee must be submitted using the Dissertation Committee Chair/Committee Member Change Request form for approval of the dissertation committee chair, the doctoral program director, and the Dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense.

## Dissertation Committee Chair

The Ph.D. program director serves as initial advisor of each student accepted into the program. The director then works with the student and the faculty to identify possible dissertation advisors. By the time 18 semester credit hours have been accrued, each doctoral student is expected to have secured a qualified dissertation advisor who agrees to advise and mentor the student. The mentoring by the dissertation advisor should include providing regular feedback to students and supervising them throughout the Ph.D. program – specifically in the execution of the dissertation research – and helping them identify short- and long-term career goals. The Ph.D. Dissertation Committee Chair Form must be completed by the student and the dissertation committee chair and approved by Doctoral Program Director and Department Chair or School Director, and the Dean of The Graduate College. This form may be downloaded from The Graduate College's website. If a student has not identified a willing and qualified dissertation committee chair by the



time he/she has accrued 27 semester credit hours, the student will be dismissed from the program.

## Committee Changes

Any change to the dissertation committee must be submitted using the Dissertation Advisor/Committee Member Change Request Form for approval by the dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be downloaded from The Graduate College's website. The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the Ph.D. program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

## Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least one month before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the dissertation is defensible, and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of their dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense in the following long semester. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's website. The student must submit his/her dissertation to The Graduate College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Students must pass the dissertation defense by the time 90 semester credit hours have been accrued. The doctoral program will review each student annually to ascertain his/her progress towards the degree and will consult the student's dissertation advisor and dissertation committee on this matter as needed. Any student who does not pass the dissertation defense by the time 90 semester credit hours have been accrued will be dismissed from the program.

## Approval and Submission of the Dissertation

Following approval and signing of the Thesis/Dissertation Committee Approval form by the members of the dissertation committee, the student must submit one copy of the dissertation to the office of The Graduate College for final approval. Specific guidelines for approval and submission of the dissertation can be obtained from the office of The Graduate College. Dissertations must be submitted in electronic format.

Doctoral level courses in Civil Engineering: CE (p. 3026)

## Courses Offered Civil Engineering (CE)

### CE 7199. Dissertation.

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the PhD research advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### CE 7299. Dissertation.

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### CE 7320. Water Quality Management.

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### CE 7322. Low Impact Development and Green Infrastructure.

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development including water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CE 7323. Soil and Groundwater Remediation.**

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. The significance of subsurface contamination and importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7330. Advanced Soil Mechanics.**

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CE 7332. Earth Retaining Structures and Slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7333. Fluid Flow in Porous Media.**

In this course, the fundamental theory of transport and fluid flow in heterogeneous porous media will be presented. First, the equations that govern transport and fluid flow processes will be derived. Both analytical and numerical methods will be used to solve these equations in order to characterize and predict flow fields in porous media. These skills will then be applied to practical problems that involve porous media such as soils, rocks, biological tissues, concrete, etc. The knowledge gained from studies of fluid flow in natural porous materials will be employed to design/optimize systems with engineered porous media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7336. Discrete Element Methods for Granular Materials.**

This course is an introduction to discrete element methods (DEM) as applicable to a range of problems in physics and engineering that deal with granular materials. It brings together various methods and skills for particle-scale or discrete-element numerical simulation of granular media. It covers a broad range of topics from basic concepts and methods towards more advanced aspects and technical details applicable to the current research on granular materials. This course particularly focuses on the transient motion of hard and soft particles encountered in geotechnical, geomechanical, geomaterial, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, and others. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course. Students will be asked to solve an infrastructure material related problem using advanced analytical and simulation tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics include the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7353. Earthquake Engineering.**

This course covers the theories, principles, and concepts of earthquake waves and wave equations, structural dynamics, and the effect of earthquakes on structures, including modal analysis and linear and nonlinear analyses of single- and multi-degree of freedom systems. Additionally, different earthquake-resistant design principles (e.g., force-based, displacement-based, and energy-based) will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7361. Pavement Asset Management.**

This course discusses applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. Topics include methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7362. Advanced Traffic Engineering.**

This course evaluates components of transportation systems by applying principles of transportation engineering, geometric design of highways, and study of warrants for traffic control devices. Additional topics include analysis of traffic flow theory and characteristics, levels of service, and capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7363. Road Infrastructure Safety.**

This course provides an introduction to road infrastructure safety. Topics include fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and design based on safe system approach (SSA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7364. Non Destructive Testing and Forensic Studies.**

This course focuses on applications of non-destructive testing (NDT) technologies in pavement infrastructure forensic studies. The course covers typical modern NDT devices employed in transportation testing and evaluation including ground penetrating radar, 3-D laser scanning, falling weight deflectometer, traffic-speed deflectometer, high-speed inertial profiler, and impact echo. The course will provide in-depth content on the principles of these NDT technologies. Based on these technologies, a series of real-world projects will be comprehensively discussed as forensic study cases. The objective is to develop engineering decision making skills in effectively identifying the root-cause of distresses or failures based on the NDT test results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7366. Advanced Statistical and Econometric Modeling.**

This course focuses on a comprehensive understanding of statistical and econometric analysis techniques, emphasizing their application in civil engineering and scientific data analysis. It covers model-estimation methods that extend beyond traditional statistics courses, providing students with a broad range of data-analysis applications while discussing underlying theories and limitations for proper comprehension and application. Prerequisite: CE 7363 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship

**Grade Mode:** Standard Letter

**CE 7370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7371. Remote Sensing in Hydrology.**

This course focuses on the basics of remote sensing, data collection, processing, and analysis for a wide range of applications for hydrology and water resources at different scales. Topics include the hydrologic cycle, relevant sensor types, the electromagnetic spectrum, active/passive microwave remote sensing (precipitation, soil moisture, snow, vegetation water content, etc.), thermal sensing of evapotranspiration, and the gravity method of groundwater. This course also covers an introduction to data assimilation and practical approaches with remote sensing data for water resources management including floods and drought monitoring.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7372. Water, Climate, and Disasters.**

This course introduces the interactions between water and climate systems and their relationship with occurrences, magnitude, and frequencies of natural disasters with a focus on climate impacts on hydrology, water resources, and extreme events (e.g., floods, drought, heat waves, landslides, and wildfires). This course covers disaster risk management and adaptation strategies for a sustainable and resilient natural environment and human society against weather and climate extreme disasters.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7393. Artificial Intelligence Applications in Civil Engineering.**

This course explores the interface between artificial intelligence (AI) and civil engineering. The course covers foundational topics including civil engineering basics, AI fundamentals, matrix algebra, and data preprocessing. The curriculum also includes specific AI methodologies, like supervised, unsupervised, deep learning, and explainable AI, in addition to natural language processing. It highlights emerging technologies in civil engineering and the ethical and social implications of AI in the sector.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7394. Climate Change Impact and Adaptation in Civil Engineering.**

This course provides an introduction to global and regional climate change processes, drivers, and impacts. Case studies are presented for the regional impacts of climate change on extreme weather, water availability, and energy and transportation systems. Students are introduced to a variety of natural hazards and possible mitigation approaches as well as principles of design, including adaptable design and design for failure. Students select the problems they want to solve and develop their projects. Students carry out exercises with relevant data sets, write critiques of key issues, and complete a focused term project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7395. Finite Element Modeling in Civil Engineering.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered. This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7396. Life Cycle Assessment of Infrastructure.**

This course provides analytical tools and methods for implementing principles of life cycle analysis for civil engineering infrastructure. Civil infrastructure systems are critical assets that are subjected to damage, service-life deterioration, and increasing maintenance and rehabilitation cost. Effective infrastructure management and principles of sustainable development can help to find an optimal compromise between economic growth and environmental protection for all stakeholders. Life cycle assessment (LCA) is an important decision support framework for estimating and assessing the environmental impacts attributable to the life cycle of civil infrastructure systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7399. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7599. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7699. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7999. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

The program incorporates components aimed at training students for research-oriented professions in both industry and academia, encompassing traditional Civil Engineering pathways, including Transportation Engineering. By fostering a symbiotic relationship between academia and industry, it will establish a model of a technology-enhanced Civil Engineering program.

**Application Requirements**

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 non-refundable application fee

or

- \$90 non-refundable application fee for applicants with international credentials
- exceptional applicants with a bachelor's degree in Civil Engineering or a closely related discipline, from a regionally accredited university will be considered for admission but will be required to complete an additional 24 semester credit hours of master's level courses when admitted.
- official transcripts from **each institution** where course credit was granted
- competitive GPA
- official GRE (general test) with a preferred score of 146 or higher for verbal and 160 or higher for quantitative.
- resume/CV outlining education, work experience, scholarships/grants, publications/presentations, other accomplishments
- statement of purpose outlining the applicant's personal history and goals that are relevant to obtaining this doctoral degree, explaining why the applicant wants to pursue this degree at TXST
- three letters of recommendation evaluating applicant's skill and potential in this degree program, preferably from academic sources
- interview for top ranked applicants who meet the minimum preferred credentials; interviewed by the Ph.D. program director and other committee members via online tools such as Zoom or MS Teams

**TOEFL, PTE, or IELTS Scores**

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

**Additional Information:**

The program will admit full-time and part-time Ph.D. students twice a year.

**Degree Requirements**

The Doctor of Philosophy (Ph.D.) degree with a major in Civil Engineering concentration Transportation Engineering requires 78 semester credit hours.

**Course Requirements**

Code	Title	Hours
<b>Required Courses</b>		
CE 7393	Artificial Intelligence Applications in Civil Engineering	3
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship	3
<b>Bachelor's Entry</b>		
Choose 24 hours from the following:		24
CE 5320	Water Quality Management	

CE 5331	Computational Methods in Geosystems	
CE 5340	Advanced Infrastructure Materials	
CE 5350	Highway Bridge Design	
CE 5360	Pavement Design	
CE 5370	Urban Stormwater Management	
CE 5390	Infrastructure Systems Analysis	
CE 5391	Advanced Mechanics of Materials	
CIS 5357		
CIS 5367		
CS 5316	Data Mining	
CS 5346	Advanced Artificial Intelligence	
CSM 5366	Soils in Construction	
CSM 5368	Sustainable Construction	
EE 5323	Digital Image Processing	
EE 5331	Machine Learning for Engineering Applications	
ENGR 5310	Probability, Random Variables, & Stochastic Processes for Engineers	
ENGR 5321	Environmental Chemistry	
ENGR 5322	Low Impact Development and Green Infrastructure	
ENGR 5323	Soil and Groundwater Remediation	
ENGR 5330	Advanced Soil Mechanics	
ENGR 5332	Earth retaining structures and slopes	
ENGR 5333	Fluid Flow in Porous Media	
ENGR 5334	Advanced Foundation Engineering	
ENGR 5341	Advanced Bituminous Materials	
ENGR 5351	Advanced Reinforced Concrete Members	
ENGR 5352	Advanced Prestressed Concrete	
ENGR 5361	Pavement Asset Management	
ENGR 5362	Advanced Traffic Engineering	
ENGR 5363	Road Infrastructure Safety	
ENGR 5384	Problems in Engineering	
GEO 5309	Geographical Analysis	
GEO 5336	Transportation Systems	
GEO 5352	Air Quality Management	
GEO 5367	Exploring Spatial Databases	
GEO 5393K	Advanced Web Cartography and Data Visualization	
GEO 5418	Geographic Information Systems I	
IE 5310	Advanced Statistical Design of Experiments for Engineers	
IE 5330	Advanced Quality Control and Reliability Engineering	
MATH 5315	Mathematical Statistics	
MATH 5345	Regression Analysis	
MATH 5376A	Design and Analysis of Experiments	
<b>Concentration</b>		
CE 7361	Pavement Asset Management	3
CE 7363	Road Infrastructure Safety	3
Choose 3 hours from the following:		3
CE 7322	Low Impact Development and Green Infrastructure	
CE 7330	Advanced Soil Mechanics	
CE 7340	Advanced Infrastructure Materials	
CE 7351	Advanced Reinforced Concrete Members	

CE 7394	Climate Change Impact and Adaptation in Civil Engineering	
CE 7395	Finite Element Modeling in Civil Engineering	
<b>Prescribed Electives</b>		
Choose 15 hours from the following:		15
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship	
MSEC 7395H	Environmental Chemistry	
CE 7320	Water Quality Management	
CE 7322	Low Impact Development and Green Infrastructure	
CE 7323	Soil and Groundwater Remediation	
CE 7330	Advanced Soil Mechanics	
CE 7332	Earth Retaining Structures and Slopes	
CE 7333	Fluid Flow in Porous Media	
CE 7334	Advanced Foundation Engineering	
CE 7336	Discrete Element Methods for Granular Materials	
CE 7340	Advanced Infrastructure Materials	
CE 7341	Advanced Bituminous Materials	
CE 7350	Highway Bridge Design	
CE 7351	Advanced Reinforced Concrete Members	
CE 7352	Advanced Prestressed Concrete	
CE 7353	Earthquake Engineering	
CE 7360	Pavement Design	
CE 7362	Advanced Traffic Engineering	
CE 7364	Non Destructive Testing and Forensic Studies	
CE 7366	Advanced Statistical and Econometric Modeling	
CE 7370	Urban Stormwater Management	
CE 7371	Remote Sensing in Hydrology	
CE 7372	Water, Climate, and Disasters	
CE 7390	Infrastructure Systems Analysis	
CE 7391	Advanced Mechanics of Materials	
CE 7394	Climate Change Impact and Adaptation in Civil Engineering	
CE 7395	Finite Element Modeling in Civil Engineering	
CE 7396	Life Cycle Assessment of Infrastructure	
CS 7312	Advanced Data Mining	
CS 7313	Advanced Machine Learning and Pattern Recognition	
CS 7323	Image Processing and Computer Vision	
GEO 7316	Remote Sensing and the Environment	
GEO 7368	Lidar and SfM Data Processing and Analysis	
MATH 7335	Statistics II: Linear Modeling	
MATH 7375C	Time Series Analysis	
MATH 7375D	Advanced linear Modeling	
<b>Dissertation</b>		
Choose a minimum of 24 hours from the following:		24
CE 7199	Dissertation	
CE 7299	Dissertation	
CE 7399	Dissertation	
CE 7599	Dissertation	
CE 7699	Dissertation	



## Qualifying Exam

The Qualifying (preliminary) Exam is required for doctoral students entering with a bachelor's degree. It usually consists of a written and/or oral exam in a given area of Civil Engineering and related field, administered by a committee consisting of at least three members, with at least two members from Civil Engineering. It will typically be taken after completion of 24 semester credit hours. The students will take the exam through the individual concentration of study. The qualifying exam is a 3-hour written exam that is offered at the end of each academic year or scheduled based on needs. A list of the general topics to be covered, along with a corresponding reading list, will be available to the students. This exam has any of three possible outcomes: 1-Pass, 2-Pass with recommendations regarding the student's program of work, 3-No Pass but one re-examination permitted.

## Candidacy Criteria

Students will advance to candidacy after they have completed all required and elective course work (except for dissertation credit hours), passed their qualifying exam (entering with a bachelor's degree), passed the comprehensive exam, and successfully defended their dissertation proposal. It is expected that the students will enter their candidacy three years after they are enrolled into the program.

When all requirements for admission to candidacy have been met, the doctoral program director forwards the Application for Advancement to Candidacy to the Dean of The Graduate College for review and approval. This application form is available on The Graduate College's website.

A minimum GPA of 3.0 on all coursework undertaken in the doctoral program is required for admission to candidacy. Grades below a B on any graduate coursework cannot be applied toward the doctoral degree. Incomplete grades must have been cleared before approval for advancement to candidacy can be granted. No more than 6 semester credit hours of dissertation research can be taken before advancing to candidacy. No credit will be applied toward a student's doctoral degree for coursework completed more than five years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at TXST as well as course credit transferred to TXST from other institutions.

All doctoral students must complete a dissertation that consists of original research and demonstrates mature scholarship and critical judgment in addition to familiarity with tools and methods in the chosen area. The dissertation project must adhere to the dissertation proposal and cover the topic approved by the student's dissertation committee.

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. At least 18 semester credit hours of dissertation research must be taken after having advanced to candidacy. If a student is receiving supervision on a dissertation during the summer or if the student is graduating in the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours.

## Comprehensive Exam

Each doctoral student must pass a comprehensive examination consisting of a written and an oral component. This should be done by the time the student has completed 36 semester credit hours of 7000-series courses if admitted with a master's degree, (or 60 if admitted with the bachelor's degree), identified the dissertation committee, passed the qualifying exam (entering with a bachelor's degree), and fulfilled the programming requirement. Any student who does not pass the comprehensive exam by the time 45 semester credit hours for students entering with a master's degree (or 69 for students entering with a bachelor's degree) have been accrued will be dismissed from the program. If the comprehensive exam is not passed, the student will have the option of taking a second and final comprehensive exam in the following long semester. Students will be dismissed from the program if they do not pass the comprehensive exam the second time.

The comprehensive examination consists of a written and an oral component. The oral component is administered by the dissertation committee, typically right after the dissertation proposal (see below). The exam consists of questions covering Civil Engineering knowledge from all the Civil Engineering courses in the student's concentration. To pass the oral exam, the student's dissertation advisor and a majority of the remaining members on the dissertation committee must agree that the student has passed. The student's dissertation committee members must indicate the result on the Doctoral Comprehensive Form, which is to be submitted to The Graduate College. This form is available on The Graduate College's website.

## Dissertation Proposal and Proposal Defense

Each Ph.D. student must prepare a written dissertation proposal and defend it orally. This should be done by the time the student has completed 36 semester credit hours and after identifying the dissertation committee, passing the comprehensive exam, and completing all required courses and Boot Camp. Any student who does not defend his/her dissertation proposal by the time 45 semester credit hours have been accrued will be dismissed from the program. If the proposal defense is not passed, the student will have the option of taking a second and final defense in the following long semester. Students will be dismissed from the program if they do not pass the proposal defense the second time.

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It must include at least a short introduction to the topic, an overview of the methodology to be used, a preliminary survey of the relevant literature, and preliminary results that demonstrate the feasibility of the project to be undertaken. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

The proposal defense entails a public presentation of the student's dissertation proposal followed immediately by a closed defense of the proposal attended only by the student and his/her dissertation committee. The dissertation proposal must be approved by the student's dissertation advisor and a majority of the remaining members on the dissertation committee. The student's dissertation committee members must indicate their approvals on the doctoral Dissertation Proposal Form as well as on the Defense of Dissertation Proposal Form. These forms are available on The Graduate College's website.

A final copy of the dissertation proposal, accompanied by the signed approval forms, must be turned in to the doctoral program director, who

will forward them to the dean of The Graduate College for review and final approval.

## Dissertation Research and Writing

All doctoral students must complete a dissertation that must represent an original contribution to scholarship based on independent investigation. The style, organization, and mechanics of the dissertation should follow the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*. Referencing guidelines should either follow the American Anthropological Association or the guidelines from an appropriate professional journal, as deemed acceptable by the dissertation committee.

## Dissertation Committee

The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the doctoral program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

The Dissertation Committee will be responsible for administering the Comprehensive Exam and the Dissertation Proposal Defense and will oversee the research and writing of the student's dissertation. The committee will consist of 4 members, including the student's dissertation committee chair who must be a regular graduate faculty member in the program, two other graduate faculty members from the School of Engineering, and one doctoral graduate faculty from another department at TXST or from outside TXST. All members must have a Ph.D. degree. The student's dissertation committee chair will chair the committee. The student, the dissertation committee chair, and the Dean of The Graduate College will approve the composition of the dissertation committee.

As per Graduate College policy, the Dissertation Committee Chair Assignment form and the Dissertation Committee Request form must be completed and approved by the Dean of The Graduate College to form the dissertation committee. Any changes to the dissertation committee must be submitted using the Dissertation Committee Chair/Committee Member Change Request form for approval of the dissertation committee chair, the doctoral program director, and the Dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense.

## Dissertation Committee Chair

The Ph.D. program director serves as initial advisor of each student accepted into the program. The director then works with the student and the faculty to identify possible dissertation advisors. By the time 18 semester credit hours have been accrued, each doctoral student is expected to have secured a qualified dissertation advisor who agrees to advise and mentor the student. The mentoring by the dissertation advisor should include providing regular feedback to students and supervising them throughout the Ph.D. program – specifically in the execution of the dissertation research – and helping them identify short- and long-term career goals. The Ph.D. Dissertation Committee Chair Form must be completed by the student and the dissertation committee chair and approved by Doctoral Program Director and Department Chair or School Director, and the Dean of The Graduate College. This form may be downloaded from The Graduate College's website. If a student has not identified a willing and qualified dissertation committee chair by the

time he/she has accrued 27 semester credit hours, the student will be dismissed from the program.

## Committee Changes

Any change to the dissertation committee must be submitted using the Dissertation Advisor/Committee Member Change Request Form for approval by the dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be downloaded from The Graduate College's website. The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the Ph.D. program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

## Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least one month before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the dissertation is defensible, and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of their dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense in the following long semester. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's website. The student must submit his/her dissertation to The Graduate College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Students must pass the dissertation defense by the time 90 semester credit hours have been accrued. The doctoral program will review each student annually to ascertain his/her progress towards the degree and will consult the student's dissertation advisor and dissertation committee on this matter as needed. Any student who does not pass the dissertation defense by the time 90 semester credit hours have been accrued will be dismissed from the program.

## Approval and Submission of the Dissertation

Following approval and signing of the Thesis/Dissertation Committee Approval form by the members of the dissertation committee, the student must submit one copy of the dissertation to the office of The Graduate College for final approval. Specific guidelines for approval and submission of the dissertation can be obtained from the office of The Graduate College. Dissertations must be submitted in electronic format.

Doctoral level courses in Civil Engineering: CE (p. 3034)

## Courses Offered

### Civil Engineering, (CE)

#### CE 7199. Dissertation.

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the PhD research advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CE 7299. Dissertation.

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CE 7320. Water Quality Management.

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CE 7322. Low Impact Development and Green Infrastructure.

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development including water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CE 7323. Soil and Groundwater Remediation.

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. The significance of subsurface contamination and importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CE 7330. Advanced Soil Mechanics.

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### CE 7332. Earth Retaining Structures and Slopes.

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CE 7333. Fluid Flow in Porous Media.

In this course, the fundamental theory of transport and fluid flow in heterogeneous porous media will be presented. First, the equations that govern transport and fluid flow processes will be derived. Both analytical and numerical methods will be used to solve these equations in order to characterize and predict flow fields in porous media. These skills will then be applied to practical problems that involve porous media such as soils, rocks, biological tissues, concrete, etc. The knowledge gained from studies of fluid flow in natural porous materials will be employed to design/optimize systems with engineered porous media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7336. Discrete Element Methods for Granular Materials.**

This course is an introduction to discrete element methods (DEM) as applicable to a range of problems in physics and engineering that deal with granular materials. It brings together various methods and skills for particle-scale or discrete-element numerical simulation of granular media. It covers a broad range of topics from basic concepts and methods towards more advanced aspects and technical details applicable to the current research on granular materials. This course particularly focuses on the transient motion of hard and soft particles encountered in geotechnical, geomechanical, geomaterial, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, and others. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course. Students will be asked to solve an infrastructure material related problem using advanced analytical and simulation tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics include the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7353. Earthquake Engineering.**

This course covers the theories, principles, and concepts of earthquake waves and wave equations, structural dynamics, and the effect of earthquakes on structures, including modal analysis and linear and nonlinear analyses of single- and multi-degree of freedom systems. Additionally, different earthquake-resistant design principles (e.g., force-based, displacement-based, and energy-based) will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7361. Pavement Asset Management.**

This course discusses applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. Topics include methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7362. Advanced Traffic Engineering.**

This course evaluates components of transportation systems by applying principles of transportation engineering, geometric design of highways, and study of warrants for traffic control devices. Additional topics include analysis of traffic flow theory and characteristics, levels of service, and capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7363. Road Infrastructure Safety.**

This course provides an introduction to road infrastructure safety. Topics include fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and design based on safe system approach (SSA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7364. Non Destructive Testing and Forensic Studies.**

This course focuses on applications of non-destructive testing (NDT) technologies in pavement infrastructure forensic studies. The course covers typical modern NDT devices employed in transportation testing and evaluation including ground penetrating radar, 3-D laser scanning, falling weight deflectometer, traffic-speed deflectometer, high-speed inertial profiler, and impact echo. The course will provide in-depth content on the principles of these NDT technologies. Based on these technologies, a series of real-world projects will be comprehensively discussed as forensic study cases. The objective is to develop engineering decision making skills in effectively identifying the root-cause of distresses or failures based on the NDT test results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7366. Advanced Statistical and Econometric Modeling.**

This course focuses on a comprehensive understanding of statistical and econometric analysis techniques, emphasizing their application in civil engineering and scientific data analysis. It covers model-estimation methods that extend beyond traditional statistics courses, providing students with a broad range of data-analysis applications while discussing underlying theories and limitations for proper comprehension and application. Prerequisite: CE 7363 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship

**Grade Mode:** Standard Letter

**CE 7370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7371. Remote Sensing in Hydrology.**

This course focuses on the basics of remote sensing, data collection, processing, and analysis for a wide range of applications for hydrology and water resources at different scales. Topics include the hydrologic cycle, relevant sensor types, the electromagnetic spectrum, active/passive microwave remote sensing (precipitation, soil moisture, snow, vegetation water content, etc.), thermal sensing of evapotranspiration, and the gravity method of groundwater. This course also covers an introduction to data assimilation and practical approaches with remote sensing data for water resources management including floods and drought monitoring.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7372. Water, Climate, and Disasters.**

This course introduces the interactions between water and climate systems and their relationship with occurrences, magnitude, and frequencies of natural disasters with a focus on climate impacts on hydrology, water resources, and extreme events (e.g., floods, drought, heat waves, landslides, and wildfires). This course covers disaster risk management and adaptation strategies for a sustainable and resilient natural environment and human society against weather and climate extreme disasters.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CE 7393. Artificial Intelligence Applications in Civil Engineering.**

This course explores the interface between artificial intelligence (AI) and civil engineering. The course covers foundational topics including civil engineering basics, AI fundamentals, matrix algebra, and data preprocessing. The curriculum also includes specific AI methodologies, like supervised, unsupervised, deep learning, and explainable AI, in addition to natural language processing. It highlights emerging technologies in civil engineering and the ethical and social implications of AI in the sector.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7394. Climate Change Impact and Adaptation in Civil Engineering.**

This course provides an introduction to global and regional climate change processes, drivers, and impacts. Case studies are presented for the regional impacts of climate change on extreme weather, water availability, and energy and transportation systems. Students are introduced to a variety of natural hazards and possible mitigation approaches as well as principles of design, including adaptable design and design for failure. Students select the problems they want to solve and develop their projects. Students carry out exercises with relevant data sets, write critiques of key issues, and complete a focused term project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7395. Finite Element Modeling in Civil Engineering.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered. This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7396. Life Cycle Assessment of Infrastructure.**

This course provides analytical tools and methods for implementing principles of life cycle analysis for civil engineering infrastructure. Civil infrastructure systems are critical assets that are subjected to damage, service-life deterioration, and increasing maintenance and rehabilitation cost. Effective infrastructure management and principles of sustainable development can help to find an optimal compromise between economic growth and environmental protection for all stakeholders. Life cycle assessment (LCA) is an important decision support framework for estimating and assessing the environmental impacts attributable to the life cycle of civil infrastructure systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7399. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7599. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7699. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7999. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

The program incorporates components aimed at training students for research-oriented professions in both industry and academia, encompassing traditional Civil Engineering pathways, including Transportation Engineering. By fostering a symbiotic relationship between academia and industry, it will establish a model of a technology-enhanced Civil Engineering program.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 non-refundable application fee

- or
- \$90 non-refundable application fee for applicants with international credentials
  - completed master's degree in Civil Engineering or a closely related discipline, from an accredited college or university
  - official transcripts from **each institution** where course credit was granted
  - competitive GPA
  - official GRE (general test) with a preferred score of 146 or higher for verbal and 160 or higher for quantitative.
  - resume/CV outlining education, work experience, scholarships/ grants, publications/presentations, other accomplishments
  - statement of purpose outlining the applicant's personal history and goals that are relevant to obtaining this doctoral degree, explaining why the applicant wants to pursue this degree at TXST
  - three letters of recommendation evaluating applicant's skill and potential in this degree program, preferably from academic sources
  - interview for top ranked applicants who meet the minimum preferred credentials; interviewed by the Ph.D. program director and other committee members via online tools such as Zoom or MS Teams

TOEFL, PTE, or IELTS Scores

- Non-native English speakers who do not qualify for an English proficiency waiver:
- official TOEFL iBT scores required with a 78 overall
  - official PTE scores required with a 52 overall
  - official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
  - official Duolingo Scores required with a 110 overall
  - official TOEFL Essentials scores required with an 8.5 overall

Additional Information:

The program will admit full-time and part-time Ph.D. students twice a year.

Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Civil Engineering concentration Transportation Engineering requires 54 semester credit hours.

Course Requirements

Code	Title	Hours
Required Courses		
CE 7393	Artificial Intelligence Applications in Civil Engineering	3
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship	3
Concentration		
CE 7361	Pavement Asset Management	3
CE 7363	Road Infrastructure Safety	3
Choose 3 hours from the following:		3
CE 7322	Low Impact Development and Green Infrastructure	
CE 7330	Advanced Soil Mechanics	

CE 7340	Advanced Infrastructure Materials
CE 7351	Advanced Reinforced Concrete Members
CE 7394	Climate Change Impact and Adaptation in Civil Engineering
CE 7395	Finite Element Modeling in Civil Engineering
Prescribed Electives	
Choose 15 hours from the following:	
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship
MSEC 7395H	Environmental Chemistry
CE 7320	Water Quality Management
CE 7322	Low Impact Development and Green Infrastructure
CE 7323	Soil and Groundwater Remediation
CE 7330	Advanced Soil Mechanics
CE 7332	Earth Retaining Structures and Slopes
CE 7333	Fluid Flow in Porous Media
CE 7334	Advanced Foundation Engineering
CE 7336	Discrete Element Methods for Granular Materials
CE 7340	Advanced Infrastructure Materials
CE 7341	Advanced Bituminous Materials
CE 7350	Highway Bridge Design
CE 7351	Advanced Reinforced Concrete Members
CE 7352	Advanced Prestressed Concrete
CE 7353	Earthquake Engineering
CE 7360	Pavement Design
CE 7362	Advanced Traffic Engineering
CE 7364	Non Destructive Testing and Forensic Studies
CE 7366	Advanced Statistical and Econometric Modeling
CE 7370	Urban Stormwater Management
CE 7371	Remote Sensing in Hydrology
CE 7372	Water, Climate, and Disasters
CE 7390	Infrastructure Systems Analysis
CE 7391	Advanced Mechanics of Materials
CE 7394	Climate Change Impact and Adaptation in Civil Engineering
CE 7395	Finite Element Modeling in Civil Engineering
CE 7396	Life Cycle Assessment of Infrastructure
CS 7312	Advanced Data Mining
CS 7313	Advanced Machine Learning and Pattern Recognition
CS 7323	Image Processing and Computer Vision
GEO 7316	Remote Sensing and the Environment
GEO 7368	Lidar and SfM Data Processing and Analysis
MATH 7335	Statistics II: Linear Modeling
MATH 7375C	Time Series Analysis
MATH 7375D	Advanced linear Modeling
Dissertation	
Choose a minimum of 24 hours from the following:	
CE 7199	Dissertation
CE 7299	Dissertation
CE 7399	Dissertation
CE 7599	Dissertation
CE 7699	Dissertation

## Candidacy Criteria

Students will advance to candidacy after they have completed all required and elective course work (except for dissertation credit hours), passed their qualifying exam (entering with a bachelor's degree), passed the comprehensive exam, and successfully defended their dissertation proposal. It is expected that the students will enter their candidacy three years after they are enrolled into the program.

When all requirements for admission to candidacy have been met, the doctoral program director forwards the Application for Advancement to Candidacy to the Dean of The Graduate College for review and approval. This application form is available on The Graduate College's website.

A minimum GPA of 3.0 on all coursework undertaken in the doctoral program is required for admission to candidacy. Grades below a B on any graduate coursework cannot be applied toward the doctoral degree. Incomplete grades must have been cleared before approval for advancement to candidacy can be granted. No more than 6 semester credit hours of dissertation research can be taken before advancing to candidacy. No credit will be applied toward a student's doctoral degree for coursework completed more than five years before the date on which the student is admitted to candidacy. This time limit applies to course credit earned at TXST as well as course credit transferred to TXST from other institutions.

All doctoral students must complete a dissertation that consists of original research and demonstrates mature scholarship and critical judgment in addition to familiarity with tools and methods in the chosen area. The dissertation project must adhere to the dissertation proposal and cover the topic approved by the student's dissertation committee.

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. At least 18 semester credit hours of dissertation research must be taken after having advanced to candidacy. If a student is receiving supervision on a dissertation during the summer or if the student is graduating in the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours.

## Comprehensive Exam

Each doctoral student must pass a comprehensive examination consisting of a written and an oral component. This should be done by the time the student has completed 36 semester credit hours of 7000-series courses if admitted with a master's degree, (or 60 if admitted with the bachelor's degree), identified the dissertation committee, passed the qualifying exam (entering with a bachelor's degree), and fulfilled the programming requirement. Any student who does not pass the comprehensive exam by the time 45 semester credit hours for students entering with a master's degree (or 69 for students entering with a bachelor's degree) have been accrued will be dismissed from the program. If the comprehensive exam is not passed, the student will have the option of taking a second and final comprehensive exam in the following long semester. Students will be dismissed from the program if they do not pass the comprehensive exam the second time.

The comprehensive examination consists of a written and an oral component. The oral component is administered by the dissertation committee, typically right after the dissertation proposal (see below). The exam consists of questions covering Civil Engineering knowledge from all the Civil Engineering courses in the student's concentration. To pass the oral exam, the student's dissertation advisor and a majority of the remaining members on the dissertation committee must agree that the student has passed. The student's dissertation committee members must indicate the result on the Doctoral Comprehensive Form, which is to be submitted to The Graduate College. This form is available on The Graduate College's website.

## Dissertation Proposal and Proposal Defense

Each Ph.D. student must prepare a written dissertation proposal and defend it orally. This should be done by the time the student has completed 36 semester credit hours and after identifying the dissertation committee, passing the comprehensive exam, and completing all required courses and Boot Camp. Any student who does not defend his/her dissertation proposal by the time 45 semester credit hours have been accrued will be dismissed from the program. If the proposal defense is not passed, the student will have the option of taking a second and final defense in the following long semester. Students will be dismissed from the program if they do not pass the proposal defense the second time.

The proposal must outline the substance and scope of the planned dissertation research and explain its merits. It must include at least a short introduction to the topic, an overview of the methodology to be used, a preliminary survey of the relevant literature, and preliminary results that demonstrate the feasibility of the project to be undertaken. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research.

The proposal defense entails a public presentation of the student's dissertation proposal followed immediately by a closed defense of the proposal attended only by the student and his/her dissertation committee. The dissertation proposal must be approved by the student's dissertation advisor and a majority of the remaining members on the dissertation committee. The student's dissertation committee members must indicate their approvals on the doctoral Dissertation Proposal Form as well as on the Defense of Dissertation Proposal Form. These forms are available on The Graduate College's website.

A final copy of the dissertation proposal, accompanied by the signed approval forms, must be turned in to the doctoral program director, who will forward them to the dean of The Graduate College for review and final approval.

## Dissertation Research and Writing

All doctoral students must complete a dissertation that must represent an original contribution to scholarship based on independent investigation. The style, organization, and mechanics of the dissertation should follow the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*. Referencing guidelines should either follow the American Anthropological Association or the guidelines from an appropriate professional journal, as deemed acceptable by the dissertation committee.

## Dissertation Committee

The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation

committee chair, a student's new dissertation committee chair, and the doctoral program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

The Dissertation Committee will be responsible for administering the Comprehensive Exam and the Dissertation Proposal Defense and will oversee the research and writing of the student's dissertation. The committee will consist of 4 members, including the student's dissertation committee chair who must be a regular graduate faculty member in the program, two other graduate faculty members from the School of Engineering, and one doctoral graduate faculty from another department at TXST or from outside TXST. All members must have a Ph.D. degree. The student's dissertation committee chair will chair the committee. The student, the dissertation committee chair, and the Dean of The Graduate College will approve the composition of the dissertation committee.

As per Graduate College policy, the Dissertation Committee Chair Assignment form and the Dissertation Committee Request form must be completed and approved by the Dean of The Graduate College to form the dissertation committee. Any changes to the dissertation committee must be submitted using the Dissertation Committee Chair/Committee Member Change Request form for approval of the dissertation committee chair, the doctoral program director, and the Dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense.

## Dissertation Committee Chair

The Ph.D. program director serves as initial advisor of each student accepted into the program. The director then works with the student and the faculty to identify possible dissertation advisors. By the time 18 semester credit hours have been accrued, each doctoral student is expected to have secured a qualified dissertation advisor who agrees to advise and mentor the student. The mentoring by the dissertation advisor should include providing regular feedback to students and supervising them throughout the Ph.D. program – specifically in the execution of the dissertation research – and helping them identify short- and long-term career goals. The Ph.D. Dissertation Committee Chair Form must be completed by the student and the dissertation committee chair and approved by Doctoral Program Director and Department Chair or School Director, and the Dean of The Graduate College. This form may be downloaded from The Graduate College's website. If a student has not identified a willing and qualified dissertation committee chair by the time he/she has accrued 27 semester credit hours, the student will be dismissed from the program.

## Committee Changes

Any change to the dissertation committee must be submitted using the Dissertation Advisor/Committee Member Change Request Form for approval by the dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense. The "Dissertation Advisor/Committee Member Change Request form" may be downloaded from The Graduate College's website. The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the Ph.D. program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long

semester to stay on track in the program. Failure to do so will result in dismissal from the program.

## Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least one month before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the dissertation is defensible, and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of their dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense in the following long semester. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's website. The student must submit his/her dissertation to The Graduate College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Students must pass the dissertation defense by the time 90 semester credit hours have been accrued. The doctoral program will review each student annually to ascertain his/her progress towards the degree and will consult the student's dissertation advisor and dissertation committee on this matter as needed. Any student who does not pass the dissertation defense by the time 90 semester credit hours have been accrued will be dismissed from the program.

## Approval and Submission of the Dissertation

Following approval and signing of the Thesis/Dissertation Committee Approval form by the members of the dissertation committee, the student must submit one copy of the dissertation to the office of The Graduate College for final approval. Specific guidelines for approval and submission of the dissertation can be obtained from the office of The Graduate College. Dissertations must be submitted in electronic format.

Doctoral level courses in Civil Engineering: CE (p. 3041)

## Courses Offered

### Civil Engineering, (CE)

#### **CE 7199. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the PhD research advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **CE 7299. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **CE 7320. Water Quality Management.**

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CE 7322. Low Impact Development and Green Infrastructure.**

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development including water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CE 7323. Soil and Groundwater Remediation.**

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. The significance of subsurface contamination and importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CE 7330. Advanced Soil Mechanics.**

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

#### **CE 7332. Earth Retaining Structures and Slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CE 7333. Fluid Flow in Porous Media.**

In this course, the fundamental theory of transport and fluid flow in heterogeneous porous media will be presented. First, the equations that govern transport and fluid flow processes will be derived. Both analytical and numerical methods will be used to solve these equations in order to characterize and predict flow fields in porous media. These skills will then be applied to practical problems that involve porous media such as soils, rocks, biological tissues, concrete, etc. The knowledge gained from studies of fluid flow in natural porous materials will be employed to design/optimize systems with engineered porous media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **CE 7334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CE 7336. Discrete Element Methods for Granular Materials.**

This course is an introduction to discrete element methods (DEM) as applicable to a range of problems in physics and engineering that deal with granular materials. It brings together various methods and skills for particle-scale or discrete-element numerical simulation of granular media. It covers a broad range of topics from basic concepts and methods towards more advanced aspects and technical details applicable to the current research on granular materials. This course particularly focuses on the transient motion of hard and soft particles encountered in geotechnical, geomechanical, geomaterial, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, and others. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course. Students will be asked to solve an infrastructure material related problem using advanced analytical and simulation tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics include the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7353. Earthquake Engineering.**

This course covers the theories, principles, and concepts of earthquake waves and wave equations, structural dynamics, and the effect of earthquakes on structures, including modal analysis and linear and nonlinear analyses of single- and multi-degree of freedom systems. Additionally, different earthquake-resistant design principles (e.g., force-based, displacement-based, and energy-based) will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7361. Pavement Asset Management.**

This course discusses applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. Topics include methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7362. Advanced Traffic Engineering.**

This course evaluates components of transportation systems by applying principles of transportation engineering, geometric design of highways, and study of warrants for traffic control devices. Additional topics include analysis of traffic flow theory and characteristics, levels of service, and capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7363. Road Infrastructure Safety.**

This course provides an introduction to road infrastructure safety. Topics include fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and design based on safe system approach (SSA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7364. Non Destructive Testing and Forensic Studies.**

This course focuses on applications of non-destructive testing (NDT) technologies in pavement infrastructure forensic studies. The course covers typical modern NDT devices employed in transportation testing and evaluation including ground penetrating radar, 3-D laser scanning, falling weight deflectometer, traffic-speed deflectometer, high-speed inertial profiler, and impact echo. The course will provide in-depth content on the principles of these NDT technologies. Based on these technologies, a series of real-world projects will be comprehensively discussed as forensic study cases. The objective is to develop engineering decision making skills in effectively identifying the root-course of distresses or failures based on the NDT test results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7366. Advanced Statistical and Econometric Modeling.**

This course focuses on a comprehensive understanding of statistical and econometric analysis techniques, emphasizing their application in civil engineering and scientific data analysis. It covers model-estimation methods that extend beyond traditional statistics courses, providing students with a broad range of data-analysis applications while discussing underlying theories and limitations for proper comprehension and application. Prerequisite: CE 7363 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship

**Grade Mode:** Standard Letter

**CE 7370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7371. Remote Sensing in Hydrology.**

This course focuses on the basics of remote sensing, data collection, processing, and analysis for a wide range of applications for hydrology and water resources at different scales. Topics include the hydrologic cycle, relevant sensor types, the electromagnetic spectrum, active/passive microwave remote sensing (precipitation, soil moisture, snow, vegetation water content, etc.), thermal sensing of evapotranspiration, and the gravity method of groundwater. This course also covers an introduction to data assimilation and practical approaches with remote sensing data for water resources management including floods and drought monitoring.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7372. Water, Climate, and Disasters.**

This course introduces the interactions between water and climate systems and their relationship with occurrences, magnitude, and frequencies of natural disasters with a focus on climate impacts on hydrology, water resources, and extreme events (e.g., floods, drought, heat waves, landslides, and wildfires). This course covers disaster risk management and adaptation strategies for a sustainable and resilient natural environment and human society against weather and climate extreme disasters.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7393. Artificial Intelligence Applications in Civil Engineering.**

This course explores the interface between artificial intelligence (AI) and civil engineering. The course covers foundational topics including civil engineering basics, AI fundamentals, matrix algebra, and data preprocessing. The curriculum also includes specific AI methodologies, like supervised, unsupervised, deep learning, and explainable AI, in addition to natural language processing. It highlights emerging technologies in civil engineering and the ethical and social implications of AI in the sector.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7394. Climate Change Impact and Adaptation in Civil Engineering.**

This course provides an introduction to global and regional climate change processes, drivers, and impacts. Case studies are presented for the regional impacts of climate change on extreme weather, water availability, and energy and transportation systems. Students are introduced to a variety of natural hazards and possible mitigation approaches as well as principles of design, including adaptable design and design for failure. Students select the problems they want to solve and develop their projects. Students carry out exercises with relevant data sets, write critiques of key issues, and complete a focused term project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7395. Finite Element Modeling in Civil Engineering.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered.

This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7396. Life Cycle Assessment of Infrastructure.**

This course provides analytical tools and methods for implementing principles of life cycle analysis for civil engineering infrastructure. Civil infrastructure systems are critical assets that are subjected to damage, service-life deterioration, and increasing maintenance and rehabilitation cost. Effective infrastructure management and principles of sustainable development can help to find an optimal compromise between economic growth and environmental protection for all stakeholders. Life cycle assessment (LCA) is an important decision support framework for estimating and assessing the environmental impacts attributable to the life cycle of civil infrastructure systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7399. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7599. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7699. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7999. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Engineering provides a practical, industry-driven focus via a long-term, targeted technical project or thesis related to real-world engineering applications. These projects will be conducted in partnership with local industries and may involve off-campus collaborations. The degree requires a large-scale project or thesis because the ability to solve problems, innovate and make immediate contributions to industry are best developed by having students confront a substantial, open-ended problem; perform detailed research on the problem; develop various solutions; choose and implement the best solution; validate their choice; and effectively communicate the process to professional colleagues, executives, and customers.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree engineering, computer science, physics, technology, or a closely related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning and writing sections. Texas State University students are exempt from this requirement
- resume/CV detailing prior work experience, research experience, awards, scholarships, and other related qualifications
- statement of purpose (two pages) conveying research interests, plans for graduate study, and professional aspirations
- two letters of recommendation from non-related individuals familiar with the student's scholarly work and/or relevant work experience

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### Additional Information

Non-credit (leveling) course work may be required prior to admission into the program if the student lacks sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Engineering concentration in Civil Engineering requires 31 semester credit hours, including a project.

Non-credit (leveling) course work may be required prior to admission into the program if you lack sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

All students will have a faculty advisor and a graduate committee composed of a minimum of three graduate faculty members (including the faculty advisor). The faculty advisor will provide technical direction

for the student's project, and the graduate committee will be responsible for approving the project proposal, receiving project progress reports, and approving the final project presentation and written report. The oral project presentation will serve as the comprehensive examination.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENGR 5100	Seminar in Engineering	1
ENGR 5310	Probability, Random Variables, & Stochastic Processes for Engineers	3
CE 5331	Computational Methods in Geosystems	3
CE 5390	Infrastructure Systems Analysis	3
<b>Engineering Electives</b>		
Choose 9-15 hours from the following:		9-15
CE 5320	Water Quality Management	
CE 5340	Advanced Infrastructure Materials	
CE 5350	Highway Bridge Design	
CE 5360	Pavement Design	
CE 5370	Urban Stormwater Management	
CE 5391	Advanced Mechanics of Materials	
EE 5320	Advanced Computer Architecture and Arithmetic	
EE 5323	Digital Image Processing	
EE 5330	Embedded and Real-Time Computing	
EE 5331	Machine Learning for Engineering Applications	
EE 5350	Advanced Electronic Circuit Design	
EE 5355	Electronic Materials and Devices	
EE 5357	Power Systems for Engineering	
EE 5360	Thin Film Technology	
EE 5361	Nanofabrication Technology for Semiconductor Device Processing	
EE 5372	Advanced Networking	
EE 5374	Introduction to Wireless Communication	
EE 5377	Statistical Signal Processing	
EE 5380	Advanced Electric Machines	
EE 5381	Advanced Sustainable Energy & Storage	
EE 5382	Advanced Power Systems Analysis	
EE 5398A	Antenna Theory, Design and Applications	
EE 5398B	Electronic Materials and Beyond for Sustainable Energy	
EE 5398C	Multimedia Signal Processing	
EE 5398D	Electroceramics	
ENGR 5321	Environmental Chemistry	
ENGR 5322	Low Impact Development and Green Infrastructure	
ENGR 5323	Soil and Groundwater Remediation	
ENGR 5330	Advanced Soil Mechanics	
ENGR 5332	Earth retaining structures and slopes	
ENGR 5333	Fluid Flow in Porous Media	
ENGR 5334	Advanced Foundation Engineering	
ENGR 5341	Advanced Bituminous Materials	
ENGR 5351	Advanced Reinforced Concrete Members	
ENGR 5352	Advanced Prestressed Concrete	
ENGR 5361	Pavement Asset Management	

ENGR 5362	Advanced Traffic Engineering
ENGR 5363	Road Infrastructure Safety
ENGR 5384	Problems in Engineering
IE 5310	Advanced Statistical Design of Experiments for Engineers
IE 5320	Modeling and Analysis of Manufacturing Systems
IE 5330	Advanced Quality Control and Reliability Engineering
IE 5340	Applied Deterministic Operations Research for Engineers
IE 5343	Non-Linear Optimization Techniques for Engineers
IE 5345	Advanced Optimization
IE 5347	Advanced Heuristic Optimization
IE 5397	System Thinking and Analysis
IE 5398A	Healthcare Systems Engineering
IE 5398B	Response Surface Methodologies
IE 5398C	Data-Intensive Analysis and Simulation for Engineers
ME 5310	Continuum Mechanics
ME 5312	Stress Analysis of Composite Materials
MFGE 5315	Energy and Thermofluids Engineering
MFGE 5316	Advanced Computer Aided Design and Manufacturing
MFGE 5318	Additive Manufacturing
MFGE 5320	Polymer Nanocomposites
MFGE 5326	Advanced Robotics in Manufacturing Automation
MFGE 5330	Multiscale Manufacturing
<b>Multidisciplinary Electives</b>	
Choose up to 6 hours from the following: <sup>1</sup>	
<b>Business Administration</b>	
BLAW 5333	Legal Issues of Sustainability and Responsibility
ISAN 5357	Computing for Data Analytics
ISAN 5358	Agile Project Management For Business Professionals
ISAN 5370	Enterprise Resource Planning and Business Intelligence
MGT 5311	Process Improvement Management in Organizations
MGT 5315	New Venture Management
MGT 5321	Supply Chain Management
MGT 5390	Managerial Data Analysis
ANLY 5334	Statistical Methods for Business
ANLY 5335	Forecasting and Simulation
<b>Technology</b>	
TECH 5315	Engineering Economic Analysis
TECH 5382	Industrial Ecology and Sustainability Engineering
TECH 5390	Research in Technology
<b>Computer Science</b>	
CS 5306	Advanced Operating Systems
CS 5346	Advanced Artificial Intelligence
<b>Geography</b>	
GEO 5312	Managing Urbanization
GEO 5313	Environmental Studies

GEO 5334	Applied Water Resources
GEO 5336	Transportation Systems
GEO 5351	Regional Waste Management
GEO 5352	Air Quality Management
GEO 5393D	Water Resource Planning
<b>Mathematics</b>	
MATH 5315	Mathematical Statistics
MATH 5340	Scientific Computation
MATH 5345	Regression Analysis
MATH 5376A	Design and Analysis of Experiments
MATH 5376B	Analysis of Variance
MATH 5376D	Statistical Applications in Genetics and Bioinformatics
MATH 5388	Discrete Mathematics
<b>Physics</b>	
PHYS 5322	Semiconductor Device Microfabrication
PHYS 5324	Thin Film Synthesis and Characterization Laboratory
PHYS 5327	Semiconductor Device Physics
PHYS 5332	Materials Characterization
<b>Materials Science, Engineering and Commercialization</b>	
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship
MSEC 7340	Biomaterials and Biosensors
MSEC 7395H	Environmental Chemistry
<b>Project</b>	
ENGR 5398A	Project
Choose a minimum of 3 hours from the following:	
ENGR 5198B	Project
ENGR 5298B	Project
ENGR 5398B	Project
ENGR 5598B	Project
ENGR 5998B	Project
<b>Total Hours</b>	<b>31</b>

<sup>1</sup> Choose up to 6 hours from the Multidisciplinary Electives above to make the total hours selected from Engineering Electives and from Multidisciplinary Electives to equal 15 hours.

## Comprehensive Examination Requirement

An oral project defense is required. This oral defense will serve as the comprehensive examination requirement. If the committee is not satisfied with a graduate student's oral defense, they specify all deficiencies the student must resolve. The committee will not sign the Master's Comprehensive Examination Report Form until all specified deficiencies have been resolved. Should the committee decide to hold a second oral defense, the chair of the committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.



If a student elects to follow the project option for the degree, a committee to direct the project activity will be established. The project outcomes and deliverables will be specified by the project committee, and will include a written project report (similar in depth to a research thesis). In addition to demonstrating the student's capability for topical research and/or technical development, the project must also demonstrate the student's capability for independent thought and ability to completely resolve an unstructured technical problem. The structure and format of the project report will be specified by the project committee and may leverage portions of the Graduate College's Guide to Preparing and Submitting a Thesis or Dissertation. However, the project report will not be submitted to The Graduate College for publication and dissemination.

## Project Proposal

The student must submit an official Master's Project Proposal form to their project committee. The required project proposal form may be obtained from the program's website <http://www.engineering.txstate.edu/Programs/Graduate.html>. After signing the form and obtaining committee members' signatures and graduate advisor's signature the student must submit the project proposal form with one copy of the proposal attached to the Director of the Ingram School of Engineering for approval before proceeding with project activity. If the project activity involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to the Ingram School. If the project activity involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended the project proposal form be submitted to the Director of the Ingram School by the end of the student's enrollment in ENGR 5398A.

## Project Committee

The project committee must be composed of a minimum of three approved graduate faculty members. The chair of the project committee and at least one other committee member must be Ingram School faculty. The committee may contain additional members from industry sponsors or agencies, at the request of the sponsor or the preference of the committee chair.

## Project Enrollment and Credit

The completion of a minimum of six hours of project enrollment is required. Students will enroll in ENGR 5398A for initial project activity and ENGR 5x98B for subsequent project activity. Preliminary discussions regarding the selection of a topic and assignment to a project supervisor are required prior to enrollment for ENGR 5398A.

**A student will be required to enroll in and pay the fee for at least one hour of the project course during any term in which the student will receive project supervision or guidance and/or in which the student is using university resources.** Failure to register for the appropriate project course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in ENGR 5398A, the student will continue to enroll in ENGR 5x98B until the project is successfully completed, as specified by the project committee. In the rare case when a student has not previously enrolled in ENGR 5398A and plans to work on and complete the project in one term, the student may enroll concurrently in both 5398A and 5398B. The only grades assigned for project courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a project course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the project is completed. The minimum number of hours of project credit ("CR") will be awarded only

after the project report is approved by the project committee, and has been submitted to and approved by the Ingram School of Engineering. A student who has selected the project option must be registered for the appropriate project course during the term or Summer I (during summer the project course runs ten weeks for both sessions) in which the degree will be conferred.

## Project Deadlines and Approval Process

Project deadlines are the same as the thesis deadlines posted at the following web page: [http://www.gradcollege.txstate.edu/Thes-Diss\\_Info/T-D\\_Deadlines.html](http://www.gradcollege.txstate.edu/Thes-Diss_Info/T-D_Deadlines.html). The completed project report must be submitted to the chair of the project committee no later than 41 days before the date of the commencement at which the degree is to be conferred.

The following must be submitted to the office of Ingram School no later than 24 days, not counting weekends or holidays, before the date of commencement at which the degree is to be conferred (see The Graduate College webpage for specific deadlines):

1. The Project Committee Approval form bearing original signatures of the student and all committee members.
2. One (1) copy of the project report in final form, approved by all committee members, on standard paper (Hard-copy Submission Option) or PDF of the project report in final form, approved by all committee members, submitted to the Ingram School of Engineering.

After the Director of the Ingram School approves the project report, the student may take personal copies to the Alkek Library and pay the binding fee for personal use.

Master's level courses in Engineering: ENGR (p.       ), CE (p.       ), EE (p.       ), IE (p.       ), MFGE (p.       )

## Courses Offered Engineering (ENGR)

### ENGR 5100. Seminar in Engineering.

Graduate students attend seminars by invited speakers presenting relevant topics in academia and industry. The schedule of speakers will be developed each semester with strict faculty supervision. This course may only be taken for credit one time.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### ENGR 5101. Academic Instruction for Engineering Graduate Assistants.

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENGR 5105. Engineering Internship.**

This course is a faculty-supervised, experiential, work-integrated learning course intended to help the student acquire engineering curriculum-related industrial experience and hence successfully make the transition into the workforce. Course cannot be counted toward graduation. Course may be repeated once. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5198B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5201. Academic Instruction for Engineering Graduate Assistants.**

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENGR 5298B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5310. Probability, Random Variables, & Stochastic Processes for Engineers.**

This course develops theory underlying analysis and design of systems. Fundamental distributional concepts, applications of statistical methods, and theory of stochastic processes are introduced to create a mathematical foundation for engineering analysis of physical systems involving randomness. Applications to engineering topics are taught, including estimation, control, and systems theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5321. Environmental Chemistry.**

This course introduces environmental chemistry, emphasizing aquatic resources and engineering. It also examines fundamental geochemistry and atmospheric chemistry principles relating to pollutant impacts on aquatic ecosystems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5322. Low Impact Development and Green Infrastructure.**

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development and water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5323. Soil and Groundwater Remediation.**

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. Significance of subsurface contamination and the importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5330. Advanced Soil Mechanics.**

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ENGR 5332. Earth retaining structures and slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5333. Fluid Flow in Porous Media.**

This course presents the fundamental theory of fluid flow in heterogeneous porous media and introduces various theoretical tools to characterize and predict the flow field. This course focuses on the fluid flow theory in complex porous media, such as fractured porous media. Key concepts are introduced, and derivations of governing equations are presented thoroughly. Analytical and numerical techniques to solve governing equations are discussed. The students of this course use these fundamental equations to solve problems based on real-world situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics includes the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5361. Pavement Asset Management.**

This course is about applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. The course covers methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course also discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5362. Advanced Traffic Engineering.**

This course is an introduction to basic components of transportation systems and fundamentals of transportation engineering. Topics include geometric design of highways, study of warrants for traffic control devices, analysis of traffic flow theory and characteristics, levels of service, capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5363. Road Infrastructure Safety.**

This course will cover topics including an introduction to road infrastructure safety, fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and safe system design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5384. Problems in Engineering.**

Graduate students investigate a special topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. This course may be repeated once for additional credit with permission of the School Director. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENGR 5398A. Project.**

This course represents a student's initial project enrollment. No project credit is awarded until the student has completed the project in ENGR 5x98B. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5398B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the theses is completed in ENGR 5x99B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5598B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5998B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Civil Engineering (CE)**

**CE 5320. Water Quality Management.**

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5331. Computational Methods in Geosystems.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered.

This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, etc. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Electrical Engineering (EE)****EE 5320. Advanced Computer Architecture and Arithmetic.**

This course teaches design and analysis of high-performance computer systems, focusing on quantitative analysis of the latest processors and compilers. Current processor architectures are surveyed for system design. Topics include instruction sets, parallelizing architectures, pipelining, I/O, memory and cache organization, parallel/vector processing, fast arithmetic units design, and implementation using HDL. Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5321. Computer-Aided Engineering Simulations on HPC Systems.**

This course covers development of simulations for engineering applications that are solved using High Performance Computing (HPC) environments. Topics include programming techniques for multicore processors, processor and memory architecture, computation for dense and sparse linear algebra applications, computational temperature analysis, fluid dynamics, stencil and stochastic algorithms, and other applications. Prerequisite: EE 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5323. Digital Image Processing.**

This course provides the necessary fundamental techniques to analyze and process digital images. It covers principles, concepts, and techniques of digital image processing and computer vision. Restricted to students enrolled in the MS Engineering program. Prerequisite: EE 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5330. Embedded and Real-Time Computing.**

This course teaches development of embedded computing systems with strong resource constraints. Key concepts include managing constrained memory and processing speed limitations, and programming for soft and hard real-time constraints. Students will learn use of a Real-Time Operating System (RTOS). Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5331. Machine Learning for Engineering Applications.**

This course covers an introduction to machine learning focused on deep learning techniques using engineering applications with Python. Topics include model characteristics, neural network theory, classifiers for network and signal processing applications, regression and convolutional modeling for object-detection, time-series and forecasting machine learning models for Smart City concepts. Prerequisite: ENGR 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5350. Advanced Electronic Circuit Design.**

This course includes low and high power RF amplifier design techniques, oscillators, FM demodulators, limiters, and mixer design. Additional topics include circuit design to minimize intermodulation and other forms of distortion, and RD and high-speed analog circuits with emphasis on digital-friendly applications. Prerequisite: EE 4350 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**EE 5353. Fundamentals of Advanced Semiconductor Technology.**

In this course students will learn key concepts and trends of advanced semiconductor device technology. Topics include Moore's law, MOSFET, CMOS and scaling, high-K gate dielectrics, new channel materials replacing silicon, three dimensional and compound semiconductor device structures. In addition students will be involved in laboratories and seminar presentations. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5354. Flexible Electronics.**

This course will cover the materials systems, processes, device physics and applications of flexible electronics. The materials range from amorphous and nanocrystalline silicon, organic and polymeric semiconductors to solution cast films of carbon nanotubes. Real device discussions include high speed transistors, photovoltaics, flexible flat-panel displays, medical image sensors, etc. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 5355. Electronic Materials and Devices.**

This course covers theoretical concepts applicable to the understanding of unique properties exhibited by electronic materials, especially by dielectrics, oxide semiconductors, ferroelectrics, pyroelectrics, piezoelectrics, magnetic, and multifunctional and multiferroic materials. The various microelectronic devices and modern novel technologies based on these materials are emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5357. Power Systems for Engineering.**

This course introduces the analysis of various elements of power systems, including power generation, transformer action, transmission line modeling, symmetrical components, power factor correction, real and quadrature power calculations, load flow analysis, and economic considerations in operating systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5360. Thin Film Technology.**

This course covers the theoretical and practical aspects of thin film technology in modern devices. The design and fabrication of thin film heterostructures is discussed. Growth and nucleation of epitaxial thin films with diverse properties and devices with combined properties will be emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5361. Nanofabrication Technology for Semiconductor Device Processing.**

This course provides an overview of nanofabrication techniques for conventional and emerging micro- and nano-electronic devices. Topics include semiconductor crystal growth, wafer preparation, epitaxial growth, oxidation, control of dopant profiles for the formation of shallow junctions, ion-implantation, thin film deposition, photolithography, metallization etching, device and circuit formation, and testing.

Prerequisite: EE 3350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5372. Advanced Networking.**

This course develops important theoretical and application topics related to advanced networking. Theoretical topics are introduced using mathematical treatments, including queuing theory and some random processes. The course includes applications of these topics to communications networks, and focuses on architectures, applications and technologies which affect modern computer and data networks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5374. Introduction to Wireless Communication.**

This course teaches principles and practices in designing and analyzing cellular and other wireless communication systems. Topics include RF propagation modeling, fast and slow fading, modulation, demodulation, coding, and multiple access techniques. Prerequisite: EE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5375. Smart Grid: an Application Development Platform.**

In this course, students will learn how to develop real applications for the smart grid and model its performance with simulations and stochastic models. Topics include energy informatics, smart metering, home energy management, demand response, load disaggregation and APIs/ OpenData. The mathematical tools used include: Optimization/Control, Machine Learning and Stochastic Processes. Prerequisites: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5377. Statistical Signal Processing.**

This course develops the theory and applications of random processes using mathematical treatments, including elementary discrete and continuous time linear systems theory, elementary probability, and transform theory. Topics include applications of random processes to information and communication theory, estimation and detection, control, signal processing, and stochastic systems theory. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5380. Advanced Electric Machines.**

This course teaches the principles and analysis of electromechanical systems. Students will develop analytical techniques for predicting device and system interaction characteristics as well as learn to design major classes of electric machines.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5381. Advanced Sustainable Energy & Storage.**

This course examines the consumption and production of energy and the principles and technologies behind renewable energy sources. It also introduces the basics of energy storage systems such as batteries, gravitational, and hybrid. Current research in the field is examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5382. Advanced Power Systems Analysis.**

This course is an advanced treatment of various elements of power systems, including case studies, analysis of relevant peer-reviewed literature, symmetrical and unsymmetrical faults, symmetrical components, system protection, transient stability, transient operation of transmission lines, and supervisory control and data acquisition (SCADA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5398A. Antenna Theory, Design and Applications.**

This course covers the basic theory, design and applications of antennas. The topics include antenna radiation, fundamental parameters of antennas, linear wire antennas, loop antennas, antenna arrays, long-periodic antennas, horn antennas, microstrip antennas and modern nano-antennas. Prerequisite: EE 3340 or EE 3370 either with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398B. Electronic Materials and Beyond for Sustainable Energy.**

This course covers the basic science and technology for sustainable energy from the view of materials, where electronic materials are highly emphasized. The topics include solar cells, thermoelectrics, batteries, supercapacitors, artificial photosynthesis, fuel cells, biomass and nuclear energy. Prerequisite: EE 3355 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398C. Multimedia Signal Processing.**

This course covers theory and applications of digital signal processing to multimedia signals, including speech, audio, image, and video. Key concepts and algorithms are discussed first, followed by a review of relevant industry standards. Hardware architectures and real-time implementation concepts appropriate for multimedia signals are also included. Prerequisites: EE 3370 and [EE 4323 or EE 4377] both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398D. Electroceramics.**

This course covers binary and ternary phase diagrams, non-centro-symmetric crystal structures and symmetry groups, nonlinear dielectrics (ferroelectricity, piezoelectricity, pyroelectricity), nonlinear magnetics, oxide wideband gap semiconductors, detectors and sensors, introduction to MEMS, radhard electronics, and spintronics technology. Labs and additional research-oriented instruction are related to materials processing, characterization, fabrication, and testing. Prerequisite: EE 3355 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Industrial Engineering (IE)****IE 5310. Advanced Statistical Design of Experiments for Engineers.**

This course examines the design and analysis of controlled experiments, demonstrating engineering applications of design of experiments (DOE) in the manufacturing and service industries. Topics include full and fractional factorial designs, response surface methodology, and Taguchi methods. In a semester-long project, students apply DOE to improve a real manufacturing process. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5320. Modeling and Analysis of Manufacturing Systems.**

This course covers the methods for modeling and analyzing manufacturing systems. Critical manufacturing issues that are addressed by these models include sustainable production systems, material handling systems, scheduling, and supply chains. Prerequisite: IE 3320 and IE 3340 and MFGE 4396 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5330. Advanced Quality Control and Reliability Engineering.**

This course provides in-depth knowledge in reliability modeling and maintenance optimization for components and systems. The course also covers advanced quality control techniques including multivariate process control. Methodologies are applied to solve practical problems arising from various industry domains. Restricted to students enrolled in the MS Engineering program. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5340. Applied Deterministic Operations Research for Engineers.**

This course introduces students to modeling of linear, non-linear, and integer problems applied to engineering design, manufacturing, service, supply chain, healthcare and electrical systems. Mathematical programming software is emphasized in class exercises, homework, and project. Techniques including revised simplex method, duality theory, sensitivity analysis, and networks are also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5343. Non-Linear Optimization Techniques for Engineers.**

This course covers engineering applications of mathematical modeling and computational methods for nonlinear programming problems. The primary goal of this course is to present techniques and strategies essential to optimize non-linear models. Prerequisite: IE 3340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5345. Advanced Optimization.**

This course covers advanced concepts in linear and integer programming. Solution techniques for stochastic and dynamic programming and formulation and solution of decision models in manufacturing, service, supply chain, healthcare and electrical systems are presented. Prerequisite: IE 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5347. Advanced Heuristic Optimization.**

This course covers heuristic methods that search beyond local optima such as simulated annealing, tabu search, genetic algorithms, ant-colony systems and particle swarm. Papers from the literature, problem-specific heuristics, evaluation methods, and implementations are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5397. System Thinking and Analysis.**

This course is an introduction to systems engineering and the systems thinking process, providing important considerations related to the engineering of large scale systems. These considerations include system understanding, modeling and design, the system development process, needs analysis, concept exploration and definition, design, integration and evaluation, and systems engineering management. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5398A. Healthcare Systems Engineering.**

This course provides an introduction into healthcare delivery with particular attention to the application of systems engineering techniques. Topics include the organization of healthcare systems, characteristics of US healthcare, decision-making in the healthcare environment, health informatics, and performance measurement tools. Student project involves integration and application of systems engineering methodologies. Prerequisite: IE 5340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398B. Response Surface Methodologies.**

This course continues the examination of the design and analysis of controlled experiments, demonstrating how design of experiments (DOE) and response surface methodologies (RSM) are used in product optimization and process improvement. Topics include factorial and fractional factorial designs, steepest ascent, fitting response surfaces, variance-optimal design, and mixture experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398C. Data-Intensive Analysis and Simulation for Engineers.**

This course covers foundational topics in data science, including data-intensive analysis and simulation. Specific topics include data science, data extracting and preprocessing, data visualization, and design of simulation experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Manufacturing Engineering (MFGE)

### Program Overview

The Master of Science (M.S.) degree with a major in Engineering provides a practical, industry-driven focus via a long-term, targeted technical project or thesis related to real-world engineering applications. These projects will be conducted in partnership with local industries and may involve off-campus collaborations. The degree requires a large-scale project or thesis because the abilities to solve problems, innovate and make immediate contributions to industry are best developed by

having students confront a substantial, open-ended problem; perform detailed research on the problem; develop various solutions; choose and implement the best solution; validate their choice; and effectively communicate the process to professional colleagues, executives, and customers.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree engineering, computer science, physics, technology, or a closely related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning and writing sections will be required. Texas State University students are exempt from this requirement
- resume/CV detailing prior work experience, research experience, awards, scholarships, and other related qualifications
- statement of purpose (two pages) conveying research interests, plans for graduate study, and professional aspirations
- two letters of recommendation from non-related individuals familiar with the student's scholarly work and/or relevant work experience

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### Additional Information

Non-credit (leveling) course work may be required prior to admission into the program if the student lacks sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Engineering concentration in Civil Engineering requires 31 semester credit hours, including a thesis.

Non-credit (leveling) course work may be required prior to admission into the program if you lack sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

All students will have a faculty advisor and a graduate committee composed of a minimum of three graduate faculty members (including the faculty advisor). The faculty advisor will provide technical direction for the student's project, and the graduate committee will be responsible for approving the project proposal, receiving project progress reports, and approving the final project presentation and written report. The oral project presentation will serve as the comprehensive examination.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENGR 5100	Seminar in Engineering	1
ENGR 5310	Probability, Random Variables, & Stochastic Processes for Engineers	3
CE 5331	Computational Methods in Geosystems	3
CE 5390	Infrastructure Systems Analysis	3
<b>Engineering Electives</b>		
Choose 9-15 from the following:		9-15
CE 5320	Water Quality Management	
CE 5340	Advanced Infrastructure Materials	
CE 5350	Highway Bridge Design	
CE 5360	Pavement Design	
CE 5370	Urban Stormwater Management	
CE 5391	Advanced Mechanics of Materials	
EE 5320	Advanced Computer Architecture and Arithmetic	
EE 5323	Digital Image Processing	
EE 5330	Embedded and Real-Time Computing	
EE 5331	Machine Learning for Engineering Applications	
EE 5350	Advanced Electronic Circuit Design	
EE 5355	Electronic Materials and Devices	
EE 5357	Power Systems for Engineering	
EE 5360	Thin Film Technology	
EE 5361	Nanofabrication Technology for Semiconductor Device Processing	
EE 5372	Advanced Networking	
EE 5374	Introduction to Wireless Communication	
EE 5377	Statistical Signal Processing	
EE 5380	Advanced Electric Machines	

EE 5381	Advanced Sustainable Energy & Storage
EE 5382	Advanced Power Systems Analysis
EE 5398A	Antenna Theory, Design and Applications
EE 5398B	Electronic Materials and Beyond for Sustainable Energy
EE 5398C	Multimedia Signal Processing
EE 5398D	Electroceramics
ENGR 5321	Environmental Chemistry
ENGR 5322	Low Impact Development and Green Infrastructure
ENGR 5323	Soil and Groundwater Remediation
ENGR 5330	Advanced Soil Mechanics
ENGR 5332	Earth retaining structures and slopes
ENGR 5333	Fluid Flow in Porous Media
ENGR 5334	Advanced Foundation Engineering
ENGR 5341	Advanced Bituminous Materials
ENGR 5351	Advanced Reinforced Concrete Members
ENGR 5352	Advanced Prestressed Concrete
ENGR 5361	Pavement Asset Management
ENGR 5362	Advanced Traffic Engineering
ENGR 5363	Road Infrastructure Safety
ENGR 5384	Problems in Engineering
IE 5310	Advanced Statistical Design of Experiments for Engineers
IE 5320	Modeling and Analysis of Manufacturing Systems
IE 5330	Advanced Quality Control and Reliability Engineering
IE 5340	Applied Deterministic Operations Research for Engineers
IE 5343	Non-Linear Optimization Techniques for Engineers
IE 5345	Advanced Optimization
IE 5347	Advanced Heuristic Optimization
IE 5397	System Thinking and Analysis
IE 5398A	Healthcare Systems Engineering
IE 5398B	Response Surface Methodologies
IE 5398C	Data-Intensive Analysis and Simulation for Engineers
ME 5310	Continuum Mechanics
ME 5312	Stress Analysis of Composite Materials
MFGE 5315	Energy and Thermofluids Engineering
MFGE 5316	Advanced Computer Aided Design and Manufacturing
MFGE 5318	Additive Manufacturing
MFGE 5320	Polymer Nanocomposites
MFGE 5326	Advanced Robotics in Manufacturing Automation
MFGE 5330	Multiscale Manufacturing
<b>Multidisciplinary Electives</b>	
Choose up to 6 hours from the following: <sup>1</sup>	
0-6	
<b>Business Administration</b>	
BLAW 5333	Legal Issues of Sustainability and Responsibility
ISAN 5357	Computing for Data Analytics
ISAN 5358	Agile Project Management For Business Professionals

ISAN 5370	Enterprise Resource Planning and Business Intelligence
MGT 5311	Process Improvement Management in Organizations
MGT 5315	New Venture Management
MGT 5321	Supply Chain Management
MGT 5390	Managerial Data Analysis
ANLY 5334	Statistical Methods for Business
ANLY 5335	Forecasting and Simulation
<b>Technology</b>	
TECH 5315	Engineering Economic Analysis
TECH 5382	Industrial Ecology and Sustainability Engineering
TECH 5390	Research in Technology
<b>Computer Science</b>	
CS 5306	Advanced Operating Systems
CS 5346	Advanced Artificial Intelligence
<b>Geography</b>	
GEO 5312	Managing Urbanization
GEO 5313	Environmental Studies
GEO 5334	Applied Water Resources
GEO 5336	Transportation Systems
GEO 5351	Regional Waste Management
GEO 5352	Air Quality Management
GEO 5393D	Water Resource Planning
<b>Mathematics</b>	
MATH 5315	Mathematical Statistics
MATH 5340	Scientific Computation
MATH 5345	Regression Analysis
MATH 5376A	Design and Analysis of Experiments
MATH 5376B	Analysis of Variance
MATH 5376D	Statistical Applications in Genetics and Bioinformatics
MATH 5388	Discrete Mathematics
<b>Physics</b>	
PHYS 5322	Semiconductor Device Microfabrication
PHYS 5324	Thin Film Synthesis and Characterization Laboratory
PHYS 5327	Semiconductor Device Physics
PHYS 5332	Materials Characterization
<b>Materials Science, Engineering and Commercialization</b>	
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship
MSEC 7340	Biomaterials and Biosensors
MSEC 7395H	Environmental Chemistry
<b>Thesis</b>	
ENGR 5399A	Thesis
Choose a minimum of 3 hours from the following:	
ENGR 5199B	Thesis
ENGR 5299B	Thesis
ENGR 5399B	Thesis
ENGR 5599B	Thesis



<sup>1</sup> Choose up to 6 hours from the Multidisciplinary Electives above to make the total hours selected from Engineering Electives and from Multidisciplinary Electives to equal 15 hours.

## Comprehensive Examination Requirement

An oral thesis defense is required. This oral defense will serve as the comprehensive examination requirement. If the thesis committee is not satisfied with a graduate student's oral defense, they specify all deficiencies the student must resolve. The thesis committee will not sign the Master's Comprehensive Examination Report Form and the Thesis Submission Approval Form until all specified deficiencies have been resolved. Should the thesis committee decide to hold a second oral defense, the chair of the thesis committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student

will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's

progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Engineering: ENGR (p.       ), CE (p.       ), EE (p.       ), IE (p.       ), MFGE (p.       )

## Courses Offered

### Engineering (ENGR)

#### ENGR 5100. Seminar in Engineering.

Graduate students attend seminars by invited speakers presenting relevant topics in academia and industry. The schedule of speakers will be developed each semester with strict faculty supervision. This course may only be taken for credit one time.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ENGR 5101. Academic Instruction for Engineering Graduate Assistants.

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ENGR 5105. Engineering Internship.

This course is a faculty-supervised, experiential, work-integrated learning course intended to help the student acquire engineering curriculum-related industrial experience and hence successfully make the transition into the workforce. Course cannot be counted toward graduation. Course may be repeated once. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENGR 5198B. Project.

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENGR 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENGR 5201. Academic Instruction for Engineering Graduate Assistants.

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ENGR 5298B. Project.

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENGR 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENGR 5310. Probability, Random Variables, & Stochastic Processes for Engineers.

This course develops theory underlying analysis and design of systems. Fundamental distributional concepts, applications of statistical methods, and theory of stochastic processes are introduced to create a mathematical foundation for engineering analysis of physical systems involving randomness. Applications to engineering topics are taught, including estimation, control, and systems theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5321. Environmental Chemistry.**

This course introduces environmental chemistry, emphasizing aquatic resources and engineering. It also examines fundamental geochemistry and atmospheric chemistry principles relating to pollutant impacts on aquatic ecosystems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5322. Low Impact Development and Green Infrastructure.**

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development and water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5323. Soil and Groundwater Remediation.**

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. Significance of subsurface contamination and the importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5330. Advanced Soil Mechanics.**

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ENGR 5332. Earth retaining structures and slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5333. Fluid Flow in Porous Media.**

This course presents the fundamental theory of fluid flow in heterogeneous porous media and introduces various theoretical tools to characterize and predict the flow field. This course focuses on the fluid flow theory in complex porous media, such as fractured porous media. Key concepts are introduced, and derivations of governing equations are presented thoroughly. Analytical and numerical techniques to solve governing equations are discussed. The students of this course use these fundamental equations to solve problems based on real-world situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics includes the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5361. Pavement Asset Management.**

This course is about applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. The course covers methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course also discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5362. Advanced Traffic Engineering.**

This course is an introduction to basic components of transportation systems and fundamentals of transportation engineering. Topics include geometric design of highways, study of warrants for traffic control devices, analysis of traffic flow theory and characteristics, levels of service, capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5363. Road Infrastructure Safety.**

This course will cover topics including an introduction to road infrastructure safety, fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and safe system design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5384. Problems in Engineering.**

Graduate students investigate a special topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. This course may be repeated once for additional credit with permission of the School Director. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENGR 5398A. Project.**

This course represents a student's initial project enrollment. No project credit is awarded until the student has completed the project in ENGR 5x98B. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5398B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the theses is completed in ENGR 5x99B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5598B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5998B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Civil Engineering (CE)

### **CE 5320. Water Quality Management.**

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CE 5331. Computational Methods in Geosystems.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered. This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CE 5340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, etc. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CE 5350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CE 5360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CE 5370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CE 5390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **CE 5391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Electrical Engineering (EE)

### **EE 5320. Advanced Computer Architecture and Arithmetic.**

This course teaches design and analysis of high-performance computer systems, focusing on quantitative analysis of the latest processors and compilers. Current processor architectures are surveyed for system design. Topics include instruction sets, parallelizing architectures, pipelining, I/O, memory and cache organization, parallel/vector processing, fast arithmetic units design, and implementation using HDL. Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **EE 5321. Computer-Aided Engineering Simulations on HPC Systems.**

This course covers development of simulations for engineering applications that are solved using High Performance Computing (HPC) environments. Topics include programming techniques for multicore processors, processor and memory architecture, computation for dense and sparse linear algebra applications, computational temperature analysis, fluid dynamics, stencil and stochastic algorithms, and other applications. Prerequisite: EE 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**EE 5323. Digital Image Processing.**

This course provides the necessary fundamental techniques to analyze and process digital images. It covers principles, concepts, and techniques of digital image processing and computer vision. Restricted to students enrolled in the MS Engineering program. Prerequisite: EE 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5330. Embedded and Real-Time Computing.**

This course teaches development of embedded computing systems with strong resource constraints. Key concepts include managing constrained memory and processing speed limitations, and programming for soft and hard real-time constraints. Students will learn use of a Real-Time Operating System (RTOS). Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5331. Machine Learning for Engineering Applications.**

This course covers an introduction to machine learning focused on deep learning techniques using engineering applications with Python. Topics include model characteristics, neural network theory, classifiers for network and signal processing applications, regression and convolutional modeling for object-detection, time-series and forecasting machine learning models for Smart City concepts. Prerequisite: ENGR 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5350. Advanced Electronic Circuit Design.**

This course includes low and high power RF amplifier design techniques, oscillators, FM demodulators, limiters, and mixer design. Additional topics include circuit design to minimize intermodulation and other forms of distortion, and RD and high-speed analog circuits with emphasis on digital-friendly applications. Prerequisite: EE 4350 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5353. Fundamentals of Advanced Semiconductor Technology.**

In this course students will learn key concepts and trends of advanced semiconductor device technology. Topics include Moore's law, MOSFET, CMOS and scaling, high-K gate dielectrics, new channel materials replacing silicon, three dimensional and compound semiconductor device structures. In addition students will be involved in laboratories and seminar presentations. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5354. Flexible Electronics.**

This course will cover the materials systems, processes, device physics and applications of flexible electronics. The materials range from amorphous and nanocrystalline silicon, organic and polymeric semiconductors to solution cast films of carbon nanotubes. Real device discussions include high speed transistors, photovoltaics, flexible flat-panel displays, medical image sensors, etc. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 5355. Electronic Materials and Devices.**

This course covers theoretical concepts applicable to the understanding of unique properties exhibited by electronic materials, especially by dielectrics, oxide semiconductors, ferroelectrics, pyroelectrics, piezoelectrics, magnetic, and multifunctional and multiferroic materials. The various microelectronic devices and modern novel technologies based on these materials are emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5357. Power Systems for Engineering.**

This course introduces the analysis of various elements of power systems, including power generation, transformer action, transmission line modeling, symmetrical components, power factor correction, real and quadrature power calculations, load flow analysis, and economic considerations in operating systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5360. Thin Film Technology.**

This course covers the theoretical and practical aspects of thin film technology in modern devices. The design and fabrication of thin film heterostructures is discussed. Growth and nucleation of epitaxial thin films with diverse properties and devices with combined properties will be emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5361. Nanofabrication Technology for Semiconductor Device Processing.**

This course provides an overview of nanofabrication techniques for conventional and emerging micro- and nano-electronic devices. Topics include semiconductor crystal growth, wafer preparation, epitaxial growth, oxidation, control of dopant profiles for the formation of shallow junctions, ion-implantation, thin film deposition, photolithography, metallization etching, device and circuit formation, and testing. Prerequisite: EE 3350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5372. Advanced Networking.**

This course develops important theoretical and application topics related to advanced networking. Theoretical topics are introduced using mathematical treatments, including queuing theory and some random processes. The course includes applications of these topics to communications networks, and focuses on architectures, applications and technologies which affect modern computer and data networks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5374. Introduction to Wireless Communication.**

This course teaches principles and practices in designing and analyzing cellular and other wireless communication systems. Topics include RF propagation modeling, fast and slow fading, modulation, demodulation, coding, and multiple access techniques. Prerequisite: EE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5375. Smart Grid: an Application Development Platform.**

In this course, students will learn how to develop real applications for the smart grid and model its performance with simulations and stochastic models. Topics include energy informatics, smart metering, home energy management, demand response, load disaggregation and APIs/OpenData. The mathematical tools used include: Optimization/Control, Machine Learning and Stochastic Processes. Prerequisites: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5377. Statistical Signal Processing.**

This course develops the theory and applications of random processes using mathematical treatments, including elementary discrete and continuous time linear systems theory, elementary probability, and transform theory. Topics include applications of random processes to information and communication theory, estimation and detection, control, signal processing, and stochastic systems theory. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5380. Advanced Electric Machines.**

This course teaches the principles and analysis of electromechanical systems. Students will develop analytical techniques for predicting device and system interaction characteristics as well as learn to design major classes of electric machines.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5381. Advanced Sustainable Energy & Storage.**

This course examines the consumption and production of energy and the principles and technologies behind renewable energy sources. It also introduces the basics of energy storage systems such as batteries, gravitational, and hybrid. Current research in the field is examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5382. Advanced Power Systems Analysis.**

This course is an advanced treatment of various elements of power systems, including case studies, analysis of relevant peer-reviewed literature, symmetrical and unsymmetrical faults, symmetrical components, system protection, transient stability, transient operation of transmission lines, and supervisory control and data acquisition (SCADA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5398A. Antenna Theory, Design and Applications.**

This course covers the basic theory, design and applications of antennas. The topics include antenna radiation, fundamental parameters of antennas, linear wire antennas, loop antennas, antenna arrays, long-periodic antennas, horn antennas, microstrip antennas and modern nano-antennas. Prerequisite: EE 3340 or EE 3370 either with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398B. Electronic Materials and Beyond for Sustainable Energy.**

This course covers the basic science and technology for sustainable energy from the view of materials, where electronic materials are highly emphasized. The topics include solar cells, thermoelectrics, batteries, supercapacitors, artificial photosynthesis, fuel cells, biomass and nuclear energy. Prerequisite: EE 3355 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398C. Multimedia Signal Processing.**

This course covers theory and applications of digital signal processing to multimedia signals, including speech, audio, image, and video. Key concepts and algorithms are discussed first, followed by a review of relevant industry standards. Hardware architectures and real-time implementation concepts appropriate for multimedia signals are also included. Prerequisites: EE 3370 and [EE 4323 or EE 4377] both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398D. Electroceramics.**

This course covers binary and ternary phase diagrams, non-centro-symmetric crystal structures and symmetry groups, nonlinear dielectrics (ferroelectricity, piezoelectricity, pyroelectricity), nonlinear magnetics, oxide wideband gap semiconductors, detectors and sensors, introduction to MEMS, radhard electronics, and spintronics technology. Labs and additional research-oriented instruction are related to materials processing, characterization, fabrication, and testing. Prerequisite: EE 3355 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Industrial Engineering (IE)

**IE 5310. Advanced Statistical Design of Experiments for Engineers.**

This course examines the design and analysis of controlled experiments, demonstrating engineering applications of design of experiments (DOE) in the manufacturing and service industries. Topics include full and fractional factorial designs, response surface methodology, and Taguchi methods. In a semester-long project, students apply DOE to improve a real manufacturing process. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5320. Modeling and Analysis of Manufacturing Systems.**

This course covers the methods for modeling and analyzing manufacturing systems. Critical manufacturing issues that are addressed by these models include sustainable production systems, material handling systems, scheduling, and supply chains. Prerequisite: IE 3320 and IE 3340 and MFGE 4396 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5330. Advanced Quality Control and Reliability Engineering.**

This course provides in-depth knowledge in reliability modeling and maintenance optimization for components and systems. The course also covers advanced quality control techniques including multivariate process control. Methodologies are applied to solve practical problems arising from various industry domains. Restricted to students enrolled in the MS Engineering program. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5340. Applied Deterministic Operations Research for Engineers.**

This course introduces students to modeling of linear, non-linear, and integer problems applied to engineering design, manufacturing, service, supply chain, healthcare and electrical systems. Mathematical programming software is emphasized in class exercises, homework, and project. Techniques including revised simplex method, duality theory, sensitivity analysis, and networks are also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5343. Non-Linear Optimization Techniques for Engineers.**

This course covers engineering applications of mathematical modeling and computational methods for nonlinear programming problems. The primary goal of this course is to present techniques and strategies essential to optimize non-linear models. Prerequisite: IE 3340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5345. Advanced Optimization.**

This course covers advanced concepts in linear and integer programming. Solution techniques for stochastic and dynamic programming and formulation and solution of decision models in manufacturing, service, supply chain, healthcare and electrical systems are presented. Prerequisite: IE 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5347. Advanced Heuristic Optimization.**

This course covers heuristic methods that search beyond local optima such as simulated annealing, tabu search, genetic algorithms, ant-colony systems and particle swarm. Papers from the literature, problem-specific heuristics, evaluation methods, and implementations are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5397. System Thinking and Analysis.**

This course is an introduction to systems engineering and the systems thinking process, providing important considerations related to the engineering of large scale systems. These considerations include system understanding, modeling and design, the system development process, needs analysis, concept exploration and definition, design, integration and evaluation, and systems engineering management. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5398A. Healthcare Systems Engineering.**

This course provides an introduction into healthcare delivery with particular attention to the application of systems engineering techniques. Topics include the organization of healthcare systems, characteristics of US healthcare, decision-making in the healthcare environment, health informatics, and performance measurement tools. Student project involves integration and application of systems engineering methodologies. Prerequisite: IE 5340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398B. Response Surface Methodologies.**

This course continues the examination of the design and analysis of controlled experiments, demonstrating how design of experiments (DOE) and response surface methodologies (RSM) are used in product optimization and process improvement. Topics include factorial and fractional factorial designs, steepest ascent, fitting response surfaces, variance-optimal design, and mixture experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398C. Data-Intensive Analysis and Simulation for Engineers.**

This course covers foundational topics in data science, including data-intensive analysis and simulation. Specific topics include data science, data extracting and preprocessing, data visualization, and design of simulation experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Manufacturing Engineering (MFGE)****MFGE 5315. Energy and Thermofluids Engineering.**

This course covers core engineering concepts of energy and thermofluids based on fluid mechanics, thermodynamics, and heat transfer. The main topics include properties of pure substances, fluid statics and dynamics, non-Newtonian fluid, differential analysis of fluid flow, viscous flow in pipes, external flows, boundary layer, open channel flows, mass and energy analysis of control volumes, first and second laws of thermodynamics, steady-state and transient conduction, internal and external forced convection, natural convection, fundamentals of radiation, and mass transfer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5316. Advanced Computer Aided Design and Manufacturing.**

Topics include design process, mathematical presentation of wireframe/surface/solid models, transformation and manipulation of objects, finite element analysis, data exchange, process planning, fundamentals of multi-axis NC programming for turning and milling processes, fundamentals of CAD/CAM systems, CNC code generation by CAD/CAM software for the CNC, and waterjet machines. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5318. Additive Manufacturing.**

In this course CAD standards, theory, techniques, applications, and development of additive manufacturing technology, photopolymerization, powder bed fusion, extrusion-based systems, printing processes, sheet lamination processes, beam deposition processes, design for additive manufacturing, and safety considerations in a hands-on approach will be explained. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5320. Polymer Nanocomposites.**

This course covers polymer nanocomposites focusing on materials, manufacturing, characterization, and applications. The primary focus is on fiber reinforced polymer nanocomposites. Morphological, Thermal, Mechanical, and Electrical Characterization will be discussed in detail. Applications include fire-resistant, ablative, fatigue-resistant, impact-resistant, and bio-based composites. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5326. Advanced Robotics in Manufacturing Automation.**

This course covers principles and techniques involved in advanced robotics. Topics include introduction to robotics, industrial robotics, robot kinematics, path planning, robot dynamics, advanced control, force control, sensors and actuators, mobile robotics, and introduction to nanorobotics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5330. Multiscale Manufacturing.**

This course covers the multiscale manufacturing processes, techniques, and applications. Topics include micro and nano-manufacturing, polymer and semiconductor fabrication, thin film technologies, bulk and surface micromachining, physics of multiscale manufacturing, microelectromechanical (MEMS) devices, and design issues for fabrication of micro and nano-systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5398B. Advanced Composite Materials.**

This course examines various aspects of fiber-reinforced polymeric composites. The topics covered include constituent materials (fibers and matrices), mechanics, performance, manufacturing, and introduction to nanocomposites. This course also provides introductory treatments concerning ceramic matrix composites, metal matrix composites, and carbon/carbon composites.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Program Overview**

The Master of Science (M.S.) degree with a major in Engineering provides a practical, industry-driven focus via a long-term, targeted technical project or thesis related to real-world engineering applications. These projects will be conducted in partnership with local industries and

may involve off-campus collaborations. The degree requires a large-scale project or thesis because the abilities to solve problems, innovate and make immediate contributions to industry are best developed by having students confront a substantial, open-ended problem; perform detailed research on the problem; develop various solutions; choose and implement the best solution; validate their choice; and effectively communicate the process to professional colleagues, executives, and customers.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree engineering, computer science, physics, technology, or a closely related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate coursework (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning and writing sections will be required. Texas State University students are exempt from this requirement.
- resume/CV detailing prior work experience, research experience, awards, scholarships, and other related qualifications
- statement of purpose (two pages) conveying research interests, plans for graduate study, and professional aspirations
- two letters of recommendation from non-related individuals familiar with the student's scholarly work and/or relevant work experience

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### Additional Information

Non-credit (leveling) course work may be required prior to admission into the program if the student lacks sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Engineering concentration in Electrical Engineering requires 31 semester credit hours, including a project.

Non-credit (leveling) course work may be required prior to admission into the program if you lack sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

All students will have a faculty advisor and a graduate committee composed of a minimum of three graduate faculty members (including the faculty advisor). The faculty advisor will provide technical direction for the student's project, and the graduate committee will be responsible for approving the project proposal, receiving project progress reports, and approving the final project presentation and written report. The oral project presentation will serve as the comprehensive examination.

## Course Requirements

Code	Title	Hours
Required Courses		
ENGR 5100	Seminar in Engineering	1
ENGR 5310	Probability, Random Variables, & Stochastic Processes for Engineers	3
EE 5320	Advanced Computer Architecture and Arithmetic	3
EE 5350	Advanced Electronic Circuit Design	3
Engineering Electives		
Choose 9-15 hours from the following:		9-15
CE 5320	Water Quality Management	
CE 5340	Advanced Infrastructure Materials	
CE 5350	Highway Bridge Design	
CE 5360	Pavement Design	
CE 5370	Urban Stormwater Management	
CE 5390	Infrastructure Systems Analysis	
CE 5391	Advanced Mechanics of Materials	
EE 5321	Computer-Aided Engineering Simulations on HPC Systems	
EE 5323	Digital Image Processing	
EE 5330	Embedded and Real-Time Computing	
EE 5331	Machine Learning for Engineering Applications	
EE 5353	Fundamentals of Advanced Semiconductor Technology	
EE 5354	Flexible Electronics	
EE 5355	Electronic Materials and Devices	
EE 5357	Power Systems for Engineering	
EE 5360	Thin Film Technology	



EE 5361	Nanofabrication Technology for Semiconductor Device Processing
EE 5372	Advanced Networking
EE 5374	Introduction to Wireless Communication
EE 5375	Smart Grid: an Application Development Platform
EE 5377	Statistical Signal Processing
EE 5380	Advanced Electric Machines
EE 5381	Advanced Sustainable Energy & Storage
EE 5382	Advanced Power Systems Analysis
EE 5398A	Antenna Theory, Design and Applications
EE 5398B	Electronic Materials and Beyond for Sustainable Energy
EE 5398C	Multimedia Signal Processing
EE 5398D	Electroceramics
ENGR 5321	Environmental Chemistry
ENGR 5323	Soil and Groundwater Remediation
ENGR 5330	Advanced Soil Mechanics
ENGR 5333	Fluid Flow in Porous Media
ENGR 5334	Advanced Foundation Engineering
ENGR 5341	Advanced Bituminous Materials
ENGR 5352	Advanced Prestressed Concrete
ENGR 5362	Advanced Traffic Engineering
ENGR 5363	Road Infrastructure Safety
ENGR 5384	Problems in Engineering
IE 5310	Advanced Statistical Design of Experiments for Engineers
IE 5320	Modeling and Analysis of Manufacturing Systems
IE 5330	Advanced Quality Control and Reliability Engineering
IE 5340	Applied Deterministic Operations Research for Engineers
IE 5343	Non-Linear Optimization Techniques for Engineers
IE 5345	Advanced Optimization
IE 5347	Advanced Heuristic Optimization
IE 5397	System Thinking and Analysis
IE 5398A	Healthcare Systems Engineering
IE 5398B	Response Surface Methodologies
IE 5398C	Data-Intensive Analysis and Simulation for Engineers
ME 5310	Continuum Mechanics
ME 5312	Stress Analysis of Composite Materials
MFGE 5315	Energy and Thermofluids Engineering
MFGE 5316	Advanced Computer Aided Design and Manufacturing
MFGE 5318	Additive Manufacturing
MFGE 5320	Polymer Nanocomposites
MFGE 5326	Advanced Robotics in Manufacturing Automation
MFGE 5330	Multiscale Manufacturing

**Multidisciplinary Electives**Choose up to 6 hours from the following: <sup>1</sup> 0-6**Business Administration**

BLAW 5333	Legal Issues of Sustainability and Responsibility
ISAN 5357	Computing for Data Analytics

ISAN 5358	Agile Project Management For Business Professionals
ISAN 5370	Enterprise Resource Planning and Business Intelligence
MGT 5311	Process Improvement Management in Organizations
MGT 5315	New Venture Management
MGT 5321	Supply Chain Management
MGT 5390	Managerial Data Analysis
ANLY 5334	Statistical Methods for Business
ANLY 5335	Forecasting and Simulation
<b>Technology</b>	
TECH 5315	Engineering Economic Analysis
TECH 5382	Industrial Ecology and Sustainability Engineering
TECH 5390	Research in Technology
<b>Computer Science</b>	
CS 5306	Advanced Operating Systems
CS 5346	Advanced Artificial Intelligence
<b>Geography</b>	
GEO 5312	Managing Urbanization
GEO 5313	Environmental Studies
GEO 5334	Applied Water Resources
GEO 5336	Transportation Systems
GEO 5351	Regional Waste Management
GEO 5352	Air Quality Management
GEO 5393D	Water Resource Planning
<b>Mathematics</b>	
MATH 5315	Mathematical Statistics
MATH 5340	Scientific Computation
MATH 5345	Regression Analysis
MATH 5376A	Design and Analysis of Experiments
MATH 5376B	Analysis of Variance
MATH 5376D	Statistical Applications in Genetics and Bioinformatics
MATH 5388	Discrete Mathematics
<b>Physics</b>	
PHYS 5322	Semiconductor Device Microfabrication
PHYS 5324	Thin Film Synthesis and Characterization Laboratory
PHYS 5327	Semiconductor Device Physics
PHYS 5332	Materials Characterization
<b>Material Science, Engineering and Commercialization</b>	
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship
MSEC 7340	Biomaterials and Biosensors
MSEC 7395H	Environmental Chemistry

**Project**

ENGR 5398A	Project
Choose a minimum of 3 hours from the following:	
ENGR 5198B	Project
ENGR 5298B	Project

3

ENGR 5398B	Project
ENGR 5598B	Project
ENGR 5998B	Project
<b>Total Hours</b>	<b>31</b>

<sup>1</sup> Choose up to 6 hours from the Multidisciplinary Electives above to make the total hours selected from Engineering Electives and from Multidisciplinary Electives to equal 15 hours.

## Comprehensive Examination Requirement

An oral project defense is required. This oral defense will serve as the comprehensive examination requirement. If the committee is not satisfied with a graduate student's oral defense, they specify all deficiencies the student must resolve. The committee will not sign the Master's Comprehensive Examination Report Form until all specified deficiencies have been resolved. Should the committee decide to hold a second oral defense, the chair of the committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the project option for the degree, a committee to direct the project activity will be established. The project outcomes and deliverables will be specified by the project committee, and will include a written project report (similar in depth to a research thesis). In addition to demonstrating the student's capability for topical research and/or technical development, the project must also demonstrate the student's capability for independent thought and ability to completely resolve an unstructured technical problem. The structure and format of the project report will be specified by the project committee and may leverage portions of the Graduate College's Guide to Preparing and Submitting a Thesis or Dissertation. However, the project report will not be submitted to The Graduate College for publication and dissemination.

## Project Proposal

The student must submit an official Master's Project Proposal form to their project committee. The required project proposal form may be obtained from the program's website <http://www.engineering.txstate.edu/Programs/Graduate.html>. After signing the form and obtaining committee members' signatures and graduate advisor's signature the student must submit the project proposal form with one copy of the proposal attached to the Director of the Ingram School of Engineering for approval before proceeding with project activity. If the project activity involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to the Ingram School. If the project activity involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended the project proposal form be submitted to the Director of the Ingram School by the end of the student's enrollment in ENGR 5398A.

## Project Committee

The project committee must be composed of a minimum of three approved graduate faculty members. The chair of the project committee and at least one other committee member must be Ingram School faculty. The committee may contain additional members from industry sponsors or agencies, at the request of the sponsor or the preference of the committee chair.

## Project Enrollment and Credit

The completion of a minimum of six hours of project enrollment is required. Students will enroll in ENGR 5398A for initial project activity and ENGR 5x98B for subsequent project activity. Preliminary discussions regarding the selection of a topic and assignment to a project supervisor are required prior to enrollment for ENGR 5398A.

**A student will be required to enroll in and pay the fee for at least one hour of the project course during any term in which the student will receive project supervision or guidance and/or in which the student is using university resources.** Failure to register for the appropriate project course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in ENGR 5398A, the student will continue to enroll in ENGR 5x98B until the project is successfully completed, as specified by the project committee. In the rare case when a student has not previously enrolled in ENGR 5398A and plans to work on and complete the project in one term, the student may enroll concurrently in both 5398A and 5398B. The only grades assigned for project courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a project course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the project is completed. The minimum number of hours of project credit ("CR") will be awarded only after the project report is approved by the project committee, and has been submitted to and approved by the Ingram School of Engineering. A student who has selected the project option must be registered for the appropriate project course during the term or Summer I (during summer the project course runs ten weeks for both sessions) in which the degree will be conferred.

## Project Deadlines and Approval Process

Project deadlines are the same as the thesis deadlines posted at the following web page: [http://www.gradcollege.txstate.edu/Thes-Diss\\_Info/T-D\\_Deadlines.html](http://www.gradcollege.txstate.edu/Thes-Diss_Info/T-D_Deadlines.html). The completed project report must be submitted to the chair of the project committee no later than 41 days before the date of the commencement at which the degree is to be conferred.

The following must be submitted to the office of Ingram School no later than 24 days, not counting weekends or holidays, before the date of commencement at which the degree is to be conferred (see The Graduate College webpage for specific deadlines):

1. The Project Committee Approval form bearing original signatures of the student and all committee members.
2. One (1) copy of the project report in final form, approved by all committee members, on standard paper (Hard-copy Submission Option) **or** PDF of the project report in final form, approved by all committee members, submitted to the Ingram School of Engineering.

After the Director of the Ingram School approves the project report, the student may take personal copies to the Alkek Library and pay the binding fee for personal use.

Master's level courses in Engineering: ENGR (p. 3069), CE (p. 3070), EE (p. 3072), IE (p. 3074), MFG (p. 3076)

## Courses Offered

### Engineering (ENGR)

#### **ENGR 5100. Seminar in Engineering.**

Graduate students attend seminars by invited speakers presenting relevant topics in academia and industry. The schedule of speakers will be developed each semester with strict faculty supervision. This course may only be taken for credit one time.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **ENGR 5101. Academic Instruction for Engineering Graduate Assistants.**

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **ENGR 5105. Engineering Internship.**

This course is a faculty-supervised, experiential, work-integrated learning course intended to help the student acquire engineering curriculum-related industrial experience and hence successfully make the transition into the workforce. Course cannot be counted toward graduation. Course may be repeated once. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **ENGR 5198B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **ENGR 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **ENGR 5201. Academic Instruction for Engineering Graduate Assistants.**

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **ENGR 5298B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **ENGR 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### **ENGR 5310. Probability, Random Variables, & Stochastic Processes for Engineers.**

This course develops theory underlying analysis and design of systems. Fundamental distributional concepts, applications of statistical methods, and theory of stochastic processes are introduced to create a mathematical foundation for engineering analysis of physical systems involving randomness. Applications to engineering topics are taught, including estimation, control, and systems theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ENGR 5321. Environmental Chemistry.**

This course introduces environmental chemistry, emphasizing aquatic resources and engineering. It also examines fundamental geochemistry and atmospheric chemistry principles relating to pollutant impacts on aquatic ecosystems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **ENGR 5322. Low Impact Development and Green Infrastructure.**

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development and water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5323. Soil and Groundwater Remediation.**

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. Significance of subsurface contamination and the importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5330. Advanced Soil Mechanics.**

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ENGR 5332. Earth retaining structures and slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5333. Fluid Flow in Porous Media.**

This course presents the fundamental theory of fluid flow in heterogeneous porous media and introduces various theoretical tools to characterize and predict the flow field. This course focuses on the fluid flow theory in complex porous media, such as fractured porous media. Key concepts are introduced, and derivations of governing equations are presented thoroughly. Analytical and numerical techniques to solve governing equations are discussed. The students of this course use these fundamental equations to solve problems based on real-world situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics includes the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5361. Pavement Asset Management.**

This course is about applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. The course covers methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course also discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5362. Advanced Traffic Engineering.**

This course is an introduction to basic components of transportation systems and fundamentals of transportation engineering. Topics include geometric design of highways, study of warrants for traffic control devices, analysis of traffic flow theory and characteristics, levels of service, capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5363. Road Infrastructure Safety.**

This course will cover topics including an introduction to road infrastructure safety, fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and safe system design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5384. Problems in Engineering.**

Graduate students investigate a special topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. This course may be repeated once for additional credit with permission of the School Director. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENGR 5398A. Project.**

This course represents a student's initial project enrollment. No project credit is awarded until the student has completed the project in ENGR 5x98B. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5398B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the theses is completed in ENGR 5x99B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5598B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed.

Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5998B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed.

Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Civil Engineering (CE)****CE 5320. Water Quality Management.**

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5331. Computational Methods in Geosystems.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered. This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CE 5340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, etc. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Electrical Engineering (EE)****EE 5320. Advanced Computer Architecture and Arithmetic.**

This course teaches design and analysis of high-performance computer systems, focusing on quantitative analysis of the latest processors and compilers. Current processor architectures are surveyed for system design. Topics include instruction sets, parallelizing architectures, pipelining, I/O, memory and cache organization, parallel/vector processing, fast arithmetic units design, and implementation using HDL. Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5321. Computer-Aided Engineering Simulations on HPC Systems.**

This course covers development of simulations for engineering applications that are solved using High Performance Computing (HPC) environments. Topics include programming techniques for multicore processors, processor and memory architecture, computation for dense and sparse linear algebra applications, computational temperature analysis, fluid dynamics, stencil and stochastic algorithms, and other applications. Prerequisite: EE 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5323. Digital Image Processing.**

This course provides the necessary fundamental techniques to analyze and process digital images. It covers principles, concepts, and techniques of digital image processing and computer vision. Restricted to students enrolled in the MS Engineering program. Prerequisite: EE 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5330. Embedded and Real-Time Computing.**

This course teaches development of embedded computing systems with strong resource constraints. Key concepts include managing constrained memory and processing speed limitations, and programming for soft and hard real-time constraints. Students will learn use of a Real-Time Operating System (RTOS). Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5331. Machine Learning for Engineering Applications.**

This course covers an introduction to machine learning focused on deep learning techniques using engineering applications with Python. Topics include model characteristics, neural network theory, classifiers for network and signal processing applications, regression and convolutional modeling for object-detection, time-series and forecasting machine learning models for Smart City concepts. Prerequisite: ENGR 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5350. Advanced Electronic Circuit Design.**

This course includes low and high power RF amplifier design techniques, oscillators, FM demodulators, limiters, and mixer design. Additional topics include circuit design to minimize intermodulation and other forms of distortion, and RD and high-speed analog circuits with emphasis on digital-friendly applications. Prerequisite: EE 4350 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5353. Fundamentals of Advanced Semiconductor Technology.**

In this course students will learn key concepts and trends of advanced semiconductor device technology. Topics include Moore's law, MOSFET, CMOS and scaling, high-K gate dielectrics, new channel materials replacing silicon, three dimensional and compound semiconductor device structures. In addition students will be involved in laboratories and seminar presentations. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5354. Flexible Electronics.**

This course will cover the materials systems, processes, device physics and applications of flexible electronics. The materials range from amorphous and nanocrystalline silicon, organic and polymeric semiconductors to solution cast films of carbon nanotubes. Real device discussions include high speed transistors, photovoltaics, flexible flat-panel displays, medical image sensors, etc. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 5355. Electronic Materials and Devices.**

This course covers theoretical concepts applicable to the understanding of unique properties exhibited by electronic materials, especially by dielectrics, oxide semiconductors, ferroelectrics, pyroelectrics, piezoelectrics, magnetic, and multifunctional and multiferroic materials. The various microelectronic devices and modern novel technologies based on these materials are emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5357. Power Systems for Engineering.**

This course introduces the analysis of various elements of power systems, including power generation, transformer action, transmission line modeling, symmetrical components, power factor correction, real and quadrature power calculations, load flow analysis, and economic considerations in operating systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5360. Thin Film Technology.**

This course covers the theoretical and practical aspects of thin film technology in modern devices. The design and fabrication of thin film heterostructures is discussed. Growth and nucleation of epitaxial thin films with diverse properties and devices with combined properties will be emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5361. Nanofabrication Technology for Semiconductor Device Processing.**

This course provides an overview of nanofabrication techniques for conventional and emerging micro- and nano-electronic devices. Topics include semiconductor crystal growth, wafer preparation, epitaxial growth, oxidation, control of dopant profiles for the formation of shallow junctions, ion-implantation, thin film deposition, photolithography, metallization etching, device and circuit formation, and testing. Prerequisite: EE 3350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5372. Advanced Networking.**

This course develops important theoretical and application topics related to advanced networking. Theoretical topics are introduced using mathematical treatments, including queuing theory and some random processes. The course includes applications of these topics to communications networks, and focuses on architectures, applications and technologies which affect modern computer and data networks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5374. Introduction to Wireless Communication.**

This course teaches principles and practices in designing and analyzing cellular and other wireless communication systems. Topics include RF propagation modeling, fast and slow fading, modulation, demodulation, coding, and multiple access techniques. Prerequisite: EE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5375. Smart Grid: an Application Development Platform.**

In this course, students will learn how to develop real applications for the smart grid and model its performance with simulations and stochastic models. Topics include energy informatics, smart metering, home energy management, demand response, load disaggregation and APIs/ OpenData. The mathematical tools used include: Optimization/Control, Machine Learning and Stochastic Processes. Prerequisites: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5377. Statistical Signal Processing.**

This course develops the theory and applications of random processes using mathematical treatments, including elementary discrete and continuous time linear systems theory, elementary probability, and transform theory. Topics include applications of random processes to information and communication theory, estimation and detection, control, signal processing, and stochastic systems theory. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5380. Advanced Electric Machines.**

This course teaches the principles and analysis of electromechanical systems. Students will develop analytical techniques for predicting device and system interaction characteristics as well as learn to design major classes of electric machines.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5381. Advanced Sustainable Energy & Storage.**

This course examines the consumption and production of energy and the principles and technologies behind renewable energy sources. It also introduces the basics of energy storage systems such as batteries, gravitational, and hybrid. Current research in the field is examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5382. Advanced Power Systems Analysis.**

This course is an advanced treatment of various elements of power systems, including case studies, analysis of relevant peer-reviewed literature, symmetrical and unsymmetrical faults, symmetrical components, system protection, transient stability, transient operation of transmission lines, and supervisory control and data acquisition (SCADA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5398A. Antenna Theory, Design and Applications.**

This course covers the basic theory, design and applications of antennas. The topics include antenna radiation, fundamental parameters of antennas, linear wire antennas, loop antennas, antenna arrays, long-periodic antennas, horn antennas, microstrip antennas and modern nano-antennas. Prerequisite: EE 3340 or EE 3370 either with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398B. Electronic Materials and Beyond for Sustainable Energy.**

This course covers the basic science and technology for sustainable energy from the view of materials, where electronic materials are highly emphasized. The topics include solar cells, thermoelectrics, batteries, supercapacitors, artificial photosynthesis, fuel cells, biomass and nuclear energy. Prerequisite: EE 3355 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398C. Multimedia Signal Processing.**

This course covers theory and applications of digital signal processing to multimedia signals, including speech, audio, image, and video. Key concepts and algorithms are discussed first, followed by a review of relevant industry standards. Hardware architectures and real-time implementation concepts appropriate for multimedia signals are also included. Prerequisites: EE 3370 and [EE 4323 or EE 4377] both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398D. Electroceramics.**

This course covers binary and ternary phase diagrams, non-centrosymmetric crystal structures and symmetry groups, nonlinear dielectrics (ferroelectricity, piezoelectricity, pyroelectricity), nonlinear magnetics, oxide wideband gap semiconductors, detectors and sensors, introduction to MEMS, radhard electronics, and spintronics technology. Labs and additional research-oriented instruction are related to materials processing, characterization, fabrication, and testing. Prerequisite: EE 3355 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Industrial Engineering (IE)****IE 5310. Advanced Statistical Design of Experiments for Engineers.**

This course examines the design and analysis of controlled experiments, demonstrating engineering applications of design of experiments (DOE) in the manufacturing and service industries. Topics include full and fractional factorial designs, response surface methodology, and Taguchi methods. In a semester-long project, students apply DOE to improve a real manufacturing process. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5320. Modeling and Analysis of Manufacturing Systems.**

This course covers the methods for modeling and analyzing manufacturing systems. Critical manufacturing issues that are addressed by these models include sustainable production systems, material handling systems, scheduling, and supply chains. Prerequisite: IE 3320 and IE 3340 and MFGE 4396 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5330. Advanced Quality Control and Reliability Engineering.**

This course provides in-depth knowledge in reliability modeling and maintenance optimization for components and systems. The course also covers advanced quality control techniques including multivariate process control. Methodologies are applied to solve practical problems arising from various industry domains. Restricted to students enrolled in the MS Engineering program. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5340. Applied Deterministic Operations Research for Engineers.**

This course introduces students to modeling of linear, non-linear, and integer problems applied to engineering design, manufacturing, service, supply chain, healthcare and electrical systems. Mathematical programming software is emphasized in class exercises, homework, and project. Techniques including revised simplex method, duality theory, sensitivity analysis, and networks are also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5343. Non-Linear Optimization Techniques for Engineers.**

This course covers engineering applications of mathematical modeling and computational methods for nonlinear programming problems. The primary goal of this course is to present techniques and strategies essential to optimize non-linear models. Prerequisite: IE 3340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5345. Advanced Optimization.**

This course covers advanced concepts in linear and integer programming. Solution techniques for stochastic and dynamic programming and formulation and solution of decision models in manufacturing, service, supply chain, healthcare and electrical systems are presented. Prerequisite: IE 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5347. Advanced Heuristic Optimization.**

This course covers heuristic methods that search beyond local optima such as simulated annealing, tabu search, genetic algorithms, ant-colony systems and particle swarm. Papers from the literature, problem-specific heuristics, evaluation methods, and implementations are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5397. System Thinking and Analysis.**

This course is an introduction to systems engineering and the systems thinking process, providing important considerations related to the engineering of large scale systems. These considerations include system understanding, modeling and design, the system development process, needs analysis, concept exploration and definition, design, integration and evaluation, and systems engineering management. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5398A. Healthcare Systems Engineering.**

This course provides an introduction into healthcare delivery with particular attention to the application of systems engineering techniques. Topics include the organization of healthcare systems, characteristics of US healthcare, decision-making in the healthcare environment, health informatics, and performance measurement tools. Student project involves integration and application of systems engineering methodologies. Prerequisite: IE 5340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398B. Response Surface Methodologies.**

This course continues the examination of the design and analysis of controlled experiments, demonstrating how design of experiments (DOE) and response surface methodologies (RSM) are used in product optimization and process improvement. Topics include factorial and fractional factorial designs, steepest ascent, fitting response surfaces, variance-optimal design, and mixture experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398C. Data-Intensive Analysis and Simulation for Engineers.**

This course covers foundational topics in data science, including data-intensive analysis and simulation. Specific topics include data science, data extracting and preprocessing, data visualization, and design of simulation experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Manufacturing Engineering (MFGE)

### MFGE 5315. Energy and Thermofluids Engineering.

This course covers core engineering concepts of energy and thermofluids based on fluid mechanics, thermodynamics, and heat transfer. The main topics include properties of pure substances, fluid statics and dynamics, non-Newtonian fluid, differential analysis of fluid flow, viscous flow in pipes, external flows, boundary layer, open channel flows, mass and energy analysis of control volumes, first and second laws of thermodynamics, steady-state and transient conduction, internal and external forced convection, natural convection, fundamentals of radiation, and mass transfer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MFGE 5316. Advanced Computer Aided Design and Manufacturing.

Topics include design process, mathematical presentation of wireframe/surface/solid modes, transformation and manipulation of objects, finite element analysis, data exchange, process planning, fundamentals of multi-axis NC programming for turning and milling processes, fundamentals of CAD/CAM systems, CNC code generation by CAD/CAM software for the CNC, and waterjet machines. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

### MFGE 5318. Additive Manufacturing.

In this course CAD standards, theory, techniques, applications, and development of additive manufacturing technology, photopolymerization, powder bed fusion, extrusion-based systems, printing processes, sheet lamination processes, beam deposition processes, design for additive manufacturing, and safety considerations in a hands-on approach will be explained. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

### MFGE 5320. Polymer Nanocomposites.

This course covers polymer nanocomposites focusing on materials, manufacturing, characterization, and applications. The primary focus is on fiber reinforced polymer nanocomposites. Morphological, Thermal, Mechanical, and Electrical Characterization will be discussed in detail. Applications include fire-resistant, ablative, fatigue-resistant, impact-resistant, and bio-based composites. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

### MFGE 5326. Advanced Robotics in Manufacturing Automation.

This course covers principles and techniques involved in advanced robotics. Topics include introduction to robotics, industrial robotics, robot kinematics, path planning, robot dynamics, advanced control, force control, sensors and actuators, mobile robotics, and introduction to nanorobotics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MFGE 5330. Multiscale Manufacturing.

This course covers the multiscale manufacturing processes, techniques, and applications. Topics include micro and nano-manufacturing, polymer and semiconductor fabrication, thin film technologies, bulk and surface micromachining, physics of multiscale manufacturing, microelectromechanical (MEMS) devices, and design issues for fabrication of micro and nano-systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MFGE 5398B. Advanced Composite Materials.

This course examines various aspects of fiber-reinforced polymeric composites. The topics covered include constituent materials (fibers and matrices), mechanics, performance, manufacturing, and introduction to nanocomposites. This course also provides introductory treatments concerning ceramic matrix composites, metal matrix composites, and carbon/carbon composites.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Program Overview

The Master of Science (M.S.) degree with a major in Engineering provides a practical, industry-driven focus via a long-term, targeted technical project or thesis related to real-world engineering applications. These projects will be conducted in partnership with local industries and may involve off-campus collaborations. The degree requires a large-scale project or thesis because the abilities to solve problems, innovate and make immediate contributions to industry are best developed by having students confront a substantial, open-ended problem; perform detailed research on the problem; develop various solutions; choose and implement the best solution; validate their choice; and effectively communicate the process to professional colleagues, executives, and customers.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree engineering, computer science, physics, technology, or a closely related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://>



[www.gradcollege.txst.edu/international/faqs.html](http://www.gradcollege.txst.edu/international/faqs.html)) for more information.)

- official transcripts from **each institution** where course credit was granted
- 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning and writing sections will be required. Texas State University students are exempt from this requirement
- resume/CV detailing prior work experience, research experience, awards, scholarships, and other related qualifications
- statement of purpose (two pages) conveying research interests, plans for graduate study, and professional aspirations
- two letters of recommendation from non-related individuals familiar with the student's scholarly work and/or relevant work experience

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### Additional Information

Non-credit (leveling) course work may be required prior to admission into the program if the student lacks sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Engineering concentration in Electrical Engineering requires 31 semester credit hours, including a thesis.

Non-credit (leveling) course work may be required prior to admission into the program if you lack sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

All students will have a faculty advisor and a graduate committee composed of a minimum of three graduate faculty members (including the faculty advisor). The faculty advisor will provide technical direction for the student's thesis, and the graduate committee will be responsible for approving the thesis proposal, receiving thesis progress reports, and approving the final thesis presentation and written report. The oral project presentation will serve as the comprehensive examination.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENGR 5100	Seminar in Engineering	1
ENGR 5310	Probability, Random Variables, & Stochastic Processes for Engineers	3
EE 5320	Advanced Computer Architecture and Arithmetic	3
EE 5350	Advanced Electronic Circuit Design	3
<b>Engineering Electives</b>		
Choose 9-15 hours from the following:		9-15
CE 5320	Water Quality Management	
CE 5340	Advanced Infrastructure Materials	
CE 5350	Highway Bridge Design	
CE 5360	Pavement Design	
CE 5370	Urban Stormwater Management	
CE 5390	Infrastructure Systems Analysis	
CE 5391	Advanced Mechanics of Materials	
EE 5321	Computer-Aided Engineering Simulations on HPC Systems	
EE 5323	Digital Image Processing	
EE 5330	Embedded and Real-Time Computing	
EE 5331	Machine Learning for Engineering Applications	
EE 5353	Fundamentals of Advanced Semiconductor Technology	
EE 5354	Flexible Electronics	
EE 5355	Electronic Materials and Devices	
EE 5357	Power Systems for Engineering	
EE 5360	Thin Film Technology	
EE 5361	Nanofabrication Technology for Semiconductor Device Processing	
EE 5372	Advanced Networking	
EE 5374	Introduction to Wireless Communication	
EE 5375	Smart Grid: an Application Development Platform	
EE 5377	Statistical Signal Processing	
EE 5380	Advanced Electric Machines	
EE 5381	Advanced Sustainable Energy & Storage	
EE 5382	Advanced Power Systems Analysis	
EE 5398A	Antenna Theory, Design and Applications	
EE 5398B	Electronic Materials and Beyond for Sustainable Energy	
EE 5398C	Multimedia Signal Processing	
EE 5398D	Electroceramics	
ENGR 5321	Environmental Chemistry	
ENGR 5323	Soil and Groundwater Remediation	
ENGR 5330	Advanced Soil Mechanics	
ENGR 5333	Fluid Flow in Porous Media	
ENGR 5334	Advanced Foundation Engineering	
ENGR 5341	Advanced Bituminous Materials	
ENGR 5352	Advanced Prestressed Concrete	
ENGR 5362	Advanced Traffic Engineering	
ENGR 5363	Road Infrastructure Safety	
ENGR 5384	Problems in Engineering	

IE 5310	Advanced Statistical Design of Experiments for Engineers
IE 5320	Modeling and Analysis of Manufacturing Systems
IE 5330	Advanced Quality Control and Reliability Engineering
IE 5340	Applied Deterministic Operations Research for Engineers
IE 5343	Non-Linear Optimization Techniques for Engineers
IE 5345	Advanced Optimization
IE 5347	Advanced Heuristic Optimization
IE 5397	System Thinking and Analysis
IE 5398A	Healthcare Systems Engineering
IE 5398B	Response Surface Methodologies
IE 5398C	Data-Intensive Analysis and Simulation for Engineers
ME 5310	Continuum Mechanics
ME 5312	Stress Analysis of Composite Materials
MFGE 5315	Energy and Thermofluids Engineering
MFGE 5316	Advanced Computer Aided Design and Manufacturing
MFGE 5318	Additive Manufacturing
MFGE 5320	Polymer Nanocomposites
MFGE 5326	Advanced Robotics in Manufacturing Automation
MFGE 5330	Multiscale Manufacturing
<b>Multidisciplinary Electives</b>	
Choose up to 6 hours from the following: <sup>1</sup>	
0-6	
<b>Business Administration</b>	
BLAW 5333	Legal Issues of Sustainability and Responsibility
ISAN 5357	Computing for Data Analytics
ISAN 5358	Agile Project Management For Business Professionals
ISAN 5358	Agile Project Management For Business Professionals
MGT 5311	Process Improvement Management in Organizations
MGT 5315	New Venture Management
MGT 5321	Supply Chain Management
MGT 5390	Managerial Data Analysis
ANLY 5334	Statistical Methods for Business
ANLY 5335	Forecasting and Simulation
<b>Technology</b>	
TECH 5315	Engineering Economic Analysis
TECH 5382	Industrial Ecology and Sustainability Engineering
TECH 5390	Research in Technology
<b>Computer Science</b>	
CS 5306	Advanced Operating Systems
CS 5346	Advanced Artificial Intelligence
<b>Geography</b>	
GEO 5312	Managing Urbanization
GEO 5313	Environmental Studies
GEO 5334	Applied Water Resources
GEO 5336	Transportation Systems
GEO 5351	Regional Waste Management

GEO 5352	Air Quality Management
GEO 5393D	Water Resource Planning
<b>Mathematics</b>	
MATH 5315	Mathematical Statistics
MATH 5340	Scientific Computation
MATH 5345	Regression Analysis
MATH 5376A	Design and Analysis of Experiments
MATH 5376B	Analysis of Variance
MATH 5376D	Statistical Applications in Genetics and Bioinformatics
MATH 5388	Discrete Mathematics
<b>Physics</b>	
PHYS 5322	Semiconductor Device Microfabrication
PHYS 5324	Thin Film Synthesis and Characterization Laboratory
PHYS 5327	Semiconductor Device Physics
PHYS 5332	Materials Characterization
<b>Materials Science, Engineering and Commercialization</b>	
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship
MSEC 7340	Biomaterials and Biosensors
MSEC 7395H	Environmental Chemistry
<b>Thesis</b>	
ENGR 5399A	Thesis
Choose a minimum of 3 hours from the following:	
ENGR 5199B	Thesis
ENGR 5299B	Thesis
ENGR 5399B	Thesis
ENGR 5599B	Thesis
ENGR 5999B	Thesis
<b>Total Hours</b>	
<b>31</b>	

<sup>1</sup> Choose up to 6 hours from the Multidisciplinary Electives above to make the total hours selected from Engineering Electives and from Multidisciplinary Electives to equal 15 hours.

## Comprehensive Examination Requirement

An oral thesis defense is required. This oral defense will serve as the comprehensive examination requirement. If the thesis committee is not satisfied with a graduate student's oral defense, they specify all deficiencies the student must resolve. The thesis committee will not sign the Master's Comprehensive Examination Report Form and the Thesis Submission Approval Form until all specified deficiencies have been resolved. Should the thesis committee decide to hold a second oral defense, the chair of the thesis committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with

the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being

made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Engineering: ENGR (p. 3080), CE (p. 3081), EE (p. 3083), IE (p. 3085), MFGE (p. 3087)

## Courses Offered

### Engineering (ENGR)

#### ENGR 5100. Seminar in Engineering.

Graduate students attend seminars by invited speakers presenting relevant topics in academia and industry. The schedule of speakers will be developed each semester with strict faculty supervision. This course may only be taken for credit one time.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ENGR 5101. Academic Instruction for Engineering Graduate Assistants.

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ENGR 5105. Engineering Internship.

This course is a faculty-supervised, experiential, work-integrated learning course intended to help the student acquire engineering curriculum-related industrial experience and hence successfully make the transition into the workforce. Course cannot be counted toward graduation. Course may be repeated once. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENGR 5198B. Project.

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENGR 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENGR 5201. Academic Instruction for Engineering Graduate Assistants.

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ENGR 5298B. Project.

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENGR 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENGR 5310. Probability, Random Variables, & Stochastic Processes for Engineers.

This course develops theory underlying analysis and design of systems. Fundamental distributional concepts, applications of statistical methods, and theory of stochastic processes are introduced to create a mathematical foundation for engineering analysis of physical systems involving randomness. Applications to engineering topics are taught, including estimation, control, and systems theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ENGR 5321. Environmental Chemistry.

This course introduces environmental chemistry, emphasizing aquatic resources and engineering. It also examines fundamental geochemistry and atmospheric chemistry principles relating to pollutant impacts on aquatic ecosystems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### ENGR 5322. Low Impact Development and Green Infrastructure.

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development and water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5323. Soil and Groundwater Remediation.**

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. Significance of subsurface contamination and the importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5330. Advanced Soil Mechanics.**

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ENGR 5332. Earth retaining structures and slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5333. Fluid Flow in Porous Media.**

This course presents the fundamental theory of fluid flow in heterogeneous porous media and introduces various theoretical tools to characterize and predict the flow field. This course focuses on the fluid flow theory in complex porous media, such as fractured porous media. Key concepts are introduced, and derivations of governing equations are presented thoroughly. Analytical and numerical techniques to solve governing equations are discussed. The students of this course use these fundamental equations to solve problems based on real-world situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics includes the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5361. Pavement Asset Management.**

This course is about applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. The course covers methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course also discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5362. Advanced Traffic Engineering.**

This course is an introduction to basic components of transportation systems and fundamentals of transportation engineering. Topics include geometric design of highways, study of warrants for traffic control devices, analysis of traffic flow theory and characteristics, levels of service, capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ENGR 5363. Road Infrastructure Safety.**

This course will cover topics including an introduction to road infrastructure safety, fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and safe system design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5384. Problems in Engineering.**

Graduate students investigate a special topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. This course may be repeated once for additional credit with permission of the School Director. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENGR 5398A. Project.**

This course represents a student's initial project enrollment. No project credit is awarded until the student has completed the project in ENGR 5x98B. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5398B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the theses is completed in ENGR 5x99B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5598B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed.

Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5998B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed.

Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Civil Engineering (CE)****CE 5320. Water Quality Management.**

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5331. Computational Methods in Geosystems.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered. This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, etc. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Electrical Engineering (EE)****EE 5320. Advanced Computer Architecture and Arithmetic.**

This course teaches design and analysis of high-performance computer systems, focusing on quantitative analysis of the latest processors and compilers. Current processor architectures are surveyed for system design. Topics include instruction sets, parallelizing architectures, pipelining, I/O, memory and cache organization, parallel/vector processing, fast arithmetic units design, and implementation using HDL. Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5321. Computer-Aided Engineering Simulations on HPC Systems.**

This course covers development of simulations for engineering applications that are solved using High Performance Computing (HPC) environments. Topics include programming techniques for multicore processors, processor and memory architecture, computation for dense and sparse linear algebra applications, computational temperature analysis, fluid dynamics, stencil and stochastic algorithms, and other applications. Prerequisite: EE 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5323. Digital Image Processing.**

This course provides the necessary fundamental techniques to analyze and process digital images. It covers principles, concepts, and techniques of digital image processing and computer vision. Restricted to students enrolled in the MS Engineering program. Prerequisite: EE 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5330. Embedded and Real-Time Computing.**

This course teaches development of embedded computing systems with strong resource constraints. Key concepts include managing constrained memory and processing speed limitations, and programming for soft and hard real-time constraints. Students will learn use of a Real-Time Operating System (RTOS). Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5331. Machine Learning for Engineering Applications.**

This course covers an introduction to machine learning focused on deep learning techniques using engineering applications with Python. Topics include model characteristics, neural network theory, classifiers for network and signal processing applications, regression and convolutional modeling for object-detection, time-series and forecasting machine learning models for Smart City concepts. Prerequisite: ENGR 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5350. Advanced Electronic Circuit Design.**

This course includes low and high power RF amplifier design techniques, oscillators, FM demodulators, limiters, and mixer design. Additional topics include circuit design to minimize intermodulation and other forms of distortion, and RD and high-speed analog circuits with emphasis on digital-friendly applications. Prerequisite: EE 4350 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5353. Fundamentals of Advanced Semiconductor Technology.**

In this course students will learn key concepts and trends of advanced semiconductor device technology. Topics include Moore's law, MOSFET, CMOS and scaling, high-K gate dielectrics, new channel materials replacing silicon, three dimensional and compound semiconductor device structures. In addition students will be involved in laboratories and seminar presentations. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5354. Flexible Electronics.**

This course will cover the materials systems, processes, device physics and applications of flexible electronics. The materials range from amorphous and nanocrystalline silicon, organic and polymeric semiconductors to solution cast films of carbon nanotubes. Real device discussions include high speed transistors, photovoltaics, flexible flat-panel displays, medical image sensors, etc. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 5355. Electronic Materials and Devices.**

This course covers theoretical concepts applicable to the understanding of unique properties exhibited by electronic materials, especially by dielectrics, oxide semiconductors, ferroelectrics, pyroelectrics, piezoelectrics, magnetic, and multifunctional and multiferroic materials. The various microelectronic devices and modern novel technologies based on these materials are emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5357. Power Systems for Engineering.**

This course introduces the analysis of various elements of power systems, including power generation, transformer action, transmission line modeling, symmetrical components, power factor correction, real and quadrature power calculations, load flow analysis, and economic considerations in operating systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5360. Thin Film Technology.**

This course covers the theoretical and practical aspects of thin film technology in modern devices. The design and fabrication of thin film heterostructures is discussed. Growth and nucleation of epitaxial thin films with diverse properties and devices with combined properties will be emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5361. Nanofabrication Technology for Semiconductor Device Processing.**

This course provides an overview of nanofabrication techniques for conventional and emerging micro- and nano-electronic devices. Topics include semiconductor crystal growth, wafer preparation, epitaxial growth, oxidation, control of dopant profiles for the formation of shallow junctions, ion-implantation, thin film deposition, photolithography, metallization etching, device and circuit formation, and testing. Prerequisite: EE 3350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5372. Advanced Networking.**

This course develops important theoretical and application topics related to advanced networking. Theoretical topics are introduced using mathematical treatments, including queuing theory and some random processes. The course includes applications of these topics to communications networks, and focuses on architectures, applications and technologies which affect modern computer and data networks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5374. Introduction to Wireless Communication.**

This course teaches principles and practices in designing and analyzing cellular and other wireless communication systems. Topics include RF propagation modeling, fast and slow fading, modulation, demodulation, coding, and multiple access techniques. Prerequisite: EE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5375. Smart Grid: an Application Development Platform.**

In this course, students will learn how to develop real applications for the smart grid and model its performance with simulations and stochastic models. Topics include energy informatics, smart metering, home energy management, demand response, load disaggregation and APIs/ OpenData. The mathematical tools used include: Optimization/Control, Machine Learning and Stochastic Processes. Prerequisites: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5377. Statistical Signal Processing.**

This course develops the theory and applications of random processes using mathematical treatments, including elementary discrete and continuous time linear systems theory, elementary probability, and transform theory. Topics include applications of random processes to information and communication theory, estimation and detection, control, signal processing, and stochastic systems theory. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5380. Advanced Electric Machines.**

This course teaches the principles and analysis of electromechanical systems. Students will develop analytical techniques for predicting device and system interaction characteristics as well as learn to design major classes of electric machines.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5381. Advanced Sustainable Energy & Storage.**

This course examines the consumption and production of energy and the principles and technologies behind renewable energy sources. It also introduces the basics of energy storage systems such as batteries, gravitational, and hybrid. Current research in the field is examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5382. Advanced Power Systems Analysis.**

This course is an advanced treatment of various elements of power systems, including case studies, analysis of relevant peer-reviewed literature, symmetrical and unsymmetrical faults, symmetrical components, system protection, transient stability, transient operation of transmission lines, and supervisory control and data acquisition (SCADA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5398A. Antenna Theory, Design and Applications.**

This course covers the basic theory, design and applications of antennas. The topics include antenna radiation, fundamental parameters of antennas, linear wire antennas, loop antennas, antenna arrays, long-periodic antennas, horn antennas, microstrip antennas and modern nano-antennas. Prerequisite: EE 3340 or EE 3370 either with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398B. Electronic Materials and Beyond for Sustainable Energy.**

This course covers the basic science and technology for sustainable energy from the view of materials, where electronic materials are highly emphasized. The topics include solar cells, thermoelectrics, batteries, supercapacitors, artificial photosynthesis, fuel cells, biomass and nuclear energy. Prerequisite: EE 3355 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398C. Multimedia Signal Processing.**

This course covers theory and applications of digital signal processing to multimedia signals, including speech, audio, image, and video. Key concepts and algorithms are discussed first, followed by a review of relevant industry standards. Hardware architectures and real-time implementation concepts appropriate for multimedia signals are also included. Prerequisites: EE 3370 and [EE 4323 or EE 4377] both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398D. Electroceramics.**

This course covers binary and ternary phase diagrams, non-centrosymmetric crystal structures and symmetry groups, nonlinear dielectrics (ferroelectricity, piezoelectricity, pyroelectricity), nonlinear magnetics, oxide wideband gap semiconductors, detectors and sensors, introduction to MEMS, radhard electronics, and spintronics technology. Labs and additional research-oriented instruction are related to materials processing, characterization, fabrication, and testing. Prerequisite: EE 3355 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Industrial Engineering (IE)****IE 5310. Advanced Statistical Design of Experiments for Engineers.**

This course examines the design and analysis of controlled experiments, demonstrating engineering applications of design of experiments (DOE) in the manufacturing and service industries. Topics include full and fractional factorial designs, response surface methodology, and Taguchi methods. In a semester-long project, students apply DOE to improve a real manufacturing process. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5320. Modeling and Analysis of Manufacturing Systems.**

This course covers the methods for modeling and analyzing manufacturing systems. Critical manufacturing issues that are addressed by these models include sustainable production systems, material handling systems, scheduling, and supply chains. Prerequisite: IE 3320 and IE 3340 and MFGE 4396 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5330. Advanced Quality Control and Reliability Engineering.**

This course provides in-depth knowledge in reliability modeling and maintenance optimization for components and systems. The course also covers advanced quality control techniques including multivariate process control. Methodologies are applied to solve practical problems arising from various industry domains. Restricted to students enrolled in the MS Engineering program. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5340. Applied Deterministic Operations Research for Engineers.**

This course introduces students to modeling of linear, non-linear, and integer problems applied to engineering design, manufacturing, service, supply chain, healthcare and electrical systems. Mathematical programming software is emphasized in class exercises, homework, and project. Techniques including revised simplex method, duality theory, sensitivity analysis, and networks are also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5343. Non-Linear Optimization Techniques for Engineers.**

This course covers engineering applications of mathematical modeling and computational methods for nonlinear programming problems. The primary goal of this course is to present techniques and strategies essential to optimize non-linear models. Prerequisite: IE 3340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5345. Advanced Optimization.**

This course covers advanced concepts in linear and integer programming. Solution techniques for stochastic and dynamic programming and formulation and solution of decision models in manufacturing, service, supply chain, healthcare and electrical systems are presented. Prerequisite: IE 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5347. Advanced Heuristic Optimization.**

This course covers heuristic methods that search beyond local optima such as simulated annealing, tabu search, genetic algorithms, ant-colony systems and particle swarm. Papers from the literature, problem-specific heuristics, evaluation methods, and implementations are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5397. System Thinking and Analysis.**

This course is an introduction to systems engineering and the systems thinking process, providing important considerations related to the engineering of large scale systems. These considerations include system understanding, modeling and design, the system development process, needs analysis, concept exploration and definition, design, integration and evaluation, and systems engineering management. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5398A. Healthcare Systems Engineering.**

This course provides an introduction into healthcare delivery with particular attention to the application of systems engineering techniques. Topics include the organization of healthcare systems, characteristics of US healthcare, decision-making in the healthcare environment, health informatics, and performance measurement tools. Student project involves integration and application of systems engineering methodologies. Prerequisite: IE 5340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398B. Response Surface Methodologies.**

This course continues the examination of the design and analysis of controlled experiments, demonstrating how design of experiments (DOE) and response surface methodologies (RSM) are used in product optimization and process improvement. Topics include factorial and fractional factorial designs, steepest ascent, fitting response surfaces, variance-optimal design, and mixture experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398C. Data-Intensive Analysis and Simulation for Engineers.**

This course covers foundational topics in data science, including data-intensive analysis and simulation. Specific topics include data science, data extracting and preprocessing, data visualization, and design of simulation experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



## Manufacturing Engineering (MFGE)

### MFGE 5315. Energy and Thermofluids Engineering.

This course covers core engineering concepts of energy and thermofluids based on fluid mechanics, thermodynamics, and heat transfer. The main topics include properties of pure substances, fluid statics and dynamics, non-Newtonian fluid, differential analysis of fluid flow, viscous flow in pipes, external flows, boundary layer, open channel flows, mass and energy analysis of control volumes, first and second laws of thermodynamics, steady-state and transient conduction, internal and external forced convection, natural convection, fundamentals of radiation, and mass transfer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MFGE 5316. Advanced Computer Aided Design and Manufacturing.

Topics include design process, mathematical presentation of wireframe/surface/solid modes, transformation and manipulation of objects, finite element analysis, data exchange, process planning, fundamentals of multi-axis NC programming for turning and milling processes, fundamentals of CAD/CAM systems, CNC code generation by CAD/CAM software for the CNC, and waterjet machines. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

### MFGE 5318. Additive Manufacturing.

In this course CAD standards, theory, techniques, applications, and development of additive manufacturing technology, photopolymerization, powder bed fusion, extrusion-based systems, printing processes, sheet lamination processes, beam deposition processes, design for additive manufacturing, and safety considerations in a hands-on approach will be explained. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

### MFGE 5320. Polymer Nanocomposites.

This course covers polymer nanocomposites focusing on materials, manufacturing, characterization, and applications. The primary focus is on fiber reinforced polymer nanocomposites. Morphological, Thermal, Mechanical, and Electrical Characterization will be discussed in detail. Applications include fire-resistant, ablative, fatigue-resistant, impact-resistant, and bio-based composites. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

### MFGE 5326. Advanced Robotics in Manufacturing Automation.

This course covers principles and techniques involved in advanced robotics. Topics include introduction to robotics, industrial robotics, robot kinematics, path planning, robot dynamics, advanced control, force control, sensors and actuators, mobile robotics, and introduction to nanorobotics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MFGE 5330. Multiscale Manufacturing.

This course covers the multiscale manufacturing processes, techniques, and applications. Topics include micro and nano-manufacturing, polymer and semiconductor fabrication, thin film technologies, bulk and surface micromachining, physics of multiscale manufacturing, microelectromechanical (MEMS) devices, and design issues for fabrication of micro and nano-systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MFGE 5398B. Advanced Composite Materials.

This course examines various aspects of fiber-reinforced polymeric composites. The topics covered include constituent materials (fibers and matrices), mechanics, performance, manufacturing, and introduction to nanocomposites. This course also provides introductory treatments concerning ceramic matrix composites, metal matrix composites, and carbon/carbon composites.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Program Overview

The Master of Science (M.S.) degree with a major in Engineering provides a practical, industry-driven focus via a long-term, targeted technical project or thesis related to real-world engineering applications. These projects will be conducted in partnership with local industries and may involve off-campus collaborations. The degree requires a large-scale project or thesis because the abilities to solve problems, innovate and make immediate contributions to industry are best developed by having students confront a substantial, open-ended problem; perform detailed research on the problem; develop various solutions; choose and implement the best solution; validate their choice; and effectively communicate the process to professional colleagues, executives, and customers.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree engineering, computer science, physics, technology, or a closely related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://>

- [www.gradcollege.txst.edu/international/faqs.html](http://www.gradcollege.txst.edu/international/faqs.html)) for more information.)
- official transcripts from **each institution** where course credit was granted
  - 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning and writing sections will be required. Texas State University students are exempt from this requirement
  - resume/CV detailing prior work experience, research experience, awards, scholarships, and other related qualifications
  - statement of purpose (two pages) conveying research interests, plans for graduate study, and professional aspirations
  - two letters of recommendation from non-related individuals familiar with the student’s scholarly work and/or relevant work experience

Approved English Proficiency Exam Scores

- Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor’s degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).
- official TOEFL iBT scores required with a 78 overall
  - official PTE scores required with a 52 overall
  - official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
  - official Duolingo Scores required with a 110 overall
  - official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

Additional Information

Non-credit (leveling) course work may be required prior to admission into the program if the student lacks sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

Degree Requirements

The Master of Science (M.S.) degree with a major in Engineering concentration in Industrial Engineering requires 31 semester credit hours, including a project.

Non-credit (leveling) course work may be required prior to admission into the program if you lack sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

All students will have a faculty advisor and a graduate committee composed of a minimum of three graduate faculty members (including the faculty advisor). The faculty advisor will provide technical direction for the student’s project, and the graduate committee will be responsible for approving the project proposal, receiving project progress reports, and approving the final project presentation and written report. The oral project presentation will serve as the comprehensive examination.

Course Requirements

Code	Title	Hours
Required Courses		
ENGR 5100	Seminar in Engineering	1
ENGR 5310	Probability, Random Variables, & Stochastic Processes for Engineers	3
IE 5320	Modeling and Analysis of Manufacturing Systems	3
IE 5340	Applied Deterministic Operations Research for Engineers	3
Engineering Electives		
Choose 9-15 hours from the following:		9-15
CE 5320	Water Quality Management	
CE 5340	Advanced Infrastructure Materials	
CE 5350	Highway Bridge Design	
CE 5360	Pavement Design	
CE 5370	Urban Stormwater Management	
CE 5390	Infrastructure Systems Analysis	
CE 5391	Advanced Mechanics of Materials	
EE 5320	Advanced Computer Architecture and Arithmetic	
EE 5321	Computer-Aided Engineering Simulations on HPC Systems	
EE 5323	Digital Image Processing	
EE 5330	Embedded and Real-Time Computing	
EE 5331	Machine Learning for Engineering Applications	
EE 5350	Advanced Electronic Circuit Design	
EE 5353	Fundamentals of Advanced Semiconductor Technology	
EE 5354	Flexible Electronics	
EE 5355	Electronic Materials and Devices	
EE 5357	Power Systems for Engineering	
EE 5360	Thin Film Technology	
EE 5361	Nanofabrication Technology for Semiconductor Device Processing	
EE 5372	Advanced Networking	
EE 5374	Introduction to Wireless Communication	
EE 5375	Smart Grid: an Application Development Platform	
EE 5377	Statistical Signal Processing	
EE 5380	Advanced Electric Machines	3
EE 5381	Advanced Sustainable Energy & Storage	
EE 5382	Advanced Power Systems Analysis	
EE 5398A	Antenna Theory, Design and Applications	
EE 5398B	Electronic Materials and Beyond for Sustainable Energy	
EE 5398C	Multimedia Signal Processing	
EE 5398D	Electroceramics	
ENGR 5321	Environmental Chemistry	
ENGR 5323	Soil and Groundwater Remediation	
ENGR 5330	Advanced Soil Mechanics	
ENGR 5333	Fluid Flow in Porous Media	
ENGR 5334	Advanced Foundation Engineering	
ENGR 5341	Advanced Bituminous Materials	
ENGR 5352	Advanced Prestressed Concrete	
ENGR 5362	Advanced Traffic Engineering	

ENGR 5363	Road Infrastructure Safety
ENGR 5384	Problems in Engineering
IE 5310	Advanced Statistical Design of Experiments for Engineers
IE 5330	Advanced Quality Control and Reliability Engineering
IE 5343	Non-Linear Optimization Techniques for Engineers
IE 5345	Advanced Optimization
IE 5347	Advanced Heuristic Optimization
IE 5397	System Thinking and Analysis
IE 5398A	Healthcare Systems Engineering
IE 5398B	Response Surface Methodologies
IE 5398C	Data-Intensive Analysis and Simulation for Engineers
ME 5310	Continuum Mechanics
ME 5312	Stress Analysis of Composite Materials
MFGE 5315	Energy and Thermofluids Engineering
MFGE 5316	Advanced Computer Aided Design and Manufacturing
MFGE 5318	Additive Manufacturing
MFGE 5320	Polymer Nanocomposites
MFGE 5326	Advanced Robotics in Manufacturing Automation
MFGE 5330	Multiscale Manufacturing

#### Multidisciplinary Electives

Choose up to 6 hours from the following: <sup>1</sup> 0-6

##### Business Administration

BLAW 5333	Legal Issues of Sustainability and Responsibility
ISAN 5357	Computing for Data Analytics
ISAN 5358	Agile Project Management For Business Professionals
ISAN 5370	Enterprise Resource Planning and Business Intelligence
MGT 5311	Process Improvement Management in Organizations
MGT 5315	New Venture Management
MGT 5321	Supply Chain Management
MGT 5390	Managerial Data Analysis
ANLY 5334	Statistical Methods for Business
ANLY 5335	Forecasting and Simulation

##### Technology

TECH 5315	Engineering Economic Analysis
TECH 5382	Industrial Ecology and Sustainability Engineering
TECH 5390	Research in Technology

##### Computer Science

CS 5306	Advanced Operating Systems
CS 5346	Advanced Artificial Intelligence

##### Geography

GEO 5312	Managing Urbanization
GEO 5313	Environmental Studies
GEO 5334	Applied Water Resources
GEO 5336	Transportation Systems
GEO 5351	Regional Waste Management
GEO 5352	Air Quality Management

GEO 5393D	Water Resource Planning
<b>Mathematics</b>	
MATH 5315	Mathematical Statistics
MATH 5340	Scientific Computation
MATH 5345	Regression Analysis
MATH 5376A	Design and Analysis of Experiments
MATH 5376B	Analysis of Variance
MATH 5376D	Statistical Applications in Genetics and Bioinformatics
MATH 5388	Discrete Mathematics
<b>Physics</b>	
PHYS 5327	Semiconductor Device Physics
<b>Materials Science, Engineering and Commercialization</b>	
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship
MSEC 7340	Biomaterials and Biosensors
MSEC 7395H	Environmental Chemistry

#### Project

ENGR 5398A	Project	3
Choose a minimum of 3 hours from the following:		3
ENGR 5198B	Project	
ENGR 5298B	Project	
ENGR 5398B	Project	
ENGR 5598B	Project	
ENGR 5998B	Project	

**Total Hours** **31**

<sup>1</sup> Choose up to 6 hours from the Multidisciplinary Electives above to make the total hours selected from Engineering Electives and from Multidisciplinary Electives to equal 15 hours.

## Comprehensive Examination Requirement

An oral project defense is required. This oral defense will serve as the comprehensive examination requirement. If the committee is not satisfied with a graduate student's oral defense, they specify all deficiencies the student must resolve. The committee will not sign the Master's Comprehensive Examination Report Form until all specified deficiencies have been resolved. Should the committee decide to hold a second oral defense, the chair of the committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the project option for the degree, a committee to direct the project activity will be established. The project outcomes and deliverables will be specified by the project committee, and will include a written project report (similar in depth to a research thesis). In addition to demonstrating the student's capability for topical research and/or technical development, the project must also demonstrate the student's capability for independent thought and ability to completely resolve an unstructured technical problem. The structure and format of the project report will be specified by the project committee and may leverage portions of the Graduate College's Guide to Preparing and

Submitting a Thesis or Dissertation. However, the project report will not be submitted to The Graduate College for publication and dissemination.

## Project Proposal

The student must submit an official Master's Project Proposal form to their project committee. The required project proposal form may be obtained from the program's website <http://www.engineering.txstate.edu/Programs/Graduate.html>. After signing the form and obtaining committee members' signatures and graduate advisor's signature the student must submit the project proposal form with one copy of the proposal attached to the Director of the Ingram School of Engineering for approval before proceeding with project activity. If the project activity involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to the Ingram School. If the project activity involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended the project proposal form be submitted to the Director of the Ingram School by the end of the student's enrollment in ENGR 5398A.

## Project Committee

The project committee must be composed of a minimum of three approved graduate faculty members. The chair of the project committee and at least one other committee member must be Ingram School faculty. The committee may contain additional members from industry sponsors or agencies, at the request of the sponsor or the preference of the committee chair.

## Project Enrollment and Credit

The completion of a minimum of six hours of project enrollment is required. Students will enroll in ENGR 5398A for initial project activity and ENGR 5x98B for subsequent project activity. Preliminary discussions regarding the selection of a topic and assignment to a project supervisor are required prior to enrollment for ENGR 5398A.

**A student will be required to enroll in and pay the fee for at least one hour of the project course during any term in which the student will receive project supervision or guidance and/or in which the student is using university resources.** Failure to register for the appropriate project course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in ENGR 5398A, the student will continue to enroll in ENGR 5x98B until the project is successfully completed, as specified by the project committee. In the rare case when a student has not previously enrolled in ENGR 5398A and plans to work on and complete the project in one term, the student may enroll concurrently in both 5398A and 5398B. The only grades assigned for project courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a project course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the project is completed. The minimum number of hours of project credit ("CR") will be awarded only after the project report is approved by the project committee, and has been submitted to and approved by the Ingram School of Engineering. A student who has selected the project option must be registered for the appropriate project course during the term or Summer I (during summer the project course runs ten weeks for both sessions) in which the degree will be conferred.

## Project Deadlines and Approval Process

Project deadlines are the same as the thesis deadlines posted at the following web page: [http://www.gradcollege.txstate.edu/Thes-Diss\\_Info/T-D\\_Developing.html](http://www.gradcollege.txstate.edu/Thes-Diss_Info/T-D_Developing.html). The completed project report must be submitted to the chair of the project committee no later than 41 days before the date of the commencement at which the degree is to be conferred.

The following must be submitted to the office of Ingram School no later than 24 days, not counting weekends or holidays, before the date of commencement at which the degree is to be conferred (see The Graduate College webpage for specific deadlines):

1. The Project Committee Approval form bearing original signatures of the student and all committee members.
2. One (1) copy of the project report in final form, approved by all committee members, on standard paper (Hard-copy Submission Option) or PDF of the project report in final form, approved by all committee members, submitted to the Ingram School of Engineering.

After the Director of the Ingram School approves the project report, the student may take personal copies to the Alkek Library and pay the binding fee for personal use.

Master's level courses in Engineering: ENGR (p. 3090), CE (p. 3094), EE (p. 3094), IE (p. 3096), MFGE (p. 3097)

## Courses Offered

### Engineering (ENGR)

#### ENGR 5100. Seminar in Engineering.

Graduate students attend seminars by invited speakers presenting relevant topics in academia and industry. The schedule of speakers will be developed each semester with strict faculty supervision. This course may only be taken for credit one time.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ENGR 5101. Academic Instruction for Engineering Graduate Assistants.

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ENGR 5105. Engineering Internship.

This course is a faculty-supervised, experiential, work-integrated learning course intended to help the student acquire engineering curriculum-related industrial experience and hence successfully make the transition into the workforce. Course cannot be counted toward graduation. Course may be repeated once. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5198B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5201. Academic Instruction for Engineering Graduate Assistants.**

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENGR 5298B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5310. Probability, Random Variables, & Stochastic Processes for Engineers.**

This course develops theory underlying analysis and design of systems. Fundamental distributional concepts, applications of statistical methods, and theory of stochastic processes are introduced to create a mathematical foundation for engineering analysis of physical systems involving randomness. Applications to engineering topics are taught, including estimation, control, and systems theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5321. Environmental Chemistry.**

This course introduces environmental chemistry, emphasizing aquatic resources and engineering. It also examines fundamental geochemistry and atmospheric chemistry principles relating to pollutant impacts on aquatic ecosystems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5322. Low Impact Development and Green Infrastructure.**

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development and water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5323. Soil and Groundwater Remediation.**

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. Significance of subsurface contamination and the importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5330. Advanced Soil Mechanics.**

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ENGR 5332. Earth retaining structures and slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ENGR 5333. Fluid Flow in Porous Media.**

This course presents the fundamental theory of fluid flow in heterogeneous porous media and introduces various theoretical tools to characterize and predict the flow field. This course focuses on the fluid flow theory in complex porous media, such as fractured porous media. Key concepts are introduced, and derivations of governing equations are presented thoroughly. Analytical and numerical techniques to solve governing equations are discussed. The students of this course use these fundamental equations to solve problems based on real-world situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics includes the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5361. Pavement Asset Management.**

This course is about applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. The course covers methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course also discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5362. Advanced Traffic Engineering.**

This course is an introduction to basic components of transportation systems and fundamentals of transportation engineering. Topics include geometric design of highways, study of warrants for traffic control devices, analysis of traffic flow theory and characteristics, levels of service, capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5363. Road Infrastructure Safety.**

This course will cover topics including an introduction to road infrastructure safety, fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and safe system design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5384. Problems in Engineering.**

Graduate students investigate a special topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. This course may be repeated once for additional credit with permission of the School Director. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENGR 5398A. Project.**

This course represents a student's initial project enrollment. No project credit is awarded until the student has completed the project in ENGR 5x98B. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5398B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the theses is completed in ENGR 5x99B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5598B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5998B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Civil Engineering (CE)****CE 5320. Water Quality Management.**

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5331. Computational Methods in Geosystems.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered.

This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, etc. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**Electrical Engineering (EE)****EE 5320. Advanced Computer Architecture and Arithmetic.**

This course teaches design and analysis of high-performance computer systems, focusing on quantitative analysis of the latest processors and compilers. Current processor architectures are surveyed for system design. Topics include instruction sets, parallelizing architectures, pipelining, I/O, memory and cache organization, parallel/vector processing, fast arithmetic units design, and implementation using HDL. Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5321. Computer-Aided Engineering Simulations on HPC Systems.**

This course covers development of simulations for engineering applications that are solved using High Performance Computing (HPC) environments. Topics include programming techniques for multicore processors, processor and memory architecture, computation for dense and sparse linear algebra applications, computational temperature analysis, fluid dynamics, stencil and stochastic algorithms, and other applications. Prerequisite: EE 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5323. Digital Image Processing.**

This course provides the necessary fundamental techniques to analyze and process digital images. It covers principles, concepts, and techniques of digital image processing and computer vision. Restricted to students enrolled in the MS Engineering program. Prerequisite: EE 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5330. Embedded and Real-Time Computing.**

This course teaches development of embedded computing systems with strong resource constraints. Key concepts include managing constrained memory and processing speed limitations, and programming for soft and hard real-time constraints. Students will learn use of a Real-Time Operating System (RTOS). Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5331. Machine Learning for Engineering Applications.**

This course covers an introduction to machine learning focused on deep learning techniques using engineering applications with Python. Topics include model characteristics, neural network theory, classifiers for network and signal processing applications, regression and convolutional modeling for object-detection, time-series and forecasting machine learning models for Smart City concepts. Prerequisite: ENGR 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5350. Advanced Electronic Circuit Design.**

This course includes low and high power RF amplifier design techniques, oscillators, FM demodulators, limiters, and mixer design. Additional topics include circuit design to minimize intermodulation and other forms of distortion, and RD and high-speed analog circuits with emphasis on digital-friendly applications. Prerequisite: EE 4350 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5353. Fundamentals of Advanced Semiconductor Technology.**

In this course students will learn key concepts and trends of advanced semiconductor device technology. Topics include Moore's law, MOSFET, CMOS and scaling, high-K gate dielectrics, new channel materials replacing silicon, three dimensional and compound semiconductor device structures. In addition students will be involved in laboratories and seminar presentations. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5354. Flexible Electronics.**

This course will cover the materials systems, processes, device physics and applications of flexible electronics. The materials range from amorphous and nanocrystalline silicon, organic and polymeric semiconductors to solution cast films of carbon nanotubes. Real device discussions include high speed transistors, photovoltaics, flexible flat-panel displays, medical image sensors, etc. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 5355. Electronic Materials and Devices.**

This course covers theoretical concepts applicable to the understanding of unique properties exhibited by electronic materials, especially by dielectrics, oxide semiconductors, ferroelectrics, pyroelectrics, piezoelectrics, magnetic, and multifunctional and multiferroic materials. The various microelectronic devices and modern novel technologies based on these materials are emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5357. Power Systems for Engineering.**

This course introduces the analysis of various elements of power systems, including power generation, transformer action, transmission line modeling, symmetrical components, power factor correction, real and quadrature power calculations, load flow analysis, and economic considerations in operating systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5360. Thin Film Technology.**

This course covers the theoretical and practical aspects of thin film technology in modern devices. The design and fabrication of thin film heterostructures is discussed. Growth and nucleation of epitaxial thin films with diverse properties and devices with combined properties will be emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5361. Nanofabrication Technology for Semiconductor Device Processing.**

This course provides an overview of nanofabrication techniques for conventional and emerging micro- and nano-electronic devices. Topics include semiconductor crystal growth, wafer preparation, epitaxial growth, oxidation, control of dopant profiles for the formation of shallow junctions, ion-implantation, thin film deposition, photolithography, metallization etching, device and circuit formation, and testing. Prerequisite: EE 3350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5372. Advanced Networking.**

This course develops important theoretical and application topics related to advanced networking. Theoretical topics are introduced using mathematical treatments, including queueing theory and some random processes. The course includes applications of these topics to communications networks, and focuses on architectures, applications and technologies which affect modern computer and data networks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5374. Introduction to Wireless Communication.**

This course teaches principles and practices in designing and analyzing cellular and other wireless communication systems. Topics include RF propagation modeling, fast and slow fading, modulation, demodulation, coding, and multiple access techniques. Prerequisite: EE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5375. Smart Grid: an Application Development Platform.**

In this course, students will learn how to develop real applications for the smart grid and model its performance with simulations and stochastic models. Topics include energy informatics, smart metering, home energy management, demand response, load disaggregation and APIs/OpenData. The mathematical tools used include: Optimization/Control, Machine Learning and Stochastic Processes. Prerequisites: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5377. Statistical Signal Processing.**

This course develops the theory and applications of random processes using mathematical treatments, including elementary discrete and continuous time linear systems theory, elementary probability, and transform theory. Topics include applications of random processes to information and communication theory, estimation and detection, control, signal processing, and stochastic systems theory. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5380. Advanced Electric Machines.**

This course teaches the principles and analysis of electromechanical systems. Students will develop analytical techniques for predicting device and system interaction characteristics as well as learn to design major classes of electric machines.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5381. Advanced Sustainable Energy & Storage.**

This course examines the consumption and production of energy and the principles and technologies behind renewable energy sources. It also introduces the basics of energy storage systems such as batteries, gravitational, and hybrid. Current research in the field is examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5382. Advanced Power Systems Analysis.**

This course is an advanced treatment of various elements of power systems, including case studies, analysis of relevant peer-reviewed literature, symmetrical and unsymmetrical faults, symmetrical components, system protection, transient stability, transient operation of transmission lines, and supervisory control and data acquisition (SCADA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5398A. Antenna Theory, Design and Applications.**

This course covers the basic theory, design and applications of antennas. The topics include antenna radiation, fundamental parameters of antennas, linear wire antennas, loop antennas, antenna arrays, long-periodic antennas, horn antennas, microstrip antennas and modern nano-antennas. Prerequisite: EE 3340 or EE 3370 either with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398B. Electronic Materials and Beyond for Sustainable Energy.**

This course covers the basic science and technology for sustainable energy from the view of materials, where electronic materials are highly emphasized. The topics include solar cells, thermoelectrics, batteries, supercapacitors, artificial photosynthesis, fuel cells, biomass and nuclear energy. Prerequisite: EE 3355 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398C. Multimedia Signal Processing.**

This course covers theory and applications of digital signal processing to multimedia signals, including speech, audio, image, and video. Key concepts and algorithms are discussed first, followed by a review of relevant industry standards. Hardware architectures and real-time implementation concepts appropriate for multimedia signals are also included. Prerequisites: EE 3370 and [EE 4323 or EE 4377] both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398D. Electroceramics.**

This course covers binary and ternary phase diagrams, non-centro-symmetric crystal structures and symmetry groups, nonlinear dielectrics (ferroelectricity, piezoelectricity, pyroelectricity), nonlinear magnetics, oxide wideband gap semiconductors, detectors and sensors, introduction to MEMS, radhard electronics, and spintronics technology. Labs and additional research-oriented instruction are related to materials processing, characterization, fabrication, and testing. Prerequisite: EE 3355 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Industrial Engineering (IE)****IE 5310. Advanced Statistical Design of Experiments for Engineers.**

This course examines the design and analysis of controlled experiments, demonstrating engineering applications of design of experiments (DOE) in the manufacturing and service industries. Topics include full and fractional factorial designs, response surface methodology, and Taguchi methods. In a semester-long project, students apply DOE to improve a real manufacturing process. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5320. Modeling and Analysis of Manufacturing Systems.**

This course covers the methods for modeling and analyzing manufacturing systems. Critical manufacturing issues that are addressed by these models include sustainable production systems, material handling systems, scheduling, and supply chains. Prerequisite: IE 3320 and IE 3340 and MFGE 4396 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5330. Advanced Quality Control and Reliability Engineering.**

This course provides in-depth knowledge in reliability modeling and maintenance optimization for components and systems. The course also covers advanced quality control techniques including multivariate process control. Methodologies are applied to solve practical problems arising from various industry domains. Restricted to students enrolled in the MS Engineering program. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5340. Applied Deterministic Operations Research for Engineers.**

This course introduces students to modeling of linear, non-linear, and integer problems applied to engineering design, manufacturing, service, supply chain, healthcare and electrical systems. Mathematical programming software is emphasized in class exercises, homework, and project. Techniques including revised simplex method, duality theory, sensitivity analysis, and networks are also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**IE 5343. Non-Linear Optimization Techniques for Engineers.**

This course covers engineering applications of mathematical modeling and computational methods for nonlinear programming problems. The primary goal of this course is to present techniques and strategies essential to optimize non-linear models. Prerequisite: IE 3340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5345. Advanced Optimization.**

This course covers advanced concepts in linear and integer programming. Solution techniques for stochastic and dynamic programming and formulation and solution of decision models in manufacturing, service, supply chain, healthcare and electrical systems are presented. Prerequisite: IE 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5347. Advanced Heuristic Optimization.**

This course covers heuristic methods that search beyond local optima such as simulated annealing, tabu search, genetic algorithms, ant-colony systems and particle swarm. Papers from the literature, problem-specific heuristics, evaluation methods, and implementations are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5397. System Thinking and Analysis.**

This course is an introduction to systems engineering and the systems thinking process, providing important considerations related to the engineering of large scale systems. These considerations include system understanding, modeling and design, the system development process, needs analysis, concept exploration and definition, design, integration and evaluation, and systems engineering management. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5398A. Healthcare Systems Engineering.**

This course provides an introduction into healthcare delivery with particular attention to the application of systems engineering techniques. Topics include the organization of healthcare systems, characteristics of US healthcare, decision-making in the healthcare environment, health informatics, and performance measurement tools. Student project involves integration and application of systems engineering methodologies. Prerequisite: IE 5340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398B. Response Surface Methodologies.**

This course continues the examination of the design and analysis of controlled experiments, demonstrating how design of experiments (DOE) and response surface methodologies (RSM) are used in product optimization and process improvement. Topics include factorial and fractional factorial designs, steepest ascent, fitting response surfaces, variance-optimal design, and mixture experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398C. Data-Intensive Analysis and Simulation for Engineers.**

This course covers foundational topics in data science, including data-intensive analysis and simulation. Specific topics include data science, data extracting and preprocessing, data visualization, and design of simulation experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Manufacturing Engineering (MFGE)****MFGE 5315. Energy and Thermofluids Engineering.**

This course covers core engineering concepts of energy and thermofluids based on fluid mechanics, thermodynamics, and heat transfer. The main topics include properties of pure substances, fluid statics and dynamics, non-Newtonian fluid, differential analysis of fluid flow, viscous flow in pipes, external flows, boundary layer, open channel flows, mass and energy analysis of control volumes, first and second laws of thermodynamics, steady-state and transient conduction, internal and external forced convection, natural convection, fundamentals of radiation, and mass transfer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5316. Advanced Computer Aided Design and Manufacturing.**

Topics include design process, mathematical presentation of wireframe/surface/solid modes, transformation and manipulation of objects, finite element analysis, data exchange, process planning, fundamentals of multi-axis NC programming for turning and milling processes, fundamentals of CAD/CAM systems, CNC code generation by CAD/CAM software for the CNC, and waterjet machines. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5318. Additive Manufacturing.**

In this course CAD standards, theory, techniques, applications, and development of additive manufacturing technology, photopolymerization, powder bed fusion, extrusion-based systems, printing processes, sheet lamination processes, beam deposition processes, design for additive manufacturing, and safety considerations in a hands-on approach will be explained. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5320. Polymer Nanocomposites.**

This course covers polymer nanocomposites focusing on materials, manufacturing, characterization, and applications. The primary focus is on fiber reinforced polymer nanocomposites. Morphological, Thermal, Mechanical, and Electrical Characterization will be discussed in detail. Applications include fire-resistant, ablative, fatigue-resistant, impact-resistant, and bio-based composites. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5326. Advanced Robotics in Manufacturing Automation.**

This course covers principles and techniques involved in advanced robotics. Topics include introduction to robotics, industrial robotics, robot kinematics, path planning, robot dynamics, advanced control, force control, sensors and actuators, mobile robotics, and introduction to nanorobotics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5330. Multiscale Manufacturing.**

This course covers the multiscale manufacturing processes, techniques, and applications. Topics include micro and nano-manufacturing, polymer and semiconductor fabrication, thin film technologies, bulk and surface micromachining, physics of multiscale manufacturing, microelectromechanical (MEMS) devices, and design issues for fabrication of micro and nano-systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5398B. Advanced Composite Materials.**

This course examines various aspects of fiber-reinforced polymeric composites. The topics covered include constituent materials (fibers and matrices), mechanics, performance, manufacturing, and introduction to nanocomposites. This course also provides introductory treatments concerning ceramic matrix composites, metal matrix composites, and carbon/carbon composites.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Program Overview

The Master of Science (M.S.) degree with a major in Engineering provides a practical, industry-driven focus via a long-term, targeted technical project or thesis related to real-world engineering applications. These projects will be conducted in partnership with local industries and

may involve off-campus collaborations. The degree requires a large-scale project or thesis because the abilities to solve problems, innovate and make immediate contributions to industry are best developed by having students confront a substantial, open-ended problem; perform detailed research on the problem; develop various solutions; choose and implement the best solution; validate their choice; and effectively communicate the process to professional colleagues, executives, and customers.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree engineering, computer science, physics, technology, or a closely related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning and writing sections will be required. Texas State University students are exempt from this requirement
- resume/CV detailing prior work experience, research experience, awards, scholarships, and other related qualifications
- statement of purpose (two pages) conveying research interests, plans for graduate study, and professional aspirations
- two letters of recommendation from non-related individuals familiar with the student's scholarly work and/or relevant work experience

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### Additional Information

Non-credit (leveling) course work may be required prior to admission into the program if the student lacks sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Engineering concentration in Industrial Engineering requires 31 semester credit hours, including a thesis.

Non-credit (leveling) course work may be required prior to admission into the program if you lack sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

All students will have a faculty advisor and a graduate committee composed of a minimum of three graduate faculty members (including the faculty advisor). The faculty advisor will provide technical direction for the student's thesis, and the graduate committee will be responsible for approving the thesis proposal, receiving thesis progress reports, and approving the final thesis presentation and written report. The oral project presentation will serve as the comprehensive examination.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENGR 5100	Seminar in Engineering	1
ENGR 5310	Probability, Random Variables, & Stochastic Processes for Engineers	3
IE 5320	Modeling and Analysis of Manufacturing Systems	3
IE 5340	Applied Deterministic Operations Research for Engineers	3
<b>Engineering Electives</b>		
Choose 9-15 hours from the following:		9-15
CE 5320	Water Quality Management	
CE 5340	Advanced Infrastructure Materials	
CE 5350	Highway Bridge Design	
CE 5360	Pavement Design	
CE 5370	Urban Stormwater Management	
CE 5390	Infrastructure Systems Analysis	
CE 5391	Advanced Mechanics of Materials	
EE 5320	Advanced Computer Architecture and Arithmetic	
EE 5321	Computer-Aided Engineering Simulations on HPC Systems	
EE 5323	Digital Image Processing	
EE 5330	Embedded and Real-Time Computing	
EE 5331	Machine Learning for Engineering Applications	
EE 5350	Advanced Electronic Circuit Design	
EE 5353	Fundamentals of Advanced Semiconductor Technology	
EE 5354	Flexible Electronics	

EE 5355	Electronic Materials and Devices
EE 5357	Power Systems for Engineering
EE 5360	Thin Film Technology
EE 5361	Nanofabrication Technology for Semiconductor Device Processing
EE 5372	Advanced Networking
EE 5374	Introduction to Wireless Communication
EE 5375	Smart Grid: an Application Development Platform
EE 5377	Statistical Signal Processing
EE 5380	Advanced Electric Machines
EE 5381	Advanced Sustainable Energy & Storage
EE 5382	Advanced Power Systems Analysis
EE 5398A	Antenna Theory, Design and Applications
EE 5398B	Electronic Materials and Beyond for Sustainable Energy
EE 5398C	Multimedia Signal Processing
EE 5398D	Electroceramics
ENGR 5321	Environmental Chemistry
ENGR 5323	Soil and Groundwater Remediation
ENGR 5330	Advanced Soil Mechanics
ENGR 5333	Fluid Flow in Porous Media
ENGR 5334	Advanced Foundation Engineering
ENGR 5341	Advanced Bituminous Materials
ENGR 5352	Advanced Prestressed Concrete
ENGR 5362	Advanced Traffic Engineering
ENGR 5363	Road Infrastructure Safety
ENGR 5384	Problems in Engineering
IE 5310	Advanced Statistical Design of Experiments for Engineers
IE 5330	Advanced Quality Control and Reliability Engineering
IE 5343	Non-Linear Optimization Techniques for Engineers
IE 5345	Advanced Optimization
IE 5347	Advanced Heuristic Optimization
IE 5397	System Thinking and Analysis
IE 5398A	Healthcare Systems Engineering
IE 5398B	Response Surface Methodologies
IE 5398C	Data-Intensive Analysis and Simulation for Engineers
ME 5310	Continuum Mechanics
ME 5312	Stress Analysis of Composite Materials
MFGE 5315	Energy and Thermofluids Engineering
MFGE 5316	Advanced Computer Aided Design and Manufacturing
MFGE 5318	Additive Manufacturing
MFGE 5320	Polymer Nanocomposites
MFGE 5326	Advanced Robotics in Manufacturing Automation
MFGE 5330	Multiscale Manufacturing
<b>Multidisciplinary Electives</b>	
Choose up to 6 hours from the following: <sup>1</sup>	
<b>Business Administration</b>	
BLAW 5333	Legal Issues of Sustainability and Responsibility
ISAN 5357	Computing for Data Analytics

ISAN 5358	Agile Project Management For Business Professionals
ISAN 5370	Enterprise Resource Planning and Business Intelligence
MGT 5311	Process Improvement Management in Organizations
MGT 5315	New Venture Management
MGT 5321	Supply Chain Management
MGT 5390	Managerial Data Analysis
ANLY 5334	Statistical Methods for Business
ANLY 5335	Forecasting and Simulation
<b>Technology</b>	
TECH 5315	Engineering Economic Analysis
TECH 5382	Industrial Ecology and Sustainability Engineering
TECH 5390	Research in Technology
<b>Computer Science</b>	
CS 5306	Advanced Operating Systems
CS 5346	Advanced Artificial Intelligence
<b>Geography</b>	
GEO 5312	Managing Urbanization
GEO 5313	Environmental Studies
GEO 5334	Applied Water Resources
GEO 5336	Transportation Systems
GEO 5351	Regional Waste Management
GEO 5352	Air Quality Management
GEO 5393D	Water Resource Planning
<b>Mathematics</b>	
MATH 5315	Mathematical Statistics
MATH 5340	Scientific Computation
MATH 5345	Regression Analysis
MATH 5376A	Design and Analysis of Experiments
MATH 5376B	Analysis of Variance
MATH 5376D	Statistical Applications in Genetics and Bioinformatics
MATH 5388	Discrete Mathematics
<b>Physics</b>	
PHYS 5327	Semiconductor Device Physics
<b>Materials Science, Engineering and Commercialization</b>	
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship
MSEC 7340	Biomaterials and Biosensors
MSEC 7395H	Environmental Chemistry
<b>Thesis</b>	
ENGR 5399A	Thesis
Choose a minimum of 3 hours from the following:	
ENGR 5199B	Thesis
ENGR 5299B	Thesis
ENGR 5399B	Thesis
ENGR 5599B	Thesis

ENGR 5999B	Thesis
Total Hours	31

<sup>1</sup> Choose up to 6 hours from the Multidisciplinary Electives above to make the total hours selected from Engineering Electives and from Multidisciplinary Electives to equal 15 hours.

## Comprehensive Examination Requirement

An oral thesis defense is required. This oral defense will serve as the comprehensive examination requirement. If the thesis committee is not satisfied with a graduate student's oral defense, they specify all deficiencies the student must resolve. The thesis committee will not sign the Master's Comprehensive Examination Report Form and the Thesis Submission Approval Form until all specified deficiencies have been resolved. Should the thesis committee decide to hold a second oral defense, the chair of the thesis committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student

will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's

progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Engineering: ENGR (p. 3101), CE (p. 3105), EE (p. 3107), IE (p. 3107), MFGE (p. 3108)

## Courses Offered

### Engineering (ENGR)

#### ENGR 5100. Seminar in Engineering.

Graduate students attend seminars by invited speakers presenting relevant topics in academia and industry. The schedule of speakers will be developed each semester with strict faculty supervision. This course may only be taken for credit one time.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ENGR 5101. Academic Instruction for Engineering Graduate Assistants.

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ENGR 5105. Engineering Internship.

This course is a faculty-supervised, experiential, work-integrated learning course intended to help the student acquire engineering curriculum-related industrial experience and hence successfully make the transition into the workforce. Course cannot be counted toward graduation. Course may be repeated once. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**ENGR 5198B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5201. Academic Instruction for Engineering Graduate Assistants.**

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENGR 5298B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5310. Probability, Random Variables, & Stochastic Processes for Engineers.**

This course develops theory underlying analysis and design of systems. Fundamental distributional concepts, applications of statistical methods, and theory of stochastic processes are introduced to create a mathematical foundation for engineering analysis of physical systems involving randomness. Applications to engineering topics are taught, including estimation, control, and systems theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5321. Environmental Chemistry.**

This course introduces environmental chemistry, emphasizing aquatic resources and engineering. It also examines fundamental geochemistry and atmospheric chemistry principles relating to pollutant impacts on aquatic ecosystems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5322. Low Impact Development and Green Infrastructure.**

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development and water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5323. Soil and Groundwater Remediation.**

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. Significance of subsurface contamination and the importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5330. Advanced Soil Mechanics.**

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ENGR 5332. Earth retaining structures and slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5333. Fluid Flow in Porous Media.**

This course presents the fundamental theory of fluid flow in heterogeneous porous media and introduces various theoretical tools to characterize and predict the flow field. This course focuses on the fluid flow theory in complex porous media, such as fractured porous media. Key concepts are introduced, and derivations of governing equations are presented thoroughly. Analytical and numerical techniques to solve governing equations are discussed. The students of this course use these fundamental equations to solve problems based on real-world situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics includes the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5361. Pavement Asset Management.**

This course is about applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. The course covers methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course also discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5362. Advanced Traffic Engineering.**

This course is an introduction to basic components of transportation systems and fundamentals of transportation engineering. Topics include geometric design of highways, study of warrants for traffic control devices, analysis of traffic flow theory and characteristics, levels of service, capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5363. Road Infrastructure Safety.**

This course will cover topics including an introduction to road infrastructure safety, fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and safe system design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5384. Problems in Engineering.**

Graduate students investigate a special topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. This course may be repeated once for additional credit with permission of the School Director. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENGR 5398A. Project.**

This course represents a student's initial project enrollment. No project credit is awarded until the student has completed the project in ENGR 5x98B. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5398B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the theses is completed in ENGR 5x99B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5598B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5998B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Civil Engineering (CE)****CE 5320. Water Quality Management.**

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5331. Computational Methods in Geosystems.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered.

This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, etc. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete.

Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Electrical Engineering (EE)

**EE 5320. Advanced Computer Architecture and Arithmetic.**

This course teaches design and analysis of high-performance computer systems, focusing on quantitative analysis of the latest processors and compilers. Current processor architectures are surveyed for system design. Topics include instruction sets, parallelizing architectures, pipelining, I/O, memory and cache organization, parallel/vector processing, fast arithmetic units design, and implementation using HDL. Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5321. Computer-Aided Engineering Simulations on HPC Systems.**

This course covers development of simulations for engineering applications that are solved using High Performance Computing (HPC) environments. Topics include programming techniques for multicore processors, processor and memory architecture, computation for dense and sparse linear algebra applications, computational temperature analysis, fluid dynamics, stencil and stochastic algorithms, and other applications. Prerequisite: EE 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5323. Digital Image Processing.**

This course provides the necessary fundamental techniques to analyze and process digital images. It covers principles, concepts, and techniques of digital image processing and computer vision. Restricted to students enrolled in the MS Engineering program. Prerequisite: EE 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5330. Embedded and Real-Time Computing.**

This course teaches development of embedded computing systems with strong resource constraints. Key concepts include managing constrained memory and processing speed limitations, and programming for soft and hard real-time constraints. Students will learn use of a Real-Time Operating System (RTOS). Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5331. Machine Learning for Engineering Applications.**

This course covers an introduction to machine learning focused on deep learning techniques using engineering applications with Python. Topics include model characteristics, neural network theory, classifiers for network and signal processing applications, regression and convolutional modeling for object-detection, time-series and forecasting machine learning models for Smart City concepts. Prerequisite: ENGR 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5350. Advanced Electronic Circuit Design.**

This course includes low and high power RF amplifier design techniques, oscillators, FM demodulators, limiters, and mixer design. Additional topics include circuit design to minimize intermodulation and other forms of distortion, and RD and high-speed analog circuits with emphasis on digital-friendly applications. Prerequisite: EE 4350 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5353. Fundamentals of Advanced Semiconductor Technology.**

In this course students will learn key concepts and trends of advanced semiconductor device technology. Topics include Moore's law, MOSFET, CMOS and scaling, high-K gate dielectrics, new channel materials replacing silicon, three dimensional and compound semiconductor device structures. In addition students will be involved in laboratories and seminar presentations. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5354. Flexible Electronics.**

This course will cover the materials systems, processes, device physics and applications of flexible electronics. The materials range from amorphous and nanocrystalline silicon, organic and polymeric semiconductors to solution cast films of carbon nanotubes. Real device discussions include high speed transistors, photovoltaics, flexible flat-panel displays, medical image sensors, etc. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 5355. Electronic Materials and Devices.**

This course covers theoretical concepts applicable to the understanding of unique properties exhibited by electronic materials, especially by dielectrics, oxide semiconductors, ferroelectrics, pyroelectrics, piezoelectrics, magnetic, and multifunctional and multiferroic materials. The various microelectronic devices and modern novel technologies based on these materials are emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5357. Power Systems for Engineering.**

This course introduces the analysis of various elements of power systems, including power generation, transformer action, transmission line modeling, symmetrical components, power factor correction, real and quadrature power calculations, load flow analysis, and economic considerations in operating systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5360. Thin Film Technology.**

This course covers the theoretical and practical aspects of thin film technology in modern devices. The design and fabrication of thin film heterostructures is discussed. Growth and nucleation of epitaxial thin films with diverse properties and devices with combined properties will be emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5361. Nanofabrication Technology for Semiconductor Device Processing.**

This course provides an overview of nanofabrication techniques for conventional and emerging micro- and nano-electronic devices. Topics include semiconductor crystal growth, wafer preparation, epitaxial growth, oxidation, control of dopant profiles for the formation of shallow junctions, ion-implantation, thin film deposition, photolithography, metallization etching, device and circuit formation, and testing. Prerequisite: EE 3350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5372. Advanced Networking.**

This course develops important theoretical and application topics related to advanced networking. Theoretical topics are introduced using mathematical treatments, including queuing theory and some random processes. The course includes applications of these topics to communications networks, and focuses on architectures, applications and technologies which affect modern computer and data networks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5374. Introduction to Wireless Communication.**

This course teaches principles and practices in designing and analyzing cellular and other wireless communication systems. Topics include RF propagation modeling, fast and slow fading, modulation, demodulation, coding, and multiple access techniques. Prerequisite: EE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5375. Smart Grid: an Application Development Platform.**

In this course, students will learn how to develop real applications for the smart grid and model its performance with simulations and stochastic models. Topics include energy informatics, smart metering, home energy management, demand response, load disaggregation and APIs/OpenData. The mathematical tools used include: Optimization/Control, Machine Learning and Stochastic Processes. Prerequisites: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5377. Statistical Signal Processing.**

This course develops the theory and applications of random processes using mathematical treatments, including elementary discrete and continuous time linear systems theory, elementary probability, and transform theory. Topics include applications of random processes to information and communication theory, estimation and detection, control, signal processing, and stochastic systems theory. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5380. Advanced Electric Machines.**

This course teaches the principles and analysis of electromechanical systems. Students will develop analytical techniques for predicting device and system interaction characteristics as well as learn to design major classes of electric machines.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**EE 5381. Advanced Sustainable Energy & Storage.**

This course examines the consumption and production of energy and the principles and technologies behind renewable energy sources. It also introduces the basics of energy storage systems such as batteries, gravitational, and hybrid. Current research in the field is examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5382. Advanced Power Systems Analysis.**

This course is an advanced treatment of various elements of power systems, including case studies, analysis of relevant peer-reviewed literature, symmetrical and unsymmetrical faults, symmetrical components, system protection, transient stability, transient operation of transmission lines, and supervisory control and data acquisition (SCADA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5398A. Antenna Theory, Design and Applications.**

This course covers the basic theory, design and applications of antennas. The topics include antenna radiation, fundamental parameters of antennas, linear wire antennas, loop antennas, antenna arrays, long-periodic antennas, horn antennas, microstrip antennas and modern nano-antennas. Prerequisite: EE 3340 or EE 3370 either with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398B. Electronic Materials and Beyond for Sustainable Energy.**

This course covers the basic science and technology for sustainable energy from the view of materials, where electronic materials are highly emphasized. The topics include solar cells, thermoelectrics, batteries, supercapacitors, artificial photosynthesis, fuel cells, biomass and nuclear energy. Prerequisite: EE 3355 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398C. Multimedia Signal Processing.**

This course covers theory and applications of digital signal processing to multimedia signals, including speech, audio, image, and video. Key concepts and algorithms are discussed first, followed by a review of relevant industry standards. Hardware architectures and real-time implementation concepts appropriate for multimedia signals are also included. Prerequisites: EE 3370 and [EE 4323 or EE 4377] both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398D. Electroceramics.**

This course covers binary and ternary phase diagrams, non-centro-symmetric crystal structures and symmetry groups, nonlinear dielectrics (ferroelectricity, piezoelectricity, pyroelectricity), nonlinear magnetics, oxide wideband gap semiconductors, detectors and sensors, introduction to MEMS, radhard electronics, and spintronics technology. Labs and additional research-oriented instruction are related to materials processing, characterization, fabrication, and testing. Prerequisite: EE 3355 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Industrial Engineering (IE)****IE 5310. Advanced Statistical Design of Experiments for Engineers.**

This course examines the design and analysis of controlled experiments, demonstrating engineering applications of design of experiments (DOE) in the manufacturing and service industries. Topics include full and fractional factorial designs, response surface methodology, and Taguchi methods. In a semester-long project, students apply DOE to improve a real manufacturing process. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5320. Modeling and Analysis of Manufacturing Systems.**

This course covers the methods for modeling and analyzing manufacturing systems. Critical manufacturing issues that are addressed by these models include sustainable production systems, material handling systems, scheduling, and supply chains. Prerequisite: IE 3320 and IE 3340 and MFGE 4396 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5330. Advanced Quality Control and Reliability Engineering.**

This course provides in-depth knowledge in reliability modeling and maintenance optimization for components and systems. The course also covers advanced quality control techniques including multivariate process control. Methodologies are applied to solve practical problems arising from various industry domains. Restricted to students enrolled in the MS Engineering program. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5340. Applied Deterministic Operations Research for Engineers.**

This course introduces students to modeling of linear, non-linear, and integer problems applied to engineering design, manufacturing, service, supply chain, healthcare and electrical systems. Mathematical programming software is emphasized in class exercises, homework, and project. Techniques including revised simplex method, duality theory, sensitivity analysis, and networks are also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5343. Non-Linear Optimization Techniques for Engineers.**

This course covers engineering applications of mathematical modeling and computational methods for nonlinear programming problems. The primary goal of this course is to present techniques and strategies essential to optimize non-linear models. Prerequisite: IE 3340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5345. Advanced Optimization.**

This course covers advanced concepts in linear and integer programming. Solution techniques for stochastic and dynamic programming and formulation and solution of decision models in manufacturing, service, supply chain, healthcare and electrical systems are presented. Prerequisite: IE 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5347. Advanced Heuristic Optimization.**

This course covers heuristic methods that search beyond local optima such as simulated annealing, tabu search, genetic algorithms, ant-colony systems and particle swarm. Papers from the literature, problem-specific heuristics, evaluation methods, and implementations are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5397. System Thinking and Analysis.**

This course is an introduction to systems engineering and the systems thinking process, providing important considerations related to the engineering of large scale systems. These considerations include system understanding, modeling and design, the system development process, needs analysis, concept exploration and definition, design, integration and evaluation, and systems engineering management. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5398A. Healthcare Systems Engineering.**

This course provides an introduction into healthcare delivery with particular attention to the application of systems engineering techniques. Topics include the organization of healthcare systems, characteristics of US healthcare, decision-making in the healthcare environment, health informatics, and performance measurement tools. Student project involves integration and application of systems engineering methodologies. Prerequisite: IE 5340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398B. Response Surface Methodologies.**

This course continues the examination of the design and analysis of controlled experiments, demonstrating how design of experiments (DOE) and response surface methodologies (RSM) are used in product optimization and process improvement. Topics include factorial and fractional factorial designs, steepest ascent, fitting response surfaces, variance-optimal design, and mixture experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398C. Data-Intensive Analysis and Simulation for Engineers.**

This course covers foundational topics in data science, including data-intensive analysis and simulation. Specific topics include data science, data extracting and preprocessing, data visualization, and design of simulation experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Manufacturing Engineering (MFGE)****MFGE 5315. Energy and Thermofluids Engineering.**

This course covers core engineering concepts of energy and thermofluids based on fluid mechanics, thermodynamics, and heat transfer. The main topics include properties of pure substances, fluid statics and dynamics, non-Newtonian fluid, differential analysis of fluid flow, viscous flow in pipes, external flows, boundary layer, open channel flows, mass and energy analysis of control volumes, first and second laws of thermodynamics, steady-state and transient conduction, internal and external forced convection, natural convection, fundamentals of radiation, and mass transfer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5316. Advanced Computer Aided Design and Manufacturing.**

Topics include design process, mathematical presentation of wireframe/surface/solid models, transformation and manipulation of objects, finite element analysis, data exchange, process planning, fundamentals of multi-axis NC programming for turning and milling processes, fundamentals of CAD/CAM systems, CNC code generation by CAD/CAM software for the CNC, and waterjet machines. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5318. Additive Manufacturing.**

In this course CAD standards, theory, techniques, applications, and development of additive manufacturing technology, photopolymerization, powder bed fusion, extrusion-based systems, printing processes, sheet lamination processes, beam deposition processes, design for additive manufacturing, and safety considerations in a hands-on approach will be explained. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5320. Polymer Nanocomposites.**

This course covers polymer nanocomposites focusing on materials, manufacturing, characterization, and applications. The primary focus is on fiber reinforced polymer nanocomposites. Morphological, Thermal, Mechanical, and Electrical Characterization will be discussed in detail. Applications include fire-resistant, ablative, fatigue-resistant, impact-resistant, and bio-based composites. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5326. Advanced Robotics in Manufacturing Automation.**

This course covers principles and techniques involved in advanced robotics. Topics include introduction to robotics, industrial robotics, robot kinematics, path planning, robot dynamics, advanced control, force control, sensors and actuators, mobile robotics, and introduction to nanorobotics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5330. Multiscale Manufacturing.**

This course covers the multiscale manufacturing processes, techniques, and applications. Topics include micro and nano-manufacturing, polymer and semiconductor fabrication, thin film technologies, bulk and surface micromachining, physics of multiscale manufacturing, microelectromechanical (MEMS) devices, and design issues for fabrication of micro and nano-systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5398B. Advanced Composite Materials.**

This course examines various aspects of fiber-reinforced polymeric composites. The topics covered include constituent materials (fibers and matrices), mechanics, performance, manufacturing, and introduction to nanocomposites. This course also provides introductory treatments concerning ceramic matrix composites, metal matrix composites, and carbon/carbon composites.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Program Overview

The Master of Science (M.S.) degree with a major in Engineering provides a practical, industry-driven focus via a long-term, targeted technical project or thesis related to real-world engineering applications. These projects will be conducted in partnership with local industries and

may involve off-campus collaborations. The degree requires a large-scale project or thesis because the abilities to solve problems, innovate and make immediate contributions to industry are best developed by having students confront a substantial, open-ended problem; perform detailed research on the problem; develop various solutions; choose and implement the best solution; validate their choice; and effectively communicate the process to professional colleagues, executives, and customers.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree engineering, computer science, physics, technology, or a closely related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning and writing sections will be required. Texas State University students are exempt from this requirement
- resume/CV detailing prior work experience, research experience, awards, scholarships, and other related qualifications
- statement of purpose (two pages) conveying research interests, plans for graduate study, and professional aspirations
- two letters of recommendation from non-related individuals familiar with the student's scholarly work and/or relevant work experience

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### Additional Information

Non-credit (leveling) course work may be required prior to admission into the program if the student lacks sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Engineering concentration in Mechanical and Manufacturing Engineering requires 31 semester credit hours, including a project.

Non-credit (leveling) course work may be required prior to admission into the program if you lack sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

All students will have a faculty advisor and a graduate committee composed of a minimum of three graduate faculty members (including the faculty advisor). The faculty advisor will provide technical direction for the student's project, and the graduate committee will be responsible for approving the project proposal, receiving project progress reports, and approving the final project presentation and written report. The oral project presentation will serve as the comprehensive examination.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENGR 5100	Seminar in Engineering	1
ENGR 5310	Probability, Random Variables, & Stochastic Processes for Engineers	3
Choose 6 hours from the following:		6
ME 5310	Continuum Mechanics	
ME 5312	Stress Analysis of Composite Materials	
MFGE 5315	Energy and Thermofluids Engineering	
MFGE 5316	Advanced Computer Aided Design and Manufacturing	
MFGE 5318	Additive Manufacturing	
MFGE 5320	Polymer Nanocomposites	
MFGE 5326	Advanced Robotics in Manufacturing Automation	
MFGE 5330	Multiscale Manufacturing	
MFGE 5398B	Advanced Composite Materials	
<b>Engineering Electives</b>		
Choose 9-15 hours from the following:		9-15
CE 5320	Water Quality Management	
CE 5340	Advanced Infrastructure Materials	
CE 5350	Highway Bridge Design	
CE 5360	Pavement Design	
CE 5370	Urban Stormwater Management	
CE 5390	Infrastructure Systems Analysis	
CE 5391	Advanced Mechanics of Materials	
EE 5320	Advanced Computer Architecture and Arithmetic	

EE 5321	Computer-Aided Engineering Simulations on HPC Systems
EE 5323	Digital Image Processing
EE 5330	Embedded and Real-Time Computing
EE 5331	Machine Learning for Engineering Applications
EE 5350	Advanced Electronic Circuit Design
EE 5353	Fundamentals of Advanced Semiconductor Technology
EE 5354	Flexible Electronics
EE 5355	Electronic Materials and Devices
EE 5357	Power Systems for Engineering
EE 5360	Thin Film Technology
EE 5361	Nanofabrication Technology for Semiconductor Device Processing
EE 5372	Advanced Networking
EE 5374	Introduction to Wireless Communication
EE 5375	Smart Grid: an Application Development Platform
EE 5377	Statistical Signal Processing
EE 5380	Advanced Electric Machines
EE 5381	Advanced Sustainable Energy & Storage
EE 5382	Advanced Power Systems Analysis
EE 5398A	Antenna Theory, Design and Applications
EE 5398B	Electronic Materials and Beyond for Sustainable Energy
EE 5398C	Multimedia Signal Processing
EE 5398D	Electroceramics
ENGR 5321	Environmental Chemistry
ENGR 5323	Soil and Groundwater Remediation
ENGR 5330	Advanced Soil Mechanics
ENGR 5333	Fluid Flow in Porous Media
ENGR 5334	Advanced Foundation Engineering
ENGR 5341	Advanced Bituminous Materials
ENGR 5352	Advanced Prestressed Concrete
ENGR 5362	Advanced Traffic Engineering
ENGR 5363	Road Infrastructure Safety
ENGR 5384	Problems in Engineering
IE 5310	Advanced Statistical Design of Experiments for Engineers
IE 5320	Modeling and Analysis of Manufacturing Systems
IE 5330	Advanced Quality Control and Reliability Engineering
IE 5340	Applied Deterministic Operations Research for Engineers
IE 5343	Non-Linear Optimization Techniques for Engineers
IE 5345	Advanced Optimization
IE 5347	Advanced Heuristic Optimization
IE 5397	System Thinking and Analysis
IE 5398A	Healthcare Systems Engineering
IE 5398B	Response Surface Methodologies
IE 5398C	Data-Intensive Analysis and Simulation for Engineers
ME 5310	Continuum Mechanics
ME 5312	Stress Analysis of Composite Materials



MFGE 5315	Energy and Thermofluids Engineering
MFGE 5318	Additive Manufacturing
MFGE 5320	Polymer Nanocomposites
MFGE 5330	Multiscale Manufacturing
<b>Multidisciplinary Electives</b>	
Choose up to 6 hours from the following: <sup>1</sup>	
<b>Business Administration</b>	
BLAW 5333	Legal Issues of Sustainability and Responsibility
ISAN 5357	Computing for Data Analytics
ISAN 5358	Agile Project Management For Business Professionals
ISAN 5370	Enterprise Resource Planning and Business Intelligence
MGT 5311	Process Improvement Management in Organizations
MGT 5315	New Venture Management
MGT 5321	Supply Chain Management
MGT 5390	Managerial Data Analysis
ANLY 5334	Statistical Methods for Business
ANLY 5335	Forecasting and Simulation
<b>Technology</b>	
TECH 5315	Engineering Economic Analysis
TECH 5382	Industrial Ecology and Sustainability Engineering
TECH 5390	Research in Technology
<b>Computer Science</b>	
CS 5306	Advanced Operating Systems
CS 5346	Advanced Artificial Intelligence
<b>Geography</b>	
GEO 5312	Managing Urbanization
GEO 5313	Environmental Studies
GEO 5334	Applied Water Resources
GEO 5336	Transportation Systems
GEO 5351	Regional Waste Management
GEO 5352	Air Quality Management
GEO 5393D	Water Resource Planning
<b>Mathematics</b>	
MATH 5315	Mathematical Statistics
MATH 5340	Scientific Computation
MATH 5345	Regression Analysis
MATH 5376A	Design and Analysis of Experiments
MATH 5376B	Analysis of Variance
MATH 5376D	Statistical Applications in Genetics and Bioinformatics
MATH 5388	Discrete Mathematics
<b>Physics</b>	
PHYS 5322	Semiconductor Device Microfabrication
PHYS 5324	Thin Film Synthesis and Characterization Laboratory
PHYS 5327	Semiconductor Device Physics
PHYS 5332	Materials Characterization
<b>Materials Science, Engineering and Commercialization</b>	
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship

MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship
MSEC 7340	Biomaterials and Biosensors
MSEC 7395H	Environmental Chemistry
<b>Project</b>	
ENGR 5398A	Project
Choose a minimum of 3 hours from the following:	
ENGR 5198B	Project
ENGR 5298B	Project
ENGR 5398B	Project
ENGR 5598B	Project
ENGR 5998B	Project
<b>Total Hours</b>	

31

<sup>1</sup> Choose up to 6 hours from the Multidisciplinary Electives above to make the total hours selected from Engineering Electives and from Multidisciplinary Electives to equal 15 hours.

## Comprehensive Examination Requirement

An oral project defense is required. This oral defense will serve as the comprehensive examination requirement. If the committee is not satisfied with a graduate student's oral defense, they specify all deficiencies the student must resolve. The committee will not sign the Master's Comprehensive Examination Report Form until all specified deficiencies have been resolved. Should the committee decide to hold a second oral defense, the chair of the committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the project option for the degree, a committee to direct the project activity will be established. The project outcomes and deliverables will be specified by the project committee, and will include a written project report (similar in depth to a research thesis). In addition to demonstrating the student's capability for topical research and/or technical development, the project must also demonstrate the student's capability for independent thought and ability to completely resolve an unstructured technical problem. The structure and format of the project report will be specified by the project committee and may leverage portions of the Graduate College's Guide to Preparing and Submitting a Thesis or Dissertation. However, the project report will not be submitted to The Graduate College for publication and dissemination.

## Project Proposal

The student must submit an official Master's Project Proposal form to their project committee. The required project proposal form may be obtained from the program's website <http://www.engineering.txstate.edu/Programs/Graduate.html>. After signing the form and obtaining committee members' signatures and graduate advisor's signature the student must submit the project proposal form with one copy of the proposal attached to the Director of the Ingram School of Engineering for approval before proceeding with project activity. If the project activity involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to the Ingram School. If the project activity involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended the



project proposal form be submitted to the Director of the Ingram School by the end of the student's enrollment in ENGR 5398A.

## Project Committee

The project committee must be composed of a minimum of three approved graduate faculty members. The chair of the project committee and at least one other committee member must be Ingram School faculty. The committee may contain additional members from industry sponsors or agencies, at the request of the sponsor or the preference of the committee chair.

## Project Enrollment and Credit

The completion of a minimum of six hours of project enrollment is required. Students will enroll in ENGR 5398A for initial project activity and ENGR 5x98B for subsequent project activity. Preliminary discussions regarding the selection of a topic and assignment to a project supervisor are required prior to enrollment for ENGR 5398A.

**A student will be required to enroll in and pay the fee for at least one hour of the project course during any term in which the student will receive project supervision or guidance and/or in which the student is using university resources.** Failure to register for the appropriate project course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in ENGR 5398A, the student will continue to enroll in ENGR 5x98B until the project is successfully completed, as specified by the project committee. In the rare case when a student has not previously enrolled in ENGR 5398A and plans to work on and complete the project in one term, the student may enroll concurrently in both 5398A and 5398B. The only grades assigned for project courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a project course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the project is completed. The minimum number of hours of project credit ("CR") will be awarded only after the project report is approved by the project committee, and has been submitted to and approved by the Ingram School of Engineering. A student who has selected the project option must be registered for the appropriate project course during the term or Summer I (during summer the project course runs ten weeks for both sessions) in which the degree will be conferred.

## Project Deadlines and Approval Process

Project deadlines are the same as the thesis deadlines posted at the following web page: [http://www.gradcollege.txstate.edu/Thes-Diss\\_Info/T-D\\_Deadlines.html](http://www.gradcollege.txstate.edu/Thes-Diss_Info/T-D_Deadlines.html). The completed project report must be submitted to the chair of the project committee no later than 41 days before the date of the commencement at which the degree is to be conferred.

The following must be submitted to the office of Ingram School no later than 24 days, not counting weekends or holidays, before the date of commencement at which the degree is to be conferred (see The Graduate College webpage for specific deadlines):

1. The Project Committee Approval form bearing original signatures of the student and all committee members.
2. One (1) copy of the project report in final form, approved by all committee members, on standard paper (Hard-copy Submission Option) or PDF of the project report in final form, approved by all committee members, submitted to the Ingram School of Engineering.

After the Director of the Ingram School approves the project report, the student may take personal copies to the Alkek Library and pay the binding fee for personal use.

Master's level courses in Engineering: ENGR (p. 3112), CE (p. ), EE (p. 3116), IE (p. 3118), MFGE (p. 3119)

## Courses Offered Engineering (ENGR)

### ENGR 5100. Seminar in Engineering.

Graduate students attend seminars by invited speakers presenting relevant topics in academia and industry. The schedule of speakers will be developed each semester with strict faculty supervision. This course may only be taken for credit one time.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### ENGR 5101. Academic Instruction for Engineering Graduate Assistants.

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### ENGR 5105. Engineering Internship.

This course is a faculty-supervised, experiential, work-integrated learning course intended to help the student acquire engineering curriculum-related industrial experience and hence successfully make the transition into the workforce. Course cannot be counted toward graduation. Course may be repeated once. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### ENGR 5198B. Project.

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### ENGR 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5201. Academic Instruction for Engineering Graduate Assistants.**

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENGR 5298B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5310. Probability, Random Variables, & Stochastic Processes for Engineers.**

This course develops theory underlying analysis and design of systems. Fundamental distributional concepts, applications of statistical methods, and theory of stochastic processes are introduced to create a mathematical foundation for engineering analysis of physical systems involving randomness. Applications to engineering topics are taught, including estimation, control, and systems theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5321. Environmental Chemistry.**

This course introduces environmental chemistry, emphasizing aquatic resources and engineering. It also examines fundamental geochemistry and atmospheric chemistry principles relating to pollutant impacts on aquatic ecosystems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5322. Low Impact Development and Green Infrastructure.**

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development and water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5323. Soil and Groundwater Remediation.**

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. Significance of subsurface contamination and the importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5330. Advanced Soil Mechanics.**

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ENGR 5332. Earth retaining structures and slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5333. Fluid Flow in Porous Media.**

This course presents the fundamental theory of fluid flow in heterogeneous porous media and introduces various theoretical tools to characterize and predict the flow field. This course focuses on the fluid flow theory in complex porous media, such as fractured porous media. Key concepts are introduced, and derivations of governing equations are presented thoroughly. Analytical and numerical techniques to solve governing equations are discussed. The students of this course use these fundamental equations to solve problems based on real-world situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics includes the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5361. Pavement Asset Management.**

This course is about applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. The course covers methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course also discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5362. Advanced Traffic Engineering.**

This course is an introduction to basic components of transportation systems and fundamentals of transportation engineering. Topics include geometric design of highways, study of warrants for traffic control devices, analysis of traffic flow theory and characteristics, levels of service, capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5363. Road Infrastructure Safety.**

This course will cover topics including an introduction to road infrastructure safety, fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and safe system design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5384. Problems in Engineering.**

Graduate students investigate a special topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. This course may be repeated once for additional credit with permission of the School Director. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENGR 5398A. Project.**

This course represents a student's initial project enrollment. No project credit is awarded until the student has completed the project in ENGR 5x98B. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5398B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the theses is completed in ENGR 5x99B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5598B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5998B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Civil Engineering (CE)****CE 5320. Water Quality Management.**

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5331. Computational Methods in Geosystems.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered. This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, etc. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Electrical Engineering (EE)

### EE 5320. Advanced Computer Architecture and Arithmetic.

This course teaches design and analysis of high-performance computer systems, focusing on quantitative analysis of the latest processors and compilers. Current processor architectures are surveyed for system design. Topics include instruction sets, parallelizing architectures, pipelining, I/O, memory and cache organization, parallel/vector processing, fast arithmetic units design, and implementation using HDL. Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5321. Computer-Aided Engineering Simulations on HPC Systems.

This course covers development of simulations for engineering applications that are solved using High Performance Computing (HPC) environments. Topics include programming techniques for multicore processors, processor and memory architecture, computation for dense and sparse linear algebra applications, computational temperature analysis, fluid dynamics, stencil and stochastic algorithms, and other applications. Prerequisite: EE 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5323. Digital Image Processing.

This course provides the necessary fundamental techniques to analyze and process digital images. It covers principles, concepts, and techniques of digital image processing and computer vision. Restricted to students enrolled in the MS Engineering program. Prerequisite: EE 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5330. Embedded and Real-Time Computing.

This course teaches development of embedded computing systems with strong resource constraints. Key concepts include managing constrained memory and processing speed limitations, and programming for soft and hard real-time constraints. Students will learn use of a Real-Time Operating System (RTOS). Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5331. Machine Learning for Engineering Applications.

This course covers an introduction to machine learning focused on deep learning techniques using engineering applications with Python. Topics include model characteristics, neural network theory, classifiers for network and signal processing applications, regression and convolutional modeling for object-detection, time-series and forecasting machine learning models for Smart City concepts. Prerequisite: ENGR 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5350. Advanced Electronic Circuit Design.

This course includes low and high power RF amplifier design techniques, oscillators, FM demodulators, limiters, and mixer design. Additional topics include circuit design to minimize intermodulation and other forms of distortion, and RF and high-speed analog circuits with emphasis on digital-friendly applications. Prerequisite: EE 4350 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5353. Fundamentals of Advanced Semiconductor Technology.

In this course students will learn key concepts and trends of advanced semiconductor device technology. Topics include Moore's law, MOSFET, CMOS and scaling, high-K gate dielectrics, new channel materials replacing silicon, three dimensional and compound semiconductor device structures. In addition students will be involved in laboratories and seminar presentations. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5354. Flexible Electronics.

This course will cover the materials systems, processes, device physics and applications of flexible electronics. The materials range from amorphous and nanocrystalline silicon, organic and polymeric semiconductors to solution cast films of carbon nanotubes. Real device discussions include high speed transistors, photovoltaics, flexible flat-panel displays, medical image sensors, etc. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

### EE 5355. Electronic Materials and Devices.

This course covers theoretical concepts applicable to the understanding of unique properties exhibited by electronic materials, especially by dielectrics, oxide semiconductors, ferroelectrics, pyroelectrics, piezoelectrics, magnetic, and multifunctional and multiferroic materials. The various microelectronic devices and modern novel technologies based on these materials are emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5357. Power Systems for Engineering.

This course introduces the analysis of various elements of power systems, including power generation, transformer action, transmission line modeling, symmetrical components, power factor correction, real and quadrature power calculations, load flow analysis, and economic considerations in operating systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**EE 5360. Thin Film Technology.**

This course covers the theoretical and practical aspects of thin film technology in modern devices. The design and fabrication of thin film heterostructures is discussed. Growth and nucleation of epitaxial thin films with diverse properties and devices with combined properties will be emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5361. Nanofabrication Technology for Semiconductor Device Processing.**

This course provides an overview of nanofabrication techniques for conventional and emerging micro- and nano-electronic devices. Topics include semiconductor crystal growth, wafer preparation, epitaxial growth, oxidation, control of dopant profiles for the formation of shallow junctions, ion-implantation, thin film deposition, photolithography, metallization etching, device and circuit formation, and testing. Prerequisite: EE 3350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5372. Advanced Networking.**

This course develops important theoretical and application topics related to advanced networking. Theoretical topics are introduced using mathematical treatments, including queuing theory and some random processes. The course includes applications of these topics to communications networks, and focuses on architectures, applications and technologies which affect modern computer and data networks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5374. Introduction to Wireless Communication.**

This course teaches principles and practices in designing and analyzing cellular and other wireless communication systems. Topics include RF propagation modeling, fast and slow fading, modulation, demodulation, coding, and multiple access techniques. Prerequisite: EE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5375. Smart Grid: an Application Development Platform.**

In this course, students will learn how to develop real applications for the smart grid and model its performance with simulations and stochastic models. Topics include energy informatics, smart metering, home energy management, demand response, load disaggregation and APIs/OpenData. The mathematical tools used include: Optimization/Control, Machine Learning and Stochastic Processes. Prerequisites: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5377. Statistical Signal Processing.**

This course develops the theory and applications of random processes using mathematical treatments, including elementary discrete and continuous time linear systems theory, elementary probability, and transform theory. Topics include applications of random processes to information and communication theory, estimation and detection, control, signal processing, and stochastic systems theory. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5380. Advanced Electric Machines.**

This course teaches the principles and analysis of electromechanical systems. Students will develop analytical techniques for predicting device and system interaction characteristics as well as learn to design major classes of electric machines.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5381. Advanced Sustainable Energy & Storage.**

This course examines the consumption and production of energy and the principles and technologies behind renewable energy sources. It also introduces the basics of energy storage systems such as batteries, gravitational, and hybrid. Current research in the field is examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5382. Advanced Power Systems Analysis.**

This course is an advanced treatment of various elements of power systems, including case studies, analysis of relevant peer-reviewed literature, symmetrical and unsymmetrical faults, symmetrical components, system protection, transient stability, transient operation of transmission lines, and supervisory control and data acquisition (SCADA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5398A. Antenna Theory, Design and Applications.**

This course covers the basic theory, design and applications of antennas. The topics include antenna radiation, fundamental parameters of antennas, linear wire antennas, loop antennas, antenna arrays, long-periodic antennas, horn antennas, microstrip antennas and modern nano-antennas. Prerequisite: EE 3340 or EE 3370 either with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398B. Electronic Materials and Beyond for Sustainable Energy.**

This course covers the basic science and technology for sustainable energy from the view of materials, where electronic materials are highly emphasized. The topics include solar cells, thermoelectrics, batteries, supercapacitors, artificial photosynthesis, fuel cells, biomass and nuclear energy. Prerequisite: EE 3355 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398C. Multimedia Signal Processing.**

This course covers theory and applications of digital signal processing to multimedia signals, including speech, audio, image, and video. Key concepts and algorithms are discussed first, followed by a review of relevant industry standards. Hardware architectures and real-time implementation concepts appropriate for multimedia signals are also included. Prerequisites: EE 3370 and [EE 4323 or EE 4377] both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398D. Electroceramics.**

This course covers binary and ternary phase diagrams, non-centro-symmetric crystal structures and symmetry groups, nonlinear dielectrics (ferroelectricity, piezoelectricity, pyroelectricity), nonlinear magnetics, oxide wideband gap semiconductors, detectors and sensors, introduction to MEMS, radhard electronics, and spintronics technology. Labs and additional research-oriented instruction are related to materials processing, characterization, fabrication, and testing. Prerequisite: EE 3355 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Industrial Engineering (IE)****IE 5310. Advanced Statistical Design of Experiments for Engineers.**

This course examines the design and analysis of controlled experiments, demonstrating engineering applications of design of experiments (DOE) in the manufacturing and service industries. Topics include full and fractional factorial designs, response surface methodology, and Taguchi methods. In a semester-long project, students apply DOE to improve a real manufacturing process. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5320. Modeling and Analysis of Manufacturing Systems.**

This course covers the methods for modeling and analyzing manufacturing systems. Critical manufacturing issues that are addressed by these models include sustainable production systems, material handling systems, scheduling, and supply chains. Prerequisite: IE 3320 and IE 3340 and MFGE 4396 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5330. Advanced Quality Control and Reliability Engineering.**

This course provides in-depth knowledge in reliability modeling and maintenance optimization for components and systems. The course also covers advanced quality control techniques including multivariate process control. Methodologies are applied to solve practical problems arising from various industry domains. Restricted to students enrolled in the MS Engineering program. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5340. Applied Deterministic Operations Research for Engineers.**

This course introduces students to modeling of linear, non-linear, and integer problems applied to engineering design, manufacturing, service, supply chain, healthcare and electrical systems. Mathematical programming software is emphasized in class exercises, homework, and project. Techniques including revised simplex method, duality theory, sensitivity analysis, and networks are also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5343. Non-Linear Optimization Techniques for Engineers.**

This course covers engineering applications of mathematical modeling and computational methods for nonlinear programming problems. The primary goal of this course is to present techniques and strategies essential to optimize non-linear models. Prerequisite: IE 3340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5345. Advanced Optimization.**

This course covers advanced concepts in linear and integer programming. Solution techniques for stochastic and dynamic programming and formulation and solution of decision models in manufacturing, service, supply chain, healthcare and electrical systems are presented. Prerequisite: IE 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5347. Advanced Heuristic Optimization.**

This course covers heuristic methods that search beyond local optima such as simulated annealing, tabu search, genetic algorithms, ant-colony systems and particle swarm. Papers from the literature, problem-specific heuristics, evaluation methods, and implementations are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5397. System Thinking and Analysis.**

This course is an introduction to systems engineering and the systems thinking process, providing important considerations related to the engineering of large scale systems. These considerations include system understanding, modeling and design, the system development process, needs analysis, concept exploration and definition, design, integration and evaluation, and systems engineering management. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5398A. Healthcare Systems Engineering.**

This course provides an introduction into healthcare delivery with particular attention to the application of systems engineering techniques. Topics include the organization of healthcare systems, characteristics of US healthcare, decision-making in the healthcare environment, health informatics, and performance measurement tools. Student project involves integration and application of systems engineering methodologies. Prerequisite: IE 5340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398B. Response Surface Methodologies.**

This course continues the examination of the design and analysis of controlled experiments, demonstrating how design of experiments (DOE) and response surface methodologies (RSM) are used in product optimization and process improvement. Topics include factorial and fractional factorial designs, steepest ascent, fitting response surfaces, variance-optimal design, and mixture experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398C. Data-Intensive Analysis and Simulation for Engineers.**

This course covers foundational topics in data science, including data-intensive analysis and simulation. Specific topics include data science, data extracting and preprocessing, data visualization, and design of simulation experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Manufacturing Engineering (MFGE)****MFGE 5315. Energy and Thermofluids Engineering.**

This course covers core engineering concepts of energy and thermofluids based on fluid mechanics, thermodynamics, and heat transfer. The main topics include properties of pure substances, fluid statics and dynamics, non-Newtonian fluid, differential analysis of fluid flow, viscous flow in pipes, external flows, boundary layer, open channel flows, mass and energy analysis of control volumes, first and second laws of thermodynamics, steady-state and transient conduction, internal and external forced convection, natural convection, fundamentals of radiation, and mass transfer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5316. Advanced Computer Aided Design and Manufacturing.**

Topics include design process, mathematical presentation of wireframe/surface/solid modes, transformation and manipulation of objects, finite element analysis, data exchange, process planning, fundamentals of multi-axis NC programming for turning and milling processes, fundamentals of CAD/CAM systems, CNC code generation by CAD/CAM software for the CNC, and waterjet machines. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5318. Additive Manufacturing.**

In this course CAD standards, theory, techniques, applications, and development of additive manufacturing technology, photopolymerization, powder bed fusion, extrusion-based systems, printing processes, sheet lamination processes, beam deposition processes, design for additive manufacturing, and safety considerations in a hands-on approach will be explained. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5320. Polymer Nanocomposites.**

This course covers polymer nanocomposites focusing on materials, manufacturing, characterization, and applications. The primary focus is on fiber reinforced polymer nanocomposites. Morphological, Thermal, Mechanical, and Electrical Characterization will be discussed in detail. Applications include fire-resistant, ablative, fatigue-resistant, impact-resistant, and bio-based composites. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5326. Advanced Robotics in Manufacturing Automation.**

This course covers principles and techniques involved in advanced robotics. Topics include introduction to robotics, industrial robotics, robot kinematics, path planning, robot dynamics, advanced control, force control, sensors and actuators, mobile robotics, and introduction to nanorobotics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5330. Multiscale Manufacturing.**

This course covers the multiscale manufacturing processes, techniques, and applications. Topics include micro and nano-manufacturing, polymer and semiconductor fabrication, thin film technologies, bulk and surface micromachining, physics of multiscale manufacturing, microelectromechanical (MEMS) devices, and design issues for fabrication of micro and nano-systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5398B. Advanced Composite Materials.**

This course examines various aspects of fiber-reinforced polymeric composites. The topics covered include constituent materials (fibers and matrices), mechanics, performance, manufacturing, and introduction to nanocomposites. This course also provides introductory treatments concerning ceramic matrix composites, metal matrix composites, and carbon/carbon composites.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

## Program Overview

The Master of Science (M.S.) degree with a major in Engineering provides a practical, industry-driven focus via a long-term, targeted technical project or thesis related to real-world engineering applications. These projects will be conducted in partnership with local industries and may involve off-campus collaborations. The degree requires a large-scale project or thesis because the abilities to solve problems, innovate and make immediate contributions to industry are best developed by having students confront a substantial, open-ended problem; perform detailed research on the problem; develop various solutions; choose and implement the best solution; validate their choice; and effectively communicate the process to professional colleagues, executives, and customers.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree engineering, computer science, physics, technology, or a closely related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs ([https://](https://www.gradcollege.txst.edu/international/faqs.html)

[www.gradcollege.txst.edu/international/faqs.html](http://www.gradcollege.txst.edu/international/faqs.html)) for more information.)

- official transcripts from **each institution** where course credit was granted
- minimum 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning and writing sections will be required. Texas State University students are exempt from this requirement
- resume/CV detailing prior work experience, research experience, awards, scholarships, and other related qualifications
- statement of purpose (two pages) conveying research interests, plans for graduate study, and professional aspirations
- two letters of recommendation from non-related individuals familiar with the student's scholarly work and/or relevant work experience

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### Additional Information

Non-credit (leveling) course work may be required prior to admission into the program if the student lacks sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Engineering concentration in Mechanical and Manufacturing Engineering requires 31 semester credit hours, including a thesis.

Non-credit (leveling) course work may be required prior to admission into the program if you lack sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.

All students will have a faculty advisor and a graduate committee composed of a minimum of three graduate faculty members (including the faculty advisor). The faculty advisor will provide technical direction for the student's thesis, and the graduate committee will be responsible for approving the thesis proposal, receiving thesis progress reports, and approving the final thesis presentation and written report. The oral project presentation will serve as the comprehensive examination.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENGR 5100	Seminar in Engineering	1
ENGR 5310	Probability, Random Variables, & Stochastic Processes for Engineers	3
Choose 6 hours from the following:		6
ME 5310	Continuum Mechanics	
ME 5312	Stress Analysis of Composite Materials	
MFGE 5315	Energy and Thermofluids Engineering	
MFGE 5316	Advanced Computer Aided Design and Manufacturing	
MFGE 5318	Additive Manufacturing	
MFGE 5320	Polymer Nanocomposites	
MFGE 5326	Advanced Robotics in Manufacturing Automation	
MFGE 5330	Multiscale Manufacturing	
MFGE 5398B	Advanced Composite Materials	
<b>Engineering Electives</b>		
Choose 9-15 hours from the following:		9-15
CE 5320	Water Quality Management	
CE 5340	Advanced Infrastructure Materials	
CE 5350	Highway Bridge Design	
CE 5360	Pavement Design	
CE 5370	Urban Stormwater Management	
CE 5390	Infrastructure Systems Analysis	
CE 5391	Advanced Mechanics of Materials	
EE 5320	Advanced Computer Architecture and Arithmetic	
EE 5321	Computer-Aided Engineering Simulations on HPC Systems	
EE 5323	Digital Image Processing	
EE 5330	Embedded and Real-Time Computing	
EE 5331	Machine Learning for Engineering Applications	
EE 5350	Advanced Electronic Circuit Design	
EE 5353	Fundamentals of Advanced Semiconductor Technology	
EE 5354	Flexible Electronics	
EE 5355	Electronic Materials and Devices	
EE 5357	Power Systems for Engineering	
EE 5360	Thin Film Technology	
EE 5361	Nanofabrication Technology for Semiconductor Device Processing	
EE 5372	Advanced Networking	
EE 5374	Introduction to Wireless Communication	
EE 5375	Smart Grid: an Application Development Platform	
EE 5377	Statistical Signal Processing	
EE 5380	Advanced Electric Machines	
EE 5381	Advanced Sustainable Energy & Storage	
EE 5382	Advanced Power Systems Analysis	
EE 5398A	Antenna Theory, Design and Applications	
EE 5398B	Electronic Materials and Beyond for Sustainable Energy	
EE 5398C	Multimedia Signal Processing	
EE 5398D	Electroceramics	

ENGR 5321	Environmental Chemistry
ENGR 5323	Soil and Groundwater Remediation
ENGR 5330	Advanced Soil Mechanics
ENGR 5333	Fluid Flow in Porous Media
ENGR 5334	Advanced Foundation Engineering
ENGR 5341	Advanced Bituminous Materials
ENGR 5352	Advanced Prestressed Concrete
ENGR 5362	Advanced Traffic Engineering
ENGR 5363	Road Infrastructure Safety
ENGR 5384	Problems in Engineering
IE 5310	Advanced Statistical Design of Experiments for Engineers
IE 5320	Modeling and Analysis of Manufacturing Systems
IE 5330	Advanced Quality Control and Reliability Engineering
IE 5340	Applied Deterministic Operations Research for Engineers
IE 5343	Non-Linear Optimization Techniques for Engineers
IE 5345	Advanced Optimization
IE 5347	Advanced Heuristic Optimization
IE 5397	System Thinking and Analysis
IE 5398A	Healthcare Systems Engineering
IE 5398B	Response Surface Methodologies
IE 5398C	Data-Intensive Analysis and Simulation for Engineers
ME 5310	Continuum Mechanics
ME 5312	Stress Analysis of Composite Materials
MFGE 5315	Energy and Thermofluids Engineering
MFGE 5318	Additive Manufacturing
MFGE 5320	Polymer Nanocomposites
MFGE 5330	Multiscale Manufacturing
Multidisciplinary Electives	
Choose up to 6 hours from the following: <sup>1</sup>	
0-6	
Business Administration	
BLAW 5333	Legal Issues of Sustainability and Responsibility
ISAN 5357	Computing for Data Analytics
ISAN 5358	Agile Project Management For Business Professionals
ISAN 5370	Enterprise Resource Planning and Business Intelligence
MGT 5311	Process Improvement Management in Organizations
MGT 5315	New Venture Management
MGT 5321	Supply Chain Management
MGT 5390	Managerial Data Analysis
ANLY 5334	Statistical Methods for Business
ANLY 5335	Forecasting and Simulation
Technology	
TECH 5315	Engineering Economic Analysis
TECH 5382	Industrial Ecology and Sustainability Engineering
TECH 5390	Research in Technology
Computer Science	
CS 5306	Advanced Operating Systems



CS 5346	Advanced Artificial Intelligence	
<b>Geography</b>		
GEO 5312	Managing Urbanization	
GEO 5313	Environmental Studies	
GEO 5334	Applied Water Resources	
GEO 5336	Transportation Systems	
GEO 5351	Regional Waste Management	
GEO 5352	Air Quality Management	
GEO 5393D	Water Resource Planning	
<b>Mathematics</b>		
MATH 5315	Mathematical Statistics	
MATH 5340	Scientific Computation	
MATH 5345	Regression Analysis	
MATH 5376A	Design and Analysis of Experiments	
MATH 5376B	Analysis of Variance	
MATH 5376D	Statistical Applications in Genetics and Bioinformatics	
MATH 5388	Discrete Mathematics	
<b>Physics</b>		
PHYS 5322	Semiconductor Device Microfabrication	
PHYS 5324	Thin Film Synthesis and Characterization Laboratory	
PHYS 5327	Semiconductor Device Physics	
PHYS 5332	Materials Characterization	
<b>Materials Science, Engineering and Commercialization</b>		
MSEC 7301	Practical Skills in Commercialization and Entrepreneurship	
MSEC 7302	Leadership Skills in Commercialization and Entrepreneurship	
MSEC 7340	Biomaterials and Biosensors	
MSEC 7395H	Environmental Chemistry	
<b>Thesis</b>		
ENGR 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
ENGR 5199B	Thesis	
ENGR 5299B	Thesis	
ENGR 5399B	Thesis	
ENGR 5599B	Thesis	
ENGR 5999B	Thesis	
<b>Total Hours</b>		<b>31</b>

<sup>1</sup> Choose up to 6 hours from the Multidisciplinary Electives above to make the total hours selected from Engineering Electives and from Multidisciplinary Electives to equal 15 hours.

## Comprehensive Examination Requirement

An oral thesis defense is required. This oral defense will serve as the comprehensive examination requirement. If the thesis committee is not satisfied with a graduate student's oral defense, they specify all deficiencies the student must resolve. The thesis committee will not sign the Master's Comprehensive Examination Report Form and the Thesis Submission Approval Form until all specified deficiencies have been resolved. Should the thesis committee decide to hold a second oral

defense, the chair of the thesis committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the

topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival

quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Engineering: ENGR (p. 3123), CE (p. ), EE (p. 3127), IE (p. 3129), MFG (p. 3130)

## Courses Offered

### Engineering (ENGR)

#### ENGR 5100. Seminar in Engineering.

Graduate students attend seminars by invited speakers presenting relevant topics in academia and industry. The schedule of speakers will be developed each semester with strict faculty supervision. This course may only be taken for credit one time.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### ENGR 5101. Academic Instruction for Engineering Graduate Assistants.

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### ENGR 5105. Engineering Internship.

This course is a faculty-supervised, experiential, work-integrated learning course intended to help the student acquire engineering curriculum-related industrial experience and hence successfully make the transition into the workforce. Course cannot be counted toward graduation. Course may be repeated once. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENGR 5198B. Project.

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### ENGR 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5201. Academic Instruction for Engineering Graduate Assistants.**

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENGR 5298B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5310. Probability, Random Variables, & Stochastic Processes for Engineers.**

This course develops theory underlying analysis and design of systems. Fundamental distributional concepts, applications of statistical methods, and theory of stochastic processes are introduced to create a mathematical foundation for engineering analysis of physical systems involving randomness. Applications to engineering topics are taught, including estimation, control, and systems theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5321. Environmental Chemistry.**

This course introduces environmental chemistry, emphasizing aquatic resources and engineering. It also examines fundamental geochemistry and atmospheric chemistry principles relating to pollutant impacts on aquatic ecosystems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5322. Low Impact Development and Green Infrastructure.**

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development and water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5323. Soil and Groundwater Remediation.**

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. Significance of subsurface contamination and the importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5330. Advanced Soil Mechanics.**

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ENGR 5332. Earth retaining structures and slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5333. Fluid Flow in Porous Media.**

This course presents the fundamental theory of fluid flow in heterogeneous porous media and introduces various theoretical tools to characterize and predict the flow field. This course focuses on the fluid flow theory in complex porous media, such as fractured porous media. Key concepts are introduced, and derivations of governing equations are presented thoroughly. Analytical and numerical techniques to solve governing equations are discussed. The students of this course use these fundamental equations to solve problems based on real-world situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics includes the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5361. Pavement Asset Management.**

This course is about applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. The course covers methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course also discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5362. Advanced Traffic Engineering.**

This course is an introduction to basic components of transportation systems and fundamentals of transportation engineering. Topics include geometric design of highways, study of warrants for traffic control devices, analysis of traffic flow theory and characteristics, levels of service, capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5363. Road Infrastructure Safety.**

This course will cover topics including an introduction to road infrastructure safety, fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and safe system design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5384. Problems in Engineering.**

Graduate students investigate a special topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. This course may be repeated once for additional credit with permission of the School Director. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENGR 5398A. Project.**

This course represents a student's initial project enrollment. No project credit is awarded until the student has completed the project in ENGR 5x98B. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5398B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the theses is completed in ENGR 5x99B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5598B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5998B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Civil Engineering (CE)****CE 5320. Water Quality Management.**

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5331. Computational Methods in Geosystems.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered. This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, etc. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



## Electrical Engineering (EE)

### EE 5320. Advanced Computer Architecture and Arithmetic.

This course teaches design and analysis of high-performance computer systems, focusing on quantitative analysis of the latest processors and compilers. Current processor architectures are surveyed for system design. Topics include instruction sets, parallelizing architectures, pipelining, I/O, memory and cache organization, parallel/vector processing, fast arithmetic units design, and implementation using HDL. Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5321. Computer-Aided Engineering Simulations on HPC Systems.

This course covers development of simulations for engineering applications that are solved using High Performance Computing (HPC) environments. Topics include programming techniques for multicore processors, processor and memory architecture, computation for dense and sparse linear algebra applications, computational temperature analysis, fluid dynamics, stencil and stochastic algorithms, and other applications. Prerequisite: EE 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5323. Digital Image Processing.

This course provides the necessary fundamental techniques to analyze and process digital images. It covers principles, concepts, and techniques of digital image processing and computer vision. Restricted to students enrolled in the MS Engineering program. Prerequisite: EE 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5330. Embedded and Real-Time Computing.

This course teaches development of embedded computing systems with strong resource constraints. Key concepts include managing constrained memory and processing speed limitations, and programming for soft and hard real-time constraints. Students will learn use of a Real-Time Operating System (RTOS). Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5331. Machine Learning for Engineering Applications.

This course covers an introduction to machine learning focused on deep learning techniques using engineering applications with Python. Topics include model characteristics, neural network theory, classifiers for network and signal processing applications, regression and convolutional modeling for object-detection, time-series and forecasting machine learning models for Smart City concepts. Prerequisite: ENGR 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5350. Advanced Electronic Circuit Design.

This course includes low and high power RF amplifier design techniques, oscillators, FM demodulators, limiters, and mixer design. Additional topics include circuit design to minimize intermodulation and other forms of distortion, and RD and high-speed analog circuits with emphasis on digital-friendly applications. Prerequisite: EE 4350 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5353. Fundamentals of Advanced Semiconductor Technology.

In this course students will learn key concepts and trends of advanced semiconductor device technology. Topics include Moore's law, MOSFET, CMOS and scaling, high-K gate dielectrics, new channel materials replacing silicon, three dimensional and compound semiconductor device structures. In addition students will be involved in laboratories and seminar presentations. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5354. Flexible Electronics.

This course will cover the materials systems, processes, device physics and applications of flexible electronics. The materials range from amorphous and nanocrystalline silicon, organic and polymeric semiconductors to solution cast films of carbon nanotubes. Real device discussions include high speed transistors, photovoltaics, flexible flat-panel displays, medical image sensors, etc. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

### EE 5355. Electronic Materials and Devices.

This course covers theoretical concepts applicable to the understanding of unique properties exhibited by electronic materials, especially by dielectrics, oxide semiconductors, ferroelectrics, pyroelectrics, piezoelectrics, magnetic, and multifunctional and multiferroic materials. The various microelectronic devices and modern novel technologies based on these materials are emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### EE 5357. Power Systems for Engineering.

This course introduces the analysis of various elements of power systems, including power generation, transformer action, transmission line modeling, symmetrical components, power factor correction, real and quadrature power calculations, load flow analysis, and economic considerations in operating systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5360. Thin Film Technology.**

This course covers the theoretical and practical aspects of thin film technology in modern devices. The design and fabrication of thin film heterostructures is discussed. Growth and nucleation of epitaxial thin films with diverse properties and devices with combined properties will be emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5361. Nanofabrication Technology for Semiconductor Device Processing.**

This course provides an overview of nanofabrication techniques for conventional and emerging micro- and nano-electronic devices. Topics include semiconductor crystal growth, wafer preparation, epitaxial growth, oxidation, control of dopant profiles for the formation of shallow junctions, ion-implantation, thin film deposition, photolithography, metallization etching, device and circuit formation, and testing. Prerequisite: EE 3350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5372. Advanced Networking.**

This course develops important theoretical and application topics related to advanced networking. Theoretical topics are introduced using mathematical treatments, including queuing theory and some random processes. The course includes applications of these topics to communications networks, and focuses on architectures, applications and technologies which affect modern computer and data networks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5374. Introduction to Wireless Communication.**

This course teaches principles and practices in designing and analyzing cellular and other wireless communication systems. Topics include RF propagation modeling, fast and slow fading, modulation, demodulation, coding, and multiple access techniques. Prerequisite: EE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5375. Smart Grid: an Application Development Platform.**

In this course, students will learn how to develop real applications for the smart grid and model its performance with simulations and stochastic models. Topics include energy informatics, smart metering, home energy management, demand response, load disaggregation and APIs/OpenData. The mathematical tools used include: Optimization/Control, Machine Learning and Stochastic Processes. Prerequisites: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5377. Statistical Signal Processing.**

This course develops the theory and applications of random processes using mathematical treatments, including elementary discrete and continuous time linear systems theory, elementary probability, and transform theory. Topics include applications of random processes to information and communication theory, estimation and detection, control, signal processing, and stochastic systems theory. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5380. Advanced Electric Machines.**

This course teaches the principles and analysis of electromechanical systems. Students will develop analytical techniques for predicting device and system interaction characteristics as well as learn to design major classes of electric machines.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5381. Advanced Sustainable Energy & Storage.**

This course examines the consumption and production of energy and the principles and technologies behind renewable energy sources. It also introduces the basics of energy storage systems such as batteries, gravitational, and hybrid. Current research in the field is examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5382. Advanced Power Systems Analysis.**

This course is an advanced treatment of various elements of power systems, including case studies, analysis of relevant peer-reviewed literature, symmetrical and unsymmetrical faults, symmetrical components, system protection, transient stability, transient operation of transmission lines, and supervisory control and data acquisition (SCADA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5398A. Antenna Theory, Design and Applications.**

This course covers the basic theory, design and applications of antennas. The topics include antenna radiation, fundamental parameters of antennas, linear wire antennas, loop antennas, antenna arrays, long-periodic antennas, horn antennas, microstrip antennas and modern nano-antennas. Prerequisite: EE 3340 or EE 3370 either with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398B. Electronic Materials and Beyond for Sustainable Energy.**

This course covers the basic science and technology for sustainable energy from the view of materials, where electronic materials are highly emphasized. The topics include solar cells, thermoelectrics, batteries, supercapacitors, artificial photosynthesis, fuel cells, biomass and nuclear energy. Prerequisite: EE 3355 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398C. Multimedia Signal Processing.**

This course covers theory and applications of digital signal processing to multimedia signals, including speech, audio, image, and video. Key concepts and algorithms are discussed first, followed by a review of relevant industry standards. Hardware architectures and real-time implementation concepts appropriate for multimedia signals are also included. Prerequisites: EE 3370 and [EE 4323 or EE 4377] both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398D. Electroceramics.**

This course covers binary and ternary phase diagrams, non-centro-symmetric crystal structures and symmetry groups, nonlinear dielectrics (ferroelectricity, piezoelectricity, pyroelectricity), nonlinear magnetics, oxide wideband gap semiconductors, detectors and sensors, introduction to MEMS, radhard electronics, and spintronics technology. Labs and additional research-oriented instruction are related to materials processing, characterization, fabrication, and testing. Prerequisite: EE 3355 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Industrial Engineering (IE)****IE 5310. Advanced Statistical Design of Experiments for Engineers.**

This course examines the design and analysis of controlled experiments, demonstrating engineering applications of design of experiments (DOE) in the manufacturing and service industries. Topics include full and fractional factorial designs, response surface methodology, and Taguchi methods. In a semester-long project, students apply DOE to improve a real manufacturing process. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5320. Modeling and Analysis of Manufacturing Systems.**

This course covers the methods for modeling and analyzing manufacturing systems. Critical manufacturing issues that are addressed by these models include sustainable production systems, material handling systems, scheduling, and supply chains. Prerequisite: IE 3320 and IE 3340 and MFGE 4396 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5330. Advanced Quality Control and Reliability Engineering.**

This course provides in-depth knowledge in reliability modeling and maintenance optimization for components and systems. The course also covers advanced quality control techniques including multivariate process control. Methodologies are applied to solve practical problems arising from various industry domains. Restricted to students enrolled in the MS Engineering program. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5340. Applied Deterministic Operations Research for Engineers.**

This course introduces students to modeling of linear, non-linear, and integer problems applied to engineering design, manufacturing, service, supply chain, healthcare and electrical systems. Mathematical programming software is emphasized in class exercises, homework, and project. Techniques including revised simplex method, duality theory, sensitivity analysis, and networks are also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5343. Non-Linear Optimization Techniques for Engineers.**

This course covers engineering applications of mathematical modeling and computational methods for nonlinear programming problems. The primary goal of this course is to present techniques and strategies essential to optimize non-linear models. Prerequisite: IE 3340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5345. Advanced Optimization.**

This course covers advanced concepts in linear and integer programming. Solution techniques for stochastic and dynamic programming and formulation and solution of decision models in manufacturing, service, supply chain, healthcare and electrical systems are presented. Prerequisite: IE 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5347. Advanced Heuristic Optimization.**

This course covers heuristic methods that search beyond local optima such as simulated annealing, tabu search, genetic algorithms, ant-colony systems and particle swarm. Papers from the literature, problem-specific heuristics, evaluation methods, and implementations are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5397. System Thinking and Analysis.**

This course is an introduction to systems engineering and the systems thinking process, providing important considerations related to the engineering of large scale systems. These considerations include system understanding, modeling and design, the system development process, needs analysis, concept exploration and definition, design, integration and evaluation, and systems engineering management. Prerequisite:

ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5398A. Healthcare Systems Engineering.**

This course provides an introduction into healthcare delivery with particular attention to the application of systems engineering techniques. Topics include the organization of healthcare systems, characteristics of US healthcare, decision-making in the healthcare environment, health informatics, and performance measurement tools. Student project involves integration and application of systems engineering methodologies. Prerequisite: IE 5340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398B. Response Surface Methodologies.**

This course continues the examination of the design and analysis of controlled experiments, demonstrating how design of experiments (DOE) and response surface methodologies (RSM) are used in product optimization and process improvement. Topics include factorial and fractional factorial designs, steepest ascent, fitting response surfaces, variance-optimal design, and mixture experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398C. Data-Intensive Analysis and Simulation for Engineers.**

This course covers foundational topics in data science, including data-intensive analysis and simulation. Specific topics include data science, data extracting and preprocessing, data visualization, and design of simulation experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**Manufacturing Engineering (MFGE)****MFGE 5315. Energy and Thermofluids Engineering.**

This course covers core engineering concepts of energy and thermofluids based on fluid mechanics, thermodynamics, and heat transfer. The main topics include properties of pure substances, fluid statics and dynamics, non-Newtonian fluid, differential analysis of fluid flow, viscous flow in pipes, external flows, boundary layer, open channel flows, mass and energy analysis of control volumes, first and second laws of thermodynamics, steady-state and transient conduction, internal and external forced convection, natural convection, fundamentals of radiation, and mass transfer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5316. Advanced Computer Aided Design and Manufacturing.**

Topics include design process, mathematical presentation of wireframe/surface/solid modes, transformation and manipulation of objects, finite element analysis, data exchange, process planning, fundamentals of multi-axis NC programming for turning and milling processes, fundamentals of CAD/CAM systems, CNC code generation by CAD/CAM software for the CNC, and waterjet machines. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5318. Additive Manufacturing.**

In this course CAD standards, theory, techniques, applications, and development of additive manufacturing technology, photopolymerization, powder bed fusion, extrusion-based systems, printing processes, sheet lamination processes, beam deposition processes, design for additive manufacturing, and safety considerations in a hands-on approach will be explained. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5320. Polymer Nanocomposites.**

This course covers polymer nanocomposites focusing on materials, manufacturing, characterization, and applications. The primary focus is on fiber reinforced polymer nanocomposites. Morphological, Thermal, Mechanical, and Electrical Characterization will be discussed in detail. Applications include fire-resistant, ablative, fatigue-resistant, impact-resistant, and bio-based composites. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5326. Advanced Robotics in Manufacturing Automation.**

This course covers principles and techniques involved in advanced robotics. Topics include introduction to robotics, industrial robotics, robot kinematics, path planning, robot dynamics, advanced control, force control, sensors and actuators, mobile robotics, and introduction to nanorobotics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5330. Multiscale Manufacturing.**

This course covers the multiscale manufacturing processes, techniques, and applications. Topics include micro and nano-manufacturing, polymer and semiconductor fabrication, thin film technologies, bulk and surface micromachining, physics of multiscale manufacturing, microelectromechanical (MEMS) devices, and design issues for fabrication of micro and nano-systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5398B. Advanced Composite Materials.**

This course examines various aspects of fiber-reinforced polymeric composites. The topics covered include constituent materials (fibers and matrices), mechanics, performance, manufacturing, and introduction to nanocomposites. This course also provides introductory treatments concerning ceramic matrix composites, metal matrix composites, and carbon/carbon composites.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

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The mission of the Department of Engineering Technology is to prepare professionals for innovation and leadership careers in the global industrial marketplace, for the purpose of positively contributing to the well-being of the economy of the State of Texas. Our programs are student-centered to ensure that graduates are accomplished in technical expertise, business practices, industrial management, teaming, communication and leadership skills, lifelong learning, social awareness and ethical responsibility.

The Department of Engineering Technology offers two MS degree programs (both with options for fully online completion) – MS in Construction Management and MS in Engineering Management (with concentrations in Manufacturing and Industrial Management).

Students engage in applied research and develop partnerships with industry and/or academia as they develop problem-solving and management skills.

As an applied discipline, Engineering Technology is committed to experiential learning and exploration. The Roy F. Mitte building, which is home to the department, houses 16 well-equipped, technical laboratories where students put into practice the principles learned in their classes. Learning by doing is fundamental to who we are, and students can expect to spend a significant portion of their time in a laboratory setting.

Our curricula reflect adherence to established national accreditation standards that are appropriate to each of the technology disciplines offered within our programs. We value continuous improvement and report these results annually. Several industrial advisory committees contribute toward continuous improvement of our programs.

## Financial Assistance

### Graduate Instructional and Research Assistantships

A limited number of paid graduate assistantships are available. Research assistants work with faculty on research and other special projects. Instructional assistants work with undergraduates in laboratory settings. Contact the program graduate advisors for details and application instructions.

### Graduate College Scholarships and Fellowships

For more information about scholarships, fellowships, financial aid and application deadlines, visit The Graduate College website at [www.gradcollege.txstate.edu](http://www.gradcollege.txstate.edu) (<http://www.gradcollege.txstate.edu/>) and click on *Financing Your Graduate Education*.

## Master of Science (M.S.)

- Major in Construction Management (Non-thesis Option) (p. 3131)
- Major in Construction Management (Thesis Option) (p. 3136)
- Major in Engineering Management (Industrial Management Concentration Non-thesis Option) (p. 3142)
- Major in Engineering Management (Industrial Management Concentration Thesis Option) (p. 3148)
- Major in Engineering Management (Manufacturing Management Concentration Non-thesis Option) (p. 3154)
- Major in Engineering Management (Manufacturing Management Concentration Thesis Option) (p. 3160)

## Minor

- Industrial Technology (p. 3166)

## Program Overview

The master's degree is increasingly becoming the degree of choice among Construction Managers as the field becomes more technologically advanced and the industry more complex with governmental regulations. The purpose of the Construction Management master's degree program is to provide advanced project management principles and practices, critical thinking and creativity, and complex problem solving and decision making in construction projects as a specialized program for working construction professionals and others seeking master's level preparation. Further, the program will provide students with the skills to integrate information and communication technology in Construction Management.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or



- \$90 nonrefundable international evaluation fee (if applicable)
- baccalaureate degree (or equivalent) from an accredited college or university in construction related area. Graduates of curricula outside these program areas may be required to satisfy program prerequisite before full admission into the program. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a competitive overall GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- knowledge of Construction Management demonstrated through previous coursework and/or work experience
- responses to specific essay questions on the statement of purpose
- resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
- two letters of recommendation from persons best able to assess the student's ability to succeed in graduate school

Applicants should refer to The Graduate College website for additional information regarding the admission process.

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with an 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Construction Management requires 30 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CSM 5314	Technology Management in Construction	3
CSM 5360	Construction Company Financial Control	3
CSM 5362	Pre-Construction Services	3
CSM 5363	Construction Project Delivery and Leadership	3
CSM 5364	Decision Making in Construction Management	3
CSM 5366	Soils in Construction	3
CSM 5368	Sustainable Construction	3
CSM 5369	Construction Dispute Resolution	3
CSM 5380	Construction Safety Management	3

#### Prescribed Electives

Choose 3 hours from the following:		3
CSM 5365	Construction Project Controls	
CSM 5367	Principles of Leadership in Construction	
CSM 5384A	Construction Failure	

**Total Hours** **30**

## Comprehensive Examination

All candidates for graduate degrees must pass one or more comprehensive examinations, either written, oral, or both, covering at least the field of concentration.

Master's level courses in Engineering Technology: CSM, TECH

## Courses Offered

### Construction Science and Management (CSM)

#### CSM 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CSM 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CSM 5302. Fundamentals of Construction Contracts and Liability Issues.

This course introduces students to the legal aspects of design and construction contract documents, including dispute resolution methods and professional ethics commonly used in the construction industry. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CSM 5304. Fundamentals of Construction Estimating.

This course provides the student with a comprehensive introduction to the principles, techniques, technologies, and basic concepts involving methodologies and strategies used in the preparation of various types of construction estimates and bids. This course does not count as degree credit.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CSM 5306. Fundamentals of Commercial Building Construction Systems.**

This course is a commercial building construction systems class dealing with soils, site work, heavy foundations, steel, reinforced concrete, pre-cast structures and common assemblies. Commercial MEPs are studied along with CSI master format, as-built/shop drawings, schedule of values, AIA documents, and appropriate building codes. This course does not earn graduate degree credit.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CSM 5313. Building Information Modeling.**

This course covers understanding the supervisory role of construction professionals in the design process including, directing a design team in the integration of construction documents for commercial buildings, coordination of site work, structural, architectural, mechanical, electrical, plumbing plans and contemporary CAD software for 2D& 3D design including Building Information Modeling. Prerequisite: CSM 2313 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5314. Technology Management in Construction.**

This course covers the supervisory role of construction professionals in the Virtual Design and Construction (VDC) process. Topics covered include directing a VDC team in the integration of construction documents for construction (architectural, structural, mechanical, electrical, and plumbing plans), coordination of site work, implementation of current CAD software for 2D and 3D design, the Building Information Modeling (BIM) process, and other technologies that have an impact on the construction industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5360. Construction Company Financial Control.**

Financial accounting and cost controls used at the company level in construction companies are studied. Topics include accounting systems, construction project profit calculations, and financial analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5362. Pre-Construction Services.**

The course will introduce students to designer/contractor interactions, including conceptual estimating and scheduling, the RFQ/RFP process and legal, insurance, risk allocation issues, along with procurement and selection.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5363. Construction Project Delivery and Leadership.**

This course covers methods of construction project delivery in detail and focuses on analyzing data to assess its impact on project outcomes. Construction project delivery is covered along with contract strategies. An owner approach to a method selection is developed within this class.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5364. Decision Making in Construction Management.**

This course focuses on the application of systems engineering and statistics used in solving construction and civil engineering problems. Topics covered include network and linear programming models, construction and evaluation of decision trees to clarify a proper course of action considering uncertainty, probability distributions, sample statistics, linear regression models, risk analysis, and sampling plans for quality assurance. Personal computer usage emphasized for problem solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5365. Construction Project Controls.**

This course covers construction management cost and schedule concepts, cost/schedule management information systems, variance analysis, forecasting, resource management, project recovery strategies, and application of theory to practical problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5366. Soils in Construction.**

This course provides students with an in-depth examination of geotechnical principles as they apply to soil construction activities. Topics covered include geological formations of natural soils, soil mineralogy, soil sampling, classification, soil testing, dewatering, safety and sustainability in soil construction, soil contamination and remediation, recycled content used in soil construction and innovative technologies in soil stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5367. Principles of Leadership in Construction.**

This course covers individual, organizational, and process/structure styles of leadership using a transformational model.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5368. Sustainable Construction.**

This course examines a breadth of sustainable construction techniques, including material production, material selection, sustainable design, the ecology model for design, life cycle cost analysis, and sustainable construction. The sustainable construction techniques are discussed relative to advanced sustainable framing, waste minimization techniques, LEED, and green roofs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5369. Construction Dispute Resolution.**

This course focuses on different mechanisms of dispute resolution in the industry. They are presented from the perspective of owner, designer, and contractor's liability/risk assessment. The course is comprised of best practices and pitfalls of negotiation, mediation and arbitration. Finally, a perspective on litigation is discussed, along with the fast changing world of case law. The course uses a collaborative model of contemporary research and industry case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5380. Construction Safety Management.**

This course covers the administration and application of 29CFR 1926 OSHA Construction Industry Regulations for the construction industry along with applicable state and federal construction safety laws related to construction, alterations, or repair work at construction sites. The roles of all participants at the construction job site concerning construction safety are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5384A. Construction Failure.**

This course covers a breadth of causes of construction failure, including how past failures can improve current construction practices and litigation is a likely response to failures in construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CSM 5390. Research in Construction.**

This course examines research methods used for construction, including such topics as designing experiments, scientific principles, problem solving techniques, producing a proposal, executing research, acquiring and managing data, statistical analysis methods, reporting results, and publishing. The course highlights up-to-date discussions on debates and concerns within the construction research community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Construction Management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CSM 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Technology (TECH)****TECH 5100. Academic Instruction for Technology.**

The course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TECH 5195. Industrial Internship.**

This course is a supervised experiential learning course in Technology Management. This work integrated learning course helps the student link theory with practice. Repeatable for credit. Prerequisites: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**TECH 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5300. Academic Instruction for Graduate Instructional Assistants.**

This course is designed to develop and enhance the professional and technical skills of graduate instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, safety, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

**TECH 5310. Product Design and Development.**

This course provides an overview of the new product realization process, focusing on systematic product design, including problem identification, product planning, conceptual design, and embodiment design. Standard CAD tools are employed for product modeling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5311. Computer-Aided Engineering.**

This course teaches the application of computer hardware and software to the design of products and of systems. Specific topics include geometric modeling, the development of computational methods, and an overview of engineering analysis software. Additional topics may include finite element analysis, manufacturing simulation, solidification modeling, and rapid prototyping.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TECH 5315. Engineering Economic Analysis.**

This course covers economic analytical techniques used in engineering decision-making. Topics include time-value of money, comparing alternatives, depreciation, replacement, and income tax considerations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5364. Robust Product and Process Design.**

Provides the student with in-depth knowledge of inferential statistics as applied to design of robust processes and products. Topics covered include probability distributions, ANOVA, fractional factorial design, response surface method, orthogonal arrays, and Taguchi method. Prior experience with introductory-level statistics is assumed. Prerequisite: TECH 5394 with a grade "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5365. Industrial Project Management and Scheduling.**

This course introduces students to industrial management system concepts and applications relating to management operations, system design, implementation and management, case studies of practices, and application of theory to practical problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5380. Principles of Information and Communication Technology Management.**

This course, in a case-based learning environment, integrates concepts and principles of information and communication technology (ICT) including mobile communication and Internet of Things (IoT). Analysis and evaluation of advanced ICT management examples demonstrate issues and strategies of modern ICT management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5382. Industrial Ecology and Sustainability Engineering.**

This course covers the principles of life cycle analysis (LCA) of engineered products and processes. Topics include industrial ecology, resource depletion, product design, process design, material selection, energy efficiency, product delivery, use, and end-of-life considerations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5384. Problems in Technology.**

In this course graduate students investigate a particular topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. It may be repeated for credit with the permission of the department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TECH 5385. Readings in Technology.**

A study of the ethical and moral viewpoints typically associated with American society as related to the development and introduction of new technology and engineering. Past, present, and future issues will be studied with selected readings focusing on industrial related problems and issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5387. Advanced Facilities Planning.**

This course is an in-depth study of technical problems encountered in designing, equipping, arranging, and specifying facility requirements for industrial and technical training facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5390. Research in Technology.**

This course examines the scientific method, including theory formulation, deductive reasoning, hypothesis generation, observation, inductive reasoning, and theory revision. Categories of research are compared and contrasted as regards methodology. Experimental research relating to significant industrial problems, including design considerations, internal and external validity, and appropriate analytical techniques, is studied in-depth. The course includes an introduction to data analysis and its proper interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TECH 5391. Advanced Manufacturing Systems.**

This course introduces various advanced tools, technologies, and strategies in modern manufacturing. Topic coverage emphasizes state-of-the-art in factory automation, as well as global and smart manufacturing enterprises. Specific topics include process automation and control, advanced manufacturing processes, intelligent manufacturing control, and information and communication technology (ICT) in manufacturing.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5392. Fundamentals of Microelectronics Manufacturing.**

This course is an introduction to integrated circuit fabrication. Topics include crystal growth, wafer preparation, epitaxial growth, oxidation, diffusion, ion implantation, thin film deposition, lithography, etching, device and circuit formation, packaging, and testing. A significant part of the course is a project focusing on circuit design and simulation or on process design. Laboratory component involves the actual production and testing of a functional semiconductor device.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5394. Design of Experiments.**

This course covers fundamentals of designing industrial experiments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5395A. Structure and Properties of Alloys.**

This course is an advanced exploration of the structure and properties of engineering alloys. Strengthening mechanisms of alloys are explored with specific applications to the alloys studied. The processing, properties, and structure of ferrous and nonferrous alloys are explored including new and emerging alloys. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TECH 5398. Directed Project.**

This course is a formal investigation into a business or industry problem. The directed project is an applied research project that is more extensive than an independent study and less extensive than a thesis. The course culminates in a detailed project report and oral presentation. Prerequisite: TECH 5394 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**TECH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Technology 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The master's degree is increasingly becoming the degree of choice among Construction Managers as the field becomes more technologically advanced and the industry more complex with governmental regulations. The purpose of the Construction Management master's degree program is to provide advanced project management principles and practices, critical thinking and creativity, and complex problem solving and decision making in construction projects as a specialized program for working construction professionals and others seeking master's level preparation. Further, the program will provide students with the skills to integrate information and communication technology in Construction Management.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic



year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable international evaluation fee (if applicable)
- baccalaureate degree (or equivalent) from an accredited college or university in construction related degree. Graduates of curricula outside these program areas may be required to satisfy program prerequisite before full admission into the program. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txstate.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a competitive overall GPA or a competitive GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- knowledge of Construction Management demonstrated through previous coursework and/or work experience
- responses to specific essay questions on the statement of purpose
- resume/CV detailing work experience, extracurricular and community activities, and honors and achievements
- two letters of recommendation from persons best able to assess the student's ability to succeed in graduate school

Applicants should refer to The Graduate College website for additional information regarding the admission process.

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with an 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Construction Management requires 30 semester credit hours, including a thesis.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
CSM 5314	Technology Management in Construction	3
CSM 5362	Pre-Construction Services	3
CSM 5364	Decision Making in Construction Management	3
CSM 5366	Soils in Construction	3
CSM 5368	Sustainable Construction	3
TECH 5390	Research in Technology	3
TECH 5394	Design of Experiments	3
<b>Prescribed Electives</b>		
Choose 3 hours from the following:		3
CSM 5360	Construction Company Financial Control	
CSM 5363	Construction Project Delivery and Leadership	
CSM 5365	Construction Project Controls	
CSM 5367	Principles of Leadership in Construction	
CSM 5380	Construction Safety Management	
CSM 5384A	Construction Failure	
<b>Thesis</b>		
CSM 5399A	Thesis	3
Choose a minimum of 3 total hours from the following:		3
CSM 5199B	Thesis	
CSM 5299B	Thesis	
CSM 5399B	Thesis	
CSM 5599B	Thesis	
CSM 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination

All candidates for graduate degrees must pass one or more comprehensive examinations, either written, oral, or both, covering at least the field of concentration and the thesis.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review

Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Engineering Technology: CSM, TECH

## Courses Offered

### Construction Science and Management (CSM)

#### CSM 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CSM 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5302. Fundamentals of Construction Contracts and Liability Issues.**

This course introduces students to the legal aspects of design and construction contract documents, including dispute resolution methods and professional ethics commonly used in the construction industry. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CSM 5304. Fundamentals of Construction Estimating.**

This course provides the student with a comprehensive introduction to the principles, techniques, technologies, and basic concepts involving methodologies and strategies used in the preparation of various types of construction estimates and bids. This course does not count as degree credit.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CSM 5306. Fundamentals of Commercial Building Construction Systems.**

This course is a commercial building construction systems class dealing with soils, site work, heavy foundations, steel, reinforced concrete, pre-cast structures and common assemblies. Commercial MEPs are studied along with CSI master format, as-built/shop drawings, schedule of values, AIA documents, and appropriate building codes. This course does not earn graduate degree credit.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CSM 5313. Building Information Modeling.**

This course covers understanding the supervisory role of construction professionals in the design process including, directing a design team in the integration of construction documents for commercial buildings, coordination of site work, structural, architectural, mechanical, electrical, plumbing plans and contemporary CAD software for 2D& 3D design including Building Information Modeling. Prerequisite: CSM 2313 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5314. Technology Management in Construction.**

This course covers the supervisory role of construction professionals in the Virtual Design and Construction (VDC) process. Topics covered include directing a VDC team in the integration of construction documents for construction (architectural, structural, mechanical, electrical, and plumbing plans), coordination of site work, implementation of current CAD software for 2D and 3D design, the Building Information Modeling (BIM) process, and other technologies that have an impact on the construction industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5360. Construction Company Financial Control.**

Financial accounting and cost controls used at the company level in construction companies are studied. Topics include accounting systems, construction project profit calculations, and financial analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5362. Pre-Construction Services.**

The course will introduce students to designer/contractor interactions, including conceptual estimating and scheduling, the RFQ/RFP process and legal, insurance, risk allocation issues, along with procurement and selection.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5363. Construction Project Delivery and Leadership.**

This course covers methods of construction project delivery in detail and focuses on analyzing data to assess its impact on project outcomes. Construction project delivery is covered along with contract strategies. An owner approach to a method selection is developed within this class.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5364. Decision Making in Construction Management.**

This course focuses on the application of systems engineering and statistics used in solving construction and civil engineering problems. Topics covered include network and linear programming models, construction and evaluation of decision trees to clarify a proper course of action considering uncertainty, probability distributions, sample statistics, linear regression models, risk analysis, and sampling plans for quality assurance. Personal computer usage emphasized for problem solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5365. Construction Project Controls.**

This course covers construction management cost and schedule concepts, cost/schedule management information systems, variance analysis, forecasting, resource management, project recovery strategies, and application of theory to practical problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5366. Soils in Construction.**

This course provides students with an in-depth examination of geotechnical principles as they apply to soil construction activities. Topics covered include geological formations of natural soils, soil mineralogy, soil sampling, classification, soil testing, dewatering, safety and sustainability in soil construction, soil contamination and remediation, recycled content used in soil construction and innovative technologies in soil stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5367. Principles of Leadership in Construction.**

This course covers individual, organizational, and process/structure styles of leadership using a transformational model.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5368. Sustainable Construction.**

This course examines a breadth of sustainable construction techniques, including material production, material selection, sustainable design, the ecology model for design, life cycle cost analysis, and sustainable construction. The sustainable construction techniques are discussed relative to advanced sustainable framing, waste minimization techniques, LEED, and green roofs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5369. Construction Dispute Resolution.**

This course focuses on different mechanisms of dispute resolution in the industry. They are presented from the perspective of owner, designer, and contractor's liability/risk assessment. The course is comprised of best practices and pitfalls of negotiation, mediation and arbitration. Finally, a perspective on litigation is discussed, along with the fast changing world of case law. The course uses a collaborative model of contemporary research and industry case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5380. Construction Safety Management.**

This course covers the administration and application of 29CFR 1926 OSHA Construction Industry Regulations for the construction industry along with applicable state and federal construction safety laws related to construction, alterations, or repair work at construction sites. The roles of all participants at the construction job site concerning construction safety are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5384A. Construction Failure.**

This course covers a breadth of causes of construction failure, including how past failures can improve current construction practices and litigation is a likely response to failures in construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CSM 5390. Research in Construction.**

This course examines research methods used for construction, including such topics as designing experiments, scientific principles, problem solving techniques, producing a proposal, executing research, acquiring and managing data, statistical analysis methods, reporting results, and publishing. The course highlights up-to-date discussions on debates and concerns within the construction research community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Construction Management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CSM 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Technology (TECH)****TECH 5100. Academic Instruction for Technology.**

The course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TECH 5195. Industrial Internship.**

This course is a supervised experiential learning course in Technology Management. This work integrated learning course helps the student link theory with practice. Repeatable for credit. Prerequisites: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**TECH 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5300. Academic Instruction for Graduate Instructional Assistants.**

This course is designed to develop and enhance the professional and technical skills of graduate instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, safety, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TECH 5310. Product Design and Development.**

This course provides an overview of the new product realization process, focusing on systematic product design, including problem identification, product planning, conceptual design, and embodiment design. Standard CAD tools are employed for product modeling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5311. Computer-Aided Engineering.**

This course teaches the application of computer hardware and software to the design of products and of systems. Specific topics include geometric modeling, the development of computational methods, and an overview of engineering analysis software. Additional topics may include finite element analysis, manufacturing simulation, solidification modeling, and rapid prototyping.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TECH 5315. Engineering Economic Analysis.**

This course covers economic analytical techniques used in engineering decision-making. Topics include time-value of money, comparing alternatives, depreciation, replacement, and income tax considerations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5364. Robust Product and Process Design.**

Provides the student with in-depth knowledge of inferential statistics as applied to design of robust processes and products. Topics covered include probability distributions, ANOVA, fractional factorial design, response surface method, orthogonal arrays, and Taguchi method. Prior experience with introductory-level statistics is assumed. Prerequisite: TECH 5394 with a grade "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5365. Industrial Project Management and Scheduling.**

This course introduces students to industrial management system concepts and applications relating to management operations, system design, implementation and management, case studies of practices, and application of theory to practical problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5380. Principles of Information and Communication Technology Management.**

This course, in a case-based learning environment, integrates concepts and principles of information and communication technology (ICT) including mobile communication and Internet of Things (IoT). Analysis and evaluation of advanced ICT management examples demonstrate issues and strategies of modern ICT management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5382. Industrial Ecology and Sustainability Engineering.**

This course covers the principles of life cycle analysis (LCA) of engineered products and processes. Topics include industrial ecology, resource depletion, product design, process design, material selection, energy efficiency, product delivery, use, and end-of-life considerations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5384. Problems in Technology.**

In this course graduate students investigate a particular topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. It may be repeated for credit with the permission of the department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TECH 5385. Readings in Technology.**

A study of the ethical and moral viewpoints typically associated with American society as related to the development and introduction of new technology and engineering. Past, present, and future issues will be studied with selected readings focusing on industrial related problems and issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**TECH 5387. Advanced Facilities Planning.**

This course is an in-depth study of technical problems encountered in designing, equipping, arranging, and specifying facility requirements for industrial and technical training facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5390. Research in Technology.**

This course examines the scientific method, including theory formulation, deductive reasoning, hypothesis generation, observation, inductive reasoning, and theory revision. Categories of research are compared and contrasted as regards methodology. Experimental research relating to significant industrial problems, including design considerations, internal and external validity, and appropriate analytical techniques, is studied in-depth. The course includes an introduction to data analysis and its proper interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TECH 5391. Advanced Manufacturing Systems.**

This course introduces various advanced tools, technologies, and strategies in modern manufacturing. Topic coverage emphasizes state-of-the-art in factory automation, as well as global and smart manufacturing enterprises. Specific topics include process automation and control, advanced manufacturing processes, intelligent manufacturing control, and information and communication technology (ICT) in manufacturing.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5392. Fundamentals of Microelectronics Manufacturing.**

This course is an introduction to integrated circuit fabrication. Topics include crystal growth, wafer preparation, epitaxial growth, oxidation, diffusion, ion implantation, thin film deposition, lithography, etching, device and circuit formation, packaging, and testing. A significant part of the course is a project focusing on circuit design and simulation or on process design. Laboratory component involves the actual production and testing of a functional semiconductor device.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5394. Design of Experiments.**

This course covers fundamentals of designing industrial experiments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5395A. Structure and Properties of Alloys.**

This course is an advanced exploration of the structure and properties of engineering alloys. Strengthening mechanisms of alloys are explored with specific applications to the alloys studied. The processing, properties, and structure of ferrous and nonferrous alloys are explored including new and emerging alloys. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TECH 5398. Directed Project.**

This course is a formal investigation into a business or industry problem. The directed project is an applied research project that is more extensive than an independent study and less extensive than a thesis. The course culminates in a detailed project report and oral presentation. Prerequisite: TECH 5394 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**TECH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Technology 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Engineering Management at Texas State is designed for those who seek careers or career advancement in the management of engineering and production activity in the construction and concrete industries; in the semiconductor, cast metals, machining, fabrication, and other manufacturing industries;

or in the fields of power generation, environmental management, and occupational health and safety.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- Background course work may be required if the undergraduate degree is **not** in the following fields: industrial technology, technology management, construction science and management, concrete industry management, engineering technology, or engineering.
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)\*
- GRE not required\*
- brief statement of purpose to include an explanation of why the applicant is interested in Technology Management as a field of study
- current resume/CV

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

If the GPA falls below the minimum requirement of 2.75, the student may submit the following to be considered for conditional admission:

- official GRE scores (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections

Conditional admission is not available to applicants who require "F" or "F" visas.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Engineering Management concentration in Industrial Management requires 30 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
TECH 5315	Engineering Economic Analysis	3
TECH 5365	Industrial Project Management and Scheduling	3
TECH 5394	Design of Experiments	3
<b>Concentration</b>		<b>15</b>
Choose 15 hours from the following:		
TECH 5310	Product Design and Development	
TECH 5380	Principles of Information and Communication Technology Management	
TECH 5382	Industrial Ecology and Sustainability Engineering	
TECH 5384	Problems in Technology	
TECH 5387	Advanced Facilities Planning	
TECH 5398	Directed Project (Taken Twice)	
May choose other advisor-approved courses in the College of Science and Engineering		
<b>Engineering Management Cognate</b>		
Choose 6 hours from the following:		6
MGT 5310	Organizational Change Management	
MGT 5311	Process Improvement Management in Organizations	
MGT 5312	Seminar in Management	
MGT 5315	New Venture Management	
MGT 5321	Supply Chain Management	
MGT 5325	Managing Business Creativity	
MGT 5330	Seminar in Human Resource Management	
MGT 5335	New Venture Launch	
MGT 5390	Managerial Data Analysis	
MGT 5391	Managing the Communication Process	
ANLY 5335	Forecasting and Simulation	
ANLY 5336	Analytics	
ANLY 5343	Data Mining	
ISAN 5355	Database Management Systems	
ISAN 5357	Computing for Data Analytics	
ISAN 5364	Data Warehousing	
May choose other advisor-approved business courses		
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

The comprehensive examination takes the form of a written exam based on all concentration courses. For the students who take the Directed

Project course, the oral proposal defense counts as the comprehensive exam. Students who perform unacceptably on the exam may take the exam a second time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Engineering Technology: CSM (p. 3144), TECH (p. 3146)

## Courses Offered

### Construction Science and Management (CSM)

#### CSM 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CSM 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CSM 5302. Fundamentals of Construction Contracts and Liability Issues.

This course introduces students to the legal aspects of design and construction contract documents, including dispute resolution methods and professional ethics commonly used in the construction industry. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CSM 5304. Fundamentals of Construction Estimating.

This course provides the student with a comprehensive introduction to the principles, techniques, technologies, and basic concepts involving methodologies and strategies used in the preparation of various types of construction estimates and bids. This course does not count as degree credit.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CSM 5306. Fundamentals of Commercial Building Construction Systems.

This course is a commercial building construction systems class dealing with soils, site work, heavy foundations, steel, reinforced concrete, pre-cast structures and common assemblies. Commercial MEPs are studied along with CSI master format, as-built/shop drawings, schedule of values, AIA documents, and appropriate building codes. This course does not earn graduate degree credit.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CSM 5313. Building Information Modeling.

This course covers understanding the supervisory role of construction professionals in the design process including, directing a design team in the integration of construction documents for commercial buildings, coordination of site work, structural, architectural, mechanical, electrical, plumbing plans and contemporary CAD software for 2D& 3D design including Building Information Modeling. Prerequisite: CSM 2313 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CSM 5314. Technology Management in Construction.

This course covers the supervisory role of construction professionals in the Virtual Design and Construction (VDC) process. Topics covered include directing a VDC team in the integration of construction documents for construction (architectural, structural, mechanical, electrical, and plumbing plans), coordination of site work, implementation of current CAD software for 2D and 3D design, the Building Information Modeling (BIM) process, and other technologies that have an impact on the construction industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CSM 5360. Construction Company Financial Control.

Financial accounting and cost controls used at the company level in construction companies are studied. Topics include accounting systems, construction project profit calculations, and financial analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CSM 5362. Pre-Construction Services.

The course will introduce students to designer/contractor interactions, including conceptual estimating and scheduling, the RFQ/RFP process and legal, insurance, risk allocation issues, along with procurement and selection.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5363. Construction Project Delivery and Leadership.**

This course covers methods of construction project delivery in detail and focuses on analyzing data to assess its impact on project outcomes.

Construction project delivery is covered along with contract strategies.

An owner approach to a method selection is developed within this class.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5364. Decision Making in Construction Management.**

This course focuses on the application of systems engineering and statistics used in solving construction and civil engineering problems.

Topics covered include network and linear programming models, construction and evaluation of decision trees to clarify a proper course of action considering uncertainty, probability distributions, sample statistics, linear regression models, risk analysis, and sampling plans for quality assurance. Personal computer usage emphasized for problem solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5365. Construction Project Controls.**

This course covers construction management cost and schedule concepts, cost/schedule management information systems, variance analysis, forecasting, resource management, project recovery strategies, and application of theory to practical problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5366. Soils in Construction.**

This course provides students with an in-depth examination of geotechnical principles as they apply to soil construction activities.

Topics covered include geological formations of natural soils, soil mineralogy, soil sampling, classification, soil testing, dewatering, safety and sustainability in soil construction, soil contamination and remediation, recycled content used in soil construction and innovative technologies in soil stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5367. Principles of Leadership in Construction.**

This course covers individual, organizational, and process/structure styles of leadership using a transformational model.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5368. Sustainable Construction.**

This course examines a breadth of sustainable construction techniques, including material production, material selection, sustainable design, the ecology model for design, life cycle cost analysis, and sustainable construction. The sustainable construction techniques are discussed relative to advanced sustainable framing, waste minimization techniques, LEED, and green roofs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5369. Construction Dispute Resolution.**

This course focuses on different mechanisms of dispute resolution in the industry. They are presented from the perspective of owner, designer, and contractor's liability/risk assessment. The course is comprised of best practices and pitfalls of negotiation, mediation and arbitration. Finally, a perspective on litigation is discussed, along with the fast changing world of case law. The course uses a collaborative model of contemporary research and industry case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5380. Construction Safety Management.**

This course covers the administration and application of 29CFR 1926 OSHA Construction Industry Regulations for the construction industry along with applicable state and federal construction safety laws related to construction, alterations, or repair work at construction sites. The roles of all participants at the construction job site concerning construction safety are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5384A. Construction Failure.**

This course covers a breadth of causes of construction failure, including how past failures can improve current construction practices and litigation is a likely response to failures in construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CSM 5390. Research in Construction.**

This course examines research methods used for construction, including such topics as designing experiments, scientific principles, problem solving techniques, producing a proposal, executing research, acquiring and managing data, statistical analysis methods, reporting results, and publishing. The course highlights up-to-date discussions on debates and concerns within the construction research community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Construction Management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CSM 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Technology (TECH)

**TECH 5100. Academic Instruction for Technology.**

The course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TECH 5195. Industrial Internship.**

This course is a supervised experiential learning course in Technology Management. This work integrated learning course helps the student link theory with practice. Repeatable for credit. Prerequisites: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**TECH 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5300. Academic Instruction for Graduate Instructional Assistants.**

This course is designed to develop and enhance the professional and technical skills of graduate instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, safety, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TECH 5310. Product Design and Development.**

This course provides an overview of the new product realization process, focusing on systematic product design, including problem identification, product planning, conceptual design, and embodiment design. Standard CAD tools are employed for product modeling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5311. Computer-Aided Engineering.**

This course teaches the application of computer hardware and software to the design of products and of systems. Specific topics include geometric modeling, the development of computational methods, and an overview of engineering analysis software. Additional topics may include finite element analysis, manufacturing simulation, solidification modeling, and rapid prototyping.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TECH 5315. Engineering Economic Analysis.**

This course covers economic analytical techniques used in engineering decision-making. Topics include time-value of money, comparing alternatives, depreciation, replacement, and income tax considerations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5364. Robust Product and Process Design.**

Provides the student with in-depth knowledge of inferential statistics as applied to design of robust processes and products. Topics covered include probability distributions, ANOVA, fractional factorial design, response surface method, orthogonal arrays, and Taguchi method. Prior experience with introductory-level statistics is assumed. Prerequisite: TECH 5394 with a grade "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5365. Industrial Project Management and Scheduling.**

This course introduces students to industrial management system concepts and applications relating to management operations, system design, implementation and management, case studies of practices, and application of theory to practical problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**TECH 5380. Principles of Information and Communication Technology Management.**

This course, in a case-based learning environment, integrates concepts and principles of information and communication technology (ICT) including mobile communication and Internet of Things (IoT). Analysis and evaluation of advanced ICT management examples demonstrate issues and strategies of modern ICT management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5382. Industrial Ecology and Sustainability Engineering.**

This course covers the principles of life cycle analysis (LCA) of engineered products and processes. Topics include industrial ecology, resource depletion, product design, process design, material selection, energy efficiency, product delivery, use, and end-of-life considerations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5384. Problems in Technology.**

In this course graduate students investigate a particular topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. It may be repeated for credit with the permission of the department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TECH 5385. Readings in Technology.**

A study of the ethical and moral viewpoints typically associated with American society as related to the development and introduction of new technology and engineering. Past, present, and future issues will be studied with selected readings focusing on industrial related problems and issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5387. Advanced Facilities Planning.**

This course is an in-depth study of technical problems encountered in designing, equipping, arranging, and specifying facility requirements for industrial and technical training facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5390. Research in Technology.**

This course examines the scientific method, including theory formulation, deductive reasoning, hypothesis generation, observation, inductive reasoning, and theory revision. Categories of research are compared and contrasted as regards methodology. Experimental research relating to significant industrial problems, including design considerations, internal and external validity, and appropriate analytical techniques, is studied in-depth. The course includes an introduction to data analysis and its proper interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TECH 5391. Advanced Manufacturing Systems.**

This course introduces various advanced tools, technologies, and strategies in modern manufacturing. Topic coverage emphasizes state-of-the-art in factory automation, as well as global and smart manufacturing enterprises. Specific topics include process automation and control, advanced manufacturing processes, intelligent manufacturing control, and information and communication technology (ICT) in manufacturing.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5392. Fundamentals of Microelectronics Manufacturing.**

This course is an introduction to integrated circuit fabrication. Topics include crystal growth, wafer preparation, epitaxial growth, oxidation, diffusion, ion implantation, thin film deposition, lithography, etching, device and circuit formation, packaging, and testing. A significant part of the course is a project focusing on circuit design and simulation or on process design. Laboratory component involves the actual production and testing of a functional semiconductor device.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5394. Design of Experiments.**

This course covers fundamentals of designing industrial experiments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5395A. Structure and Properties of Alloys.**

This course is an advanced exploration of the structure and properties of engineering alloys. Strengthening mechanisms of alloys are explored with specific applications to the alloys studied. The processing, properties, and structure of ferrous and nonferrous alloys are explored including new and emerging alloys. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TECH 5398. Directed Project.**

This course is a formal investigation into a business or industry problem. The directed project is an applied research project that is more extensive than an independent study and less extensive than a thesis. The course culminates in a detailed project report and oral presentation. Prerequisite: TECH 5394 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**TECH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Technology 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Engineering Management at Texas State is designed for those who seek careers or career advancement in the management of engineering and production activity in the construction and concrete industries; in the semiconductor, cast metals, machining, fabrication, and other manufacturing industries; or in the fields of power generation, environmental management, and occupational health and safety.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review

the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- Background course work may be required if the undergraduate degree is **not** in the following fields: industrial technology, technology management, construction science and management, concrete industry management, engineering technology, or engineering.
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)\*
- GRE not required\*
- statement of purpose to include an explanation of why the applicant is interested in Technology Management as a field of study
- current resume/CV

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

If the GPA falls below the minimum requirement of 2.75, the student may submit the following to be considered for conditional admission:

- official GRE scores (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections

Conditional admission is not available to applicants who require "F" or "J" visas.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Engineering Management concentration in Industrial Management requires 30 semester credit hours, including a thesis. Students who do not have

the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
TECH 5315	Engineering Economic Analysis	3
TECH 5365	Industrial Project Management and Scheduling	3
TECH 5394	Design of Experiments	3
<b>Concentration</b>		
Choose 9 hours from the following:		9
TECH 5310	Product Design and Development	
TECH 5380	Principles of Information and Communication Technology Management	
TECH 5382	Industrial Ecology and Sustainability Engineering	
TECH 5384	Problems in Technology	
TECH 5387	Advanced Facilities Planning	
May choose other advisor-approved courses in the College of Science and Engineering		
<b>Engineering Management Cognate</b>		
Choose 6 hours from the following:		6
MGT 5310	Organizational Change Management	
MGT 5311	Process Improvement Management in Organizations	
MGT 5312	Seminar in Management	
MGT 5330	Seminar in Human Resource Management	
MGT 5335	New Venture Launch	
MGT 5315	New Venture Management	
MGT 5321	Supply Chain Management	
MGT 5325	Managing Business Creativity	
MGT 5390	Managerial Data Analysis	
MGT 5391	Managing the Communication Process	
ANLY 5335	Forecasting and Simulation	
ANLY 5336	Analytics	
ANLY 5336	Analytics	
ISAN 5355	Database Management Systems	
ISAN 5357	Computing for Data Analytics	
ISAN 5357	Computing for Data Analytics	
May choose other advisor-approved business courses		
<b>Thesis</b>		
TECH 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
TECH 5199B	Thesis	
TECH 5299B	Thesis	
TECH 5399B	Thesis	
TECH 5599B	Thesis	
TECH 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

The oral proposal defense is used as the comprehensive exam. The examination is administered by the student's main advisor (committee

chair). Students who perform unacceptably on the exam may take the exam a second time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the

topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival

quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Engineering Technology: CSM (p. 3150), TECH (p. 3152)

## Courses Offered

### Construction Science and Management (CSM)

#### CSM 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CSM 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CSM 5302. Fundamentals of Construction Contracts and Liability Issues.

This course introduces students to the legal aspects of design and construction contract documents, including dispute resolution methods and professional ethics commonly used in the construction industry. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CSM 5304. Fundamentals of Construction Estimating.

This course provides the student with a comprehensive introduction to the principles, techniques, technologies, and basic concepts involving methodologies and strategies used in the preparation of various types of construction estimates and bids. This course does not count as degree credit.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CSM 5306. Fundamentals of Commercial Building Construction Systems.

This course is a commercial building construction systems class dealing with soils, site work, heavy foundations, steel, reinforced concrete, pre-cast structures and common assemblies. Commercial MEPs are studied along with CSI master format, as-built/shop drawings, schedule of values, AIA documents, and appropriate building codes. This course does not earn graduate degree credit.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CSM 5313. Building Information Modeling.**

This course covers understanding the supervisory role of construction professionals in the design process including, directing a design team in the integration of construction documents for commercial buildings, coordination of site work, structural, architectural, mechanical, electrical, plumbing plans and contemporary CAD software for 2D& 3D design including Building Information Modeling. Prerequisite: CSM 2313 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5314. Technology Management in Construction.**

This course covers the supervisory role of construction professionals in the Virtual Design and Construction (VDC) process. Topics covered include directing a VDC team in the integration of construction documents for construction (architectural, structural, mechanical, electrical, and plumbing plans), coordination of site work, implementation of current CAD software for 2D and 3D design, the Building Information Modeling (BIM) process, and other technologies that have an impact on the construction industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5360. Construction Company Financial Control.**

Financial accounting and cost controls used at the company level in construction companies are studied. Topics include accounting systems, construction project profit calculations, and financial analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5362. Pre-Construction Services.**

The course will introduce students to designer/contractor interactions, including conceptual estimating and scheduling, the RFQ/RFP process and legal, insurance, risk allocation issues, along with procurement and selection.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5363. Construction Project Delivery and Leadership.**

This course covers methods of construction project delivery in detail and focuses on analyzing data to assess its impact on project outcomes. Construction project delivery is covered along with contract strategies. An owner approach to a method selection is developed within this class.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5364. Decision Making in Construction Management.**

This course focuses on the application of systems engineering and statistics used in solving construction and civil engineering problems. Topics covered include network and linear programming models, construction and evaluation of decision trees to clarify a proper course of action considering uncertainty, probability distributions, sample statistics, linear regression models, risk analysis, and sampling plans for quality assurance. Personal computer usage emphasized for problem solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5365. Construction Project Controls.**

This course covers construction management cost and schedule concepts, cost/schedule management information systems, variance analysis, forecasting, resource management, project recovery strategies, and application of theory to practical problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5366. Soils in Construction.**

This course provides students with an in-depth examination of geotechnical principles as they apply to soil construction activities. Topics covered include geological formations of natural soils, soil mineralogy, soil sampling, classification, soil testing, dewatering, safety and sustainability in soil construction, soil contamination and remediation, recycled content used in soil construction and innovative technologies in soil stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5367. Principles of Leadership in Construction.**

This course covers individual, organizational, and process/structure styles of leadership using a transformational model.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5368. Sustainable Construction.**

This course examines a breadth of sustainable construction techniques, including material production, material selection, sustainable design, the ecology model for design, life cycle cost analysis, and sustainable construction. The sustainable construction techniques are discussed relative to advanced sustainable framing, waste minimization techniques, LEED, and green roofs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CSM 5369. Construction Dispute Resolution.**

This course focuses on different mechanisms of dispute resolution in the industry. They are presented from the perspective of owner, designer, and contractor's liability/risk assessment. The course is comprised of best practices and pitfalls of negotiation, mediation and arbitration. Finally, a perspective on litigation is discussed, along with the fast changing world of case law. The course uses a collaborative model of contemporary research and industry case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5380. Construction Safety Management.**

This course covers the administration and application of 29CFR 1926 OSHA Construction Industry Regulations for the construction industry along with applicable state and federal construction safety laws related to construction, alterations, or repair work at construction sites. The roles of all participants at the construction job site concerning construction safety are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5384A. Construction Failure.**

This course covers a breadth of causes of construction failure, including how past failures can improve current construction practices and litigation is a likely response to failures in construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CSM 5390. Research in Construction.**

This course examines research methods used for construction, including such topics as designing experiments, scientific principles, problem solving techniques, producing a proposal, executing research, acquiring and managing data, statistical analysis methods, reporting results, and publishing. The course highlights up-to-date discussions on debates and concerns within the construction research community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Construction Management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CSM 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Technology (TECH)****TECH 5100. Academic Instruction for Technology.**

The course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TECH 5195. Industrial Internship.**

This course is a supervised experiential learning course in Technology Management. This work integrated learning course helps the student link theory with practice. Repeatable for credit. Prerequisites: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**TECH 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5300. Academic Instruction for Graduate Instructional Assistants.**

This course is designed to develop and enhance the professional and technical skills of graduate instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, safety, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

**TECH 5310. Product Design and Development.**

This course provides an overview of the new product realization process, focusing on systematic product design, including problem identification, product planning, conceptual design, and embodiment design. Standard CAD tools are employed for product modeling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5311. Computer-Aided Engineering.**

This course teaches the application of computer hardware and software to the design of products and of systems. Specific topics include geometric modeling, the development of computational methods, and an overview of engineering analysis software. Additional topics may include finite element analysis, manufacturing simulation, solidification modeling, and rapid prototyping.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TECH 5315. Engineering Economic Analysis.**

This course covers economic analytical techniques used in engineering decision-making. Topics include time-value of money, comparing alternatives, depreciation, replacement, and income tax considerations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5364. Robust Product and Process Design.**

Provides the student with in-depth knowledge of inferential statistics as applied to design of robust processes and products. Topics covered include probability distributions, ANOVA, fractional factorial design, response surface method, orthogonal arrays, and Taguchi method. Prior experience with introductory-level statistics is assumed. Prerequisite: TECH 5394 with a grade "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5365. Industrial Project Management and Scheduling.**

This course introduces students to industrial management system concepts and applications relating to management operations, system design, implementation and management, case studies of practices, and application of theory to practical problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5380. Principles of Information and Communication Technology Management.**

This course, in a case-based learning environment, integrates concepts and principles of information and communication technology (ICT) including mobile communication and Internet of Things (IoT). Analysis and evaluation of advanced ICT management examples demonstrate issues and strategies of modern ICT management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5382. Industrial Ecology and Sustainability Engineering.**

This course covers the principles of life cycle analysis (LCA) of engineered products and processes. Topics include industrial ecology, resource depletion, product design, process design, material selection, energy efficiency, product delivery, use, and end-of-life considerations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5384. Problems in Technology.**

In this course graduate students investigate a particular topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. It may be repeated for credit with the permission of the department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TECH 5385. Readings in Technology.**

A study of the ethical and moral viewpoints typically associated with American society as related to the development and introduction of new technology and engineering. Past, present, and future issues will be studied with selected readings focusing on industrial related problems and issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5387. Advanced Facilities Planning.**

This course is an in-depth study of technical problems encountered in designing, equipping, arranging, and specifying facility requirements for industrial and technical training facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5390. Research in Technology.**

This course examines the scientific method, including theory formulation, deductive reasoning, hypothesis generation, observation, inductive reasoning, and theory revision. Categories of research are compared and contrasted as regards methodology. Experimental research relating to significant industrial problems, including design considerations, internal and external validity, and appropriate analytical techniques, is studied in-depth. The course includes an introduction to data analysis and its proper interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TECH 5391. Advanced Manufacturing Systems.**

This course introduces various advanced tools, technologies, and strategies in modern manufacturing. Topic coverage emphasizes state-of-the-art in factory automation, as well as global and smart manufacturing enterprises. Specific topics include process automation and control, advanced manufacturing processes, intelligent manufacturing control, and information and communication technology (ICT) in manufacturing.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5392. Fundamentals of Microelectronics Manufacturing.**

This course is an introduction to integrated circuit fabrication. Topics include crystal growth, wafer preparation, epitaxial growth, oxidation, diffusion, ion implantation, thin film deposition, lithography, etching, device and circuit formation, packaging, and testing. A significant part of the course is a project focusing on circuit design and simulation or on process design. Laboratory component involves the actual production and testing of a functional semiconductor device.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5394. Design of Experiments.**

This course covers fundamentals of designing industrial experiments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5395A. Structure and Properties of Alloys.**

This course is an advanced exploration of the structure and properties of engineering alloys. Strengthening mechanisms of alloys are explored with specific applications to the alloys studied. The processing, properties, and structure of ferrous and nonferrous alloys are explored including new and emerging alloys. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TECH 5398. Directed Project.**

This course is a formal investigation into a business or industry problem. The directed project is an applied research project that is more extensive than an independent study and less extensive than a thesis. The course culminates in a detailed project report and oral presentation. Prerequisite: TECH 5394 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**TECH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Technology 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Engineering Management at Texas State is designed for those who seek careers or career advancement in the management of engineering and production activity in the construction and concrete industries; in the semiconductor, cast metals, machining, fabrication, and other manufacturing industries; or in the fields of power generation, environmental management, and occupational health and safety.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review

the International Admission Documents page (p. 806) for additional requirements.

- completed online application
  - \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - Background course work may be required if the undergraduate degree is **not** in the following fields: industrial technology, technology management, construction science and management, concrete industry management, engineering technology, or engineering.
  - official transcripts from **each institution** where course credit was granted
  - 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)\*
  - GRE not required\*
  - statement of purpose to include an explanation of why the applicant is interested in Technology Management as a field of study
  - current resume/CV

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

If the GPA falls below the minimum requirement of 2.75, the student may submit the following to be considered for conditional admission:

- official GRE scores (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections

Conditional admission is not available to applicants who require "F" or "J" visas.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Engineering Management concentration in Manufacturing Management requires

30 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
TECH 5315	Engineering Economic Analysis	3
TECH 5365	Industrial Project Management and Scheduling	3
TECH 5394	Design of Experiments	3
<b>Concentration</b>		
Choose 15 hours from the following:		15
TECH 5310	Product Design and Development	
TECH 5311	Computer-Aided Engineering	
TECH 5380	Principles of Information and Communication Technology Management	
TECH 5384	Problems in Technology	
TECH 5391	Advanced Manufacturing Systems	
TECH 5392	Fundamentals of Microelectronics Manufacturing	
TECH 5398	Directed Project (Taken Twice)	
May choose other advisor-approved courses in the College of Science and Engineering		
<b>Engineering Management Cognate</b>		
Choose 6 hours from the following:		6
MGT 5310	Organizational Change Management	
MGT 5311	Process Improvement Management in Organizations	
MGT 5312	Seminar in Management	
MGT 5315	New Venture Management	
MGT 5321	Supply Chain Management	
MGT 5325	Managing Business Creativity	
MGT 5330	Seminar in Human Resource Management	
MGT 5335	New Venture Launch	
MGT 5390	Managerial Data Analysis	
MGT 5391	Managing the Communication Process	
ANLY 5335	Forecasting and Simulation	
ANLY 5336	Analytics	
ANLY 5336	Analytics	
ISAN 5355	Database Management Systems	
ISAN 5357	Computing for Data Analytics	
ISAN 5364	Data Warehousing	
May choose other advisor-approved business courses		
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

The comprehensive examination takes the form of a written exam based on all concentration courses. For the students who take the Directed Project course, the oral proposal defense counts as the comprehensive exam. **Students** who perform unacceptably on the exam may take the exam a second time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Engineering Technology: CSM (p. 3156), TECH (p. 3158)

## Courses Offered

### Construction Science and Management (CSM)

#### CSM 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CSM 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CSM 5302. Fundamentals of Construction Contracts and Liability Issues.

This course introduces students to the legal aspects of design and construction contract documents, including dispute resolution methods and professional ethics commonly used in the construction industry. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CSM 5304. Fundamentals of Construction Estimating.

This course provides the student with a comprehensive introduction to the principles, techniques, technologies, and basic concepts involving methodologies and strategies used in the preparation of various types of construction estimates and bids. This course does not count as degree credit.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CSM 5306. Fundamentals of Commercial Building Construction Systems.

This course is a commercial building construction systems class dealing with soils, site work, heavy foundations, steel, reinforced concrete, pre-cast structures and common assemblies. Commercial MEPs are studied along with CSI master format, as-built/shop drawings, schedule of values, AIA documents, and appropriate building codes. This course does not earn graduate degree credit.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CSM 5313. Building Information Modeling.

This course covers understanding the supervisory role of construction professionals in the design process including, directing a design team in the integration of construction documents for commercial buildings, coordination of site work, structural, architectural, mechanical, electrical, plumbing plans and contemporary CAD software for 2D& 3D design including Building Information Modeling. Prerequisite: CSM 2313 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CSM 5314. Technology Management in Construction.

This course covers the supervisory role of construction professionals in the Virtual Design and Construction (VDC) process. Topics covered include directing a VDC team in the integration of construction documents for construction (architectural, structural, mechanical, electrical, and plumbing plans), coordination of site work, implementation of current CAD software for 2D and 3D design, the Building Information Modeling (BIM) process, and other technologies that have an impact on the construction industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CSM 5360. Construction Company Financial Control.

Financial accounting and cost controls used at the company level in construction companies are studied. Topics include accounting systems, construction project profit calculations, and financial analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CSM 5362. Pre-Construction Services.

The course will introduce students to designer/contractor interactions, including conceptual estimating and scheduling, the RFQ/RFP process and legal, insurance, risk allocation issues, along with procurement and selection.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### CSM 5363. Construction Project Delivery and Leadership.

This course covers methods of construction project delivery in detail and focuses on analyzing data to assess its impact on project outcomes. Construction project delivery is covered along with contract strategies. An owner approach to a method selection is developed within this class.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CSM 5364. Decision Making in Construction Management.**

This course focuses on the application of systems engineering and statistics used in solving construction and civil engineering problems. Topics covered include network and linear programming models, construction and evaluation of decision trees to clarify a proper course of action considering uncertainty, probability distributions, sample statistics, linear regression models, risk analysis, and sampling plans for quality assurance. Personal computer usage emphasized for problem solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5365. Construction Project Controls.**

This course covers construction management cost and schedule concepts, cost/schedule management information systems, variance analysis, forecasting, resource management, project recovery strategies, and application of theory to practical problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5366. Soils in Construction.**

This course provides students with an in-depth examination of geotechnical principles as they apply to soil construction activities. Topics covered include geological formations of natural soils, soil mineralogy, soil sampling, classification, soil testing, dewatering, safety and sustainability in soil construction, soil contamination and remediation, recycled content used in soil construction and innovative technologies in soil stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5367. Principles of Leadership in Construction.**

This course covers individual, organizational, and process/structure styles of leadership using a transformational model.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5368. Sustainable Construction.**

This course examines a breadth of sustainable construction techniques, including material production, material selection, sustainable design, the ecology model for design, life cycle cost analysis, and sustainable construction. The sustainable construction techniques are discussed relative to advanced sustainable framing, waste minimization techniques, LEED, and green roofs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5369. Construction Dispute Resolution.**

This course focuses on different mechanisms of dispute resolution in the industry. They are presented from the perspective of owner, designer, and contractor's liability/risk assessment. The course is comprised of best practices and pitfalls of negotiation, mediation and arbitration. Finally, a perspective on litigation is discussed, along with the fast changing world of case law. The course uses a collaborative model of contemporary research and industry case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5380. Construction Safety Management.**

This course covers the administration and application of 29CFR 1926 OSHA Construction Industry Regulations for the construction industry along with applicable state and federal construction safety laws related to construction, alterations, or repair work at construction sites. The roles of all participants at the construction job site concerning construction safety are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5384A. Construction Failure.**

This course covers a breadth of causes of construction failure, including how past failures can improve current construction practices and litigation is a likely response to failures in construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CSM 5390. Research in Construction.**

This course examines research methods used for construction, including such topics as designing experiments, scientific principles, problem solving techniques, producing a proposal, executing research, acquiring and managing data, statistical analysis methods, reporting results, and publishing. The course highlights up-to-date discussions on debates and concerns within the construction research community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Construction Management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CSM 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Technology (TECH)

**TECH 5100. Academic Instruction for Technology.**

The course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TECH 5195. Industrial Internship.**

This course is a supervised experiential learning course in Technology Management. This work integrated learning course helps the student link theory with practice. Repeatable for credit. Prerequisites: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**TECH 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5300. Academic Instruction for Graduate Instructional Assistants.**

This course is designed to develop and enhance the professional and technical skills of graduate instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, safety, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TECH 5310. Product Design and Development.**

This course provides an overview of the new product realization process, focusing on systematic product design, including problem identification, product planning, conceptual design, and embodiment design. Standard CAD tools are employed for product modeling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5311. Computer-Aided Engineering.**

This course teaches the application of computer hardware and software to the design of products and of systems. Specific topics include geometric modeling, the development of computational methods, and an overview of engineering analysis software. Additional topics may include finite element analysis, manufacturing simulation, solidification modeling, and rapid prototyping.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TECH 5315. Engineering Economic Analysis.**

This course covers economic analytical techniques used in engineering decision-making. Topics include time-value of money, comparing alternatives, depreciation, replacement, and income tax considerations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5364. Robust Product and Process Design.**

Provides the student with in-depth knowledge of inferential statistics as applied to design of robust processes and products. Topics covered include probability distributions, ANOVA, fractional factorial design, response surface method, orthogonal arrays, and Taguchi method. Prior experience with introductory-level statistics is assumed. Prerequisite: TECH 5394 with a grade "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5365. Industrial Project Management and Scheduling.**

This course introduces students to industrial management system concepts and applications relating to management operations, system design, implementation and management, case studies of practices, and application of theory to practical problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5380. Principles of Information and Communication Technology Management.**

This course, in a case-based learning environment, integrates concepts and principles of information and communication technology (ICT) including mobile communication and Internet of Things (IoT). Analysis and evaluation of advanced ICT management examples demonstrate issues and strategies of modern ICT management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5382. Industrial Ecology and Sustainability Engineering.**

This course covers the principles of life cycle analysis (LCA) of engineered products and processes. Topics include industrial ecology, resource depletion, product design, process design, material selection, energy efficiency, product delivery, use, and end-of-life considerations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5384. Problems in Technology.**

In this course graduate students investigate a particular topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. It may be repeated for credit with the permission of the department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TECH 5385. Readings in Technology.**

A study of the ethical and moral viewpoints typically associated with American society as related to the development and introduction of new technology and engineering. Past, present, and future issues will be studied with selected readings focusing on industrial related problems and issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5387. Advanced Facilities Planning.**

This course is an in-depth study of technical problems encountered in designing, equipping, arranging, and specifying facility requirements for industrial and technical training facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5390. Research in Technology.**

This course examines the scientific method, including theory formulation, deductive reasoning, hypothesis generation, observation, inductive reasoning, and theory revision. Categories of research are compared and contrasted as regards methodology. Experimental research relating to significant industrial problems, including design considerations, internal and external validity, and appropriate analytical techniques, is studied in-depth. The course includes an introduction to data analysis and its proper interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TECH 5391. Advanced Manufacturing Systems.**

This course introduces various advanced tools, technologies, and strategies in modern manufacturing. Topic coverage emphasizes state-of-the-art in factory automation, as well as global and smart manufacturing enterprises. Specific topics include process automation and control, advanced manufacturing processes, intelligent manufacturing control, and information and communication technology (ICT) in manufacturing.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5392. Fundamentals of Microelectronics Manufacturing.**

This course is an introduction to integrated circuit fabrication. Topics include crystal growth, wafer preparation, epitaxial growth, oxidation, diffusion, ion implantation, thin film deposition, lithography, etching, device and circuit formation, packaging, and testing. A significant part of the course is a project focusing on circuit design and simulation or on process design. Laboratory component involves the actual production and testing of a functional semiconductor device.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5394. Design of Experiments.**

This course covers fundamentals of designing industrial experiments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5395A. Structure and Properties of Alloys.**

This course is an advanced exploration of the structure and properties of engineering alloys. Strengthening mechanisms of alloys are explored with specific applications to the alloys studied. The processing, properties, and structure of ferrous and nonferrous alloys are explored including new and emerging alloys. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TECH 5398. Directed Project.**

This course is a formal investigation into a business or industry problem. The directed project is an applied research project that is more extensive than an independent study and less extensive than a thesis. The course culminates in a detailed project report and oral presentation. Prerequisite: TECH 5394 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**TECH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Technology 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The Master of Science (M.S.) degree with a major in Engineering Management at Texas State is designed for those who seek careers or career advancement in the management of engineering and production activity in the construction and concrete industries; in the semiconductor, cast metals, machining, fabrication, and other manufacturing industries; or in the fields of power generation, environmental management, and occupational health and safety.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review

the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university. (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- Background course work may be required if the undergraduate degree is **not** in the following fields: industrial technology, technology management, construction science and management, concrete industry management, engineering technology, or engineering.
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)\*
- GRE not required\*
- statement of purpose to include an explanation of why the applicant is interested in Technology Management as a field of study
- current resume/CV

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

### \*Additional Information

If the GPA falls below the minimum requirement of 2.75, the student may submit the following to be considered for conditional admission:

- official GRE scores (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections

Conditional admission is not available to applicants who require "F" or "J" visas.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Engineering Management concentration in Manufacturing Management requires 30 semester credit hours, including a thesis. Students who do not have

the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
TECH 5315	Engineering Economic Analysis	3
TECH 5365	Industrial Project Management and Scheduling	3
TECH 5394	Design of Experiments	3
<b>Concentration</b>		
Choose 9 hours from the following:		9
TECH 5310	Product Design and Development	
TECH 5311	Computer-Aided Engineering	
TECH 5380	Principles of Information and Communication Technology Management	
TECH 5384	Problems in Technology	
TECH 5387	Advanced Facilities Planning	
TECH 5391	Advanced Manufacturing Systems	
TECH 5392	Fundamentals of Microelectronics Manufacturing	
May choose other advisor-approved courses in the College of Science and Engineering		
<b>Engineering Management Cognate</b>		
Choose 6 hours from the following:		6
MGT 5310	Organizational Change Management	
MGT 5311	Process Improvement Management in Organizations	
MGT 5312	Seminar in Management	
MGT 5315	New Venture Management	
MGT 5321	Supply Chain Management	
MGT 5325	Managing Business Creativity	
MGT 5330	Seminar in Human Resource Management	
MGT 5335	New Venture Launch	
MGT 5390	Managerial Data Analysis	
MGT 5391	Managing the Communication Process	
ANLY 5335	Forecasting and Simulation	
ANLY 5336	Analytics	
ANLY 5343	Data Mining	
ISAN 5355	Database Management Systems	
ISAN 5357	Computing for Data Analytics	
ISAN 5364	Data Warehousing	
May choose other advisor-approved business courses		
<b>Thesis</b>		
TECH 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
TECH 5199B	Thesis	
TECH 5299B	Thesis	
TECH 5399B	Thesis	
TECH 5599B	Thesis	
TECH 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

The oral proposal defense is used as the comprehensive exam. The examination is administered by the student's main advisor (committee chair). Students who perform unacceptably on the exam may take the exam a second time.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision



is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Engineering Technology: CSM (p. 3162), TECH (p. 3164)

## Courses Offered

### Construction Science and Management (CSM)

#### CSM 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CSM 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

#### CSM 5302. Fundamentals of Construction Contracts and Liability Issues.

This course introduces students to the legal aspects of design and construction contract documents, including dispute resolution methods and professional ethics commonly used in the construction industry. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### CSM 5304. Fundamentals of Construction Estimating.

This course provides the student with a comprehensive introduction to the principles, techniques, technologies, and basic concepts involving methodologies and strategies used in the preparation of various types of construction estimates and bids. This course does not count as degree credit.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CSM 5306. Fundamentals of Commercial Building Construction Systems.**

This course is a commercial building construction systems class dealing with soils, site work, heavy foundations, steel, reinforced concrete, pre-cast structures and common assemblies. Commercial MEPs are studied along with CSI master format, as-built/shop drawings, schedule of values, AIA documents, and appropriate building codes. This course does not earn graduate degree credit.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CSM 5313. Building Information Modeling.**

This course covers understanding the supervisory role of construction professionals in the design process including, directing a design team in the integration of construction documents for commercial buildings, coordination of site work, structural, architectural, mechanical, electrical, plumbing plans and contemporary CAD software for 2D& 3D design including Building Information Modeling. Prerequisite: CSM 2313 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5314. Technology Management in Construction.**

This course covers the supervisory role of construction professionals in the Virtual Design and Construction (VDC) process. Topics covered include directing a VDC team in the integration of construction documents for construction (architectural, structural, mechanical, electrical, and plumbing plans), coordination of site work, implementation of current CAD software for 2D and 3D design, the Building Information Modeling (BIM) process, and other technologies that have an impact on the construction industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5360. Construction Company Financial Control.**

Financial accounting and cost controls used at the company level in construction companies are studied. Topics include accounting systems, construction project profit calculations, and financial analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5362. Pre-Construction Services.**

The course will introduce students to designer/contractor interactions, including conceptual estimating and scheduling, the RFQ/RFP process and legal, insurance, risk allocation issues, along with procurement and selection.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5363. Construction Project Delivery and Leadership.**

This course covers methods of construction project delivery in detail and focuses on analyzing data to assess its impact on project outcomes. Construction project delivery is covered along with contract strategies. An owner approach to a method selection is developed within this class.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5364. Decision Making in Construction Management.**

This course focuses on the application of systems engineering and statistics used in solving construction and civil engineering problems. Topics covered include network and linear programming models, construction and evaluation of decision trees to clarify a proper course of action considering uncertainty, probability distributions, sample statistics, linear regression models, risk analysis, and sampling plans for quality assurance. Personal computer usage emphasized for problem solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5365. Construction Project Controls.**

This course covers construction management cost and schedule concepts, cost/schedule management information systems, variance analysis, forecasting, resource management, project recovery strategies, and application of theory to practical problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5366. Soils in Construction.**

This course provides students with an in-depth examination of geotechnical principles as they apply to soil construction activities. Topics covered include geological formations of natural soils, soil mineralogy, soil sampling, classification, soil testing, dewatering, safety and sustainability in soil construction, soil contamination and remediation, recycled content used in soil construction and innovative technologies in soil stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5367. Principles of Leadership in Construction.**

This course covers individual, organizational, and process/structure styles of leadership using a transformational model.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5368. Sustainable Construction.**

This course examines a breadth of sustainable construction techniques, including material production, material selection, sustainable design, the ecology model for design, life cycle cost analysis, and sustainable construction. The sustainable construction techniques are discussed relative to advanced sustainable framing, waste minimization techniques, LEED, and green roofs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5369. Construction Dispute Resolution.**

This course focuses on different mechanisms of dispute resolution in the industry. They are presented from the perspective of owner, designer, and contractor's liability/risk assessment. The course is comprised of best practices and pitfalls of negotiation, mediation and arbitration. Finally, a perspective on litigation is discussed, along with the fast changing world of case law. The course uses a collaborative model of contemporary research and industry case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5380. Construction Safety Management.**

This course covers the administration and application of 29CFR 1926 OSHA Construction Industry Regulations for the construction industry along with applicable state and federal construction safety laws related to construction, alterations, or repair work at construction sites. The roles of all participants at the construction job site concerning construction safety are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5384A. Construction Failure.**

This course covers a breadth of causes of construction failure, including how past failures can improve current construction practices and litigation is a likely response to failures in construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CSM 5390. Research in Construction.**

This course examines research methods used for construction, including such topics as designing experiments, scientific principles, problem solving techniques, producing a proposal, executing research, acquiring and managing data, statistical analysis methods, reporting results, and publishing. The course highlights up-to-date discussions on debates and concerns within the construction research community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Construction Management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CSM 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Technology (TECH)****TECH 5100. Academic Instruction for Technology.**

The course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TECH 5195. Industrial Internship.**

This course is a supervised experiential learning course in Technology Management. This work integrated learning course helps the student link theory with practice. Repeatable for credit. Prerequisites: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**TECH 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5300. Academic Instruction for Graduate Instructional Assistants.**

This course is designed to develop and enhance the professional and technical skills of graduate instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, safety, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TECH 5310. Product Design and Development.**

This course provides an overview of the new product realization process, focusing on systematic product design, including problem identification, product planning, conceptual design, and embodiment design. Standard CAD tools are employed for product modeling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5311. Computer-Aided Engineering.**

This course teaches the application of computer hardware and software to the design of products and of systems. Specific topics include geometric modeling, the development of computational methods, and an overview of engineering analysis software. Additional topics may include finite element analysis, manufacturing simulation, solidification modeling, and rapid prototyping.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TECH 5315. Engineering Economic Analysis.**

This course covers economic analytical techniques used in engineering decision-making. Topics include time-value of money, comparing alternatives, depreciation, replacement, and income tax considerations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5364. Robust Product and Process Design.**

Provides the student with in-depth knowledge of inferential statistics as applied to design of robust processes and products. Topics covered include probability distributions, ANOVA, fractional factorial design, response surface method, orthogonal arrays, and Taguchi method. Prior experience with introductory-level statistics is assumed. Prerequisite: TECH 5394 with a grade "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5365. Industrial Project Management and Scheduling.**

This course introduces students to industrial management system concepts and applications relating to management operations, system design, implementation and management, case studies of practices, and application of theory to practical problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5380. Principles of Information and Communication Technology Management.**

This course, in a case-based learning environment, integrates concepts and principles of information and communication technology (ICT) including mobile communication and Internet of Things (IoT). Analysis and evaluation of advanced ICT management examples demonstrate issues and strategies of modern ICT management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5382. Industrial Ecology and Sustainability Engineering.**

This course covers the principles of life cycle analysis (LCA) of engineered products and processes. Topics include industrial ecology, resource depletion, product design, process design, material selection, energy efficiency, product delivery, use, and end-of-life considerations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5384. Problems in Technology.**

In this course graduate students investigate a particular topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. It may be repeated for credit with the permission of the department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TECH 5385. Readings in Technology.**

A study of the ethical and moral viewpoints typically associated with American society as related to the development and introduction of new technology and engineering. Past, present, and future issues will be studied with selected readings focusing on industrial related problems and issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5387. Advanced Facilities Planning.**

This course is an in-depth study of technical problems encountered in designing, equipping, arranging, and specifying facility requirements for industrial and technical training facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5390. Research in Technology.**

This course examines the scientific method, including theory formulation, deductive reasoning, hypothesis generation, observation, inductive reasoning, and theory revision. Categories of research are compared and contrasted as regards methodology. Experimental research relating to significant industrial problems, including design considerations, internal and external validity, and appropriate analytical techniques, is studied in-depth. The course includes an introduction to data analysis and its proper interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TECH 5391. Advanced Manufacturing Systems.**

This course introduces various advanced tools, technologies, and strategies in modern manufacturing. Topic coverage emphasizes state-of-the-art in factory automation, as well as global and smart manufacturing enterprises. Specific topics include process automation and control, advanced manufacturing processes, intelligent manufacturing control, and information and communication technology (ICT) in manufacturing.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5392. Fundamentals of Microelectronics Manufacturing.**

This course is an introduction to integrated circuit fabrication. Topics include crystal growth, wafer preparation, epitaxial growth, oxidation, diffusion, ion implantation, thin film deposition, lithography, etching, device and circuit formation, packaging, and testing. A significant part of the course is a project focusing on circuit design and simulation or on process design. Laboratory component involves the actual production and testing of a functional semiconductor device.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5394. Design of Experiments.**

This course covers fundamentals of designing industrial experiments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5395A. Structure and Properties of Alloys.**

This course is an advanced exploration of the structure and properties of engineering alloys. Strengthening mechanisms of alloys are explored with specific applications to the alloys studied. The processing, properties, and structure of ferrous and nonferrous alloys are explored including new and emerging alloys. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TECH 5398. Directed Project.**

This course is a formal investigation into a business or industry problem. The directed project is an applied research project that is more extensive than an independent study and less extensive than a thesis. The course culminates in a detailed project report and oral presentation. Prerequisite: TECH 5394 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**TECH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Technology 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

The graduate minor in Industrial Technology requires 15 semester credit hours of advisor-approved Industrial Technology courses.

Math/Computer Science Building Room 470

T: 512.245.2551 F: 512.245.3425

[www.math.txstate.edu \(http://www.math.txstate.edu/\)](http://www.math.txstate.edu/)

The Department of Mathematics provides an environment at the forefront of research that produces highly qualified mathematics and mathematics education graduates who further Texas's status as a mathematics, science, and technology leader. We offer a rich mathematical experience students develop critical thinking skills, communicate mathematical concepts effectively, and grow as lifelong learners. We maintain a nationally recognized community of faculty and students in mathematics, mathematics education, and related disciplines.



## Goals

The Department of Mathematics offers an MS in Mathematics with optional concentrations in Applied Mathematics and Statistics, an M.Ed. in Mathematics, and a Ph.D. in Mathematics Education. The programs are designed to prepare students to apply mathematics or statistics to solve real-world problems, teach mathematics at the K–12, community college, or college level, enter doctoral programs, or conduct research in mathematics, statistics, and mathematics education.

## Faculty

The faculty has specialists in algebra, analysis, applied mathematics, bifurcation theory, bioinformatics, combinatorics, differential equations, differential geometry, graph theory, logic, mathematics education, non-linear functional analysis, model theory, number theory, operator theory, quadratic forms, statistics, and algebraic and geometric topology. The faculty oversees an extensive library collection of journals and reference works, with current journals accessible online and in the library.

## Financial Assistance

Mathematics graduate students are encouraged to work as assistant instructors. The stipends for these assistantships are comparable to national norms and generally require teaching two courses per term. Write to the Graduate Program Coordinator at [mathgrad@txstate.edu](mailto:mathgrad@txstate.edu) to obtain more information. The Graduate College can provide information on the availability of graduate scholarships. There are also stipends available for Research Assistantships through faculty research grants. Additional summer support is available as Instructional Assistants or Research Assistants. Contact the department for more information.

## Doctor of Philosophy (Ph.D.)

- Major in Mathematics (Applied Mathematics Concentration) (p. 3167)
- Major in Mathematics (General Mathematics Concentration) (p. 3196)
- Major in Mathematics (Statistics Concentration) (p. 3226)
- Major in Mathematics Education (p. 3256)

## Master of Education (M.Ed.)

- Major in Mathematics (p. 3272)

## Master of Science (M.S.)

- Major in Mathematics (Applied Mathematics Concentration Non-thesis Option) (p. 3278)
- Major in Mathematics (Applied Mathematics Concentration Thesis Option) (p. 3284)
- Major in Mathematics (Non-thesis Option) (p. 3291)
- Major in Mathematics (Non-thesis Minor Option) (p. 3298)
- Major in Mathematics (Statistics Concentration Non-thesis Option) (p. 3304)
- Major in Mathematics (Statistics Concentration Thesis Option) (p. 3310)
- Major in Mathematics (Thesis Option) (p. 3317)
- Major in Mathematics (Thesis Minor Option) (p. 3324)

## Minor

- Mathematics (p. 3332)

## Program Overview

Offered through the Department of Mathematics at Texas State, this Mathematics Ph.D. program provides student the flexibility to select a concentration in general mathematics, applied mathematics or statistics. The program includes elements designed to prepare students for both research careers in industry and the more traditional Ph.D. careers in academia. Studies will study in an environment where academia and industry interact. Students will gain a breadth of mathematical and statistical knowledge, the ability to produce new innovative research, the ability to write and communicate technical knowledge and disseminate that knowledge to a broad audience, acquire and develop grant writing skills, and practical experience aligned with their chosen long-term professional and career goals.

### Educational Goal

The main goal of the doctoral program in mathematics is prepare students for success in our rapidly changing technological society. Graduates of the program will

- have demonstrated skill in conducting original research in mathematics, applied mathematics, or statistics.
- be introduced to the joy of problem solving in mathematics and exposed to open problems in the field.
- have a well-balanced foundation in a breadth of mathematical and/or statistical areas relevant to their desired concentration.
- have an in-depth understanding of their chosen field of concentration.
- be able to clearly communicate mathematical ideas and concepts both to specialists in their chosen field and to a broader audience.

In addition,

- Doctoral graduates who desire careers in academia will be familiar with basic principles of mathematics education. Graduates will be able to apply those principles in the classroom.
- Doctoral graduates who desire careers outside of academia will have practical experience applying doctoral level mathematics and/or statistics to solve real world problems.
- Doctoral graduates with a concentration in Applied Mathematics or Statistics will have demonstrated proficiency in at least one of R, Python, or Matlab.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 non-refundable application fee

or

- \$90 non-refundable application fee for applicants with international credentials
- completed bachelor's degree in mathematics, statistics, or a closely related discipline, from an accredited college or university. Applicants

- who have completed a master’s degree in mathematics, statistics, or a closely related discipline, from an accredited college or university, with a competitive GPA can, upon approval of the program advisor, have up to 30 hours of coursework waived based on courses taken during the master’s degree that closely align with courses in the program.
- official transcripts from **each institution** where course credit was granted
  - competitive GPA
  - GRE not required. Applicants whose GPA is not deemed competitive by the program may be offered the opportunity to submit GRE scores for review.
  - resume/CV outlining education, work experience, scholarships/ grants, publications/presentations, other accomplishments
  - statement of purpose outlining the applicant’s background and professional goals, including their rationale for pursuing a doctoral degree in mathematics at Texas State
  - three letters of recommendation evaluating the applicant’s professional and academic background as well as research potential. Letters should address teaching potential for applicants interested in applying for funding as an instructional assistant.
  - interviews may be conducted with semifinalists

TOEFL, PTE, IELTS or Duolingo Scores

- Non-native English speakers who do not qualify for an English proficiency waiver:
- official TOEFL iBT scores required with a 78 overall.
  - official PTE scores required with a 52 overall.
  - official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
  - official Duolingo Scores required with a 110 overall.
  - official TOEFL Essentials scores required with an 8.5 overall.

This program does not offer admission if these scores are not met.

Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Mathematics concentration in Applied Mathematics with a requires 72 semester credit hours.

Course Requirements

Code	Title	Hours
Required Courses		
MATH 7303	Analysis I	3
MATH 7313	Analysis II	3
Applied Mathematics Concentration		
MATH 5301	Partial Differential Equations	3
MATH 7373C	Partial Differential Equations II	3
MATH 7363B	NUMERICAL ANALYSIS	3
MATH 7363E	Numerical Analysis II	3
MATH 7363C	FUNCTNL ANALYSIS	3
MATH 7363F	Functional Analysis II	3
Practicum		
Choose 9 hours from the following:		9
MATH 7306	Current Research in Math Education	

MATH 7328	Instructional Techniques & Assessments
MATH 7366F	Research in Undergraduate Mathematics Education I
MATH 7387	Consulting
MATH 7389	Internship
Prescribed Electives	
Choose 21 hours from the following:	
MATH 5315	Mathematical Statistics
MATH 5335	Survival Analysis
MATH 5340	Scientific Computation
MATH 5360	Mathematical Modeling
MATH 5376A	Design and Analysis of Experiments
MATH 5376B	Analysis of Variance
MATH 5376D	Statistical Applications in Genetics and Bioinformatics
MATH 5376E	Introduction to Data Science
MATH 5376F	Introduction to Probability Theory and Models
MATH 5393	Numerical Optimization
MATH 7303	Analysis I
MATH 7306	Current Research in Math Education
MATH 7307	Algebra I
MATH 7309	Topology I
MATH 7313	Analysis II
MATH 7315	Calculus of Variations
MATH 7317	Algebra II
MATH 7319	Topology II: Algebraic Topology
MATH 7321	Graph Theory
MATH 7324	Curriculum Design & Analysis
MATH 7325	Statistics 1
MATH 7328	Instructional Techniques & Assessments
MATH 7331	Combinatorics
MATH 7335	Statistics II: Linear Modeling
MATH 7337	Mathematical Statistics II
MATH 7361	Seminar in Advanced Mathematics
MATH 7363B	NUMERICAL ANALYSIS
MATH 7363A	COMPLEX ANALYSIS
MATH 7363C	FUNCTNL ANALYSIS
MATH 7363E	Numerical Analysis II
MATH 7363F	Functional Analysis II
MATH 7366A	Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors)
MATH 7366C	Teaching Teachers (In-Service; Pre-Service)
MATH 7366E	Developmental Mathematics Curriculum
MATH 7366F	Research in Undergraduate Mathematics Education I
MATH 7367B	ADV GROUP THEORY
MATH 7369C	Low-dimensional topology
MATH 7369D	Characteristic Classes
MATH 7369E	Differential Geometry
MATH 7371A	Advanced Graph Theory
MATH 7371B	Advanced Combinatorics
MATH 7371C	Combinatorial Number Theory

MATH 7371D	Discrete Optimization
MATH 7371F	Probabilistic Methods in Discrete Mathematics
MATH 7371G	Applied Discrete Mathematics
MATH 7373B	Partial Differential Equations I
MATH 7373C	Partial Differential Equations II
MATH 7373G	Spectral Methods
MATH 7375C	Time Series Analysis
MATH 7375D	Advanced linear Modeling
MATH 7375E	Computational Statistics
MATH 7375F	Multivariate Data Analysis
MATH 7375G	Bayesian Methods
MATH 7375I	Advanced Statistical Learning
MATH 7385	Independent Study in Mathematics
MATH 7387	Consulting
MATH 7389	Internship
CS 7312	Advanced Data Mining
CS 7314	Bioinformatics
CS 7341	Cyberspace Security
CS 7389E	
CS 7389G	Human-Centered Data Science
MSEC 7355	Fluid Flow in Porous Media
BIO 7360I	Bayesian Statistics for Biology
BIO 7360Y	Applied Bioinformatics
BIO 7361C	Advanced Genomics and Bioinformatics
CJ 7350E	Discrete Multivariate Models
CJ 7350I	Introduction to Structural Equation Modeling
<b>Dissertation</b>	
Choose a minimum of 18 hours from the following:	
MATH 7199A	Dissertation in Mathematics Education
MATH 7299A	Dissertation in Mathematics Education
MATH 7399A	Dissertation
MATH 7599A	Dissertation in Mathematics Education
MATH 7699A	Dissertation in Mathematics Education
MATH 7999A	Dissertation in Mathematics Education
<b>Total Hours</b>	

18

72

## Application for Advancement to Candidacy

The Dean of The Graduate College approves advancement to candidacy once all requirements are met. Doctoral students must be advanced to candidacy within five years of initiating Ph.D. course work applied toward the degree. Students need to indicate their intent to advance to candidacy during the term they complete the required course work and other departmental requirements. The doctoral candidacy requirements include:

- Completion of all required course work with the exception of dissertation credit hours.
- Successful passage of all three qualifying exams.
- Successful passage of the comprehensive exam.
- Approval of the dissertation proposal.
- At least a 3.5 GPA on all doctoral required courses.

## Advancement to Candidacy Time Limit

No credit will be applied toward the doctoral degree for course work completed more than five years before the date on which the student is advanced to candidacy. This time limit applies toward credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions. Requests for a time extension must be submitted to the doctoral program director, who in turn submits a recommendation to the dean of The Graduate College.

## Grade-Point Requirements for Advancement to Candidacy

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.5. No grade earned below a "B" on any graduate course may apply toward a Ph.D. at Texas State. Incomplete grades must be cleared through the office of The Graduate College before a student can be approved for advancement to candidacy.

## Qualifying Examination

Typically, after completion of the core course work or by the end of the second year in residence, each student will be required to take written examinations. To be eligible to take the examinations, the student normally will have a minimum grade point average of 3.5 on all the core courses including the transferred equivalent courses that the student has completed. Students are expected to complete the exams by the end of their second year in the program and must have attempted the exams by the end of their third year in the program. These times will be adjusted for part-time students. Any student who does not pass the qualifying exam by the time they have accrued 70 credit hours will be dismissed from the program. If the qualifying exam is not passed, the student will have the option of taking a second exam. Students will be encouraged to make full use of study aids provided by the department prior to retesting. Students who fail the exam, or a portion of the exam, a second time, will be required to retake the relevant course sequence(s) prior to a third attempt. Students will be dismissed from the program if they do not pass the qualifying exam the third time.

The qualifying exams will consist of a series of three topic examinations based on core components of the program. The three topics will be administered and scored separately so that a student can receive a partial pass. A student who fails to pass one or more of the three portions of the exam need only retest on the failed portion. The exams will be administered at least twice per academic year. Students may take their topic exams during one administration or may separate the topic to take during multiple administrations. Each topic exam will be administered as a written, proctored exam. Students will typically be prepared for the exams through their core course work. Students can strengthen their preparation through additional study and through working with faculty to take practice oral exams and discuss the topics in depth. Exam topics include: algebra, analysis, discrete mathematics, numerical analysis, partial differential equations, statistics, and topology. Students in the general mathematics program will take two of: algebra, analysis, and topology, and a third topic of their choice. Students in the statistics concentration will take statistics, analysis, and a topic of their choice. Students in the applied mathematics concentration will take analysis, numerical analysis, and a topic of their choice.

## Comprehensive Oral Exam

A comprehensive oral examination will be administered by the candidate's dissertation committee as part of the student's proposal

defense. The exam will be approximately 30 minutes long and will involve a discussion of content closely related to the student's proposed dissertation topic. Committee members will work together to provide the candidate with a list of suitable readings designed to prepare the student in the selected area. The focus should be on topics necessary for the student to begin to approach the selected dissertation question, with an understanding that the student will continue to study related topics during the course of their research. The dissertation advisor and committee members are expected to work with the student prior to the exam to ensure the student has the information necessary to prepare for this exam. Any student who does not pass the comprehensive exam by the end of the fourth year in the program may be dismissed from the program. If the comprehensive exam is not passed on the first try, the student will have the option of taking a second comprehensive exam. The dissertation chair should meet with the student after a failed attempt and create a plan for that, if followed, will aid the student in being successful in the second attempt. Normally, the second exam will be taken in the following long semester and will be the final attempt with failure resulting in dismissal from the program. Exceptions must be approved by the Graduate Program Committee. Students who do not pass the exam on the first attempt are expected to work closely with their committee members to ensure they are well-prepared for the second exam.

## Dissertation Proposal

To be advanced to candidacy, a student must select a doctoral dissertation advisor and committee, submit a dissertation proposal, and successfully defend the proposal in an oral examination with the dissertation committee. Information about the formation of the dissertation committee can be found in the "Dissertation Research and Writing" section of this catalog. The proposal should identify the intended mathematical question to be addressed by the dissertation and include a brief survey of relevant literature. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research. The proposal defense entails a public presentation. The student should give a 50-minute presentation on a specialized topic closely related to their dissertation question. The public presentation will be followed immediately by a closed defense of the proposal attended only by the student and his/her dissertation committee. The dissertation proposal must be approved by the student's dissertation advisor and a majority of the remaining members on the dissertation committee.

## Recommendation for Advancement to Candidacy

The doctoral program committee recommends the applicant for advancement to candidacy to the doctoral program director, the department chair, and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been met. To be eligible for admission to candidacy, the student must have successfully completed the qualifying and/or comprehensive exam(s), completed all course work, and successfully defended the dissertation proposal.

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. All students in the program will take a minimum of 18 semester credit hours of dissertation coursework. Students may take dissertation coursework prior to completing elective and practicum credit hour requirements if approved by their dissertation advisor. Students should work with their dissertation advisor to

determine the correct number of dissertation hours to take in a semester. All candidates for graduation must be enrolled in dissertation hours (e.g., MATH 7199A) during the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours. Note that the second digit in the course numbers below refers to the number of dissertation credit hours.

## Dissertation Committee

The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the doctoral program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

The Dissertation Committee will be responsible for administering the Comprehensive Exam and the Dissertation Proposal Defense and will oversee the research and writing of the student's dissertation. The committee will consist of 4 members, including the student's dissertation committee chair who must be a regular graduate faculty member in the program, two other graduate faculty members from the mathematics department, and one doctoral graduate faculty from another department at Texas State University or from another university. The student's dissertation committee chair will chair the committee. The student, the dissertation committee chair, and the Dean of The Graduate College will approve the composition of the dissertation committee.

As per The Graduate College policy, the Dissertation Committee Chair Assignment form and the Dissertation Committee Request form must be completed and approved by the Dean of The Graduate College to form the dissertation committee. Any changes to the dissertation committee must be submitted using the Dissertation Committee Chair/Committee Member Change Request form for approval of the dissertation committee chair, the doctoral program director, and the Dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense.

## Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least one month before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the dissertation is defensible, and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of their dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.



If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense in the following long semester. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's website. The student must submit his/her dissertation to The Graduate College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Doctoral level courses in Mathematics: MATH (p. 3171), CS (p. 3178), MSEC (p. 3182), BIO (p. 3186), CJ (p. 3193)

## Mathematics (MATH)

### MATH 7111. Seminar in Teaching.

Seminar on individual study projects concerned with selected problems in the teaching of mathematics. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### MATH 7188. Seminar in Mathematics Education.

Students are required to attend weekly research seminars in Mathematics Education and to give at least one research presentation in the seminar during the semester. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MATH 7199A. Dissertation.

Original research and writing in Mathematics Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### MATH 7299A. Dissertation.

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### MATH 7301. Studies in Mathematics.

This course provides basic foundations in Mathematics for students entering the doctoral program in Mathematics or Mathematics Education. This course may be repeated. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

### MATH 7302. History of Mathematics.

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MATH 7303. Analysis I.

This course covers foundations of modern analysis. Topics include: sequences,  $\text{LimSup}$ ,  $\text{LimInf}$ , Sigma Algebras of sets that include open and closed sets, sequences of functions, pointwise and uniform convergence, lower and upper semi-continuity, Borel sets, outer measure, and Lebesgue measure. Prerequisite: MATH 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MATH 7306. Current Research in Math Education.

This course surveys the various current social, political, and economic trends in local, state, national, and international settings that are related to research in Mathematics Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MATH 7307. Algebra I.

Applications of Algebra and topics in modern algebra, including permutation groups, symmetry groups, Sylow theorems, and select topics from Ring Theory. Prerequisite: MATH 4307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MATH 7309. Topology I.

A course in point-set topology emphasizing topological spaces, continuous functions, connectedness, compactness, countability, separability, metrizability, CW-complexes, simplicial complexes, nerves, and dimension theory. Prerequisite: MATH 4330.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MATH 7313. Analysis II.**

This course covers the theory of integration with special emphasis on Lebesgue integrals. Topics include: Lebesgue integral, Bounded Convergence theorem, differentiation and integration, absolute continuity, and  $L_p$  spaces. Prerequisite: Math 7303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7317. Algebra II.**

A study of the important algebraic structures of rings and fields. Topics covered include rings, ideals, modules, polynomial rings, Euclidean algorithm, finite fields, and field extensions. Topics also include an introduction to Galois Theory with an emphasis on the geometric applications. Prerequisite: MATH 7307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7319. Topology II: Algebraic Topology.**

This course covers the fundamental concepts and tools of algebraic topology. Topics include the fundamental group, covering spaces, homotopy type, the higher homotopy groups, singular homology theory, and the computation of homology groups via exact sequences and applications. Prerequisite: MATH 7307 and MATH 7309.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7321. Graph Theory.**

Topics in this course include trees, connectivity of graphs, Eulerian graphs, Hamiltonian graphs, planar graphs, graph coloring, matchings, factorizations, digraphs, networks, and network flow problems. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7323. Theories of Knowing and Learning in Mathematics Education.**

This course surveys the major theories of knowing and learning that have influenced mathematics education. These theories include behaviorism, constructivism, sociocultural theories, situated cognition, and others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7324. Curriculum Design & Analysis.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques that are related to curriculum design in Mathematics Education for grade levels P-16.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7325. Statistics 1.**

A study of the mathematical and probabilistic underpinnings of the techniques used in statistical inference. Topics covered include sampling, sampling distributions, confidence intervals, and hypothesis testing with an emphasis on both simulations and derivations. Prerequisite: Math 2321 and Math 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7328. Instructional Techniques & Assessments.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques of instruction in Mathematics Education and the related assessment procedures for each for grade levels P-20.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7331. Combinatorics.**

This course is a study of fundamental principles of combinatorics. Topics include: permutations and combinations, the Pigeonhole principle, the principle of inclusion-exclusion, binomial and multinomial theorems, special counting sequences, partitions, posets, extremal set theory, generating functions, recurrence relations, and the Polya theory of counting. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7335. Statistics II: Linear Modeling.**

A study of the formulation and statistical methodologies for fitting linear models. Topics include the general linear hypothesis, least-squares estimation, Gauss-Markov theorem, assessment of model fit, effects of departures from assumptions, model design, and criteria for selection of optimal regression models. Prerequisite: MATH 3377 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7346. Quantitative Research Analysis in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and use of appropriate design methodologies to achieve the strongest possible evidence to support or refute a knowledge claim. Prerequisite: MATH 7306 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7354. Advanced Qualitative Research.**

This course encompasses the techniques and tools needed for the development, investigation, and demonstration of competence in conducting qualitative research in mathematics education. Principles of qualitative data analysis are a significant focus of the course, with particular attention given to specific methods used to code and analyze data. Prerequisite: ED 7352 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 7356B. Advanced Qualitative Research.**

This course encompasses investigation, development, and demonstration of competence, design, and execution for mathematics education problems in qualitative research. Prerequisite: ED 7352 or CI 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356C. Action Research in Mathematics Education.**

This course examines underlying theory and issues in action research model and the development of action research projects. Prerequisites: MATH 7346 or ED 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7358. Advanced Quantitative Research in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and the use of appropriate design methodologies to achieve the most substantial evidence to support or refute a knowledge claim. Prerequisite: MATH 7346 with a grade of "B" or better or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7361. Seminar in Advanced Mathematics.**

Material in course will vary with the interest of students and faculty. A detailed study of subject matter may be chosen from advanced areas of analysis; algebra; topology and geometry; applied mathematics; and probability and statistics. This course is repeatable for credit when subject matter varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7363A. COMPLEX ANALYSIS.**

This course is a brief introduction to the complex number system and basic point-set topology of the complex plane, followed by a proof-based and rigorous study of the principal results of the analysis of functions of a single complex variable. Prerequisite: MATH 4315 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363B. NUMERICAL ANALYSIS.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using computer algebra systems. Symbolic, numerical, and graphical techniques will be studied. Applications will be drawn from the sciences, engineering, and mathematics. Prerequisite: MATH 3323 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363C. FUNCTIONAL ANALYSIS.**

This course presents the three basic fundamental theorems of functional analysis: the Hahn-Banach theorem, the uniform boundedness theorem, and the open mapping theorem. Prerequisite: MATH 7303 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363E. Numerical Analysis II.**

This course will involve the analysis and numerical implementation of algorithms to solve partial differential equations. Applications will be drawn from science, engineering, and mathematics. Topics include the numerical solution of linear partial differential equations and the related linear systems of equations. Prerequisite: MATH 7363B with a letter grade of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363F. Functional Analysis II.**

This course will involve the analysis of infinite dimensional vector spaces including spaces of functions, measures, and distributions. Topics include Fourier transforms, theory of Banach spaces, and operator theory. Prerequisite: MATH 7363C with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366A. Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors).**

This course examines how to develop and teach post-secondary students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisites: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366B. Teaching K-12 Students (Elementary, Middle School, and High School).**

This course examines how to develop and teach K-12 students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366C. Teaching Teachers (In-Service; Pre-Service).**

This course examines how to prepare teachers of mathematics. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366D. Teaching Specialized Content.**

This course will be an in-depth study of a specialized content area in mathematics with an emphasis on teaching. The specific content area will vary by instructor. Examples include Euclidean Simplex Geometry and Discrete Probability Spaces with Implications for Public School Curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366E. Developmental Mathematics Curriculum.**

This course surveys the research, development, and evaluation of the scope and sequence of developmental mathematics curriculum. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366F. Research in Undergraduate Mathematics Education I.**

Students will develop the requisite knowledge to become a good consumer of Research in Undergraduate Mathematics Education (RUME) research. The course will cover the theoretical underpinnings of current and historic RUME research. Students will develop the knowledge to understand relevant theoretical stances and the role they play in research. Prerequisite: Math 7306 or permission from the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366G. Research in Undergraduate Mathematics Education II.**

In this course, students will develop necessary knowledge to design/conduct RUME research via a topic-driven look at current RUME research. Core topics include proof, analysis/calculus, abstract algebra, linear algebra, and differential equations. Students will develop a depth of knowledge related to these topics and engage in research design and development. Prerequisite: MATH7306 and MATH7366F.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7367B. ADV GROUP THEORY.**

This course covers topics including properties of solvable, p-solvable and nilpotent groups, group actions, transfer theorems, simple groups and composition series, the generalized Fitting subgroup, automorphism groups, classical groups and linear representations of groups. Prerequisite: MATH 7307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369C. Low-dimensional topology.**

This course is an introduction to low-dimensional topology. Topics include surfaces, 3-manifolds, knots, and 4-manifolds. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369D. Characteristic Classes.**

This course is an introduction to vector bundles and characteristic classes. Topics covered include Stiefel-Whitney classes, Chern classes, Euler class, Pontrjagin classes, and their computation. Additional topics may include manifold immersion problems. Prerequisite: MATH 7317 and MATH 7319 both with grades of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369E. Differential Geometry.**

This course is an introduction to modern tools of differential geometry. Topics covered include manifolds, Riemannian metrics, connections, covariant derivatives, geodesics, curvatures, extrinsic and intrinsic computations. Other possible topics include hyperbolic geometry, Lie groups, Chern-Weil theory, surfaces of prescribed mean curvature, the Gauss-Bonnet theorem, and the Cartan-Hadamard theorem. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7371A. Advanced Graph Theory.**

Topics in this course include Turan's problems, Ramsey theory, random graph theory, extremal graph theory, algebraic graph theory, domination of graphs, distance problems, and applications. Prerequisite: MATH 7321.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371B. Advanced Combinatorics.**

Topics in this course include Block designs, Latin squares, combinatorial optimization problems, coding theory, matroids, difference sets, and finite geometry. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371C. Combinatorial Number Theory.**

A study of fundamental techniques in combinatorial number theory. Topics will include Waring's problem, additive number theory, and probabilistic methods in number theory. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371D. Discrete Optimization.**

A study of some fundamental techniques in discrete optimization. Topics include discrete optimization, linear programming, integer programming, integer nonlinear programming, dynamic programming, location problem, scheduling problem, transportation problem, postman problem, traveling salesman problem, matroids, and NP-completeness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371E. Algorithms and Complexity.**

A study of some fundamental concepts of computability and complexity. Topics include polynomially bounded problems, NP-complete problems, exponentially hard problems, undecidable problems, and reducibility. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371F. Probabilistic Methods in Discrete Mathematics.**

A study of some fundamental probabilistic techniques used to solve problems in graph theory, combinatorics, combinatorial number theory, combinatorial geometry, and algorithm. Topics include linearity of expectation, alterations, second moment, local lemma, correlation inequalities, martingales, Poisson paradigm, and pseudo-randomness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371G. Applied Discrete Mathematics.**

This course introduces fundamental concepts in logic, Boolean algebra, and binomial coefficients; and applications in different fields such as complexity of algorithms and network theory. Prerequisites: MATH 2472 and MATH 4307, all with a grade of "C" or better, or with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371H. Combinatorial Networks.**

Combinatorial Networks is an area of study of certain types of networks using combinatorial methods extensively. This course introduces fundamental basics as well as the latest development in this area of research. Prerequisite: MATH 5307/7307 with a grade of "C" or higher.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7373B. Partial Differential Equations I.**

This course covers the theory and application of partial differential equations, typical equations of mathematical physics, Cauchy problem for equations of the first order, classification of second-order equations, Cauchy problem for second-order hyperbolic equations, Duhamel's principle, potential theory and elliptic equations, maximum principle, and parabolic equations. Prerequisite: MATH 3323, 3373 and 3380 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373C. Partial Differential Equations II.**

This course covers the existence and uniqueness theory for boundary value problems of partial differential equations (PDE) including the topics linear evolution equations, variational techniques, non-variational techniques, Hamilton-Jacobi equations, conservation laws. Prerequisite: MATH 7373B with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373G. Spectral Methods.**

This course covers the essentials of spectral collocation methods with an emphasis on numerically implementing algorithms. The problems studied will include ordinary and partial differential equations connected with fluid mechanics, quantum mechanics, waves, and other fields. The techniques used will include both Fourier and Chebyshev methods. Prerequisite: MATH 7363E with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375C. Time Series Analysis.**

A study of the theory of time-dependent data. The analysis includes modeling, estimation, and testing; alternating between the time domain; using autoregressive and moving average models and the frequency domain; and using spectral analysis. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375D. Advanced linear Modeling.**

The course provides an extension of regression methodology to more general settings where standard assumptions for ordinary least squares are violated. Topics include generalized least squares, robust regression, bootstrap, regression in the presence of autocorrelated errors, generalized linear models, and logistic and Poisson regression. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375E. Computational Statistics.**

This course focuses on commonly used sampling and optimization algorithms in statistics. Topics include accept-reject method, importance sampling, Markov Chain Monte Carlo algorithms, Fisher scoring algorithm, expectation-maximization algorithm, and minorization-maximization algorithm. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375F. Multivariate Data Analysis.**

This course focuses on statistical methodologies based on multivariate analysis. Topics include multivariate normal distribution, tests of hypothesis on means, multivariate analysis of variance, discriminant analysis, principal component analysis, factor analysis and canonical correlation analysis. Prerequisite: MATH 5305 and (MATH 3376 or MATH 3377) with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375G. Bayesian Methods.**

This course focuses on Bayesian statistical analysis and associated theories. Topics include one-parameter and multi-parameter Bayesian models, choices of priors, formulation of regression models in the Bayesian framework, and related data analysis. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375I. Advanced Statistical Learning.**

This course covers the theoretical foundations in statistical learning and deep learning. Topics include the framework of empirical risk minimization, metric entropy, Vapnik-Chervonenkis dimension, Rademacher and Gaussian complexity, symmetrization and chaining techniques, contraction principle, uniform law of large numbers, sample complexity, and neural networks. Prerequisite: MATH 7337 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378A. Problem Solving, Reasoning, and Proof.**

A study of the fundamental concepts of problem solving, logic, set theory, and mathematical proof and applications of these concepts in mathematics curriculum for grades P-20. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378B. Connecting and Communicating Math.**

This course examines one of the basic principles involved in mathematics education: Connecting and Communicating Mathematics. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378C. Representing Fundamental Math Ideas (Function, Data Analysis, and Enumeration).**

This course examines the basic principles involved in mathematics education. The process of representing fundamental mathematical ideas will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378D. Math Technologies.**

This course examines the basic principles involved in mathematics education: Technology. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378E. Developmental Mathematics Perspectives.**

This course examines developmental mathematics-specific strands including technological course support and placement tools/decisions. Issues related to the first mathematics core course required of undergraduates will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter



**MATH 7378F. Research on Mathematical Problem Solving in Secondary Schools.**

In this course a careful study is made of elementary techniques for problem solving in a variety of domains, including algebra, number theory, combinatorics, geometry, and logic puzzles. Students will learn these techniques by actually working on a collection of problems in each of these areas. Students will read and examine research about various aspects of problem solving and research in math education that includes both teacher training and student learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378G. Discourse Processes, Traditions, and Analysis in Mathematics Education.**

Discourse and discourse analysis have been used to answer research questions across disciplines throughout the humanities and social sciences. This course will focus on theory and methods for the analysis of discourse in mathematical settings. We will learn how different approaches to discourse are used to understand mathematics learning. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378H. Equity in Mathematics Education.**

Equity in Mathematics Education is a course examining research on equity issues in mathematics education. These equity issues will range from race, culture, class, and gender as they relate to the teaching, learning, and schooling of mathematics education. We will look at how equity is framed within the field of mathematics education, what has been addressed, and what has not been conceptualized. The course will help students understand the literature in the field, critique the extant research literature, design research, and consider important facets of teaching for various student groups. Prerequisite: MATH 7306 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7385. Independent Study in Mathematics.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of mathematics. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7386. Independent Study in Mathematics Education.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of Mathematics Education. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7389. Internship.**

In this course, students will work under the supervision of a faculty member to gain practical knowledge in their field. Student experience can come from industry, government agencies, or other sources but must directly apply to furthering knowledge of applications of mathematics or mathematics education.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7396. Mathematics Education Research Seminar.**

Collaborative research projects with faculty through identifying an educational issue, reviewing literature, creating a research question, designing a methodology, analyzing data, drawing conclusions, implications, and creating a draft of a publishable paper. Prerequisite: MATH 7356, and ED 7352 or MATH 7346, all with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7399A. Dissertation.**

This course represents a Mathematics or Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MATH 7599A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7699A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7999A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Computer Science (CS)

**CS 7100. Graduate Computer Science Internship.**

This course provides advanced training supervised by computer scientists in internship programs approved by the department.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7199. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7299. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7300. Introduction to Research in Computer Science.**

This credit/no credit course is designed to develop research and communication skills for Ph.D. students. Topics covered include research processes, research methods, ethics, conducting literature review, critiquing papers, preparing research proposals, faculty research presentations, and the software tools and platforms available for conducting applied computing research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 7308. Computer Science Studies.**

This course provides foundations in computer science for students entering the doctoral program who may need certain background or leveling coursework. The course does not earn graduate degree credit. It is repeatable with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CS 7309. Professional Development of Doctoral Assistants.**

This course is designed to equip the doctoral students with skills and an understanding of the proper procedures to be effective doctoral instructional and teaching assistants. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 7311. Data-Driven Computational Methods and Infrastructure.**

This course covers computational and statistical methods for using large-scale data sets ('big data') to answer scientific and business questions. It focuses on framing research questions, understanding how data can answer them, and using modern software tools for scalable data storage, processing, and analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7312. Advanced Data Mining.**

This course provides in-depth coverage of advanced data mining and information retrieval principles and techniques. It also offers extensive training and practice opportunities in frontier research directions. Prerequisite: CS 5316 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7313. Advanced Machine Learning and Pattern Recognition.**

This course provides students advanced theoretical and practical skills to learn, design, implement, and apply machine learning and pattern recognition approaches. The students will gain analytical and problem-solving skills by studying machine learning and pattern recognition techniques and applying them to solve real problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7314. Bioinformatics.**

This course introduces advanced algorithms for data-intensive computational analysis targeting biological applications such as drug response prediction, gene network analysis, and protein/RNA structure prediction. Main techniques include greedy search, linear regression, clustering, network analysis, expectation maximization, and Hidden Markov models, which are widely applicable beyond biological data. Prerequisite: CS 5329 or CS 5369L either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7315. Network Science.**

This course provides in-depth coverage of the fundamentals and research frontiers of network science. The main topics include mathematical models and computational algorithms for analyzing the structure of complex networks and predicting dynamic processes on networks. Other topics include machine learning and data mining on graphs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7321. Human Computer Interaction: Concepts, Models, and Methodologies.**

This course provides an introduction to Human Computer Interaction (HCI) research, methods, and topics, including fundamentals of user interface and experimental design, usability, evaluation methods, software toolkits for interactive applications, graphics, visualization, mobile design, collaborative and social computing, biological factors, and human computation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7322. Human Factors and Ergonomics.**

This course combines knowledge in the fields of intelligent user interfaces, human factors, ergonomics, and environmental psychology. Topics include HCI principles, human information processing, anthropometry, principles of eye tracking and their effects on human factors research, as well as operations of biometrics systems and human factors influencing those systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7323. Image Processing and Computer Vision.**

Image Processing and Computer Vision are research areas with a variety of modern applications ranging from the analysis of images and videos to real-time processing of image streams coming from self-driving vehicles and robotic agents. This course will prepare students with advanced state of the art knowledge in those fields. Prerequisite: CS 5329 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7324. HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality.**

This course introduces advanced methods for enhancing user experience and presents effective HCI models via computer graphics, imaging, animation, simulation, visualization, augmented reality, and immersive virtual reality. Additionally, the course presents related science and engineering foundations as well as graphic design, cognitive science, and perceptual psychology theories and models. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7331. High-Performance Computing.**

This course covers the advanced design, analysis, and optimization of high-performance applications. Topics include high-performance computer architectures, including accelerators and systems-on-chip, performance modeling and benchmarking, data and control dependence analysis, data locality estimation, memory hierarchy management, techniques for exposing parallelism, and code transformations. Different workloads are studied. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7332. Advanced Parallel Computing.**

This course covers advanced design of parallel algorithms, performance modeling, parallel hardware, language support for parallel programming, and programming models for shared- and distributed-memory systems ranging from handheld multicore devices to large-scale clusters and accelerators. The students will gain applied knowledge and skills by developing parallel software for multiple platforms. Prerequisite: CS 5351 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7333. Advanced Green Computing.**

This course covers hardware and software techniques to improve the energy-efficiency of computing systems. Topics include best practices in building energy-efficient data centers and mobile devices, current trends in reducing the energy consumption of processors and storage components, energy-aware resource management, software optimizations, and hands-on experience on power-measurable systems. Prerequisite: CS 5351 and CS 5369Y both with grades of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7334. Scalable Systems for Supercomputing.**

This course will teach basic aspects of building a scalable high performance computing (HPC) system. Specifically, it will focus on the design principles for scaling parallel communication and I/O operations for accessing HPC storage using a message-passing programming model. The course will use two large-scale systems—checkpointing for resilience and a parallel file system for storage as use cases to demonstrate how these principles are used in practice. Students will develop components of a scalable system and use software tools to measure and analyze their performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7341. Cyberspace Security.**

This course presents recent advances in methodologies, models, systems and applications of cyberspace security research. Topics include in-depth coverage of the state-of-the-art security technologies and research issues on information security, software security, network security, secure system design, secure programming, applied cryptography, vulnerability, and threats. Prerequisite: CS 5378 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7342. Advanced Computer Networking.**

This course covers recent research ideas, methodologies and approaches in networking research. The course focuses on the development of protocols and the analysis of related algorithms. Topics include new network architectures, cloud computing, software defined networking, wireless systems, social networks, and security and privacy. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7343. Mobile Networks and Computing.**

This course provides an in-depth study of wireless mobile communication networks, wireless network measurements and modeling, channel assignments and coverage, wireless network protocols, mobile data management, wireless security, and various wireless network applications including ad hoc, sensor networks, delay-tolerant networks, and mobile social networks. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7351. Advanced Software Engineering.**

Software engineering is the application of scientific methods to software development and maintenance. This course provides an in-depth study of advanced concepts and techniques of automatic software generation and analysis. Topics include software process programming, symbolic execution, model checking, property generation and checking, and runtime verification of complex software systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7352. Real-time Systems.**

This course covers issues related to the design and analysis of systems with real-time constraints. The problem of ensuring such constraints is ultimately a scheduling problem, so much attention is devoted to such problems. This course aims to provide a solid foundation for conducting research in real-time systems or related areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7387. Research in Computer Science.**

This course covers current research topics in computer science under the direction of a supervising professor. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7389A. Service Computing.**

This course introduces concepts and principles for enabling the development of software as a service based on Service-Oriented Architecture (SOA), methodology of SOA systems development, the main technologies used in achieving SOA, and state of the art techniques and advances in emerging cloud and edge (Internet of Things) services. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389B. Advanced Software Evolution.**

This topics course provides an in-depth study of state-of-the-art software evolution techniques and tools based on the current research literature. Software evolution has become increasingly important in software development. Software systems often evolve to fix defects, to improve performance, or to adapt to various other requirements. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389F. Secure Cyber-Physical Systems: Cryptography and Machine Learning.**

This course is designed to introduce students to the fundamentals of cryptography and machine learning and how they can be used to ensure security and privacy in cyber-physical systems (CPS). Topics will include an overview of cyber-physical systems, cryptographic techniques, machine learning algorithms, and security threats and attacks on CPS. The course will also cover privacy-preserving machine learning techniques and design principles for secure CPS. Students who successfully complete this course will be well-versed in cryptography and machine learning approaches for cybersecurity in CPS and be able to use these techniques to address practical real-world issues. Prerequisite: CS 3354 and CS 3358 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389G. Human-Centered Data Science.**

This course is to study the process of deriving insights from data in order to make optimal decisions. Human-Centered Data Science addresses various data science problems with attention to improve the quality of decisions by incorporating human experts in the learning process, e.g., interactive Machine Learning and eXplainable Artificial Intelligence. Prerequisite: CS 3358 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389H. Human-Centric Deep Learning.**

This course provides an in-depth exploration of deep learning, emphasizing multi-layer neural networks and their applications. Students will explore core topics like convolutional, recurrent, and graph neural networks, along with optimization algorithms and generative models. The curriculum uniquely integrates multimedia processing, Human-Computer Interaction (HCI), and "human in the loop" approaches, demonstrating how deep learning can be applied to image, video, and audio analysis, as well as to create user-centric and interactive systems. Practical aspects, including data preprocessing, model evaluation, and framework implementation, will also be covered, equipping students with the skills to apply deep learning techniques in a human-centered context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389J. Advanced Natural Language Processing.**

This course is an interdisciplinary field that combines computational linguistics with statistical and machine learning techniques to enable the computer to understand, interpret, generate, and learn natural language. Natural Language Processing (NLP) introduces key concepts, tasks, and techniques, including recent advancements such as neural networks and large language models. It covers applications such as question answering, automatic speech recognition, and machine translation. Students will gain an understanding of fundamental concepts, advanced algorithms, and practical applications, and will also learn methods for acquiring and annotating text data, and representing linguistic structures. Familiarity with Linear Algebra and Python Programming is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7399. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7599. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7699. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**CS 7999. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## **Materials Science, Engineering, and Commercialization (MSEC)**

**MSEC 7100. Doctoral Assistant Development.**

The course is designed to equip the doctoral students with skills and an understanding of proper procedures to be effective teaching assistants. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MSEC 7101. Commercialization Forum.**

The course is a seminar series exposing students to commercialization issues. The series includes as speakers: successful entrepreneurs, businessmen, research directors, production and process control engineers, intellectual property and licensing experts, management consultants, and technology transfer specialists. Repeatable four times for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MSEC 7102. MSEC Seminar.**

This course is an introduction to current materials science and engineering topics with presentations by subject matter experts as the basis for weekly discussions. Students participate by asking questions and actively engaging the seminar speaker. Students are also expected to give public presentations based upon their own field of research at the STAR (Student Technology and Research) Showcase. Repeatable four times for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### **MSEC 7103. Research in Materials Science, Engineering, and Commercialization.**

This research course is for students in Materials Science, Engineering, and Commercialization who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor. Repeatable (with MSEC 7203 & MSEC 7303 hours) for doctoral credit up to 6 hours.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7199. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **MSEC 7203. Research in Materials Science, Engineering, and Commercialization.**

This research course is for students in Materials Science, Engineering, and Commercialization who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor. Repeatable (with MSEC 7103 and MSEC 7303 hours) for doctoral credit up to 6 hours.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7299. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7301. Practical Skills in Commercialization and Entrepreneurship.**

This course is the first of a two-course series to impart business and commercialization skills by producing a business plan. Key areas covered include intellectual property law, technology transfer and licensing strategies, business plan development, business finance strategies, management structures, project management methods, statistical quality and process control.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **MSEC 7302. Leadership Skills in Commercialization and Entrepreneurship.**

Leadership Skills in Commercialization and Entrepreneurship (3-0). This course is the second of a two-course series to impart business and commercialization skills by producing a business plan. Key areas covered include intellectual property law, technology transfer and licensing strategies, business plan development, business finance strategies, management structures, project management methods, statistical quality and process control. Prerequisite: MSEC 7301 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7303. Research in Materials Science, Engineering, and Commercialization.**

This research course is for students in Materials Science, Engineering, and Commercialization who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor. Repeatable (with MSEC 7103 & MSEC 7203 hours) for doctoral credit up to 6 hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7304. Collaborative Research/Commercialization Experience.**

This course allows Ph.D. level graduate students to initiate, conduct and participate in a collaborative research or commercialization experience with graduate faculty in addition to research conducted under MSEC 7103, MSEC 7303, MSEC 7199 and MSEC 7399. This course recognizes the collaborative nature of the scientific and commercialization enterprise. Repeatable for doctoral credit up to 6 hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MSEC 7310. Nanoscale Systems and Devices.**

This course is an in-depth treatment of physical phenomena in nanoscale structures, and consequences for electronic, photonic, mechanical and other types of devices. The course provides a strong background in devices with applications in nanoelectronics, biomedical systems, micro- and nanoscale manipulation, adaptive optics, and microfluidics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7311. Materials Characterization.**

This course covers skills and knowledge required for microscopy methods including transmission electron microscopy, scanning electron microscopy, scanning tunneling electron microscopy, atomic force microscopy, and confocal microscopy. It covers x-ray and neutron diffraction techniques including structure analysis, powder and glancing angle diffraction, pole figure, texture analysis, and small angle scattering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MSEC 7315. Quantum Mechanics for Materials Scientists.**

This course includes quantum-mechanical foundation for study of nanometer-scale materials, principles of quantum physics, stationary-states for one-dimensional potentials, symmetry considerations, interaction with the electromagnetic radiation, scattering, reaction rate theory, spectroscopy, chemical bonding and molecular orbital theory, solids, perturbation theory, and nuclear magnetic resonance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7320. Nanocomposites.**

Characteristics of nanoparticles utilized in nanocomposites, techniques for surface modification, methods for nanoparticle dispersion forming nanocomposites, types of nanocomposites, characteristics of nanocomposites, analytical methods for characterization of composites, and common applications will be discussed. Particular attention will be given to the science and theories explaining the unique behavior of nanocomposites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7325. Principles of Technical Project Management.**

This course includes planning, budgeting, identification of risks and risk mitigation approaches, resource allocation, review of milestones and schedules, and evaluating projects to measure success. Responsibilities of project managers in the areas of problem solving, motivating and managing creative technical staff in project and matrix organizations will be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7330. Computational Materials Science.**

Application of computational techniques to molecular and atomic modeling of materials is discussed along with quantum mechanical modeling, density functional theory approaches, forcefield based molecular modeling, mesoscale modeling, energy minimization, molecular dynamics, vibrational spectra, crystal structures, phase equilibria, physical property prediction, and electronic structure related to magnetic and electrical properties. Prerequisite: CHEM 3340 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7340. Biomaterials and Biosensors.**

The course covers the growing field of biomaterials science including materials for prosthetics and implants, mimetic materials, biosensors, diagnostic devices, and drug delivery systems. Particular attention will be given to nanomaterials for diagnosis and treatment of diseases including targeted cancer treatments, drug delivery systems, and advanced imaging methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7350. Frontiers of Nanoelectronics.**

This course provides an introduction to the operating principles of nanoscale electronic and optical devices. The emphasis is on how leading edge nano-fabrication technology takes advantage of quantum mechanics of reduced sizes and dimensions. Specific examples of devices based on quantum wells, wires, dots and molecular electronics are given.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7355. Fluid Flow in Porous Media.**

In this course, the fundamental theory of transport and fluid flow in heterogeneous porous media will be presented. First, the equations that govern transport and fluid flow processes will be derived. Both analytical and numerical methods will be used to solve these equations in order to characterize and predict flow fields in porous media. These skills will then be applied to practical problems that involve porous media such as soils, rocks, biological tissues, concrete, etc. The knowledge gained from studies of fluid flow in natural porous materials will be employed to design/optimize systems with engineered porous media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7360. Nanomaterials Processing.**

The course will cover various aspects of materials processing related to semiconductor devices. Topics covered include properties of electronic materials, thin film deposition, etching, lithography, and related device physics with an emphasis on the nanoscale. Fabrication and characterization techniques will be covered, including clean room usage. Prerequisite: MSEC 7401 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7370. Advanced Polymer Science.**

Advanced topics in polymer science are discussed with a focus on high performance polymers such as high impact, conducting, shape memory, high temperature and the underlying phenomena that provide these unusual properties, and advanced polymer topic areas such as flame retardancy, barrier properties, dielectric properties, rheology, and fiber reinforced composites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7395A. Microwave & Power Device Physics and Materials.**

This course will develop an understanding of basic microwave and power device physics and technology and the advanced materials that are used in today's cutting-edge research & development. The primary focus will be wide bandgap semiconductor materials and devices, and their performance metric versus the industry standard Si-based devices. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395B. Thin Film Photovoltaic Devices.**

This course is a survey of the Materials Science of photovoltaic devices with emphasis on device physics including the photovoltaic effect, photon absorption, electrons and holes, generation and recombination, the pn-junction, charge separation, monocrystalline solar cells, thin film solar cells, III-V solar cells, and losses. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395C. Materials for Sustainable Energy.**

This course introduces principles and applications of sustainable energy materials used for energy generation, conversion, and storage. Topics of study include principles (thermodynamics, kinetics, transport phenomena, equivalent circuits, catalysis, and electrochemistry) and selection and performance criteria important for applications including batteries, supercapacitors, fuel cells, electrolyzers, dielectrics, biomass, and piezoelectrics. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395D. Polymer Characterization and Processing.**

This course will cover the concepts critical to the characterization and processing of organic polymers. Topics critical to characterization will include molecular weight determination, thermo/mechanical characterization, X-ray scattering, and polymer spectroscopy. Processing topics will include polymer rheology, principles of polymer processing, solution processing, and extrusion. Prerequisite: CHEM 4351 or CHEM 5351 or MSEC 7370 any with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395E. Industrial Ecology and Sustainability Engineering.**

This course covers the basic principles of life cycle analysis (LCA) of engineered products, materials, and processes. Topics covered include: biological ecology, industrial ecology, resource depletion, product design, process design, material selection, energy efficiency, product delivery, use, end of life and LCA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395F. Catalysis in Materials Science.**

This course introduces principles and applications of catalysis in materials science. The primary topics of study will include catalysis as a means of synthesizing materials and materials as catalysis. Subtopics will focus on specific catalysts (Ziegler-Natta, ROMP, and cross-coupling catalysts) and specific catalytic processes (hydrogenation, photoredox, and electrocatalysis).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395G. Applied Plasma Physics.**

Applied plasma physics focusing on the broad range of technical plasma devices, and to analyze and describe the main plasma physical characteristics and principles of operation. Emphasis will be on physical insight, application, and problem solving. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395H. Environmental Chemistry.**

Advanced study in environmental chemistry, with an emphasis on aquatic resources and materials science and engineering. Principles of geochemistry and atmospheric chemistry will be covered as they relate to environmental pollution monitoring and control. Principles and applications of green chemistry will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395I. Structure and Properties of Alloys.**

This course is an advanced exploration of the structure and properties of engineering alloys. Strengthening mechanisms of alloys are explored with specific applications to the alloys studied. The processing, properties, and structure of ferrous and nonferrous alloys are explored including new and emerging alloys. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395J. Advanced Concrete Materials and Durability.**

This course delves into a comprehensive coverage of Portland cement concrete materials as well as resilient and sustainable materials used for building and transportation infrastructure. Topics include cement and aggregate properties, chemical and mineral admixtures, mixture proportioning, concrete microstructure, concrete durability, long-term performance, durability prediction and modeling, durability of alternative cement, multi-scale assessment, and dimensional stability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395K. Electrical and Magnetic Characterization Methods.**

This course introduces electric and magnetic characterization methods important to metals, magnetic and semiconductor materials and devices. Various measurement techniques and methods will be reviewed. Students will learn to work with characterization tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395L. Advanced Solid State Physics.**

This course reviews models of a solid and energy band theory. Additional topics may include interaction of electromagnetic waves with solids, lattice vibrations and phonons, many body effects in solids, device physics, quantum phenomena, carrier transport properties, current device configurations, and materials interface problems. Prerequisite: MSEC 7401 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395M. Semiconductor Devices and Processing.**

This course addresses the basics of semiconductor devices, silicon and compound semiconductor material fabrication, photolithography, etching, control of dopant profiles for the formation of shallow junctions needed for nanoscale devices, ion implantation and microstructure engineering, different types of doping phenomena, the carrier action and charge transport properties, defect microstructures, low-resistivity Ohmic contacts, and different fabrication concepts of conventional and emerging micro-/nano-electronic devices. In addition, students will be involved in laboratory projects and seminar presentations. Prerequisite: MSEC 7401 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395N. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, etc. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course. Students will be asked to solve an infrastructure material related problem using advanced analytical and simulation tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395O. Modern Concepts in Materials Science.**

This course provides an overview of the modern concepts and principles that are used to describe and predict the physical properties of materials. An emphasis will be placed on developing and applying fundamental materials science concepts: atoms and atomic bonding, fundamentals of crystallography, elementary diffraction by solid-state materials, defects, solid solution and phase equilibrium. Particular attention will be given to the science and theories explaining the unique behavior of different classes of materials, i.e. ceramics, metals, polymers, electronic materials and composites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7399. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7401. Fundamental Materials Science and Engineering.**

Course covers fundamentals of chemical kinetics, physical properties, and continuum mechanics. Topics include electronic and atomic structure, structure of crystalline materials, imperfections, thermodynamic and kinetic principles and equations for closed and open systems, statistical models, phase diagrams, diffusion, phase transformations, conservation laws, and kinematics.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7402. Advanced Materials Science and Engineering Concepts.**

Fundamentals of quantum mechanics, physics of solid state, and physical electronics and photonics for advanced materials will be discussed. Topics will include quantum basis for properties of solids, lattice vibration, free electron model for magnetism, semiconductors, nanostructures and mesoscopic phenomena, superconductivity, and recent advances in new types of materials. Prerequisite: MSEC 7401 with a grade of "C" or better.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7599. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7699. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7999. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Biology (BIO)****BIO 7100. Professional Development.**

This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**BIO 7102. Seminar in Aquatic Resources.**

This course is an interactive discussion of timely issues and problems, designed to introduce students to the range of scientific, socioeconomic and policy issues likely to be encountered within the field of aquatic resources. All students seeking a doctoral degree in Aquatic Resources must enroll in BIO 7102 at least twice.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 7103A. Ecology and Society.**

Interactive discussion on relationships between society and the life-supporting ecosystems on which humans depend. Topics include roles of natural systems in social systems; effects of social, economic and political institutions on ecological systems and services; and the means by which humans develop and sustain desired ecological and social states.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103B. Aquaculture.**

The course comprises a survey of aquaculture production throughout the world. It also examines and discusses the impacts of aquaculture on nutrition, fisheries and the economy.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103D. Molecular Biology of the Cell.**

Interactive discussion of current literature on molecular biology of the cell. The course is designed to discuss concepts and their applications and methodology associated with the structure and function of the cell at cellular and molecular level.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter



**BIO 7103E. Contemporary Problems in Ecology.**

This course is an interactive discussion of the theoretical foundations and empirical basis for controversial topics in ecology, designed to develop critical thinking skills, and the ability to evaluate and integrate the biological, chemical and physical factors that affect the structure, functions, and interactions characterizing communities and ecosystems.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103F. Molecular Genetics of Plant Development.**

The study of plant development is rapidly changing as plant genome projects discover a multitude of new genes, and their expression and interaction patterns are understood. This course is designed to discuss concepts in plant development, and developmental processes as pathways of gene regulatory activities.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103G. Ecohydrology.**

A review of the concept of ecohydrology, its scientific foundation, and its ecological-hydrological linkages. Current topics in ecohydrology in the literature will be discussed, including manipulation of biota and hydrology interactions in a landscape, and the possibility of augmenting the resilience of ecosystems to anthropogenic changes.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103H. Integrated Waterbird Management.**

This course focuses on the ecology and management of waterbirds, with an emphasis on the inland and coastal waterbirds of Texas. The basic ecology of waterbirds, waterbird management techniques, and waterbird habitat management will be discussed.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103I. Avian Ecology and Evolution.**

This course is an interactive discussion of avian ecology and evolution, providing students with a critical examination of theories, hypotheses, and lab and field-based data that support or refute their hypotheses. This course also discusses peer-reviewed literature that challenges some paradigms in avian ecology and evolution.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7104. Marine Pollution.**

In this course, students will read and discuss the scientific literature on the sources, bioaccumulation, trophic transfer, and health effects of contaminants in the marine environment. Papers will address a variety of marine life including plankton, crustaceans, mollusks, fishes, marine mammals, turtles, and birds. Contaminants to be reviewed include trace elements, PCBs, oil, pesticides, radionuclides, plastics, pharmaceuticals, illegal drugs, and personal care products.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7105. Environmental Issues through Documentaries.**

In this course, students will examine how environmental issues are addressed in documentaries. Students will learn how to critically evaluate documentaries for scientific content, imagery, biases, and ease of understanding. Topics to be examined include overfishing, the wildlife trade, habitat degradation, pollution, energy resources, climate change, sustainability, and conservation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7114. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7120. Population Biology Seminar.**

This course facilitates exploration of current topics in population and conservation biology through reading and discussion of contemporary primary and secondary literature.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7199A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7214. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7299A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7300. Communicating Science.**

This course explores how to successfully disseminate science through visualizations, oral presentations, and written works to multiple audiences. Special emphasis will be placed on communicating with the general public, media, granting agencies, and science peers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7301. College Science Teaching.**

This course is designed for graduate students in the sciences who are interested in improving their science teaching and/or are interested in pursuing careers in academia. This course focuses on the central question, "How do college students best learn science, and thus how do we best teach them?"

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7302. Problems in Aquatic Resources.**

Individual study on specific state, national, or international aquatic resources issues, under direct supervision of a doctoral or associate faculty member. Students may not enroll in BIO 7302 more than twice for doctoral credit without the approval of the Graduate Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7303. Research.**

Research course for students who have not yet passed their Candidacy Exam, typically under direction of research-dissertation supervisor. Pre-candidacy students must enroll in course every semester until admission to Candidacy, although it may not be taken more than three times for doctoral credit without the approval of Graduate Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7308. History of Vegetation and Climate.**

An overview of past vegetation and its relationship to changing climate. Topics include principles of paleovegetation analysis, paleoclimatology, the rise of flowering plants, vegetation during the age of dinosaurs, the rise of the grasslands, and the Quaternary Ice Age. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7310. Global Aquatic Resources.**

Introduction to global, national, and regional aquatic resource issues, including scientific, environmental policy and socioeconomic components and perspectives. Water quantity and quality issues and their root causes in different regions of the world are examined, with an emphasis on case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7311. Ecology of Temporary Waters.**

The course explores the diversity of temporary bodies of water and of the species that rely on them, including their special adaptations, population and community dynamics, the ecological role of temporary waters, and how these systems are impacted by humans. Background coursework or independent study in ecology is recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7314. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7326. Immunobiology.**

This lecture-based course will cover the mechanisms and biology of the innate and adaptive immune system. Emphasis will include relationship to cancer, transplantation, hypersensitivity (allergy), and disease. Students will evaluate current research in immunology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7327. Ecological Immunology.**

This course explores the roles of immunity in natural ecosystems, focusing on central concepts in ecological immunology. From viruses to parasites, pathogenic threats are omnipresent. As epizootic outbreaks become more common, it is important to integrate immunological knowledge with traditional ecological perspectives. Background coursework in immunology is recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7331. Human Dimensions of Wildlife and Fisheries Conservation.**

This course will provide principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will have an opportunity to integrate human dimensions into decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7332. Introduction to R Programming for Biologists.**

This course introduces the programming language R. The course will focus on best practices in programming and the use of Base-R and RStudio. Topics include navigating the R and RStudio environment, installing packages, loading, manipulating, and visualizing data, declaring variables, writing loops, and writing functions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7333. Phylogenetic Comparative Methods.**

This course introduces students to modern phylogenetic comparative methods and teaches how to perform them. Topics include constructing phylogenies, dating phylogenies, finding and using previously published phylogenetic datasets, phylogenetic data visualization, and a variety of methods to test ecological and evolutionary hypotheses in a phylogenetic framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7336. Evolutionary Ecology.**

This course will use an evolutionary perspective to explore questions provided by natural selection and sexual selection through assessment of current theory and research related to topics such as competition, coevolution, and phenotypic plasticity. Students will achieve comprehension and familiarity with the field through discussions and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7342. Virology.**

This course examines the structure, multiplication and genetics of bacterial, plant, and animal viruses as well as the role of viruses in human and plant disease. Students are expected to become familiar with the research literature in virology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7346. Conservation Biology.**

Examination of the alteration of habitats and associated biological changes threatening the continued existence of species and basic ecosystems. Topics include conservation ethics, working paradigms, levels and loss of global biodiversity, conservation at population and ecosystem levels, restoration ecology, endangered species biology and conservation laws. Recent Advances are stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7353. Biogeography.**

Examines historical and ecological explanations of the geographic distribution of organisms including the role of geologic, climatic, and biologic changes. Emphasizes the historical and philosophical development of the science and modern methods of analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7354. Applied Analyses of Populations.**

In this course students will learn and apply a variety of statistical techniques for analyzing populations. They will build code to conduct and compare statistical analyses as they apply to real population data. Students will use real-world data sets to generate objectives and test hypotheses including conducting all data visualization and validations, performing models, selecting appropriate models, and estimating latent variables and their predictors. Analyses include assessing the effects of environmental attributes on occupancy, relative abundance, abundance, space (habitat) use, home range size, local colonization, local extinction, survival, and recruitment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7355. Plant-Water Relations.**

Examination of the physiology and ecology of water use in higher plants, including the uptake, utilization, and movement of water, transpiration and adaptation to variable water availability including drought, and the ecological role of water in structuring plant communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7360A. Industry and Sustainable Aquatic Resources.**

Examination of industrial water needs and uses, the types and quantities of water pollutants produced by different industries, problems faced by industry regarding process water for different manufacturing activities, and the possibilities for industry to contribute to the goal of sustainable aquatic resources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360B. Environmental Linkages and Sustainable Aquatic Resources.**

Introduction to the environmental relationships between humans and other living beings and the ecological systems in which they exist. Emphasis will be on the potential for individual environmental problems to have serious impacts on other environmental components, as well as the nature of these impacts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360C. Role of State and Federal Courts in Protection and Maintenance of Aquatic Resources.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360D. Evolutionary Ecology.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360E. Advances in Water Quality Investigations.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360F. Approaches to Aquatic Resource Modeling.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360G. Molecular Techniques in Microbial Ecology.**

Lectures on molecular techniques used to analyze structure and function of uncultured microbial communities in the environment with selected examples of applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360H. Parasites and Diseases of Fishes and Other Aquatic Animals.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics

**Grade Mode:** Standard Letter

**BIO 7360I. Bayesian Statistics for Biology.**

This course examines the theory and mathematical foundations of Bayesian statistics and provides instruction and experience conducting Bayesian analyses using computer-based procedures. The course emphasizes practical applications for Bayesian statistical procedures for problems in biological sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360K. Evolution.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360L. Landscape and Biogeography of Texas.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360P. Regulation of Plant Growth and Development.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360Q. Spatial Ecology of Animals.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360R. Community and Ecosystem Ecology.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360S. Soil Biology.**

An introduction to the biology of soil systems, including the roles of biota in forming and maintaining soils, and the interactions between biotic and abiotic components in soils.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360T. Karst Hydrogeology and Geomorphology.**

An introduction to, and advanced understanding of, karst hydrogeology, geology, and geomorphology, with emphasis on field and theoretical applications of this information to the study of karst systems, and recognition and understanding of karst landforms at the surface and their relationships with subsurface processes. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360U. Sustainability in a Changing World.**

Understanding the ecological-social interface, including policies, product development and actions towards sustainability, with emphasis on integrating and implementing theories and methods across disciplines, and improving the knowledge and experience base for public policy and decision-making regarding human-environment linkages within the context of sustainable development. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360V. Techniques in Aquatic Biology.**

The course will provide hands on experience with a suite of physical, chemical, and biological sampling techniques and gear used in applied river studies. Students will be exposed to the fundamentals of data quality objectives, accuracy, precision, detection limits, data visualization, exploratory analysis, univariate and multivariate statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360Y. Applied Bioinformatics.**

This course provides an introduction to scripting and other computational techniques used for visualizing and analyzing large biological datasets. Computational techniques include sequence and structural alignment, data mining, phylogenetic tree construction, and data clustering using UNIX, Python, and R. Students will gain a solid foundation in broadly applicable bioinformatics skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7361A. Discipline-Based Educational Research Methods.**

This course will expose science graduate students to educational research in a practical setting, supervised by a professor experienced in conducting discipline-based educational research, focusing primarily on qualitative methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7361C. Advanced Genomics and Bioinformatics.**

This course provides hands-on experience in processing and analyzing data produced from contemporary genomics tools for thesis students with basic bioinformatics training. Prerequisite: BIO 7360Y with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7361D. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**BIO 7399A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7402. Molecular Field Techniques.**

The application of molecular tools for identifying, quantifying, and interpreting biological diversity assessments in aquatic systems. The course focuses on micro organismal identification and vertebrate model systems.

**4 Credit Hours. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7405. Statistics and Experimental Design I.**

Introduction to inferential statistics, including exploratory and confirmatory data analysis, estimation and hypothesis testing, analysis of variance and regression, and non-parametric techniques, as applied to aquatic resource issues. Computer applications emphasized.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7406. Statistics and Experimental Design II.**

Introduction to the principles of experimental design, including randomization, replication, sample-size determination, completely randomized and randomized block design, factorial design, repeated measure design, and analysis of variance and covariance, as applied to aquatic resource issues. Computer applications emphasized.

Prerequisite: BIO 7405 with a grade of "C" or better or instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7410. Aquatic Microbial Ecology.**

Examination of microbial organisms, communities, and interactions affecting the form, structure, and functional aspects of aquatic ecosystems. Field trips may be required. Prerequisite: BIO 2400 with a grade of "D" or better or instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7412. Environmental Hydrology.**

Overview of the properties, distribution, and movement of water over and under the land surface and its relation to sustainable aquatic ecosystems, including quantitative methods to assess cumulative impacts of human activities on such systems. Field trips may be required. Knowledge of calculus recommended.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7414. Ecology of Infectious Diseases of Wildlife.**

Concepts of the ecology of infectious diseases in wildlife are studied in depth with emphasis on their application to the management and conservation of wildlife species and for the control of zoonotic diseases. Prerequisite: Instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7419. Stream Ecology.**

Study of ecological theories, concepts, and processes occurring at the population, community, and ecosystem levels of organization in running water. Laboratory includes sampling methods, descriptive and comparative studies, experiments, and critical discussion of literature. Field trips may be required.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7426. Ecology and Management of Aquatic Macrophytes.**

Examination of aquatic macrophytes and their ecology, taxonomy, distribution and management. Field trips may be required.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7427. Principles of Population Biology I.**

This course provides a foundation in theory and mathematics of basic population biology. The course is divided into modular components, including defining evolutionarily significant units, ecology of populations, genetics of populations, and evolutionary genetics. A background in genetics and general ecology is recommended.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7428. Principles of Population Biology II.**

This course provides a foundation in theory and mathematics of basic population biology. The course is divided into modular components which include: 1) Ecology of Communities, 2) Evolution of Behavior, 3) Phylogenetic Methods, and 4) Biological Diversity and Conservation Biology.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7430. Mycology.**

This course provides an introduction to the organisms in the Kingdom Fungi and to fungus-like organisms, their ecology and evolution, and their role in industry and disease. Special emphasis will be placed on morphology, culturing, and using laboratory techniques for identification.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7433. Population Genetics.**

This course examines the theoretical foundations of population genetics, including the description of population genetic structure and the forces creating it. The course emphasizes application of principles to a wide range of current problems in evolution, systematics and ecology. Molecular methods, data interpretation and computer-based data analysis are emphasized.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7434. Herpetology.**

A course treating the origin and evolution of amphibians and reptiles; their reproductive and physiological tactics; taxonomy/systematics; and population biology. While cosmopolitan in scope, emphasis will be placed on North American species and those groups inhabiting Texas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7440. Aquatic Toxicology.**

Introduction to principles for identifying and assessing the adverse effects of chemicals and other compounds and mixtures on aquatic organisms and ecosystems.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7447. Microbial Physiology.**

Prokaryotes, including bacteria and archaea, are the most diverse group of organisms on earth. Many prokaryotes live in environments which are inhospitable to other life forms. This course covers major aspects of prokaryotic physiology that permit them to be so successful.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7466. Phylogenetics.**

Study of the use of phylogenetic methodologies in aquatic research, including practical data collection, management, and analysis in the reconstruction of phylogenies. Laboratory exercises will introduce phylogenetic and DNA analysis software. Prerequisite: BIO 2450 and BIO 4369 and BIO 5466 all with grades of "C" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7468. Groundwater Resources.**

Study of the geological, physical, chemical and biological factors influencing sustainable groundwater resources, including hydrologic linkages and interactions with surface aquatic resources. Emphasis will be on the karst aquifer systems of Central Texas, and other groundwater aquifer systems of the United States.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7469. Introduction to Ecological Modeling.**

Mathematical models range from simple conceptual models to complex mechanistic models for mimicking behavior of natural systems. This course provides a broad overview of modeling objectives, techniques and assumptions, as well as the practical skills needed to conduct modeling projects. Computer applications emphasized. Prerequisite: MATH 2471 with a grade of "C" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7599A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7699A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7999A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Criminal Justice (CJ)****CJ 7199. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7299. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7301. Instructional Assistant Supervision.**

This course prepares doctoral students employed as research or teaching assistants to perform effectively in diverse instructional settings. The course provides for regular and planned opportunities for continuing evaluation of students. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CJ 7309. Proseminar.**

This course introduces students to information that is useful to their success as Ph.D. students and after graduation. Topics include the criminal justice discipline, teaching, publishing, grants and fellowships, writing dissertations, and post-doctoral employment. Emphasis is placed on identifying and coordinating opportunities for research and scholarship among faculty and students. Must have completed 12 hours of doctoral credit in Criminal Justice to enroll in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7310. Philosophy of Law, Justice, and Social Control.**

A current, thorough, and comprehensive review of the criminal justice system focused on how the system functions, and its current needs and future trends. Students submit extensive critiques and participate in panel discussions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7311. Advanced Criminological Theory.**

An overview of the major criminological paradigms is presented focusing on the causes of crime and deviant behavior. The course includes a discussion of criminological theories from a philosophy of science perspective focusing on such issues as theory construction, theoretical integration, and the formal evaluation of theory and policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7313. Race and Ethnicity in Crime and Criminal Justice.**

An exploration of how issues related to racial and ethnic minorities and criminal behaviors impact criminal justice reactions. Topics include racial disparities related to law enforcement and sentencing, and policy implications related to policing, probation, pre-sentencing and post-release issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CJ 7314. Policing.**

This course examines current problems in American policing and the role of research in their examination and solution. Official crime and victimization statistics and measure of police performance are explained, with a focus on their collection, development, limitations, and utility. Methods and issues in policing research are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7315. Corrections.**

This course examines the history, forms, and functions of correctional institutions, their programs and policies, as well as theories of punishment. Topics include the structure and functions of prisons and jails, community corrections, intermediate sanctions, reentry, supermax prisons, and the death penalty.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7320. Quantitative Research Methods.**

A course that demonstrates the practical aspects of conducting criminal justice research that uses quantitative methodologies and design. Topics include the philosophy of science; research ethics; methodological designs in establishing causation; nonexperimental/descriptive research; sampling techniques; secondary data sources and data gathering techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7321. Linear Regression for Criminal Justice Research.**

Instruction on the use of advanced linear modeling techniques in criminal justice research is addressed. After completing this course, students should be able to evaluate quantitative research articles in the major criminal justice journals and be prepared to complete a major quantitative research project of their own.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7322. Advanced Research for Planning and Evaluation.**

An introduction to evaluation and research design methodologies, assessment techniques including modeling and case studies, agency management issues, and on-going policy implications. Course gives students an understanding of the principles and techniques commonly used to evaluate the effectiveness and efficiency of criminal justice interventions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7323. Applied Statistics and Quantitative Data Analysis.**

This is a course in statistics and data analysis for the purposes of original quantitative research. Topics include descriptive statistics, statistical inference for single and multivariable analysis, and principles underlying the techniques. This course makes extensive use of statistics software and data preparation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7330. Qualitative Research Methods.**

A discussion of the methods and techniques used for achieving interpretable qualitative results in social research. Topics covered include ethnography, focus groups, in-depth interviewing and case studies. Students will be trained in inductive reasoning and coordinating qualitative with quantitative methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7331. Law and Behavioral Science.**

A review of the issues addressed in the application of the behavioral sciences to the criminal law system. Topics include criminal sanctions and diminished responsibility, civil commitment, victimology, psychology in the courtroom, the role of media, drugs, and alcohol to violence, and how the justice system reacts to violent offenders.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7336. Survey Research Methods for Criminal Justice.**

This course addresses the procedures and techniques used to create social surveys including question formulation, metrics, and question scaling. Students learn how to prepare face-to-face, telephone, and mail surveys, and are trained in sampling procedures related to survey administration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7350A. Forecasting, Trend Analysis, and Data Interpretation.**

A review of quantitative approaches to public policy analysis, the diverse conceptions of the goals and objectives that should be served by policy, and the appropriate role of the policy analyst. Policy consequences are traced to indirect and subtle incentives and disincentives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350B. Academic Scholarship and Communication.**

A course on conducting academic research, interpreting results and how to prepare manuscripts for publication in refereed journals. Included is a survey of the audiences, topical focus, and submission requirements of the major criminal justice, criminology, and law publications, along with specialized knowledge on achieving success in the scholarship environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350C. Qualitative Data Collection, Coding and Analysis.**

This course takes a structured approach to understanding and implementing the various information collection methods used in qualitative research, including formatting the information for coding, coding schemes, and information interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350E. Discrete Multivariate Models.**

This course focuses on regression models for discrete outcome variables, sometimes called limited or categorical dependent variables. Topics include maximum likelihood estimation, binary and multinomial logistic models and negative binomial models. Prerequisite: CJ 7321 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350F. Environmental Criminology.**

Crime distributes unevenly in space/time. As such, the course examines such questions as (1) What places are dangerous? (2) Why do we study specific crime types? (3) Where do crime types concentrate? (4) Where do offenders go in their normal activities? (5) What are the temporal patterns for crime? Prerequisite: CJ 7311 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350G. Seminar in Macro Criminology.**

This course has a macro focus, examining criminological theory and research that takes cities, geographical regions, states, and nations as the units of comparison. The importance and relevance of macro criminology for understanding the causes of crime and key criminal justice issues, such as police resources, are explored in depth. Prerequisite: CJ 7311 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350I. Introduction to Structural Equation Modeling.**

The course provides an introduction to structural equation modeling, which is sometimes called mean and covariance structure analysis or latent variable analysis. Topics include recursive and non-recursive models, path analysis, measurement models, and factor analysis. Prerequisite: CJ 7321 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350K. Criminal Justice Forecasting and Policy Analysis.**

This course examines the inputs and outputs of criminal justice programs. It covers forecasting methods using statistical bootstrapping techniques including line fitting methods, moving averages, cohort propagation matrixes, and systems simulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350L. Sex Offenders: Theory, Research & Policy.**

This course will focus on application of theory to explain sexual offenses, research design issues related to researching this salient population of offenders (e.g., ethical issues, gaining IRB approval, research design limitations, social desirability problems in self-report data, and examining available data sources), and examining policy related issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7360. Independent Study.**

Students will work closely with a particular doctoral faculty member and develop in-depth knowledge in a specific topic area of criminal justice.

Topics vary according to a student's program needs. Repeatable once for credit with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7399. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7599. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7699. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7999. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

### Application for Advancement to Candidacy

The Dean of The Graduate College approves advancement to candidacy once all requirements are met. Doctoral students must be advanced to candidacy within five years of initiating Ph.D. course work applied toward the degree. Students need to indicate their intent to advance to candidacy during the term they complete the required course work and other departmental requirements. The doctoral candidacy requirements include:

- Completion of all required course work with the exception of dissertation credit hours.
- Successful passage of all three qualifying exams.
- Successful passage of the comprehensive exam.
- Approval of the dissertation proposal.
- At least a 3.5 GPA on all doctoral required courses.

### Advancement to Candidacy Time Limit

No credit will be applied toward the doctoral degree for course work completed more than five years before the date on which the student is advanced to candidacy. This time limit applies toward credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions. Requests for a time extension must be submitted to the doctoral program director, who in turn submits a recommendation to the dean of The Graduate College.



## Grade-Point Requirements for Advancement to Candidacy

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.5. No grade earned below a "B" on any graduate course may apply toward a Ph.D. at Texas State. Incomplete grades must be cleared through the office of The Graduate College before a student can be approved for advancement to candidacy.

## Qualifying Examination

Typically, after completion of the core course work or by the end of the second year in residence, each student will be required to take written examinations. To be eligible to take the examinations, the student normally will have a minimum grade point average of 3.5 on all the core courses including the transferred equivalent courses that the student has completed. Students are expected to complete the exams by the end of their second year in the program and must have attempted the exams by the end of their third year in the program. These times will be adjusted for part-time students. Any student who does not pass the qualifying exam by the time they have accrued 70 credit hours will be dismissed from the program. If the qualifying exam is not passed, the student will have the option of taking a second exam. Students will be encouraged to make full use of study aids provided by the department prior to retesting. Students who fail the exam, or a portion of the exam, a second time, will be required to retake the relevant course sequence(s) prior to a third attempt. Students will be dismissed from the program if they do not pass the qualifying exam the third time.

The qualifying exams will consist of a series of three topic examinations based on core components of the program. The three topics will be administered and scored separately so that a student can receive a partial pass. A student who fails to pass one or more of the three portions of the exam need only retest on the failed portion. The exams will be administered at least twice per academic year. Students may take their topic exams during one administration or may separate the topic to take during multiple administrations. Each topic exam will be administered as a written, proctored exam. Students will typically be prepared for the exams through their core course work. Students can strengthen their preparation through additional study and through working with faculty to take practice oral exams and discuss the topics in depth. Exam topics include: algebra, analysis, discrete mathematics, numerical analysis, partial differential equations, statistics, and topology. Students in the general mathematics program will take two of: algebra, analysis, and topology, and a third topic of their choice. Students in the statistics concentration will take statistics, analysis, and a topic of their choice. Students in the applied mathematics concentration will take analysis, numerical analysis, and a topic of their choice.

## Comprehensive Oral Exam

A comprehensive oral examination will be administered by the candidate's dissertation committee as part of the student's proposal defense. The exam will be approximately 30 minutes long and will involve a discussion of content closely related to the student's proposed dissertation topic. Committee members will work together to provide the candidate with a list of suitable readings designed to prepare the student in the selected area. The focus should be on topics necessary for the student to begin to approach the selected dissertation question, with an understanding that the student will continue to study related topics during the course of their research. The dissertation advisor and committee members are expected to work with the student prior to the exam to ensure the student has the information necessary to prepare

for this exam. Any student who does not pass the comprehensive exam by the end of the fourth year in the program may be dismissed from the program. If the comprehensive exam is not passed on the first try, the student will have the option of taking a second comprehensive exam. The dissertation chair should meet with the student after a failed attempt and create a plan for that, if followed, will aid the student in being successful in the second attempt. Normally, the second exam will be taken in the following long semester and will be the final attempt with failure resulting in dismissal from the program. Exceptions must be approved by the Graduate Program Committee. Students who do not pass the exam on the first attempt are expected to work closely with their committee members to ensure they are well-prepared for the second exam.

## Dissertation Proposal

To be advanced to candidacy, a student must select a doctoral dissertation advisor and committee, submit a dissertation proposal, and successfully defend the proposal in an oral examination with the dissertation committee. Information about the formation of the dissertation committee can be found in the "Dissertation Research and Writing" section of this catalog. The proposal should identify the intended mathematical question to be addressed by the dissertation and include a brief survey of relevant literature. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research. The proposal defense entails a public presentation. The student should give a 50-minute presentation on a specialized topic closely related to their dissertation question. The public presentation will be followed immediately by a closed defense of the proposal attended only by the student and his/her dissertation committee. The dissertation proposal must be approved by the student's dissertation advisor and a majority of the remaining members on the dissertation committee.

## Recommendation for Advancement to Candidacy

The doctoral program committee recommends the applicant for advancement to candidacy to the doctoral program director, the department chair, and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been met. To be eligible for admission to candidacy, the student must have successfully completed the qualifying and/or comprehensive exam(s), completed all course work, and successfully defended the dissertation proposal.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 non-refundable application fee
- or
- \$90 non-refundable application fee for applicants with international credentials

- completed bachelor’s degree in mathematics, statistics, or a closely related discipline, from an accredited college or university. Applicants who have completed a master’s degree in mathematics, statistics, or a closely related discipline from an accredited college or university can, upon approval of the program advisor, have up to 30 hours of coursework waived based on courses taken during the master’s degree that closely align with courses in the program.
- official transcripts from **each institution** where course credit was granted
- competitive GPA
- GRE not required. Applicants whose GPA is not deemed competitive by the program may be offered the opportunity to submit GRE scores for review.
- resume/CV outlining education, work experience, scholarships/ grants, publications/presentations, other accomplishments
- statement of purpose outlining the applicant’s background and professional goals, including their rationale for pursuing a doctoral degree in mathematics at Texas State
- three letters of recommendation evaluating the applicant’s professional and academic background as well as research potential. Letters should address teaching potential for applicants interested in applying for funding as an instructional assistant.
- interviews may be conducted with semifinalists

TOEFL, PTE, IELTS or Duolingo Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall.
- official PTE scores required with a 52 overall.
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall.
- official TOEFL Essentials scores required with an 8.5 overall.

This program does not offer admission if these scores are not met.

Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Mathematics concentration in General Mathematics with a requires 72 semester credit hours.

Course Requirements

Code	Title	Hours
Required Courses		
MATH 7303	Analysis I	3
MATH 7313	Analysis II	3
General Mathematics Concentration		
MATH 7307	Algebra I	3
MATH 7317	Algebra II	3
MATH 7309	Topology I	3
MATH 7319	Topology II: Algebraic Topology	3
MATH 7325	Statistics 1	3
MATH 7331	Combinatorics	3
Practicum		
Choose 9 hours from the following:		9

MATH 7306	Current Research in Math Education
MATH 7328	Instructional Techniques & Assessments
MATH 7366F	Research in Undergraduate Mathematics Education I
MATH 7387	Consulting
MATH 7389	Internship
Prescribed Electives	
Choose 21 hours from the following:	21
MATH 5315	Mathematical Statistics
MATH 5335	Survival Analysis
MATH 5340	Scientific Computation
MATH 5360	Mathematical Modeling
MATH 5376A	Design and Analysis of Experiments
MATH 5376B	Analysis of Variance
MATH 5376D	Statistical Applications in Genetics and Bioinformatics
MATH 5376E	Introduction to Data Science
MATH 5376F	Introduction to Probability Theory and Models
MATH 5393	Numerical Optimization
MATH 7303	Analysis I
MATH 7306	Current Research in Math Education
MATH 7307	Algebra I
MATH 7309	Topology I
MATH 7313	Analysis II
MATH 7315	Calculus of Variations
MATH 7317	Algebra II
MATH 7319	Topology II: Algebraic Topology
MATH 7321	Graph Theory
MATH 7324	Curriculum Design & Analysis
MATH 7325	Statistics 1
MATH 7328	Instructional Techniques & Assessments
MATH 7331	Combinatorics
MATH 7335	Statistics II: Linear Modeling
MATH 7337	Mathematical Statistics II
MATH7361	
MATH 7363A	COMPLEX ANALYSIS
MATH 7363B	NUMERICAL ANALYSIS
MATH 7363C	FUNCTNL ANALYSIS
MATH 7363E	Numerical Analysis II
MATH 7363F	Functional Analysis II
MATH 7366A	Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors)
MATH 7366C	Teaching Teachers (In-Service; Pre-Service)
MATH 7366E	Developmental Mathematics Curriculum
MATH 7366F	Research in Undergraduate Mathematics Education I
MATH 7367B	ADV GROUP THEORY
MATH 7369C	Low-dimensional topology
MATH 7369D	Characteristic Classes
MATH 7369E	Differential Geometry
MATH 7371A	Advanced Graph Theory
MATH 7371B	Advanced Combinatorics

MATH 7371C	Combinatorial Number Theory
MATH 7371D	Discrete Optimization
MATH 7371F	Probabilistic Methods in Discrete Mathematics
MATH 7371G	Applied Discrete Mathematics
MATH 7373B	Partial Differential Equations I
MATH 7373C	Partial Differential Equations II
MATH 7373G	Spectral Methods
MATH 7375C	Time Series Analysis
MATH 7375D	Advanced linear Modeling
MATH 7375E	Computational Statistics
MATH 7375F	Multivariate Data Analysis
MATH 7375G	Bayesian Methods
MATH 7375I	Advanced Statistical Learning
MATH 7385	Independent Study in Mathematics
MATH 7387	Consulting
MATH 7389	Internship
CS 7312	Advanced Data Mining
CS 7314	Bioinformatics
CS 7341	Cyberspace Security
CS 7389E	
CS 7389G	Human-Centered Data Science
MSEC 7355	Fluid Flow in Porous Media
BIO 7360I	Bayesian Statistics for Biology
BIO 7360Y	Applied Bioinformatics
BIO 7361C	Advanced Genomics and Bioinformatics
CJ 7350E	Discrete Multivariate Models
CJ 7350I	Introduction to Structural Equation Modeling
<b>Dissertation</b>	
Choose a minimum of 18 hours from the following:	
MATH 7199A	Dissertation in Mathematics Education
MATH 7299A	Dissertation in Mathematics Education
MATH 7399A	Dissertation
MATH 7599A	Dissertation in Mathematics Education
MATH 7699A	Dissertation in Mathematics Education
MATH 7999A	Dissertation in Mathematics Education

**Total Hours****72**

## Advancement to Candidacy

### Application for Advancement to Candidacy

The Dean of The Graduate College approves advancement to candidacy once all requirements are met. Doctoral students must be advanced to candidacy within five years of initiating Ph.D. course work applied toward the degree. Students need to indicate their intent to advance to candidacy during the term they complete the required course work and other departmental requirements. The doctoral candidacy requirements include:

- Completion of all required course work with the exception of dissertation credit hours.
- Successful passage of all three qualifying exams.
- Successful passage of the comprehensive exam.

- Approval of the dissertation proposal.
- At least a 3.5 GPA on all doctoral required courses.

## Advancement to Candidacy Time Limit

No credit will be applied toward the doctoral degree for course work completed more than five years before the date on which the student is advanced to candidacy. This time limit applies toward credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions. Requests for a time extension must be submitted to the doctoral program director, who in turn submits a recommendation to the dean of The Graduate College.

## Grade-Point Requirements for Advancement to Candidacy

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.5. No grade earned below a "B" on any graduate course may apply toward a Ph.D. at Texas State. Incomplete grades must be cleared through the office of The Graduate College before a student can be approved for advancement to candidacy.

## Qualifying Examination

Typically, after completion of the core course work or by the end of the second year in residence, each student will be required to take written examinations. To be eligible to take the examinations, the student normally will have a minimum grade point average of 3.5 on all the core courses including the transferred equivalent courses that the student has completed. Students are expected to complete the exams by the end of their second year in the program and must have attempted the exams by the end of their third year in the program. These times will be adjusted for part-time students. Any student who does not pass the qualifying exam by the time they have accrued 70 credit hours will be dismissed from the program. If the qualifying exam is not passed, the student will have the option of taking a second exam. Students will be encouraged to make full use of study aids provided by the department prior to retesting. Students who fail the exam, or a portion of the exam, a second time, will be required to retake the relevant course sequence(s) prior to a third attempt. Students will be dismissed from the program if they do not pass the qualifying exam the third time.

The qualifying exams will consist of a series of three topic examinations based on core components of the program. The three topics will be administered and scored separately so that a student can receive a partial pass. A student who fails to pass one or more of the three portions of the exam need only retest on the failed portion. The exams will be administered at least twice per academic year. Students may take their topic exams during one administration or may separate the topic to take during multiple administrations. Each topic exam will be administered as a written, proctored exam. Students will typically be prepared for the exams through their core course work. Students can strengthen their preparation through additional study and through working with faculty to take practice oral exams and discuss the topics in depth. Exam topics include: algebra, analysis, discrete mathematics, numerical analysis, partial differential equations, statistics, and topology. Students in the general mathematics program will take two of: algebra, analysis, and topology, and a third topic of their choice. Students in the statistics concentration will take statistics, analysis, and a topic of their choice. Students in the applied mathematics concentration will take analysis, numerical analysis, and a topic of their choice.

## Comprehensive Oral Exam

A comprehensive oral examination will be administered by the candidate's dissertation committee as part of the student's proposal defense. The exam will be approximately 30 minutes long and will involve a discussion of content closely related to the student's proposed dissertation topic. Committee members will work together to provide the candidate with a list of suitable readings designed to prepare the student in the selected area. The focus should be on topics necessary for the student to begin to approach the selected dissertation question, with an understanding that the student will continue to study related topics during the course of their research. The dissertation advisor and committee members are expected to work with the student prior to the exam to ensure the student has the information necessary to prepare for this exam. Any student who does not pass the comprehensive exam by the end of the fourth year in the program may be dismissed from the program. If the comprehensive exam is not passed on the first try, the student will have the option of taking a second comprehensive exam. The dissertation chair should meet with the student after a failed attempt and create a plan for that, if followed, will aid the student in being successful in the second attempt. Normally, the second exam will be taken in the following long semester and will be the final attempt with failure resulting in dismissal from the program. Exceptions must be approved by the Graduate Program Committee. Students who do not pass the exam on the first attempt are expected to work closely with their committee members to ensure they are well-prepared for the second exam.

## Dissertation Proposal

To be advanced to candidacy, a student must select a doctoral dissertation advisor and committee, submit a dissertation proposal, and successfully defend the proposal in an oral examination with the dissertation committee. Information about the formation of the dissertation committee can be found in the "Dissertation Research and Writing" section of this catalog. The proposal should identify the intended mathematical question to be addressed by the dissertation and include a brief survey of relevant literature. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research. The proposal defense entails a public presentation. The student should give a 50-minute presentation on a specialized topic closely related to their dissertation question. The public presentation will be followed immediately by a closed defense of the proposal attended only by the student and his/her dissertation committee. The dissertation proposal must be approved by the student's dissertation advisor and a majority of the remaining members on the dissertation committee.

## Recommendation for Advancement to Candidacy

The doctoral program committee recommends the applicant for advancement to candidacy to the doctoral program director, the department chair, and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been met. To be eligible for admission to candidacy, the student must have successfully completed the qualifying and/or comprehensive exam(s), completed all course work, and successfully defended the dissertation proposal.

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. All students in the program will take a minimum of 18 semester credit hours of dissertation coursework.

Students may take dissertation coursework prior to completing elective and practicum credit hour requirements if approved by their dissertation advisor. Students should work with their dissertation advisor to determine the correct number of dissertation hours to take in a semester. All candidates for graduation must be enrolled in dissertation hours (e.g., MATH 7199A) during the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours. Note that the second digit in the course numbers below refers to the number of dissertation credit hours.

## Dissertation Committee

The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the doctoral program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

The Dissertation Committee will be responsible for administering the Comprehensive Exam and the Dissertation Proposal Defense and will oversee the research and writing of the student's dissertation. The committee will consist of 4 members, including the student's dissertation committee chair who must be a regular graduate faculty member in the program, two other graduate faculty members from the mathematics department, and one doctoral graduate faculty from another department at Texas State University or from another university. The student's dissertation committee chair will chair the committee. The student, the dissertation committee chair, and the Dean of The Graduate College will approve the composition of the dissertation committee.

As per The Graduate College policy, the Dissertation Committee Chair Assignment form and the Dissertation Committee Request form must be completed and approved by the Dean of The Graduate College to form the dissertation committee. Any changes to the dissertation committee must be submitted using the Dissertation Committee Chair/Committee Member Change Request form for approval of the dissertation committee chair, the doctoral program director, and the Dean of The Graduate College. Committee changes must be submitted no later than 60 days before the dissertation defense.

## Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least one month before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the dissertation is defensible, and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of their dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee.



Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense in the following long semester. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's website. The student must submit his/her dissertation to The Graduate College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Doctoral level courses in Mathematics: MATH (p. 3201), CS (p. 3208), MSEC (p. 3212), BIO (p. 3216), CJ (p. 3223)

## Mathematics (Math)

### **MATH 7111. Seminar in Teaching.**

Seminar on individual study projects concerned with selected problems in the teaching of mathematics. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### **MATH 7188. Seminar in Mathematics Education.**

Students are required to attend weekly research seminars in Mathematics Education and to give at least one research presentation in the seminar during the semester. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **MATH 7199A. Dissertation.**

Original research and writing in Mathematics Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### **MATH 7299A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### **MATH 7301. Studies in Mathematics.**

This course provides basic foundations in Mathematics for students entering the doctoral program in Mathematics or Mathematics Education. This course may be repeated. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

### **MATH 7302. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **MATH 7303. Analysis I.**

This course covers foundations of modern analysis. Topics include: sequences,  $\text{LimSup}$ ,  $\text{LimInf}$ , Sigma Algebras of sets that include open and closed sets, sequences of functions, pointwise and uniform convergence, lower and upper semi-continuity, Borel sets, outer measure, and Lebesgue measure. Prerequisite: MATH 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **MATH 7306. Current Research in Math Education.**

This course surveys the various current social, political, and economic trends in local, state, national, and international settings that are related to research in Mathematics Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **MATH 7307. Algebra I.**

Applications of Algebra and topics in modern algebra, including permutation groups, symmetry groups, Sylow theorems, and select topics from Ring Theory. Prerequisite: MATH 4307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **MATH 7309. Topology I.**

A course in point-set topology emphasizing topological spaces, continuous functions, connectedness, compactness, countability, separability, metrizability, CW-complexes, simplicial complexes, nerves, and dimension theory. Prerequisite: MATH 4330.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MATH 7313. Analysis II.**

This course covers the theory of integration with special emphasis on Lebesgue integrals. Topics include: Lebesgue integral, Bounded Convergence theorem, differentiation and integration, absolute continuity, and  $L_p$  spaces. Prerequisite: Math 7303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7317. Algebra II.**

A study of the important algebraic structures of rings and fields. Topics covered include rings, ideals, modules, polynomial rings, Euclidean algorithm, finite fields, and field extensions. Topics also include an introduction to Galois Theory with an emphasis on the geometric applications. Prerequisite: MATH 7307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7319. Topology II: Algebraic Topology.**

This course covers the fundamental concepts and tools of algebraic topology. Topics include the fundamental group, covering spaces, homotopy type, the higher homotopy groups, singular homology theory, and the computation of homology groups via exact sequences and applications. Prerequisite: MATH 7307 and MATH 7309.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7321. Graph Theory.**

Topics in this course include trees, connectivity of graphs, Eulerian graphs, Hamiltonian graphs, planar graphs, graph coloring, matchings, factorizations, digraphs, networks, and network flow problems. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7323. Theories of Knowing and Learning in Mathematics Education.**

This course surveys the major theories of knowing and learning that have influenced mathematics education. These theories include behaviorism, constructivism, sociocultural theories, situated cognition, and others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7324. Curriculum Design & Analysis.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques that are related to curriculum design in Mathematics Education for grade levels P-16.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7325. Statistics 1.**

A study of the mathematical and probabilistic underpinnings of the techniques used in statistical inference. Topics covered include sampling, sampling distributions, confidence intervals, and hypothesis testing with an emphasis on both simulations and derivations. Prerequisite: Math 2321 and Math 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7328. Instructional Techniques & Assessments.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques of instruction in Mathematics Education and the related assessment procedures for each for grade levels P-20.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7331. Combinatorics.**

This course is a study of fundamental principles of combinatorics. Topics include: permutations and combinations, the Pigeonhole principle, the principle of inclusion-exclusion, binomial and multinomial theorems, special counting sequences, partitions, posets, extremal set theory, generating functions, recurrence relations, and the Polya theory of counting. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7335. Statistics II: Linear Modeling.**

A study of the formulation and statistical methodologies for fitting linear models. Topics include the general linear hypothesis, least-squares estimation, Gauss-Markov theorem, assessment of model fit, effects of departures from assumptions, model design, and criteria for selection of optimal regression models. Prerequisite: MATH 3377 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7346. Quantitative Research Analysis in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and use of appropriate design methodologies to achieve the strongest possible evidence to support or refute a knowledge claim. Prerequisite: MATH 7306 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7354. Advanced Qualitative Research.**

This course encompasses the techniques and tools needed for the development, investigation, and demonstration of competence in conducting qualitative research in mathematics education. Principles of qualitative data analysis are a significant focus of the course, with particular attention given to specific methods used to code and analyze data. Prerequisite: ED 7352 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 7356B. Advanced Qualitative Research.**

This course encompasses investigation, development, and demonstration of competence, design, and execution for mathematics education problems in qualitative research. Prerequisite: ED 7352 or CI 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356C. Action Research in Mathematics Education.**

This course examines underlying theory and issues in action research model and the development of action research projects. Prerequisites: MATH 7346 or ED 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7358. Advanced Quantitative Research in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and the use of appropriate design methodologies to achieve the most substantial evidence to support or refute a knowledge claim. Prerequisite: MATH 7346 with a grade of "B" or better or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7361. Seminar in Advanced Mathematics.**

Material in course will vary with the interest of students and faculty. A detailed study of subject matter may be chosen from advanced areas of analysis; algebra; topology and geometry; applied mathematics; and probability and statistics. This course is repeatable for credit when subject matter varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7363A. COMPLEX ANALYSIS.**

This course is a brief introduction to the complex number system and basic point-set topology of the complex plane, followed by a proof-based and rigorous study of the principal results of the analysis of functions of a single complex variable. Prerequisite: MATH 4315 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363B. NUMERICAL ANALYSIS.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using computer algebra systems. Symbolic, numerical, and graphical techniques will be studied. Applications will be drawn from the sciences, engineering, and mathematics. Prerequisite: MATH 3323 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363C. FUNCTIONAL ANALYSIS.**

This course presents the three basic fundamental theorems of functional analysis: the Hahn-Banach theorem, the uniform boundedness theorem, and the open mapping theorem. Prerequisite: MATH 7303 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363E. Numerical Analysis II.**

This course will involve the analysis and numerical implementation of algorithms to solve partial differential equations. Applications will be drawn from science, engineering, and mathematics. Topics include the numerical solution of linear partial differential equations and the related linear systems of equations. Prerequisite: MATH 7363B with a letter grade of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363F. Functional Analysis II.**

This course will involve the analysis of infinite dimensional vector spaces including spaces of functions, measures, and distributions. Topics include Fourier transforms, theory of Banach spaces, and operator theory. Prerequisite: MATH 7363C with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366A. Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors).**

This course examines how to develop and teach post-secondary students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisites: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366B. Teaching K-12 Students (Elementary, Middle School, and High School).**

This course examines how to develop and teach K-12 students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366C. Teaching Teachers (In-Service; Pre-Service).**

This course examines how to prepare teachers of mathematics. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366D. Teaching Specialized Content.**

This course will be an in-depth study of a specialized content area in mathematics with an emphasis on teaching. The specific content area will vary by instructor. Examples include Euclidean Simplex Geometry and Discrete Probability Spaces with Implications for Public School Curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366E. Developmental Mathematics Curriculum.**

This course surveys the research, development, and evaluation of the scope and sequence of developmental mathematics curriculum. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366F. Research in Undergraduate Mathematics Education I.**

Students will develop the requisite knowledge to become a good consumer of Research in Undergraduate Mathematics Education (RUME) research. The course will cover the theoretical underpinnings of current and historic RUME research. Students will develop the knowledge to understand relevant theoretical stances and the role they play in research. Prerequisite: Math 7306 or permission from the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366G. Research in Undergraduate Mathematics Education II.**

In this course, students will develop necessary knowledge to design/conduct RUME research via a topic-driven look at current RUME research. Core topics include proof, analysis/calculus, abstract algebra, linear algebra, and differential equations. Students will develop a depth of knowledge related to these topics and engage in research design and development. Prerequisite: MATH7306 and MATH7366F.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7367B. ADV GROUP THEORY.**

This course covers topics including properties of solvable, p-solvable and nilpotent groups, group actions, transfer theorems, simple groups and composition series, the generalized Fitting subgroup, automorphism groups, classical groups and linear representations of groups. Prerequisite: MATH 7307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369C. Low-dimensional topology.**

This course is an introduction to low-dimensional topology. Topics include surfaces, 3-manifolds, knots, and 4-manifolds. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369D. Characteristic Classes.**

This course is an introduction to vector bundles and characteristic classes. Topics covered include Stiefel-Whitney classes, Chern classes, Euler class, Pontrjagin classes, and their computation. Additional topics may include manifold immersion problems. Prerequisite: MATH 7317 and MATH 7319 both with grades of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369E. Differential Geometry.**

This course is an introduction to modern tools of differential geometry. Topics covered include manifolds, Riemannian metrics, connections, covariant derivatives, geodesics, curvatures, extrinsic and intrinsic computations. Other possible topics include hyperbolic geometry, Lie groups, Chern-Weil theory, surfaces of prescribed mean curvature, the Gauss-Bonnet theorem, and the Cartan-Hadamard theorem. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7371A. Advanced Graph Theory.**

Topics in this course include Turan's problems, Ramsey theory, random graph theory, extremal graph theory, algebraic graph theory, domination of graphs, distance problems, and applications. Prerequisite: MATH 7321.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371B. Advanced Combinatorics.**

Topics in this course include Block designs, Latin squares, combinatorial optimization problems, coding theory, matroids, difference sets, and finite geometry. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371C. Combinatorial Number Theory.**

A study of fundamental techniques in combinatorial number theory. Topics will include Waring's problem, additive number theory, and probabilistic methods in number theory. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371D. Discrete Optimization.**

A study of some fundamental techniques in discrete optimization. Topics include discrete optimization, linear programming, integer programming, integer nonlinear programming, dynamic programming, location problem, scheduling problem, transportation problem, postman problem, traveling salesman problem, matroids, and NP-completeness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371E. Algorithms and Complexity.**

A study of some fundamental concepts of computability and complexity. Topics include polynomially bounded problems, NP-complete problems, exponentially hard problems, undecidable problems, and reducibility. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371F. Probabilistic Methods in Discrete Mathematics.**

A study of some fundamental probabilistic techniques used to solve problems in graph theory, combinatorics, combinatorial number theory, combinatorial geometry, and algorithm. Topics include linearity of expectation, alterations, second moment, local lemma, correlation inequalities, martingales, Poisson paradigm, and pseudo-randomness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371G. Applied Discrete Mathematics.**

This course introduces fundamental concepts in logic, Boolean algebra, and binomial coefficients; and applications in different fields such as complexity of algorithms and network theory. Prerequisites: MATH 2472 and MATH 4307, all with a grade of "C" or better, or with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371H. Combinatorial Networks.**

Combinatorial Networks is an area of study of certain types of networks using combinatorial methods extensively. This course introduces fundamental basics as well as the latest development in this area of research. Prerequisite: MATH 5307/7307 with a grade of "C" or higher.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7373B. Partial Differential Equations I.**

This course covers the theory and application of partial differential equations, typical equations of mathematical physics, Cauchy problem for equations of the first order, classification of second-order equations, Cauchy problem for second-order hyperbolic equations, Duhamel's principle, potential theory and elliptic equations, maximum principle, and parabolic equations. Prerequisite: MATH 3323, 3373 and 3380 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373C. Partial Differential Equations II.**

This course covers the existence and uniqueness theory for boundary value problems of partial differential equations (PDE) including the topics linear evolution equations, variational techniques, non-variational techniques, Hamilton-Jacobi equations, conservation laws. Prerequisite: MATH 7373B with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373G. Spectral Methods.**

This course covers the essentials of spectral collocation methods with an emphasis on numerically implementing algorithms. The problems studied will include ordinary and partial differential equations connected with fluid mechanics, quantum mechanics, waves, and other fields. The techniques used will include both Fourier and Chebychev methods. Prerequisite: MATH 7363E with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375C. Time Series Analysis.**

A study of the theory of time-dependent data. The analysis includes modeling, estimation, and testing; alternating between the time domain; using autoregressive and moving average models and the frequency domain; and using spectral analysis. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375D. Advanced linear Modeling.**

The course provides an extension of regression methodology to more general settings where standard assumptions for ordinary least squares are violated. Topics include generalized least squares, robust regression, bootstrap, regression in the presence of autocorrelated errors, generalized linear models, and logistic and Poisson regression. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375E. Computational Statistics.**

This course focuses on commonly used sampling and optimization algorithms in statistics. Topics include accept-reject method, importance sampling, Markov Chain Monte Carlo algorithms, Fisher scoring algorithm, expectation-maximization algorithm, and minorization-maximization algorithm. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375F. Multivariate Data Analysis.**

This course focuses on statistical methodologies based on multivariate analysis. Topics include multivariate normal distribution, tests of hypothesis on means, multivariate analysis of variance, discriminant analysis, principal component analysis, factor analysis and canonical correlation analysis. Prerequisite: MATH 5305 and (MATH 3376 or MATH 3377) with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375G. Bayesian Methods.**

This course focuses on Bayesian statistical analysis and associated theories. Topics include one-parameter and multi-parameter Bayesian models, choices of priors, formulation of regression models in the Bayesian framework, and related data analysis. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375I. Advanced Statistical Learning.**

This course covers the theoretical foundations in statistical learning and deep learning. Topics include the framework of empirical risk minimization, metric entropy, Vapnik-Chervonenkis dimension, Rademacher and Gaussian complexity, symmetrization and chaining techniques, contraction principle, uniform law of large numbers, sample complexity, and neural networks. Prerequisite: MATH 7337 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378A. Problem Solving, Reasoning, and Proof.**

A study of the fundamental concepts of problem solving, logic, set theory, and mathematical proof and applications of these concepts in mathematics curriculum for grades P-20. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378B. Connecting and Communicating Math.**

This course examines one of the basic principles involved in mathematics education: Connecting and Communicating Mathematics. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378C. Representing Fundamental Math Ideas (Function, Data Analysis, and Enumeration).**

This course examines the basic principles involved in mathematics education. The process of representing fundamental mathematical ideas will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378D. Math Technologies.**

This course examines the basic principles involved in mathematics education: Technology. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378E. Developmental Mathematics Perspectives.**

This course examines developmental mathematics-specific strands including technological course support and placement tools/decisions. Issues related to the first mathematics core course required of undergraduates will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter



**MATH 7378F. Research on Mathematical Problem Solving in Secondary Schools.**

In this course a careful study is made of elementary techniques for problem solving in a variety of domains, including algebra, number theory, combinatorics, geometry, and logic puzzles. Students will learn these techniques by actually working on a collection of problems in each of these areas. Students will read and examine research about various aspects of problem solving and research in math education that includes both teacher training and student learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378G. Discourse Processes, Traditions, and Analysis in Mathematics Education.**

Discourse and discourse analysis have been used to answer research questions across disciplines throughout the humanities and social sciences. This course will focus on theory and methods for the analysis of discourse in mathematical settings. We will learn how different approaches to discourse are used to understand mathematics learning. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378H. Equity in Mathematics Education.**

Equity in Mathematics Education is a course examining research on equity issues in mathematics education. These equity issues will range from race, culture, class, and gender as they relate to the teaching, learning, and schooling of mathematics education. We will look at how equity is framed within the field of mathematics education, what has been addressed, and what has not been conceptualized. The course will help students understand the literature in the field, critique the extant research literature, design research, and consider important facets of teaching for various student groups. Prerequisite: MATH 7306 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7385. Independent Study in Mathematics.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of mathematics. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7386. Independent Study in Mathematics Education.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of Mathematics Education. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7389. Internship.**

In this course, students will work under the supervision of a faculty member to gain practical knowledge in their field. Student experience can come from industry, government agencies, or other sources but must directly apply to furthering knowledge of applications of mathematics or mathematics education.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7396. Mathematics Education Research Seminar.**

Collaborative research projects with faculty through identifying an educational issue, reviewing literature, creating a research question, designing a methodology, analyzing data, drawing conclusions, implications, and creating a draft of a publishable paper. Prerequisite: MATH 7356, and ED 7352 or MATH 7346, all with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7399A. Dissertation.**

This course represents a Mathematics or Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MATH 7599A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7699A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7999A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Computer Science (CS)

**CS 7100. Graduate Computer Science Internship.**

This course provides advanced training supervised by computer scientists in internship programs approved by the department.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7199. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7299. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7300. Introduction to Research in Computer Science.**

This credit/no credit course is designed to develop research and communication skills for Ph.D. students. Topics covered include research processes, research methods, ethics, conducting literature review, critiquing papers, preparing research proposals, faculty research presentations, and the software tools and platforms available for conducting applied computing research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 7308. Computer Science Studies.**

This course provides foundations in computer science for students entering the doctoral program who may need certain background or leveling coursework. The course does not earn graduate degree credit. It is repeatable with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CS 7309. Professional Development of Doctoral Assistants.**

This course is designed to equip the doctoral students with skills and an understanding of the proper procedures to be effective doctoral instructional and teaching assistants. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 7311. Data-Driven Computational Methods and Infrastructure.**

This course covers computational and statistical methods for using large-scale data sets ('big data') to answer scientific and business questions. It focuses on framing research questions, understanding how data can answer them, and using modern software tools for scalable data storage, processing, and analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7312. Advanced Data Mining.**

This course provides in-depth coverage of advanced data mining and information retrieval principles and techniques. It also offers extensive training and practice opportunities in frontier research directions.

Prerequisite: CS 5316 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7313. Advanced Machine Learning and Pattern Recognition.**

This course provides students advanced theoretical and practical skills to learn, design, implement, and apply machine learning and pattern recognition approaches. The students will gain analytical and problem-solving skills by studying machine learning and pattern recognition techniques and applying them to solve real problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7314. Bioinformatics.**

This course introduces advanced algorithms for data-intensive computational analysis targeting biological applications such as drug response prediction, gene network analysis, and protein/RNA structure prediction. Main techniques include greedy search, linear regression, clustering, network analysis, expectation maximization, and Hidden Markov models, which are widely applicable beyond biological data. Prerequisite: CS 5329 or CS 5369L either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7315. Network Science.**

This course provides in-depth coverage of the fundamentals and research frontiers of network science. The main topics include mathematical models and computational algorithms for analyzing the structure of complex networks and predicting dynamic processes on networks. Other topics include machine learning and data mining on graphs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7321. Human Computer Interaction: Concepts, Models, and Methodologies.**

This course provides an introduction to Human Computer Interaction (HCI) research, methods, and topics, including fundamentals of user interface and experimental design, usability, evaluation methods, software toolkits for interactive applications, graphics, visualization, mobile design, collaborative and social computing, biological factors, and human computation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7322. Human Factors and Ergonomics.**

This course combines knowledge in the fields of intelligent user interfaces, human factors, ergonomics, and environmental psychology. Topics include HCI principles, human information processing, anthropometry, principles of eye tracking and their effects on human factors research, as well as operations of biometrics systems and human factors influencing those systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7323. Image Processing and Computer Vision.**

Image Processing and Computer Vision are research areas with a variety of modern applications ranging from the analysis of images and videos to real-time processing of image streams coming from self-driving vehicles and robotic agents. This course will prepare students with advanced state of the art knowledge in those fields. Prerequisite: CS 5329 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7324. HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality.**

This course introduces advanced methods for enhancing user experience and presents effective HCI models via computer graphics, imaging, animation, simulation, visualization, augmented reality, and immersive virtual reality. Additionally, the course presents related science and engineering foundations as well as graphic design, cognitive science, and perceptual psychology theories and models. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7331. High-Performance Computing.**

This course covers the advanced design, analysis, and optimization of high-performance applications. Topics include high-performance computer architectures, including accelerators and systems-on-chip, performance modeling and benchmarking, data and control dependence analysis, data locality estimation, memory hierarchy management, techniques for exposing parallelism, and code transformations. Different workloads are studied. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7332. Advanced Parallel Computing.**

This course covers advanced design of parallel algorithms, performance modeling, parallel hardware, language support for parallel programming, and programming models for shared- and distributed-memory systems ranging from handheld multicore devices to large-scale clusters and accelerators. The students will gain applied knowledge and skills by developing parallel software for multiple platforms. Prerequisite: CS 5351 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7333. Advanced Green Computing.**

This course covers hardware and software techniques to improve the energy-efficiency of computing systems. Topics include best practices in building energy-efficient data centers and mobile devices, current trends in reducing the energy consumption of processors and storage components, energy-aware resource management, software optimizations, and hands-on experience on power-measurable systems. Prerequisite: CS 5351 and CS 5369Y both with grades of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7334. Scalable Systems for Supercomputing.**

This course will teach basic aspects of building a scalable high performance computing (HPC) system. Specifically, it will focus on the design principles for scaling parallel communication and I/O operations for accessing HPC storage using a message-passing programming model. The course will use two large-scale systems—checkpointing for resilience and a parallel file system for storage as use cases to demonstrate how these principles are used in practice. Students will develop components of a scalable system and use software tools to measure and analyze their performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7341. Cyberspace Security.**

This course presents recent advances in methodologies, models, systems and applications of cyberspace security research. Topics include in-depth coverage of the state-of-the-art security technologies and research issues on information security, software security, network security, secure system design, secure programming, applied cryptography, vulnerability, and threats. Prerequisite: CS 5378 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7342. Advanced Computer Networking.**

This course covers recent research ideas, methodologies and approaches in networking research. The course focuses on the development of protocols and the analysis of related algorithms. Topics include new network architectures, cloud computing, software defined networking, wireless systems, social networks, and security and privacy. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7343. Mobile Networks and Computing.**

This course provides an in-depth study of wireless mobile communication networks, wireless network measurements and modeling, channel assignments and coverage, wireless network protocols, mobile data management, wireless security, and various wireless network applications including ad hoc, sensor networks, delay-tolerant networks, and mobile social networks. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7351. Advanced Software Engineering.**

Software engineering is the application of scientific methods to software development and maintenance. This course provides an in-depth study of advanced concepts and techniques of automatic software generation and analysis. Topics include software process programming, symbolic execution, model checking, property generation and checking, and runtime verification of complex software systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7352. Real-time Systems.**

This course covers issues related to the design and analysis of systems with real-time constraints. The problem of ensuring such constraints is ultimately a scheduling problem, so much attention is devoted to such problems. This course aims to provide a solid foundation for conducting research in real-time systems or related areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7387. Research in Computer Science.**

This course covers current research topics in computer science under the direction of a supervising professor. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7389A. Service Computing.**

This course introduces concepts and principles for enabling the development of software as a service based on Service-Oriented Architecture (SOA), methodology of SOA systems development, the main technologies used in achieving SOA, and state of the art techniques and advances in emerging cloud and edge (Internet of Things) services. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389B. Advanced Software Evolution.**

This topics course provides an in-depth study of state-of-the-art software evolution techniques and tools based on the current research literature. Software evolution has become increasingly important in software development. Software systems often evolve to fix defects, to improve performance, or to adapt to various other requirements. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389F. Secure Cyber-Physical Systems: Cryptography and Machine Learning.**

This course is designed to introduce students to the fundamentals of cryptography and machine learning and how they can be used to ensure security and privacy in cyber-physical systems (CPS). Topics will include an overview of cyber-physical systems, cryptographic techniques, machine learning algorithms, and security threats and attacks on CPS. The course will also cover privacy-preserving machine learning techniques and design principles for secure CPS. Students who successfully complete this course will be well-versed in cryptography and machine learning approaches for cybersecurity in CPS and be able to use these techniques to address practical real-world issues. Prerequisite: CS 3354 and CS 3358 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389G. Human-Centered Data Science.**

This course is to study the process of deriving insights from data in order to make optimal decisions. Human-Centered Data Science addresses various data science problems with attention to improve the quality of decisions by incorporating human experts in the learning process, e.g., interactive Machine Learning and eXplainable Artificial Intelligence. Prerequisite: CS 3358 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389H. Human-Centric Deep Learning.**

This course provides an in-depth exploration of deep learning, emphasizing multi-layer neural networks and their applications. Students will explore core topics like convolutional, recurrent, and graph neural networks, along with optimization algorithms and generative models. The curriculum uniquely integrates multimedia processing, Human-Computer Interaction (HCI), and "human in the loop" approaches, demonstrating how deep learning can be applied to image, video, and audio analysis, as well as to create user-centric and interactive systems. Practical aspects, including data preprocessing, model evaluation, and framework implementation, will also be covered, equipping students with the skills to apply deep learning techniques in a human-centered context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389J. Advanced Natural Language Processing.**

This course is an interdisciplinary field that combines computational linguistics with statistical and machine learning techniques to enable the computer to understand, interpret, generate, and learn natural language. Natural Language Processing (NLP) introduces key concepts, tasks, and techniques, including recent advancements such as neural networks and large language models. It covers applications such as question answering, automatic speech recognition, and machine translation. Students will gain an understanding of fundamental concepts, advanced algorithms, and practical applications, and will also learn methods for acquiring and annotating text data, and representing linguistic structures. Familiarity with Linear Algebra and Python Programming is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7399. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7599. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7699. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**CS 7999. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## **Materials Science, Engineering, and Commercialization (MSEC)**

**MSEC 7100. Doctoral Assistant Development.**

The course is designed to equip the doctoral students with skills and an understanding of proper procedures to be effective teaching assistants. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MSEC 7101. Commercialization Forum.**

The course is a seminar series exposing students to commercialization issues. The series includes as speakers: successful entrepreneurs, businessmen, research directors, production and process control engineers, intellectual property and licensing experts, management consultants, and technology transfer specialists. Repeatable four times for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MSEC 7102. MSEC Seminar.**

This course is an introduction to current materials science and engineering topics with presentations by subject matter experts as the basis for weekly discussions. Students participate by asking questions and actively engaging the seminar speaker. Students are also expected to give public presentations based upon their own field of research at the STAR (Student Technology and Research) Showcase. Repeatable four times for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

### **MSEC 7103. Research in Materials Science, Engineering, and Commercialization.**

This research course is for students in Materials Science, Engineering, and Commercialization who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor. Repeatable (with MSEC 7203 & MSEC 7303 hours) for doctoral credit up to 6 hours.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7199. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

### **MSEC 7203. Research in Materials Science, Engineering, and Commercialization.**

This research course is for students in Materials Science, Engineering, and Commercialization who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor. Repeatable (with MSEC 7103 and MSEC 7303 hours) for doctoral credit up to 6 hours.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7299. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7301. Practical Skills in Commercialization and Entrepreneurship.**

This course is the first of a two-course series to impart business and commercialization skills by producing a business plan. Key areas covered include intellectual property law, technology transfer and licensing strategies, business plan development, business finance strategies, management structures, project management methods, statistical quality and process control.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### **MSEC 7302. Leadership Skills in Commercialization and Entrepreneurship.**

Leadership Skills in Commercialization and Entrepreneurship (3-0). This course is the second of a two-course series to impart business and commercialization skills by producing a business plan. Key areas covered include intellectual property law, technology transfer and licensing strategies, business plan development, business finance strategies, management structures, project management methods, statistical quality and process control. Prerequisite: MSEC 7301 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7303. Research in Materials Science, Engineering, and Commercialization.**

This research course is for students in Materials Science, Engineering, and Commercialization who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor. Repeatable (with MSEC 7103 & MSEC 7203 hours) for doctoral credit up to 6 hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7304. Collaborative Research/Commercialization Experience.**

This course allows Ph.D. level graduate students to initiate, conduct and participate in a collaborative research or commercialization experience with graduate faculty in addition to research conducted under MSEC 7103, MSEC 7303, MSEC 7199 and MSEC 7399. This course recognizes the collaborative nature of the scientific and commercialization enterprise. Repeatable for doctoral credit up to 6 hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MSEC 7310. Nanoscale Systems and Devices.**

This course is an in-depth treatment of physical phenomena in nanoscale structures, and consequences for electronic, photonic, mechanical and other types of devices. The course provides a strong background in devices with applications in nanoelectronics, biomedical systems, micro- and nanoscale manipulation, adaptive optics, and microfluidics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7311. Materials Characterization.**

This course covers skills and knowledge required for microscopy methods including transmission electron microscopy, scanning electron microscopy, scanning tunneling electron microscopy, atomic force microscopy, and confocal microscopy. It covers x-ray and neutron diffraction techniques including structure analysis, powder and glancing angle diffraction, pole figure, texture analysis, and small angle scattering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MSEC 7315. Quantum Mechanics for Materials Scientists.**

This course includes quantum-mechanical foundation for study of nanometer-scale materials, principles of quantum physics, stationary-states for one-dimensional potentials, symmetry considerations, interaction with the electromagnetic radiation, scattering, reaction rate theory, spectroscopy, chemical bonding and molecular orbital theory, solids, perturbation theory, and nuclear magnetic resonance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7320. Nanocomposites.**

Characteristics of nanoparticles utilized in nanocomposites, techniques for surface modification, methods for nanoparticle dispersion forming nanocomposites, types of nanocomposites, characteristics of nanocomposites, analytical methods for characterization of composites, and common applications will be discussed. Particular attention will be given to the science and theories explaining the unique behavior of nanocomposites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7325. Principles of Technical Project Management.**

This course includes planning, budgeting, identification of risks and risk mitigation approaches, resource allocation, review of milestones and schedules, and evaluating projects to measure success. Responsibilities of project managers in the areas of problem solving, motivating and managing creative technical staff in project and matrix organizations will be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7330. Computational Materials Science.**

Application of computational techniques to molecular and atomic modeling of materials is discussed along with quantum mechanical modeling, density functional theory approaches, forcefield based molecular modeling, mesoscale modeling, energy minimization, molecular dynamics, vibrational spectra, crystal structures, phase equilibria, physical property prediction, and electronic structure related to magnetic and electrical properties. Prerequisite: CHEM 3340 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7340. Biomaterials and Biosensors.**

The course covers the growing field of biomaterials science including materials for prosthetics and implants, mimetic materials, biosensors, diagnostic devices, and drug delivery systems. Particular attention will be given to nanomaterials for diagnosis and treatment of diseases including targeted cancer treatments, drug delivery systems, and advanced imaging methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7350. Frontiers of Nanoelectronics.**

This course provides an introduction to the operating principles of nanoscale electronic and optical devices. The emphasis is on how leading edge nano-fabrication technology takes advantage of quantum mechanics of reduced sizes and dimensions. Specific examples of devices based on quantum wells, wires, dots and molecular electronics are given.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7355. Fluid Flow in Porous Media.**

In this course, the fundamental theory of transport and fluid flow in heterogeneous porous media will be presented. First, the equations that govern transport and fluid flow processes will be derived. Both analytical and numerical methods will be used to solve these equations in order to characterize and predict flow fields in porous media. These skills will then be applied to practical problems that involve porous media such as soils, rocks, biological tissues, concrete, etc. The knowledge gained from studies of fluid flow in natural porous materials will be employed to design/optimize systems with engineered porous media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7360. Nanomaterials Processing.**

The course will cover various aspects of materials processing related to semiconductor devices. Topics covered include properties of electronic materials, thin film deposition, etching, lithography, and related device physics with an emphasis on the nanoscale. Fabrication and characterization techniques will be covered, including clean room usage. Prerequisite: MSEC 7401 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7370. Advanced Polymer Science.**

Advanced topics in polymer science are discussed with a focus on high performance polymers such as high impact, conducting, shape memory, high temperature and the underlying phenomena that provide these unusual properties, and advanced polymer topic areas such as flame retardancy, barrier properties, dielectric properties, rheology, and fiber reinforced composites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7395A. Microwave & Power Device Physics and Materials.**

This course will develop an understanding of basic microwave and power device physics and technology and the advanced materials that are used in today's cutting-edge research & development. The primary focus will be wide bandgap semiconductor materials and devices, and their performance metric versus the industry standard Si-based devices. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395B. Thin Film Photovoltaic Devices.**

This course is a survey of the Materials Science of photovoltaic devices with emphasis on device physics including the photovoltaic effect, photon absorption, electrons and holes, generation and recombination, the pn-junction, charge separation, monocrystalline solar cells, thin film solar cells, III-V solar cells, and losses. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395C. Materials for Sustainable Energy.**

This course introduces principles and applications of sustainable energy materials used for energy generation, conversion, and storage. Topics of study include principles (thermodynamics, kinetics, transport phenomena, equivalent circuits, catalysis, and electrochemistry) and selection and performance criteria important for applications including batteries, supercapacitors, fuel cells, electrolyzers, dielectrics, biomass, and piezoelectrics. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395D. Polymer Characterization and Processing.**

This course will cover the concepts critical to the characterization and processing of organic polymers. Topics critical to characterization will include molecular weight determination, thermo/mechanical characterization, X-ray scattering, and polymer spectroscopy. Processing topics will include polymer rheology, principles of polymer processing, solution processing, and extrusion. Prerequisite: CHEM 4351 or CHEM 5351 or MSEC 7370 any with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395E. Industrial Ecology and Sustainability Engineering.**

This course covers the basic principles of life cycle analysis (LCA) of engineered products, materials, and processes. Topics covered include: biological ecology, industrial ecology, resource depletion, product design, process design, material selection, energy efficiency, product delivery, use, end of life and LCA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395F. Catalysis in Materials Science.**

This course introduces principles and applications of catalysis in materials science. The primary topics of study will include catalysis as a means of synthesizing materials and materials as catalysis. Subtopics will focus on specific catalysts (Ziegler-Natta, ROMP, and cross-coupling catalysts) and specific catalytic processes (hydrogenation, photoredox, and electrocatalysis).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395G. Applied Plasma Physics.**

Applied plasma physics focusing on the broad range of technical plasma devices, and to analyze and describe the main plasma physical characteristics and principles of operation. Emphasis will be on physical insight, application, and problem solving. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395H. Environmental Chemistry.**

Advanced study in environmental chemistry, with an emphasis on aquatic resources and materials science and engineering. Principles of geochemistry and atmospheric chemistry will be covered as they relate to environmental pollution monitoring and control. Principles and applications of green chemistry will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395I. Structure and Properties of Alloys.**

This course is an advanced exploration of the structure and properties of engineering alloys. Strengthening mechanisms of alloys are explored with specific applications to the alloys studied. The processing, properties, and structure of ferrous and nonferrous alloys are explored including new and emerging alloys. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395J. Advanced Concrete Materials and Durability.**

This course delves into a comprehensive coverage of Portland cement concrete materials as well as resilient and sustainable materials used for building and transportation infrastructure. Topics include cement and aggregate properties, chemical and mineral admixtures, mixture proportioning, concrete microstructure, concrete durability, long-term performance, durability prediction and modeling, durability of alternative cement, multi-scale assessment, and dimensional stability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395K. Electrical and Magnetic Characterization Methods.**

This course introduces electric and magnetic characterization methods important to metals, magnetic and semiconductor materials and devices. Various measurement techniques and methods will be reviewed. Students will learn to work with characterization tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395L. Advanced Solid State Physics.**

This course reviews models of a solid and energy band theory. Additional topics may include interaction of electromagnetic waves with solids, lattice vibrations and phonons, many body effects in solids, device physics, quantum phenomena, carrier transport properties, current device configurations, and materials interface problems. Prerequisite: MSEC 7401 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395M. Semiconductor Devices and Processing.**

This course addresses the basics of semiconductor devices, silicon and compound semiconductor material fabrication, photolithography, etching, control of dopant profiles for the formation of shallow junctions needed for nanoscale devices, ion implantation and microstructure engineering, different types of doping phenomena, the carrier action and charge transport properties, defect microstructures, low-resistivity Ohmic contacts, and different fabrication concepts of conventional and emerging micro-/nano-electronic devices. In addition, students will be involved in laboratory projects and seminar presentations. Prerequisite: MSEC 7401 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395N. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, etc. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course. Students will be asked to solve an infrastructure material related problem using advanced analytical and simulation tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395O. Modern Concepts in Materials Science.**

This course provides an overview of the modern concepts and principles that are used to describe and predict the physical properties of materials. An emphasis will be placed on developing and applying fundamental materials science concepts: atoms and atomic bonding, fundamentals of crystallography, elementary diffraction by solid-state materials, defects, solid solution and phase equilibrium. Particular attention will be given to the science and theories explaining the unique behavior of different classes of materials, i.e. ceramics, metals, polymers, electronic materials and composites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7399. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7401. Fundamental Materials Science and Engineering.**

Course covers fundamentals of chemical kinetics, physical properties, and continuum mechanics. Topics include electronic and atomic structure, structure of crystalline materials, imperfections, thermodynamic and kinetic principles and equations for closed and open systems, statistical models, phase diagrams, diffusion, phase transformations, conservation laws, and kinematics.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7402. Advanced Materials Science and Engineering Concepts.**

Fundamentals of quantum mechanics, physics of solid state, and physical electronics and photonics for advanced materials will be discussed. Topics will include quantum basis for properties of solids, lattice vibration, free electron model for magnetism, semiconductors, nanostructures and mesoscopic phenomena, superconductivity, and recent advances in new types of materials. Prerequisite: MSEC 7401 with a grade of "C" or better.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7599. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7699. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7999. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Biology (BIO)****BIO 7100. Professional Development.**

This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**BIO 7102. Seminar in Aquatic Resources.**

This course is an interactive discussion of timely issues and problems, designed to introduce students to the range of scientific, socioeconomic and policy issues likely to be encountered within the field of aquatic resources. All students seeking a doctoral degree in Aquatic Resources must enroll in BIO 7102 at least twice.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 7103A. Ecology and Society.**

Interactive discussion on relationships between society and the life-supporting ecosystems on which humans depend. Topics include roles of natural systems in social systems; effects of social, economic and political institutions on ecological systems and services; and the means by which humans develop and sustain desired ecological and social states.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103B. Aquaculture.**

The course comprises a survey of aquaculture production throughout the world. It also examines and discusses the impacts of aquaculture on nutrition, fisheries and the economy.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103D. Molecular Biology of the Cell.**

Interactive discussion of current literature on molecular biology of the cell. The course is designed to discuss concepts and their applications and methodology associated with the structure and function of the cell at cellular and molecular level.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter



**BIO 7103E. Contemporary Problems in Ecology.**

This course is an interactive discussion of the theoretical foundations and empirical basis for controversial topics in ecology, designed to develop critical thinking skills, and the ability to evaluate and integrate the biological, chemical and physical factors that affect the structure, functions, and interactions characterizing communities and ecosystems.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103F. Molecular Genetics of Plant Development.**

The study of plant development is rapidly changing as plant genome projects discover a multitude of new genes, and their expression and interaction patterns are understood. This course is designed to discuss concepts in plant development, and developmental processes as pathways of gene regulatory activities.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103G. Ecohydrology.**

A review of the concept of ecohydrology, its scientific foundation, and its ecological-hydrological linkages. Current topics in ecohydrology in the literature will be discussed, including manipulation of biota and hydrology interactions in a landscape, and the possibility of augmenting the resilience of ecosystems to anthropogenic changes.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103H. Integrated Waterbird Management.**

This course focuses on the ecology and management of waterbirds, with an emphasis on the inland and coastal waterbirds of Texas. The basic ecology of waterbirds, waterbird management techniques, and waterbird habitat management will be discussed.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103I. Avian Ecology and Evolution.**

This course is an interactive discussion of avian ecology and evolution, providing students with a critical examination of theories, hypotheses, and lab and field-based data that support or refute their hypotheses. This course also discusses peer-reviewed literature that challenges some paradigms in avian ecology and evolution.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7104. Marine Pollution.**

In this course, students will read and discuss the scientific literature on the sources, bioaccumulation, trophic transfer, and health effects of contaminants in the marine environment. Papers will address a variety of marine life including plankton, crustaceans, mollusks, fishes, marine mammals, turtles, and birds. Contaminants to be reviewed include trace elements, PCBs, oil, pesticides, radionuclides, plastics, pharmaceuticals, illegal drugs, and personal care products.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7105. Environmental Issues through Documentaries.**

In this course, students will examine how environmental issues are addressed in documentaries. Students will learn how to critically evaluate documentaries for scientific content, imagery, biases, and ease of understanding. Topics to be examined include overfishing, the wildlife trade, habitat degradation, pollution, energy resources, climate change, sustainability, and conservation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7114. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7120. Population Biology Seminar.**

This course facilitates exploration of current topics in population and conservation biology through reading and discussion of contemporary primary and secondary literature.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7199A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7214. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7299A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7300. Communicating Science.**

This course explores how to successfully disseminate science through visualizations, oral presentations, and written works to multiple audiences. Special emphasis will be placed on communicating with the general public, media, granting agencies, and science peers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7301. College Science Teaching.**

This course is designed for graduate students in the sciences who are interested in improving their science teaching and/or are interested in pursuing careers in academia. This course focuses on the central question, "How do college students best learn science, and thus how do we best teach them?"

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7302. Problems in Aquatic Resources.**

Individual study on specific state, national, or international aquatic resources issues, under direct supervision of a doctoral or associate faculty member. Students may not enroll in BIO 7302 more than twice for doctoral credit without the approval of the Graduate Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7303. Research.**

Research course for students who have not yet passed their Candidacy Exam, typically under direction of research-dissertation supervisor. Pre-candidacy students must enroll in course every semester until admission to Candidacy, although it may not be taken more than three times for doctoral credit without the approval of Graduate Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7308. History of Vegetation and Climate.**

An overview of past vegetation and its relationship to changing climate. Topics include principles of paleovegetation analysis, paleoclimatology, the rise of flowering plants, vegetation during the age of dinosaurs, the rise of the grasslands, and the Quaternary Ice Age. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7310. Global Aquatic Resources.**

Introduction to global, national, and regional aquatic resource issues, including scientific, environmental policy and socioeconomic components and perspectives. Water quantity and quality issues and their root causes in different regions of the world are examined, with an emphasis on case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7311. Ecology of Temporary Waters.**

The course explores the diversity of temporary bodies of water and of the species that rely on them, including their special adaptations, population and community dynamics, the ecological role of temporary waters, and how these systems are impacted by humans. Background coursework or independent study in ecology is recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7314. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7326. Immunobiology.**

This lecture-based course will cover the mechanisms and biology of the innate and adaptive immune system. Emphasis will include relationship to cancer, transplantation, hypersensitivity (allergy), and disease. Students will evaluate current research in immunology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7327. Ecological Immunology.**

This course explores the roles of immunity in natural ecosystems, focusing on central concepts in ecological immunology. From viruses to parasites, pathogenic threats are omnipresent. As epizootic outbreaks become more common, it is important to integrate immunological knowledge with traditional ecological perspectives. Background coursework in immunology is recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7331. Human Dimensions of Wildlife and Fisheries Conservation.**

This course will provide principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will have an opportunity to integrate human dimensions into decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7332. Introduction to R Programming for Biologists.**

This course introduces the programming language R. The course will focus on best practices in programming and the use of Base-R and RStudio. Topics include navigating the R and RStudio environment, installing packages, loading, manipulating, and visualizing data, declaring variables, writing loops, and writing functions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7333. Phylogenetic Comparative Methods.**

This course introduces students to modern phylogenetic comparative methods and teaches how to perform them. Topics include constructing phylogenies, dating phylogenies, finding and using previously published phylogenetic datasets, phylogenetic data visualization, and a variety of methods to test ecological and evolutionary hypotheses in a phylogenetic framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7336. Evolutionary Ecology.**

This course will use an evolutionary perspective to explore questions provided by natural selection and sexual selection through assessment of current theory and research related to topics such as competition, coevolution, and phenotypic plasticity. Students will achieve comprehension and familiarity with the field through discussions and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7342. Virology.**

This course examines the structure, multiplication and genetics of bacterial, plant, and animal viruses as well as the role of viruses in human and plant disease. Students are expected to become familiar with the research literature in virology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7346. Conservation Biology.**

Examination of the alteration of habitats and associated biological changes threatening the continued existence of species and basic ecosystems. Topics include conservation ethics, working paradigms, levels and loss of global biodiversity, conservation at population and ecosystem levels, restoration ecology, endangered species biology and conservation laws. Recent Advances are stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7353. Biogeography.**

Examines historical and ecological explanations of the geographic distribution of organisms including the role of geologic, climatic, and biologic changes. Emphasizes the historical and philosophical development of the science and modern methods of analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7354. Applied Analyses of Populations.**

In this course students will learn and apply a variety of statistical techniques for analyzing populations. They will build code to conduct and compare statistical analyses as they apply to real population data. Students will use real-world data sets to generate objectives and test hypotheses including conducting all data visualization and validations, performing models, selecting appropriate models, and estimating latent variables and their predictors. Analyses include assessing the effects of environmental attributes on occupancy, relative abundance, abundance, space (habitat) use, home range size, local colonization, local extinction, survival, and recruitment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7355. Plant-Water Relations.**

Examination of the physiology and ecology of water use in higher plants, including the uptake, utilization, and movement of water, transpiration and adaptation to variable water availability including drought, and the ecological role of water in structuring plant communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7360A. Industry and Sustainable Aquatic Resources.**

Examination of industrial water needs and uses, the types and quantities of water pollutants produced by different industries, problems faced by industry regarding process water for different manufacturing activities, and the possibilities for industry to contribute to the goal of sustainable aquatic resources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360B. Environmental Linkages and Sustainable Aquatic Resources.**

Introduction to the environmental relationships between humans and other living beings and the ecological systems in which they exist. Emphasis will be on the potential for individual environmental problems to have serious impacts on other environmental components, as well as the nature of these impacts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360C. Role of State and Federal Courts in Protection and Maintenance of Aquatic Resources.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360D. Evolutionary Ecology.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360E. Advances in Water Quality Investigations.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360F. Approaches to Aquatic Resource Modeling.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360G. Molecular Techniques in Microbial Ecology.**

Lectures on molecular techniques used to analyze structure and function of uncultured microbial communities in the environment with selected examples of applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360H. Parasites and Diseases of Fishes and Other Aquatic Animals.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics

**Grade Mode:** Standard Letter

**BIO 7360I. Bayesian Statistics for Biology.**

This course examines the theory and mathematical foundations of Bayesian statistics and provides instruction and experience conducting Bayesian analyses using computer-based procedures. The course emphasizes practical applications for Bayesian statistical procedures for problems in biological sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360K. Evolution.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360L. Landscape and Biogeography of Texas.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360P. Regulation of Plant Growth and Development.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360Q. Spatial Ecology of Animals.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360R. Community and Ecosystem Ecology.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360S. Soil Biology.**

An introduction to the biology of soil systems, including the roles of biota in forming and maintaining soils, and the interactions between biotic and abiotic components in soils.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360T. Karst Hydrogeology and Geomorphology.**

An introduction to, and advanced understanding of, karst hydrogeology, geology, and geomorphology, with emphasis on field and theoretical applications of this information to the study of karst systems, and recognition and understanding of karst landforms at the surface and their relationships with subsurface processes. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360U. Sustainability in a Changing World.**

Understanding the ecological-social interface, including policies, product development and actions towards sustainability, with emphasis on integrating and implementing theories and methods across disciplines, and improving the knowledge and experience base for public policy and decision-making regarding human-environment linkages within the context of sustainable development. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360V. Techniques in Aquatic Biology.**

The course will provide hands on experience with a suite of physical, chemical, and biological sampling techniques and gear used in applied river studies. Students will be exposed to the fundamentals of data quality objectives, accuracy, precision, detection limits, data visualization, exploratory analysis, univariate and multivariate statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360Y. Applied Bioinformatics.**

This course provides an introduction to scripting and other computational techniques used for visualizing and analyzing large biological datasets. Computational techniques include sequence and structural alignment, data mining, phylogenetic tree construction, and data clustering using UNIX, Python, and R. Students will gain a solid foundation in broadly applicable bioinformatics skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7361A. Discipline-Based Educational Research Methods.**

This course will expose science graduate students to educational research in a practical setting, supervised by a professor experienced in conducting discipline-based educational research, focusing primarily on qualitative methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7361C. Advanced Genomics and Bioinformatics.**

This course provides hands-on experience in processing and analyzing data produced from contemporary genomics tools for thesis students with basic bioinformatics training. Prerequisite: BIO 7360Y with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7361D. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**BIO 7399A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7402. Molecular Field Techniques.**

The application of molecular tools for identifying, quantifying, and interpreting biological diversity assessments in aquatic systems. The course focuses on micro organismal identification and vertebrate model systems.

**4 Credit Hours. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7405. Statistics and Experimental Design I.**

Introduction to inferential statistics, including exploratory and confirmatory data analysis, estimation and hypothesis testing, analysis of variance and regression, and non-parametric techniques, as applied to aquatic resource issues. Computer applications emphasized.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7406. Statistics and Experimental Design II.**

Introduction to the principles of experimental design, including randomization, replication, sample-size determination, completely randomized and randomized block design, factorial design, repeated measure design, and analysis of variance and covariance, as applied to aquatic resource issues. Computer applications emphasized.

Prerequisite: BIO 7405 with a grade of "C" or better or instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7410. Aquatic Microbial Ecology.**

Examination of microbial organisms, communities, and interactions affecting the form, structure, and functional aspects of aquatic ecosystems. Field trips may be required. Prerequisite: BIO 2400 with a grade of "D" or better or instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7412. Environmental Hydrology.**

Overview of the properties, distribution, and movement of water over and under the land surface and its relation to sustainable aquatic ecosystems, including quantitative methods to assess cumulative impacts of human activities on such systems. Field trips may be required. Knowledge of calculus recommended.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7414. Ecology of Infectious Diseases of Wildlife.**

Concepts of the ecology of infectious diseases in wildlife are studied in depth with emphasis on their application to the management and conservation of wildlife species and for the control of zoonotic diseases. Prerequisite: Instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7419. Stream Ecology.**

Study of ecological theories, concepts, and processes occurring at the population, community, and ecosystem levels of organization in running water. Laboratory includes sampling methods, descriptive and comparative studies, experiments, and critical discussion of literature. Field trips may be required.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7426. Ecology and Management of Aquatic Macrophytes.**

Examination of aquatic macrophytes and their ecology, taxonomy, distribution and management. Field trips may be required.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7427. Principles of Population Biology I.**

This course provides a foundation in theory and mathematics of basic population biology. The course is divided into modular components, including defining evolutionarily significant units, ecology of populations, genetics of populations, and evolutionary genetics. A background in genetics and general ecology is recommended.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7428. Principles of Population Biology II.**

This course provides a foundation in theory and mathematics of basic population biology. The course is divided into modular components which include: 1) Ecology of Communities, 2) Evolution of Behavior, 3) Phylogenetic Methods, and 4) Biological Diversity and Conservation Biology.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7430. Mycology.**

This course provides an introduction to the organisms in the Kingdom Fungi and to fungus-like organisms, their ecology and evolution, and their role in industry and disease. Special emphasis will be placed on morphology, culturing, and using laboratory techniques for identification.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7433. Population Genetics.**

This course examines the theoretical foundations of population genetics, including the description of population genetic structure and the forces creating it. The course emphasizes application of principles to a wide range of current problems in evolution, systematics and ecology. Molecular methods, data interpretation and computer-based data analysis are emphasized.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7434. Herpetology.**

A course treating the origin and evolution of amphibians and reptiles; their reproductive and physiological tactics; taxonomy/systematics; and population biology. While cosmopolitan in scope, emphasis will be placed on North American species and those groups inhabiting Texas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7440. Aquatic Toxicology.**

Introduction to principles for identifying and assessing the adverse effects of chemicals and other compounds and mixtures on aquatic organisms and ecosystems.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7447. Microbial Physiology.**

Prokaryotes, including bacteria and archaea, are the most diverse group of organisms on earth. Many prokaryotes live in environments which are inhospitable to other life forms. This course covers major aspects of prokaryotic physiology that permit them to be so successful.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7466. Phylogenetics.**

Study of the use of phylogenetic methodologies in aquatic research, including practical data collection, management, and analysis in the reconstruction of phylogenies. Laboratory exercises will introduce phylogenetic and DNA analysis software. Prerequisite: BIO 2450 and BIO 4369 and BIO 5466 all with grades of "C" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7468. Groundwater Resources.**

Study of the geological, physical, chemical and biological factors influencing sustainable groundwater resources, including hydrologic linkages and interactions with surface aquatic resources. Emphasis will be on the karst aquifer systems of Central Texas, and other groundwater aquifer systems of the United States.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7469. Introduction to Ecological Modeling.**

Mathematical models range from simple conceptual models to complex mechanistic models for mimicking behavior of natural systems. This course provides a broad overview of modeling objectives, techniques and assumptions, as well as the practical skills needed to conduct modeling projects. Computer applications emphasized. Prerequisite: MATH 2471 with a grade of "C" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7599A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7699A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7999A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Criminal Justice (CJ)****CJ 7199. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7299. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7301. Instructional Assistant Supervision.**

This course prepares doctoral students employed as research or teaching assistants to perform effectively in diverse instructional settings. The course provides for regular and planned opportunities for continuing evaluation of students. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CJ 7309. Proseminar.**

This course introduces students to information that is useful to their success as Ph.D. students and after graduation. Topics include the criminal justice discipline, teaching, publishing, grants and fellowships, writing dissertations, and post-doctoral employment. Emphasis is placed on identifying and coordinating opportunities for research and scholarship among faculty and students. Must have completed 12 hours of doctoral credit in Criminal Justice to enroll in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7310. Philosophy of Law, Justice, and Social Control.**

A current, thorough, and comprehensive review of the criminal justice system focused on how the system functions, and its current needs and future trends. Students submit extensive critiques and participate in panel discussions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7311. Advanced Criminological Theory.**

An overview of the major criminological paradigms is presented focusing on the causes of crime and deviant behavior. The course includes a discussion of criminological theories from a philosophy of science perspective focusing on such issues as theory construction, theoretical integration, and the formal evaluation of theory and policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7313. Race and Ethnicity in Crime and Criminal Justice.**

An exploration of how issues related to racial and ethnic minorities and criminal behaviors impact criminal justice reactions. Topics include racial disparities related to law enforcement and sentencing, and policy implications related to policing, probation, pre-sentencing and post-release issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CJ 7314. Policing.**

This course examines current problems in American policing and the role of research in their examination and solution. Official crime and victimization statistics and measure of police performance are explained, with a focus on their collection, development, limitations, and utility. Methods and issues in policing research are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7315. Corrections.**

This course examines the history, forms, and functions of correctional institutions, their programs and policies, as well as theories of punishment. Topics include the structure and functions of prisons and jails, community corrections, intermediate sanctions, reentry, supermax prisons, and the death penalty.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7320. Quantitative Research Methods.**

A course that demonstrates the practical aspects of conducting criminal justice research that uses quantitative methodologies and design. Topics include the philosophy of science; research ethics; methodological designs in establishing causation; nonexperimental/descriptive research; sampling techniques; secondary data sources and data gathering techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7321. Linear Regression for Criminal Justice Research.**

Instruction on the use of advanced linear modeling techniques in criminal justice research is addressed. After completing this course, students should be able to evaluate quantitative research articles in the major criminal justice journals and be prepared to complete a major quantitative research project of their own.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7322. Advanced Research for Planning and Evaluation.**

An introduction to evaluation and research design methodologies, assessment techniques including modeling and case studies, agency management issues, and on-going policy implications. Course gives students an understanding of the principles and techniques commonly used to evaluate the effectiveness and efficiency of criminal justice interventions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7323. Applied Statistics and Quantitative Data Analysis.**

This is a course in statistics and data analysis for the purposes of original quantitative research. Topics include descriptive statistics, statistical inference for single and multivariable analysis, and principles underlying the techniques. This course makes extensive use of statistics software and data preparation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7330. Qualitative Research Methods.**

A discussion of the methods and techniques used for achieving interpretable qualitative results in social research. Topics covered include ethnography, focus groups, in-depth interviewing and case studies. Students will be trained in inductive reasoning and coordinating qualitative with quantitative methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7331. Law and Behavioral Science.**

A review of the issues addressed in the application of the behavioral sciences to the criminal law system. Topics include criminal sanctions and diminished responsibility, civil commitment, victimology, psychology in the courtroom, the role of media, drugs, and alcohol to violence, and how the justice system reacts to violent offenders.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7336. Survey Research Methods for Criminal Justice.**

This course addresses the procedures and techniques used to create social surveys including question formulation, metrics, and question scaling. Students learn how to prepare face-to-face, telephone, and mail surveys, and are trained in sampling procedures related to survey administration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7350A. Forecasting, Trend Analysis, and Data Interpretation.**

A review of quantitative approaches to public policy analysis, the diverse conceptions of the goals and objectives that should be served by policy, and the appropriate role of the policy analyst. Policy consequences are traced to indirect and subtle incentives and disincentives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350B. Academic Scholarship and Communication.**

A course on conducting academic research, interpreting results and how to prepare manuscripts for publication in refereed journals. Included is a survey of the audiences, topical focus, and submission requirements of the major criminal justice, criminology, and law publications, along with specialized knowledge on achieving success in the scholarship environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350C. Qualitative Data Collection, Coding and Analysis.**

This course takes a structured approach to understanding and implementing the various information collection methods used in qualitative research, including formatting the information for coding, coding schemes, and information interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350E. Discrete Multivariate Models.**

This course focuses on regression models for discrete outcome variables, sometimes called limited or categorical dependent variables. Topics include maximum likelihood estimation, binary and multinomial logistic models and negative binomial models. Prerequisite: CJ 7321 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350F. Environmental Criminology.**

Crime distributes unevenly in space/time. As such, the course examines such questions as (1) What places are dangerous? (2) Why do we study specific crime types? (3) Where do crime types concentrate? (4) Where do offenders go in their normal activities? (5) What are the temporal patterns for crime? Prerequisite: CJ 7311 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350G. Seminar in Macro Criminology.**

This course has a macro focus, examining criminological theory and research that takes cities, geographical regions, states, and nations as the units of comparison. The importance and relevance of macro criminology for understanding the causes of crime and key criminal justice issues, such as police resources, are explored in depth. Prerequisite: CJ 7311 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350I. Introduction to Structural Equation Modeling.**

The course provides an introduction to structural equation modeling, which is sometimes called mean and covariance structure analysis or latent variable analysis. Topics include recursive and non-recursive models, path analysis, measurement models, and factor analysis. Prerequisite: CJ 7321 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350K. Criminal Justice Forecasting and Policy Analysis.**

This course examines the inputs and outputs of criminal justice programs. It covers forecasting methods using statistical bootstrapping techniques including line fitting methods, moving averages, cohort propagation matrixes, and systems simulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350L. Sex Offenders: Theory, Research & Policy.**

This course will focus on application of theory to explain sexual offenses, research design issues related to researching this salient population of offenders (e.g., ethical issues, gaining IRB approval, research design limitations, social desirability problems in self-report data, and examining available data sources), and examining policy related issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7360. Independent Study.**

Students will work closely with a particular doctoral faculty member and develop in-depth knowledge in a specific topic area of criminal justice. Topics vary according to a student's program needs. Repeatable once for credit with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7399. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7599. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7699. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7999. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Program Overview**

Offered through the Department of Mathematics at Texas State, this Mathematics Ph.D. program provides student the flexibility to select a concentration in general mathematics, applied mathematics or statistics. The program includes elements designed to prepare students for both research careers in industry and the more traditional Ph.D. careers in academia. Studies will study in an environment where academia and industry interact. Students will gain a breadth of mathematical and statistical knowledge, the ability to produce new innovative research, the ability to write and communicate technical knowledge and disseminate that knowledge to a broad audience, acquire and develop grant writing skills, and practical experience aligned with their chosen long-term professional and career goals.

**Educational Goal**

The main goal of the doctoral program in mathematics is prepare students for success in our rapidly changing technological society. Graduates of the program will

- have demonstrated skill in conducting original research in mathematics, applied mathematics, or statistics.
- be introduced to the joy of problem solving in mathematics and exposed to open problems in the field.
- have a well-balanced foundation in a breadth of mathematical and/or statistical areas relevant to their desired concentration.
- have an in-depth understanding of their chosen field of concentration.
- be able to clearly communicate mathematical ideas and concepts both to specialists in their chosen field and to a broader audience.



In addition,

- Doctoral graduates who desire careers in academia will be familiar with basic principles of mathematics education. Graduates will be able to apply those principles in the classroom.
- Doctoral graduates who desire careers outside of academia will have practical experience applying doctoral level mathematics and/or statistics to solve real world problems.
- Doctoral graduates with a concentration in Applied Mathematics or Statistics will have demonstrated proficiency in at least one of R, Python, or Matlab.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 non-refundable application fee
- or
- \$90 non-refundable application fee for applicants with international credentials
- completed bachelor's degree in mathematics, statistics, or a closely related discipline, from an accredited college or university. Applicants who have completed a master's degree in mathematics, statistics, or a closely related discipline from an accredited college or university can, upon approval of the program advisor, have up to 30 hours of coursework waived based on courses taken during the master's degree that closely align with courses in the program.
- official transcripts from **each institution** where course credit was granted
- competitive GPA
- GRE not required. Applicants whose GPA is not deemed competitive by the program may be offered the opportunity to submit GRE scores for review.
- resume/CV outlining education, work experience, scholarships/grants, publications/presentations, other accomplishments
- statement of purpose outlining the applicant's background and professional goals, including their rationale for pursuing a doctoral degree in mathematics at Texas State
- three letters of recommendation evaluating the applicant's professional and academic background as well as research potential. Letters should address teaching potential for applicants interested in applying for funding as an instructional assistant.
- interviews may be conducted with semifinalists

### TOEFL, PTE, IELTS or Duolingo Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall.
- official PTE scores required with a 52 overall.

- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall.
- official TOEFL Essentials scores required with an 8.5 overall.

This program does not offer admission if these scores are not met.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Mathematics concentration in Statistics with a requires 72 semester credit hours.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MATH 7303	Analysis I	3
MATH 7313	Analysis II	3
<b>Statistics Concentration</b>		
MATH 5315	Mathematical Statistics	3
MATH 7325	Statistics I	3
MATH 7335	Statistics II: Linear Modeling	3
MATH 7337	Mathematical Statistics II	3
MATH 7375D	Advanced linear Modeling	3
MATH 7363B	NUMERICAL ANALYSIS	3
<b>Practicum</b>		
Choose 9 hours from the following:		9
MATH 7306	Current Research in Math Education	
MATH 7328	Instructional Techniques & Assessments	
MATH 7366F	Research in Undergraduate Mathematics Education I	
MATH 7387	Consulting	
MATH 7389	Internship	
<b>Prescribed Electives</b>		
Choose 21 hours from the following:		21
MATH 5315	Mathematical Statistics	
MATH 5335	Survival Analysis	
MATH 5340	Scientific Computation	
MATH 5360	Mathematical Modeling	
MATH 5376A	Design and Analysis of Experiments	
MATH 5376B	Analysis of Variance	
MATH 5376D	Statistical Applications in Genetics and Bioinformatics	
MATH 5376E	Introduction to Data Science	
MATH 5376F	Introduction to Probability Theory and Models	
MATH 5393	Numerical Optimization	
MATH 7303	Analysis I	
MATH 7306	Current Research in Math Education	
MATH 7307	Algebra I	
MATH 7309	Topology I	
MATH 7313	Analysis II	
MATH 7315	Calculus of Variations	
MATH 7317	Algebra II	
MATH 7319	Topology II: Algebraic Topology	
MATH 7321	Graph Theory	

MATH 7324	Curriculum Design & Analysis
MATH 7325	Statistics I
MATH 7328	Instructional Techniques & Assessments
MATH 7331	Combinatorics
MATH 7335	Statistics II: Linear Modeling
MATH 7337	Mathematical Statistics II
MATH 7361	
MATH 7363A	COMPLEX ANALYSIS
MATH 7363B	NUMERICAL ANALYSIS
MATH 7363C	FUNCTNL ANALYSIS
MATH 7363E	Numerical Analysis II
MATH 7363F	Functional Analysis II
MATH 7366A	Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors)
MATH 7366C	Teaching Teachers (In-Service; Pre-Service)
MATH 7366E	Developmental Mathematics Curriculum
MATH 7366F	Research in Undergraduate Mathematics Education I
MATH 7367B	ADV GROUP THEORY
MATH 7369C	Low-dimensional topology
MATH 7369D	Characteristic Classes
MATH 7369E	Differential Geometry
MATH 7371A	Advanced Graph Theory
MATH 7371B	Advanced Combinatorics
MATH 7371C	Combinatorial Number Theory
MATH 7371D	Discrete Optimization
MATH 7371F	Probabilistic Methods in Discrete Mathematics
MATH 7371G	Applied Discrete Mathematics
MATH 7373B	Partial Differential Equations I
MATH 7373C	Partial Differential Equations II
MATH 7373G	Spectral Methods
MATH 7375C	Time Series Analysis
MATH 7375D	Advanced linear Modeling
MATH 7375E	Computational Statistics
MATH 7375F	Multivariate Data Analysis
MATH 7375G	Bayesian Methods
MATH 7375I	Advanced Statistical Learning
MATH 7385	Independent Study in Mathematics
MATH 7387	Consulting
MATH 7389	Internship
CS 7312	Advanced Data Mining
CS 7314	Bioinformatics
CS 7341	Cyberspace Security
CS 7389E	
CS 7389G	Human-Centered Data Science
MSEC 7355	Fluid Flow in Porous Media
BIO 7360I	Bayesian Statistics for Biology
BIO 7360Y	Applied Bioinformatics
BIO 7361C	Advanced Genomics and Bioinformatics
CJ 7350E	Discrete Multivariate Models
CJ 7350I	Introduction to Structural Equation Modeling
<b>Dissertation</b>	

Choose a minimum of 18 hours from the following: 18

MATH 7199A	Dissertation in Mathematics Education
MATH 7299A	Dissertation in Mathematics Education
MATH 7399A	Dissertation
MATH 7599A	Dissertation in Mathematics Education
MATH 7699A	Dissertation in Mathematics Education
MATH 7999A	Dissertation in Mathematics Education

**Total Hours** 72**Application for Advancement to Candidacy**

The Dean of The Graduate College approves advancement to candidacy once all requirements are met. Doctoral students must be advanced to candidacy within five years of initiating Ph.D. course work applied toward the degree. Students need to indicate their intent to advance to candidacy during the term they complete the required course work and other departmental requirements. The doctoral candidacy requirements include:

- Completion of all required course work with the exception of dissertation credit hours.
- Successful passage of all three qualifying exams.
- Successful passage of the comprehensive exam.
- Approval of the dissertation proposal.
- At least a 3.5 GPA on all doctoral required courses.

**Advancement to Candidacy Time Limit**

No credit will be applied toward the doctoral degree for course work completed more than five years before the date on which the student is advanced to candidacy. This time limit applies toward credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions. Requests for a time extension must be submitted to the doctoral program director, who in turn submits a recommendation to the dean of The Graduate College.

**Grade-Point Requirements for Advancement to Candidacy**

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.5. No grade earned below a "B" on any graduate course may apply toward a Ph.D. at Texas State. Incomplete grades must be cleared through the office of The Graduate College before a student can be approved for advancement to candidacy.

**Qualifying Examination**

Typically, after completion of the core course work or by the end of the second year in residence, each student will be required to take written examinations. To be eligible to take the examinations, the student normally will have a minimum grade point average of 3.5 on all the core courses including the transferred equivalent courses that the student has completed. Students are expected to complete the exams by the end of their second year in the program and must have attempted the exams by the end of their third year in the program. These times will be adjusted for part-time students. Any student who does not pass the qualifying exam by the time they have accrued 70 credit hours will be dismissed from the program. If the qualifying exam is not passed, the student will have the option of taking a second exam. Students will be encouraged to make full use of study aids provided by the department prior to retesting. Students who fail the exam, or a portion of the exam, a second time, will be required to retake the relevant course sequence(s) prior to a third

attempt. Students will be dismissed from the program if they do not pass the qualifying exam the third time.

The qualifying exams will consist of a series of three topic examinations based on core components of the program. The three topics will be administered and scored separately so that a student can receive a partial pass. A student who fails to pass one or more of the three portions of the exam need only retest on the failed portion. The exams will be administered at least twice per academic year. Students may take their topic exams during one administration or may separate the topic to take during multiple administrations. Each topic exam will be administered as a written, proctored exam. Students will typically be prepared for the exams through their core course work. Students can strengthen their preparation through additional study and through working with faculty to take practice oral exams and discuss the topics in depth. Exam topics include: algebra, analysis, discrete mathematics, numerical analysis, partial differential equations, statistics, and topology. Students in the general mathematics program will take two of: algebra, analysis, and topology, and a third topic of their choice. Students in the statistics concentration will take statistics, analysis, and a topic of their choice. Students in the applied mathematics concentration will take analysis, numerical analysis, and a topic of their choice.

### **Comprehensive Oral Exam**

A comprehensive oral examination will be administered by the candidate's dissertation committee as part of the student's proposal defense. The exam will be approximately 30 minutes long and will involve a discussion of content closely related to the student's proposed dissertation topic. Committee members will work together to provide the candidate with a list of suitable readings designed to prepare the student in the selected area. The focus should be on topics necessary for the student to begin to approach the selected dissertation question, with an understanding that the student will continue to study related topics during the course of their research. The dissertation advisor and committee members are expected to work with the student prior to the exam to ensure the student has the information necessary to prepare for this exam. Any student who does not pass the comprehensive exam by the end of the fourth year in the program may be dismissed from the program. If the comprehensive exam is not passed on the first try, the student will have the option of taking a second comprehensive exam. The dissertation chair should meet with the student after a failed attempt and create a plan for that, if followed, will aid the student in being successful in the second attempt. Normally, the second exam will be taken in the following long semester and will be the final attempt with failure resulting in dismissal from the program. Exceptions must be approved by the Graduate Program Committee. Students who do not pass the exam on the first attempt are expected to work closely with their committee members to ensure they are well-prepared for the second exam.

### **Dissertation Proposal**

To be advanced to candidacy, a student must select a doctoral dissertation advisor and committee, submit a dissertation proposal, and successfully defend the proposal in an oral examination with the dissertation committee. Information about the formation of the dissertation committee can be found in the "Dissertation Research and Writing" section of this catalog. The proposal should identify the intended mathematical question to be addressed by the dissertation and include a brief survey of relevant literature. The goal of the proposal is to establish that the student has a sufficient grasp of the fundamentals of the chosen dissertation topic to execute the research. The proposal defense entails a public presentation. The student should give a 50-minute presentation

on a specialized topic closely related to their dissertation question. The public presentation will be followed immediately by a closed defense of the proposal attended only by the student and his/her dissertation committee. The dissertation proposal must be approved by the student's dissertation advisor and a majority of the remaining members on the dissertation committee.

### **Recommendation for Advancement to Candidacy**

The doctoral program committee recommends the applicant for advancement to candidacy to the doctoral program director, the department chair, and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been met. To be eligible for admission to candidacy, the student must have successfully completed the qualifying and/or comprehensive exam(s), completed all course work, and successfully defended the dissertation proposal.

After being admitted to candidacy, students must be continuously enrolled for dissertation hours each fall and spring semester until the defense of their dissertation. All students in the program will take a minimum of 18 semester credit hours of dissertation coursework. Students may take dissertation coursework prior to completing elective and practicum credit hour requirements if approved by their dissertation advisor. Students should work with their dissertation advisor to determine the correct number of dissertation hours to take in a semester. All candidates for graduation must be enrolled in dissertation hours (e.g., MATH 7199A) during the semester in which the degree is to be conferred, even if they have already satisfied the minimum dissertation hours. Note that the second digit in the course numbers below refers to the number of dissertation credit hours.

### **Dissertation Committee**

The initial dissertation committee chair assignment, and its continuation, is subject to the approval of both parties. A dissertation committee chair can be changed with the approval of a student's assigned dissertation committee chair, a student's new dissertation committee chair, and the doctoral program director. If a dissertation committee chair withdraws mentorship, the student must secure a new dissertation committee chair within one long semester to stay on track in the program. Failure to do so will result in dismissal from the program.

The Dissertation Committee will be responsible for administering the Comprehensive Exam and the Dissertation Proposal Defense and will oversee the research and writing of the student's dissertation. The committee will consist of 4 members, including the student's dissertation committee chair who must be a regular graduate faculty member in the program, two other graduate faculty members from the mathematics department, and one doctoral graduate faculty from another department at Texas State University or from another university. The student's dissertation committee chair will chair the committee. The student, the dissertation committee chair, and the Dean of The Graduate College will approve the composition of the dissertation committee.

As per The Graduate College policy, the Dissertation Committee Chair Assignment form and the Dissertation Committee Request form must be completed and approved by the Dean of The Graduate College to form the dissertation committee. Any changes to the dissertation committee must be submitted using the Dissertation Committee Chair/Committee Member Change Request form for approval of the dissertation committee chair, the doctoral program director, and the Dean of The Graduate College. Committee changes must be submitted no later than

60 days before the dissertation defense.

### Dissertation Defense

Once the dissertation has been completed, a final exam (referred to as the dissertation defense) on the dissertation must be conducted. The dissertation defense cannot be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least one month before the defense. However, students are highly encouraged to provide drafts earlier so that the committee members can provide feedback, which the student, in consultation with the dissertation advisor, will address in later drafts to ensure that the dissertation is defensible, and each committee member is satisfied before the dissertation defense takes place.

The dissertation defense consists of two parts. The first part is a public presentation of their dissertation research. The second part of the defense immediately follows the public presentation. It is restricted to participation of the student's dissertation committee and entails an oral examination of the dissertation research. Approval of the dissertation requires positive votes from the student's dissertation advisor and from the majority of the remaining members of the dissertation committee. Notice of the defense presentation will be publicly posted at least two weeks in advance.

If the dissertation defense is not approved, the student will have the option of taking a second and final dissertation defense in the following long semester. Students who do not pass the dissertation defense the second time will be dismissed from the program.

The results of the dissertation defense must be recorded in the Dissertation Defense Report Form and submitted to The Graduate College before the Dean of The Graduate College can give final approval of the dissertation. This form can be downloaded from The Graduate College's website. The student must submit his/her dissertation to The Graduate College for final approval. The guidelines for submission and approval of the dissertation can be obtained from The Graduate College.

Doctoral level courses in Mathematics: MATH (p. 3230), CS (p. 3237), MSEC (p. 3241), BIO (p. 3245), CJ (p. 3253)

## Mathematics (MATH)

### MATH 7111. Seminar in Teaching.

Seminar on individual study projects concerned with selected problems in the teaching of mathematics. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

### MATH 7188. Seminar in Mathematics Education.

Students are required to attend weekly research seminars in Mathematics Education and to give at least one research presentation in the seminar during the semester. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MATH 7199A. Dissertation.

Original research and writing in Mathematics Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### MATH 7299A. Dissertation.

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

### MATH 7301. Studies in Mathematics.

This course provides basic foundations in Mathematics for students entering the doctoral program in Mathematics or Mathematics Education. This course may be repeated. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

### MATH 7302. History of Mathematics.

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MATH 7303. Analysis I.

This course covers foundations of modern analysis. Topics include: sequences,  $\limsup$ ,  $\liminf$ , Sigma Algebras of sets that include open and closed sets, sequences of functions, pointwise and uniform convergence, lower and upper semi-continuity, Borel sets, outer measure, and Lebesgue measure. Prerequisite: MATH 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MATH 7306. Current Research in Math Education.

This course surveys the various current social, political, and economic trends in local, state, national, and international settings that are related to research in Mathematics Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7307. Algebra I.**

Applications of Algebra and topics in modern algebra, including permutation groups, symmetry groups, Sylow theorems, and select topics from Ring Theory. Prerequisite: MATH 4307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7309. Topology I.**

A course in point-set topology emphasizing topological spaces, continuous functions, connectedness, compactness, countability, separability, metrizability, CW-complexes, simplicial complexes, nerves, and dimension theory. Prerequisite: MATH 4330.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7313. Analysis II.**

This course covers the theory of integration with special emphasis on Lebesgue integrals. Topics include: Lebesgue integral, Bounded Convergence theorem, differentiation and integration, absolute continuity, and  $L_p$  spaces. Prerequisite: Math 7303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7317. Algebra II.**

A study of the important algebraic structures of rings and fields. Topics covered include rings, ideals, modules, polynomial rings, Euclidean algorithm, finite fields, and field extensions. Topics also include an introduction to Galois Theory with an emphasis on the geometric applications. Prerequisite: MATH 7307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7319. Topology II: Algebraic Topology.**

This course covers the fundamental concepts and tools of algebraic topology. Topics include the fundamental group, covering spaces, homotopy type, the higher homotopy groups, singular homology theory, and the computation of homology groups via exact sequences and applications. Prerequisite: MATH 7307 and MATH 7309.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7321. Graph Theory.**

Topics in this course include trees, connectivity of graphs, Eulerian graphs, Hamiltonian graphs, planar graphs, graph coloring, matchings, factorizations, digraphs, networks, and network flow problems. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7323. Theories of Knowing and Learning in Mathematics Education.**

This course surveys the major theories of knowing and learning that have influenced mathematics education. These theories include behaviorism, constructivism, sociocultural theories, situated cognition, and others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7324. Curriculum Design & Analysis.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques that are related to curriculum design in Mathematics Education for grade levels P-16.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7325. Statistics 1.**

A study of the mathematical and probabilistic underpinnings of the techniques used in statistical inference. Topics covered include sampling, sampling distributions, confidence intervals, and hypothesis testing with an emphasis on both simulations and derivations. Prerequisite: Math 2321 and Math 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7328. Instructional Techniques & Assessments.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques of instruction in Mathematics Education and the related assessment procedures for each for grade levels P-20.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7331. Combinatorics.**

This course is a study of fundamental principles of combinatorics. Topics include: permutations and combinations, the Pigeonhole principle, the principle of inclusion-exclusion, binomial and multinomial theorems, special counting sequences, partitions, posets, extremal set theory, generating functions, recurrence relations, and the Polya theory of counting. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7335. Statistics II: Linear Modeling.**

A study of the formulation and statistical methodologies for fitting linear models. Topics include the general linear hypothesis, least-squares estimation, Gauss-Markov theorem, assessment of model fit, effects of departures from assumptions, model design, and criteria for selection of optimal regression models. Prerequisite: MATH 3377 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MATH 7346. Quantitative Research Analysis in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and use of appropriate design methodologies to achieve the strongest possible evidence to support or refute a knowledge claim. Prerequisite: MATH 7306 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7354. Advanced Qualitative Research.**

This course encompasses the techniques and tools needed for the development, investigation, and demonstration of competence in conducting qualitative research in mathematics education. Principles of qualitative data analysis are a significant focus of the course, with particular attention given to specific methods used to code and analyze data. Prerequisite: ED 7352 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356B. Advanced Qualitative Research.**

This course encompasses investigation, development, and demonstration of competence, design, and execution for mathematics education problems in qualitative research. Prerequisite: ED 7352 or CI 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356C. Action Research in Mathematics Education.**

This course examines underlying theory and issues in action research model and the development of action research projects. Prerequisites: MATH 7346 or ED 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7358. Advanced Quantitative Research in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and the use of appropriate design methodologies to achieve the most substantial evidence to support or refute a knowledge claim. Prerequisite: MATH 7346 with a grade of "B" or better or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7361. Seminar in Advanced Mathematics.**

Material in course will vary with the interest of students and faculty. A detailed study of subject matter may be chosen from advanced areas of analysis; algebra; topology and geometry; applied mathematics; and probability and statistics. This course is repeatable for credit when subject matter varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7363A. COMPLEX ANALYSIS.**

This course is a brief introduction to the complex number system and basic point-set topology of the complex plane, followed by a proof-based and rigorous study of the principal results of the analysis of functions of a single complex variable. Prerequisite: MATH 4315 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363B. NUMERICAL ANALYSIS.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using computer algebra systems. Symbolic, numerical, and graphical techniques will be studied. Applications will be drawn from the sciences, engineering, and mathematics. Prerequisite: MATH 3323 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363C. FUNCTIONAL ANALYSIS.**

This course presents the three basic fundamental theorems of functional analysis: the Hahn-Banach theorem, the uniform boundedness theorem, and the open mapping theorem. Prerequisite: MATH 7303 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363E. Numerical Analysis II.**

This course will involve the analysis and numerical implementation of algorithms to solve partial differential equations. Applications will be drawn from science, engineering, and mathematics. Topics include the numerical solution of linear partial differential equations and the related linear systems of equations. Prerequisite: MATH 7363B with a letter grade of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363F. Functional Analysis II.**

This course will involve the analysis of infinite dimensional vector spaces including spaces of functions, measures, and distributions. Topics include Fourier transforms, theory of Banach spaces, and operator theory. Prerequisite: MATH 7363C with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366A. Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors).**

This course examines how to develop and teach post-secondary students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisites: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366B. Teaching K-12 Students (Elementary, Middle School, and High School).**

This course examines how to develop and teach K-12 students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366C. Teaching Teachers (In-Service; Pre-Service).**

This course examines how to prepare teachers of mathematics. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366D. Teaching Specialized Content.**

This course will be an in-depth study of a specialized content area in mathematics with an emphasis on teaching. The specific content area will vary by instructor. Examples include Euclidean Simplex Geometry and Discrete Probability Spaces with Implications for Public School Curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366E. Developmental Mathematics Curriculum.**

This course surveys the research, development, and evaluation of the scope and sequence of developmental mathematics curriculum. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366F. Research in Undergraduate Mathematics Education I.**

Students will develop the requisite knowledge to become a good consumer of Research in Undergraduate Mathematics Education (RUME) research. The course will cover the theoretical underpinnings of current and historic RUME research. Students will develop the knowledge to understand relevant theoretical stances and the role they play in research. Prerequisite: Math 7306 or permission from the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366G. Research in Undergraduate Mathematics Education II.**

In this course, students will develop necessary knowledge to design/conduct RUME research via a topic-driven look at current RUME research. Core topics include proof, analysis/calculus, abstract algebra, linear algebra, and differential equations. Students will develop a depth of knowledge related to these topics and engage in research design and development. Prerequisite: MATH7306 and MATH7366F.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7367B. ADV GROUP THEORY.**

This course covers topics including properties of solvable, p-solvable and nilpotent groups, group actions, transfer theorems, simple groups and composition series, the generalized Fitting subgroup, automorphism groups, classical groups and linear representations of groups. Prerequisite: MATH 7307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369C. Low-dimensional topology.**

This course is an introduction to low-dimensional topology. Topics include surfaces, 3-manifolds, knots, and 4-manifolds. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369D. Characteristic Classes.**

This course is an introduction to vector bundles and characteristic classes. Topics covered include Stiefel-Whitney classes, Chern classes, Euler class, Pontrjagin classes, and their computation. Additional topics may include manifold immersion problems. Prerequisite: MATH 7317 and MATH 7319 both with grades of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369E. Differential Geometry.**

This course is an introduction to modern tools of differential geometry. Topics covered include manifolds, Riemannian metrics, connections, covariant derivatives, geodesics, curvatures, extrinsic and intrinsic computations. Other possible topics include hyperbolic geometry, Lie groups, Chern-Weil theory, surfaces of prescribed mean curvature, the Gauss-Bonnet theorem, and the Cartan-Hadamard theorem. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7371A. Advanced Graph Theory.**

Topics in this course include Turan's problems, Ramsey theory, random graph theory, extremal graph theory, algebraic graph theory, domination of graphs, distance problems, and applications. Prerequisite: MATH 7321.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371B. Advanced Combinatorics.**

Topics in this course include Block designs, Latin squares, combinatorial optimization problems, coding theory, matroids, difference sets, and finite geometry. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371C. Combinatorial Number Theory.**

A study of fundamental techniques in combinatorial number theory. Topics will include Waring's problem, additive number theory, and probabilistic methods in number theory. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371D. Discrete Optimization.**

A study of some fundamental techniques in discrete optimization. Topics include discrete optimization, linear programming, integer programming, integer nonlinear programming, dynamic programming, location problem, scheduling problem, transportation problem, postman problem, traveling salesman problem, matroids, and NP-completeness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371E. Algorithms and Complexity.**

A study of some fundamental concepts of computability and complexity. Topics include polynomially bounded problems, NP-complete problems, exponentially hard problems, undecidable problems, and reducibility. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371F. Probabilistic Methods in Discrete Mathematics.**

A study of some fundamental probabilistic techniques used to solve problems in graph theory, combinatorics, combinatorial number theory, combinatorial geometry, and algorithm. Topics include linearity of expectation, alterations, second moment, local lemma, correlation inequalities, martingales, Poisson paradigm, and pseudo-randomness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371G. Applied Discrete Mathematics.**

This course introduces fundamental concepts in logic, Boolean algebra, and binomial coefficients; and applications in different fields such as complexity of algorithms and network theory. Prerequisites: MATH 2472 and MATH 4307, all with a grade of "C" or better, or with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371H. Combinatorial Networks.**

Combinatorial Networks is an area of study of certain types of networks using combinatorial methods extensively. This course introduces fundamental basics as well as the latest development in this area of research. Prerequisite: MATH 5307/7307 with a grade of "C" or higher.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7373B. Partial Differential Equations I.**

This course covers the theory and application of partial differential equations, typical equations of mathematical physics, Cauchy problem for equations of the first order, classification of second-order equations, Cauchy problem for second-order hyperbolic equations, Duhamel's principle, potential theory and elliptic equations, maximum principle, and parabolic equations. Prerequisite: MATH 3323, 3373 and 3380 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373C. Partial Differential Equations II.**

This course covers the existence and uniqueness theory for boundary value problems of partial differential equations (PDE) including the topics linear evolution equations, variational techniques, non-variational techniques, Hamilton-Jacobi equations, conservation laws. Prerequisite: MATH 7373B with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373G. Spectral Methods.**

This course covers the essentials of spectral collocation methods with an emphasis on numerically implementing algorithms. The problems studied will include ordinary and partial differential equations connected with fluid mechanics, quantum mechanics, waves, and other fields. The techniques used will include both Fourier and Chebychev methods.

Prerequisite: MATH 7363E with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375C. Time Series Analysis.**

A study of the theory of time-dependent data. The analysis includes modeling, estimation, and testing; alternating between the time domain; using autoregressive and moving average models and the frequency domain; and using spectral analysis. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375D. Advanced linear Modeling.**

The course provides an extension of regression methodology to more general settings where standard assumptions for ordinary least squares are violated. Topics include generalized least squares, robust regression, bootstrap, regression in the presence of autocorrelated errors, generalized linear models, and logistic and Poisson regression. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375E. Computational Statistics.**

This course focuses on commonly used sampling and optimization algorithms in statistics. Topics include accept-reject method, importance sampling, Markov Chain Monte Carlo algorithms, Fisher scoring algorithm, expectation-maximization algorithm, and minorization-maximization algorithm. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375F. Multivariate Data Analysis.**

This course focuses on statistical methodologies based on multivariate analysis. Topics include multivariate normal distribution, tests of hypothesis on means, multivariate analysis of variance, discriminant analysis, principal component analysis, factor analysis and canonical correlation analysis. Prerequisite: MATH 5305 and (MATH 3376 or MATH 3377) with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375G. Bayesian Methods.**

This course focuses on Bayesian statistical analysis and associated theories. Topics include one-parameter and multi-parameter Bayesian models, choices of priors, formulation of regression models in the Bayesian framework, and related data analysis. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375I. Advanced Statistical Learning.**

This course covers the theoretical foundations in statistical learning and deep learning. Topics include the framework of empirical risk minimization, metric entropy, Vapnik-Chervonenkis dimension, Rademacher and Gaussian complexity, symmetrization and chaining techniques, contraction principle, uniform law of large numbers, sample complexity, and neural networks. Prerequisite: MATH 7337 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378A. Problem Solving, Reasoning, and Proof.**

A study of the fundamental concepts of problem solving, logic, set theory, and mathematical proof and applications of these concepts in mathematics curriculum for grades P-20. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378B. Connecting and Communicating Math.**

This course examines one of the basic principles involved in mathematics education: Connecting and Communicating Mathematics. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378C. Representing Fundamental Math Ideas (Function, Data Analysis, and Enumeration).**

This course examines the basic principles involved in mathematics education. The process of representing fundamental mathematical ideas will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378D. Math Technologies.**

This course examines the basic principles involved in mathematics education: Technology. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378E. Developmental Mathematics Perspectives.**

This course examines developmental mathematics-specific strands including technological course support and placement tools/decisions. Issues related to the first mathematics core course required of undergraduates will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378F. Research on Mathematical Problem Solving in Secondary Schools.**

In this course a careful study is made of elementary techniques for problem solving in a variety of domains, including algebra, number theory, combinatorics, geometry, and logic puzzles. Students will learn these techniques by actually working on a collection of problems in each of these areas. Students will read and examine research about various aspects of problem solving and research in math education that includes both teacher training and student learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378G. Discourse Processes, Traditions, and Analysis in Mathematics Education.**

Discourse and discourse analysis have been used to answer research questions across disciplines throughout the humanities and social sciences. This course will focus on theory and methods for the analysis of discourse in mathematical settings. We will learn how different approaches to discourse are used to understand mathematics learning. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378H. Equity in Mathematics Education.**

Equity in Mathematics Education is a course examining research on equity issues in mathematics education. These equity issues will range from race, culture, class, and gender as they relate to the teaching, learning, and schooling of mathematics education. We will look at how equity is framed within the field of mathematics education, what has been addressed, and what has not been conceptualized. The course will help students understand the literature in the field, critique the extant research literature, design research, and consider important facets of teaching for various student groups. Prerequisite: MATH 7306 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7385. Independent Study in Mathematics.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of mathematics. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7386. Independent Study in Mathematics Education.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of Mathematics Education. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7389. Internship.**

In this course, students will work under the supervision of a faculty member to gain practical knowledge in their field. Student experience can come from industry, government agencies, or other sources but must directly apply to furthering knowledge of applications of mathematics or mathematics education.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7396. Mathematics Education Research Seminar.**

Collaborative research projects with faculty through identifying an educational issue, reviewing literature, creating a research question, designing a methodology, analyzing data, drawing conclusions, implications, and creating a draft of a publishable paper. Prerequisite: MATH 7356, and ED 7352 or MATH 7346, all with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**MATH 7399A. Dissertation.**

This course represents a Mathematics or Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MATH 7599A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7699A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7999A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Computer Science (CS)

**CS 7100. Graduate Computer Science Internship.**

This course provides advanced training supervised by computer scientists in internship programs approved by the department.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7199. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7299. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7300. Introduction to Research in Computer Science.**

This credit/no credit course is designed to develop research and communication skills for Ph.D. students. Topics covered include research processes, research methods, ethics, conducting literature review, critiquing papers, preparing research proposals, faculty research presentations, and the software tools and platforms available for conducting applied computing research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 7308. Computer Science Studies.**

This course provides foundations in computer science for students entering the doctoral program who may need certain background or leveling coursework. The course does not earn graduate degree credit. It is repeatable with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CS 7309. Professional Development of Doctoral Assistants.**

This course is designed to equip the doctoral students with skills and an understanding of the proper procedures to be effective doctoral instructional and teaching assistants. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 7311. Data-Driven Computational Methods and Infrastructure.**

This course covers computational and statistical methods for using large-scale data sets ('big data') to answer scientific and business questions. It focuses on framing research questions, understanding how data can answer them, and using modern software tools for scalable data storage, processing, and analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7312. Advanced Data Mining.**

This course provides in-depth coverage of advanced data mining and information retrieval principles and techniques. It also offers extensive training and practice opportunities in frontier research directions.

Prerequisite: CS 5316 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7313. Advanced Machine Learning and Pattern Recognition.**

This course provides students advanced theoretical and practical skills to learn, design, implement, and apply machine learning and pattern recognition approaches. The students will gain analytical and problem-solving skills by studying machine learning and pattern recognition techniques and applying them to solve real problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7314. Bioinformatics.**

This course introduces advanced algorithms for data-intensive computational analysis targeting biological applications such as drug response prediction, gene network analysis, and protein/RNA structure prediction. Main techniques include greedy search, linear regression, clustering, network analysis, expectation maximization, and Hidden Markov models, which are widely applicable beyond biological data.

Prerequisite: CS 5329 or CS 5369L either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7315. Network Science.**

This course provides in-depth coverage of the fundamentals and research frontiers of network science. The main topics include mathematical models and computational algorithms for analyzing the structure of complex networks and predicting dynamic processes on networks. Other topics include machine learning and data mining on graphs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7321. Human Computer Interaction: Concepts, Models, and Methodologies.**

This course provides an introduction to Human Computer Interaction (HCI) research, methods, and topics, including fundamentals of user interface and experimental design, usability, evaluation methods, software toolkits for interactive applications, graphics, visualization, mobile design, collaborative and social computing, biological factors, and human computation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7322. Human Factors and Ergonomics.**

This course combines knowledge in the fields of intelligent user interfaces, human factors, ergonomics, and environmental psychology. Topics include HCI principles, human information processing, anthropometry, principles of eye tracking and their effects on human factors research, as well as operations of biometrics systems and human factors influencing those systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7323. Image Processing and Computer Vision.**

Image Processing and Computer Vision are research areas with a variety of modern applications ranging from the analysis of images and videos to real-time processing of image streams coming from self-driving vehicles and robotic agents. This course will prepare students with advanced state of the art knowledge in those fields. Prerequisite: CS 5329 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7324. HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality.**

This course introduces advanced methods for enhancing user experience and presents effective HCI models via computer graphics, imaging, animation, simulation, visualization, augmented reality, and immersive virtual reality. Additionally, the course presents related science and engineering foundations as well as graphic design, cognitive science, and perceptual psychology theories and models. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7331. High-Performance Computing.**

This course covers the advanced design, analysis, and optimization of high-performance applications. Topics include high-performance computer architectures, including accelerators and systems-on-chip, performance modeling and benchmarking, data and control dependence analysis, data locality estimation, memory hierarchy management, techniques for exposing parallelism, and code transformations. Different workloads are studied. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7332. Advanced Parallel Computing.**

This course covers advanced design of parallel algorithms, performance modeling, parallel hardware, language support for parallel programming, and programming models for shared- and distributed-memory systems ranging from handheld multicore devices to large-scale clusters and accelerators. The students will gain applied knowledge and skills by developing parallel software for multiple platforms. Prerequisite: CS 5351 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7333. Advanced Green Computing.**

This course covers hardware and software techniques to improve the energy-efficiency of computing systems. Topics include best practices in building energy-efficient data centers and mobile devices, current trends in reducing the energy consumption of processors and storage components, energy-aware resource management, software optimizations, and hands-on experience on power-measurable systems. Prerequisite: CS 5351 and CS 5369Y both with grades of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7334. Scalable Systems for Supercomputing.**

This course will teach basic aspects of building a scalable high performance computing (HPC) system. Specifically, it will focus on the design principles for scaling parallel communication and I/O operations for accessing HPC storage using a message-passing programming model. The course will use two large-scale systems—checkpointing for resilience and a parallel file system for storage as use cases to demonstrate how these principles are used in practice. Students will develop components of a scalable system and use software tools to measure and analyze their performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7341. Cyberspace Security.**

This course presents recent advances in methodologies, models, systems and applications of cyberspace security research. Topics include in-depth coverage of the state-of-the-art security technologies and research issues on information security, software security, network security, secure system design, secure programming, applied cryptography, vulnerability, and threats. Prerequisite: CS 5378 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7342. Advanced Computer Networking.**

This course covers recent research ideas, methodologies and approaches in networking research. The course focuses on the development of protocols and the analysis of related algorithms. Topics include new network architectures, cloud computing, software defined networking, wireless systems, social networks, and security and privacy. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7343. Mobile Networks and Computing.**

This course provides an in-depth study of wireless mobile communication networks, wireless network measurements and modeling, channel assignments and coverage, wireless network protocols, mobile data management, wireless security, and various wireless network applications including ad hoc, sensor networks, delay-tolerant networks, and mobile social networks. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7351. Advanced Software Engineering.**

Software engineering is the application of scientific methods to software development and maintenance. This course provides an in-depth study of advanced concepts and techniques of automatic software generation and analysis. Topics include software process programming, symbolic execution, model checking, property generation and checking, and runtime verification of complex software systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7352. Real-time Systems.**

This course covers issues related to the design and analysis of systems with real-time constraints. The problem of ensuring such constraints is ultimately a scheduling problem, so much attention is devoted to such problems. This course aims to provide a solid foundation for conducting research in real-time systems or related areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7387. Research in Computer Science.**

This course covers current research topics in computer science under the direction of a supervising professor. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7389A. Service Computing.**

This course introduces concepts and principles for enabling the development of software as a service based on Service-Oriented Architecture (SOA), methodology of SOA systems development, the main technologies used in achieving SOA, and state of the art techniques and advances in emerging cloud and edge (Internet of Things) services. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389B. Advanced Software Evolution.**

This topics course provides an in-depth study of state-of-the-art software evolution techniques and tools based on the current research literature. Software evolution has become increasingly important in software development. Software systems often evolve to fix defects, to improve performance, or to adapt to various other requirements. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389F. Secure Cyber-Physical Systems: Cryptography and Machine Learning.**

This course is designed to introduce students to the fundamentals of cryptography and machine learning and how they can be used to ensure security and privacy in cyber-physical systems (CPS). Topics will include an overview of cyber-physical systems, cryptographic techniques, machine learning algorithms, and security threats and attacks on CPS. The course will also cover privacy-preserving machine learning techniques and design principles for secure CPS. Students who successfully complete this course will be well-versed in cryptography and machine learning approaches for cybersecurity in CPS and be able to use these techniques to address practical real-world issues. Prerequisite: CS 3354 and CS 3358 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389G. Human-Centered Data Science.**

This course is to study the process of deriving insights from data in order to make optimal decisions. Human-Centered Data Science addresses various data science problems with attention to improve the quality of decisions by incorporating human experts in the learning process, e.g., interactive Machine Learning and eXplainable Artificial Intelligence. Prerequisite: CS 3358 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389H. Human-Centric Deep Learning.**

This course provides an in-depth exploration of deep learning, emphasizing multi-layer neural networks and their applications. Students will explore core topics like convolutional, recurrent, and graph neural networks, along with optimization algorithms and generative models. The curriculum uniquely integrates multimedia processing, Human-Computer Interaction (HCI), and "human in the loop" approaches, demonstrating how deep learning can be applied to image, video, and audio analysis, as well as to create user-centric and interactive systems. Practical aspects, including data preprocessing, model evaluation, and framework implementation, will also be covered, equipping students with the skills to apply deep learning techniques in a human-centered context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389J. Advanced Natural Language Processing.**

This course is an interdisciplinary field that combines computational linguistics with statistical and machine learning techniques to enable the computer to understand, interpret, generate, and learn natural language. Natural Language Processing (NLP) introduces key concepts, tasks, and techniques, including recent advancements such as neural networks and large language models. It covers applications such as question answering, automatic speech recognition, and machine translation. Students will gain an understanding of fundamental concepts, advanced algorithms, and practical applications, and will also learn methods for acquiring and annotating text data, and representing linguistic structures. Familiarity with Linear Algebra and Python Programming is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7399. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7599. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7699. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7999. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## **Materials Science, Engineering, and Commercialization (MSEC)**

**MSEC 7100. Doctoral Assistant Development.**

The course is designed to equip the doctoral students with skills and an understanding of proper procedures to be effective teaching assistants. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MSEC 7101. Commercialization Forum.**

The course is a seminar series exposing students to commercialization issues. The series includes as speakers: successful entrepreneurs, businessmen, research directors, production and process control engineers, intellectual property and licensing experts, management consultants, and technology transfer specialists. Repeatable four times for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MSEC 7102. MSEC Seminar.**

This course is an introduction to current materials science and engineering topics with presentations by subject matter experts as the basis for weekly discussions. Students participate by asking questions and actively engaging the seminar speaker. Students are also expected to give public presentations based upon their own field of research at the STAR (Student Technology and Research) Showcase. Repeatable four times for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MSEC 7103. Research in Materials Science, Engineering, and Commercialization.**

This research course is for students in Materials Science, Engineering, and Commercialization who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor. Repeatable (with MSEC 7203 & MSEC 7303 hours) for doctoral credit up to 6 hours.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7199. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7203. Research in Materials Science, Engineering, and Commercialization.**

This research course is for students in Materials Science, Engineering, and Commercialization who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor. Repeatable (with MSEC 7103 and MSEC 7303 hours) for doctoral credit up to 6 hours.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7299. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7301. Practical Skills in Commercialization and Entrepreneurship.**

This course is the first of a two-course series to impart business and commercialization skills by producing a business plan. Key areas covered include intellectual property law, technology transfer and licensing strategies, business plan development, business finance strategies, management structures, project management methods, statistical quality and process control.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MSEC 7302. Leadership Skills in Commercialization and Entrepreneurship.**

Leadership Skills in Commercialization and Entrepreneurship (3-0). This course is the second of a two-course series to impart business and commercialization skills by producing a business plan. Key areas covered include intellectual property law, technology transfer and licensing strategies, business plan development, business finance strategies, management structures, project management methods, statistical quality and process control. Prerequisite: MSEC 7301 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7303. Research in Materials Science, Engineering, and Commercialization.**

This research course is for students in Materials Science, Engineering, and Commercialization who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor. Repeatable (with MSEC 7103 & MSEC 7203 hours) for doctoral credit up to 6 hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7304. Collaborative Research/Commercialization Experience.**

This course allows Ph.D. level graduate students to initiate, conduct and participate in a collaborative research or commercialization experience with graduate faculty in addition to research conducted under MSEC 7103, MSEC 7303, MSEC 7199 and MSEC 7399. This course recognizes the collaborative nature of the scientific and commercialization enterprise. Repeatable for doctoral credit up to 6 hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MSEC 7310. Nanoscale Systems and Devices.**

This course is an in-depth treatment of physical phenomena in nanoscale structures, and consequences for electronic, photonic, mechanical and other types of devices. The course provides a strong background in devices with applications in nanoelectronics, biomedical systems, micro- and nanoscale manipulation, adaptive optics, and microfluidics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7311. Materials Characterization.**

This course covers skills and knowledge required for microscopy methods including transmission electron microscopy, scanning electron microscopy, scanning tunneling electron microscopy, atomic force microscopy, and confocal microscopy. It covers x-ray and neutron diffraction techniques including structure analysis, powder and glancing angle diffraction, pole figure, texture analysis, and small angle scattering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MSEC 7315. Quantum Mechanics for Materials Scientists.**

This course includes quantum-mechanical foundation for study of nanometer-scale materials, principles of quantum physics, stationary-states for one-dimensional potentials, symmetry considerations, interaction with the electromagnetic radiation, scattering, reaction rate theory, spectroscopy, chemical bonding and molecular orbital theory, solids, perturbation theory, and nuclear magnetic resonance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7320. Nanocomposites.**

Characteristics of nanoparticles utilized in nanocomposites, techniques for surface modification, methods for nanoparticle dispersion forming nanocomposites, types of nanocomposites, characteristics of nanocomposites, analytical methods for characterization of composites, and common applications will be discussed. Particular attention will be given to the science and theories explaining the unique behavior of nanocomposites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7325. Principles of Technical Project Management.**

This course includes planning, budgeting, identification of risks and risk mitigation approaches, resource allocation, review of milestones and schedules, and evaluating projects to measure success. Responsibilities of project managers in the areas of problem solving, motivating and managing creative technical staff in project and matrix organizations will be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7330. Computational Materials Science.**

Application of computational techniques to molecular and atomic modeling of materials is discussed along with quantum mechanical modeling, density functional theory approaches, forcefield based molecular modeling, mesoscale modeling, energy minimization, molecular dynamics, vibrational spectra, crystal structures, phase equilibria, physical property prediction, and electronic structure related to magnetic and electrical properties. Prerequisite: CHEM 3340 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7340. Biomaterials and Biosensors.**

The course covers the growing field of biomaterials science including materials for prosthetics and implants, mimetic materials, biosensors, diagnostic devices, and drug delivery systems. Particular attention will be given to nanomaterials for diagnosis and treatment of diseases including targeted cancer treatments, drug delivery systems, and advanced imaging methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7350. Frontiers of Nanoelectronics.**

This course provides an introduction to the operating principles of nanoscale electronic and optical devices. The emphasis is on how leading edge nano-fabrication technology takes advantage of quantum mechanics of reduced sizes and dimensions. Specific examples of devices based on quantum wells, wires, dots and molecular electronics are given.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7355. Fluid Flow in Porous Media.**

In this course, the fundamental theory of transport and fluid flow in heterogeneous porous media will be presented. First, the equations that govern transport and fluid flow processes will be derived. Both analytical and numerical methods will be used to solve these equations in order to characterize and predict flow fields in porous media. These skills will then be applied to practical problems that involve porous media such as soils, rocks, biological tissues, concrete, etc. The knowledge gained from studies of fluid flow in natural porous materials will be employed to design/optimize systems with engineered porous media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7360. Nanomaterials Processing.**

The course will cover various aspects of materials processing related to semiconductor devices. Topics covered include properties of electronic materials, thin film deposition, etching, lithography, and related device physics with an emphasis on the nanoscale. Fabrication and characterization techniques will be covered, including clean room usage. Prerequisite: MSEC 7401 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7370. Advanced Polymer Science.**

Advanced topics in polymer science are discussed with a focus on high performance polymers such as high impact, conducting, shape memory, high temperature and the underlying phenomena that provide these unusual properties, and advanced polymer topic areas such as flame retardancy, barrier properties, dielectric properties, rheology, and fiber reinforced composites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7395A. Microwave & Power Device Physics and Materials.**

This course will develop an understanding of basic microwave and power device physics and technology and the advanced materials that are used in today's cutting-edge research & development. The primary focus will be wide bandgap semiconductor materials and devices, and their performance metric versus the industry standard Si-based devices. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395B. Thin Film Photovoltaic Devices.**

This course is a survey of the Materials Science of photovoltaic devices with emphasis on device physics including the photovoltaic effect, photon absorption, electrons and holes, generation and recombination, the pn-junction, charge separation, monocrystalline solar cells, thin film solar cells, III-V solar cells, and losses. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395C. Materials for Sustainable Energy.**

This course introduces principles and applications of sustainable energy materials used for energy generation, conversion, and storage. Topics of study include principles (thermodynamics, kinetics, transport phenomena, equivalent circuits, catalysis, and electrochemistry) and selection and performance criteria important for applications including batteries, supercapacitors, fuel cells, electrolyzers, dielectrics, biomass, and piezoelectrics. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395D. Polymer Characterization and Processing.**

This course will cover the concepts critical to the characterization and processing of organic polymers. Topics critical to characterization will include molecular weight determination, thermo/mechanical characterization, X-ray scattering, and polymer spectroscopy. Processing topics will include polymer rheology, principles of polymer processing, solution processing, and extrusion. Prerequisite: CHEM 4351 or CHEM 5351 or MSEC 7370 any with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395E. Industrial Ecology and Sustainability Engineering.**

This course covers the basic principles of life cycle analysis (LCA) of engineered products, materials, and processes. Topics covered include: biological ecology, industrial ecology, resource depletion, product design, process design, material selection, energy efficiency, product delivery, use, end of life and LCA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395F. Catalysis in Materials Science.**

This course introduces principles and applications of catalysis in materials science. The primary topics of study will include catalysis as a means of synthesizing materials and materials as catalysis. Subtopics will focus on specific catalysts (Ziegler-Natta, ROMP, and cross-coupling catalysts) and specific catalytic processes (hydrogenation, photoredox, and electrocatalysis).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395G. Applied Plasma Physics.**

Applied plasma physics focusing on the broad range of technical plasma devices, and to analyze and describe the main plasma physical characteristics and principles of operation. Emphasis will be on physical insight, application, and problem solving. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395H. Environmental Chemistry.**

Advanced study in environmental chemistry, with an emphasis on aquatic resources and materials science and engineering. Principles of geochemistry and atmospheric chemistry will be covered as they relate to environmental pollution monitoring and control. Principles and applications of green chemistry will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395I. Structure and Properties of Alloys.**

This course in an advanced exploration of the structure and properties of engineering alloys. Strengthening mechanisms of alloys are explored with specific applications to the alloys studied. The processing, properties, and structure of ferrous and nonferrous alloys are explored including new and emerging alloys. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395J. Advanced Concrete Materials and Durability.**

This course delves into a comprehensive coverage of Portland cement concrete materials as well as resilient and sustainable materials used for building and transportation infrastructure. Topics include cement and aggregate properties, chemical and mineral admixtures, mixture proportioning, concrete microstructure, concrete durability, long-term performance, durability prediction and modeling, durability of alternative cement, multi-scale assessment, and dimensional stability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395K. Electrical and Magnetic Characterization Methods.**

This course introduces electric and magnetic characterization methods important to metals, magnetic and semiconductor materials and devices. Various measurement techniques and methods will be reviewed. Students will learn to work with characterization tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395L. Advanced Solid State Physics.**

This course reviews models of a solid and energy band theory. Additional topics may include interaction of electromagnetic waves with solids, lattice vibrations and phonons, many body effects in solids, device physics, quantum phenomena, carrier transport properties, current device configurations, and materials interface problems. Prerequisite: MSEC 7401 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395M. Semiconductor Devices and Processing.**

This course addresses the basics of semiconductor devices, silicon and compound semiconductor material fabrication, photolithography, etching, control of dopant profiles for the formation of shallow junctions needed for nanoscale devices, ion implantation and microstructure engineering, different types of doping phenomena, the carrier action and charge transport properties, defect microstructures, low-resistivity Ohmic contacts, and different fabrication concepts of conventional and emerging micro-/nano-electronic devices. In addition, students will be involved in laboratory projects and seminar presentations. Prerequisite: MSEC 7401 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395N. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, etc. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course. Students will be asked to solve an infrastructure material related problem using advanced analytical and simulation tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 73950. Modern Concepts in Materials Science.**

This course provides an overview of the modern concepts and principles that are used to describe and predict the physical properties of materials. An emphasis will be placed on developing and applying fundamental materials science concepts: atoms and atomic bonding, fundamentals of crystallography, elementary diffraction by solid-state materials, defects, solid solution and phase equilibrium. Particular attention will be given to the science and theories explaining the unique behavior of different classes of materials, i.e. ceramics, metals, polymers, electronic materials and composites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7399. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7401. Fundamental Materials Science and Engineering.**

Course covers fundamentals of chemical kinetics, physical properties, and continuum mechanics. Topics include electronic and atomic structure, structure of crystalline materials, imperfections, thermodynamic and kinetic principles and equations for closed and open systems, statistical models, phase diagrams, diffusion, phase transformations, conservation laws, and kinematics.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7402. Advanced Materials Science and Engineering Concepts.**

Fundamentals of quantum mechanics, physics of solid state, and physical electronics and photonics for advanced materials will be discussed. Topics will include quantum basis for properties of solids, lattice vibration, free electron model for magnetism, semiconductors, nanostructures and mesoscopic phenomena, superconductivity, and recent advances in new types of materials. Prerequisite: MSEC 7401 with a grade of "C" or better.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7599. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7699. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7999. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**Biology (BIO)****BIO 7100. Professional Development.**

This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**BIO 7102. Seminar in Aquatic Resources.**

This course is an interactive discussion of timely issues and problems, designed to introduce students to the range of scientific, socioeconomic and policy issues likely to be encountered within the field of aquatic resources. All students seeking a doctoral degree in Aquatic Resources must enroll in BIO 7102 at least twice.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 7103A. Ecology and Society.**

Interactive discussion on relationships between society and the life-supporting ecosystems on which humans depend. Topics include roles of natural systems in social systems; effects of social, economic and political institutions on ecological systems and services; and the means by which humans develop and sustain desired ecological and social states.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103B. Aquaculture.**

The course comprises a survey of aquaculture production throughout the world. It also examines and discusses the impacts of aquaculture on nutrition, fisheries and the economy.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103D. Molecular Biology of the Cell.**

Interactive discussion of current literature on molecular biology of the cell. The course is designed to discuss concepts and their applications and methodology associated with the structure and function of the cell at cellular and molecular level.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103E. Contemporary Problems in Ecology.**

This course is an interactive discussion of the theoretical foundations and empirical basis for controversial topics in ecology, designed to develop critical thinking skills, and the ability to evaluate and integrate the biological, chemical and physical factors that affect the structure, functions, and interactions characterizing communities and ecosystems.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103F. Molecular Genetics of Plant Development.**

The study of plant development is rapidly changing as plant genome projects discover a multitude of new genes, and their expression and interaction patterns are understood. This course is designed to discuss concepts in plant development, and developmental processes as pathways of gene regulatory activities.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103G. Ecohydrology.**

A review of the concept of ecohydrology, its scientific foundation, and its ecological-hydrological linkages. Current topics in ecohydrology in the literature will be discussed, including manipulation of biota and hydrology interactions in a landscape, and the possibility of augmenting the resilience of ecosystems to anthropogenic changes.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103H. Integrated Waterbird Management.**

This course focuses on the ecology and management of waterbirds, with an emphasis on the inland and coastal waterbirds of Texas. The basic ecology of waterbirds, waterbird management techniques, and waterbird habitat management will be discussed.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103I. Avian Ecology and Evolution.**

This course is an interactive discussion of avian ecology and evolution, providing students with a critical examination of theories, hypotheses, and lab and field-based data that support or refute their hypotheses. This course also discusses peer-reviewed literature that challenges some paradigms in avian ecology and evolution.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7104. Marine Pollution.**

In this course, students will read and discuss the scientific literature on the sources, bioaccumulation, trophic transfer, and health effects of contaminants in the marine environment. Papers will address a variety of marine life including plankton, crustaceans, mollusks, fishes, marine mammals, turtles, and birds. Contaminants to be reviewed include trace elements, PCBs, oil, pesticides, radionuclides, plastics, pharmaceuticals, illegal drugs, and personal care products.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7105. Environmental Issues through Documentaries.**

In this course, students will examine how environmental issues are addressed in documentaries. Students will learn how to critically evaluate documentaries for scientific content, imagery, biases, and ease of understanding. Topics to be examined include overfishing, the wildlife trade, habitat degradation, pollution, energy resources, climate change, sustainability, and conservation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7114. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter



**BIO 7120. Population Biology Seminar.**

This course facilitates exploration of current topics in population and conservation biology through reading and discussion of contemporary primary and secondary literature.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7199A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7214. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7299A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7300. Communicating Science.**

This course explores how to successfully disseminate science through visualizations, oral presentations, and written works to multiple audiences. Special emphasis will be placed on communicating with the general public, media, granting agencies, and science peers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7301. College Science Teaching.**

This course is designed for graduate students in the sciences who are interested in improving their science teaching and/or are interested in pursuing careers in academia. This course focuses on the central question, "How do college students best learn science, and thus how do we best teach them?"

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7302. Problems in Aquatic Resources.**

Individual study on specific state, national, or international aquatic resources issues, under direct supervision of a doctoral or associate faculty member. Students may not enroll in BIO 7302 more than twice for doctoral credit without the approval of the Graduate Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7303. Research.**

Research course for students who have not yet passed their Candidacy Exam, typically under direction of research-dissertation supervisor. Pre-candidacy students must enroll in course every semester until admission to Candidacy, although it may not be taken more than three times for doctoral credit without the approval of Graduate Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7308. History of Vegetation and Climate.**

An overview of past vegetation and its relationship to changing climate. Topics include principles of paleovegetation analysis, paleoclimatology, the rise of flowering plants, vegetation during the age of dinosaurs, the rise of the grasslands, and the Quaternary Ice Age. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7310. Global Aquatic Resources.**

Introduction to global, national, and regional aquatic resource issues, including scientific, environmental policy and socioeconomic components and perspectives. Water quantity and quality issues and their root causes in different regions of the world are examined, with an emphasis on case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7311. Ecology of Temporary Waters.**

The course explores the diversity of temporary bodies of water and of the species that rely on them, including their special adaptations, population and community dynamics, the ecological role of temporary waters, and how these systems are impacted by humans. Background coursework or independent study in ecology is recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7314. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7326. Immunobiology.**

This lecture-based course will cover the mechanisms and biology of the innate and adaptive immune system. Emphasis will include relationship to cancer, transplantation, hypersensitivity (allergy), and disease.

Students will evaluate current research in immunology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7327. Ecological Immunology.**

This course explores the roles of immunity in natural ecosystems, focusing on central concepts in ecological immunology. From viruses to parasites, pathogenic threats are omnipresent. As epizootic outbreaks become more common, it is important to integrate immunological knowledge with traditional ecological perspectives. Background coursework in immunology is recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7331. Human Dimensions of Wildlife and Fisheries Conservation.**

This course will provide principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will have an opportunity to integrate human dimensions into decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7332. Introduction to R Programming for Biologists.**

This course introduces the programming language R. The course will focus on best practices in programming and the use of Base-R and RStudio. Topics include navigating the R and RStudio environment, installing packages, loading, manipulating, and visualizing data, declaring variables, writing loops, and writing functions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7333. Phylogenetic Comparative Methods.**

This course introduces students to modern phylogenetic comparative methods and teaches how to perform them. Topics include constructing phylogenies, dating phylogenies, finding and using previously published phylogenetic datasets, phylogenetic data visualization, and a variety of methods to test ecological and evolutionary hypotheses in a phylogenetic framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7336. Evolutionary Ecology.**

This course will use an evolutionary perspective to explore questions provided by natural selection and sexual selection through assessment of current theory and research related to topics such as competition, coevolution, and phenotypic plasticity. Students will achieve comprehension and familiarity with the field through discussions and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7342. Virology.**

This course examines the structure, multiplication and genetics of bacterial, plant, and animal viruses as well as the role of viruses in human and plant disease. Students are expected to become familiar with the research literature in virology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7346. Conservation Biology.**

Examination of the alteration of habitats and associated biological changes threatening the continued existence of species and basic ecosystems. Topics include conservation ethics, working paradigms, levels and loss of global biodiversity, conservation at population and ecosystem levels, restoration ecology, endangered species biology and conservation laws. Recent Advances are stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7353. Biogeography.**

Examines historical and ecological explanations of the geographic distribution of organisms including the role of geologic, climatic, and biologic changes. Emphasizes the historical and philosophical development of the science and modern methods of analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7354. Applied Analyses of Populations.**

In this course students will learn and apply a variety of statistical techniques for analyzing populations. They will build code to conduct and compare statistical analyses as they apply to real population data. Students will use real-world data sets to generate objectives and test hypotheses including conducting all data visualization and validations, performing models, selecting appropriate models, and estimating latent variables and their predictors. Analyses include assessing the effects of environmental attributes on occupancy, relative abundance, abundance, space (habitat) use, home range size, local colonization, local extinction, survival, and recruitment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7355. Plant-Water Relations.**

Examination of the physiology and ecology of water use in higher plants, including the uptake, utilization, and movement of water, transpiration and adaptation to variable water availability including drought, and the ecological role of water in structuring plant communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7360A. Industry and Sustainable Aquatic Resources.**

Examination of industrial water needs and uses, the types and quantities of water pollutants produced by different industries, problems faced by industry regarding process water for different manufacturing activities, and the possibilities for industry to contribute to the goal of sustainable aquatic resources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360B. Environmental Linkages and Sustainable Aquatic Resources.**

Introduction to the environmental relationships between humans and other living beings and the ecological systems in which they exist. Emphasis will be on the potential for individual environmental problems to have serious impacts on other environmental components, as well as the nature of these impacts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360C. Role of State and Federal Courts in Protection and Maintenance of Aquatic Resources.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360D. Evolutionary Ecology.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360E. Advances in Water Quality Investigations.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360F. Approaches to Aquatic Resource Modeling.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360G. Molecular Techniques in Microbial Ecology.**

Lectures on molecular techniques used to analyze structure and function of uncultured microbial communities in the environment with selected examples of applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360H. Parasites and Diseases of Fishes and Other Aquatic Animals.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics

**Grade Mode:** Standard Letter

**BIO 7360I. Bayesian Statistics for Biology.**

This course examines the theory and mathematical foundations of Bayesian statistics and provides instruction and experience conducting Bayesian analyses using computer-based procedures. The course emphasizes practical applications for Bayesian statistical procedures for problems in biological sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360K. Evolution.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360L. Landscape and Biogeography of Texas.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360P. Regulation of Plant Growth and Development.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360Q. Spatial Ecology of Animals.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360R. Community and Ecosystem Ecology.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360S. Soil Biology.**

An introduction to the biology of soil systems, including the roles of biota in forming and maintaining soils, and the interactions between biotic and abiotic components in soils.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360T. Karst Hydrogeology and Geomorphology.**

An introduction to, and advanced understanding of, karst hydrogeology, geology, and geomorphology, with emphasis on field and theoretical applications of this information to the study of karst systems, and recognition and understanding of karst landforms at the surface and their relationships with subsurface processes. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360U. Sustainability in a Changing World.**

Understanding the ecological-social interface, including policies, product development and actions towards sustainability, with emphasis on integrating and implementing theories and methods across disciplines, and improving the knowledge and experience base for public policy and decision-making regarding human-environment linkages within the context of sustainable development. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360V. Techniques in Aquatic Biology.**

The course will provide hands on experience with a suite of physical, chemical, and biological sampling techniques and gear used in applied river studies. Students will be exposed to the fundamentals of data quality objectives, accuracy, precision, detection limits, data visualization, exploratory analysis, univariate and multivariate statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360Y. Applied Bioinformatics.**

This course provides an introduction to scripting and other computational techniques used for visualizing and analyzing large biological datasets. Computational techniques include sequence and structural alignment, data mining, phylogenetic tree construction, and data clustering using UNIX, Python, and R. Students will gain a solid foundation in broadly applicable bioinformatics skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7361A. Discipline-Based Educational Research Methods.**

This course will expose science graduate students to educational research in a practical setting, supervised by a professor experienced in conducting discipline-based educational research, focusing primarily on qualitative methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7361C. Advanced Genomics and Bioinformatics.**

This course provides hands-on experience in processing and analyzing data produced from contemporary genomics tools for thesis students with basic bioinformatics training. Prerequisite: BIO 7360Y with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7361D. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7399A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7402. Molecular Field Techniques.**

The application of molecular tools for identifying, quantifying, and interpreting biological diversity assessments in aquatic systems. The course focuses on micro organismal identification and vertebrate model systems.

**4 Credit Hours. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7405. Statistics and Experimental Design I.**

Introduction to inferential statistics, including exploratory and confirmatory data analysis, estimation and hypothesis testing, analysis of variance and regression, and non-parametric techniques, as applied to aquatic resource issues. Computer applications emphasized.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7406. Statistics and Experimental Design II.**

Introduction to the principles of experimental design, including randomization, replication, sample-size determination, completely randomized and randomized block design, factorial design, repeated measure design, and analysis of variance and covariance, as applied to aquatic resource issues. Computer applications emphasized.

Prerequisite: BIO 7405 with a grade of "C" or better or instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7410. Aquatic Microbial Ecology.**

Examination of microbial organisms, communities, and interactions affecting the form, structure, and functional aspects of aquatic ecosystems. Field trips may be required. Prerequisite: BIO 2400 with a grade of "D" or better or instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7412. Environmental Hydrology.**

Overview of the properties, distribution, and movement of water over and under the land surface and its relation to sustainable aquatic ecosystems, including quantitative methods to assess cumulative impacts of human activities on such systems. Field trips may be required. Knowledge of calculus recommended.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7414. Ecology of Infectious Diseases of Wildlife.**

Concepts of the ecology of infectious diseases in wildlife are studied in depth with emphasis on their application to the management and conservation of wildlife species and for the control of zoonotic diseases. Prerequisite: Instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7419. Stream Ecology.**

Study of ecological theories, concepts, and processes occurring at the population, community, and ecosystem levels of organization in running water. Laboratory includes sampling methods, descriptive and comparative studies, experiments, and critical discussion of literature. Field trips may be required.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7426. Ecology and Management of Aquatic Macrophytes.**

Examination of aquatic macrophytes and their ecology, taxonomy, distribution and management. Field trips may be required.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**BIO 7427. Principles of Population Biology I.**

This course provides a foundation in theory and mathematics of basic population biology. The course is divided into modular components, including defining evolutionarily significant units, ecology of populations, genetics of populations, and evolutionary genetics. A background in genetics and general ecology is recommended.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7428. Principles of Population Biology II.**

This course provides a foundation in theory and mathematics of basic population biology. The course is divided into modular components which include: 1) Ecology of Communities, 2) Evolution of Behavior, 3) Phylogenetic Methods, and 4) Biological Diversity and Conservation Biology.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7430. Mycology.**

This course provides an introduction to the organisms in the Kingdom Fungi and to fungus-like organisms, their ecology and evolution, and their role in industry and disease. Special emphasis will be placed on morphology, culturing, and using laboratory techniques for identification.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7433. Population Genetics.**

This course examines the theoretical foundations of population genetics, including the description of population genetic structure and the forces creating it. The course emphasizes application of principles to a wide range of current problems in evolution, systematics and ecology. Molecular methods, data interpretation and computer-based data analysis are emphasized.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7434. Herpetology.**

A course treating the origin and evolution of amphibians and reptiles; their reproductive and physiological tactics; taxonomy/systematics; and population biology. While cosmopolitan in scope, emphasis will be placed on North American species and those groups inhabiting Texas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7440. Aquatic Toxicology.**

Introduction to principles for identifying and assessing the adverse effects of chemicals and other compounds and mixtures on aquatic organisms and ecosystems.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7447. Microbial Physiology.**

Prokaryotes, including bacteria and archaea, are the most diverse group of organisms on earth. Many prokaryotes live in environments which are inhospitable to other life forms. This course covers major aspects of prokaryotic physiology that permit them to be so successful.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7466. Phylogenetics.**

Study of the use of phylogenetic methodologies in aquatic research, including practical data collection, management, and analysis in the reconstruction of phylogenies. Laboratory exercises will introduce phylogenetic and DNA analysis software. Prerequisite: BIO 2450 and BIO 4369 and BIO 5466 all with grades of "C" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7468. Groundwater Resources.**

Study of the geological, physical, chemical and biological factors influencing sustainable groundwater resources, including hydrologic linkages and interactions with surface aquatic resources. Emphasis will be on the karst aquifer systems of Central Texas, and other groundwater aquifer systems of the United States.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7469. Introduction to Ecological Modeling.**

Mathematical models range from simple conceptual models to complex mechanistic models for mimicking behavior of natural systems. This course provides a broad overview of modeling objectives, techniques and assumptions, as well as the practical skills needed to conduct modeling projects. Computer applications emphasized. Prerequisite: MATH 2471 with a grade of "C" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7599A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7699A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7999A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Criminal Justice (CJ)

**CJ 7199. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7299. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7301. Instructional Assistant Supervision.**

This course prepares doctoral students employed as research or teaching assistants to perform effectively in diverse instructional settings. The course provides for regular and planned opportunities for continuing evaluation of students. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CJ 7309. Proseminar.**

This course introduces students to information that is useful to their success as Ph.D. students and after graduation. Topics include the criminal justice discipline, teaching, publishing, grants and fellowships, writing dissertations, and post-doctoral employment. Emphasis is placed on identifying and coordinating opportunities for research and scholarship among faculty and students. Must have completed 12 hours of doctoral credit in Criminal Justice to enroll in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7310. Philosophy of Law, Justice, and Social Control.**

A current, thorough, and comprehensive review of the criminal justice system focused on how the system functions, and its current needs and future trends. Students submit extensive critiques and participate in panel discussions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7311. Advanced Criminological Theory.**

An overview of the major criminological paradigms is presented focusing on the causes of crime and deviant behavior. The course includes a discussion of criminological theories from a philosophy of science perspective focusing on such issues as theory construction, theoretical integration, and the formal evaluation of theory and policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7313. Race and Ethnicity in Crime and Criminal Justice.**

An exploration of how issues related to racial and ethnic minorities and criminal behaviors impact criminal justice reactions. Topics include racial disparities related to law enforcement and sentencing, and policy implications related to policing, probation, pre-sentencing and post-release issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CJ 7314. Policing.**

This course examines current problems in American policing and the role of research in their examination and solution. Official crime and victimization statistics and measure of police performance are explained, with a focus on their collection, development, limitations, and utility. Methods and issues in policing research are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7315. Corrections.**

This course examines the history, forms, and functions of correctional institutions, their programs and policies, as well as theories of punishment. Topics include the structure and functions of prisons and jails, community corrections, intermediate sanctions, reentry, supermax prisons, and the death penalty.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7320. Quantitative Research Methods.**

A course that demonstrates the practical aspects of conducting criminal justice research that uses quantitative methodologies and design. Topics include the philosophy of science; research ethics; methodological designs in establishing causation; nonexperimental/descriptive research; sampling techniques; secondary data sources and data gathering techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7321. Linear Regression for Criminal Justice Research.**

Instruction on the use of advanced linear modeling techniques in criminal justice research is addressed. After completing this course, students should be able to evaluate quantitative research articles in the major criminal justice journals and be prepared to complete a major quantitative research project of their own.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7322. Advanced Research for Planning and Evaluation.**

An introduction to evaluation and research design methodologies, assessment techniques including modeling and case studies, agency management issues, and on-going policy implications. Course gives students an understanding of the principles and techniques commonly used to evaluate the effectiveness and efficiency of criminal justice interventions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7323. Applied Statistics and Quantitative Data Analysis.**

This is a course in statistics and data analysis for the purposes of original quantitative research. Topics include descriptive statistics, statistical inference for single and multivariable analysis, and principles underlying the techniques. This course makes extensive use of statistics software and data preparation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7330. Qualitative Research Methods.**

A discussion of the methods and techniques used for achieving interpretable qualitative results in social research. Topics covered include ethnography, focus groups, in-depth interviewing and case studies. Students will be trained in inductive reasoning and coordinating qualitative with quantitative methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7331. Law and Behavioral Science.**

A review of the issues addressed in the application of the behavioral sciences to the criminal law system. Topics include criminal sanctions and diminished responsibility, civil commitment, victimology, psychology in the courtroom, the role of media, drugs, and alcohol to violence, and how the justice system reacts to violent offenders.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7336. Survey Research Methods for Criminal Justice.**

This course addresses the procedures and techniques used to create social surveys including question formulation, metrics, and question scaling. Students learn how to prepare face-to-face, telephone, and mail surveys, and are trained in sampling procedures related to survey administration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7350A. Forecasting, Trend Analysis, and Data Interpretation.**

A review of quantitative approaches to public policy analysis, the diverse conceptions of the goals and objectives that should be served by policy, and the appropriate role of the policy analyst. Policy consequences are traced to indirect and subtle incentives and disincentives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350B. Academic Scholarship and Communication.**

A course on conducting academic research, interpreting results and how to prepare manuscripts for publication in refereed journals. Included is a survey of the audiences, topical focus, and submission requirements of the major criminal justice, criminology, and law publications, along with specialized knowledge on achieving success in the scholarship environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350C. Qualitative Data Collection, Coding and Analysis.**

This course takes a structured approach to understanding and implementing the various information collection methods used in qualitative research, including formatting the information for coding, coding schemes, and information interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350E. Discrete Multivariate Models.**

This course focuses on regression models for discrete outcome variables, sometimes called limited or categorical dependent variables. Topics include maximum likelihood estimation, binary and multinomial logistic models and negative binomial models. Prerequisite: CJ 7321 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350F. Environmental Criminology.**

Crime distributes unevenly in space/time. As such, the course examines such questions as (1) What places are dangerous? (2) Why do we study specific crime types? (3) Where do crime types concentrate? (4) Where do offenders go in their normal activities? (5) What are the temporal patterns for crime? Prerequisite: CJ 7311 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350G. Seminar in Macro Criminology.**

This course has a macro focus, examining criminological theory and research that takes cities, geographical regions, states, and nations as the units of comparison. The importance and relevance of macro criminology for understanding the causes of crime and key criminal justice issues, such as police resources, are explored in depth. Prerequisite: CJ 7311 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350I. Introduction to Structural Equation Modeling.**

The course provides an introduction to structural equation modeling, which is sometimes called mean and covariance structure analysis or latent variable analysis. Topics include recursive and non-recursive models, path analysis, measurement models, and factor analysis. Prerequisite: CJ 7321 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350K. Criminal Justice Forecasting and Policy Analysis.**

This course examines the inputs and outputs of criminal justice programs. It covers forecasting methods using statistical bootstrapping techniques including line fitting methods, moving averages, cohort propagation matrixes, and systems simulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350L. Sex Offenders: Theory, Research & Policy.**

This course will focus on application of theory to explain sexual offenses, research design issues related to researching this salient population of offenders (e.g., ethical issues, gaining IRB approval, research design limitations, social desirability problems in self-report data, and examining available data sources), and examining policy related issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7360. Independent Study.**

Students will work closely with a particular doctoral faculty member and develop in-depth knowledge in a specific topic area of criminal justice. Topics vary according to a student's program needs. Repeatable once for credit with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7399. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7599. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7699. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7999. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

## Program Overview

Offered through the Department of Mathematics at Texas State, this Mathematics Education Ph.D. program has particular strength in the number of courses it requires in mathematics as a complement to its courses in the teaching and learning of mathematics. Doctoral graduates will have completed a strong mathematics core in addition to the mathematics education core, thus opening a wide variety of employment opportunities.

The program is for people whose career goals will take them into professional leadership roles involving mathematics education within the United States or internationally. This program prepares its graduates for positions as mathematics or mathematics-education faculty in colleges and universities; as decision-makers in state or local education agencies; as researchers in think tanks, corporations, or not-for-profit organizations; as high-ranking staff in foundations or international organizations; or decision-makers within a national ministry of education.

The ideal admittee has an undergraduate degree in mathematics, mathematics education, or a related field. Students, especially those with a degree in a related field other than mathematics or mathematics education, may need to take background leveling courses. This decision will be made on a case by case basis by the appropriate advisor and would be articulated at the time of admission.

## Educational Goal

The educational objectives of the program in mathematics education are:

- To develop a well-balanced foundation in mathematics content including in-depth understanding of basic principles.
- To understand the mathematics needed for our rapidly changing technological society.
- To link mathematics content to pedagogy for effective teaching that addresses educational needs through the entire P-20 continuum.
- To understand how to design best and most effective curriculum and ways to deliver this curriculum.
- To contribute to the knowledge in mathematics education by original research.
- To produce Ph.D. graduates who can become the leaders in the state and the nation's educational community concerning the teaching of mathematics appropriate for the demands of the 21<sup>st</sup> century.
- To produce high-quality teachers of mathematics at all levels.

## Teaching Experience

The Mathematics Education Ph.D. program expects its students to have had two years of teaching experience. A student who has taught full-time in the public school system for two or more years meets this requirement.

A student who has not met this requirement upon admission will be required to gain practical teaching experience before graduation. If a student receives a teaching assistantship while in the program, each long term during which the student has a two-course assignment will count as one half of a year of experience. A student who teaches two summer sessions earns one long semester credit toward this requirement. If a student has other forms of practical teaching experience, the mathematics education advisor will determine the amount of credit received on an individual basis.

## Financial Assistance

Almost all doctoral students are expected to receive full financial assistance from the department working as instructional assistants or research assistants. You must be accepted as a Ph.D. student in order to apply. In addition, you must submit to the department

- a completed employment application form (available from the departmental web site);
- at least one letter of recommendation regarding teaching ability (this could be one of the three letters recommending admission to the program); and
- a current curriculum vitae.

Please visit the departmental website for more detailed information. The financial aid application deadline is the same as that for graduate admission. Note that the number of positions available for spring semesters is quite limited. Stipends for research assistantships depend on the types of research grants. Additional summer support is available as instructional assistants or research assistants. Contact the department for more information.

In addition to the financial aid from the Department of Mathematics, The Graduate College offers a wide variety of graduate assistantships and scholarships. Visit the Department of Mathematics website <http://www.math.txstate.edu/> or The Graduate College website <http://www.gradcollege.txstate.edu/>. Please note that the deadlines for these and other scholarships may be different from those for instructional assistantships in mathematics.

## Advising

Each student is required to pass 36 hours of core courses, a minimum of 24 hours of elective courses, and a minimum of 18 hours of dissertation, yielding a minimum of 78 hours in course work. No grade earned below a "B" on any graduate course may apply toward a Ph.D. at Texas State. However, advisors may modify a student's doctoral program requirements as a result of either the student's performance in the qualifying exams or a change to their research goals.

The Graduate College issues each Ph.D. student a preliminary degree audit used to plan the student's course of study. In the first term of enrollment, students should review the degree audit in consultation with their supervising professor and the program director. Our advisors tailor doctoral degree audits with the individual student in mind. It is, therefore, possible for the individual degree audit to exceed the number of degree hours stated in the catalog.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic



year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree or higher (or the equivalent thereof) in mathematics, mathematics education, or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 3.0 overall GPA or a 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE is not required
- interview with faculty
- resume/CV
- statement of purpose (500 words) describing the student's background and professional goals, including the rationale for pursuing a doctoral degree in mathematics education and teaching philosophy
- three letters of recommendation addressing the student's professional and academic background as well as research and teaching potential
- two years teaching experience: If student has taught for two or more years at full-time status in the public school system, they will be considered to have met this requirement. If the student has not met this requirement upon admission, they will be required to gain practical teaching experience before graduation. If the student receives a teaching assistantship while in the program, each long semester they have a two-course assignment will count as one half of a year of experience. If they teach two summer sessions, they will be given credit for one long semester. In the event that they have other forms of practical teaching experience, the Ph.D. program director will determine the amount of credit received on an individual basis.

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Doctor of Philosophy (Ph.D.) degree with a major in Mathematics Education requires 78 semester credit hours for students admitted with a bachelor's degree. Students entering with a master's degree in mathematics can request up to 24 credit hours of transfer course work to be approved by the dean of The Graduate College upon recommendation from the Ph.D. program director. See the transfer credit section of this catalog for information about requesting transfer work.

## Course Requirements

Students who do not have the appropriate background course work may be required to complete leveling courses.

Code	Title	Hours
<b>Required Courses</b>		
ED 7352	Beginning Qualitative Design and Analysis	3
or CI 7352	Beginning Qualitative Design and Analysis	
MATH 7302	History of Mathematics	3
MATH 7303	Analysis I	3
MATH 7306	Current Research in Math Education	3
MATH 7307	Algebra I	3
MATH 7309	Topology I	3
MATH 7324	Curriculum Design & Analysis	3
MATH 7325	Statistics 1	3
MATH 7328	Instructional Techniques & Assessments	3
MATH 7346	Quantitative Research Analysis in Mathematics Education	3
Choose 6 hours from the following:		6
MATH 7321	Graph Theory	
MATH 7331	Combinatorics	
MATH 7354	Advanced Qualitative Research	
MATH 7358	Advanced Quantitative Research in Mathematics Education	
<b>Prescribed Electives</b>		
Choose 24 hours from the following:		24
MATH 7188	Seminar in Mathematics Education	
MATH 7313	Analysis II	
MATH 7317	Algebra II	
MATH 7319	Topology II: Algebraic Topology	
MATH 7321	Graph Theory	
MATH 7323	Theories of Knowing and Learning in Mathematics Education	
MATH 7331	Combinatorics	
MATH 7335	Statistics II: Linear Modeling	
MATH 7366A	Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors)	
MATH 7366B	Teaching K-12 Students (Elementary, Middle School, and High School)	
MATH 7366C	Teaching Teachers (In-Service; Pre-Service)	

MATH 7366D	Teaching Specialized Content
MATH 7366E	Developmental Mathematics Curriculum
MATH 7366F	Research in Undergraduate Mathematics Education I
MATH 7366G	Research in Undergraduate Mathematics Education II
MATH 7371A	Advanced Graph Theory
MATH 7371B	Advanced Combinatorics
MATH 7371C	Combinatorial Number Theory
MATH 7371D	Discrete Optimization
MATH 7371E	Algorithms and Complexity
MATH 7371F	Probabilistic Methods in Discrete Mathematics
MATH 7371G	Applied Discrete Mathematics
MATH 7371H	Combinatorial Networks
MATH 7378A	Problem Solving, Reasoning, and Proof
MATH 7378B	Connecting and Communicating Math
MATH 7378C	Representing Fundamental Math Ideas (Function, Data Analysis, and Enumeration)
MATH 7378D	Math Technologies
MATH 7378E	Developmental Mathematics Perspectives
MATH 7378F	Research on Mathematical Problem Solving in Secondary Schools
MATH 7378G	Discourse Processes, Traditions, and Analysis in Mathematics Education
MATH 7378H	Equity in Mathematics Education
MATH 7386	Independent Study in Mathematics Education
MATH 7389	Internship
MATH 7396	Mathematics Education Research Seminar
May choose advisor-approved electives from outside the department	
<b>Dissertation</b>	
Choose a minimum of 18 hours from the following:	
MATH 7199A	Dissertation in Mathematics Education
MATH 7299A	Dissertation in Mathematics Education
MATH 7399A	Dissertation
MATH 7599A	Dissertation in Mathematics Education
MATH 7699A	Dissertation in Mathematics Education
MATH 7999A	Dissertation in Mathematics Education

**Total Hours** 78

## Qualifying Examination

Typically, after completion of the core courses or by the end of the second year in residence, each student will be required to take written qualifying examinations. To be eligible to take the qualifying examinations, the student normally will have a minimum grade point average of 3.5 on all the core courses including the transferred equivalent courses that the student has completed. A student will choose two of the following topics to be on his or her qualifying examinations: algebra, analysis, topology, statistics, and discrete mathematics. Mathematics education will be the third topic.

**Following the successful completion of all qualifying exams, a student may register for a maximum of three of the required eighteen dissertation credits until successful defense of the dissertation proposal.**

## Comprehensive Examination Requirements

A comprehensive oral examination of the student's dissertation proposal will take place as part of the proposal defense.

## Advancement to Candidacy Application for Advancement to Candidacy

The dean of The Graduate College approves advancement to candidacy once all requirements are met. Doctoral students must be advanced to candidacy within five years of initiating Ph.D. course work applied toward the degree. Students need to indicate their intent to advance to candidacy during the term they complete the 60 hours of required course work and other departmental requirements. The student will need to download the Advancement to Candidacy form from The Graduate College website. The student will need to complete the form and return it to the doctoral program director. The doctoral program director will then submit the completed form to the dean of The Graduate College for review.

The doctoral candidacy requirements include:

1. Completion of all required course work with the exception of dissertation credit hours.
2. Successful passage of all three qualifying exams.
3. Successful passage of the comprehensive exam.
4. Approval of the dissertation proposal.
5. At least a 3.5 GPA on all doctoral required courses.

## Advancement to Candidacy Time Limit

No credit will be applied toward the doctoral degree for course work completed more than five years before the date on which the student is advanced to candidacy. This time limit applies toward credit earned at Texas State as well as credit transferred to Texas State from other accredited institutions.

Requests for a time extension must be submitted to the doctoral program director, who in turn, submits a recommendation to the dean of The Graduate College.

## Grade-Point Requirements for Advancement to Candidacy

To be eligible for advancement to candidacy, the student must have a minimum GPA of 3.5. No grade earned below a "B" on any graduate course may apply toward a Ph.D. at Texas State.

Incomplete grades must be cleared through the office of The Graduate College before a student can be approved for advancement to candidacy.

## Dissertation Proposal

In order to be advanced to candidacy, a student must select a doctoral dissertation advisor and committee, submit a dissertation proposal, and successfully defend the proposal in an oral examination with the dissertation committee. The examination will address the problem definition and scope, the relevant literature, and the research method of the proposed dissertation topic. Information about the formation of the dissertation committee can be found in the "Dissertation Research and Writing" section of this catalog.

## Recommendation for Advancement to Candidacy

The doctoral program committee recommends the applicant for advancement to candidacy to the doctoral program director, the department chair, and the dean of The Graduate College. The dean of The Graduate College certifies the applicant for advancement to candidacy once all requirements have been met. To be eligible for admission to candidacy, the student must have successfully completed the qualifying and/or comprehensive exam(s), completed all course work, and successfully defended the dissertation proposal.

## Dissertation Research and Writing

All doctoral students are required to complete a dissertation. The dissertation must be an original contribution to scholarship and the result of independent investigation in a significant area. Preparation of the dissertation must follow the latest edition of Kate L. Turabian's *A Manual for Writers*.

## Dissertation Enrollment Requirements

### Enrollment

After being admitted to candidacy, students must be continuously enrolled each term for at least three dissertation hours. If a student is receiving supervision on the dissertation during the summer or the student is graduating during the summer, the student must be enrolled in dissertation hours for the summer. All candidates for graduation must be enrolled in dissertation hours during the term in which the degree is to be conferred.

### Hours

Students must complete a minimum of 18 semester hours of dissertation research and writing credit.

## Dissertation Time Limit

Students are expected to complete the dissertation within three years of advancement to candidacy. The mathematics education program director will review the students' annual progress to ascertain his or her progress in pursuing the degree. The program director will consult with the student's Ph.D. advisor and dissertation committee on this matter as appropriate.

## Dissertation Committee

A dissertation committee must be formed to oversee the research and writing of the dissertation. The dissertation committee will include a dissertation advisor and a minimum of three additional members (one of whom must be an external member).

The members must be chosen from qualified Ph.D. faculty. The dissertation advisor and the committee members must be selected in consultation with the student. The dissertation advisor will chair the dissertation committee and must be from the major department. The dissertation advisor and committee members must be approved by the doctoral program director, the department chair, and the dean of The Graduate College.

The student is responsible for obtaining committee members' signatures on the proper forms and submitting the forms to the department for further routing approval. The forms may be downloaded from The Graduate College website.

## Committee Changes

Any changes to the dissertation committee must be submitted for approval to the dissertation committee chair, the doctoral program director, the department chair, and the dean of The Graduate College. Changes must be submitted no less than sixty days before the dissertation defense. The "Ph.D. Research Advisor/Committee Member Change Request form" may be downloaded from The Graduate College website.

## Dissertation Defense

The dissertation defense may not be scheduled until all other academic and program requirements have been fulfilled. A complete draft of the dissertation must be given to the members of the dissertation committee at least 65 days before the date of commencement during the term in which the student intends to graduate. After committee members have reviewed the draft with the student and provided comments, the student, in consultation with the research advisor, will incorporate the recommended changes into a second draft of the dissertation. When each committee member is satisfied that the draft dissertation is defensible, dissertation defense will be scheduled.

The dissertation defense will consist of two parts. The first part is an oral presentation of the dissertation research given as a public seminar. The second part of the defense will immediately follow the public presentation, but is restricted to the student's dissertation committee, and will entail an oral examination over the dissertation research. The full committee, including all external members, must be present. Approval of the dissertation requires positive votes from the student's Ph.D. advisor and a majority of the remaining members of the dissertation committee. Specific information on the examination and defense procedure can be obtained from the doctoral program director.

## Approval and Submission of the Dissertation

Following approval and signing of the dissertation by the members of the dissertation committee, the student must submit one copy of the dissertation and one signed "Thesis/Dissertation Committee Approval form" to The Graduate College for final approval. Specific guidelines for approval and submission of the dissertation can be obtained from the office of The Graduate College. Dissertations must be submitted in electronic format.

Doctoral level courses in Mathematics Education: ED (p. 3259), MATH (p. 3265)

## Courses Offered

### Education (ED)

#### ED 7199A. Dissertation.

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7199B. Dissertation.**

Original research and writing in Education-School improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7299A. Dissertation.**

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7299B. Dissertation.**

Original research and writing in Education-School improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7310. Instructional Roles in Counseling, Leadership, Adult Education & School Psychology.**

This seminar is intended to prepare graduate teaching and instructional assistants in the CLAS Department to function effectively in various instructional and instructional support roles. Required for first-year teaching assistants and GIAs. This course does not earn graduate degree credit. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ED 7311. Educational Philosophy in a Social Context.**

This course examines the philosophical foundations of education from the time of Plato through current writings. It frames these foundations through the lens of educational challenges of today. Readings include classical and current writings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7312. Leadership and Organizational Change.**

This course will familiarize students with different perspectives on organizations, different paradigms by which they might be viewed, and a survey of research done on organizations, organizational leadership and change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**ED 7313. Advanced Studies in Adult Learning and Development.**

This advanced seminar will examine research and theoretical literature on a variety of topics including: characteristics of adult learners; models of adult cognitive and psychosocial development; adult cognition, memory, and intelligence; and principles for facilitating adult learning. Restricted to Ph.D. in Education degree, Major in School Improvement.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7314. Community Development for Educators.**

Examines models and methods of community development as relevant to the practice and scholarship of formal and non-formal education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7315. Models of Inquiry: Understanding Epistemologies.**

This course examines the philosophies informing different research epistemologies, and examples of how these can be actualized methodologically. Philosophies to be analyzed include feminism, and race-based theory. This course will help students see the multiple possibilities for conducting research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7316. Advanced Studies in Adult Development.**

This course examines current theories of adult development, fundamental developmental changes in adulthood, and the implications for practice in adult education. Restricted to students admitted to the Education Ph.D. Program- APCE major or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7317. Instructional Leadership for Organizational Change.**

This course will introduce students to the major stream of research on instructional leadership and organizational change in education while analyzing models of leadership and change from critical, systemic, and cross-cultural context lenses. The relationship between instructional supervision, professional development, and curriculum development, with experiential applications will also be explored. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7318. Advanced Studies in Adult Learning.**

This advanced seminar will examine research and theoretical literature on a variety of topics related to adult learning such as: characteristics and diversity of adult learners; key theories of adult learning; alternative perspectives on adult learning; intelligence, aging and wisdom; and learning in the digital age. Restricted to students admitted to the Education Ph.D. Program – APCE major or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7319. Foundations of Educational and Community Leadership.**

This course examines the philosophical, political, psychological, cultural, ethical, and technological foundations of educational and community leadership, with a focus on the purpose of education and history of educational and community leadership in American education and how leadership shapes teaching and learning. Some topics related to educational and community leadership to be explored include decision and policy making, school culture, schools as learning communities, the change process, action plans, and research-based school improvement models/networks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7320. Literature Review for Research Writing.**

In this seminar course, students conduct a careful examination of a body of literature related to a research topic in adult/professional/community/lifelong education. The literature review tests research questions in relation to what is published about a topic, discusses various positions, crafts coherent arguments and addresses knowledge gaps. Prerequisites: ED 7352 or ED 7351, all with a grade of "B" or better. Restriction: Doctoral standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7321. Historical and Philosophical Foundations and Contemporary Issues in Adult Education.**

Examines historical and philosophical foundations for the study and practice of adult professional, and community education in formal and non-formal settings; and contemporary issues in adult education in a "learning society." Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7322. Human Resource and Professional Development.**

Examines the methods, practices, and issues of facilitating learning related to occupational, professional, and volunteer roles. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7324. Problems and Strategies in Program Planning Seminar.**

Addresses principles and procedures, issues and trends, utilization of assessment, goal setting, and other effective strategies for developing learning opportunities and programs responsive to human, professional, and community needs. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7325. Sociocultural Dynamics in Learning Communities.**

This course draws on interdisciplinary literature to explore social, cultural, historical, and political dynamics and its implications on education for people, organizations, and communities. This will involve an exploration of the sociocultural dynamics in learning communities through a personal lived perspective and through the ecologies of knowing framework (Guajardo et al., 2013; Guajardo et al., 2016): self, organization, and community. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7326. Policy and Politics as Practice.**

This course examines the historical and theoretical underpinnings informing educational policy, politics, and social justice. It addresses both the micro and macro levels of the context, values, and cultural norms guiding policy and politics as practice in a democratic society. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7327. Education Policy Development.**

This course equips students with the skills needed to analyze the origins and consequences of existing policy and to play active roles in policy development for educational equity and social justice. Prerequisite: ED 7326 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7328. Research and Analysis in Education Policy.**

This course engages students in a field-based educational policy research project using quantitative and qualitative techniques. Students will develop their skills to identify policy issues, gather and analyze data, and draw conclusions, and disseminate findings. Prerequisites: ED 7326 and ED 7327 and ED 7351 and ED 7352, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7329. Field-Based Experience in Educational Policy.**

This course provides fieldbased practice in policy analysis and development from a democratic and social justice perspective. With guidance from a university faculty supervisor and site mentor, the student will develop and implement a policy project related to democracy and social justice. Prerequisite: ED 7328 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7331. Foundations of School Improvement.**

Examines school improvement efforts from philosophical, political, psychological, cultural, ethical, and technological foundations. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ED 7332. Facilitating School Improvement.**

Examines school culture, schools as learning communities, the change process, and research-based school improvement models, with experiential applications. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7333. Curriculum and Instructional Leadership.**

Examines the relationship between curriculum, instructional improvement, and teacher development, with experiential applications. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7334. Processes for Educational Evaluation and Analysis.**

This course focuses on the development of the requisite knowledge and skills to facilitate the evaluation and analysis of educational programs and initiatives in complex community and school settings to inform pedagogy, leadership and community development. The course includes the assessment, evaluation, and analysis of student learning at the individual, classroom, school, and system level; teacher assessment; and program assessment. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7341. Dissertation Proposal Development.**

In this course students approaching dissertation stage meet in a seminar designed to help them clarify their research problem and develop a preliminary proposal for the dissertation. Core and concentration courses must be completed with minimum grades of "B" in each course prior to taking ED 7341. Prerequisites: ED 7351 and ED 7352, and ED 7353 or ED 7354, all with a grade of "B" or better. Departmental approval required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7345. Human Resources and Instructional Management.**

This course focuses on the twin areas of human resource administration and instructional improvement. Topics addressed include legal requirements for personnel management, staff supervision, appraisal, and development, curriculum planning and alignment and student assessment. Students taking the course will complete an original research project under the instructor's direction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7347. The Superintendency.**

This course addressed issues critical to superintendents in Texas. These include leadership, leadership assessment, school board relations, and other governance issues, management strategies, the role of public education in a democratic society, and professional ethics. Students taking the course will complete an original research project under the instructor's direction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7349. School Finance and Business Management.**

This course focuses on the financing of public schools. Students will examine the school budgeting process, sources of school revenues, principals of taxation, methods of school fund accounting, and techniques of business management. Students taking the course will complete an original research project under the instructor's direction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7351. Beginning Quantitative Research Design and Analysis.**

Includes descriptive statistics; sampling techniques; statistical inference including the null hypothesis, significance tests, and confidence intervals; and causal-comparative analyses, including t-test and ANOVA.

Prerequisites: Core and Concentration courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7352. Beginning Qualitative Design and Analysis.**

Introduces the qualitative paradigm. Includes distinctive features, alternative qualitative traditions, purposeful sampling, common data collection methods, inductive analysis, the role of the researcher, and evaluating qualitative research. Prerequisites: Core and Concentration courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7353. Intermediate Quantitative Research Design and Analysis.**

This course focuses on issues in the design and implementation of quantitative research. Topics include ANOVA, ANCOVA, and MANOVA, correlation analysis, regression analysis, nonparametric tests, and relationships between experimental designs and statistical analysis techniques. Prerequisite: ED 7351 with a grade of "B" or better, or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7354. Intermediate Qualitative Design and Analysis.**

Focuses on issues in design and implementation of qualitative research. Topics include influence of alternative traditions, literature in qualitative research, access to the field and ethical issues, researcher-participant relationships, purposeful sampling strategies, inductive analysis procedures, developing theory, and reporting research. Prerequisite: ED 7352 with a minimum grade of "B", or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7357. Advanced Study in Action Research.**

This course examines underlying theory, practice, skills, and issues in action research. Conducting research in the area of action research is also addressed. This course is an appropriate elective for majors in School Improvement or Adult, Professional and Community Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7359. Seminar in Quantitative Research.**

This course is a small group seminar that focuses on analytic strategies specific to the doctoral student's dissertation topic. Examples include structural equation modeling, hierarchical linear modeling, log linear modeling, non-parametric analyses, factor analysis, factorial analysis of variance, and other multivariate statistical methods. Prerequisites: ED 7351 and ED 7353, all with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7364. Personal, Team, and Professional Development in Education.**

This course focuses on the interconnectivity and development of individuals and teams to acquire the knowledge, skills, and dispositions needed in professional education contexts to improve educational organizations, teaching, and learning. Because of its focus on education, it is recommended only for doctoral students preparing for careers in educational settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7371. Anthropology and Education.**

This course introduces the student to the basic concepts in anthropology and education and sketches the application of these concepts. It explores the research in anthropology and education with relevance to both K-12 schools and other, more general educational settings. The course is an appropriate elective for Education Ph.D. majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7378. Problems in Education.**

Individual problems or topics will be designed and completed to emphasize selected areas of study. May be repeated for additional credit at the discretion of the program coordinator.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dual Enrollment Permitted

**Grade Mode:** Standard Letter

**ED 7379. Independent Study.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in the Counseling, Leadership, Adult Education & School Psychology Department. May be repeated for additional credit at the discretion of the program coordinator.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7389B. Seminar in International Educational Research: Chile.**

This course develops theoretical knowledge, methodological skills, and scholarly capacity for international educational research. It focuses on research within the complex educational environment of Chile, involving seminar components held at the university and research fieldwork in Chile. International research is framed as a form of service learning. Restricted to students in the PhD in Education program.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389C. Advanced Theory in Qualitative Research.**

This course features advanced study in qualitative research methods.

The course studies such methods as ethnography, case study, phenomenology, narrative analysis, post-qualitative research, grounded theory, or more advanced qualitative research in general and their constitutive field techniques. Prerequisites: Introduction to Qualitative Research and Intermediate Qualitative Research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ED 7389D. Advanced Theory in Qualitative Research: Narrative Research.**

The purpose of this course is to explore the possibilities of narrative research. The course will provide an overview of narrative inquiry, look at various theories and corresponding examples of research, and explore, analyze, and interpret data using narrative methods. Prerequisites: Introduction to Qualitative Research and Intermediate Qualitative Research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ED 7389E. Mexican Perspectives on Mexico - U.S. Immigration.**

The course gives U.S. educators an understanding of Mexican to U.S. immigration from Mexican women's perspectives. Students will read background information and visit Mexico where through lectures, field interviews, and field visits, they will view immigration from the "other side". They will analyze and write up data when they return. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ED 7389H. Oracy and Language Expression for Educators.**

This course focuses on the theory and practice of language expression. It emphasizes the relationship between audience analysis, speaker goals, organized outlines, delivery and development of personal style of presentation skills. The course offers direct experience writing, delivering, and constructively evaluating public speeches in a variety of educational contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389I. Comparative Studies in International Adult Education.**

This course compares a model of adult learning, communities of practice (CoP) today with its practice in pre-historical times. It will involve international travel and working with scholars to contrast theory and practice in the United States with the new setting. Students from both contexts will be encouraged to present their work in a conference format.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389L. Writing for Publication.**

Students will hone their writing skills. Students will work individually and in groups, getting feedback from other students and the instructor. Topics include APA style, getting started, first drafts, polishing and tightening, re-writing, submitting a manuscript, responding to feedback/reviews and more. Restricted to masters' and doctoral students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ED 7389M. Shifting Demographics in Texas: Exploring Education, Democracy and Healthy Communities.**

Students will explore the shifting population in Texas through multiple frames including historical, sociological, anthropological and political. Class will canvas the literature and emerging community conditions as a vehicle for imagining possible theoretical, policy and local responses to the conditions we see in schools and local communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389O. Educational Privatization: Policies, Actors, and Effects.**

This course interrogates the origins and outcomes of educational privatization. In this course, students will review the foundations of education as a public good, study frameworks and theories of privatization, trace public policies promoting privatization, delineate types of educational privatization over time, and examine the actors involved in educational privatization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389P. International Comparative Adult, Community, and Higher Education Research and Study: Italy.**

This course develops theoretical knowledge, methodological skills, and scholarly capacity for educational research. It focuses on comparative adult, higher, and socio-cultural education within the complex educational environment of Italy, involving seminar components held at the university and research fieldwork and presentation in Italy. Prerequisite: Should the student not be able to participate in the international component of the course, a domestic alternative can be discussed prior to enrollment.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389Q. Schools, Communities and Race in a Democratic Society.**

The class explores race through a personal lived perspective. This class will view race as a social construct. Students will interrogate the phenomena of race through multiple lens and frames, including but not limited to, an ontological perspective, its use in organizations, and its use in re-segregating society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389R. Understanding the Self: Anatomy of Engaged Scholarship.**

Successful leadership in school settings requires an understanding of human behavior. This understanding begins with knowledge of self and leads to the understanding of others at the micro and macro levels. The focus of this course is on you, the learner, and your surroundings. The goal is to enhance the student's self-awareness of values, beliefs, attitudes and the ecological context informing and impacting their school leadership experience. This understanding will inform the past, but also begin to inform your future as you matriculate through your course work. We will employ interdisciplinary literature to inform this work.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389S. Feminist and Critical Thought in Education.**

Feminist and Critical thought provides a means to examine and understand how issues of power shape and impact cultures, societies, and their associated policies and practices. In this seminar, students will engage with varying feminist and critical perspectives, frameworks, theories, epistemologies and methodologies to consider their application in examining their own educational journeys as well as current and systemic issues in education. Course readings and materials will primarily draw from the work of seminal and minoritized feminist and critical scholars, while providing students an opportunity to identify and explore course readings and materials of their choice as well.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389T. LGBTQIA+ Issues in Educational Leadership.**

This course examines the intersectionality of gender identity, sexual orientation, and other identities within the educational context, offering a nuanced exploration of the social, legal, and psychological aspects that influence LGBTQIA+ experiences in schools. Participants will engage in critical discussions on policy development, cultural competence, and leadership strategies that promote diversity, equity, and inclusion. The course is designed to address the unique challenges and opportunities facing educational leaders in fostering inclusive and affirming environments for LGBTQIA+ individuals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7399A. Dissertation.**

Original research and writing in Adult, Professional, and Community Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dual Enrollment Permitted

**Grade Mode:** Credit/No Credit

**ED 7399B. Dissertation.**

Original research and writing in School Improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dual Enrollment Permitted

**Grade Mode:** Credit/No Credit

**ED 7599A. Dissertation.**

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7599B. Dissertation.**

Original research and writing in Education-School improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7699A. Dissertation.**

The student conducts original research and writing in Adult, Professional, and Community Education, guided by the direct supervision of the dissertation chair. While conducting dissertation research and writing, students must be continuously enrolled.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7699B. Dissertation.**

Students produce a dissertation under direct supervision of dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled. Prerequisites: Core, Concentration, and Methodology courses or instructor's permission.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7999A. Dissertation.**

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7999B. Dissertation.**

Original research and writing in Education-School Improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Mathematics (MATH)****MATH 7111. Seminar in Teaching.**

Seminar on individual study projects concerned with selected problems in the teaching of mathematics. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MATH 7188. Seminar in Mathematics Education.**

Students are required to attend weekly research seminars in Mathematics Education and to give at least one research presentation in the seminar during the semester. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7199A. Dissertation.**

Original research and writing in Mathematics Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7299A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7301. Studies in Mathematics.**

This course provides basic foundations in Mathematics for students entering the doctoral program in Mathematics or Mathematics Education. This course may be repeated. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 7302. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7303. Analysis I.**

This course covers foundations of modern analysis. Topics include: sequences,  $\limsup$ ,  $\liminf$ , Sigma Algebras of sets that include open and closed sets, sequences of functions, pointwise and uniform convergence, lower and upper semi-continuity, Borel sets, outer measure, and Lebesgue measure. Prerequisite: MATH 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7306. Current Research in Math Education.**

This course surveys the various current social, political, and economic trends in local, state, national, and international settings that are related to research in Mathematics Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7307. Algebra I.**

Applications of Algebra and topics in modern algebra, including permutation groups, symmetry groups, Sylow theorems, and select topics from Ring Theory. Prerequisite: MATH 4307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7309. Topology I.**

A course in point-set topology emphasizing topological spaces, continuous functions, connectedness, compactness, countability, separability, metrizable, CW-complexes, simplicial complexes, nerves, and dimension theory. Prerequisite: MATH 4330.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7313. Analysis II.**

This course covers the theory of integration with special emphasis on Lebesgue integrals. Topics include: Lebesgue integral, Bounded Convergence theorem, differentiation and integration, absolute continuity, and  $L_p$  spaces. Prerequisite: Math 7303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7317. Algebra II.**

A study of the important algebraic structures of rings and fields. Topics covered include rings, ideals, modules, polynomial rings, Euclidean algorithm, finite fields, and field extensions. Topics also include an introduction to Galois Theory with an emphasis on the geometric applications. Prerequisite: MATH 7307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7319. Topology II: Algebraic Topology.**

This course covers the fundamental concepts and tools of algebraic topology. Topics include the fundamental group, covering spaces, homotopy type, the higher homotopy groups, singular homology theory, and the computation of homology groups via exact sequences and applications. Prerequisite: MATH 7307 and MATH 7309.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7321. Graph Theory.**

Topics in this course include trees, connectivity of graphs, Eulerian graphs, Hamiltonian graphs, planar graphs, graph coloring, matchings, factorizations, digraphs, networks, and network flow problems. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MATH 7323. Theories of Knowing and Learning in Mathematics Education.**

This course surveys the major theories of knowing and learning that have influenced mathematics education. These theories include behaviorism, constructivism, sociocultural theories, situated cognition, and others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7324. Curriculum Design & Analysis.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques that are related to curriculum design in Mathematics Education for grade levels P-16.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7325. Statistics 1.**

A study of the mathematical and probabilistic underpinnings of the techniques used in statistical inference. Topics covered include sampling, sampling distributions, confidence intervals, and hypothesis testing with an emphasis on both simulations and derivations. Prerequisite: Math 2321 and Math 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7328. Instructional Techniques & Assessments.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques of instruction in Mathematics Education and the related assessment procedures for each for grade levels P-20.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7331. Combinatorics.**

This course is a study of fundamental principles of combinatorics. Topics include: permutations and combinations, the Pigeonhole principle, the principle of inclusion-exclusion, binomial and multinomial theorems, special counting sequences, partitions, posets, extremal set theory, generating functions, recurrence relations, and the Polya theory of counting. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7335. Statistics II: Linear Modeling.**

A study of the formulation and statistical methodologies for fitting linear models. Topics include the general linear hypothesis, least-squares estimation, Gauss-Markov theorem, assessment of model fit, effects of departures from assumptions, model design, and criteria for selection of optimal regression models. Prerequisite: MATH 3377 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7346. Quantitative Research Analysis in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and use of appropriate design methodologies to achieve the strongest possible evidence to support or refute a knowledge claim. Prerequisite: MATH 7306 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7354. Advanced Qualitative Research.**

This course encompasses the techniques and tools needed for the development, investigation, and demonstration of competence in conducting qualitative research in mathematics education. Principles of qualitative data analysis are a significant focus of the course, with particular attention given to specific methods used to code and analyze data. Prerequisite: ED 7352 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 7356B. Advanced Qualitative Research.**

This course encompasses investigation, development, and demonstration of competence, design, and execution for mathematics education problems in qualitative research. Prerequisite: ED 7352 or CI 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356C. Action Research in Mathematics Education.**

This course examines underlying theory and issues in action research model and the development of action research projects. Prerequisites: MATH 7346 or ED 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7358. Advanced Quantitative Research in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and the use of appropriate design methodologies to achieve the most substantial evidence to support or refute a knowledge claim. Prerequisite: MATH 7346 with a grade of "B" or better or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7361. Seminar in Advanced Mathematics.**

Material in course will vary with the interest of students and faculty. A detailed study of subject matter may be chosen from advanced areas of analysis; algebra; topology and geometry; applied mathematics; and probability and statistics. This course is repeatable for credit when subject matter varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7363A. COMPLEX ANALYSIS.**

This course is a brief introduction to the complex number system and basic point-set topology of the complex plane, followed by a proof-based and rigorous study of the principal results of the analysis of functions of a single complex variable. Prerequisite: MATH 4315 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363B. NUMERICAL ANALYSIS.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using computer algebra systems. Symbolic, numerical, and graphical techniques will be studied. Applications will be drawn from the sciences, engineering, and mathematics. Prerequisite: MATH 3323 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363C. FUNCTIONAL ANALYSIS.**

This course presents the three basic fundamental theorems of functional analysis: the Hahn-Banach theorem, the uniform boundedness theorem, and the open mapping theorem. Prerequisite: MATH 7303 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363E. Numerical Analysis II.**

This course will involve the analysis and numerical implementation of algorithms to solve partial differential equations. Applications will be drawn from science, engineering, and mathematics. Topics include the numerical solution of linear partial differential equations and the related linear systems of equations. Prerequisite: MATH 7363B with a letter grade of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363F. Functional Analysis II.**

This course will involve the analysis of infinite dimensional vector spaces including spaces of functions, measures, and distributions. Topics include Fourier transforms, theory of Banach spaces, and operator theory. Prerequisite: MATH 7363C with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366A. Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors).**

This course examines how to develop and teach post-secondary students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisites: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366B. Teaching K-12 Students (Elementary, Middle School, and High School).**

This course examines how to develop and teach K-12 students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366C. Teaching Teachers (In-Service; Pre-Service).**

This course examines how to prepare teachers of mathematics. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366D. Teaching Specialized Content.**

This course will be an in-depth study of a specialized content area in mathematics with an emphasis on teaching. The specific content area will vary by instructor. Examples include Euclidean Simplex Geometry and Discrete Probability Spaces with Implications for Public School Curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366E. Developmental Mathematics Curriculum.**

This course surveys the research, development, and evaluation of the scope and sequence of developmental mathematics curriculum. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366F. Research in Undergraduate Mathematics Education I.**

Students will develop the requisite knowledge to become a good consumer of Research in Undergraduate Mathematics Education (RUME) research. The course will cover the theoretical underpinnings of current and historic RUME research. Students will develop the knowledge to understand relevant theoretical stances and the role they play in research. Prerequisite: Math 7306 or permission from the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366G. Research in Undergraduate Mathematics Education II.**

In this course, students will develop necessary knowledge to design/conduct RUME research via a topic-driven look at current RUME research. Core topics include proof, analysis/calculus, abstract algebra, linear algebra, and differential equations. Students will develop a depth of knowledge related to these topics and engage in research design and development. Prerequisite: MATH7306 and MATH7366F.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7367B. ADV GROUP THEORY.**

This course covers topics including properties of solvable, p-solvable and nilpotent groups, group actions, transfer theorems, simple groups and composition series, the generalized Fitting subgroup, automorphism groups, classical groups and linear representations of groups. Prerequisite: MATH 7307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369C. Low-dimensional topology.**

This course is an introduction to low-dimensional topology. Topics include surfaces, 3-manifolds, knots, and 4-manifolds. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369D. Characteristic Classes.**

This course is an introduction to vector bundles and characteristic classes. Topics covered include Stiefel-Whitney classes, Chern classes, Euler class, Pontrjagin classes, and their computation. Additional topics may include manifold immersion problems. Prerequisite: MATH 7317 and MATH 7319 both with grades of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369E. Differential Geometry.**

This course is an introduction to modern tools of differential geometry.

Topics covered include manifolds, Riemannian metrics, connections, covariant derivatives, geodesics, curvatures, extrinsic and intrinsic computations. Other possible topics include hyperbolic geometry, Lie groups, Chern-Weil theory, surfaces of prescribed mean curvature, the Gauss-Bonnet theorem, and the Cartan-Hadamard theorem. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7371A. Advanced Graph Theory.**

Topics in this course include Turan's problems, Ramsey theory, random graph theory, extremal graph theory, algebraic graph theory, domination of graphs, distance problems, and applications. Prerequisite: MATH 7321.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371B. Advanced Combinatorics.**

Topics in this course include Block designs, Latin squares, combinatorial optimization problems, coding theory, matroids, difference sets, and finite geometry. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371C. Combinatorial Number Theory.**

A study of fundamental techniques in combinatorial number theory.

Topics will include Waring's problem, additive number theory, and probabilistic methods in number theory. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371D. Discrete Optimization.**

A study of some fundamental techniques in discrete optimization. Topics include discrete optimization, linear programming, integer programming, integer nonlinear programming, dynamic programming, location problem, scheduling problem, transportation problem, postman problem, traveling salesman problem, matroids, and NP-completeness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371E. Algorithms and Complexity.**

A study of some fundamental concepts of computability and complexity. Topics include polynomially bounded problems, NP-complete problems, exponentially hard problems, undecidable problems, and reducibility. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371F. Probabilistic Methods in Discrete Mathematics.**

A study of some fundamental probabilistic techniques used to solve problems in graph theory, combinatorics, combinatorial number theory, combinatorial geometry, and algorithm. Topics include linearity of expectation, alterations, second moment, local lemma, correlation inequalities, martingales, Poisson paradigm, and pseudo-randomness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371G. Applied Discrete Mathematics.**

This course introduces fundamental concepts in logic, Boolean algebra, and binomial coefficients; and applications in different fields such as complexity of algorithms and network theory. Prerequisites: MATH 2472 and MATH 4307, all with a grade of "C" or better, or with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371H. Combinatorial Networks.**

Combinatorial Networks is an area of study of certain types of networks using combinatorial methods extensively. This course introduces fundamental basics as well as the latest development in this area of research. Prerequisite: MATH 5307/7307 with a grade of "C" or higher.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7373B. Partial Differential Equations I.**

This course covers the theory and application of partial differential equations, typical equations of mathematical physics, Cauchy problem for equations of the first order, classification of second-order equations, Cauchy problem for second-order hyperbolic equations, Duhamel's principle, potential theory and elliptic equations, maximum principle, and parabolic equations. Prerequisite: MATH 3323, 3373 and 3380 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373C. Partial Differential Equations II.**

This course covers the existence and uniqueness theory for boundary value problems of partial differential equations (PDE) including the topics linear evolution equations, variational techniques, non-variational techniques, Hamilton-Jacobi equations, conservation laws. Prerequisite: MATH 7373B with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373G. Spectral Methods.**

This course covers the essentials of spectral collocation methods with an emphasis on numerically implementing algorithms. The problems studied will include ordinary and partial differential equations connected with fluid mechanics, quantum mechanics, waves, and other fields. The techniques used will include both Fourier and Chebyshev methods. Prerequisite: MATH 7363E with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375C. Time Series Analysis.**

A study of the theory of time-dependent data. The analysis includes modeling, estimation, and testing; alternating between the time domain; using autoregressive and moving average models and the frequency domain; and using spectral analysis. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375D. Advanced linear Modeling.**

The course provides an extension of regression methodology to more general settings where standard assumptions for ordinary least squares are violated. Topics include generalized least squares, robust regression, bootstrap, regression in the presence of autocorrelated errors, generalized linear models, and logistic and Poisson regression. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375E. Computational Statistics.**

This course focuses on commonly used sampling and optimization algorithms in statistics. Topics include accept-reject method, importance sampling, Markov Chain Monte Carlo algorithms, Fisher scoring algorithm, expectation-maximization algorithm, and minorization-maximization algorithm. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375F. Multivariate Data Analysis.**

This course focuses on statistical methodologies based on multivariate analysis. Topics include multivariate normal distribution, tests of hypothesis on means, multivariate analysis of variance, discriminant analysis, principal component analysis, factor analysis and canonical correlation analysis. Prerequisite: MATH 5305 and (MATH 3376 or MATH 3377) with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375G. Bayesian Methods.**

This course focuses on Bayesian statistical analysis and associated theories. Topics include one-parameter and multi-parameter Bayesian models, choices of priors, formulation of regression models in the Bayesian framework, and related data analysis. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375I. Advanced Statistical Learning.**

This course covers the theoretical foundations in statistical learning and deep learning. Topics include the framework of empirical risk minimization, metric entropy, Vapnik-Chervonenkis dimension, Rademacher and Gaussian complexity, symmetrization and chaining techniques, contraction principle, uniform law of large numbers, sample complexity, and neural networks. Prerequisite: MATH 7337 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378A. Problem Solving, Reasoning, and Proof.**

A study of the fundamental concepts of problem solving, logic, set theory, and mathematical proof and applications of these concepts in mathematics curriculum for grades P-20. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378B. Connecting and Communicating Math.**

This course examines one of the basic principles involved in mathematics education: Connecting and Communicating Mathematics. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378C. Representing Fundamental Math Ideas (Function, Data Analysis, and Enumeration).**

This course examines the basic principles involved in mathematics education. The process of representing fundamental mathematical ideas will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378D. Math Technologies.**

This course examines the basic principles involved in mathematics education: Technology. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378E. Developmental Mathematics Perspectives.**

This course examines developmental mathematics-specific strands including technological course support and placement tools/decisions. Issues related to the first mathematics core course required of undergraduates will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378F. Research on Mathematical Problem Solving in Secondary Schools.**

In this course a careful study is made of elementary techniques for problem solving in a variety of domains, including algebra, number theory, combinatorics, geometry, and logic puzzles. Students will learn these techniques by actually working on a collection of problems in each of these areas. Students will read and examine research about various aspects of problem solving and research in math education that includes both teacher training and student learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378G. Discourse Processes, Traditions, and Analysis in Mathematics Education.**

Discourse and discourse analysis have been used to answer research questions across disciplines throughout the humanities and social sciences. This course will focus on theory and methods for the analysis of discourse in mathematical settings. We will learn how different approaches to discourse are used to understand mathematics learning. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**MATH 7378H. Equity in Mathematics Education.**

Equity in Mathematics Education is a course examining research on equity issues in mathematics education. These equity issues will range from race, culture, class, and gender as they relate to the teaching, learning, and schooling of mathematics education. We will look at how equity is framed within the field of mathematics education, what has been addressed, and what has not been conceptualized. The course will help students understand the literature in the field, critique the extant research literature, design research, and consider important facets of teaching for various student groups. Prerequisite: MATH 7306 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7385. Independent Study in Mathematics.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of mathematics. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7386. Independent Study in Mathematics Education.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of Mathematics Education. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7389. Internship.**

In this course, students will work under the supervision of a faculty member to gain practical knowledge in their field. Student experience can come from industry, government agencies, or other sources but must directly apply to furthering knowledge of applications of mathematics or mathematics education.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7396. Mathematics Education Research Seminar.**

Collaborative research projects with faculty through identifying an educational issue, reviewing literature, creating a research question, designing a methodology, analyzing data, drawing conclusions, implications, and creating a draft of a publishable paper. Prerequisite: MATH 7356, and ED 7352 or MATH 7346, all with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7399A. Dissertation.**

This course represents a Mathematics or Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MATH 7599A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7699A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7999A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

The M.Ed. in Mathematics prepares students with the mathematical knowledge and critical thinking abilities needed to pursue doctoral degrees or teaching careers at the collegiate or secondary level.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in mathematics or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections
- resume/CV
- statement of purpose
- three letters of recommendation addressing the substance and quality of your preparation for graduate study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official PTE scores required with a 52 overall
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Education (M.Ed.) degree with a major in Mathematics requires 36 semester credit hours, including a minor.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MATH 5381	Foundations of Set Theory	3
MATH 5382	Foundation of Real Analysis	3
MATH 5384	Geometric Approach to Abstract Algebra	3
<b>Electives</b>		
Choose 18 hours of advisor-approved electives		18
<b>Minor</b>		
Choose a 9-hour advisor-approved minor		9
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass a comprehensive examination consisting of three parts. A student may fail up to two times

on one or more of the three parts of the comprehensive exam. After failing any given part of the comprehensive exam twice, a student will then be advised to retake the course(s). Provided they earn at least a C in each retaken class, they will then be permitted one final attempt at passing the corresponding part(s) of the comprehensive exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Mathematics: MATH (p. 3273), MTE (p. 3278)

## Courses Offered

### Mathematics (MATH)

#### MATH 5111. Graduate Assistant Training.

This course is concerned with techniques used in the teaching of mathematics. This course is required as a condition of employment for graduate teaching and instructional assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

#### MATH 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### MATH 5272A. Teaching Geometry through Problem Solving and Discovery Learning.

This course investigates the problem-solving heuristics embedded in the secondary school geometry curriculum and explores how to implement problem solving in geometry classrooms. This course also examines the unique "Hungarian style" method of discovery learning in mathematics, developed for students aged 12-18. The method referred to as the Pósa Method is similar to inquiry based learning with an emphasis on problem solving.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

#### MATH 5272B. Gamification and Playfulness in Teaching Mathematics.

This course focuses on the non-game context of education and presents applications of game elements with special attention to teaching mathematics. Mathematics concepts are uncovered through the use of mathematical games and hands-on manipulatives that foster playfulness.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

**MATH 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5301. Partial Differential Equations.**

Theory and application of partial differential equations; derivation of the differential equation; use of vector and Tensor methods; equations of the first order; wave equations; vibrations and normal functions; Fourier series and integral; Cauchy's methods, initial data; methods of Green; potentials; boundary problems; methods of Riemann-Volterra; characteristics. Prerequisites: MATH 3323 and consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5303. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress. Cannot be used on a degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5304. Topics in Mathematics for the Secondary Teacher.**

A study of the current trends and topics found in the secondary school mathematics curriculum with the goal of improving the mathematical background of the secondary teacher. Course content will be flexible and topics will be selected on the basis of student needs and interests. Cannot be used on degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5305. Advanced Course in Probability and Statistics.**

Advanced topics in probability and statistics. May be repeated once with different emphasis for additional credit. Prerequisite: MATH 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5307. Modern Algebra.**

Topics in modern algebra. Material will be adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5311. Foundations of Differential Equations.**

A critical study of the foundations of derivation equations, operator spaces, and such basic topics. Recent developments in this field will be investigated and independent investigation will be encouraged.

Prerequisite: MATH 2393 and [MATH 3380 or MATH 5382] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5312. Functions of a Complex Variable.**

Modern developments in the field of a complex variable. Prerequisite: MATH 2393 and MATH 4315 and [MATH 3380 or MATH 5382] all with grades of "C" or better or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5313. Field Theory.**

Topics in field theory, separable extensions, and Galois Theory.

Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5314. Number Theory.**

Topics in algebra selected from quadratic forms, elementary number theory, algebraic or analytic number theory, with material adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5315. Mathematical Statistics.**

This course discusses theoretical aspects of estimation theory and hypothesis testing procedures, with some of their important applications. The main topics include convergence of random variables, parameter estimation, properties of estimators, interval estimation, sufficiency and applications to the exponential family, hypothesis testing, decision theory, and Bayesian inference. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5317. Problems in Advanced Mathematics.**

Open to graduate students on an individual basis by arrangement with the mathematics department. A considerable degree of mathematical maturity is required. May be repeated with different emphasis. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 5319. The Theory of Integration.**

A course in the theory of integration with special emphasis on the Lebesgue integrals. A course in the theory of real variables, with a knowledge of point set theory, is desirable as a background for this course. A considerable amount of mathematical maturity is required. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5329. General Topology.**

Point-set topology with an emphasis on general topological spaces; separation axioms, connectivity, the metrization theorem, and the C-W complexes. Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5331. Metric Spaces.**

Point-set topology with an emphasis on metric spaces and compactness but including a brief introduction to general topological spaces. Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5335. Survival Analysis.**

This course introduces concepts and methods in the analysis of survival data. Topics include characteristics of survival data; basic functions; parametric models for survival time; maximum likelihood estimation of survival functions; two-sample test techniques; regression analysis with parametric and semi-parametric models; and mathematical and graphical methods for model checking. Prerequisite: Math 5305 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5336. Studies in Applied Mathematics.**

Topics selected from optimization and control theory, numerical analysis, calculus of variations, boundary value problems, special functions, tensor analysis, or other subfields of applied mathematics are studied. Repeatable for credit with different topic emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**MATH 5338. Advanced Independent Study in Mathematics or Statistics.**

This course gives graduate students specializing in mathematical or statistical subjects the opportunity to study specialty subjects from individual Mathematics faculty's research interests. Work may consist of theoretical or empirical research or reviewing and integrating existing literature on the subject. Repeatable once for credit with different emphasis. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**MATH 5340. Scientific Computation.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using a computer algebra system. Symbolic numerical and graphical techniques will be studied. Applications will be drawn from science, engineering, and mathematics. A knowledge of differential equations is expected.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Lab Required  
**Grade Mode:** Standard Letter

**MATH 5345. Regression Analysis.**

This course introduces formulation and statistical methodologies for simple and multiple regression, assessment of model fit, model design, and criteria for selection of optimal regression models. Students will develop skills with the use of statistical packages and the writing of reports analyzing a variety of real-world data. Prerequisite: MATH 2472.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5350. Combinatorics.**

This course, covers permutations, combinations, Stirling numbers, chromatic numbers, Ramsey numbers, generating functions, Polya theory, Latin squares and random block design. Prerequisite: MATH 3398 or consent of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5355. Applied and Algorithmic Graph Theory.**

This course is designed to emphasize the close tie between the theoretical and algorithmic aspects. The topics may include basic concepts such as connectivity, trees, planarity, coloring of graphs, matchings, and networks. It also covers many algorithms such as Max-flow Min-cut algorithm, maximum matching algorithm, and optimization algorithms for facility location problems in networks. Prerequisite: MATH 5388 or MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5358. Applied Discrete Mathematics.**

Boolean algebra, counting techniques, discrete probability, graph theory, and related discrete mathematical structures that are commonly encountered in computer science. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5360. Mathematical Modeling.**

This course introduces the process and techniques of mathematical modeling. It covers a variety of application areas from the natural sciences. Emphasis is placed on deterministic systems, stochastic models, and diffusion. Prerequisite: [MATH 2393 and MATH 3323 both with grades of "D" or better and MATH 5301 with a grade of "C" or better] or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5373. Theory of Functions of Real Variables.**

This course will discuss those topics that will enable the student to obtain a better grasp of the fundamental concepts of the calculus of real variables and the more recent developments of this analysis. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5374. Numerical Linear Algebra.**

This course introduces tools that mathematical scientists use with vectors and matrices. Applications include least squares and eigenvalue problems, and systems of equations from applied mathematics. The stability of algorithms to perturbations are considered. Theory is balanced with numerically implementing algorithms, in particular for iterative methods for large, sparse systems. Prerequisite: MATH 3377 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5376A. Design and Analysis of Experiments.**

This course introduces fundamental concepts in the design of experiments, justification of linear models, randomization and principles of blocking. It also discusses the construction and analysis of basic designs including fractional replication, composite designs, factorial designs, and incomplete block designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376B. Analysis of Variance.**

This course introduces basic methods, one-way, two-way ANOVA procedures, and multifactor ANOVA designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376D. Statistical Applications in Genetics and Bioinformatics.**

The statistical concepts and methods to be covered include important probability distributions, analysis of variance, regression analysis, hidden Markov model, and Markov Chain Monte Carlo methods. These methods will be used to address important and challenging questions arising in the analysis of large genetic and bioinformatic datasets. Prerequisite: Math4305 or equivalent.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376E. Introduction to Data Science.**

This course introduces basic concepts and methods in the field of data science. Topics include data wrangling, data exploration and visualization, optimization, deep learning, supervised learning subjects such as nearest-neighbor techniques, regression, Lasso, linear discriminant analysis, logistic regression, tree-based models, neural networks, as well as unsupervised learning subjects such as market basket analysis and cluster analysis, and random forests. The material will be approached with a blend of theory and application, and will include programming in Python, R, or another modern, popular language of the instructor's choice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376F. Introduction to Probability Theory and Models.**

This course covers the definitions, constructions, theorems, and techniques to build and analyze probability models. The emphasis of this class is the active construction and analysis of probability models. However, we will develop a rigorous treatment of the requisite abstract theory in service of this goal. Topics include conditional expectation, the convergence of random variables, weak and strong law of large numbers, central limit theorem, random walk, Martingales, and Brownian motion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5381. Foundations of Set Theory.**

A formal study of the theory of sets, relations, functions, finite and infinite sets, set operations and other selected topics. This course will also train the student in the understanding of mathematical logic and the writing of proofs. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MATH 5382. Foundation of Real Analysis.**

A course covering the foundations of mathematical analysis. Topics include: real numbers, sequences, series, and limits and continuity of functions. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5384. Geometric Approach to Abstract Algebra.**

Definitions and elementary properties of groups, rings, integral domains, fields and vector spaces with great emphasis on the rings of integers, rational numbers, complex numbers, polynomials, and the interplay between algebra and geometry. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5386. Knots and Surfaces, An Introduction to Low-Dimensional Topology.**

Knot polynomials and other knot invariants. The topological classification of surfaces and topological invariants of surfaces. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5388. Discrete Mathematics.**

This course covers topics from: basic and advanced techniques of counting, recurrence relations, discrete probability and statistics, and applications of graph theory. Prerequisites: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5390. Statistics.**

This course will cover not only some of the basic statistical ideas and techniques but also the mathematical and probabilistic underpinnings of these techniques with an emphasis on simulations and modeling. The planning, conducting, analysis, and reporting of experimental data will also be covered. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5392. Survey of Geometries.**

A study of topics in geometry including geometrical transformations, the geometry fractals, projective geometry, Euclidean geometry, and non-Euclidean geometry. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5393. Numerical Optimization.**

This course focuses on optimization methods for a broad range of applications, such as engineering and applied sciences. Subjects are the basic theory of optimization, numerical algorithms to locate points satisfying optimality conditions and to analyze the convergence properties. Prerequisites: MATH 2472 and MATH 3377 and MATH 3383, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Mathematics 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5472A. Experiencing the Hungarian Approach through Observation and Teaching Practicum.**

This course provides a first-hand experience in putting the Hungarian style guided discovery into practice. As part of the course, students will spend one week at a mathematics camp for secondary students that is being run using the Hungarian style of teaching. Students will observe mathematics classes, discuss pedagogy with camp instructors, and design and teach their own lesson to camp participants.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Mathematics for Teacher Education (MTE)

### MTE 5301E. Visual Models for Middle School Mathematics.

This course uses visual models to motivate understanding of the fundamental concepts underlying middle school mathematics. Pedagogical techniques to engage middle school students will also be addressed including inquiry-based instructional methods utilizing these visual models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

### MTE 5301F. Implementing New Mathematics Curriculum.

In this course we will investigate the keys to successfully implementing new curriculum. Two main aspects considered are: 1) the mathematical content knowledge required for a new curriculum and 2) how to build a community of practice which provides support during the implementation process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

### MTE 5301G. Mathematics for Teaching.

A study of the current trends and topics found in the secondary school mathematics curriculum taught from an advance perspective. Course context will be flexible and topics will be selected on the basis of student needs and interests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

### MTE 5302A. Quantitative Reasoning.

This course covers current pedagogy, curriculum, and methods related specifically to the teaching of middle school mathematics. Some of the topics explored are curriculum theory, instructional theory, learning theory, problem solving, national and state standards and assessment, discovery learning, assessment methods, manipulative, and technology in the classroom.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

### MTE 5313. Geometry and Measurement.

This course will focus on using spatial reasoning to investigate the concepts of direction, orientation, shape and structure; using mathematical reasoning to develop and prove geometric relationships; using logical reasoning and proof in relation to the axiomatic structure of geometry; using measurement of geometry concepts to solve real-world problems. 5315 Algebraic Reasoning. (3-0) This course will focus on using algebraic reasoning to.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MTE 5315. Algebraic Reasoning.

This course will focus on using algebraic reasoning to investigate patterns, make generalizations, formulate mathematical models, and make predications; using properties, graphs, and applications of relations and function to analyze, model and solve problems; and making connections among geometric, graphic, numeric and symbolic representation of functions and relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MTE 5321. Probability and Statistics.

This course will deal with using graphical and numerical techniques to explore data, characterize patterns, and describe departures from patterns; designing experiments to solve problems; understanding the theory of probability and its relationship to sampling and statistical inference and its use in making and evaluating predication. Prerequisite: MTE 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

### MTE 5323. Logic and Foundations of Mathematics.

This course will consist of an introduction to fundamental mathematical structures and techniques of proof. Topics will include: logic, set theory, number theory, relations, and functions. Emphasis will be placed on communication about mathematics and construction of well-reasoned explanations. Prerequisite: MTE 5313 and MTE 5319 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State offers opportunities to work with outstanding faculty in a collegial atmosphere where mathematicians and mathematics educators collaborate closely. The multi-faceted program offers a strong foundation and research opportunities in mathematics, applied math, and mathematics education, preparing students for further graduate study, teaching, or industry positions. The M.S. in mathematics prepares students with the applied mathematical knowledge and critical thinking abilities needed to pursue doctoral degrees, teaching careers or leadership positions in industry.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in mathematics or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.) Students who lack sufficient background course work will be required to complete leveling course work with grades of B or better prior to admission.
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV
- statement of purpose
- three letters of recommendation addressing the substance and quality of the student's preparation for graduate study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Mathematics concentration in Applied Mathematics requires 36 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MATH 5301	Partial Differential Equations	3
MATH 5312	Functions of a Complex Variable	3
MATH 5319	The Theory of Integration	3
MATH 5340	Scientific Computation	3
MATH 5360	Mathematical Modeling	3
MATH 5373	Theory of Functions of Real Variables	3
MATH 5374	Numerical Linear Algebra	3
MATH 5393	Numerical Optimization	3
<b>Prescribed Electives</b>		
Choose 12 hours from the following:		12

MATH 5305	Advanced Course in Probability and Statistics
MATH 5307	Modern Algebra
MATH 5311	Foundations of Differential Equations
MATH 5313	Field Theory
MATH 5314	Number Theory
MATH 5329	General Topology
MATH 5331	Metric Spaces
MATH 5335	Survival Analysis
MATH 5336	Studies in Applied Mathematics
MATH 5345	Regression Analysis
MATH 5350	Combinatorics
MATH 5355	Applied and Algorithmic Graph Theory
MATH 5358	Applied Discrete Mathematics
MATH 5376A	Design and Analysis of Experiments
MATH 5376B	Analysis of Variance
MATH 5376D	Statistical Applications in Genetics and Bioinformatics
MATH 5376E	Introduction to Data Science
MATH 5382	Foundation of Real Analysis
MATH 5390	Statistics

**Total Hours** 36

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass a comprehensive examination consisting of three parts. A student may fail up to two times on one or more of the three parts of the comprehensive exam. After failing any given part of the comprehensive exam twice, a student will then be advised to retake the course(s). Provided they earn at least a C in each retaken class, they will then be permitted one final attempt at passing the corresponding part(s) of the comprehensive exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Mathematics: MATH (p. 3279), MTE (p. 3284)

## Courses Offered

### Mathematics (MATH)

#### MATH 5111. Graduate Assistant Training.

This course is concerned with techniques used in the teaching of mathematics. This course is required as a condition of employment for graduate teaching and instructional assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

#### MATH 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5272A. Teaching Geometry through Problem Solving and Discovery Learning.**

This course investigates the problem-solving heuristics embedded in the secondary school geometry curriculum and explores how to implement problem solving in geometry classrooms. This course also examines the unique "Hungarian style" method of discovery learning in mathematics, developed for students aged 12-18. The method referred to as the Pósa Method is similar to inquiry based learning with an emphasis on problem solving.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5272B. Gamification and Playfulness in Teaching Mathematics.**

This course focuses on the non-game context of education and presents applications of game elements with special attention to teaching mathematics. Mathematics concepts are uncovered through the use of mathematical games and hands-on manipulatives that foster playfulness.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5301. Partial Differential Equations.**

Theory and application of partial differential equations; derivation of the differential equation; use of vector and Tensor methods; equations of the first order; wave equations; vibrations and normal functions; Fourier series and integral; Cauchy's methods, initial data; methods of Green; potentials; boundary problems; methods of Riemann-Volterra; characteristics. Prerequisites: MATH 3323 and consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5303. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress. Cannot be used on a degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5304. Topics in Mathematics for the Secondary Teacher.**

A study of the current trends and topics found in the secondary school mathematics curriculum with the goal of improving the mathematical background of the secondary teacher. Course content will be flexible and topics will be selected on the basis of student needs and interests. Cannot be used on degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5305. Advanced Course in Probability and Statistics.**

Advanced topics in probability and statistics. May be repeated once with different emphasis for additional credit. Prerequisite: MATH 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5307. Modern Algebra.**

Topics in modern algebra. Material will be adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5311. Foundations of Differential Equations.**

A critical study of the foundations of derivation equations, operator spaces, and such basic topics. Recent developments in this field will be investigated and independent investigation will be encouraged. Prerequisite: MATH 2393 and [MATH 3380 or MATH 5382] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5312. Functions of a Complex Variable.**

Modern developments in the field of a complex variable. Prerequisite: MATH 2393 and MATH 4315 and [MATH 3380 or MATH 5382] all with grades of "C" or better or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5313. Field Theory.**

Topics in field theory, separable extensions, and Galois Theory. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5314. Number Theory.**

Topics in algebra selected from quadratic forms, elementary number theory, algebraic or analytic number theory, with material adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5315. Mathematical Statistics.**

This course discusses theoretical aspects of estimation theory and hypothesis testing procedures, with some of their important applications. The main topics include convergence of random variables, parameter estimation, properties of estimators, interval estimation, sufficiency and applications to the exponential family, hypothesis testing, decision theory, and Bayesian inference. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5317. Problems in Advanced Mathematics.**

Open to graduate students on an individual basis by arrangement with the mathematics department. A considerable degree of mathematical maturity is required. May be repeated with different emphasis. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 5319. The Theory of Integration.**

A course in the theory of integration with special emphasis on the Lebesgue integrals. A course in the theory of real variables, with a knowledge of point set theory, is desirable as a background for this course. A considerable amount of mathematical maturity is required. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5329. General Topology.**

Point-set topology with an emphasis on general topological spaces; separation axioms, connectivity, the metrization theorem, and the C-W complexes. Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5331. Metric Spaces.**

Point-set topology with an emphasis on metric spaces and compactness but including a brief introduction to general topological spaces. Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5335. Survival Analysis.**

This course introduces concepts and methods in the analysis of survival data. Topics include characteristics of survival data; basic functions; parametric models for survival time; maximum likelihood estimation of survival functions; two-sample test techniques; regression analysis with parametric and semi-parametric models; and mathematical and graphical methods for model checking. Prerequisite: Math 5305 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5336. Studies in Applied Mathematics.**

Topics selected from optimization and control theory, numerical analysis, calculus of variations, boundary value problems, special functions, tensor analysis, or other subfields of applied mathematics are studied.

Repeatable for credit with different topic emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5338. Advanced Independent Study in Mathematics or Statistics.**

This course gives graduate students specializing in mathematical or statistical subjects the opportunity to study specialty subjects from individual Mathematics faculty's research interests. Work may consist of theoretical or empirical research or reviewing and integrating existing literature on the subject. Repeatable once for credit with different emphasis. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5340. Scientific Computation.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using a computer algebra system. Symbolic numerical and graphical techniques will be studied. Applications will be drawn from science, engineering, and mathematics. A knowledge of differential equations is expected.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MATH 5345. Regression Analysis.**

This course introduces formulation and statistical methodologies for simple and multiple regression, assessment of model fit, model design, and criteria for selection of optimal regression models. Students will develop skills with the use of statistical packages and the writing of reports analyzing a variety of real-world data. Prerequisite: MATH 2472.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MATH 5350. Combinatorics.**

This course covers permutations, combinations, Stirling numbers, chromatic numbers, Ramsey numbers, generating functions, Polya theory, Latin squares and random block design. Prerequisite: MATH 3398 or consent of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5355. Applied and Algorithmic Graph Theory.**

This course is designed to emphasize the close tie between the theoretical and algorithmic aspects. The topics may include basic concepts such as connectivity, trees, planarity, coloring of graphs, matchings, and networks. It also covers many algorithms such as Max-flow Min-cut algorithm, maximum matching algorithm, and optimization algorithms for facility location problems in networks. Prerequisite: MATH 5388 or MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5358. Applied Discrete Mathematics.**

Boolean algebra, counting techniques, discrete probability, graph theory, and related discrete mathematical structures that are commonly encountered in computer science. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5360. Mathematical Modeling.**

This course introduces the process and techniques of mathematical modeling. It covers a variety of application areas from the natural sciences. Emphasis is placed on deterministic systems, stochastic models, and diffusion. Prerequisite: [MATH 2393 and MATH 3323 both with grades of "D" or better and MATH 5301 with a grade of "C" or better] or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5373. Theory of Functions of Real Variables.**

This course will discuss those topics that will enable the student to obtain a better grasp of the fundamental concepts of the calculus of real variables and the more recent developments of this analysis. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5374. Numerical Linear Algebra.**

This course introduces tools that mathematical scientists use with vectors and matrices. Applications include least squares and eigenvalue problems, and systems of equations from applied mathematics. The stability of algorithms to perturbations are considered. Theory is balanced with numerically implementing algorithms, in particular for iterative methods for large, sparse systems. Prerequisite: MATH 3377 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5376A. Design and Analysis of Experiments.**

This course introduces fundamental concepts in the design of experiments, justification of linear models, randomization and principles of blocking. It also discusses the construction and analysis of basic designs including fractional replication, composite designs, factorial designs, and incomplete block designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376B. Analysis of Variance.**

This course introduces basic methods, one-way, two-way ANOVA procedures, and multifactor ANOVA designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376D. Statistical Applications in Genetics and Bioinformatics.**

The statistical concepts and methods to be covered include important probability distributions, analysis of variance, regression analysis, hidden Markov model, and Markov Chain Monte Carlo methods. These methods will be used to address important and challenging questions arising in the analysis of large genetic and bioinformatic datasets. Prerequisite: Math4305 or equivalent.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376E. Introduction to Data Science.**

This course introduces basic concepts and methods in the field of data science. Topics include data wrangling, data exploration and visualization, optimization, deep learning, supervised learning subjects such as nearest-neighbor techniques, regression, Lasso, linear discriminant analysis, logistic regression, tree-based models, neural networks, as well as unsupervised learning subjects such as market basket analysis and cluster analysis, and random forests. The material will be approached with a blend of theory and application, and will include programming in Python, R, or another modern, popular language of the instructor's choice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376F. Introduction to Probability Theory and Models.**

This course covers the definitions, constructions, theorems, and techniques to build and analyze probability models. The emphasis of this class is the active construction and analysis of probability models. However, we will develop a rigorous treatment of the requisite abstract theory in service of this goal. Topics include conditional expectation, the convergence of random variables, weak and strong law of large numbers, central limit theorem, random walk, Martingales, and Brownian motion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5381. Foundations of Set Theory.**

A formal study of the theory of sets, relations, functions, finite and infinite sets, set operations and other selected topics. This course will also train the student in the understanding of mathematical logic and the writing of proofs. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5382. Foundation of Real Analysis.**

A course covering the foundations of mathematical analysis. Topics include: real numbers, sequences, series, and limits and continuity of functions. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5384. Geometric Approach to Abstract Algebra.**

Definitions and elementary properties of groups, rings, integral domains, fields and vector spaces with great emphasis on the rings of integers, rational numbers, complex numbers, polynomials, and the interplay between algebra and geometry. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5386. Knots and Surfaces, An Introduction to Low-Dimensional Topology.**

Knot polynomials and other knot invariants. The topological classification of surfaces and topological invariants of surfaces. Prerequisite:

MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5388. Discrete Mathematics.**

This course covers topics from: basic and advanced techniques of counting, recurrence relations, discrete probability and statistics, and applications of graph theory. Prerequisites: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5390. Statistics.**

This course will cover not only some of the basic statistical ideas and techniques but also the mathematical and probabilistic underpinnings of these techniques with an emphasis on simulations and modeling. The planning, conducting, analysis, and reporting of experimental data will also be covered. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5392. Survey of Geometries.**

A study of topics in geometry including geometrical transformations, the geometry fractals, projective geometry, Euclidean geometry, and non-Euclidean geometry. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5393. Numerical Optimization.**

This course focuses on optimization methods for a broad range of applications, such as engineering and applied sciences. Subjects are the basic theory of optimization, numerical algorithms to locate points satisfying optimality conditions and to analyze the convergence properties. Prerequisites: MATH 2472 and MATH 3377 and MATH 3383, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Mathematics 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5472A. Experiencing the Hungarian Approach through Observation and Teaching Practicum.**

This course provides a first-hand experience in putting the Hungarian style guided discovery into practice. As part of the course, students will spend one week at a mathematics camp for secondary students that is being run using the Hungarian style of teaching. Students will observe mathematics classes, discuss pedagogy with camp instructors, and design and teach their own lesson to camp participants.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Mathematics for Teacher Education (MTE)

**MTE 5301E. Visual Models for Middle School Mathematics.**

This course uses visual models to motivate understanding of the fundamental concepts underlying middle school mathematics. Pedagogical techniques to engage middle school students will also be addressed including inquiry-based instructional methods utilizing these visual models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301F. Implementing New Mathematics Curriculum.**

In this course we will investigate the keys to successfully implementing new curriculum. Two main aspects considered are: 1) the mathematical content knowledge required for a new curriculum and 2) how to build a community of practice which provides support during the implementation process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301G. Mathematics for Teaching.**

A study of the current trends and topics found in the secondary school mathematics curriculum taught from an advance perspective. Course context will be flexible and topics will be selected on the basis of student needs and interests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5302A. Quantitative Reasoning.**

This course covers current pedagogy, curriculum, and methods related specifically to the teaching of middle school mathematics. Some of the topics explored are curriculum theory, instructional theory, learning theory, problem solving, national and state standards and assessment, discovery learning, assessment methods, manipulative, and technology in the classroom.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5313. Geometry and Measurement.**

This course will focus on using spatial reasoning to investigate the concepts of direction, orientation, shape and structure; using mathematical reasoning to develop and prove geometric relationships; using logical reasoning and proof in relation to the axiomatic structure of geometry; using measurement of geometry concepts to solve real-world problems. 5315 Algebraic Reasoning. (3-0) This course will focus on using algebraic reasoning to.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5315. Algebraic Reasoning.**

This course will focus on using algebraic reasoning to investigate patterns, make generalizations, formulate mathematical models, and make predication; using properties, graphs, and applications of relations and function to analyze, model and solve problems; and making connections among geometric, graphic, numeric and symbolic representation of functions and relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5321. Probability and Statistics.**

This course will deal with using graphical and numerical techniques to explore data, characterize patterns, and describe departures from patterns; designing experiments to solve problems; understanding the theory of probability and its relationship to sampling and statistical inference and its use in making and evaluating predication. Prerequisite: MTE 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5323. Logic and Foundations of Mathematics.**

This course will consist of an introduction to fundamental mathematical structures and techniques of proof. Topics will include: logic, set theory, number theory, relations, and functions. Emphasis will be placed on communication about mathematics and construction of well-reasoned explanations. Prerequisite: MTE 5313 and MTE 5319 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State offers opportunities to work with outstanding faculty in a collegial atmosphere where mathematicians and mathematics

educators collaborate closely. The multi-faceted program offers a strong foundation and research opportunities in mathematics, applied math, and mathematics education, preparing students for further graduate study, teaching, or industry positions. The M.S. in mathematics prepares students with the applied mathematical knowledge and critical thinking abilities needed to pursue doctoral degrees, teaching careers or leadership positions in industry.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in mathematics or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV
- statement of purpose
- three letters of recommendation addressing the substance and quality of the student's preparation for graduate study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Mathematics concentration in applied mathematics requires 30 semester credit hours, including a thesis. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MATH 5301	Partial Differential Equations	3
MATH 5312	Functions of a Complex Variable	3
MATH 5319	The Theory of Integration	3
MATH 5340	Scientific Computation	3
MATH 5360	Mathematical Modeling	3
MATH 5373	Theory of Functions of Real Variables	3
MATH 5374	Numerical Linear Algebra	3
MATH 5393	Numerical Optimization	3
<b>Thesis</b>		
MATH 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
MATH 5199B	Thesis	
MATH 5299B	Thesis	
MATH 5399B	Thesis	
MATH 5599B	Thesis	
MATH 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass a comprehensive examination consisting of three parts. A student may fail up to two times on one or more of the three parts of the comprehensive exam. After failing any given part of the comprehensive exam twice, a student will then be advised to retake the course(s). Provided they earn at least a C in each retaken class, they will then be permitted one final attempt at passing the corresponding part(s) of the comprehensive exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the

department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Mathematics: MATH (p. 3286), MTE (p. 3291)

## Courses Offered

### Mathematics (MATH)

#### MATH 5111. Graduate Assistant Training.

This course is concerned with techniques used in the teaching of mathematics. This course is required as a condition of employment for graduate teaching and instructional assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships



**MATH 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5272A. Teaching Geometry through Problem Solving and Discovery Learning.**

This course investigates the problem-solving heuristics embedded in the secondary school geometry curriculum and explores how to implement problem solving in geometry classrooms. This course also examines the unique "Hungarian style" method of discovery learning in mathematics, developed for students aged 12-18. The method referred to as the Pósa Method is similar to inquiry based learning with an emphasis on problem solving.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5272B. Gamification and Playfulness in Teaching Mathematics.**

This course focuses on the non-game context of education and presents applications of game elements with special attention to teaching mathematics. Mathematics concepts are uncovered through the use of mathematical games and hands-on manipulatives that foster playfulness.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5301. Partial Differential Equations.**

Theory and application of partial differential equations; derivation of the differential equation; use of vector and Tensor methods; equations of the first order; wave equations; vibrations and normal functions; Fourier series and integral; Cauchy's methods, initial data; methods of Green; potentials; boundary problems; methods of Riemann-Volterra; characteristics. Prerequisites: MATH 3323 and consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5303. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress. Cannot be used on a degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5304. Topics in Mathematics for the Secondary Teacher.**

A study of the current trends and topics found in the secondary school mathematics curriculum with the goal of improving the mathematical background of the secondary teacher. Course content will be flexible and topics will be selected on the basis of student needs and interests. Cannot be used on degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5305. Advanced Course in Probability and Statistics.**

Advanced topics in probability and statistics. May be repeated once with different emphasis for additional credit. Prerequisite: MATH 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5307. Modern Algebra.**

Topics in modern algebra. Material will be adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5311. Foundations of Differential Equations.**

A critical study of the foundations of derivation equations, operator spaces, and such basic topics. Recent developments in this field will be investigated and independent investigation will be encouraged. Prerequisite: MATH 2393 and [MATH 3380 or MATH 5382] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5312. Functions of a Complex Variable.**

Modern developments in the field of a complex variable. Prerequisite: MATH 2393 and MATH 4315 and [MATH 3380 or MATH 5382] all with grades of "C" or better or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5313. Field Theory.**

Topics in field theory, separable extensions, and Galois Theory. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5314. Number Theory.**

Topics in algebra selected from quadratic forms, elementary number theory, algebraic or analytic number theory, with material adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5315. Mathematical Statistics.**

This course discusses theoretical aspects of estimation theory and hypothesis testing procedures, with some of their important applications. The main topics include convergence of random variables, parameter estimation, properties of estimators, interval estimation, sufficiency and applications to the exponential family, hypothesis testing, decision theory, and Bayesian inference. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5317. Problems in Advanced Mathematics.**

Open to graduate students on an individual basis by arrangement with the mathematics department. A considerable degree of mathematical maturity is required. May be repeated with different emphasis. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 5319. The Theory of Integration.**

A course in the theory of integration with special emphasis on the Lebesgue integrals. A course in the theory of real variables, with a knowledge of point set theory, is desirable as a background for this course. A considerable amount of mathematical maturity is required. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5329. General Topology.**

Point-set topology with an emphasis on general topological spaces; separation axioms, connectivity, the metrization theorem, and the C-W complexes. Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5331. Metric Spaces.**

Point-set topology with an emphasis on metric spaces and compactness but including a brief introduction to general topological spaces. Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5335. Survival Analysis.**

This course introduces concepts and methods in the analysis of survival data. Topics include characteristics of survival data; basic functions; parametric models for survival time; maximum likelihood estimation of survival functions; two-sample test techniques; regression analysis with parametric and semi-parametric models; and mathematical and graphical methods for model checking. Prerequisite: Math 5305 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5336. Studies in Applied Mathematics.**

Topics selected from optimization and control theory, numerical analysis, calculus of variations, boundary value problems, special functions, tensor analysis, or other subfields of applied mathematics are studied. Repeatable for credit with different topic emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5338. Advanced Independent Study in Mathematics or Statistics.**

This course gives graduate students specializing in mathematical or statistical subjects the opportunity to study specialty subjects from individual Mathematics faculty's research interests. Work may consist of theoretical or empirical research or reviewing and integrating existing literature on the subject. Repeatable once for credit with different emphasis. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5340. Scientific Computation.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using a computer algebra system. Symbolic numerical and graphical techniques will be studied. Applications will be drawn from science, engineering, and mathematics. A knowledge of differential equations is expected.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MATH 5345. Regression Analysis.**

This course introduces formulation and statistical methodologies for simple and multiple regression, assessment of model fit, model design, and criteria for selection of optimal regression models. Students will develop skills with the use of statistical packages and the writing of reports analyzing a variety of real-world data. Prerequisite: MATH 2472.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5350. Combinatorics.**

This course covers permutations, combinations, Stirling numbers, chromatic numbers, Ramsey numbers, generating functions, Polya theory, Latin squares and random block design. Prerequisite: MATH 3398 or consent of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5355. Applied and Algorithmic Graph Theory.**

This course is designed to emphasize the close tie between the theoretical and algorithmic aspects. The topics may include basic concepts such as connectivity, trees, planarity, coloring of graphs, matchings, and networks. It also covers many algorithms such as Max-flow Min-cut algorithm, maximum matching algorithm, and optimization algorithms for facility location problems in networks. Prerequisite: MATH 5388 or MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5358. Applied Discrete Mathematics.**

Boolean algebra, counting techniques, discrete probability, graph theory, and related discrete mathematical structures that are commonly encountered in computer science. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5360. Mathematical Modeling.**

This course introduces the process and techniques of mathematical modeling. It covers a variety of application areas from the natural sciences. Emphasis is placed on deterministic systems, stochastic models, and diffusion. Prerequisite: [MATH 2393 and MATH 3323 both with grades of "D" or better and MATH 5301 with a grade of "C" or better] or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5373. Theory of Functions of Real Variables.**

This course will discuss those topics that will enable the student to obtain a better grasp of the fundamental concepts of the calculus of real variables and the more recent developments of this analysis. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5374. Numerical Linear Algebra.**

This course introduces tools that mathematical scientists use with vectors and matrices. Applications include least squares and eigenvalue problems, and systems of equations from applied mathematics. The stability of algorithms to perturbations are considered. Theory is balanced with numerically implementing algorithms, in particular for iterative methods for large, sparse systems. Prerequisite: MATH 3377 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5376A. Design and Analysis of Experiments.**

This course introduces fundamental concepts in the design of experiments, justification of linear models, randomization and principles of blocking. It also discusses the construction and analysis of basic designs including fractional replication, composite designs, factorial designs, and incomplete block designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376B. Analysis of Variance.**

This course introduces basic methods, one-way, two-way ANOVA procedures, and multifactor ANOVA designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376D. Statistical Applications in Genetics and Bioinformatics.**

The statistical concepts and methods to be covered include important probability distributions, analysis of variance, regression analysis, hidden Markov model, and Markov Chain Monte Carlo methods. These methods will be used to address important and challenging questions arising in the analysis of large genetic and bioinformatic datasets. Prerequisite: Math4305 or equivalent.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376E. Introduction to Data Science.**

This course introduces basic concepts and methods in the field of data science. Topics include data wrangling, data exploration and visualization, optimization, deep learning, supervised learning subjects such as nearest-neighbor techniques, regression, Lasso, linear discriminant analysis, logistic regression, tree-based models, neural networks, as well as unsupervised learning subjects such as market basket analysis and cluster analysis, and random forests. The material will be approached with a blend of theory and application, and will include programming in Python, R, or another modern, popular language of the instructor's choice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376F. Introduction to Probability Theory and Models.**

This course covers the definitions, constructions, theorems, and techniques to build and analyze probability models. The emphasis of this class is the active construction and analysis of probability models. However, we will develop a rigorous treatment of the requisite abstract theory in service of this goal. Topics include conditional expectation, the convergence of random variables, weak and strong law of large numbers, central limit theorem, random walk, Martingales, and Brownian motion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5381. Foundations of Set Theory.**

A formal study of the theory of sets, relations, functions, finite and infinite sets, set operations and other selected topics. This course will also train the student in the understanding of mathematical logic and the writing of proofs. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5382. Foundation of Real Analysis.**

A course covering the foundations of mathematical analysis. Topics include: real numbers, sequences, series, and limits and continuity of functions. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5384. Geometric Approach to Abstract Algebra.**

Definitions and elementary properties of groups, rings, integral domains, fields and vector spaces with great emphasis on the rings of integers, rational numbers, complex numbers, polynomials, and the interplay between algebra and geometry. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5386. Knots and Surfaces, An Introduction to Low-Dimensional Topology.**

Knot polynomials and other knot invariants. The topological classification of surfaces and topological invariants of surfaces. Prerequisite:

MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5388. Discrete Mathematics.**

This course covers topics from: basic and advanced techniques of counting, recurrence relations, discrete probability and statistics, and applications of graph theory. Prerequisites: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5390. Statistics.**

This course will cover not only some of the basic statistical ideas and techniques but also the mathematical and probabilistic underpinnings of these techniques with an emphasis on simulations and modeling. The planning, conducting, analysis, and reporting of experimental data will also be covered. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5392. Survey of Geometries.**

A study of topics in geometry including geometrical transformations, the geometry fractals, projective geometry, Euclidean geometry, and non-Euclidean geometry. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5393. Numerical Optimization.**

This course focuses on optimization methods for a broad range of applications, such as engineering and applied sciences. Subjects are the basic theory of optimization, numerical algorithms to locate points satisfying optimality conditions and to analyze the convergence properties. Prerequisites: MATH 2472 and MATH 3377 and MATH 3383, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Mathematics 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5472A. Experiencing the Hungarian Approach through Observation and Teaching Practicum.**

This course provides a first-hand experience in putting the Hungarian style guided discovery into practice. As part of the course, students will spend one week at a mathematics camp for secondary students that is being run using the Hungarian style of teaching. Students will observe mathematics classes, discuss pedagogy with camp instructors, and design and teach their own lesson to camp participants.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Mathematics for Teacher Education (MTE)

**MTE 5301E. Visual Models for Middle School Mathematics.**

This course uses visual models to motivate understanding of the fundamental concepts underlying middle school mathematics. Pedagogical techniques to engage middle school students will also be addressed including inquiry-based instructional methods utilizing these visual models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301F. Implementing New Mathematics Curriculum.**

In this course we will investigate the keys to successfully implementing new curriculum. Two main aspects considered are: 1) the mathematical content knowledge required for a new curriculum and 2) how to build a community of practice which provides support during the implementation process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301G. Mathematics for Teaching.**

A study of the current trends and topics found in the secondary school mathematics curriculum taught from an advance perspective. Course context will be flexible and topics will be selected on the basis of student needs and interests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5302A. Quantitative Reasoning.**

This course covers current pedagogy, curriculum, and methods related specifically to the teaching of middle school mathematics. Some of the topics explored are curriculum theory, instructional theory, learning theory, problem solving, national and state standards and assessment, discovery learning, assessment methods, manipulative, and technology in the classroom.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5313. Geometry and Measurement.**

This course will focus on using spatial reasoning to investigate the concepts of direction, orientation, shape and structure; using mathematical reasoning to develop and prove geometric relationships; using logical reasoning and proof in relation to the axiomatic structure of geometry; using measurement of geometry concepts to solve real-world problems. 5315 Algebraic Reasoning. (3-0) This course will focus on using algebraic reasoning to.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5315. Algebraic Reasoning.**

This course will focus on using algebraic reasoning to investigate patterns, make generalizations, formulate mathematical models, and make predication; using properties, graphs, and applications of relations and function to analyze, model and solve problems; and making connections among geometric, graphic, numeric and symbolic representation of functions and relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5321. Probability and Statistics.**

This course will deal with using graphical and numerical techniques to explore data, characterize patterns, and describe departures from patterns; designing experiments to solve problems; understanding the theory of probability and its relationship to sampling and statistical inference and its use in making and evaluating predication. Prerequisite: MTE 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5323. Logic and Foundations of Mathematics.**

This course will consist of an introduction to fundamental mathematical structures and techniques of proof. Topics will include: logic, set theory, number theory, relations, and functions. Emphasis will be placed on communication about mathematics and construction of well-reasoned explanations. Prerequisite: MTE 5313 and MTE 5319 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State offers opportunities to work with outstanding faculty in a collegial atmosphere where mathematicians and mathematics



educators collaborate closely. The multi-faceted program offers a strong foundation and research opportunities in mathematics, applied math, and mathematics education, preparing students for further graduate study, teaching, or industry positions. The M.S. in mathematics prepares students with the applied mathematical knowledge and critical thinking abilities needed to pursue doctoral degrees, teaching careers or leadership positions in industry.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in mathematics or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.) Students who lack sufficient background course work will be required to complete leveling course work with grades of B or better prior to admission.
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV
- statement of purpose
- three letters of recommendation addressing the substance and quality of the student's preparation for graduate study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Mathematics requires 36 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MATH 5307	Modern Algebra	3
MATH 5329	General Topology	3
or MATH 5331	Metric Spaces	
MATH 5373	Theory of Functions of Real Variables	3
<b>Prescribed Electives</b>		
Choose 27 hours from the following:		27
MATH 5301	Partial Differential Equations	
MATH 5305	Advanced Course in Probability and Statistics	
MATH 5311	Foundations of Differential Equations	
MATH 5312	Functions of a Complex Variable	
MATH 5313	Field Theory	
MATH 5314	Number Theory	
MATH 5319	The Theory of Integration	
MATH 5335	Survival Analysis	
MATH 5336	Studies in Applied Mathematics	
MATH 5338	Advanced Independent Study in Mathematics or Statistics	
MATH 5340	Scientific Computation	
MATH 5345	Regression Analysis	
MATH 5350	Combinatorics	
MATH 5355	Applied and Algorithmic Graph Theory	
MATH 5358	Applied Discrete Mathematics	
MATH 5360	Mathematical Modeling	
MATH 5374	Numerical Linear Algebra	
MATH 5376A	Design and Analysis of Experiments	
or MATH 5376B	Analysis of Variance	
MATH 5376D	Statistical Applications in Genetics and Bioinformatics	
MATH 5376E	Introduction to Data Science	
MATH 5382	Foundation of Real Analysis	
MATH 5390	Statistics	
MATH 5393	Numerical Optimization	

**Total Hours** 36

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass a comprehensive examination consisting of three parts. A student may fail up to two times on one or more of the three parts of the comprehensive exam. After failing any given part of the comprehensive exam twice, a student will then be advised to retake the course(s). Provided they earn at least a C in each retaken class, they will then be permitted one final attempt at passing the corresponding part(s) of the comprehensive exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Mathematics: MATH (p. 3293), MTE (p. 3297)

## Courses Offered

### Mathematics (MATH)

#### **MATH 5111. Graduate Assistant Training.**

This course is concerned with techniques used in the teaching of mathematics. This course is required as a condition of employment for graduate teaching and instructional assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **MATH 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **MATH 5272A. Teaching Geometry through Problem Solving and Discovery Learning.**

This course investigates the problem-solving heuristics embedded in the secondary school geometry curriculum and explores how to implement problem solving in geometry classrooms. This course also examines the unique "Hungarian style" method of discovery learning in mathematics, developed for students aged 12-18. The method referred to as the Pósa Method is similar to inquiry based learning with an emphasis on problem solving.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### **MATH 5272B. Gamification and Playfulness in Teaching Mathematics.**

This course focuses on the non-game context of education and presents applications of game elements with special attention to teaching mathematics. Mathematics concepts are uncovered through the use of mathematical games and hands-on manipulatives that foster playfulness.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### **MATH 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **MATH 5301. Partial Differential Equations.**

Theory and application of partial differential equations; derivation of the differential equation; use of vector and Tensor methods; equations of the first order; wave equations; vibrations and normal functions; Fourier series and integral; Cauchy's methods, initial data; methods of Green; potentials; boundary problems; methods of Riemann-Volterra; characteristics. Prerequisites: MATH 3323 and consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MATH 5303. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress. Cannot be used on a degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MATH 5304. Topics in Mathematics for the Secondary Teacher.**

A study of the current trends and topics found in the secondary school mathematics curriculum with the goal of improving the mathematical background of the secondary teacher. Course content will be flexible and topics will be selected on the basis of student needs and interests. Cannot be used on degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MATH 5305. Advanced Course in Probability and Statistics.**

Advanced topics in probability and statistics. May be repeated once with different emphasis for additional credit. Prerequisite: MATH 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MATH 5307. Modern Algebra.**

Topics in modern algebra. Material will be adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MATH 5311. Foundations of Differential Equations.**

A critical study of the foundations of derivation equations, operator spaces, and such basic topics. Recent developments in this field will be investigated and independent investigation will be encouraged. Prerequisite: MATH 2393 and [MATH 3380 or MATH 5382] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5312. Functions of a Complex Variable.**

Modern developments in the field of a complex variable. Prerequisite: MATH 2393 and MATH 4315 and [MATH 3380 or MATH 5382] all with grades of "C" or better or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5313. Field Theory.**

Topics in field theory, separable extensions, and Galois Theory.

Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5314. Number Theory.**

Topics in algebra selected from quadratic forms, elementary number theory, algebraic or analytic number theory, with material adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5315. Mathematical Statistics.**

This course discusses theoretical aspects of estimation theory and hypothesis testing procedures, with some of their important applications. The main topics include convergence of random variables, parameter estimation, properties of estimators, interval estimation, sufficiency and applications to the exponential family, hypothesis testing, decision theory, and Bayesian inference. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5317. Problems in Advanced Mathematics.**

Open to graduate students on an individual basis by arrangement with the mathematics department. A considerable degree of mathematical maturity is required. May be repeated with different emphasis. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 5319. The Theory of Integration.**

A course in the theory of integration with special emphasis on the Lebesgue integrals. A course in the theory of real variables, with a knowledge of point set theory, is desirable as a background for this course. A considerable amount of mathematical maturity is required. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5329. General Topology.**

Point-set topology with an emphasis on general topological spaces; separation axioms, connectivity, the metrization theorem, and the C-W complexes. Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5331. Metric Spaces.**

Point-set topology with an emphasis on metric spaces and compactness but including a brief introduction to general topological spaces.

Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5335. Survival Analysis.**

This course introduces concepts and methods in the analysis of survival data. Topics include characteristics of survival data; basic functions; parametric models for survival time; maximum likelihood estimation of survival functions; two-sample test techniques; regression analysis with parametric and semi-parametric models; and mathematical and graphical methods for model checking. Prerequisite: Math 5305 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5336. Studies in Applied Mathematics.**

Topics selected from optimization and control theory, numerical analysis, calculus of variations, boundary value problems, special functions, tensor analysis, or other subfields of applied mathematics are studied. Repeatable for credit with different topic emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5338. Advanced Independent Study in Mathematics or Statistics.**

This course gives graduate students specializing in mathematical or statistical subjects the opportunity to study specialty subjects from individual Mathematics faculty's research interests. Work may consist of theoretical or empirical research or reviewing and integrating existing literature on the subject. Repeatable once for credit with different emphasis. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5340. Scientific Computation.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using a computer algebra system. Symbolic numerical and graphical techniques will be studied. Applications will be drawn from science, engineering, and mathematics. A knowledge of differential equations is expected.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MATH 5345. Regression Analysis.**

This course introduces formulation and statistical methodologies for simple and multiple regression, assessment of model fit, model design, and criteria for selection of optimal regression models. Students will develop skills with the use of statistical packages and the writing of reports analyzing a variety of real-world data. Prerequisite: MATH 2472.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5350. Combinatorics.**

This course, covers permutations, combinations, Stirling numbers, chromatic numbers, Ramsey numbers, generating functions, Polya theory, Latin squares and random block design. Prerequisite: MATH 3398 or consent of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5355. Applied and Algorithmic Graph Theory.**

This course is designed to emphasize the close tie between the theoretical and algorithmic aspects. The topics may include basic concepts such as connectivity, trees, planarity, coloring of graphs, matchings, and networks. It also covers many algorithms such as Max-flow Min-cut algorithm, maximum matching algorithm, and optimization algorithms for facility location problems in networks. Prerequisite: MATH 5388 or MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5358. Applied Discrete Mathematics.**

Boolean algebra, counting techniques, discrete probability, graph theory, and related discrete mathematical structures that are commonly encountered in computer science. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5360. Mathematical Modeling.**

This course introduces the process and techniques of mathematical modeling. It covers a variety of application areas from the natural sciences. Emphasis is placed on deterministic systems, stochastic models, and diffusion. Prerequisite: [MATH 2393 and MATH 3323 both with grades of "D" or better and MATH 5301 with a grade of "C" or better] or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5373. Theory of Functions of Real Variables.**

This course will discuss those topics that will enable the student to obtain a better grasp of the fundamental concepts of the calculus of real variables and the more recent developments of this analysis. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5374. Numerical Linear Algebra.**

This course introduces tools that mathematical scientists use with vectors and matrices. Applications include least squares and eigenvalue problems, and systems of equations from applied mathematics. The stability of algorithms to perturbations are considered. Theory is balanced with numerically implementing algorithms, in particular for iterative methods for large, sparse systems. Prerequisite: MATH 3377 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5376A. Design and Analysis of Experiments.**

This course introduces fundamental concepts in the design of experiments, justification of linear models, randomization and principles of blocking. It also discusses the construction and analysis of basic designs including fractional replication, composite designs, factorial designs, and incomplete block designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376B. Analysis of Variance.**

This course introduces basic methods, one-way, two-way ANOVA procedures, and multifactor ANOVA designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376D. Statistical Applications in Genetics and Bioinformatics.**

The statistical concepts and methods to be covered include important probability distributions, analysis of variance, regression analysis, hidden Markov model, and Markov Chain Monte Carlo methods. These methods will be used to address important and challenging questions arising in the analysis of large genetic and bioinformatic datasets. Prerequisite: Math4305 or equivalent.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376E. Introduction to Data Science.**

This course introduces basic concepts and methods in the field of data science. Topics include data wrangling, data exploration and visualization, optimization, deep learning, supervised learning subjects such as nearest-neighbor techniques, regression, Lasso, linear discriminant analysis, logistic regression, tree-based models, neural networks, as well as unsupervised learning subjects such as market basket analysis and cluster analysis, and random forests. The material will be approached with a blend of theory and application, and will include programming in Python, R, or another modern, popular language of the instructor's choice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376F. Introduction to Probability Theory and Models.**

This course covers the definitions, constructions, theorems, and techniques to build and analyze probability models. The emphasis of this class is the active construction and analysis of probability models. However, we will develop a rigorous treatment of the requisite abstract theory in service of this goal. Topics include conditional expectation, the convergence of random variables, weak and strong law of large numbers, central limit theorem, random walk, Martingales, and Brownian motion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5381. Foundations of Set Theory.**

A formal study of the theory of sets, relations, functions, finite and infinite sets, set operations and other selected topics. This course will also train the student in the understanding of mathematical logic and the writing of proofs. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5382. Foundation of Real Analysis.**

A course covering the foundations of mathematical analysis. Topics include: real numbers, sequences, series, and limits and continuity of functions. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5384. Geometric Approach to Abstract Algebra.**

Definitions and elementary properties of groups, rings, integral domains, fields and vector spaces with great emphasis on the rings of integers, rational numbers, complex numbers, polynomials, and the interplay between algebra and geometry. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5386. Knots and Surfaces, An Introduction to Low-Dimensional Topology.**

Knot polynomials and other knot invariants. The topological classification of surfaces and topological invariants of surfaces. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5388. Discrete Mathematics.**

This course covers topics from: basic and advanced techniques of counting, recurrence relations, discrete probability and statistics, and applications of graph theory. Prerequisites: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5390. Statistics.**

This course will cover not only some of the basic statistical ideas and techniques but also the mathematical and probabilistic underpinnings of these techniques with an emphasis on simulations and modeling. The planning, conducting, analysis, and reporting of experimental data will also be covered. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5392. Survey of Geometries.**

A study of topics in geometry including geometrical transformations, the geometry of fractals, projective geometry, Euclidean geometry, and non-Euclidean geometry. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5393. Numerical Optimization.**

This course focuses on optimization methods for a broad range of applications, such as engineering and applied sciences. Subjects are the basic theory of optimization, numerical algorithms to locate points satisfying optimality conditions and to analyze the convergence properties. Prerequisites: MATH 2472 and MATH 3377 and MATH 3383, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MATH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Mathematics 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5472A. Experiencing the Hungarian Approach through Observation and Teaching Practicum.**

This course provides a first-hand experience in putting the Hungarian style guided discovery into practice. As part of the course, students will spend one week at a mathematics camp for secondary students that is being run using the Hungarian style of teaching. Students will observe mathematics classes, discuss pedagogy with camp instructors, and design and teach their own lesson to camp participants.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Mathematics for Teacher Education (MTE)****MTE 5301E. Visual Models for Middle School Mathematics.**

This course uses visual models to motivate understanding of the fundamental concepts underlying middle school mathematics. Pedagogical techniques to engage middle school students will also be addressed including inquiry-based instructional methods utilizing these visual models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301F. Implementing New Mathematics Curriculum.**

In this course we will investigate the keys to successfully implementing new curriculum. Two main aspects considered are: 1) the mathematical content knowledge required for a new curriculum and 2) how to build a community of practice which provides support during the implementation process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301G. Mathematics for Teaching.**

A study of the current trends and topics found in the secondary school mathematics curriculum taught from an advance perspective. Course context will be flexible and topics will be selected on the basis of student needs and interests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5302A. Quantitative Reasoning.**

This course covers current pedagogy, curriculum, and methods related specifically to the teaching of middle school mathematics. Some of the topics explored are curriculum theory, instructional theory, learning theory, problem solving, national and state standards and assessment, discovery learning, assessment methods, manipulative, and technology in the classroom.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5313. Geometry and Measurement.**

This course will focus on using spatial reasoning to investigate the concepts of direction, orientation, shape and structure; using mathematical reasoning to develop and prove geometric relationships; using logical reasoning and proof in relation to the axiomatic structure of geometry; using measurement of geometry concepts to solve real-world problems. 5315 Algebraic Reasoning. (3-0) This course will focus on using algebraic reasoning to.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5315. Algebraic Reasoning.**

This course will focus on using algebraic reasoning to investigate patterns, make generalizations, formulate mathematical models, and make predications; using properties, graphs, and applications of relations and function to analyze, model and solve problems; and making connections among geometric, graphic, numeric and symbolic representation of functions and relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5321. Probability and Statistics.**

This course will deal with using graphical and numerical techniques to explore data, characterize patterns, and describe departures from patterns; designing experiments to solve problems; understanding the theory of probability and its relationship to sampling and statistical inference and its use in making and evaluating predication. Prerequisite: MTE 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MTE 5323. Logic and Foundations of Mathematics.**

This course will consist of an introduction to fundamental mathematical structures and techniques of proof. Topics will include: logic, set theory, number theory, relations, and functions. Emphasis will be placed on communication about mathematics and construction of well-reasoned explanations. Prerequisite: MTE 5313 and MTE 5319 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**Program Overview**

Texas State offers opportunities to work with outstanding faculty in a collegial atmosphere where mathematicians and mathematics educators collaborate closely. The multi-faceted program offers a strong foundation and research opportunities in mathematics, applied math, and mathematics education, preparing students for further graduate study, teaching, or industry positions. The M.S. in mathematics prepares students with the applied mathematical knowledge and critical thinking abilities needed to pursue doctoral degrees, teaching careers or leadership positions in industry.

**Application Requirements**

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in mathematics or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.) Students who lack sufficient background course work will be required to complete leveling course work with grades of B or better prior to admission.
- official transcripts from **each institution** where course credit was granted

- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV
- statement of purpose
- three letters of recommendation addressing the substance and quality of the student's preparation for graduate study

**Approved English Proficiency Exam Scores**

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

**Degree Requirements**

The Master of Science (M.S.) degree with a major in Mathematics requires 36 semester credit hours.

Students who do not have the appropriate background course work may be required to complete leveling courses.

**Course Requirements**

Code	Title	Hours
<b>Required Courses</b>		
MATH 5307	Modern Algebra	3
MATH 5329	General Topology	3
	or MATH 5331 Metric Spaces	
MATH 5373	Theory of Functions of Real Variables	3
<b>Prescribed Electives</b>		
Choose 18 hours from the following:		18
MATH 5301	Partial Differential Equations	
MATH 5305	Advanced Course in Probability and Statistics	
MATH 5311	Foundations of Differential Equations	
MATH 5312	Functions of a Complex Variable	
MATH 5313	Field Theory	
MATH 5314	Number Theory	
MATH 5319	The Theory of Integration	
MATH 5336	Studies in Applied Mathematics	
MATH 5340	Scientific Computation	
MATH 5345	Regression Analysis	
MATH 5350	Combinatorics	
MATH 5355	Applied and Algorithmic Graph Theory	
MATH 5358	Applied Discrete Mathematics	
MATH 5360	Mathematical Modeling	

MATH 5374	Numerical Linear Algebra
MATH 5376A	Design and Analysis of Experiments or MATH 5376B Analysis of Variance
MATH 5335	Survival Analysis
MATH 5376D	Statistical Applications in Genetics and Bioinformatics
MATH 5376E	Introduction to Data Science
MATH 5382	Foundation of Real Analysis
MATH 5390	Statistics
MATH 5393	Numerical Optimization

**Minor**

Choose a 9-hour advisor-approved minor	9
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<b>Total Hours</b>	<b>36</b>
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## Comprehensive Examination Requirement

All candidates for graduate degrees must pass a comprehensive examination consisting of three parts. A student may fail up to two times on one or more of the three parts of the comprehensive exam. After failing any given part of the comprehensive exam twice, a student will then be advised to retake the course(s). Provided they earn at least a C in each retaken class, they will then be permitted one final attempt at passing the corresponding part(s) of the comprehensive exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Mathematics: MATH (p. 3299), MTE (p. 3303)

## Courses Offered

### Mathematics (MATH)

#### MATH 5111. Graduate Assistant Training.

This course is concerned with techniques used in the teaching of mathematics. This course is required as a condition of employment for graduate teaching and instructional assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### MATH 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### MATH 5272A. Teaching Geometry through Problem Solving and Discovery Learning.

This course investigates the problem-solving heuristics embedded in the secondary school geometry curriculum and explores how to implement problem solving in geometry classrooms. This course also examines the unique "Hungarian style" method of discovery learning in mathematics, developed for students aged 12-18. The method referred to as the Pósa Method is similar to inquiry based learning with an emphasis on problem solving.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### MATH 5272B. Gamification and Playfulness in Teaching Mathematics.

This course focuses on the non-game context of education and presents applications of game elements with special attention to teaching mathematics. Mathematics concepts are uncovered through the use of mathematical games and hands-on manipulatives that foster playfulness.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### MATH 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### MATH 5301. Partial Differential Equations.

Theory and application of partial differential equations; derivation of the differential equation; use of vector and Tensor methods; equations of the first order; wave equations; vibrations and normal functions; Fourier series and integral; Cauchy's methods, initial data; methods of Green; potentials; boundary problems; methods of Riemann-Volterra; characteristics. Prerequisites: MATH 3323 and consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### MATH 5303. History of Mathematics.

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress. Cannot be used on a degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5304. Topics in Mathematics for the Secondary Teacher.**

A study of the current trends and topics found in the secondary school mathematics curriculum with the goal of improving the mathematical background of the secondary teacher. Course content will be flexible and topics will be selected on the basis of student needs and interests. Cannot be used on degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5305. Advanced Course in Probability and Statistics.**

Advanced topics in probability and statistics. May be repeated once with different emphasis for additional credit. Prerequisite: MATH 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5307. Modern Algebra.**

Topics in modern algebra. Material will be adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5311. Foundations of Differential Equations.**

A critical study of the foundations of derivation equations, operator spaces, and such basic topics. Recent developments in this field will be investigated and independent investigation will be encouraged. Prerequisite: MATH 2393 and [MATH 3380 or MATH 5382] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5312. Functions of a Complex Variable.**

Modern developments in the field of a complex variable. Prerequisite: MATH 2393 and MATH 4315 and [MATH 3380 or MATH 5382] all with grades of "C" or better or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5313. Field Theory.**

Topics in field theory, separable extensions, and Galois Theory. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5314. Number Theory.**

Topics in algebra selected from quadratic forms, elementary number theory, algebraic or analytic number theory, with material adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5315. Mathematical Statistics.**

This course discusses theoretical aspects of estimation theory and hypothesis testing procedures, with some of their important applications. The main topics include convergence of random variables, parameter estimation, properties of estimators, interval estimation, sufficiency and applications to the exponential family, hypothesis testing, decision theory, and Bayesian inference. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5317. Problems in Advanced Mathematics.**

Open to graduate students on an individual basis by arrangement with the mathematics department. A considerable degree of mathematical maturity is required. May be repeated with different emphasis. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from Graduate GPA|Leveling  
**Grade Mode:** Leveling/Assistantships

**MATH 5319. The Theory of Integration.**

A course in the theory of integration with special emphasis on the Lebesgue integrals. A course in the theory of real variables, with a knowledge of point set theory, is desirable as a background for this course. A considerable amount of mathematical maturity is required. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5329. General Topology.**

Point-set topology with an emphasis on general topological spaces; separation axioms, connectivity, the metrization theorem, and the C-W complexes. Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5331. Metric Spaces.**

Point-set topology with an emphasis on metric spaces and compactness but including a brief introduction to general topological spaces. Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MATH 5335. Survival Analysis.**

This course introduces concepts and methods in the analysis of survival data. Topics include characteristics of survival data; basic functions; parametric models for survival time; maximum likelihood estimation of survival functions; two-sample test techniques; regression analysis with parametric and semi-parametric models; and mathematical and graphical methods for model checking. Prerequisite: Math 5305 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5336. Studies in Applied Mathematics.**

Topics selected from optimization and control theory, numerical analysis, calculus of variations, boundary value problems, special functions, tensor analysis, or other subfields of applied mathematics are studied. Repeatable for credit with different topic emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5338. Advanced Independent Study in Mathematics or Statistics.**

This course gives graduate students specializing in mathematical or statistical subjects the opportunity to study specialty subjects from individual Mathematics faculty's research interests. Work may consist of theoretical or empirical research or reviewing and integrating existing literature on the subject. Repeatable once for credit with different emphasis. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5340. Scientific Computation.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using a computer algebra system. Symbolic numerical and graphical techniques will be studied. Applications will be drawn from science, engineering, and mathematics. A knowledge of differential equations is expected.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MATH 5345. Regression Analysis.**

This course introduces formulation and statistical methodologies for simple and multiple regression, assessment of model fit, model design, and criteria for selection of optimal regression models. Students will develop skills with the use of statistical packages and the writing of reports analyzing a variety of real-world data. Prerequisite: MATH 2472.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5350. Combinatorics.**

This course, covers permutations, combinations, Stirling numbers, chromatic numbers, Ramsey numbers, generating functions, Polya theory, Latin squares and random block design. Prerequisite: MATH 3398 or consent of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5355. Applied and Algorithmic Graph Theory.**

This course is designed to emphasize the close tie between the theoretical and algorithmic aspects. The topics may include basic concepts such as connectivity, trees, planarity, coloring of graphs, matchings, and networks. It also covers many algorithms such as Max-flow Min-cut algorithm, maximum matching algorithm, and optimization algorithms for facility location problems in networks. Prerequisite: MATH 5388 or MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5358. Applied Discrete Mathematics.**

Boolean algebra, counting techniques, discrete probability, graph theory, and related discrete mathematical structures that are commonly encountered in computer science. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5360. Mathematical Modeling.**

This course introduces the process and techniques of mathematical modeling. It covers a variety of application areas from the natural sciences. Emphasis is placed on deterministic systems, stochastic models, and diffusion. Prerequisite: [MATH 2393 and MATH 3323 both with grades of "D" or better and MATH 5301 with a grade of "C" or better] or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5373. Theory of Functions of Real Variables.**

This course will discuss those topics that will enable the student to obtain a better grasp of the fundamental concepts of the calculus of real variables and the more recent developments of this analysis. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MATH 5374. Numerical Linear Algebra.**

This course introduces tools that mathematical scientists use with vectors and matrices. Applications include least squares and eigenvalue problems, and systems of equations from applied mathematics. The stability of algorithms to perturbations are considered. Theory is balanced with numerically implementing algorithms, in particular for iterative methods for large, sparse systems. Prerequisite: MATH 3377 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5376A. Design and Analysis of Experiments.**

This course introduces fundamental concepts in the design of experiments, justification of linear models, randomization and principles of blocking. It also discusses the construction and analysis of basic designs including fractional replication, composite designs, factorial designs, and incomplete block designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376B. Analysis of Variance.**

This course introduces basic methods, one-way, two-way ANOVA procedures, and multifactor ANOVA designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376D. Statistical Applications in Genetics and Bioinformatics.**

The statistical concepts and methods to be covered include important probability distributions, analysis of variance, regression analysis, hidden Markov model, and Markov Chain Monte Carlo methods. These methods will be used to address important and challenging questions arising in the analysis of large genetic and bioinformatic datasets. Prerequisite: Math4305 or equivalent.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376E. Introduction to Data Science.**

This course introduces basic concepts and methods in the field of data science. Topics include data wrangling, data exploration and visualization, optimization, deep learning, supervised learning subjects such as nearest-neighbor techniques, regression, Lasso, linear discriminant analysis, logistic regression, tree-based models, neural networks, as well as unsupervised learning subjects such as market basket analysis and cluster analysis, and random forests. The material will be approached with a blend of theory and application, and will include programming in Python, R, or another modern, popular language of the instructor's choice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376F. Introduction to Probability Theory and Models.**

This course covers the definitions, constructions, theorems, and techniques to build and analyze probability models. The emphasis of this class is the active construction and analysis of probability models. However, we will develop a rigorous treatment of the requisite abstract theory in service of this goal. Topics include conditional expectation, the convergence of random variables, weak and strong law of large numbers, central limit theorem, random walk, Martingales, and Brownian motion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5381. Foundations of Set Theory.**

A formal study of the theory of sets, relations, functions, finite and infinite sets, set operations and other selected topics. This course will also train the student in the understanding of mathematical logic and the writing of proofs. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5382. Foundation of Real Analysis.**

A course covering the foundations of mathematical analysis. Topics include: real numbers, sequences, series, and limits and continuity of functions. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5384. Geometric Approach to Abstract Algebra.**

Definitions and elementary properties of groups, rings, integral domains, fields and vector spaces with great emphasis on the rings of integers, rational numbers, complex numbers, polynomials, and the interplay between algebra and geometry. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5386. Knots and Surfaces, An Introduction to Low-Dimensional Topology.**

Knot polynomials and other knot invariants. The topological classification of surfaces and topological invariants of surfaces. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5388. Discrete Mathematics.**

This course covers topics from: basic and advanced techniques of counting, recurrence relations, discrete probability and statistics, and applications of graph theory. Prerequisites: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5390. Statistics.**

This course will cover not only some of the basic statistical ideas and techniques but also the mathematical and probabilistic underpinnings of these techniques with an emphasis on simulations and modeling. The planning, conducting, analysis, and reporting of experimental data will also be covered. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5392. Survey of Geometries.**

A study of topics in geometry including geometrical transformations, the geometry fractals, projective geometry, Euclidean geometry, and non-Euclidean geometry. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5393. Numerical Optimization.**

This course focuses on optimization methods for a broad range of applications, such as engineering and applied sciences. Subjects are the basic theory of optimization, numerical algorithms to locate points satisfying optimality conditions and to analyze the convergence properties. Prerequisites: MATH 2472 and MATH 3377 and MATH 3383, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Mathematics 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5472A. Experiencing the Hungarian Approach through Observation and Teaching Practicum.**

This course provides a first-hand experience in putting the Hungarian style guided discovery into practice. As part of the course, students will spend one week at a mathematics camp for secondary students that is being run using the Hungarian style of teaching. Students will observe mathematics classes, discuss pedagogy with camp instructors, and design and teach their own lesson to camp participants.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Mathematics for Teacher Education (MTE)****MTE 5301E. Visual Models for Middle School Mathematics.**

This course uses visual models to motivate understanding of the fundamental concepts underlying middle school mathematics. Pedagogical techniques to engage middle school students will also be addressed including inquiry-based instructional methods utilizing these visual models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301F. Implementing New Mathematics Curriculum.**

In this course we will investigate the keys to successfully implementing new curriculum. Two main aspects considered are: 1) the mathematical content knowledge required for a new curriculum and 2) how to build a community of practice which provides support during the implementation process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301G. Mathematics for Teaching.**

A study of the current trends and topics found in the secondary school mathematics curriculum taught from an advance perspective. Course context will be flexible and topics will be selected on the basis of student needs and interests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5302A. Quantitative Reasoning.**

This course covers current pedagogy, curriculum, and methods related specifically to the teaching of middle school mathematics. Some of the topics explored are curriculum theory, instructional theory, learning theory, problem solving, national and state standards and assessment, discovery learning, assessment methods, manipulative, and technology in the classroom.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5313. Geometry and Measurement.**

This course will focus on using spatial reasoning to investigate the concepts of direction, orientation, shape and structure; using mathematical reasoning to develop and prove geometric relationships; using logical reasoning and proof in relation to the axiomatic structure of geometry; using measurement of geometry concepts to solve real-world problems. 5315 Algebraic Reasoning. (3-0) This course will focus on using algebraic reasoning to.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5315. Algebraic Reasoning.**

This course will focus on using algebraic reasoning to investigate patterns, make generalizations, formulate mathematical models, and make predication; using properties, graphs, and applications of relations and function to analyze, model and solve problems; and making connections among geometric, graphic, numeric and symbolic representation of functions and relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5321. Probability and Statistics.**

This course will deal with using graphical and numerical techniques to explore data, characterize patterns, and describe departures from patterns; designing experiments to solve problems; understanding the theory of probability and its relationship to sampling and statistical inference and its use in making and evaluating predication. Prerequisite: MTE 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5323. Logic and Foundations of Mathematics.**

This course will consist of an introduction to fundamental mathematical structures and techniques of proof. Topics will include: logic, set theory, number theory, relations, and functions. Emphasis will be placed on communication about mathematics and construction of well-reasoned explanations. Prerequisite: MTE 5313 and MTE 5319 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State offers opportunities to work with outstanding faculty in a collegial atmosphere where mathematicians and mathematics educators

work closely together. The multi-faceted programs offer a strong mathematics foundation and research opportunities in mathematics and mathematics education, preparing students for further graduate study, teaching, or industry positions.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in mathematics or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.) Students who lack sufficient background course work will be required to complete leveling course work with grades of B or better prior to admission.
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV
- statement of purpose
- three letters of recommendation addressing the substance and quality of the student's preparation for graduate study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Mathematics concentration in Statistics requires 36 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MATH 5305	Advanced Course in Probability and Statistics	3
MATH 5315	Mathematical Statistics	3
MATH 5335	Survival Analysis	3
or MATH 5376C	Statistical Applications in Genetics and Bioinformatics	
MATH 5345	Regression Analysis	3
MATH 5373	Theory of Functions of Real Variables	3
MATH 5376A	Design and Analysis of Experiments	3
or MATH 5376B	Analysis of Variance	
MATH 5390	Statistics	3
MATH 5393	Numerical Optimization	3
or MATH 5374	Numerical Linear Algebra	
<b>Prescribed Electives</b>		
Choose 12 hours from the following:		12
MATH 5301	Partial Differential Equations	
MATH 5307	Modern Algebra	
MATH 5311	Foundations of Differential Equations	
MATH 5312	Functions of a Complex Variable	
MATH 5313	Field Theory	
MATH 5314	Number Theory	
MATH 5319	The Theory of Integration	
MATH 5329	General Topology	
MATH 5331	Metric Spaces	
MATH 5336	Studies in Applied Mathematics	
MATH 5340	Scientific Computation	
MATH 5350	Combinatorics	
MATH 5355	Applied and Algorithmic Graph Theory	
MATH 5358	Applied Discrete Mathematics	
MATH 5376D	Statistical Applications in Genetics and Bioinformatics	
or MATH 5376E	Survival Analysis	
MATH 5360	Mathematical Modeling	
MATH 5376E	Introduction to Data Science	
MATH 5382	Foundation of Real Analysis	
MATH 5393	Numerical Optimization	
or MATH 5374	Numerical Linear Algebra	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass a comprehensive examination consisting of three parts. A student may fail up to two times on one or more of the three parts of the comprehensive exam. After failing any given part of the comprehensive exam twice, a student will then be advised to retake the course(s). Provided they earn at least a C

in each retaken class, they will then be permitted one final attempt at passing the corresponding part(s) of the comprehensive exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Mathematics: MATH (p. 3305), MTE (p. 3309)

## Courses Offered

### Mathematics (MATH)

#### MATH 5111. Graduate Assistant Training.

This course is concerned with techniques used in the teaching of mathematics. This course is required as a condition of employment for graduate teaching and instructional assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

#### MATH 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### MATH 5272A. Teaching Geometry through Problem Solving and Discovery Learning.

This course investigates the problem-solving heuristics embedded in the secondary school geometry curriculum and explores how to implement problem solving in geometry classrooms. This course also examines the unique "Hungarian style" method of discovery learning in mathematics, developed for students aged 12-18. The method referred to as the Pósa Method is similar to inquiry based learning with an emphasis on problem solving.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

#### MATH 5272B. Gamification and Playfulness in Teaching Mathematics.

This course focuses on the non-game context of education and presents applications of game elements with special attention to teaching mathematics. Mathematics concepts are uncovered through the use of mathematical games and hands-on manipulatives that foster playfulness.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

#### MATH 5299B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5301. Partial Differential Equations.**

Theory and application of partial differential equations; derivation of the differential equation; use of vector and Tensor methods; equations of the first order; wave equations; vibrations and normal functions; Fourier series and integral; Cauchy's methods, initial data; methods of Green; potentials; boundary problems; methods of Riemann-Volterra; characteristics. Prerequisites: MATH 3323 and consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5303. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress. Cannot be used on a degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5304. Topics in Mathematics for the Secondary Teacher.**

A study of the current trends and topics found in the secondary school mathematics curriculum with the goal of improving the mathematical background of the secondary teacher. Course content will be flexible and topics will be selected on the basis of student needs and interests. Cannot be used on degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5305. Advanced Course in Probability and Statistics.**

Advanced topics in probability and statistics. May be repeated once with different emphasis for additional credit. Prerequisite: MATH 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5307. Modern Algebra.**

Topics in modern algebra. Material will be adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5311. Foundations of Differential Equations.**

A critical study of the foundations of derivation equations, operator spaces, and such basic topics. Recent developments in this field will be investigated and independent investigation will be encouraged. Prerequisite: MATH 2393 and [MATH 3380 or MATH 5382] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5312. Functions of a Complex Variable.**

Modern developments in the field of a complex variable. Prerequisite: MATH 2393 and MATH 4315 and [MATH 3380 or MATH 5382] all with grades of "C" or better or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5313. Field Theory.**

Topics in field theory, separable extensions, and Galois Theory.

Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5314. Number Theory.**

Topics in algebra selected from quadratic forms, elementary number theory, algebraic or analytic number theory, with material adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5315. Mathematical Statistics.**

This course discusses theoretical aspects of estimation theory and hypothesis testing procedures, with some of their important applications. The main topics include convergence of random variables, parameter estimation, properties of estimators, interval estimation, sufficiency and applications to the exponential family, hypothesis testing, decision theory, and Bayesian inference. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5317. Problems in Advanced Mathematics.**

Open to graduate students on an individual basis by arrangement with the mathematics department. A considerable degree of mathematical maturity is required. May be repeated with different emphasis. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 5319. The Theory of Integration.**

A course in the theory of integration with special emphasis on the Lebesgue integrals. A course in the theory of real variables, with a knowledge of point set theory, is desirable as a background for this course. A considerable amount of mathematical maturity is required. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MATH 5329. General Topology.**

Point-set topology with an emphasis on general topological spaces; separation axioms, connectivity, the metrization theorem, and the C-W complexes. Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5331. Metric Spaces.**

Point-set topology with an emphasis on metric spaces and compactness but including a brief introduction to general topological spaces.

Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5335. Survival Analysis.**

This course introduces concepts and methods in the analysis of survival data. Topics include characteristics of survival data; basic functions; parametric models for survival time; maximum likelihood estimation of survival functions; two-sample test techniques; regression analysis with parametric and semi-parametric models; and mathematical and graphical methods for model checking. Prerequisite: Math 5305 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5336. Studies in Applied Mathematics.**

Topics selected from optimization and control theory, numerical analysis, calculus of variations, boundary value problems, special functions, tensor analysis, or other subfields of applied mathematics are studied. Repeatable for credit with different topic emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5338. Advanced Independent Study in Mathematics or Statistics.**

This course gives graduate students specializing in mathematical or statistical subjects the opportunity to study specialty subjects from individual Mathematics faculty's research interests. Work may consist of theoretical or empirical research or reviewing and integrating existing literature on the subject. Repeatable once for credit with different emphasis. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5340. Scientific Computation.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using a computer algebra system. Symbolic numerical and graphical techniques will be studied. Applications will be drawn from science, engineering, and mathematics. A knowledge of differential equations is expected.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MATH 5345. Regression Analysis.**

This course introduces formulation and statistical methodologies for simple and multiple regression, assessment of model fit, model design, and criteria for selection of optimal regression models. Students will develop skills with the use of statistical packages and the writing of reports analyzing a variety of real-world data. Prerequisite: MATH 2472.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5350. Combinatorics.**

This course, covers permutations, combinations, Stirling numbers, chromatic numbers, Ramsey numbers, generating functions, Polya theory, Latin squares and random block design. Prerequisite: MATH 3398 or consent of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5355. Applied and Algorithmic Graph Theory.**

This course is designed to emphasize the close tie between the theoretical and algorithmic aspects. The topics may include basic concepts such as connectivity, trees, planarity, coloring of graphs, matchings, and networks. It also covers many algorithms such as Max-flow Min-cut algorithm, maximum matching algorithm, and optimization algorithms for facility location problems in networks. Prerequisite: MATH 5388 or MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5358. Applied Discrete Mathematics.**

Boolean algebra, counting techniques, discrete probability, graph theory, and related discrete mathematical structures that are commonly encountered in computer science. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5360. Mathematical Modeling.**

This course introduces the process and techniques of mathematical modeling. It covers a variety of application areas from the natural sciences. Emphasis is placed on deterministic systems, stochastic models, and diffusion. Prerequisite: [MATH 2393 and MATH 3323 both with grades of "D" or better and MATH 5301 with a grade of "C" or better] or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5373. Theory of Functions of Real Variables.**

This course will discuss those topics that will enable the student to obtain a better grasp of the fundamental concepts of the calculus of real variables and the more recent developments of this analysis. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5374. Numerical Linear Algebra.**

This course introduces tools that mathematical scientists use with vectors and matrices. Applications include least squares and eigenvalue problems, and systems of equations from applied mathematics. The stability of algorithms to perturbations are considered. Theory is balanced with numerically implementing algorithms, in particular for iterative methods for large, sparse systems. Prerequisite: MATH 3377 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5376A. Design and Analysis of Experiments.**

This course introduces fundamental concepts in the design of experiments, justification of linear models, randomization and principles of blocking. It also discusses the construction and analysis of basic designs including fractional replication, composite designs, factorial designs, and incomplete block designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376B. Analysis of Variance.**

This course introduces basic methods, one-way, two-way ANOVA procedures, and multifactor ANOVA designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376D. Statistical Applications in Genetics and Bioinformatics.**

The statistical concepts and methods to be covered include important probability distributions, analysis of variance, regression analysis, hidden Markov model, and Markov Chain Monte Carlo methods. These methods will be used to address important and challenging questions arising in the analysis of large genetic and bioinformatic datasets. Prerequisite: Math4305 or equivalent.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376E. Introduction to Data Science.**

This course introduces basic concepts and methods in the field of data science. Topics include data wrangling, data exploration and visualization, optimization, deep learning, supervised learning subjects such as nearest-neighbor techniques, regression, Lasso, linear discriminant analysis, logistic regression, tree-based models, neural networks, as well as unsupervised learning subjects such as market basket analysis and cluster analysis, and random forests. The material will be approached with a blend of theory and application, and will include programming in Python, R, or another modern, popular language of the instructor's choice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376F. Introduction to Probability Theory and Models.**

This course covers the definitions, constructions, theorems, and techniques to build and analyze probability models. The emphasis of this class is the active construction and analysis of probability models. However, we will develop a rigorous treatment of the requisite abstract theory in service of this goal. Topics include conditional expectation, the convergence of random variables, weak and strong law of large numbers, central limit theorem, random walk, Martingales, and Brownian motion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5381. Foundations of Set Theory.**

A formal study of the theory of sets, relations, functions, finite and infinite sets, set operations and other selected topics. This course will also train the student in the understanding of mathematical logic and the writing of proofs. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5382. Foundation of Real Analysis.**

A course covering the foundations of mathematical analysis. Topics include: real numbers, sequences, series, and limits and continuity of functions. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5384. Geometric Approach to Abstract Algebra.**

Definitions and elementary properties of groups, rings, integral domains, fields and vector spaces with great emphasis on the rings of integers, rational numbers, complex numbers, polynomials, and the interplay between algebra and geometry. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5386. Knots and Surfaces, An Introduction to Low-Dimensional Topology.**

Knot polynomials and other knot invariants. The topological classification of surfaces and topological invariants of surfaces. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5388. Discrete Mathematics.**

This course covers topics from: basic and advanced techniques of counting, recurrence relations, discrete probability and statistics, and applications of graph theory. Prerequisites: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5390. Statistics.**

This course will cover not only some of the basic statistical ideas and techniques but also the mathematical and probabilistic underpinnings of these techniques with an emphasis on simulations and modeling. The planning, conducting, analysis, and reporting of experimental data will also be covered. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5392. Survey of Geometries.**

A study of topics in geometry including geometrical transformations, the geometry fractals, projective geometry, Euclidean geometry, and non-Euclidean geometry. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5393. Numerical Optimization.**

This course focuses on optimization methods for a broad range of applications, such as engineering and applied sciences. Subjects are the basic theory of optimization, numerical algorithms to locate points satisfying optimality conditions and to analyze the convergence properties. Prerequisites: MATH 2472 and MATH 3377 and MATH 3383, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Mathematics 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5472A. Experiencing the Hungarian Approach through Observation and Teaching Practicum.**

This course provides a first-hand experience in putting the Hungarian style guided discovery into practice. As part of the course, students will spend one week at a mathematics camp for secondary students that is being run using the Hungarian style of teaching. Students will observe mathematics classes, discuss pedagogy with camp instructors, and design and teach their own lesson to camp participants.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Mathematics for Teacher Education (MTE)****MTE 5301E. Visual Models for Middle School Mathematics.**

This course uses visual models to motivate understanding of the fundamental concepts underlying middle school mathematics. Pedagogical techniques to engage middle school students will also be addressed including inquiry-based instructional methods utilizing these visual models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301F. Implementing New Mathematics Curriculum.**

In this course we will investigate the keys to successfully implementing new curriculum. Two main aspects considered are: 1) the mathematical content knowledge required for a new curriculum and 2) how to build a community of practice which provides support during the implementation process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301G. Mathematics for Teaching.**

A study of the current trends and topics found in the secondary school mathematics curriculum taught from an advance perspective. Course context will be flexible and topics will be selected on the basis of student needs and interests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5302A. Quantitative Reasoning.**

This course covers current pedagogy, curriculum, and methods related specifically to the teaching of middle school mathematics. Some of the topics explored are curriculum theory, instructional theory, learning theory, problem solving, national and state standards and assessment, discovery learning, assessment methods, manipulative, and technology in the classroom.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5313. Geometry and Measurement.**

This course will focus on using spatial reasoning to investigate the concepts of direction, orientation, shape and structure; using mathematical reasoning to develop and prove geometric relationships; using logical reasoning and proof in relation to the axiomatic structure of geometry; using measurement of geometry concepts to solve real-world problems. 5315 Algebraic Reasoning. (3-0) This course will focus on using algebraic reasoning to.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5315. Algebraic Reasoning.**

This course will focus on using algebraic reasoning to investigate patterns, make generalizations, formulate mathematical models, and make predication; using properties, graphs, and applications of relations and function to analyze, model and solve problems; and making connections among geometric, graphic, numeric and symbolic representation of functions and relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5321. Probability and Statistics.**

This course will deal with using graphical and numerical techniques to explore data, characterize patterns, and describe departures from patterns; designing experiments to solve problems; understanding the theory of probability and its relationship to sampling and statistical inference and its use in making and evaluating predication. Prerequisite: MTE 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5323. Logic and Foundations of Mathematics.**

This course will consist of an introduction to fundamental mathematical structures and techniques of proof. Topics will include: logic, set theory, number theory, relations, and functions. Emphasis will be placed on communication about mathematics and construction of well-reasoned explanations. Prerequisite: MTE 5313 and MTE 5319 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State offers opportunities to work with outstanding faculty in a collegial atmosphere where mathematicians and mathematics educators work closely together. The multi-faceted programs offer a strong mathematics foundation and research opportunities in mathematics and mathematics education, preparing students for further graduate study, teaching, or industry positions.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in mathematics or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV

- statement of purpose
- three letters of recommendation addressing the substance and quality of the student's preparation for graduate study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Mathematics concentration in statistics requires 30 semester credit hours, including a thesis. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MATH 5305	Advanced Course in Probability and Statistics	3
MATH 5315	Mathematical Statistics	3
MATH 5335	Survival Analysis	3
or MATH 5376L	Statistical Applications in Genetics and Bioinformatics	
MATH 5345	Regression Analysis	3
MATH 5373	Theory of Functions of Real Variables	3
MATH 5376A	Design and Analysis of Experiments	3
or MATH 5376B	Analysis of Variance	
MATH 5390	Statistics	3
MATH 5393	Numerical Optimization	3
or MATH 5374	Numerical Linear Algebra	
<b>Thesis</b>		
MATH 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
MATH 5199B	Thesis	
MATH 5299B	Thesis	
MATH 5399B	Thesis	
MATH 5599B	Thesis	
MATH 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass a comprehensive examinations consisting of three parts. A student may fail up to two times on one or more of the three parts of the comprehensive exam. After

failing any given part of the comprehensive exam twice, a student will then be advised to retake the course(s). Provided they earn at least a C in each retaken class, they will then be permitted one final attempt at passing the corresponding part(s) of the comprehensive exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B



course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival

quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Mathematics: MATH (p. 3312), MTE (p. 3316)

## Courses Offered

### Mathematics (MATH)

#### **MATH 5111. Graduate Assistant Training.**

This course is concerned with techniques used in the teaching of mathematics. This course is required as a condition of employment for graduate teaching and instructional assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **MATH 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **MATH 5272A. Teaching Geometry through Problem Solving and Discovery Learning.**

This course investigates the problem-solving heuristics embedded in the secondary school geometry curriculum and explores how to implement problem solving in geometry classrooms. This course also examines the unique "Hungarian style" method of discovery learning in mathematics, developed for students aged 12-18. The method referred to as the Pósa Method is similar to inquiry based learning with an emphasis on problem solving.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### **MATH 5272B. Gamification and Playfulness in Teaching Mathematics.**

This course focuses on the non-game context of education and presents applications of game elements with special attention to teaching mathematics. Mathematics concepts are uncovered through the use of mathematical games and hands-on manipulatives that foster playfulness.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### **MATH 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5301. Partial Differential Equations.**

Theory and application of partial differential equations; derivation of the differential equation; use of vector and Tensor methods; equations of the first order; wave equations; vibrations and normal functions; Fourier series and integral; Cauchy's methods, initial data; methods of Green; potentials; boundary problems; methods of Riemann-Volterra; characteristics. Prerequisites: MATH 3323 and consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5303. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress. Cannot be used on a degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5304. Topics in Mathematics for the Secondary Teacher.**

A study of the current trends and topics found in the secondary school mathematics curriculum with the goal of improving the mathematical background of the secondary teacher. Course content will be flexible and topics will be selected on the basis of student needs and interests. Cannot be used on degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5305. Advanced Course in Probability and Statistics.**

Advanced topics in probability and statistics. May be repeated once with different emphasis for additional credit. Prerequisite: MATH 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5307. Modern Algebra.**

Topics in modern algebra. Material will be adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5311. Foundations of Differential Equations.**

A critical study of the foundations of derivation equations, operator spaces, and such basic topics. Recent developments in this field will be investigated and independent investigation will be encouraged. Prerequisite: MATH 2393 and [MATH 3380 or MATH 5382] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5312. Functions of a Complex Variable.**

Modern developments in the field of a complex variable. Prerequisite: MATH 2393 and MATH 4315 and [MATH 3380 or MATH 5382] all with grades of "C" or better or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5313. Field Theory.**

Topics in field theory, separable extensions, and Galois Theory.

Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5314. Number Theory.**

Topics in algebra selected from quadratic forms, elementary number theory, algebraic or analytic number theory, with material adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5315. Mathematical Statistics.**

This course discusses theoretical aspects of estimation theory and hypothesis testing procedures, with some of their important applications. The main topics include convergence of random variables, parameter estimation, properties of estimators, interval estimation, sufficiency and applications to the exponential family, hypothesis testing, decision theory, and Bayesian inference. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5317. Problems in Advanced Mathematics.**

Open to graduate students on an individual basis by arrangement with the mathematics department. A considerable degree of mathematical maturity is required. May be repeated with different emphasis. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 5319. The Theory of Integration.**

A course in the theory of integration with special emphasis on the Lebesgue integrals. A course in the theory of real variables, with a knowledge of point set theory, is desirable as a background for this course. A considerable amount of mathematical maturity is required. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5329. General Topology.**

Point-set topology with an emphasis on general topological spaces; separation axioms, connectivity, the metrization theorem, and the C-W complexes. Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5331. Metric Spaces.**

Point-set topology with an emphasis on metric spaces and compactness but including a brief introduction to general topological spaces.

Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5335. Survival Analysis.**

This course introduces concepts and methods in the analysis of survival data. Topics include characteristics of survival data; basic functions; parametric models for survival time; maximum likelihood estimation of survival functions; two-sample test techniques; regression analysis with parametric and semi-parametric models; and mathematical and graphical methods for model checking. Prerequisite: Math 5305 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5336. Studies in Applied Mathematics.**

Topics selected from optimization and control theory, numerical analysis, calculus of variations, boundary value problems, special functions, tensor analysis, or other subfields of applied mathematics are studied. Repeatable for credit with different topic emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5338. Advanced Independent Study in Mathematics or Statistics.**

This course gives graduate students specializing in mathematical or statistical subjects the opportunity to study specialty subjects from individual Mathematics faculty's research interests. Work may consist of theoretical or empirical research or reviewing and integrating existing literature on the subject. Repeatable once for credit with different emphasis. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5340. Scientific Computation.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using a computer algebra system. Symbolic numerical and graphical techniques will be studied. Applications will be drawn from science, engineering, and mathematics. A knowledge of differential equations is expected.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MATH 5345. Regression Analysis.**

This course introduces formulation and statistical methodologies for simple and multiple regression, assessment of model fit, model design, and criteria for selection of optimal regression models. Students will develop skills with the use of statistical packages and the writing of reports analyzing a variety of real-world data. Prerequisite: MATH 2472.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5350. Combinatorics.**

This course, covers permutations, combinations, Stirling numbers, chromatic numbers, Ramsey numbers, generating functions, Polya theory, Latin squares and random block design. Prerequisite: MATH 3398 or consent of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5355. Applied and Algorithmic Graph Theory.**

This course is designed to emphasize the close tie between the theoretical and algorithmic aspects. The topics may include basic concepts such as connectivity, trees, planarity, coloring of graphs, matchings, and networks. It also covers many algorithms such as Max-flow Min-cut algorithm, maximum matching algorithm, and optimization algorithms for facility location problems in networks. Prerequisite: MATH 5388 or MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5358. Applied Discrete Mathematics.**

Boolean algebra, counting techniques, discrete probability, graph theory, and related discrete mathematical structures that are commonly encountered in computer science. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5360. Mathematical Modeling.**

This course introduces the process and techniques of mathematical modeling. It covers a variety of application areas from the natural sciences. Emphasis is placed on deterministic systems, stochastic models, and diffusion. Prerequisite: [MATH 2393 and MATH 3323 both with grades of "D" or better and MATH 5301 with a grade of "C" or better] or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5373. Theory of Functions of Real Variables.**

This course will discuss those topics that will enable the student to obtain a better grasp of the fundamental concepts of the calculus of real variables and the more recent developments of this analysis. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5374. Numerical Linear Algebra.**

This course introduces tools that mathematical scientists use with vectors and matrices. Applications include least squares and eigenvalue problems, and systems of equations from applied mathematics. The stability of algorithms to perturbations are considered. Theory is balanced with numerically implementing algorithms, in particular for iterative methods for large, sparse systems. Prerequisite: MATH 3377 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5376A. Design and Analysis of Experiments.**

This course introduces fundamental concepts in the design of experiments, justification of linear models, randomization and principles of blocking. It also discusses the construction and analysis of basic designs including fractional replication, composite designs, factorial designs, and incomplete block designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376B. Analysis of Variance.**

This course introduces basic methods, one-way, two-way ANOVA procedures, and multifactor ANOVA designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376D. Statistical Applications in Genetics and Bioinformatics.**

The statistical concepts and methods to be covered include important probability distributions, analysis of variance, regression analysis, hidden Markov model, and Markov Chain Monte Carlo methods. These methods will be used to address important and challenging questions arising in the analysis of large genetic and bioinformatic datasets. Prerequisite: Math4305 or equivalent.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376E. Introduction to Data Science.**

This course introduces basic concepts and methods in the field of data science. Topics include data wrangling, data exploration and visualization, optimization, deep learning, supervised learning subjects such as nearest-neighbor techniques, regression, Lasso, linear discriminant analysis, logistic regression, tree-based models, neural networks, as well as unsupervised learning subjects such as market basket analysis and cluster analysis, and random forests. The material will be approached with a blend of theory and application, and will include programming in Python, R, or another modern, popular language of the instructor's choice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376F. Introduction to Probability Theory and Models.**

This course covers the definitions, constructions, theorems, and techniques to build and analyze probability models. The emphasis of this class is the active construction and analysis of probability models. However, we will develop a rigorous treatment of the requisite abstract theory in service of this goal. Topics include conditional expectation, the convergence of random variables, weak and strong law of large numbers, central limit theorem, random walk, Martingales, and Brownian motion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5381. Foundations of Set Theory.**

A formal study of the theory of sets, relations, functions, finite and infinite sets, set operations and other selected topics. This course will also train the student in the understanding of mathematical logic and the writing of proofs. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5382. Foundation of Real Analysis.**

A course covering the foundations of mathematical analysis. Topics include: real numbers, sequences, series, and limits and continuity of functions. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5384. Geometric Approach to Abstract Algebra.**

Definitions and elementary properties of groups, rings, integral domains, fields and vector spaces with great emphasis on the rings of integers, rational numbers, complex numbers, polynomials, and the interplay between algebra and geometry. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5386. Knots and Surfaces, An Introduction to Low-Dimensional Topology.**

Knot polynomials and other knot invariants. The topological classification of surfaces and topological invariants of surfaces. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5388. Discrete Mathematics.**

This course covers topics from: basic and advanced techniques of counting, recurrence relations, discrete probability and statistics, and applications of graph theory. Prerequisites: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5390. Statistics.**

This course will cover not only some of the basic statistical ideas and techniques but also the mathematical and probabilistic underpinnings of these techniques with an emphasis on simulations and modeling. The planning, conducting, analysis, and reporting of experimental data will also be covered. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5392. Survey of Geometries.**

A study of topics in geometry including geometrical transformations, the geometry fractals, projective geometry, Euclidean geometry, and non-Euclidean geometry. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5393. Numerical Optimization.**

This course focuses on optimization methods for a broad range of applications, such as engineering and applied sciences. Subjects are the basic theory of optimization, numerical algorithms to locate points satisfying optimality conditions and to analyze the convergence properties. Prerequisites: MATH 2472 and MATH 3377 and MATH 3383, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Mathematics 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5472A. Experiencing the Hungarian Approach through Observation and Teaching Practicum.**

This course provides a first-hand experience in putting the Hungarian style guided discovery into practice. As part of the course, students will spend one week at a mathematics camp for secondary students that is being run using the Hungarian style of teaching. Students will observe mathematics classes, discuss pedagogy with camp instructors, and design and teach their own lesson to camp participants.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Mathematics for Teacher Education (MTE)****MTE 5301E. Visual Models for Middle School Mathematics.**

This course uses visual models to motivate understanding of the fundamental concepts underlying middle school mathematics. Pedagogical techniques to engage middle school students will also be addressed including inquiry-based instructional methods utilizing these visual models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter



**MTE 5301F. Implementing New Mathematics Curriculum.**

In this course we will investigate the keys to successfully implementing new curriculum. Two main aspects considered are: 1) the mathematical content knowledge required for a new curriculum and 2) how to build a community of practice which provides support during the implementation process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301G. Mathematics for Teaching.**

A study of the current trends and topics found in the secondary school mathematics curriculum taught from an advance perspective. Course context will be flexible and topics will be selected on the basis of student needs and interests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5302A. Quantitative Reasoning.**

This course covers current pedagogy, curriculum, and methods related specifically to the teaching of middle school mathematics. Some of the topics explored are curriculum theory, instructional theory, learning theory, problem solving, national and state standards and assessment, discovery learning, assessment methods, manipulative, and technology in the classroom.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5313. Geometry and Measurement.**

This course will focus on using spatial reasoning to investigate the concepts of direction, orientation, shape and structure; using mathematical reasoning to develop and prove geometric relationships; using logical reasoning and proof in relation to the axiomatic structure of geometry; using measurement of geometry concepts to solve real-world problems. 5315 Algebraic Reasoning. (3-0) This course will focus on using algebraic reasoning to.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5315. Algebraic Reasoning.**

This course will focus on using algebraic reasoning to investigate patterns, make generalizations, formulate mathematical models, and make predication; using properties, graphs, and applications of relations and function to analyze, model and solve problems; and making connections among geometric, graphic, numeric and symbolic representation of functions and relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5321. Probability and Statistics.**

This course will deal with using graphical and numerical techniques to explore data, characterize patterns, and describe departures from patterns; designing experiments to solve problems; understanding the theory of probability and its relationship to sampling and statistical inference and its use in making and evaluating predication. Prerequisite: MTE 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5323. Logic and Foundations of Mathematics.**

This course will consist of an introduction to fundamental mathematical structures and techniques of proof. Topics will include: logic, set theory, number theory, relations, and functions. Emphasis will be placed on communication about mathematics and construction of well-reasoned explanations. Prerequisite: MTE 5313 and MTE 5319 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State offers opportunities to work with outstanding faculty in a collegial atmosphere where mathematicians and mathematics educators work closely together. The multi-faceted programs offer a strong mathematics foundation and research opportunities in mathematics and mathematics education, preparing students for further graduate study, teaching, or industry positions.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in mathematics or a related field from a regionally accredited university (Students who lack sufficient background course work will be required to complete leveling course work with grades of B or better prior to admission.)
- official transcripts from **each institution** where course credit was granted
- minimum 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- official GRE (general test) with competitive scores in the verbal reasoning and quantitative reasoning sections
- effective spring 2020, GRE not required
- resume/CV

- statement of purpose
- three letters of recommendation addressing the substance and quality of the student's preparation for graduate study

### TOEFL, PTE, or IELTS Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Mathematics requires 30 semester credit hours, including a thesis.

Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MATH 5307	Modern Algebra	3
MATH 5329	General Topology	3
or MATH 5331	Metric Spaces	
MATH 5373	Theory of Functions of Real Variables	3
<b>Prescribed Electives</b>		
Choose 15 hours from the following:		15
MATH 5301	Partial Differential Equations	
MATH 5305	Advanced Course in Probability and Statistics	
MATH 5311	Foundations of Differential Equations	
MATH 5312	Functions of a Complex Variable	
MATH 5313	Field Theory	
MATH 5314	Number Theory	
MATH 5319	The Theory of Integration	
MATH 5335	Survival Analysis	
MATH 5336	Studies in Applied Mathematics	
MATH 5340	Scientific Computation	
MATH 5345	Regression Analysis	
MATH 5350	Combinatorics	
MATH 5355	Applied and Algorithmic Graph Theory	
MATH 5358	Applied Discrete Mathematics	
MATH 5360	Mathematical Modeling	
MATH 5374	Numerical Linear Algebra	
MATH 5376A	Design and Analysis of Experiments	
or MATH 5376B	Analysis of Variance	
MATH 5376D	Statistical Applications in Genetics and Bioinformatics	
MATH 5376E	Introduction to Data Science	
MATH 5382	Foundation of Real Analysis	
MATH 5390	Statistics	
MATH 5393	Numerical Optimization	

### Thesis

MATH 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
MATH 5199B	Thesis	
MATH 5299B	Thesis	
MATH 5399B	Thesis	
MATH 5599B	Thesis	
MATH 5999B	Thesis	
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass a comprehensive examination consisting of three parts. A student may fail up to two times on one or more of the three parts of the comprehensive exam. After failing any given part of the comprehensive exam twice, a student will then be advised to retake the course(s). Provided they earn a grade of "C" or better in each retaken class, they will then be permitted one final attempt at passing the corresponding part(s) of the comprehensive exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Mathematics: MATH (p. 3319), MTE (p. 3324)

## Courses Offered

### Mathematics (MATH)

#### MATH 5111. Graduate Assistant Training.

This course is concerned with techniques used in the teaching of mathematics. This course is required as a condition of employment for graduate teaching and instructional assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

#### MATH 5199B. Thesis.

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### MATH 5272A. Teaching Geometry through Problem Solving and Discovery Learning.

This course investigates the problem-solving heuristics embedded in the secondary school geometry curriculum and explores how to implement problem solving in geometry classrooms. This course also examines the unique "Hungarian style" method of discovery learning in mathematics, developed for students aged 12-18. The method referred to as the Pósa Method is similar to inquiry based learning with an emphasis on problem solving.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5272B. Gamification and Playfulness in Teaching Mathematics.**

This course focuses on the non-game context of education and presents applications of game elements with special attention to teaching mathematics. Mathematics concepts are uncovered through the use of mathematical games and hands-on manipulatives that foster playfulness.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5301. Partial Differential Equations.**

Theory and application of partial differential equations; derivation of the differential equation; use of vector and Tensor methods; equations of the first order; wave equations; vibrations and normal functions; Fourier series and integral; Cauchy's methods, initial data; methods of Green; potentials; boundary problems; methods of Riemann-Volterra; characteristics. Prerequisites: MATH 3323 and consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5303. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress. Cannot be used on a degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5304. Topics in Mathematics for the Secondary Teacher.**

A study of the current trends and topics found in the secondary school mathematics curriculum with the goal of improving the mathematical background of the secondary teacher. Course content will be flexible and topics will be selected on the basis of student needs and interests. Cannot be used on degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5305. Advanced Course in Probability and Statistics.**

Advanced topics in probability and statistics. May be repeated once with different emphasis for additional credit. Prerequisite: MATH 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5307. Modern Algebra.**

Topics in modern algebra. Material will be adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5311. Foundations of Differential Equations.**

A critical study of the foundations of derivation equations, operator spaces, and such basic topics. Recent developments in this field will be investigated and independent investigation will be encouraged.

Prerequisite: MATH 2393 and [MATH 3380 or MATH 5382] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5312. Functions of a Complex Variable.**

Modern developments in the field of a complex variable. Prerequisite: MATH 2393 and MATH 4315 and [MATH 3380 or MATH 5382] all with grades of "C" or better or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5313. Field Theory.**

Topics in field theory, separable extensions, and Galois Theory.

Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5314. Number Theory.**

Topics in algebra selected from quadratic forms, elementary number theory, algebraic or analytic number theory, with material adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5315. Mathematical Statistics.**

This course discusses theoretical aspects of estimation theory and hypothesis testing procedures, with some of their important applications. The main topics include convergence of random variables, parameter estimation, properties of estimators, interval estimation, sufficiency and applications to the exponential family, hypothesis testing, decision theory, and Bayesian inference. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5317. Problems in Advanced Mathematics.**

Open to graduate students on an individual basis by arrangement with the mathematics department. A considerable degree of mathematical maturity is required. May be repeated with different emphasis. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 5319. The Theory of Integration.**

A course in the theory of integration with special emphasis on the Lebesgue integrals. A course in the theory of real variables, with a knowledge of point set theory, is desirable as a background for this course. A considerable amount of mathematical maturity is required. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5329. General Topology.**

Point-set topology with an emphasis on general topological spaces; separation axioms, connectivity, the metrization theorem, and the C-W complexes. Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5331. Metric Spaces.**

Point-set topology with an emphasis on metric spaces and compactness but including a brief introduction to general topological spaces. Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5335. Survival Analysis.**

This course introduces concepts and methods in the analysis of survival data. Topics include characteristics of survival data; basic functions; parametric models for survival time; maximum likelihood estimation of survival functions; two-sample test techniques; regression analysis with parametric and semi-parametric models; and mathematical and graphical methods for model checking. Prerequisite: Math 5305 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5336. Studies in Applied Mathematics.**

Topics selected from optimization and control theory, numerical analysis, calculus of variations, boundary value problems, special functions, tensor analysis, or other subfields of applied mathematics are studied. Repeatable for credit with different topic emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5338. Advanced Independent Study in Mathematics or Statistics.**

This course gives graduate students specializing in mathematical or statistical subjects the opportunity to study specialty subjects from individual Mathematics faculty's research interests. Work may consist of theoretical or empirical research or reviewing and integrating existing literature on the subject. Repeatable once for credit with different emphasis. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5340. Scientific Computation.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using a computer algebra system. Symbolic numerical and graphical techniques will be studied. Applications will be drawn from science, engineering, and mathematics. A knowledge of differential equations is expected.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MATH 5345. Regression Analysis.**

This course introduces formulation and statistical methodologies for simple and multiple regression, assessment of model fit, model design, and criteria for selection of optimal regression models. Students will develop skills with the use of statistical packages and the writing of reports analyzing a variety of real-world data. Prerequisite: MATH 2472.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5350. Combinatorics.**

This course, covers permutations, combinations, Stirling numbers, chromatic numbers, Ramsey numbers, generating functions, Polya theory, Latin squares and random block design. Prerequisite: MATH 3398 or consent of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MATH 5355. Applied and Algorithmic Graph Theory.**

This course is designed to emphasize the close tie between the theoretical and algorithmic aspects. The topics may include basic concepts such as connectivity, trees, planarity, coloring of graphs, matchings, and networks. It also covers many algorithms such as Max-flow Min-cut algorithm, maximum matching algorithm, and optimization algorithms for facility location problems in networks. Prerequisite: MATH 5388 or MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5358. Applied Discrete Mathematics.**

Boolean algebra, counting techniques, discrete probability, graph theory, and related discrete mathematical structures that are commonly encountered in computer science. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5360. Mathematical Modeling.**

This course introduces the process and techniques of mathematical modeling. It covers a variety of application areas from the natural sciences. Emphasis is placed on deterministic systems, stochastic models, and diffusion. Prerequisite: [MATH 2393 and MATH 3323 both with grades of "D" or better and MATH 5301 with a grade of "C" or better] or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5373. Theory of Functions of Real Variables.**

This course will discuss those topics that will enable the student to obtain a better grasp of the fundamental concepts of the calculus of real variables and the more recent developments of this analysis. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5374. Numerical Linear Algebra.**

This course introduces tools that mathematical scientists use with vectors and matrices. Applications include least squares and eigenvalue problems, and systems of equations from applied mathematics. The stability of algorithms to perturbations are considered. Theory is balanced with numerically implementing algorithms, in particular for iterative methods for large, sparse systems. Prerequisite: MATH 3377 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5376A. Design and Analysis of Experiments.**

This course introduces fundamental concepts in the design of experiments, justification of linear models, randomization and principles of blocking. It also discusses the construction and analysis of basic designs including fractional replication, composite designs, factorial designs, and incomplete block designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376B. Analysis of Variance.**

This course introduces basic methods, one-way, two-way ANOVA procedures, and multifactor ANOVA designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376D. Statistical Applications in Genetics and Bioinformatics.**

The statistical concepts and methods to be covered include important probability distributions, analysis of variance, regression analysis, hidden Markov model, and Markov Chain Monte Carlo methods. These methods will be used to address important and challenging questions arising in the analysis of large genetic and bioinformatic datasets. Prerequisite: Math4305 or equivalent.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376E. Introduction to Data Science.**

This course introduces basic concepts and methods in the field of data science. Topics include data wrangling, data exploration and visualization, optimization, deep learning, supervised learning subjects such as nearest-neighbor techniques, regression, Lasso, linear discriminant analysis, logistic regression, tree-based models, neural networks, as well as unsupervised learning subjects such as market basket analysis and cluster analysis, and random forests. The material will be approached with a blend of theory and application, and will include programming in Python, R, or another modern, popular language of the instructor's choice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376F. Introduction to Probability Theory and Models.**

This course covers the definitions, constructions, theorems, and techniques to build and analyze probability models. The emphasis of this class is the active construction and analysis of probability models. However, we will develop a rigorous treatment of the requisite abstract theory in service of this goal. Topics include conditional expectation, the convergence of random variables, weak and strong law of large numbers, central limit theorem, random walk, Martingales, and Brownian motion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5381. Foundations of Set Theory.**

A formal study of the theory of sets, relations, functions, finite and infinite sets, set operations and other selected topics. This course will also train the student in the understanding of mathematical logic and the writing of proofs. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5382. Foundation of Real Analysis.**

A course covering the foundations of mathematical analysis. Topics include: real numbers, sequences, series, and limits and continuity of functions. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5384. Geometric Approach to Abstract Algebra.**

Definitions and elementary properties of groups, rings, integral domains, fields and vector spaces with great emphasis on the rings of integers, rational numbers, complex numbers, polynomials, and the interplay between algebra and geometry. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5386. Knots and Surfaces, An Introduction to Low-Dimensional Topology.**

Knot polynomials and other knot invariants. The topological classification of surfaces and topological invariants of surfaces. Prerequisite:

MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5388. Discrete Mathematics.**

This course covers topics from: basic and advanced techniques of counting, recurrence relations, discrete probability and statistics, and applications of graph theory. Prerequisites: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5390. Statistics.**

This course will cover not only some of the basic statistical ideas and techniques but also the mathematical and probabilistic underpinnings of these techniques with an emphasis on simulations and modeling. The planning, conducting, analysis, and reporting of experimental data will also be covered. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5392. Survey of Geometries.**

A study of topics in geometry including geometrical transformations, the geometry fractals, projective geometry, Euclidean geometry, and non-Euclidean geometry. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5393. Numerical Optimization.**

This course focuses on optimization methods for a broad range of applications, such as engineering and applied sciences. Subjects are the basic theory of optimization, numerical algorithms to locate points satisfying optimality conditions and to analyze the convergence properties. Prerequisites: MATH 2472 and MATH 3377 and MATH 3383, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Mathematics 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5472A. Experiencing the Hungarian Approach through Observation and Teaching Practicum.**

This course provides a first-hand experience in putting the Hungarian style guided discovery into practice. As part of the course, students will spend one week at a mathematics camp for secondary students that is being run using the Hungarian style of teaching. Students will observe mathematics classes, discuss pedagogy with camp instructors, and design and teach their own lesson to camp participants.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Mathematics for Teacher Education (MTE)

**MTE 5301E. Visual Models for Middle School Mathematics.**

This course uses visual models to motivate understanding of the fundamental concepts underlying middle school mathematics. Pedagogical techniques to engage middle school students will also be addressed including inquiry-based instructional methods utilizing these visual models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301F. Implementing New Mathematics Curriculum.**

In this course we will investigate the keys to successfully implementing new curriculum. Two main aspects considered are: 1) the mathematical content knowledge required for a new curriculum and 2) how to build a community of practice which provides support during the implementation process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301G. Mathematics for Teaching.**

A study of the current trends and topics found in the secondary school mathematics curriculum taught from an advance perspective. Course context will be flexible and topics will be selected on the basis of student needs and interests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5302A. Quantitative Reasoning.**

This course covers current pedagogy, curriculum, and methods related specifically to the teaching of middle school mathematics. Some of the topics explored are curriculum theory, instructional theory, learning theory, problem solving, national and state standards and assessment, discovery learning, assessment methods, manipulative, and technology in the classroom.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5313. Geometry and Measurement.**

This course will focus on using spatial reasoning to investigate the concepts of direction, orientation, shape and structure; using mathematical reasoning to develop and prove geometric relationships; using logical reasoning and proof in relation to the axiomatic structure of geometry; using measurement of geometry concepts to solve real-world problems. 5315 Algebraic Reasoning. (3-0) This course will focus on using algebraic reasoning to.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5315. Algebraic Reasoning.**

This course will focus on using algebraic reasoning to investigate patterns, make generalizations, formulate mathematical models, and make predication; using properties, graphs, and applications of relations and function to analyze, model and solve problems; and making connections among geometric, graphic, numeric and symbolic representation of functions and relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5321. Probability and Statistics.**

This course will deal with using graphical and numerical techniques to explore data, characterize patterns, and describe departures from patterns; designing experiments to solve problems; understanding the theory of probability and its relationship to sampling and statistical inference and its use in making and evaluating predication. Prerequisite: MTE 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5323. Logic and Foundations of Mathematics.**

This course will consist of an introduction to fundamental mathematical structures and techniques of proof. Topics will include: logic, set theory, number theory, relations, and functions. Emphasis will be placed on communication about mathematics and construction of well-reasoned explanations. Prerequisite: MTE 5313 and MTE 5319 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

## Program Overview

Texas State offers opportunities to work with outstanding faculty in a collegial atmosphere where mathematicians and mathematics educators

work closely together. The multi-faceted programs offer a strong mathematics foundation and research opportunities in mathematics and mathematics education, preparing students for further graduate study, teaching, or industry positions.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree in mathematics or a related field from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txstate.edu/international/faqs.html>) for more information.) Students who lack sufficient background course work will be required to complete leveling course work with grades of B or better prior to admission.
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- GRE not required
- resume/CV
- statement of purpose
- three letters of recommendation addressing the substance and quality of the student's preparation for graduate study

### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Mathematics requires 30 semester credit hours, including a thesis. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
MATH 5307	Modern Algebra	3
MATH 5329	General Topology	3
	or MATH 5331 Metric Spaces	
MATH 5373	Theory of Functions of Real Variables	3
<b>Prescribed Electives</b>		
Choose 9 hours from the following:		9
MATH 5301	Partial Differential Equations	
MATH 5305	Advanced Course in Probability and Statistics	
MATH 5311	Foundations of Differential Equations	
MATH 5312	Functions of a Complex Variable	
MATH 5313	Field Theory	
MATH 5314	Number Theory	
MATH 5319	The Theory of Integration	
MATH 5335	Survival Analysis	
MATH 5336	Studies in Applied Mathematics	
MATH 5340	Scientific Computation	
MATH 5345	Regression Analysis	
MATH 5350	Combinatorics	
MATH 5355	Applied and Algorithmic Graph Theory	
MATH 5358	Applied Discrete Mathematics	
MATH 5360	Mathematical Modeling	
MATH 5374	Numerical Linear Algebra	
MATH 5376A	Design and Analysis of Experiments	
	or MATH 5376B Analysis of Variance	
MATH 5376D	Statistical Applications in Genetics and Bioinformatics	
MATH 5376E	Introduction to Data Science	
MATH 5382	Foundation of Real Analysis	
MATH 5390	Statistics	
MATH 5393	Numerical Optimization	
<b>Thesis</b>		
MATH 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
MATH 5199B	Thesis	
MATH 5299B	Thesis	
MATH 5399B	Thesis	
MATH 5599B	Thesis	
MATH 5999B	Thesis	
<b>Minor</b>		
Choose a 6-hour advisor-approved minor		6
<b>Total Hours</b>		<b>30</b>

## Comprehensive Examination Requirement

All candidates for graduate degrees must pass a comprehensive examination consisting of three parts. A student may fail up to two times on one or more of the three parts of the comprehensive exam. After failing any given part of the comprehensive exam twice, a student will then be advised to retake the course(s). Provided they earn a grade of "C" or better in each retaken class, they will then be permitted one final attempt at passing the corresponding part(s) of the comprehensive exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect

the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.



If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Mathematics: MATH (p. 3327), MTE (p. 3331)

## Courses Offered

### Mathematics (MATH)

#### **MATH 5111. Graduate Assistant Training.**

This course is concerned with techniques used in the teaching of mathematics. This course is required as a condition of employment for graduate teaching and instructional assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### **MATH 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **MATH 5272A. Teaching Geometry through Problem Solving and Discovery Learning.**

This course investigates the problem-solving heuristics embedded in the secondary school geometry curriculum and explores how to implement problem solving in geometry classrooms. This course also examines the unique "Hungarian style" method of discovery learning in mathematics, developed for students aged 12-18. The method referred to as the Pósa Method is similar to inquiry based learning with an emphasis on problem solving.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### **MATH 5272B. Gamification and Playfulness in Teaching Mathematics.**

This course focuses on the non-game context of education and presents applications of game elements with special attention to teaching mathematics. Mathematics concepts are uncovered through the use of mathematical games and hands-on manipulatives that foster playfulness.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

#### **MATH 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### **MATH 5301. Partial Differential Equations.**

Theory and application of partial differential equations; derivation of the differential equation; use of vector and Tensor methods; equations of the first order; wave equations; vibrations and normal functions; Fourier series and integral; Cauchy's methods, initial data; methods of Green; potentials; boundary problems; methods of Riemann-Volterra; characteristics. Prerequisites: MATH 3323 and consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MATH 5303. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress. Cannot be used on a degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MATH 5304. Topics in Mathematics for the Secondary Teacher.**

A study of the current trends and topics found in the secondary school mathematics curriculum with the goal of improving the mathematical background of the secondary teacher. Course content will be flexible and topics will be selected on the basis of student needs and interests. Cannot be used on degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MATH 5305. Advanced Course in Probability and Statistics.**

Advanced topics in probability and statistics. May be repeated once with different emphasis for additional credit. Prerequisite: MATH 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### **MATH 5307. Modern Algebra.**

Topics in modern algebra. Material will be adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5311. Foundations of Differential Equations.**

A critical study of the foundations of derivation equations, operator spaces, and such basic topics. Recent developments in this field will be investigated and independent investigation will be encouraged. Prerequisite: MATH 2393 and [MATH 3380 or MATH 5382] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5312. Functions of a Complex Variable.**

Modern developments in the field of a complex variable. Prerequisite: MATH 2393 and MATH 4315 and [MATH 3380 or MATH 5382] all with grades of "C" or better or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5313. Field Theory.**

Topics in field theory, separable extensions, and Galois Theory.

Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5314. Number Theory.**

Topics in algebra selected from quadratic forms, elementary number theory, algebraic or analytic number theory, with material adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5315. Mathematical Statistics.**

This course discusses theoretical aspects of estimation theory and hypothesis testing procedures, with some of their important applications. The main topics include convergence of random variables, parameter estimation, properties of estimators, interval estimation, sufficiency and applications to the exponential family, hypothesis testing, decision theory, and Bayesian inference. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5317. Problems in Advanced Mathematics.**

Open to graduate students on an individual basis by arrangement with the mathematics department. A considerable degree of mathematical maturity is required. May be repeated with different emphasis. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 5319. The Theory of Integration.**

A course in the theory of integration with special emphasis on the Lebesgue integrals. A course in the theory of real variables, with a knowledge of point set theory, is desirable as a background for this course. A considerable amount of mathematical maturity is required. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5329. General Topology.**

Point-set topology with an emphasis on general topological spaces; separation axioms, connectivity, the metrization theorem, and the C-W complexes. Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5331. Metric Spaces.**

Point-set topology with an emphasis on metric spaces and compactness but including a brief introduction to general topological spaces.

Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5335. Survival Analysis.**

This course introduces concepts and methods in the analysis of survival data. Topics include characteristics of survival data; basic functions; parametric models for survival time; maximum likelihood estimation of survival functions; two-sample test techniques; regression analysis with parametric and semi-parametric models; and mathematical and graphical methods for model checking. Prerequisite: Math 5305 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5336. Studies in Applied Mathematics.**

Topics selected from optimization and control theory, numerical analysis, calculus of variations, boundary value problems, special functions, tensor analysis, or other subfields of applied mathematics are studied. Repeatable for credit with different topic emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5338. Advanced Independent Study in Mathematics or Statistics.**

This course gives graduate students specializing in mathematical or statistical subjects the opportunity to study specialty subjects from individual Mathematics faculty's research interests. Work may consist of theoretical or empirical research or reviewing and integrating existing literature on the subject. Repeatable once for credit with different emphasis. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5340. Scientific Computation.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using a computer algebra system. Symbolic numerical and graphical techniques will be studied. Applications will be drawn from science, engineering, and mathematics. A knowledge of differential equations is expected.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MATH 5345. Regression Analysis.**

This course introduces formulation and statistical methodologies for simple and multiple regression, assessment of model fit, model design, and criteria for selection of optimal regression models. Students will develop skills with the use of statistical packages and the writing of reports analyzing a variety of real-world data. Prerequisite: MATH 2472.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5350. Combinatorics.**

This course, covers permutations, combinations, Stirling numbers, chromatic numbers, Ramsey numbers, generating functions, Polya theory, Latin squares and random block design. Prerequisite: MATH 3398 or consent of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5355. Applied and Algorithmic Graph Theory.**

This course is designed to emphasize the close tie between the theoretical and algorithmic aspects. The topics may include basic concepts such as connectivity, trees, planarity, coloring of graphs, matchings, and networks. It also covers many algorithms such as Max-flow Min-cut algorithm, maximum matching algorithm, and optimization algorithms for facility location problems in networks. Prerequisite: MATH 5388 or MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5358. Applied Discrete Mathematics.**

Boolean algebra, counting techniques, discrete probability, graph theory, and related discrete mathematical structures that are commonly encountered in computer science. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5360. Mathematical Modeling.**

This course introduces the process and techniques of mathematical modeling. It covers a variety of application areas from the natural sciences. Emphasis is placed on deterministic systems, stochastic models, and diffusion. Prerequisite: [MATH 2393 and MATH 3323 both with grades of "D" or better and MATH 5301 with a grade of "C" or better] or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5373. Theory of Functions of Real Variables.**

This course will discuss those topics that will enable the student to obtain a better grasp of the fundamental concepts of the calculus of real variables and the more recent developments of this analysis. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5374. Numerical Linear Algebra.**

This course introduces tools that mathematical scientists use with vectors and matrices. Applications include least squares and eigenvalue problems, and systems of equations from applied mathematics. The stability of algorithms to perturbations are considered. Theory is balanced with numerically implementing algorithms, in particular for iterative methods for large, sparse systems. Prerequisite: MATH 3377 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5376A. Design and Analysis of Experiments.**

This course introduces fundamental concepts in the design of experiments, justification of linear models, randomization and principles of blocking. It also discusses the construction and analysis of basic designs including fractional replication, composite designs, factorial designs, and incomplete block designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376B. Analysis of Variance.**

This course introduces basic methods, one-way, two-way ANOVA procedures, and multifactor ANOVA designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376D. Statistical Applications in Genetics and Bioinformatics.**

The statistical concepts and methods to be covered include important probability distributions, analysis of variance, regression analysis, hidden Markov model, and Markov Chain Monte Carlo methods. These methods will be used to address important and challenging questions arising in the analysis of large genetic and bioinformatic datasets. Prerequisite: Math4305 or equivalent.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376E. Introduction to Data Science.**

This course introduces basic concepts and methods in the field of data science. Topics include data wrangling, data exploration and visualization, optimization, deep learning, supervised learning subjects such as nearest-neighbor techniques, regression, Lasso, linear discriminant analysis, logistic regression, tree-based models, neural networks, as well as unsupervised learning subjects such as market basket analysis and cluster analysis, and random forests. The material will be approached with a blend of theory and application, and will include programming in Python, R, or another modern, popular language of the instructor's choice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376F. Introduction to Probability Theory and Models.**

This course covers the definitions, constructions, theorems, and techniques to build and analyze probability models. The emphasis of this class is the active construction and analysis of probability models. However, we will develop a rigorous treatment of the requisite abstract theory in service of this goal. Topics include conditional expectation, the convergence of random variables, weak and strong law of large numbers, central limit theorem, random walk, Martingales, and Brownian motion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5381. Foundations of Set Theory.**

A formal study of the theory of sets, relations, functions, finite and infinite sets, set operations and other selected topics. This course will also train the student in the understanding of mathematical logic and the writing of proofs. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5382. Foundation of Real Analysis.**

A course covering the foundations of mathematical analysis. Topics include: real numbers, sequences, series, and limits and continuity of functions. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5384. Geometric Approach to Abstract Algebra.**

Definitions and elementary properties of groups, rings, integral domains, fields and vector spaces with great emphasis on the rings of integers, rational numbers, complex numbers, polynomials, and the interplay between algebra and geometry. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5386. Knots and Surfaces, An Introduction to Low-Dimensional Topology.**

Knot polynomials and other knot invariants. The topological classification of surfaces and topological invariants of surfaces. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5388. Discrete Mathematics.**

This course covers topics from: basic and advanced techniques of counting, recurrence relations, discrete probability and statistics, and applications of graph theory. Prerequisites: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5390. Statistics.**

This course will cover not only some of the basic statistical ideas and techniques but also the mathematical and probabilistic underpinnings of these techniques with an emphasis on simulations and modeling. The planning, conducting, analysis, and reporting of experimental data will also be covered. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5392. Survey of Geometries.**

A study of topics in geometry including geometrical transformations, the geometry of fractals, projective geometry, Euclidean geometry, and non-Euclidean geometry. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5393. Numerical Optimization.**

This course focuses on optimization methods for a broad range of applications, such as engineering and applied sciences. Subjects are the basic theory of optimization, numerical algorithms to locate points satisfying optimality conditions and to analyze the convergence properties. Prerequisites: MATH 2472 and MATH 3377 and MATH 3383, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Mathematics 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5472A. Experiencing the Hungarian Approach through Observation and Teaching Practicum.**

This course provides a first-hand experience in putting the Hungarian style guided discovery into practice. As part of the course, students will spend one week at a mathematics camp for secondary students that is being run using the Hungarian style of teaching. Students will observe mathematics classes, discuss pedagogy with camp instructors, and design and teach their own lesson to camp participants.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**Mathematics for Teacher Education (MTE)****MTE 5301E. Visual Models for Middle School Mathematics.**

This course uses visual models to motivate understanding of the fundamental concepts underlying middle school mathematics. Pedagogical techniques to engage middle school students will also be addressed including inquiry-based instructional methods utilizing these visual models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301F. Implementing New Mathematics Curriculum.**

In this course we will investigate the keys to successfully implementing new curriculum. Two main aspects considered are: 1) the mathematical content knowledge required for a new curriculum and 2) how to build a community of practice which provides support during the implementation process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301G. Mathematics for Teaching.**

A study of the current trends and topics found in the secondary school mathematics curriculum taught from an advance perspective. Course context will be flexible and topics will be selected on the basis of student needs and interests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5302A. Quantitative Reasoning.**

This course covers current pedagogy, curriculum, and methods related specifically to the teaching of middle school mathematics. Some of the topics explored are curriculum theory, instructional theory, learning theory, problem solving, national and state standards and assessment, discovery learning, assessment methods, manipulative, and technology in the classroom.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5313. Geometry and Measurement.**

This course will focus on using spatial reasoning to investigate the concepts of direction, orientation, shape and structure; using mathematical reasoning to develop and prove geometric relationships; using logical reasoning and proof in relation to the axiomatic structure of geometry; using measurement of geometry concepts to solve real-world problems. 5315 Algebraic Reasoning. (3-0) This course will focus on using algebraic reasoning to.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MTE 5315. Algebraic Reasoning.**

This course will focus on using algebraic reasoning to investigate patterns, make generalizations, formulate mathematical models, and make predication; using properties, graphs, and applications of relations and function to analyze, model and solve problems; and making connections among geometric, graphic, numeric and symbolic representation of functions and relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5321. Probability and Statistics.**

This course will deal with using graphical and numerical techniques to explore data, characterize patterns, and describe departures from patterns; designing experiments to solve problems; understanding the theory of probability and its relationship to sampling and statistical inference and its use in making and evaluating predication. Prerequisite: MTE 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5323. Logic and Foundations of Mathematics.**

This course will consist of an introduction to fundamental mathematical structures and techniques of proof. Topics will include: logic, set theory, number theory, relations, and functions. Emphasis will be placed on communication about mathematics and construction of well-reasoned explanations. Prerequisite: MTE 5313 and MTE 5319 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

The graduate minor in Mathematics requires 15 semester credit hours of advisor-approved MATH courses. Minors should have completed the equivalent of an undergraduate minor in Mathematics (Calculus I and Calculus II and three upper-level courses).

Roy F. Mitte Building Room 3240

T: 512.245.2131

[www.txstate.edu/physics/](http://www.txstate.edu/physics/) (<http://www.txstate.edu/physics/>)

The Department of Physics provides an exciting, engaging, and rigorous educational environment that stresses relevant research, classroom learning incorporating peer instruction, and extensive hands-on training to prepare students for careers in the local or national high-tech and semiconductor industry, science education, in K-14 physics education, or advanced studies.

Focusing on graduate research, the department has an effective graduate curriculum that combines a solid physics foundation combined with extensive, hands-on training in state-of-the-art growth, nanofabrication and characterization research facilities. Graduate students perform competitive relevant research in a welcoming, supportive and diverse environment with an emphasis on developing professional abilities such as teamwork, project organization, and presentation and technical writing skills. Our master's graduates may apply to continue to an innovative, multidisciplinary Ph.D. program in materials science, engineering, and commercialization offered at Texas State.

Physics graduate faculty are engaged in externally funded, competitive, interdisciplinary research in condensed matter physics, materials physics, physics education, and astrophysics.

## Financial Assistance

Most graduate students are supported as instructional or research assistants. Research assistants work with faculty on research and other special projects. Instructional assistants work with undergraduates in grading and in laboratory settings. Instructional assistantships are available and should be preferably submitted by the posted priority application deadline. Inquiries and/or applications for assistantships should be emailed to [physicsgrad@txstate.edu](mailto:physicsgrad@txstate.edu) or mailed to:

Chair, Department of Physics  
Texas State University  
601 University Drive  
San Marcos, Texas 78666

For more information about the availability of graduate scholarships and application deadlines, visit [www.gradcollege.txst.edu/funding/scholarships.html](http://www.gradcollege.txst.edu/funding/scholarships.html) (<https://www.gradcollege.txst.edu/funding/scholarships.html>).

<https://www.gradcollege.txst.edu/admissions/application-information.html>

## Master of Science (M.S.)

- Major in Physics (Materials Physics Concentration) (p. 3332)
- Major in Physics (Non-thesis Option) (p. 3337)
- Major in Physics (Non-thesis Science Minor Option) (p. 3341)
- Major in Physics (Thesis Option) (p. 3345)
- Major in Physics (Thesis Science Minor Option) (p. 3355)

## Minors

- Materials Physics (p. 3361)

## Program Overview

A solid physics foundation combined with extensive, hands-on training in state-of-the-art nanofabrication and characterization facilities prepares students for careers in the local high-tech industry, science education or advanced studies. Students are engaged in research and gain superior graduate education with individual faculty attention and mentoring.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in junior and senior level physics courses in modern physics, mathematical physics or equivalent, classical mechanics, electromagnetic field theory, and quantum mechanics (Leveling courses may be required if student lacks sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.)
- GRE not required unless your physics GPA is under 3.0\*
- resume/CV
- statement of purpose
- three letters of recommendation

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wave>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

#### \*Additional Information

If the physics GPA falls below the minimum requirement, the student may submit the following to be considered for conditional admission:

- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections

Conditional admission is not available to applicants who require "F" or "J" visas.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Physics concentration in Material Physics requires 30 semester credit hours, including a thesis. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
PHYS 5312	ADVANCED QUANTUM MECHANICS	3

PHYS 5313	Mathematical Methods of Physics	3
PHYS 5314	Statistical Physics	3
PHYS 5331	Electromagnetic Field Theory	3

#### Prescribed Electives

Choose 9 hours from the following: 9

PHYS 5304	Experimental Research Methods
PHYS 5320	Solid State Physics
PHYS 5322	Semiconductor Device Microfabrication
PHYS 5324	Thin Film Synthesis and Characterization Laboratory
PHYS 5327	Semiconductor Device Physics
PHYS 5332	Materials Characterization

#### Electives

Choose 3 hours of advisor-approved electives 3

#### Thesis

PHYS 5399A Thesis 3

Choose a minimum of 3 hours from the following: 3

PHYS 5199B	Thesis
PHYS 5299B	Thesis
PHYS 5399B	Thesis
PHYS 5599B	Thesis
PHYS 5999B	Thesis

**Total Hours 30**

## Comprehensive Examination Requirement

An oral thesis defense is required and will satisfy the comprehensive examination requirement. If the thesis committee is not satisfied with a graduate student's oral defense, they will specify all deficiencies the student must resolve. Should the thesis committee decide to hold a second oral defense, the chair of the thesis committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must

obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Physics: PHYS

## Courses Offered

### Physics (PHYS)

#### PHYS 5100. Professional Development.

This course covers topics related to teaching, research, and employment responsibilities. The completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Course is repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### PHYS 5110. Seminar in Physics.

A course designed to acquaint the graduate student with current research areas in physics. May be repeated twice for total of three semester hour's credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5200. Professional Development.**

This course covers topics related to teaching, research, and employment rights and responsibilities. It provides a brief background on teaching and learning theories and consists of organized practice teaching. Completion is required as a condition of employment for graduate instructional and teaching assistants. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**PHYS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5302. Electricity and Magnetism.**

An introduction to the electromagnetic field theory of classical physics for static fields. Topics included will be the electrostatic field, polarization and dielectrics, electrostatic energy, magnetic field of steady currents, magneto static energy, and magnetic properties of matter. This is a graduate leveling course in Electricity and Magnetism (stacked with PHYS 4310). This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**PHYS 5303. Quantum Mechanics.**

This course is an introduction to quantum mechanics. Topics include mathematical foundations, fundamental postulates, time development, and one dimensional problems. This is a graduate leveling course in Quantum Mechanics (stacked with PHYS 4312). This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**PHYS 5304. Experimental Research Methods.**

This is a laboratory based course introducing experimental methods used in physics research with emphasis on quantum effects through materials synthesis and characterization methods. The specific experiments are chosen by department faculty on topics of current research interests. The students are exposed to different research topics through laboratory rotations. Prerequisite: Instructor approval. Corequisite: PHYS 5314 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5312. Advanced Quantum Mechanics.**

This course is a study of quantum mechanics including combination of two or more quantum mechanical systems, addition of angular momentum, time independent perturbation theory, and time dependent perturbation theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5313. Mathematical Methods of Physics.**

This course is a survey of mathematical methods of physics at the graduate level focusing on complex analysis of analytic functions (Laurent expansions and evaluation of residues) and methods of solving both ordinary and partial differential equations (Frobenius' method and Sturm-Liouville theory) with applications to mechanics and electromagnetic theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5314. Statistical Physics.**

This course is an introduction to the laws of statistical physics and their application to realistic problems at the graduate level. The topics include a brief review of equilibrium thermodynamics, Boltzmann and Gibbs distribution, Fermi-Dirac and Bose-Einstein statistics, derivation of Planck's Law and black-body radiation, and heat capacity of solids.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5320. Solid State Physics.**

This is an introductory course at the graduate level intended for students who have not had a previous course in Solid State Physics. Topics covered include crystal structure, the reciprocal lattice, x-ray diffraction, lattice vibrations, electronic band structure, and optical, transport and magnetic properties of metals and semiconductors including applications. Prerequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5322. Semiconductor Device Microfabrication.**

This experimental methods course provides an in-depth overview of the physics and technology of semiconductor device micro and nano fabrication. Topics include materials used in electronic devices, thin film deposition, wet and dry etching, lithography processing, and topics relevant to semiconductor research and devices. Fabrication and characterization techniques will be covered. Corequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**PHYS 5324. Thin Film Synthesis and Characterization Laboratory.**

This advanced experimental course is designed as a research group project experience with emphasis on nanoscale device fabrication. All projects are conducted in university facilities with state-of-the-art thin film growth, processing, and characterization facilities. Prerequisite: PHYS 5322 with a grade of "C" or better. Corequisites: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5327. Semiconductor Device Physics.**

This course demonstrates how solid state physics applies to describing important examples of thin film device operation with emphasis on semiconductor devices. Additional topics may include photon and phonon effects on electronic properties, quantum phenomena, many body effects in solids, carrier transport properties, micro-electromechanical systems, and materials interface issues. Corequisite: PHYS 5314 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5328. Advanced Solid State Physics.**

Review of models of a solid and energy band theory. Additional topics may include interaction of electromagnetic waves with solids, lattice vibrations and phonons, many body effects in solids, device physics, quantum phenomena, carrier transport properties, current device configurations, and materials interface problems. Prerequisite: PHYS 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5331. Electromagnetic Field Theory.**

This course is an introduction to electrodynamics at the graduate level using rigorous mathematical formulation. Topics include methods of solving problems in electrostatics and magnetostatics, boundary value problems and Green's Functions, fields in media, and Maxwell's Equations and time varying fields.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5332. Materials Characterization.**

This course covers skills and knowledge required for microscopy methods including optical microscopy, scanning electron microscopy, scanning tunneling electron microscopy, atomic force microscopy, and confocal microscopy. Topics covered include x-ray and neutron diffraction techniques including structure analysis, powder and glancing angle diffraction, pole figure, texture analysis, and small angle scattering. Prerequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 5334. Relativity.**

This course includes a review of special relativity, an introduction to the mathematics of tensor calculus and differential geometry, and such topics from general relativity as the Schwarzschild solution and black holes, tests of general relativity, cosmological models, and applications of relativity in the global positioning system (GPS).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5350F. Astrophysics.**

This course surveys a variety of issues in astrophysics through problem solving, quantitative measurements, and theoretical reasoning. Topics include celestial mechanics, stellar structure and evolution, star formation, and supernova remnants.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350G. Electrical and Magnetic Characterization Methods.**

This course introduces electric and magnetic characterization methods important to metals, magnetic and semiconductor materials and devices. Various measurement techniques and methods will be reviewed. Students will learn to work with characterization tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350H. Astronomical Spectroscopy.**

A lecture course introducing students to spectroscopy in astronomy, with particular emphasis on molecular spectroscopy. The course will cover a broad range of aspects including the development of spectroscopy in astronomy, the theory of atomic and molecular spectra, spectra in different astrophysical environments, instrumentation and data reduction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**PHYS 5350I. Advanced Computational Methods for Physics.**

In this course students will learn and practice the Python computer language along with several of its scientific modules to model, visualize & analyze complex physical systems that cannot be described by mathematical equations with analytical solution. Special attention will be paid to programming techniques for data manipulation & analysis of large amounts of data residing in multiple data sets. The Python implementation of the (free) Anaconda distribution will be utilized. No previous knowledge of Python or programming required since a basic training will be provided in the first lectures, which will serve as an introduction or refresher for students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350J. Optical Materials and Characterization Methods.**

This course is an introduction to optical properties of solids including electronic and vibrational transitions in inorganic and organic thin films and multilayers. Various optical characterization methods and techniques will be reviewed including Raman, FTIR, Photoluminescence, and X-ray Fluorescence spectroscopy. Students will learn to work with those characterization methods and learn how to interpret the various spectra.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5360. Physics Education Research: Teaching & Learning.**

This course is an introduction to pedagogical issues in physics, including their related philosophical analysis and empirical research studies on student learning. Students will be guided to read, analyze, and present existing scholarly research that justifies approaching certain physics topics from particular perspectives and with particular instructional methods. The course is appropriate for future researchers in physics education and future physics teachers at secondary and post-secondary levels.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 5370. Problems in Advanced Physics.**

Open to graduate students on an individual basis by arrangement with the Department of Physics. May be repeated with prior approval of the department. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHYS 5395. Fundamentals of Research.**

Course is available to graduate students only at the invitation of the department. May be repeated with prior approval of the department. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHYS 5398. Industry Internship.**

Supervised work experience in an appropriate high tech industry. Students will be required to keep a daily journal and make a final presentation (both written and oral) describing their accomplishments.

**3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in PHYS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

A solid physics foundation combined with extensive, hands-on training in state-of-the art nanofabrication and characterization facilities prepares students for careers in the local high-tech industry, science education or advanced studies. Students are engaged in research and gain superior graduate education with individual faculty attention and mentoring.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in junior and senior level physics courses in modern physics, mathematical physics or equivalent, classical mechanics, electromagnetic field theory, and quantum mechanics (Leveling courses may be required if student lacks sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.)
- GRE not required\*
- resume/CV
- statement of purpose
- three letters of recommendation

#### Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

#### \*Additional Information

If the physics GPA falls below the minimum requirement, the student may submit the following to be considered for conditional admission:

- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections

Conditional admission is not available to applicants who require "F" or "J" visas.

## Degree Requirements

The Master of Science (M.S.) degree with a major in Physics requires 36 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

## Course Requirements

Code	Title	Hours
<b>Required Courses</b>		
PHYS 5312	ADVANCED QUANTUM MECHANICS	3
PHYS 5313	Mathematical Methods of Physics	3
PHYS 5314	Statistical Physics	3
PHYS 5331	Electromagnetic Field Theory	3
<b>Prescribed Electives</b>		
Choose 24 hours from the following:		24
PHYS 5110	Seminar in Physics	
PHYS 5304	Experimental Research Methods	
PHYS 5320	Solid State Physics	
PHYS 5322	Semiconductor Device Microfabrication	
PHYS 5324	Thin Film Synthesis and Characterization Laboratory	
PHYS 5327	Semiconductor Device Physics	
PHYS 5328	Advanced Solid State Physics	
PHYS 5329		
PHYS 5332	Materials Characterization	
PHYS 5340		
PHYS 5334	Relativity	
PHYS 5360	Physics Education Research: Teaching & Learning	
PHYS 5370	Problems in Advanced Physics	
PHYS 5395	Fundamentals of Research	
PHYS 5398	Industry Internship	
<b>Total Hours</b>		<b>36</b>

## Comprehensive Examination Requirement

Students are required to take a written comprehensive examination that is comprised of the MS required courses, inclusive. If the student fails to pass the comprehensive exam, the student may retake the comprehensive exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Physics: PHYS

## Courses Offered

### Physics (PHYS)

#### PHYS 5100. Professional Development.

This course covers topics related to teaching, research, and employment responsibilities. The completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Course is repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**PHYS 5110. Seminar in Physics.**

A course designed to acquaint the graduate student with current research areas in physics. May be repeated twice for total of three semester hour's credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5200. Professional Development.**

This course covers topics related to teaching, research, and employment rights and responsibilities. It provides a brief background on teaching and learning theories and consists of organized practice teaching. Completion is required as a condition of employment for graduate instructional and teaching assistants. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**PHYS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5302. Electricity and Magnetism.**

An introduction to the electromagnetic field theory of classical physics for static fields. Topics included will be the electrostatic field, polarization and dielectrics, electrostatic energy, magnetic field of steady currents, magneto static energy, and magnetic properties of matter. This is a graduate leveling course in Electricity and Magnetism (stacked with PHYS 4310). This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**PHYS 5303. Quantum Mechanics.**

This course is an introduction to quantum mechanics. Topics include mathematical foundations, fundamental postulates, time development, and one dimensional problems. This is a graduate leveling course in Quantum Mechanics (stacked with PHYS 4312). This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**PHYS 5304. Experimental Research Methods.**

This is a laboratory based course introducing experimental methods used in physics research with emphasis on quantum effects through materials synthesis and characterization methods. The specific experiments are chosen by department faculty on topics of current research interests. The students are exposed to different research topics through laboratory rotations. Prerequisite: Instructor approval. Corequisite: PHYS 5314 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5312. Advanced Quantum Mechanics.**

This course is a study of quantum mechanics including combination of two or more quantum mechanical systems, addition of angular momentum, time independent perturbation theory, and time dependent perturbation theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5313. Mathematical Methods of Physics.**

This course is a survey of mathematical methods of physics at the graduate level focusing on complex analysis of analytic functions (Laurent expansions and evaluation of residues) and methods of solving both ordinary and partial differential equations (Frobenius' method and Sturm-Liouville theory) with applications to mechanics and electromagnetic theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5314. Statistical Physics.**

This course is an introduction to the laws of statistical physics and their application to realistic problems at the graduate level. The topics include a brief review of equilibrium thermodynamics, Boltzmann and Gibbs distribution, Fermi-Dirac and Bose-Einstein statistics, derivation of Planck's Law and black-body radiation, and heat capacity of solids.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5320. Solid State Physics.**

This is an introductory course at the graduate level intended for students who have not had a previous course in Solid State Physics. Topics covered include crystal structure, the reciprocal lattice, x-ray diffraction, lattice vibrations, electronic band structure, and optical, transport and magnetic properties of metals and semiconductors including applications. Prerequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5322. Semiconductor Device Microfabrication.**

This experimental methods course provides an in-depth overview of the physics and technology of semiconductor device micro and nano fabrication. Topics include materials used in electronic devices, thin film deposition, wet and dry etching, lithography processing, and topics relevant to semiconductor research and devices. Fabrication and characterization techniques will be covered. Corequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**PHYS 5324. Thin Film Synthesis and Characterization Laboratory.**

This advanced experimental course is designed as a research group project experience with emphasis on nanoscale device fabrication. All projects are conducted in university facilities with state-of-the-art thin film growth, processing, and characterization facilities. Prerequisite: PHYS 5322 with a grade of "C" or better. Corequisites: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5327. Semiconductor Device Physics.**

This course demonstrates how solid state physics applies to describing important examples of thin film device operation with emphasis on semiconductor devices. Additional topics may include photon and phonon effects on electronic properties, quantum phenomena, many body effects in solids, carrier transport properties, micro-electromechanical systems, and materials interface issues. Corequisite: PHYS 5314 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5328. Advanced Solid State Physics.**

Review of models of a solid and energy band theory. Additional topics may include interaction of electromagnetic waves with solids, lattice vibrations and phonons, many body effects in solids, device physics, quantum phenomena, carrier transport properties, current device configurations, and materials interface problems. Prerequisite: PHYS 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5331. Electromagnetic Field Theory.**

This course is an introduction to electrodynamics at the graduate level using rigorous mathematical formulation. Topics include methods of solving problems in electrostatics and magnetostatics, boundary value problems and Green's Functions, fields in media, and Maxwell's Equations and time varying fields.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5332. Materials Characterization.**

This course covers skills and knowledge required for microscopy methods including optical microscopy, scanning electron microscopy, scanning tunneling electron microscopy, atomic force microscopy, and confocal microscopy. Topics covered include x-ray and neutron diffraction techniques including structure analysis, powder and glancing angle diffraction, pole figure, texture analysis, and small angle scattering. Prerequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 5334. Relativity.**

This course includes a review of special relativity, an introduction to the mathematics of tensor calculus and differential geometry, and such topics from general relativity as the Schwarzschild solution and black holes, tests of general relativity, cosmological models, and applications of relativity in the global positioning system (GPS).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5350F. Astrophysics.**

This course surveys a variety of issues in astrophysics through problem solving, quantitative measurements, and theoretical reasoning. Topics include celestial mechanics, stellar structure and evolution, star formation, and supernova remnants.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350G. Electrical and Magnetic Characterization Methods.**

This course introduces electric and magnetic characterization methods important to metals, magnetic and semiconductor materials and devices. Various measurement techniques and methods will be reviewed. Students will learn to work with characterization tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350H. Astronomical Spectroscopy.**

A lecture course introducing students to spectroscopy in astronomy, with particular emphasis on molecular spectroscopy. The course will cover a broad range of aspects including the development of spectroscopy in astronomy, the theory of atomic and molecular spectra, spectra in different astrophysical environments, instrumentation and data reduction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350I. Advanced Computational Methods for Physics.**

In this course students will learn and practice the Python computer language along with several of its scientific modules to model, visualize & analyze complex physical systems that cannot be described by mathematical equations with analytical solution. Special attention will be paid to programming techniques for data manipulation & analysis of large amounts of data residing in multiple data sets. The Python implementation of the (free) Anaconda distribution will be utilized. No previous knowledge of Python or programming required since a basic training will be provided in the first lectures, which will serve as an introduction or refresher for students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350J. Optical Materials and Characterization Methods.**

This course is an introduction to optical properties of solids including electronic and vibrational transitions in inorganic and organic thin films and multilayers. Various optical characterization methods and techniques will be reviewed including Raman, FTIR, Photoluminescence, and X-ray Fluorescence spectroscopy. Students will learn to work with those characterization methods and learn how to interpret the various spectra.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5360. Physics Education Research: Teaching & Learning.**

This course is an introduction to pedagogical issues in physics, including their related philosophical analysis and empirical research studies on student learning. Students will be guided to read, analyze, and present existing scholarly research that justifies approaching certain physics topics from particular perspectives and with particular instructional methods. The course is appropriate for future researchers in physics education and future physics teachers at secondary and post-secondary levels.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 5370. Problems in Advanced Physics.**

Open to graduate students on an individual basis by arrangement with the Department of Physics. May be repeated with prior approval of the department. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHYS 5395. Fundamentals of Research.**

Course is available to graduate students only at the invitation of the department. May be repeated with prior approval of the department. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHYS 5398. Industry Internship.**

Supervised work experience in an appropriate high tech industry. Students will be required to keep a daily journal and make a final presentation (both written and oral) describing their accomplishments.

**3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in PHYS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

A solid physics foundation combined with extensive, hands-on training in state-of-the art nanofabrication and characterization facilities prepares students for careers in the local high-tech industry, science education or advanced studies. Students are engaged in research and gain superior graduate education with individual faculty attention and mentoring.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee



- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - minimum 3.0 GPA in junior and senior level physics courses in modern physics, mathematical physics or equivalent, classical mechanics, electromagnetic field theory, and quantum mechanics (Leveling courses may be required if student lacks sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.)
  - GRE not required\*
  - resume/CV
  - statement of purpose
  - three letters of recommendation

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#wavier>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

\*Additional Information

If the physics GPA falls below the minimum requirement, the student may submit the following to be considered for conditional admission:

- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections

Conditional admission is not available to applicants who require "F" or "J" visas.

Degree Requirements

The Master of Science (M.S.) degree with a major in Physics requires 45 semester credit hours. Students who do not have the appropriate background course work may be required to complete leveling courses.

Course Requirements

Code	Title	Hours
Required Courses		
PHYS 5312	ADVANCED QUANTUM MECHANICS	3
PHYS 5313	Mathematical Methods of Physics	3
PHYS 5314	Statistical Physics	3
PHYS 5331	Electromagnetic Field Theory	3
Prescribed Electives		
Choose 24 hours from the following:		24
PHYS 5110	Seminar in Physics	
PHYS 5304	Experimental Research Methods	
PHYS 5320	Solid State Physics	
PHYS 5322	Semiconductor Device Microfabrication	
PHYS 5324	Thin Film Synthesis and Characterization Laboratory	
PHYS 5327	Semiconductor Device Physics	
PHYS 5328	Advanced Solid State Physics	
PHYS 5329		
PHYS 5332	Materials Characterization	
PHYS 5340		
PHYS 5334	Relativity	
PHYS 5360	Physics Education Research: Teaching & Learning	
PHYS 5370	Problems in Advanced Physics	
PHYS 5395	Fundamentals of Research	
PHYS 5398	Industry Internship	
Minor		
Choose a 9-hour advisor-approved science minor		9
Total Hours		45

Comprehensive Examination Requirement

Students are required to take a written comprehensive examination that is comprised of the MS required courses, inclusive. If the student fails to pass the comprehensive exam, the student may retake the comprehensive exam.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Physics: PHYS

Courses Offered

Physics (PHYS)

PHYS 5100. Professional Development.

This course covers topics related to teaching, research, and employment responsibilities. The completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Course is repeatable with different emphasis.

1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing|Graduate

Assistantship|Exclude from Graduate GPA

Grade Mode: Leveling/Assistantships

**PHYS 5110. Seminar in Physics.**

A course designed to acquaint the graduate student with current research areas in physics. May be repeated twice for total of three semester hour's credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5200. Professional Development.**

This course covers topics related to teaching, research, and employment rights and responsibilities. It provides a brief background on teaching and learning theories and consists of organized practice teaching. Completion is required as a condition of employment for graduate instructional and teaching assistants. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**PHYS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5302. Electricity and Magnetism.**

An introduction to the electromagnetic field theory of classical physics for static fields. Topics included will be the electrostatic field, polarization and dielectrics, electrostatic energy, magnetic field of steady currents, magneto static energy, and magnetic properties of matter. This is a graduate leveling course in Electricity and Magnetism (stacked with PHYS 4310). This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**PHYS 5303. Quantum Mechanics.**

This course is an introduction to quantum mechanics. Topics include mathematical foundations, fundamental postulates, time development, and one dimensional problems. This is a graduate leveling course in Quantum Mechanics (stacked with PHYS 4312). This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**PHYS 5304. Experimental Research Methods.**

This is a laboratory based course introducing experimental methods used in physics research with emphasis on quantum effects through materials synthesis and characterization methods. The specific experiments are chosen by department faculty on topics of current research interests. The students are exposed to different research topics through laboratory rotations. Prerequisite: Instructor approval. Corequisite: PHYS 5314 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5312. Advanced Quantum Mechanics.**

This course is a study of quantum mechanics including combination of two or more quantum mechanical systems, addition of angular momentum, time independent perturbation theory, and time dependent perturbation theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5313. Mathematical Methods of Physics.**

This course is a survey of mathematical methods of physics at the graduate level focusing on complex analysis of analytic functions (Laurent expansions and evaluation of residues) and methods of solving both ordinary and partial differential equations (Frobenius' method and Sturm-Liouville theory) with applications to mechanics and electromagnetic theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5314. Statistical Physics.**

This course is an introduction to the laws of statistical physics and their application to realistic problems at the graduate level. The topics include a brief review of equilibrium thermodynamics, Boltzmann and Gibbs distribution, Fermi-Dirac and Bose-Einstein statistics, derivation of Planck's Law and black-body radiation, and heat capacity of solids.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5320. Solid State Physics.**

This is an introductory course at the graduate level intended for students who have not had a previous course in Solid State Physics. Topics covered include crystal structure, the reciprocal lattice, x-ray diffraction, lattice vibrations, electronic band structure, and optical, transport and magnetic properties of metals and semiconductors including applications. Prerequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5322. Semiconductor Device Microfabrication.**

This experimental methods course provides an in-depth overview of the physics and technology of semiconductor device micro and nano fabrication. Topics include materials used in electronic devices, thin film deposition, wet and dry etching, lithography processing, and topics relevant to semiconductor research and devices. Fabrication and characterization techniques will be covered. Corequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**PHYS 5324. Thin Film Synthesis and Characterization Laboratory.**

This advanced experimental course is designed as a research group project experience with emphasis on nanoscale device fabrication. All projects are conducted in university facilities with state-of-the-art thin film growth, processing, and characterization facilities. Prerequisite: PHYS 5322 with a grade of "C" or better. Corequisites: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5327. Semiconductor Device Physics.**

This course demonstrates how solid state physics applies to describing important examples of thin film device operation with emphasis on semiconductor devices. Additional topics may include photon and phonon effects on electronic properties, quantum phenomena, many body effects in solids, carrier transport properties, micro-electromechanical systems, and materials interface issues. Corequisite: PHYS 5314 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5328. Advanced Solid State Physics.**

Review of models of a solid and energy band theory. Additional topics may include interaction of electromagnetic waves with solids, lattice vibrations and phonons, many body effects in solids, device physics, quantum phenomena, carrier transport properties, current device configurations, and materials interface problems. Prerequisite: PHYS 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5331. Electromagnetic Field Theory.**

This course is an introduction to electrodynamics at the graduate level using rigorous mathematical formulation. Topics include methods of solving problems in electrostatics and magnetostatics, boundary value problems and Green's Functions, fields in media, and Maxwell's Equations and time varying fields.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5332. Materials Characterization.**

This course covers skills and knowledge required for microscopy methods including optical microscopy, scanning electron microscopy, scanning tunneling electron microscopy, atomic force microscopy, and confocal microscopy. Topics covered include x-ray and neutron diffraction techniques including structure analysis, powder and glancing angle diffraction, pole figure, texture analysis, and small angle scattering. Prerequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 5334. Relativity.**

This course includes a review of special relativity, an introduction to the mathematics of tensor calculus and differential geometry, and such topics from general relativity as the Schwarzschild solution and black holes, tests of general relativity, cosmological models, and applications of relativity in the global positioning system (GPS).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5350F. Astrophysics.**

This course surveys a variety of issues in astrophysics through problem solving, quantitative measurements, and theoretical reasoning. Topics include celestial mechanics, stellar structure and evolution, star formation, and supernova remnants.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350G. Electrical and Magnetic Characterization Methods.**

This course introduces electric and magnetic characterization methods important to metals, magnetic and semiconductor materials and devices. Various measurement techniques and methods will be reviewed. Students will learn to work with characterization tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350H. Astronomical Spectroscopy.**

A lecture course introducing students to spectroscopy in astronomy, with particular emphasis on molecular spectroscopy. The course will cover a broad range of aspects including the development of spectroscopy in astronomy, the theory of atomic and molecular spectra, spectra in different astrophysical environments, instrumentation and data reduction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350I. Advanced Computational Methods for Physics.**

In this course students will learn and practice the Python computer language along with several of its scientific modules to model, visualize & analyze complex physical systems that cannot be described by mathematical equations with analytical solution. Special attention will be paid to programming techniques for data manipulation & analysis of large amounts of data residing in multiple data sets. The Python implementation of the (free) Anaconda distribution will be utilized. No previous knowledge of Python or programming required since a basic training will be provided in the first lectures, which will serve as an introduction or refresher for students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350J. Optical Materials and Characterization Methods.**

This course is an introduction to optical properties of solids including electronic and vibrational transitions in inorganic and organic thin films and multilayers. Various optical characterization methods and techniques will be reviewed including Raman, FTIR, Photoluminescence, and X-ray Fluorescence spectroscopy. Students will learn to work with those characterization methods and learn how to interpret the various spectra.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5360. Physics Education Research: Teaching & Learning.**

This course is an introduction to pedagogical issues in physics, including their related philosophical analysis and empirical research studies on student learning. Students will be guided to read, analyze, and present existing scholarly research that justifies approaching certain physics topics from particular perspectives and with particular instructional methods. The course is appropriate for future researchers in physics education and future physics teachers at secondary and post-secondary levels.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 5370. Problems in Advanced Physics.**

Open to graduate students on an individual basis by arrangement with the Department of Physics. May be repeated with prior approval of the department. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHYS 5395. Fundamentals of Research.**

Course is available to graduate students only at the invitation of the department. May be repeated with prior approval of the department. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHYS 5398. Industry Internship.**

Supervised work experience in an appropriate high tech industry. Students will be required to keep a daily journal and make a final presentation (both written and oral) describing their accomplishments.

**3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in PHYS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

A solid physics foundation combined with extensive, hands-on training in state-of-the art nanofabrication and characterization facilities prepares students for careers in the local high-tech industry, science education or advanced studies. Students are engaged in research and gain superior graduate education with individual faculty attention and mentoring.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

- or
- \$90 nonrefundable application fee for applications with international credentials
  - baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
  - official transcripts from **each institution** where course credit was granted
  - a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
  - minimum 3.0 GPA in junior and senior level physics courses in modern physics, mathematical physics or equivalent, classical mechanics, electromagnetic field theory, and quantum mechanics (Leveling courses may be required if student lacks sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.)
  - GRE not required\*
  - resume/CV
  - statement of purpose
  - three letters of recommendation

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

\*Additional Information

If the physics GPA falls below the minimum requirement, the student may submit the following to be considered for conditional admission:

- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections

Conditional admission is not available to applicants who require "F" or "J" visas.

Degree Requirements

The Master of Science (M.S.) degree with a major in Physics requires 30 semester credit hours, including a thesis. Students who do not have the appropriate background course work may be required to complete leveling courses.

Course Requirements

Code	Title	Hours
Required Courses		
PHYS 5312	ADVANCED QUANTUM MECHANICS	3
PHYS 5313	Mathematical Methods of Physics	3
PHYS 5314	Statistical Physics	3
PHYS 5331	Electromagnetic Field Theory	3
Prescribed Electives		
Choose 9 hours from the following:		9
PHYS 5110	Seminar in Physics	
PHYS 5304	Experimental Research Methods	
PHYS 5320	Solid State Physics	
PHYS 5322	Semiconductor Device Microfabrication	
PHYS 5324	Thin Film Synthesis and Characterization Laboratory	
PHYS 5327	Semiconductor Device Physics	
PHYS 5328	Advanced Solid State Physics	
PHYS 5329		
PHYS 5332	Materials Characterization	
PHYS 5340		
PHYS 5334	Relativity	
PHYS 5360	Physics Education Research: Teaching & Learning	
PHYS 5370	Problems in Advanced Physics	
PHYS 5395	Fundamentals of Research	
PHYS 5398	Industry Internship	
Electives		
Choose 3 hours of advisor-approved electives		3
Thesis		
PHYS 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
PHYS 5199B	Thesis	
PHYS 5299B	Thesis	
PHYS 5399B	Thesis	
PHYS 5599B	Thesis	
PHYS 5999B	Thesis	
Total Hours		30

Comprehensive Examination Requirements

An oral thesis defense is required and will satisfy the comprehensive examination requirement. If the thesis committee is not satisfied with a graduate student's oral defense, they will specify all deficiencies the student must resolve. Should the thesis committee decide to hold a second oral defense, the chair of the thesis committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent thought. Preparation of the thesis must be in conformity with



the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being

made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Physics: PHYS

## Courses Offered

### Physics (PHYS)

#### **PHYS 1115. General Physics I Laboratory.**

First of two laboratory courses in General Physics for science-related majors. The course introduces students to the basics of measurement. Topics cover mechanics and heat. Corequisite: PHYS 1315 or PHYS 1335 either with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1101

#### **PHYS 1125. General Physics II Laboratory.**

This is the second of two laboratory courses in general Physics. The course introduces the students to experimental measurements and demonstration of principles of electricity, magnetism, optics, modern physics, electromagnetic waves. Corequisite: PHYS 1325 or PHYS 1345 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1102

#### **PHYS 1310. Elementary Physics I.**

This course is a non-mathematical survey of mechanics, properties of matter, heat, and sound. These topics are described conceptually with applications relating to the world around us. PHYS 1310 and PHYS 1320 are designed for the liberal arts student. The order in which they are taken is not important. They are not recommended for pre-engineering students or majors and minors in science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1305

#### **PHYS 1315. General Physics I.**

This is the first course in a two semester sequence which is a survey of the basic laws and principles of physics and includes the topics of mechanics and heat. The course is designed for students whose program requires technical physics, but who are not pre-engineering students or majors or minors in physics. Prerequisite: [MATH 1315 or MATH 1317 or MATH 2321 or MATH 2417 or MATH 2471 with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Mathematics score of 520 or better] or [SAT Math section score of 550 or better] or [Next-Generation Advanced Algebra and Functions Test score of 263 or better]. Corequisite: PHYS 1115 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Co-requisite(s):** PHYS 1115

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1301

#### **PHYS 1320. Elementary Physics II.**

This course is a non-mathematical survey of electricity, magnetism, light, relativity, and atomic and nuclear physics. These topics are described conceptually with applications relating to the world around us. PHYS 1310 and PHYS 1320 are designed for the liberal arts student. The order in which they are taken is not important. They are not recommended for pre-engineering students or majors and minors in science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1307

#### **PHYS 1325. General Physics II.**

This is the second course in a two semester sequence which is a survey of the basic laws and principles of physics and includes the topics of waves, light, electricity and magnetism. This course is designed for students whose program requires technical physics, but who are not pre-engineering students or majors or minors in physics. Prerequisites: PHYS 1315 or PHYS 1335 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Co-requisite(s):** PHYS 1125

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1302

#### **PHYS 1335. General Physics I for Life Sciences Majors.**

This is the first course in a two-semester sequence which surveys the fundamental principles of physics. This focus of this first course is on the topics of mechanics, fluids, and heat. The course is designed for biology, pre-health, and life-science majors whose program requires technical physics. Credit for both PHYS 1335 and PHYS 1315 cannot be given. Prerequisite: [MATH 1315 or MATH 1317 or MATH 2321 or MATH 2417 or MATH 2471 with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Mathematics score of 520 or better] or [SAT Math section score of 550 or better] or [AAF score of 263 - 300]. Corequisite: PHYS 1115 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

#### **PHYS 1340. Astronomy: Solar System.**

A study of the solar system. Topics included are a study of the sun, the planets and their satellites, the comets, and other components of the solar system. Some aspects of telescopes and ancient astronomy will be included also.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** ASTR 1304

**PHYS 1345. General Physics II for Life Science Majors.**

This is the second course in a two-semester sequence which surveys the fundamental principles of physics. The focus of this second course is on the topics of oscillations, light, and electrical phenomena. This course is designed for biology, pre-health, and life-science majors whose program requires technical physics. Prerequisite: PHYS 1315 or PHYS 1335 with a grade of "C" or better. Corequisite: PHYS 1125 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 1350. Astronomy: Stars and Galaxies.**

A study of the universe beyond the solar system. Topics included are a study of the stars and star clusters, nebulae, galaxies, and an introduction to some aspects of cosmology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** ASTR 1303

**PHYS 1365. Physics for Educators.**

This studio-style course introduces physics concepts through active exploration and discussion of physical phenomena. Course content includes developing concepts of force and motion, light, sound, waves, electricity, magnetism, energy, and conservation laws. Focus is on how physics helps make sense of everyday experience, and on the learning and teaching of children in grades K-8.

**3 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1310

**PHYS 2125. Mechanics Laboratory.**

This course introduces students to experimental methods in the study of motion, forces, energy, momentum, and other topics in mechanics. This laboratory course is designed to accompany PHYS 2325. Corequisite: PHYS 2325 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2126. Electricity and Magnetism Laboratory.**

This course introduces students to experimental methods in the study of electric charges and fields, electric circuits, magnetic materials, and electromagnetic induction. This laboratory course is designed to accompany PHYS 2326. Corequisite: PHYS 2326 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2135. Waves and Heat Laboratory.**

This course introduces students to experimental methods in the study of geometrical and physical optics and of thermodynamics. This laboratory course is designed to accompany PHYS 2335. Corequisite: PHYS 2335 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2150. Professional Development for Beginning Physicists.**

This course introduces to physics majors career options and opportunities for internships, scholarships, and research internal and external to the university. The course also develops essential practical skills for job seekers. Prerequisite: PHYS 2326 and PHYS 2126 and PHYS 2335 and PHYS 2135 all with grades of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2230. Introduction to Computational Modeling for Physics.**

This course is an introduction to computational concepts and tools that physicists use for data analysis, simulation and modeling, and visualization in research and dissemination. Python and its various libraries are emphasized. Prerequisite: PHYS 2325 and PHYS 2125 with grades of "C" or better. Corequisite: [PHYS 2326 and PHYS 2126] or [PHYS 2335 and PHYS 2135] with grades of "C" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2325. Mechanics.**

This course covers the principles of introductory classical mechanics through problem-solving and research-validated interactive instruction. Corequisite: MATH 2471 with a grade of "C" or better and PHYS 2125 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2326. Electricity and Magnetism.**

This course covers the principles of classical electricity and magnetism through problem-solving and research-validated interactive instruction. Prerequisite: PHYS 2325 and [MATH 2472 or MATH 2473] with grades of "C" or better. Corequisite: PHYS 2126 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Life & Phys Sciences CAO 093|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2335. Waves and Heat.**

This course covers the principles of thermodynamics, geometric optics, and physical optics through problem solving and research-validated interactive instruction. Prerequisite: MATH 2471 and PHYS 2325 with grades of "C" or better. Corequisite: [MATH 2472 or MATH 2473] with a grade of "C" or better and PHYS 2135 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3210. Physics Cognition and Pedagogy.**

This course is an introduction to physics-specific pedagogy and the methods and results of physics education research (PER). Students will investigate relevant literature in PER and cognitive science, engage in discussions about physics teaching and learning, and reflect on their own teaching practice in the role of Physics Learning Assistants. (WI).

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 3301. Musical Acoustics.**

A survey of the physics of sound and acoustic measurement. Special emphasis will be placed on sound production, propagation, and perception as applied to music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3311. Classical Mechanics.**

This course discusses the fundamentals of classical mechanics focusing on the physical description of the behavior of single and multiple particle systems. Topics include advanced problem-solving strategies for systems with position and velocity dependent forces, simple harmonic oscillators, and non-inertial reference frames. Prerequisite: PHYS 2335 and PHYS 2135 with grades of "C" or better. Corequisite: PHYS 3320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3312. Modern Physics.**

This course is an introduction to the foundations of modern physics, including the following topics: relativistic mechanics, foundational experiments in the development of quantum mechanics, light and energy, wave nature of particles, and nuclear physics. Prerequisite: PHYS 2335 and PHYS 2135 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3313. Astrophysics.**

This course surveys a variety of issues in astrophysics through problem solving, quantitative measurements, and theoretical reasoning. Topics include celestial mechanics, stellar dynamics and evolution, galaxy evolution, and cosmology. Corequisite: PHYS 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3315. Thermodynamics.**

This course is a fundamental study of thermodynamics and statistical mechanics. Prerequisite: MATH 3323 and [(PHYS 2335 and PHYS 2135) or (ENGR 2300 and PHYS 2326 and PHYS 2126)] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3318. Galactic and Extragalactic Astrophysics.**

A survey of the physical properties, dynamics, and distribution of galaxies. Topics include the contents, origin, and evolution of the Milky Way and other galaxies; the large-scale distribution of galaxies in groups, clusters and superclusters; interactions between galaxies; dark matter; active galaxies and supermassive black holes; high redshift Universe.

Prerequisite: PHYS 3313 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3320. Introduction to Mathematical Physics.**

This course is an introduction to the mathematical methods of theoretical physics with emphasis on development of mathematical tools used in upper division core physics courses. Students will also develop their ability to communicate mathematical ideas in the context of physics. Prerequisite: MATH 2393 and PHYS 2326 and PHYS 2126 all with grades of "C" or better. Corequisite: MATH 3323 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3411. Advanced Physics Laboratory.**

This course is an introduction to experimental modern physics, with emphasis on the design and assembly of physics apparatus and the development of practical skills for controlling and automating data collection. (WI) Prerequisites: PHYS 2326 and PHYS 2126 with grades of "C" or better. Corequisites: PHYS 2335 and PHYS 2135 with grades of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 3416. Applied Electronics.**

This Laboratory/lecture course is an introduction to electronic test bench methods for the construction, operation and analysis of important DC/AC circuits utilizing resistors, capacitors, diodes, BJTs, FETs, and OpAmps. The behavior of the circuits will be modeled in SPICE. Elementary semiconductor device physics and microfabrication methods will be discussed. (WI) Prerequisites: PHYS 2326 and PHYS 2126 and PHYS 2335 and PHYS 2135 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 3417. Optics.**

This course is a one-semester survey of geometrical and physical optics accompanied by laboratory experience. Topics covered include electromagnetic waves and their propagation, geometrical optics, polarization, interference, diffraction, Fourier optics, and holography. (WI) Prerequisites: PHYS 2326 and PHYS 2126 and PHYS 2335 and PHYS 2135 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 3418. Methods in Observational Astrophysics.**

This course is an introduction to methods and instrumentation used in observational astrophysics. Topics include image processing, data acquisition and analysis, and detectors for data across the electromagnetic spectrum. Prerequisite: PHYS 2326 and PHYS 2126 and PHYS 2335 and PHYS 2135 all with grades "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 4121. Undergraduate Research.**

This course represents a student's research project in physics to be carried out under the supervision of a faculty member. The student must contact a faculty member in advance to arrange the topic and specific course objectives. This course may be repeated for credit. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4221. Undergraduate Research.**

This course represents a student's research project in physics to be carried out under the supervision of a faculty member. The student must contact a faculty member in advance to arrange the topic and specific course objectives. This course may be repeated for credit. Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4305. Statistical Physics.**

Statistical physics is the study of energy flow and energy distributions within systems in equilibrium. Students will explore a range of phenomena including black-body radiation, diffusion, phase transitions, and magnetism. Emphasis will be placed on topics of entropy, probability, free energy, Boltzmann distributions, and the atomic behavior of these systems. Prerequisite: MATH 3323 and PHYS 3312 and PHYS 3320 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4310. Electromagnetic Field Theory I.**

An introduction to the electromagnetic field theory of classical physics for static fields. Topics included will be the electrostatic field, polarization and dielectrics, electrostatic energy, magnetic field of steady currents, magneto static energy, and magnetic properties of matter. Prerequisite: [MATH 2393 or MATH 3373] and MATH 3323 and PHYS 3320 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4311. Condensed Matter Physics.**

Application of physics principles to solid materials. Topics include crystal structure and the reciprocal lattice, including x-ray diffraction, crystal binding and elastic properties, lattice vibrations, energy bands, semiconductors and metals. Prerequisite: PHYS 3312 and PHYS 3320 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4312. Quantum Mechanics I.**

This course introduces students to quantum mechanics. Topics include mathematical foundations, fundamental postulates, time development, and one dimensional problems. Prerequisite: PHYS 3312 PHYS 3320 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4315. Electromagnetic Field Theory II.**

An introduction to the electromagnetic field theory of classical physics for time varying fields. Topics included will be electromagnetic induction, time varying electric and magnetic fields, Maxwell's equations, electromagnetic energy, electromagnetic waves and radiation, and a brief introduction to some specialized topics. Prerequisite: PHYS 4310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter



**PHYS 4320. Selected Study in Physics.**

Topics are chosen in theoretical and experimental areas of current interest in physics with specific topic to be discussed agreed upon prior to registration. May be repeated once with different emphasis and professor for additional credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4321. Undergraduate Research.**

A research project in physics to be carried out under the supervision of a faculty member by upper division physics majors. Student must contact a faculty member in advance to arrange topic and specific course objective. Course may be repeated only as an elective towards the BS or BA in physics. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4330. Relativity.**

This course includes a review of special relativity, an introduction to the mathematics of tensor calculus and differential geometry, and covers such topics from general relativity as the Schwarzschild solution, black holes, tests of general relativity, cosmological models, gravitational waves, and the Einstein equation. Prerequisite: PHYS 3312 and PHYS 3320 with a grade of "C" or better. Corequisite: PHYS 3311 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4345. Biophysics.**

This course applies the principles of physics to the study of living organisms. An emphasis will be placed on the topics of structure, fluids, diffusion, entropy, probabilities, and stochastic processes, as well as on scientific modes of thinking, including modeling, estimation, and data analysis. Prerequisite: PHYS 3320 and PHYS 2230 and PHYS 2335 and PHYS 2135 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4350F. Astronomical Spectroscopy.**

A lecture course introducing students to spectroscopy in astronomy, with particular emphasis on molecular spectroscopy. The course will cover a broad range of aspects including the development of spectroscopy in astronomy, the theory of atomic and molecular spectra, spectra in different astrophysical environments, instrumentation and data reduction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**PHYS 4350G. Nuclear and Particle Physics.**

This course covers the theoretical, phenomenological, and experimental foundations of nuclear and particle physics including the fundamental forces, particles, and composites. An emphasis will be on the fundamental structure of nucleus (nuclear masses and nuclear sizes), nuclear interactions (alpha, beta, and gamma radiation), Fission, Fusion, beyond nuclear physics (quarks and leptons as basic constituents of matter), brief introduction to the Standard model: electroweak interactions, Higgs boson, QCD and basic nuclear Astrophysics (nucleosynthesis of stellar particles). Prerequisite: PHYS 2326 and PHYS 2126 and PHYS 3312 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**PHYS 4350H. Optical Materials and Characterization Methods.**

This course is an introduction to optical properties of solids including electronic and vibrational transitions in inorganic and organic thin films and multilayers. Various optical characterization methods and techniques will be reviewed including Raman, FTIR, Photoluminescence, and X-ray Fluorescence spectroscopy. Students will learn to work with those characterization methods and learn how to interpret the various spectra.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 4360. Physics Cognition and Pedagogy II.**

This course addresses historical, philosophical, and cognitive perspectives on the learning, teaching, and discovery of physics, including results from contemporary research on learning. It is recommended for students pursuing teacher certification. Prerequisite: PHYS 3210 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 5100. Professional Development.**

This course covers topics related to teaching, research, and employment responsibilities. The completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Course is repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**PHYS 5110. Seminar in Physics.**

A course designed to acquaint the graduate student with current research areas in physics. May be repeated twice for total of three semester hour's credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5200. Professional Development.**

This course covers topics related to teaching, research, and employment rights and responsibilities. It provides a brief background on teaching and learning theories and consists of organized practice teaching. Completion is required as a condition of employment for graduate instructional and teaching assistants. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**PHYS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5302. Electricity and Magnetism.**

An introduction to the electromagnetic field theory of classical physics for static fields. Topics included will be the electrostatic field, polarization and dielectrics, electrostatic energy, magnetic field of steady currents, magneto static energy, and magnetic properties of matter. This is a graduate leveling course in Electricity and Magnetism (stacked with PHYS 4310). This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**PHYS 5303. Quantum Mechanics.**

This course is an introduction to quantum mechanics. Topics include mathematical foundations, fundamental postulates, time development, and one dimensional problems. This is a graduate leveling course in Quantum Mechanics (stacked with PHYS 4312). This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**PHYS 5304. Experimental Research Methods.**

This is a laboratory based course introducing experimental methods used in physics research with emphasis on quantum effects through materials synthesis and characterization methods. The specific experiments are chosen by department faculty on topics of current research interests. The students are exposed to different research topics through laboratory rotations. Prerequisite: Instructor approval. Corequisite: PHYS 5314 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5312. Advanced Quantum Mechanics.**

This course is a study of quantum mechanics including combination of two or more quantum mechanical systems, addition of angular momentum, time independent perturbation theory, and time dependent perturbation theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5313. Mathematical Methods of Physics.**

This course is a survey of mathematical methods of physics at the graduate level focusing on complex analysis of analytic functions (Laurent expansions and evaluation of residues) and methods of solving both ordinary and partial differential equations (Frobenius' method and Sturm-Liouville theory) with applications to mechanics and electromagnetic theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5314. Statistical Physics.**

This course is an introduction to the laws of statistical physics and their application to realistic problems at the graduate level. The topics include a brief review of equilibrium thermodynamics, Boltzmann and Gibbs distribution, Fermi-Dirac and Bose-Einstein statistics, derivation of Planck's Law and black-body radiation, and heat capacity of solids.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5320. Solid State Physics.**

This is an introductory course at the graduate level intended for students who have not had a previous course in Solid State Physics. Topics covered include crystal structure, the reciprocal lattice, x-ray diffraction, lattice vibrations, electronic band structure, and optical, transport and magnetic properties of metals and semiconductors including applications. Prerequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5322. Semiconductor Device Microfabrication.**

This experimental methods course provides an in-depth overview of the physics and technology of semiconductor device micro and nano fabrication. Topics include materials used in electronic devices, thin film deposition, wet and dry etching, lithography processing, and topics relevant to semiconductor research and devices. Fabrication and characterization techniques will be covered. Corequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**PHYS 5324. Thin Film Synthesis and Characterization Laboratory.**

This advanced experimental course is designed as a research group project experience with emphasis on nanoscale device fabrication. All projects are conducted in university facilities with state-of-the-art thin film growth, processing, and characterization facilities. Prerequisite: PHYS 5322 with a grade of "C" or better. Corequisites: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5327. Semiconductor Device Physics.**

This course demonstrates how solid state physics applies to describing important examples of thin film device operation with emphasis on semiconductor devices. Additional topics may include photon and phonon effects on electronic properties, quantum phenomena, many body effects in solids, carrier transport properties, micro-electromechanical systems, and materials interface issues. Corequisite: PHYS 5314 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5328. Advanced Solid State Physics.**

Review of models of a solid and energy band theory. Additional topics may include interaction of electromagnetic waves with solids, lattice vibrations and phonons, many body effects in solids, device physics, quantum phenomena, carrier transport properties, current device configurations, and materials interface problems. Prerequisite: PHYS 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5331. Electromagnetic Field Theory.**

This course is an introduction to electrodynamics at the graduate level using rigorous mathematical formulation. Topics include methods of solving problems in electrostatics and magnetostatics, boundary value problems and Green's Functions, fields in media, and Maxwell's Equations and time varying fields.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5332. Materials Characterization.**

This course covers skills and knowledge required for microscopy methods including optical microscopy, scanning electron microscopy, scanning tunneling electron microscopy, atomic force microscopy, and confocal microscopy. Topics covered include x-ray and neutron diffraction techniques including structure analysis, powder and glancing angle diffraction, pole figure, texture analysis, and small angle scattering. Prerequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 5334. Relativity.**

This course includes a review of special relativity, an introduction to the mathematics of tensor calculus and differential geometry, and such topics from general relativity as the Schwarzschild solution and black holes, tests of general relativity, cosmological models, and applications of relativity in the global positioning system (GPS).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5350F. Astrophysics.**

This course surveys a variety of issues in astrophysics through problem solving, quantitative measurements, and theoretical reasoning. Topics include celestial mechanics, stellar structure and evolution, star formation, and supernova remnants.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350G. Electrical and Magnetic Characterization Methods.**

This course introduces electric and magnetic characterization methods important to metals, magnetic and semiconductor materials and devices. Various measurement techniques and methods will be reviewed. Students will learn to work with characterization tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350H. Astronomical Spectroscopy.**

A lecture course introducing students to spectroscopy in astronomy, with particular emphasis on molecular spectroscopy. The course will cover a broad range of aspects including the development of spectroscopy in astronomy, the theory of atomic and molecular spectra, spectra in different astrophysical environments, instrumentation and data reduction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350I. Advanced Computational Methods for Physics.**

In this course students will learn and practice the Python computer language along with several of its scientific modules to model, visualize & analyze complex physical systems that cannot be described by mathematical equations with analytical solution. Special attention will be paid to programming techniques for data manipulation & analysis of large amounts of data residing in multiple data sets. The Python implementation of the (free) Anaconda distribution will be utilized. No previous knowledge of Python or programming required since a basic training will be provided in the first lectures, which will serve as an introduction or refresher for students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350J. Optical Materials and Characterization Methods.**

This course is an introduction to optical properties of solids including electronic and vibrational transitions in inorganic and organic thin films and multilayers. Various optical characterization methods and techniques will be reviewed including Raman, FTIR, Photoluminescence, and X-ray Fluorescence spectroscopy. Students will learn to work with those characterization methods and learn how to interpret the various spectra.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5360. Physics Education Research: Teaching & Learning.**

This course is an introduction to pedagogical issues in physics, including their related philosophical analysis and empirical research studies on student learning. Students will be guided to read, analyze, and present existing scholarly research that justifies approaching certain physics topics from particular perspectives and with particular instructional methods. The course is appropriate for future researchers in physics education and future physics teachers at secondary and post-secondary levels.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 5370. Problems in Advanced Physics.**

Open to graduate students on an individual basis by arrangement with the Department of Physics. May be repeated with prior approval of the department. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHYS 5395. Fundamentals of Research.**

Course is available to graduate students only at the invitation of the department. May be repeated with prior approval of the department. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHYS 5398. Industry Internship.**

Supervised work experience in an appropriate high tech industry. Students will be required to keep a daily journal and make a final presentation (both written and oral) describing their accomplishments.

**3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in PHYS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

## Program Overview

A solid physics foundation combined with extensive, hands-on training in state-of-the art nanofabrication and characterization facilities prepares students for careers in the local high-tech industry, science education or advanced studies. Students are engaged in research and gain superior graduate education with individual faculty attention and mentoring.

## Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents page (p. 806) for additional requirements.

- completed online application
- \$55 nonrefundable application fee

or

- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree from a regionally accredited university (Non-U.S. degrees must be equivalent to a four-year U.S. Bachelor's degree. In most cases, three-year degrees are not considered. Visit our International FAQs (<https://www.gradcollege.txst.edu/international/faqs.html>) for more information.)
- official transcripts from **each institution** where course credit was granted
- a 2.75 overall GPA or a 2.75 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- minimum 3.0 GPA in junior and senior level physics courses in modern physics, mathematical physics or equivalent, classical mechanics, electromagnetic field theory, and quantum mechanics (Leveling courses may be required if student lacks sufficient background course work. Any required leveling course work must be completed with grades of B or better prior to admission.)
- GRE not required\*
- resume/CV
- statement of purpose
- three letters of recommendation

Approved English Proficiency Exam Scores

Applicants are required to submit an approved English proficiency exam score that meets the minimum program requirements below unless they have earned a bachelor's degree or higher from a regionally accredited U.S. institution or the equivalent from a country on our exempt countries list (<http://www.gradcollege.txstate.edu/international/language.html#waiver>).

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52 overall
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0
- official Duolingo Scores required with a 110 overall
- official TOEFL Essentials scores required with an 8.5 overall

This program does **not** offer admission if the scores above are not met.

\*Additional Information

If the physics GPA falls below the minimum requirement, the student may submit the following to be considered for conditional admission:

- official GRE (general test only) with competitive scores in the verbal reasoning and quantitative reasoning sections

Conditional admission is not available to applicants who require "F" or "J" visas.

Degree Requirements

The Master of Science (M.S.) degree with a major in Physics requires 39 semester credit hours, including a thesis. Students who do not have the appropriate background course work may be required to complete leveling courses.

Course Requirements

Code	Title	Hours
Required Courses		
PHYS 5312	ADVANCED QUANTUM MECHANICS	3
PHYS 5313	Mathematical Methods of Physics	3
PHYS 5314	Statistical Physics	3
PHYS 5331	Electromagnetic Field Theory	3
Prescribed Electives		
Choose 9 hours from the following:		9
PHYS 5110	Seminar in Physics	
PHYS 5304	Experimental Research Methods	
PHYS 5320	Solid State Physics	
PHYS 5322	Semiconductor Device Microfabrication	
PHYS 5324	Thin Film Synthesis and Characterization Laboratory	
PHYS 5327	Semiconductor Device Physics	
PHYS 5328	Advanced Solid State Physics	
PHYS 5329		
PHYS 5332	Materials Characterization	
PHYS 5340		
PHYS 5334	Relativity	
PHYS 5360	Physics Education Research: Teaching & Learning	
PHYS 5370	Problems in Advanced Physics	
PHYS 5395	Fundamentals of Research	
PHYS 5398	Industry Internship	
Electives		
Choose 3 hours of advisor-approved electives		3
Thesis		
PHYS 5399A	Thesis	3
Choose a minimum of 3 hours from the following:		3
PHYS 5199B	Thesis	
PHYS 5299B	Thesis	
PHYS 5399B	Thesis	
PHYS 5599B	Thesis	
PHYS 5999B	Thesis	
Minor		
Choose a 9-hour advisor-approved science minor		9
Total Hours		39

Comprehensive Examination Requirement

An oral thesis defense is required and will satisfy the comprehensive examination requirement. If the thesis committee is not satisfied with a graduate student's oral defense, they will specify all deficiencies the student must resolve. Should the thesis committee decide to hold a second oral defense, the chair of the thesis committee shall not schedule the second defense until the student has resolved all specified deficiencies.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

If a student elects to follow the thesis option for the degree, a committee to direct the written thesis will be established. The thesis must demonstrate the student's capability for research and independent



thought. Preparation of the thesis must be in conformity with the *Graduate College Guide to Preparing and Submitting a Thesis or Dissertation*.

## Thesis Proposal ([http://www.gradcollege.txstate.edu/docs/Thesis\\_Diss\\_Guide.pdf](http://www.gradcollege.txstate.edu/docs/Thesis_Diss_Guide.pdf))

The student must submit an official Thesis Proposal Form (<http://www.gradcollege.txstate.edu/forms.html>) and proposal to his or her thesis committee. Thesis proposals vary by department and discipline. Please see your department for proposal guidelines and requirements. After signing the form and obtaining committee members' signatures, the graduate advisor's signature if required by the program and the department chair's signature, the student must submit the Thesis Proposal Form with one copy of the proposal attached to the dean of The Graduate College for approval before proceeding with research on the thesis. If the thesis research involves human subjects, the student must obtain exemption or approval from the Texas State Institutional Review Board prior to submitting the proposal form to The Graduate College. The IRB approval letter should be included with the proposal form. If the thesis research involves vertebrate animals, the proposal form must include the Texas State IACUC approval code. It is recommended that the thesis proposal form be submitted to the dean of The Graduate College by the end of the student's enrollment in 5399A. Failure to submit the thesis proposal in a timely fashion may result in delayed graduation.

## Thesis Committee

The thesis committee must be composed of a minimum of three approved graduate faculty members.

## Thesis Enrollment and Credit

The completion of a minimum of six hours of thesis enrollment is required. For a student's initial thesis course enrollment, the student will need to register for thesis course number 5399A. After that, the student will enroll in thesis B courses, in each subsequent semester until the thesis is defended with the department and approved by The Graduate College. Preliminary discussions regarding the selection of a topic and assignment to a research supervisor will not require enrollment for the thesis course.

Students must be enrolled in thesis credits if they are receiving supervision and/or are using university resources related to their thesis work. The number of thesis credit hours students enroll in must reflect the amount of work being done on the thesis that semester. It is the responsibility of the committee chair to ensure that students are making adequate progress toward their degree throughout the thesis process. Failure to register for the thesis course during a term in which supervision is received may result in postponement of graduation. After initial enrollment in 5399A, the student will continue to enroll in a thesis B course as long as it takes to complete the thesis. Thesis projects are by definition original and individualized projects. As such, depending on the topic, methodology, and other factors, some projects may take longer than others to complete. If the thesis requires work beyond the minimum number of thesis credits needed for the degree, the student may enroll in additional thesis credits at the committee chair's discretion. In the rare case when a student has not previously enrolled in thesis and plans to work on and complete the thesis in one term, the student will enroll in both 5399A and 5399B.

The only grades assigned for thesis courses are PR (progress), CR (credit), W (withdrew), and F (failing). If acceptable progress is not being made in a thesis course, the instructor may issue a grade of F. If the student is making acceptable progress, a grade of PR is assigned until the thesis is completed. The minimum number of hours of thesis credit ("CR") will be awarded only after the thesis has been both approved by The Graduate College and released to Alkek Library.

A student who has selected the thesis option must be registered for the thesis course during the term or Summer I (during the summer, the thesis course runs ten weeks for both sessions) in which the degree will be conferred.

## Thesis Deadlines and Approval Process

Thesis deadlines are posted on The Graduate College (<http://www.gradcollege.txstate.edu/>) website under "Current Students." The completed thesis must be submitted to the chair of the thesis committee on or before the deadlines listed on The Graduate College website.

The following must be submitted to The Graduate College by the thesis deadline listed on The Graduate College website:

1. The Thesis Submission Approval Form bearing original (wet) and/or electronic signatures of the student and all committee members.
2. One (1) PDF of the thesis in final form, approved by all committee members, uploaded in the online Vireo submission system.

After the dean of The Graduate College approves the thesis, Alkek Library will harvest the document from the Vireo submission system for publishing in the Digital Collections database (according to the student's embargo selection). **NOTE: MFA Creative Writing theses will have a permanent embargo and will never be published to Digital Collections.**

While original (wet) signatures are preferred, there may be situations as determined by the chair of the committee in which obtaining original signatures is inefficient or has the potential to delay the student's progress. In those situations, the following methods of signing are acceptable:

- signing and faxing the form
- signing, scanning, and emailing the form
- notifying the department in an email from their university's or institution's email account that the committee chair can sign the form on their behalf
- electronically signing the form using the university's licensed signature platform.

If this process results in more than one document with signatures, all documents need to be submitted to The Graduate College together.

No copies are required to be submitted to Alkek Library. However, the library will bind copies submitted that the student wants bound for personal use. Personal copies are not required to be printed on archival quality paper. The student will take the personal copies to Alkek Library and pay the binding fee for personal copies.

Master's level courses in Physics: PHYS

## Courses Offered

### Physics (PHYS)

#### PHYS 5100. Professional Development.

This course covers topics related to teaching, research, and employment responsibilities. The completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Course is repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### PHYS 5110. Seminar in Physics.

A course designed to acquaint the graduate student with current research areas in physics. May be repeated twice for total of three semester hour's credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PHYS 5199B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### PHYS 5200. Professional Development.

This course covers topics related to teaching, research, and employment rights and responsibilities. It provides a brief background on teaching and learning theories and consists of organized practice teaching. Completion is required as a condition of employment for graduate instructional and teaching assistants. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

#### PHYS 5299B. Thesis.

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

#### PHYS 5302. Electricity and Magnetism.

An introduction to the electromagnetic field theory of classical physics for static fields. Topics included will be the electrostatic field, polarization and dielectrics, electrostatic energy, magnetic field of steady currents, magneto static energy, and magnetic properties of matter. This is a graduate leveling course in Electricity and Magnetism (stacked with PHYS 4310). This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### PHYS 5303. Quantum Mechanics.

This course is an introduction to quantum mechanics. Topics include mathematical foundations, fundamental postulates, time development, and one dimensional problems. This is a graduate leveling course in Quantum Mechanics (stacked with PHYS 4312). This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

#### PHYS 5304. Experimental Research Methods.

This is a laboratory based course introducing experimental methods used in physics research with emphasis on quantum effects through materials synthesis and characterization methods. The specific experiments are chosen by department faculty on topics of current research interests. The students are exposed to different research topics through laboratory rotations. Prerequisite: Instructor approval. Corequisite: PHYS 5314 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PHYS 5312. Advanced Quantum Mechanics.

This course is a study of quantum mechanics including combination of two or more quantum mechanical systems, addition of angular momentum, time independent perturbation theory, and time dependent perturbation theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

#### PHYS 5313. Mathematical Methods of Physics.

This course is a survey of mathematical methods of physics at the graduate level focusing on complex analysis of analytic functions (Laurent expansions and evaluation of residues) and methods of solving both ordinary and partial differential equations (Frobenius' method and Sturm-Liouville theory) with applications to mechanics and electromagnetic theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5314. Statistical Physics.**

This course is an introduction to the laws of statistical physics and their application to realistic problems at the graduate level. The topics include a brief review of equilibrium thermodynamics, Boltzmann and Gibbs distribution, Fermi-Dirac and Bose-Einstein statistics, derivation of Planck's Law and black-body radiation, and heat capacity of solids.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5320. Solid State Physics.**

This is an introductory course at the graduate level intended for students who have not had a previous course in Solid State Physics. Topics covered include crystal structure, the reciprocal lattice, x-ray diffraction, lattice vibrations, electronic band structure, and optical, transport and magnetic properties of metals and semiconductors including applications. Prerequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5322. Semiconductor Device Microfabrication.**

This experimental methods course provides an in-depth overview of the physics and technology of semiconductor device micro and nano fabrication. Topics include materials used in electronic devices, thin film deposition, wet and dry etching, lithography processing, and topics relevant to semiconductor research and devices. Fabrication and characterization techniques will be covered. Corequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**PHYS 5324. Thin Film Synthesis and Characterization Laboratory.**

This advanced experimental course is designed as a research group project experience with emphasis on nanoscale device fabrication. All projects are conducted in university facilities with state-of-the-art thin film growth, processing, and characterization facilities. Prerequisite: PHYS 5322 with a grade of "C" or better. Corequisites: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5327. Semiconductor Device Physics.**

This course demonstrates how solid state physics applies to describing important examples of thin film device operation with emphasis on semiconductor devices. Additional topics may include photon and phonon effects on electronic properties, quantum phenomena, many body effects in solids, carrier transport properties, micro-electromechanical systems, and materials interface issues. Corequisite: PHYS 5314 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5328. Advanced Solid State Physics.**

Review of models of a solid and energy band theory. Additional topics may include interaction of electromagnetic waves with solids, lattice vibrations and phonons, many body effects in solids, device physics, quantum phenomena, carrier transport properties, current device configurations, and materials interface problems. Prerequisite: PHYS 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5331. Electromagnetic Field Theory.**

This course is an introduction to electrodynamics at the graduate level using rigorous mathematical formulation. Topics include methods of solving problems in electrostatics and magnetostatics, boundary value problems and Green's Functions, fields in media, and Maxwell's Equations and time varying fields.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5332. Materials Characterization.**

This course covers skills and knowledge required for microscopy methods including optical microscopy, scanning electron microscopy, scanning tunneling electron microscopy, atomic force microscopy, and confocal microscopy. Topics covered include x-ray and neutron diffraction techniques including structure analysis, powder and glancing angle diffraction, pole figure, texture analysis, and small angle scattering. Prerequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 5334. Relativity.**

This course includes a review of special relativity, an introduction to the mathematics of tensor calculus and differential geometry, and such topics from general relativity as the Schwarzschild solution and black holes, tests of general relativity, cosmological models, and applications of relativity in the global positioning system (GPS).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5350F. Astrophysics.**

This course surveys a variety of issues in astrophysics through problem solving, quantitative measurements, and theoretical reasoning. Topics include celestial mechanics, stellar structure and evolution, star formation, and supernova remnants.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350G. Electrical and Magnetic Characterization Methods.**

This course introduces electric and magnetic characterization methods important to metals, magnetic and semiconductor materials and devices. Various measurement techniques and methods will be reviewed. Students will learn to work with characterization tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350H. Astronomical Spectroscopy.**

A lecture course introducing students to spectroscopy in astronomy, with particular emphasis on molecular spectroscopy. The course will cover a broad range of aspects including the development of spectroscopy in astronomy, the theory of atomic and molecular spectra, spectra in different astrophysical environments, instrumentation and data reduction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350I. Advanced Computational Methods for Physics.**

In this course students will learn and practice the Python computer language along with several of its scientific modules to model, visualize & analyze complex physical systems that cannot be described by mathematical equations with analytical solution. Special attention will be paid to programming techniques for data manipulation & analysis of large amounts of data residing in multiple data sets. The Python implementation of the (free) Anaconda distribution will be utilized. No previous knowledge of Python or programming required since a basic training will be provided in the first lectures, which will serve as an introduction or refresher for students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350J. Optical Materials and Characterization Methods.**

This course is an introduction to optical properties of solids including electronic and vibrational transitions in inorganic and organic thin films and multilayers. Various optical characterization methods and techniques will be reviewed including Raman, FTIR, Photoluminescence, and X-ray Fluorescence spectroscopy. Students will learn to work with those characterization methods and learn how to interpret the various spectra.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5360. Physics Education Research: Teaching & Learning.**

This course is an introduction to pedagogical issues in physics, including their related philosophical analysis and empirical research studies on student learning. Students will be guided to read, analyze, and present existing scholarly research that justifies approaching certain physics topics from particular perspectives and with particular instructional methods. The course is appropriate for future researchers in physics education and future physics teachers at secondary and post-secondary levels.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 5370. Problems in Advanced Physics.**

Open to graduate students on an individual basis by arrangement with the Department of Physics. May be repeated with prior approval of the department. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHYS 5395. Fundamentals of Research.**

Course is available to graduate students only at the invitation of the department. May be repeated with prior approval of the department. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHYS 5398. Industry Internship.**

Supervised work experience in an appropriate high tech industry. Students will be required to keep a daily journal and make a final presentation (both written and oral) describing their accomplishments.

**3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in PHYS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

The graduate minor in Materials Physics requires 9 semester credit hours.

Code	Title	Hours
<b>Required Courses</b>		
Choose 2 courses from the following:		6
PHYS 5320	Solid State Physics	
PHYS 5322	Semiconductor Device Microfabrication	
PHYS 5324	Thin Film Synthesis and Characterization Laboratory	
PHYS 5326		
PHYS 5327	Semiconductor Device Physics	
PHYS 5328	Advanced Solid State Physics	
PHYS 5329		
<b>Elective</b>		
Choose 1 advisor-approved course		3
<b>Total Hours</b>		<b>9</b>

Adversario, Jan Alipante, Lecturer, Coun, Ldr, Adult Ed Sch Psy, Ph.D., Texas State University

Anderson, Lindsey Nicole, Lecturer, Social Work, M.S.W., Washington Univ in St. Louis

Arowojolu, Olaniyi S, Lecturer, Engineering, Ph.D., University of Idaho

Baker, Candace K, Lecturer, Curriculum Instruction, Ph.D., Southern Illinois Univ Carbondale

Blasingame, Dale C, Associate Professor of Practice, Journalism Mass Comm, M.A., Texas State University

Bowers, Jessica Ree, Clinical Assistant Professor, Communication Disorders, M.S., Texas State University

Brecheen, Daveda Karanas, Assistant Professor, Music, M.M., Arizona State University

Brooks, Richard S, Lecturer, Social Work, M.S.W., Texas State University

Bruner, Brian L, Lecturer, Agricultural Sciences, M.B.A., Texas State University

Burson, Sheri Lynn, Lecturer, Health Human Performance, Ph.D., University of Texas at Austin

Busa, Susan Brewer, Lecturer, Theatre Dance, M.F.A., University of Texas at Austin

Byars George, Lise E S, Lecturer, Anthropology, J.D., Washington Univ in St. Louis

Calzada, Lucio, Lecturer, Coun, Ldr, Adult Ed Sch Psy, Ed.D., Texas AM Univ Kingsville

Carpenter, Blaine Earl, Lecturer, Coun, Ldr, Adult Ed Sch Psy, Ph.D., Texas State University

Cassells, Cyrus, Regents' Professor, English, A.M., Stanford University

Catano, Julio, Asst Professor of Practice, Theatre Dance, M.F.A., San Diego State University

Chamberlain, Katharine Lynette, Lecturer, Curriculum Instruction, Ph.D., University of Texas at Austin

Chase, Timothy M, Senior Lecturer, Mathematics, Ph.D., Auburn University

Chaudhary, Vikas, Lecturer, Engineering, Ph.D., Arizona State University

Cherian, Antony, Lecturer, History, Ph.D., University of Texas at Austin

Cunningham, Deborah Lenz, Senior Lecturer, Anthropology, Ph.D., University of Missouri-Columbia

Curry, Tamecia Myers, Lecturer, Social Work, Ph.D., Louisiana State Univ AM College

Dang, Stephanie Lan, Lecturer, Nursing, M.S.N., University of Texas at Austin

DeBow, Faith, Senior Lecturer, Music, M.M., Eastman School of Music

Dharmasiri, Sunethra, Senior Lecturer, Biology, Ph.D., Univ of Hawaii at Manoa

Dorst, Douglas K, Associate Professor, English, M.F.A., University of Iowa

Esselman, Amy Marie, Lecturer, Information Sysys Analytics, DBA, Wilmington College

Farquhar, Charles Craig, Lecturer, Biology, Ph.D., Texas AM University

Fisher, Diane C, Lecturer, Coun, Ldr, Adult Ed Sch Psy, Ed.D., Baylor University

Floyd, Erinn Camille Fears, Lecturer, Curriculum Instruction, Ph.D., University of Georgia

Fox, Kymberly J, Professor of Practice, Journalism Mass Comm, M.A., Univ of the Incarnate Word

Frame, Laura Beth, Lecturer, Health Human Performance, Ph.D., Texas AM University

Furjanic, David James, Lecturer, Curriculum Instruction, Ph.D., University of Oregon

Gargar, Jimmy, Lecturer, Nursing, M.S.N., New Mexico State Univ Main Campus



Gibson, Monica Pasut, Lecturer, Theatre Dance, M.F.A., Texas State University

Gonzalez, Rene Homero, Lecturer, Music, M.M., Texas State University

Gronberg, Sharon M, Senior Lecturer, Mathematics, Ph.D., University of Texas at Austin

Guevara, Yolanda Reyes, Lecturer, Coun, Ldr, Adult Ed Sch Psy, Ph.D., Texas State University

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Hall, Dorothy Ledbetter, Lecturer, Coun, Ldr, Adult Ed Sch Psy, Ph.D., University of Texas at Austin

Hammett, Chad A, Senior Lecturer, English, M.F.A., Texas State University

Harvey, Christopher Jermaine, Lecturer, Org, Workforce, Ldrshp Stds, Ed.D., Univ of Mary Hardin-Baylor

Haverland, Amanda Ann, Lecturer, Biology, Ph.D., Texas State University

Hegde Niezgoda, Asha Latha, Professor Emerita, Family Consumer Sciences, Ph.D., Oklahoma State University

Hendrix, April Natalie, Lecturer, Coun, Ldr, Adult Ed Sch Psy, Ph.D., Texas State University

Hinojosa Prieto, Hector Roberto, Lecturer, Engineering Technology, Ph.D., University of Cologne

Hogan, Brendon Hughes, Lecturer, Nursing, PHARMD, University of Texas at Austin

Horony, Staci E, Lecturer, Curriculum Instruction, Ed.D., Concordia University

Humphrey, Whitney Lee, Lecturer, Coun, Ldr, Adult Ed Sch Psy, Ph.D., Univ of Texas at San Antonio

Johnson, Jennifer L, Clinical Assistant Professor, Communication Disorders, MSCD, Texas State University

Johnson, Vanessa Anne Couto, Lecturer, English, M.F.A., Texas State University

Kilajian, Taniel Maher, Lecturer, Theatre Dance, M.F.A., University of Texas at Austin

Kim, Eun Hae, Lecturer, Social Work, Ph.D., University of Pennsylvania

Kim, Youjeong, Associate Professor, Journalism Mass Comm, Ph.D., Penn State University Park

Kirkpatrick, Lisa Lynne, Lecturer, Coun, Ldr, Adult Ed Sch Psy, Ph.D., Texas State University

Klose, Laurie, Lecturer, Coun, Ldr, Adult Ed Sch Psy, Ph.D., Univ of California, Berkeley

Lee, Kyung-Ae, Lecturer, Music, D.M.A., University of Texas at Austin

Lesieur, Stacey Renee, Clinical Lecturer, Communication Disorders, M.S., University of Texas at Dallas

Levy, David Adrian, Lecturer, Political Science, L.L.M., Georgetown University

Lorenz, James G, Lecturer, Physical Therapy, D.P.T., Texas Tech Univ Health Sci Center

Mackenzie, Todd Allan, Clinical Assistant Professor, Health Administration, M.S., University of North Texas

Mendoza, Martin, Lecturer, Curriculum Instruction, Ph.D., Texas AM University

Moczygomba, Jacqueline A, Associate Professor, Health Informatics and Info Mgmt, M.B.A., Texas State University

Mondal, Sejuti, Lecturer, Agricultural Sciences, Ph.D., Texas AM University

Moore, Bobbie J, Lecturer, Management, M.B.A., Texas State University

Morgan, Elizabeth Leigh, Lecturer, Family Consumer Sciences, Ph.D., University of Texas at Austin

Mowrey, Kara Renee, Lecturer, Org, Workforce, Ldrshp Stds, Ed.D., Univ of Texas at San Antonio

Nyamapfumba, Rudo TB, Lecturer, Social Work, D.S.W., Capella University

O'Neal, Sharon F, Associate Professor Emeritus, Curriculum Instruction, Ph.D., University of Texas at Austin

Patek, Kyle Turner, Senior Lecturer, Health Human Performance, M.S., Texas State University

Penn, Beverly, Distinguished Professor Emerita, Art Design, M.F.A., State Univ of NY at New Paltz

Perez, Cecilia T, Clinical Lecturer, Communication Disorders, MSCD, Texas State University

Pierdolla, Eryn Linnae, Lecturer, Agricultural Sciences, Ed.D., Texas Tech University

Prince, Benjamin John, Senior Lecturer, Geo Environmental Studies, Ph.D., Texas State University

Ramkumar, Vasant Chandkumar, Lecturer, Computer Science, Ph.D., City University of New York

Reardon, Robert F, Lecturer, Coun, Ldr, Adult Ed Sch Psy, Ph.D., University of Georgia

Roaten, Gail K, Associate Professor, Coun, Ldr, Adult Ed Sch Psy, Ph.D., Texas AM Univ-Corpus Christi

Robblee, Sarah Katrina, Lecturer, English, Ph.D., Texas Tech University

Rogers, Lisa, Lecturer, Social Work, M.S.T., University of Texas at Austin

Ruiz, Rachel S, Lecturer, Org, Workforce, Ldrshp Stds, Ph.D., University of Texas at Austin

Ruiz Winner, Veronica Diane, Lecturer, Curriculum Instruction, Ph.D., University of Texas at Austin

Rushing, Sidney Lanier, Lecturer, Theatre Dance, M.F.A., Texas State University

Saenz, Gabriel Luz, Lecturer, Nursing, M.S.N., Univ of Tex Hlth Sci San Antonio

Scharlach, Jennifer M, Associate Professor of Practice, Journalism Mass Comm, M.A., Texas State University

Seed, Daniel F, Asst Professor of Practice, Journalism Mass Comm, M.A., Texas State University

Shields, Sara Michelle, Lecturer, Journalism Mass Comm, M.A., Texas State University

Spencer, Jeanne Montgomery, Lecturer, Coun, Ldr, Adult Ed Sch Psy, Ed.D., Auburn University

Spooner, Melinda Henrietta, Lecturer, Chemistry Biochemistry, Ph.D., Oregon State University

Stirtz, Lori L, Chair - Associate Professor, Communication Disorders, M.A., Case Western Reserve University

Stokes Batts, Stacy Renea, Lecturer, Social Work, M.S.W., Texas State University

Terry, Nicole Hugie, Lecturer, Nursing, D.N.P., University of Massachusetts

Thompson, Courtney T, Lecturer, Curriculum Instruction, Ph.D., Univ of Texas at San Antonio

Tipps, Jason Douglas, Clinical Lecturer, Communication Disorders, MSCD, Texas State University

Underhill, Barry Alan, Asst Professor of Practice, Family Consumer Sciences, M.F.A., Syracuse University

Villers, Lance C, Lecturer, Coun, Ldr, Adult Ed Sch Psy, Ph.D., Texas AM University

Wagner, Matthew Wayne, Lecturer, Biology, Ph.D., Texas AM University

Walters-Snider, Ashley Nicole, Clinical Assistant Professor, Nursing, M.S.N., Texas AM Univ-Corpus Christi

Webb, Britney K, Senior Lecturer, Health Human Performance, M.Ed., Tarleton State University

Wendel, Renee M, Clinical Assistant Professor, Communication Disorders, M.S., Texas State University

Whitworth, Clifford Kirk, Lecturer, Org, Workforce, Ldrshp Stds, Ph.D., University of North Texas

Williams, Deirdre Aurora, Asst Professor of Practice, Curriculum Instruction, Ed.D., Argosy University, Washington DC

**ACC 2301. Accounting in Organizations and Society.**

Introductory accounting course for non-business majors. Describes the role of accounting as an information system essential for the operation of today's organizations. Focus is on (1) how data is captured and processed to provide information for decision-making, and (2) how the information provided can be used for decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 2361. Introduction to Financial Accounting.**

This course introduces financial accounting concepts and their application in the accounting process for business organizations, including financial statement preparation, analysis and communication of financial information and related ethical responsibilities. Prerequisite: MATH 1315 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2331 or MATH 2417 or MATH 2471 or HON 3391 or ACT Mathematics score of 27 or better or SAT Mathematics score of 580 or better or SAT Math Section Score 600-800.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**TCCN:** ACCT 2301

**ACC 2362. Introduction to Managerial Accounting.**

This course provides an introduction to the use of accounting information as an aid to management decision making and budgeting. Students will gain an appreciation of control processes and an understanding of accounting reports and related ethical responsibilities. Prerequisites: ACC 2361 and ISAN 1323 and (MATH 1315 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2331 or MATH 2417 or MATH 2471 or HON 3391); all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**TCCN:** ACCT 2302

**ACC 3305. Financial Accounting and Reporting.**

This course expands upon financial accounting concepts introduced in ACC 2361 by emphasizing the use of financial accounting principles to prepare and analyze an organization's financial statements and provides an in-depth study of the accounting cycle. Prerequisites: ACC 2361 with a grade of "C" or better and ISAN 1323 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3308. Survey of Income Tax.**

This course is an introduction to federal income tax provisions, concepts and issues concerning individuals, business and property transactions. The coursework focuses on income and expense recognition as well as tax planning opportunities. Prerequisite: ACC 3305 with a grade of "C" or better or ACC 3313 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3313. Intermediate Accounting I.**

An in-depth study of financial accounting concepts and standards with emphasis on current theory and practices relating to corporate financial statements particularly stressing elements of the balance sheet. Prerequisite: ACC 3305 with a grade of "B" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3314. Intermediate Accounting II.**

This course is a continuation of ACC 3313 and provides an in-depth study of advanced financial accounting topics. Prerequisite: ACC 3313 with a grade of "B" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3323. Data Analytics for Accounting.**

This courses introduces students to the application of data analytics in accounting. The focus is on developing a data analytics mindset so that students can critically think through the planning, analysis, and interpretation of data analysis results before making and communicating a professional judgment or decision. Prerequisite: ACC 3305 with a grade of "B" or better and [QMST 2333 or MATH 2328] with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3363. Governmental Accounting.**

A study of concepts and techniques of fund accounting, and financial reporting for governmental and not-for-profit organizations including state and local government, universities, hospitals, and other public sector entities. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3365. Cost/Managerial Accounting.**

The study of cost/management accounting within the manufacturing and merchandising environment. Includes the analysis of cost accumulation, planning, and control within the organization. Specific topics emphasized are job order and process costing; standard costing, standard costing and variance analysis; absorption and direct costing; budgetary procedures; cost/volume profit analysis; and capital budgeting techniques. Prerequisite: ACC 2362 with a grade of "C" or better and [QMST 2333 or MATH 2328] with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 3385. Accounting Systems.**

A study of elements of theory, procedures, and practice relating to system design and implementation for manual and computerized accounting information systems. Emphasis placed on system selection, data entry, file structure, internal control implementation, and report generation for various information end-users. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better and CIS 3380 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ACC 4313. Auditing and Internal Controls.**

This course provides a study of the theory and practices relating to auditing. The course emphasizes the procedures used to evaluate the effectiveness of risk management and control processes, including prevention and detection of fraud. Prerequisite: ACC 3385 with a grade of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**ACC 4390A. International Accounting.**

This course introduces students to accounting issues unique to multinational enterprises and international business activity. Financial accounting practices are compared across different countries. The development of international accounting standards is also explored. (MULT) Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5315. Selected Topics in Financial Accounting.**

The study of specialized financial accounting topics, existing and prospective, necessary for an advanced understanding of financial reporting. Topics include: pensions and post-retirement benefits, deferred taxes, derivatives, share-based payments, interim and segment reporting and emerging issues of the Emerging Issues Task Force. Prerequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5316. Advanced Accounting.**

A study of accounting for business combinations and consolidated financial statements. Additional selected topics may include accounting for multinational operations, interim reporting, SEC reporting, partnership and governmental and not-forprofit accounting. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5320. Auditing.**

A study of the underlying theory of external financial auditing including professional ethics, auditing standards and procedures, and the role of auditor's judgment. (Suggested for CPA eligibility). Prerequisite: ACC 4313 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5323. Accounting Data Analytics.**

This course introduces students to the process of making decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. Prerequisite: ACC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5340. Individual Income Tax.**

A study of the tax concepts and issues involved in an individual's employment and personal life, and in sole proprietorships, property transactions, tax administration and tax practice. Regulatory and ethical issues are incorporated into the discussion. This course may not count as an elective in any master's program in the McCoy College of Business. Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5350. Professional Accounting Research.**

This course provides a study of the sources of authoritative standards in financial accounting. The course develops procedures for identifying the applicable accounting issues, locating appropriate authority, and communicating the results of professional research. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5352. Financial Statement Reporting and Analysis.**

A study of financial statement reporting and analysis. Use of tools and skills will be used to analyze and interpret financial reports for assessing financial performance of firms to facilitate investment, lending, and other financial decisions in a variety of business contexts. Prerequisite: ACC 3305 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5355. IT Auditing.**

A study of the IT audit: The process of collecting and evaluating evidence of IT system practices and operations. The course develops understanding of the procedures to test whether the systems are safeguarding assets, maintaining data security and operating effectively and efficiently. Prerequisite: ACC 3305 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5357. Regulation and Professionalism.**

This course will cover the professional and legal responsibilities and liabilities of the accounting profession and tax preparers; the commercial law applicable to business transactions; and the legal structure of business organizations. It will also provide a basic overview of corporate and partnership taxation, focusing on current topics and developments. Prerequisites: ACC 3313 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5361. Accounting Analysis for Managerial Decision Making.**

Use of accounting information for improving managerial decision making. Emphasis is on understanding the practice of business management, budgeting, cost behavior, and operational, internal, and management control. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5362. Cost and Managerial Accounting Theory.**

A study of recent developments and topics in the area of cost and managerial accounting. Includes a discussion of quantitative techniques and their applicability to accounting problems. Prerequisites: ACC 3365 or ACC 5361 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5366. Business Entity Taxation.**

Federal income tax provisions affecting business decisions, with an emphasis on C Corporations, Limited Liability Companies, and Partnerships. An introduction to the choice, formation, organization, operation and distribution rules of the preceding business entities. Prerequisite: ACC 3313 and [ACC 4328 or ACC 3308] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5369. Special Studies in Accounting.**

Directed study and research on selected accounting topics, including the development of accounting thought and research in; advanced tax topics, international accounting, professional ethics and managerial and financial accounting. Courses will be offered as independent instruction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ACC 5370. Internship in Accounting.**

Experiential learning during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ACC 5372. Tax Research.**

An examination of the sources of tax authority, which include its primary sources (legislative, judicial, and administrative), as well as secondary sources. The course also develops procedures for identifying the applicable tax issues, locating appropriate tax authority, and communicating the results of tax research. Prerequisite: ACC 4328 or ACC 3308 with a grade of "B" or better. Corequisite: ACC 3314 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5373. Fraud Examination.**

An introduction to the theory and techniques used to prevent, detect, and solve occupational and financial fraud and corruption schemes. Includes forensic accounting procedures, interviewing techniques, rules of evidence, documentary evidence gathering, report writing and other aspects of litigation support. Prerequisite: ACC 3305 or ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ACC 5375. Business Information Consulting.**

Integrative capstone for the MSAIT program using principles and concepts applied through the analysis and presentation of case studies dealing with current issues or emerging trends in the fields of accounting and information technology for the accounting professionals serving as consultants. Prerequisite: ACC 3305 with a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5377. Partnership Taxation.**

A comprehensive study of the tax implications of conducting a business as a partnership or as a limited liability company. Life-cycle analysis and tax planning considerations are emphasized. Prerequisite: ACC 4328 or ACC 3308 or ACC 5366 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5378. Tax Practice, Procedures, Audits and Controversy.**

This course focuses on the procedural aspects of tax planning and tax return preparation. Coverage includes IRS enforcement tools and corresponding taxpayer rights, audits and appeals, civil and criminal penalties, and statutory relief provisions. Professional standards and ethical considerations in tax practice are emphasized. Prerequisites: ACC 3314 and [ACC 4328 or ACC 3308] both with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5389. Corporate Governance and Ethics.**

A study of the corporate governance and ethical issues in accounting, including ethical reasoning, integrity, objectivity, independence, core values and professional issues. Prerequisite: ACC 3313 with a grade of "B" or better. Corequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ACC 5390A. International Accounting.**

A study of the impact of international business activity on accounting standard setting. This course investigates the development of international accounting standards and compares those standards to US standards. Students taking ACC 4390A for credit may not take ACC 5390A for credit. (MULT) Prerequisite: ACC 3313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ACC 5390G. Sustainability Reporting.**

This course on sustainability reporting strategies will examine analytical methods and reporting techniques used by for-profit and non-profit companies to support sustainable operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5390L. Exploring Accounting Oversight in Washington, D.C..**

This course offers an immersive learning experience in Washington, D.C. The course bridges classroom theory with real-world practice, providing a holistic understanding of the regulatory landscape through exploration of the key institutions shaping the accounting profession. The core of the course consists of guided visits to these institutions. Prerequisite: ACC 4313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ACC 5680. Internship in Accounting.**

This internship involves experiential learning over one entire semester during which the students work in accounting. This work experience may be in public, industry, or governmental accounting units. The student is immersed in a variety of intensive work assignments with increasing levels of responsibility. Students taking ACC 5370 for credit may not take ACC 5680 for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 4321. Introduction to Adult Learning.**

This course will cover a range of topics of interest to professionals working with adult learners in a variety of settings, including characteristics and motivations of adult learners, theories of adult learning and intelligence, and modes of adult cognitive and psychosocial development. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 4322. Foundations of Human Resources Development.**

This course examines the primary role of human resources development in the organization to help people and organizations effectively manage change. It focuses on strategies for implementing training and organizational development efforts that positively impact the performance of the individual and the work group. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 4325. Methods for Teaching Adults.**

This course addresses methods and techniques for effective instruction of adults across a variety of settings and content. Emphasis is on concepts, theories, and principles relevant to the selection, use, and evaluation of instructional strategies. Participants will have an opportunity to practice strategies that expand their teaching repertoire. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 4330. Adult Education Program Planning and Management.**

This course introduces skills and concepts needed to plan, evaluate, and manage adult education programs within various settings. This course addresses principles and procedures, utilization of assessment, goal setting, and other effective strategies for developing learning opportunities and programs responsive to human, professional, and community needs. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 4343. Organization Development.**

This course addresses a range of topics, including the effects of change, methods of organizational change, and factors influencing organizational development success. Students learn the roles of internal and external organizational development consultants and the tools and processes for helping organizational members identify problems, gather and analyze information, and implement solutions. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 4345A. Applied Linguistics for ESL/EFL Teachers of Adults.**

This course is designed to provide language students an introduction to the elements of the English language as applied to the teaching of ESL in adult settings; specifically, the course covers English syntactic structure, morphology, and phonology. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ADED 4384. Internship in Human Resource Development.**

This course requires an 80-hour internship as well as reflexive writing activities connecting internship experiences to content from previous courses. The experience will involve orientation to the roles, responsibilities, and functions of professionals in human resource development. Prerequisite: [ADED 4325 and ADED 4330] OR [ADED 4325 and 4322] OR [ADED 4325 and ADED 4343] OR [ADED 4330 and 4322] OR [ADED 4330 and ADED 4343] OR [ADED 4322 and ADED 4343] with grades of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5314. Community Development for Educators.**

Educators in community organizations and higher education will develop a theoretical and practical understanding of the role of learning, teaching, and leading within a community development framework. They will develop an awareness of self as change agent and community builder, as well as the importance of tapping into community assets.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5321. Adult Learning and Development.**

This seminar will cover a range of topics of interest of professionals working with adult learners in a variety of settings, including characteristics and motivations of adult learners; theories of adult learning and intelligence; modes of adult cognitive and psychosocial development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5322. Human Resources and Professional Development.**

This course examines the primary role of human resources development in the organization to help people and organizations effectively manage change. It focuses on strategies for implementing training and organizational development efforts that positively impact the performance of the individual and the work group.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**ADED 5325. Teaching Adults: Principles and Practices.**

This seminar addresses methods and techniques for effective instruction of adults across a variety of settings and content. The emphasis is on concepts, theories, and principles relevant to the selection, use, and evaluation of instructional strategies. Participants will have an opportunity to practice strategies that expand their teaching repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5330. Planning, Evaluating, and Managing Programs in Adult Education.**

This seminar course introduces skills and concepts needed to plan, evaluate, and manage adult education programs within various settings. This course addresses principles and procedures, utilization of assessment, goal setting, and other effective strategies for developing learning opportunities and programs responsive to human, professional, and community needs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5335. Applied Research in Adult Education.**

An examination of purpose, principles, and methods of current research in adult education. Quantitative, qualitative, and mixed methods research design will be investigated as used in applied research including action research, evaluation research, and needs assessment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5337. Adult Literacy.**

The course is designed to provide students with a broad foundation about the needs of undereducated adults, including adult English language learners. Students will analyze and evaluate adult literacy legislation, instruction, research, and delivery systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5338. Applied Linguistics for ESL Teachers of Adults.**

This course is designed to provide language teachers a practical introduction to the elements of the English language as applied to the teaching of ESL in adult settings; specifically, the course covers English syntactic structure, morphology, and phonology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ADED 5339. Adult Literacy ESL Assessment and Evaluation.**

This course is an introduction to assessment of adult students with emphasis on literacy and ESL populations. It is an overview of assessment constructs and social and historical movements in student literacy assessment and evaluation traditional assessment and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5340. Adult Second Language Acquisition.**

This course covers topics related to contemporary adult second language acquisition practices. It also examines the complexities of adult second language acquisition and the ways in which limited English-proficient adults learn more efficiently. Class readings and projects address a variety of issues dealing with adult second language acquisition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5342. Adult ESL Methods and Materials.**

This course reviews traditional and contemporary adult language teaching methodologies. It focuses on the design of lessons that integrate listening, speaking, reading, writing, culture and all language skills. This course provides strategies for choosing, adopting, and adapting textbooks that integrate teaching material appropriate to different adult language learning settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5343. Organizational Learning and Development.**

The course addresses a range of topics, including the effects of change, methods of organizational change, and factors influencing organizational development success. Students learn the roles of internal and external organizational development consultants, tools and processes for helping organizational members identify problems, gather and analyze information, and implement solutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5344. Multicultural Perspectives in Postsecondary Education and Adult Education.**

This seminar covers a broad range of topics related to diversity within postsecondary and adult education. Course readings and projects relate to a wide variety of settings including colleges and universities, adult literacy programs, the workplace, and community-based organizations. Students taking ADED 5344 may not take ADED 7344 for doctoral level credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ADED 5345. Current Issues in Adult, Continuing and Professional Education.**

A seminar style course focusing on current issues in continuing and professional education including research and professional practice. Specific emphasis will vary depending on changes in contemporary issues. Students taking ADED 5345 may not take ADED 7345 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5346. Adult and Nontraditional Students in Higher Education.**

This seminar focuses on the "nontraditional student" in higher education, with emphasis on undergraduates 25 and older. Also considered are other nontraditional students facing similar challenges to participation in higher education. Topics include student characteristics, motivations, barriers, persistence, and outcomes as well as institutional and programmatic responses to this population.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5357. Advanced Studies in Action Research.**

This course examines underlying theory, practice, skills, and issues in action research. Students will be introduced to various educational research methods used in action research and review the components and processes of action research. They will develop a plan for an action research project focused on a specific educational problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5364. Team Development in Education.**

This course addresses the development and use of educational teams to improve educational organizations, teaching, and learning. Team development instruction focuses on managing teams, identifying leadership roles. Study topics include: the importance of shared leadership, product teams, and team decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5378. Problems in Adult Education.**

This course is designed to examine topical problems faced by practitioners in adult education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5382. Foundations of Adult Education.**

This course will provide an overview of the field of adult education in its various forms and settings. Topics include (1) historical origins of adult education as a field of study and practice, (2) philosophical perspectives, (3) organization and delivery of adult education, and (4) emerging developments and issues in the profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 5384. Internship in Adult Education.**

This course is an 80-clock hour internship is required of all Adult Education majors. The experience involves instruction and/or administration in an adult education setting and includes orientation to the roles, responsibilities, and functions of professionals in adult education. Prerequisite: ADED 5321 and ADED 5330 and ED 7324 and ADED 7325 all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Adult Education 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ADED 7325. Teaching Adults: Principles and Practices.**

Seminar that addresses methods and techniques for effective instruction of adults across a variety of settings and content. Emphasis on concepts, theories, and principles relevant to the selection, use, and evaluation of instructional strategies. Participants will have an opportunity to practice strategies that expand their teaching repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 7337. Adult Literacy.**

This course is designed to provide students with a broad foundation about the needs of undereducated students with a broad foundation about the needs of undereducated adults, including adult English language learners. Students will analyze and evaluate adult literacy legislation, instruction, research, and delivery systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 7342. Adult ESL Methods and Materials.**

This course reviews traditional and contemporary adult language teaching methodologies. It focuses on the design of lessons that integrate listening, speaking, reading, writing, culture and all language skills. This class provides strategies for choosing, adopting, and adapting textbooks that integrate teaching material appropriate to different adult language learning settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 7343. Organizational Learning and Development.**

The course addresses a range of topics, including the effects of change, methods of organizational change, and factors influencing organizational development success. Students learn the roles of internal and external organizational development consultants, tools and processes for helping organizational members identify problems, gather and analyze information, and implement solutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 7344. Multicultural Perspectives in Postsecondary Education and Adult Education.**

This seminar covers a broad range of topics related to diversity within postsecondary and adult education. Course readings and projects relate to a wide variety of setting including colleges and universities, adult literacy programs, the workplace, and community based organizations. Students who have completed ADED 5344 may not take this course for doctoral credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ADED 7345. Current Issues in Adult, Continuing and Professional Education.**

A seminar style course focusing on current issues in continuing and professional education including research and professional practice. Specific emphasis will vary depending on changes in contemporary issues. Students who have completed ADED 5345 may not take this course for doctoral credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ADED 7346. Adult and Nontraditional Students in Higher Education.**

This seminar focuses on the "nontraditional student" in higher education, with emphasis on undergraduates 25 and older. Also considered are other nontraditional students facing similar challenges to participation in higher education. Topics include student characteristics, motivations, barriers, persistence, and outcomes as well as institutional and programmatic responses to this population.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**A S 1000. Leadership Laboratory.**

An integral and mandatory two-hour lab accomplished concurrently with all Aerospace Studies courses. It is a progression of practical command and staff experiences that develop leadership potential. AFROTC cadets plan, organize, direct, coordinate, and control all activities. The lab is repeatable without credit because it focuses on different leadership processes.

**0 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Time Conflicts Permitted

**Grade Mode:** Credit/No Credit

**A S 1110. The Air Force Today I.**

A study of the doctrine, mission, and organization of the United States Air Force; United States strategic offensive and defensive forces, their missions and functions; and employment of nuclear weapons. Co-requisite: A S 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**A S 1120. The Air Force Today II.**

An introduction to flight, oral and written communication for the Air Force officer, Air Force installations, the Air Force profession and how the Air Force integrates with the U.S. Army, Navy, Marines, and Coast Guard. Co-requisite: A S 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**A S 2110. The Development of Air Power I.**

A historical study of the development of air and space power beginning before the first powered flights through WWI, the inter-war years, and WWII, tracing the development of various air power concepts with a focus on factors prompting aerospace research and technological change. Co-requisite: A S 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**A S 2120. The Development of Air Power II.**

A continuation of A S 2110 studying the historical development of air and space power from Vietnam to the present. Events and trends in the history of airpower are examined, emphasizing examples of the impact of air and space power on strategic thought. Co-requisite: A S 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter



**A S 3311. Leadership and Management I.**

A study of the framework of leadership in the Air Force (AF), part 1. Practical case studies examine AF leadership and management situations and discipline and ethics scenarios that demonstrate applications of the concepts. The course emphasizes communication skills used by officers in the AF. Co-requisite: A S 1000.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**A S 3312. Leadership and Management II.**

A study of the framework of leadership in the Air Force (AF), part 2. Practical case studies examine AF leadership and management situations and discipline and ethics scenarios that demonstrate applications of the concepts. The course emphasizes communication skills used by officers in the AF. Co-requisite: A S 1000.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**A S 4311. National Security Forces in Contemporary American Society I.**

Part 1 of the study of professional Air Force (AF) officers in a democratic society; societal attitudes toward the armed forces; national defense structure, policy development; and military law. AFROTC cadets study topics that prepare them for duty as AF officers. The course emphasizes AF communication skills. Co-requisite: A S 1000.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**A S 4312. National Security Forces in Contemporary American Society II.**

Part 2 of the study of professional Air Force (AF) officers in a democratic society; societal attitudes toward the armed forces; national defense structure, policy development; and military law. AFROTC cadets study topics that prepare them for duty as AF officers. The course emphasizes AF communication skills. Co-requisite: A S 1000.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**AAS 2310. Introduction to African American Studies.**

Course provides an overview of black culture in America from an interdisciplinary approach, employing scholarship from history, literature, music, visual and performing arts, folklore, religion, sociology, psychology, philosophy, economics, and political science. It introduces epistemological considerations, theories, and methods that form the field of African American and African Diaspora Studies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**AAS 3310A. Blacks, Film, and Society.**

This course examines Black American cinema between 1919 and the present and how film can help society better understand black history, black culture, and the black experience in America. The course also explores what each film teaches Blacks about Blacks and what film teaches Whites and other groups about Blacks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**AAS 3350. Black Queer Experience.**

This course will introduce students to the historical study of Black LGBTQ peoples. We will use primary sources such as letters, diaries, newspaper articles, and blues songs, along with historical and interdisciplinary scholarship and films, to learn about the experiences of same-sex loving and gender-transgressing Black people. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**AAS 3399. Negotiating the Color Line.**

This course examines how Black Americans have negotiated the Black-White color line from the 1800s to the present day.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**AAS 4320. Global Perspectives on the African Diaspora.**

Course connects the transatlantic slave trade, contemporary migrations, their legacies, and speaks to the broader issues of the African diaspora in relation to previous and ongoing struggles of black people for rebirth, progress, justice, and racial uplift. Examines African Diasporic women's definition of feminism while suggesting no universal black feminism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**AAS 4377. Intersections of Race, Class, Gender, and Sexualities.**

This course critically examines how race, class, gender, and sexuality intersect to shape the lived experiences of a wide array of communities in the United States. Students cannot receive credit for both WS 4377 and AAS 4377. (WI) Prerequisite: AAS 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**AAS 4388. Independent Research in African American Studies.**

Independent study course open to advanced students on an individual or small group basis. The research area in African American Studies, bibliography, and study paper outline are to be approved by the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**AG 1110. Careers in Agriculture.**

This course is an introduction to careers available in the broad field of agriculture including an overview of personal and career qualifications needed for workplace success.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** AGRI 1131

**AG 1445. Basic Animal Science.**

An introductory course designed to acquaint students with the importance of the livestock industry. A study of the types and breeds; market classes and grades of beef cattle, swine, sheep, goats, horses, and poultry; attention will be given to breeding, judging, care, and management.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** AGRI 1419

**AG 2275. Agricultural Safety.**

This course covers the fundamentals of hazards, methods of injury prevention, safety education, regulations and advancing safety and health in the agriculture industry. This course will identify potential industrial hazards and means to mitigate these hazards and develop a culture of safety within an organization.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 2313. Agronomic Crops.**

A study of the production, harvest practices, storage, and use of cereal and feed grains, fiber crops, forages, and other related crops requiring special technology.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** AGRI 1307

**AG 2318. Anatomy and Physiology of Livestock and Poultry.**

This course provides a fundamental knowledge of major anatomical and physiological features of the skeletal, muscular, endocrine, cardiovascular, urinary, respiratory, and nervous systems of various livestock species. Gross and microanatomy of livestock and poultry will also be covered. Prerequisite: AG 1445 with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 2345. Horse Management.**

A course designed as a broad but thorough coverage of most areas of horse husbandry and production, including anatomy, physiology, breeding, feeding, training, and health care. Laboratory sessions are designed to acquaint the student with modern methods of breeding, training, and care of the horse.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 2373. Introduction to Agricultural Engineering.**

An introductory course designed to acquaint students with a wide range of concepts, principles and applied technologies in agricultural engineering. A problem solving course.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** AGRI 2303

**AG 2374. Metal Fabrication and Welding Technology for Agriculture.**

This course covers the principles and practices of applied metallurgy and welding. Emphasis is given to the management of the technologies and techniques associated with oxy-fuel cutting, shielded metal arc welding (SMAW), Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW), and Plasma Arc Cutting (PAC). Prerequisite: AG 2373 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 2379. General Horticulture.**

A survey of the general field of horticulture including general areas of employment.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** AGRI 1315

**AG 2383. Introduction to Agricultural Economics.**

The role of agriculture in the general economy; the study of basic economic concepts with their application to the agricultural firm; the structure and operation of the marketing system; the functional and institutional aspects of agricultural finance; international trade; and government farm programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** AGRI 2317

**AG 2390. Computer Applications in Agriculture.**

Introduction to computers and computer technology; operation and application of the computer in production agriculture and agricultural business, services and industries. Includes characteristics of computer hardware and software, accessing and using the computer in agriculture.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** AGRI 1309

**AG 2391. Livestock Behavior and Welfare.**

This course provides foundational knowledge on how livestock behave. It also provides the knowledge of how to handle livestock humanely. Livestock stress and physiological response to human interaction will also be discussed. Prerequisite: AG 1445 and [BIO 1330 and BIO 1130] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3300. Undergraduate Research in Agricultural Sciences.**

This course introduces students to the fundamentals of scientific inquiry in agriculture. Topics include quantitative and qualitative research methods, data management, data analysis, data interpretation, and data dissemination, with emphasis on their applications in agriculture.

Prerequisite: A minimum 3.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3301. Principles of Livestock Genetics.**

This course focuses on the fundamental principles of genetics and their application to animals. The physical basis of Mendelian inheritance, expression and interaction of genes, gene frequency, linkage, sex linkage, inbreeding, line breeding, and crossbreeding as applied to selection indices for livestock are examined. (WI) Prerequisites: AG 1445 and BIO 1130 and BIO 1330 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**AG 3302. Herbaceous Plant Materials.**

This course will include the identification, selection, use, and management of annuals, perennials, herbs, and ornamental grasses in the landscape. Each student will learn irrigation, fertilization, pruning, and other cultural needs of such plants. The laboratory will complement lecture.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3304. Propagation of Horticultural Plants.**

Principles and practices of propagating ornamental plants, vegetables, and fruits by sexual and asexual methods including germination of seed, layerage, graftage, division, cuttage, bulbs, corms, and other vegetative plant structures. Study of physical, physiological and environmental factors affecting propagation of ornamental plants.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3305. Woody Plant Materials for Outdoor Landscapes.**

Study of woody plant material including fruit and ornamental trees, shrubs, and ground covers and their identification, nomenclature, and use in the planting and development of home landscapes.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3306. Flowers and Plants for Interior Design.**

Study of flowers, cut flowers, foliage and blooming pot plants to enhance the interior design of homes and businesses including their identification, cultural requirements, uses, diagnoses and corrective measures of disorders. Basic principles of flower arrangement and the preparation of floral and plant decoration as used in interior design. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**AG 3308. Organic Gardening.**

This course introduces the principles and practices of basic gardening using organic methods. Topics include an overview of soil preparation, warm and cool season crops, propagation of plants, and weed, insect, and disease identification and management.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3310. Agriculture Power and Machinery Technology.**

This course covers the principles of 2 stroke and 4-stroke cycle engines, ignition, and combustion types including injection systems. Components including power and power transmissions and hydraulic systems will also be addressed. Prerequisites: AG 2373 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] both with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3314. Animal Health and Disease Control.**

This course is designed to introduce immunology and provide a basic understanding of veterinary principles as applied to prevention and treatment of domestic livestock diseases. Common diseases of livestock are considered, with emphasis on immune function, symptoms, prevention, and treatment. Prerequisite: AG 1445 and AG 2318 and BIO 1330 and BIO 1130 all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3317. Farm Management.**

Tools and techniques which are basic to the study of farm organization and decision making, the wise allocation of factors of production, the keeping of records, and income tax management. Prerequisites: AG 2383 and AG 2390 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] all with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3318. Agricultural Business Management.**

This course introduces institutions and functions of agribusiness. The institutional structure of agribusiness such as feed, farm machinery and equipment, farm chemicals, financial institutions and private and public agri-services will be delineated. Various agribusiness functions such as organizational behavior and financial, market and human resource management will be discussed. Prerequisite: AG 2383 and AG 2390 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3319. International Food and Fiber Systems.**

This course presents the food and fiber system from an international perspective. Analysis of food production and consumption patterns under different world economic systems, causes of surpluses and shortages throughout the world; the role of trade in solving food and agricultural problems. Global outlook and situation for food and fiber. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Multicultural Content

**Grade Mode:** Standard Letter

**AG 3321. Range Management.**

Practical problems met in managing native pastures and rangelands. Attention to determining range condition and proper stocking rates, methods of handling livestock on the range, range reseeding, brush control, and poisonous plants. The ecological and physiological response of range vegetation to grazing. Prerequisite: AG 1445 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3325. Animal Nutrition.**

Principles of animal nutrition with emphasis on digestion, absorption, metabolism, and function of nutrients; estimation of feedstuff nutritive value; and requirements of animals. (WI) Prerequisite: AG 1445 and BIO 1130 and BIO 1330 and CHEM 1141 and CHEM 1341 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**AG 3329. Economic Entomology.**

A study of the most common insects of field crops, fruits, and vegetables; life history, methods of attack, damage, and means of preventing and controlling. Collection and mounts of insects will be made.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3330. Applied Wildlife Nutrition.**

Basic and fundamental principles of nutrition for ruminant and non-ruminant wildlife with emphasis in North American and African wildlife. Attention will be given to digestive physiology and anatomy, feed sources, forage resources, and nutrient requirements. Prerequisite: AG 1445 or [BIO 1130 and BIO 1330] any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3331. Reproduction in Farm Animals.**

An examination of the anatomy and physiology of reproductive systems of livestock of economic importance. Attention is given to reproductive failure and disease. The laboratory includes pregnancy testing, semen collection and evaluation, artificial insemination techniques, and evaluation of breeding records. Prerequisites: AG 1445 and AG 2318 and [AG 3301 or BIO 2450] all with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3341. Leadership Development in Agricultural Sciences.**

This course focuses on the foundations of leadership concepts and theories useful in agricultural careers of science, government agency, non-profits and business. Emphasis is placed on the development of individual leadership skills, group situations, and strategies necessary for effective leadership."

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Multicultural Perspective

**Grade Mode:** Standard Letter

**AG 3345. Livestock Selection and Evaluation.**

Detailed consideration of the factors involved in the selection and evaluation of beef cattle, sheep, swine, rabbits, goats, and chickens. Emphasis will be placed on the care, grooming and exhibition of livestock projects. (Junior and Senior standing only) Prerequisite: AG 1445 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3350. Intermediate Microeconomics and Agricultural Application.**

This course focuses on intermediate-level microeconomics and its application in agriculture. The course covers topics such as consumer and producer theories, game theory, labor and capital markets, uncertainty, externalities, and public goods. Prerequisite: AG 2383 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3351. Agricultural Marketing and Sales.**

A study of the food marketing system and farm input sales; includes the functional systems approach that integrates the agricultural input industries into a discussion of food marketing; takes a micro approach to the development of marketing management skills needed in agribusiness; and provides a critical outlook on issues ranging from inputs to final food products. (WI) Prerequisite: AG 2383 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**AG 3352. Quantitative Methods in Agricultural Economics.**

Principles involved in collection, tabulating and analyzing agricultural data. Topics include sampling procedures, questionnaire development, descriptive analysis of data, correlation, prediction and forecasting and tests of significance. Simple computer programs will be stressed for class exercises during the course. Prerequisite: MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3353. Agricultural Structures and Environment.**

Principles and practices associated with structural components, selection, materials of construction, heat and moisture control, and the environmental issues of waste management systems; a problem solving course. Prerequisites: AG 2373 and AG 2390 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] all with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3355. International Agricultural Trade.**

This course focuses on economic forces associated with trade in food and agricultural products between the United States and other countries. The course covers gains from trade, agricultural trade policies (of exporters and importers), exchange rates, and multilateral trade negotiations. The course also explains how economic principles and analytical techniques are applied to international trade and multi-national markets of agricultural products. Prerequisite: AG 2383 and ECO 2315 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471] all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3367. Livestock Ultrasonography.**

This course provides students with the current developments and utilization of ultrasound technology in the livestock industry. Emphasis will be placed on understanding the functionality of an ultrasound machine and the use of ultrasonography in live animal carcass evaluation as well as reproductive techniques including pregnancy determination, fetal sexing, and fetal aging. Prerequisite: AG 1445 and AG 2318 both with grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3375. Management of Agricultural Machinery and Equipment.**

This course addresses the optimization of the equipment phases of agricultural production and processing. Emphasis will be placed on management and decision making principles concerned with the efficient selection, operation, repair, maintenance, and replacement of machinery and equipment. Prerequisites: AG 2373 and AG 2390 and CHEM 1141 and CHEM 1341 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] all with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter



**AG 3381. Beef Cattle Production.**

This course provides students with practical application in the principles of breeding, feeding, and management of commercial and purebred cattle. Students receive first-hand experience and knowledge of breeding techniques, animal handling, genetic selection, nutrition application, marketing, and technology. Prerequisite: AG 3325 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 3426. Soil Science I.**

This course introduces fundamental principles of soil science to acquaint the student with some physical, chemical, and biological properties of the soil. Prerequisites: CHEM 1141 and CHEM 1341 and [AG 2313 or AG 2379 or BIO 1330] all with grades of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 3427. Soil Science II.**

Management of soils as pertaining to their place in the environment. Special emphasis will be given to the role of soil in conventional agricultural systems, natural resource systems, waste management systems, and reclaimed and artificial soil systems. (WI) Prerequisite: AG 3426 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4113. Summer Programs in Agricultural Education.**

This course provides students field experience in summer agricultural education programming in secondary school settings. Students will receive individualized instruction during supervised visits while they are engaged in their field experience. The course includes program planning and educating diverse student learning populations. Prerequisite: AG 4212 with a grade of "C" or better.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4185. Independent Study.**

This course provides advanced undergraduates with opportunities to study any subject matter of special interest in agricultural Sciences. May be repeated two times. (WI) Prerequisite: Department approval and a minimum 3.0 Texas State GPA.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Dual Enrollment Permitted|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4212. Program Building.**

This course focuses on program and curriculum development in agricultural education settings. Primary course elements will include determining program and curriculum goals and objectives, implementing the program, and curriculum evaluation. Corequisite: AG 4343 with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4300. Greenhouse and Nursery Management.**

Planning greenhouses for commercial and home use; plant-nursery layouts. Study of the physical and economic factors affecting the production of plants in the greenhouse and other forcing structures, and in the field; management techniques used in the production and marketing of greenhouse and nursery plants. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4302. Fruit and Vegetable Crop Production.**

Factors influencing small-fruit and tree-fruit and vegetable crop production in the field including root stocks, varieties, soil, planting, transplanting, irrigating, fertilizing, pruning, insects, diseases, nematodes, weeds, chemicals, harvesting, storing, and marketing; greenhouse production of certain vegetables. (WI) Prerequisite: AG 2313 or AG 2379 either with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4304. Landscape Management.**

To acquaint students with the practices and techniques used in professional landscape construction and management, and with the scientific and technical basis for such practices.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 4305. Landscape Design.**

Landscaping combines elements of art and science to create functional, aesthetically pleasing outdoor space. This class helps students develop knowledge of design elements and principles. Students learn site and client analysis techniques for critiquing landscapes. Students learn to communicate ideas through the planning and drawing of landscape plans.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 4307. Professional Development in Agriculture.**

This course requires students to select a topic of current interest appropriate to the major. Critical analysis of the situation including both positive and negative aspects will be encouraged. Findings will be presented in both oral and written form. (Capstone Course).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4310. Agricultural Internship.**

This course integrates professional and academic experience through internship with an external employer. The internship is designed to provide actual work experience, observation and analysis in the student's chosen career field. Prerequisite: Minimum 3.0 Overall GPA.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4311. Instructional Methods for Career and Technology Educators.**

An analysis of the instructional techniques, strategies and methods appropriate to the effective teaching of career and technology subjects. Teaching special populations and teaching in multicultural environments will be addressed. To be taken the Fall semester before student teaching.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4325. Feeds and Feeding.**

Study of feedstuffs used in livestock enterprises. Application of basic nutrients to the needs of different species of livestock. Formulating rations, methods of feeding, feed control laws, and feeding investigation. Prerequisites: AG 3325 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 4326. Advanced Animal Science-Ruminants.**

The application of scientific and technological advances to production and management in ruminant animal production and management. Prerequisite: AG 1445 and AG 2318 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 4328. Advanced Animal Science-NonRuminants.**

Application of basic principles in the production and management of nonruminant animals. Scientific and technological advances with emphasis on overall management, health care, nutrition, genetics, physiology, and marketing of nonruminant animals. Prerequisite: AG 1445 and AG 2318 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4330. Food Technology: Processing Meats.**

Evaluation and grading of carcasses; wholesale and retail cuts of beef, pork, lamb, and poultry. Emphasis on quality controls, testing of finished products that have been frozen, cured, fried, pickled, and canned. Prerequisites: AG 1445 and BIO 1130 and BIO 1330 and CHEM 1141 and CHEM 1341 all with grades of "D" or better or instructor approval.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 4331. Disaster Preparedness and Management in Agriculture.**

This course provides an investigation of past disaster events that have impacted the global and domestic food and agriculture supply. This course also provides the information needed to develop and execute an action response plan for disasters affecting agricultural operations. Both preparation and mitigation of the disaster will be covered. Prerequisite: AG 3341 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4343. Organization and Management for Laboratory Programs.**

This course examines instructional programs involving laboratory equipment and facilities. Curriculum, teaching methods, equipment and facility management practices including various aspects of safety, tool management, inventory and security are emphasized along with facilities layout planning. Must be taken in last semester of program. Corequisite: AG 4212 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 4355. Precision Applications in Land Management.**

This course focuses on engineering practices used in surveying including differential profile leveling and construction surveys. Topics include the use of dumpy levels, transits, total stations, and Global Positioning Systems. This course introduces students to the fundamental components of small unmanned aerial systems (sUAS), sensors and platforms, UAS operational concepts, the principles of UAS data collection, the legal framework within which UAS should be operated and applied, and data processing software in agricultural settings. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319] and AG 2373 and AG 2390 all with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4361. Agriculture Electric and Mechanical Systems.**

Electrical fundamentals applied to agricultural production and processing. Circuits, power, energy, wiring design, and motor fundamentals; selection, installation and operational characteristics. Sensors and control devices including switches, relays, timers, and circuit breakers will be studied. Prerequisite: AG 2373 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**AG 4371T. International Horticulture.**

The purpose of this program is to introduce students to the English culture and way of life, as well as England's historic role in Horticulture, past and present. Students will intensely study from the following four horticultural fields: Ornamental Horticulture, Landscape Design, Vegetables/Fruit Crops, and Vineyards and Hops. The program includes basic instruction in English history, as well as lectures and field trips.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**AG 4371V. Green Revolution & Agricultural Development in Asia.**

This course will provide a detailed retrospective of the Green Revolution in Asia, its achievement and limits in terms of agricultural productivity improvement, and its broader impact at social, environmental, and economic levels.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**AG 4371X. Data Analysis and its Application in Agriculture.**

This course is an introduction to data science that analyze big data with emphasis on its application in agriculture. Students will learn 1) how to analyze big data and make data-driven predictions through probabilistic modeling and statistical inference, 2) how to identify and utilize appropriate statistical and econometric methodologies to extract meaningful information for decision making in agriculture, and 3) how to use software such as Excel and R to implement statistical and econometric analysis and present results. Prerequisite: AG 2390 and AG 3352 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**AG 4371Y. Field Experiences in Regenerative Agriculture.**

This course focuses on experiential field-based activities and technologies in regenerative agriculture that improve the health and functioning of an ecosystem. Students will gain experience with metrics to assess agroecological health as well as methods, tools and technologies to improve soil biophysical qualities, biodiversity, water and nutrient cycling, and energy balance. Creating resilience to climate change, developing circular economies, and increasing farm profitability are explored. In a field setting, regenerative agriculture techniques with respect to crop production are practiced. Prerequisite: [AG 2313 or AG 2379] and AG 3426 both with grades of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**AG 4379. Agriculture Irrigation Technology.**

This course teaches the principles associated with water management practices in maintaining soil productivity and the influence of water management on environmental quality. Emphasis will be placed on the selection and layout of irrigation and drainage systems, waste management systems, and the impact on the environment. Prerequisite: AG 2373 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4380. Agricultural Finance.**

This course introduces finance and financial problems faced by agribusiness managers. The subject matter includes financial analysis, planning, and control; capital budgeting; capital structure, liquidity, and risk management; and financial markets. Prerequisite: ACC 2361 and AG 2383 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4381. Agricultural Policy.**

Identification and analysis of governmental programs and policies affecting the production and marketing of agricultural products. An economic evaluation of alternative policies and their application for farmers, consumers and agribusinesses will be considered. (WI) Prerequisite: AG 2383 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4382. Agricultural Price Analysis.**

This course focuses on the forces that influence agricultural price movements and behavior, including consumer and producer theory, and market demand and supply with their associated determinants. The course also covers commodity futures and their use by agribusiness firms to reduce price risk. An explanation of simple and multiple regression is introduced to help the student understand empirical estimation of commodity demand and supply relationships, and reduced-form, price-dependent equations that offer insight into price-making forces. Price determination under alternative market structures is also reviewed and expanded. (WI) Prerequisite: AG 3350 and AG 3352 and [MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4383. Agricultural Resource Economics.**

This course introduces economic concepts and institutional factors relating to the use of agricultural resources such as land, air, water, energy, space, etc. Emphasis is on the conservation of resources and the environmental interactions resulting from the use of natural resources for agricultural production. (WI) Prerequisite: AG 2383 and [MATH 1315 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**AG 4390. Global Agriculture.**

This study abroad course focuses on global agricultural industries and markets, including analysis of production, marketing and trade. The course examines the shape of international agriculture; how culture, history and geography in foreign countries affect the production and management of agricultural products; agricultural policy formation; countries' natural resources and competitive strategies. Course may be repeated when topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4401. Genetics and Breeding for Crop Selection.**

This course covers traditional breeding and selection in crops with an emphasis on genetics. The course includes topics on phenology, phenotype, genotype, heritability and epigenetics. The course includes a lab. Prerequisites: AG 1445 and [AG 2313 or AG 2379] and BIO 1130 and BIO 1330 and CHEM 1141 and CHEM 1341 all with grades of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**AG 4681. Student Teaching in Agriculture, Food, and Natural Resources 6-12.**

Students will apply knowledge and skills learned during the teacher preparation program while engaging in clinical practice with experienced Agriculture mentor teachers in school settings with university instruction and supervision. This culmination experience is required for Texas teacher certification. Prerequisite: Minimum 2.75 Overall GPA and instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Credit/No Credit

**AG 5100. Professional Development.**

This course introduces key concepts and practices for teaching college courses. It provides regular in-service training and planned periodic evaluations of instructional responsibilities. It is required for first-year teaching and instructional assistants in the Master's of Science in Integrated Agricultural Sciences. Graded on a credit (CR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**AG 5101. Research Experience.**

This course provides students with an opportunity to explore a focused research topic. Ideally the topic would be an emergent topic within their research area that was unplanned and resulted from their initial investigation. May be repeated twice for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**AG 5120. Aquaponic Internship.**

This course provides students with hands-on production experience in aquaculture. Students will complete 64 hours of internship with an aquaponic facility.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AG 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**AG 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**AG 5300. Applied Statistics and Econometrics for Agriculture.**

This course focuses on data analysis, modeling techniques and their applications with statistical inference for agriculture. This course will cover statistical tools applied in agriculture, including probability, sampling, principles of estimation, hypothesis testing, general linear models, multiple regression analysis, qualitative response modeling, and other related tools widely used in agriculture.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5301. Agricultural Development and Policy.**

This course focuses on current issues that integrate agricultural policy, resource development, application of welfare criteria and economic analysis, and food and rural development problems of the U.S. and the world. Course topics include integrated agricultural and rural development, food and nutrition security, commodity issues, and trade policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5302. Economics of Agricultural Production.**

This course focuses on analysis of agricultural production economic concepts and models. Topics will include traditional neo-classical theory of the firm, duality theory, resource allocation, production selection, scale of operation of agricultural firms, and risk and uncertainty associated with agricultural production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5303. Agricultural Marketing and Price Analysis.**

This course emphasizes marketing theory and structure, characteristics of demand and supply of farm products, agricultural price research techniques for evaluating marketing behavior, market legislation, and market development. The course will provide an opportunity for students to develop marketable skills in quantitative price and market analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5304. Economics of Sustainable Natural Resource Management.**

This course provides economic tools to analyze sustainable natural resources and environmental issues. It enables students to develop integrative expertise in economic analysis utilizing natural and behavioral sciences. The integrative expertise provides students with the ability to more effectively, efficiently, and sustainably manage natural resources for multiple objectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5310. Research Methods in Integrated Agricultural Sciences.**

This course covers research techniques, literature analysis, the development and implementation of experimental designs, conceptual models and survey instruments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5320. Integrated Agricultural Production in Aquaponic Systems.**

This course focuses on crop and fish production, pest management, water quality, nutrient management, and economics and marketing in aquaponic systems. Topics covered include contrasts and comparisons to soil based, hydroponic cropping and aquaculture (confined fish production without crop interactions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5323. Composting and Integrated Resource Management.**

The course provides experience and theoretical foundation for the basic design, production, management, utilization and marketing of composts, vermicomposts and related products, and non-renewable natural resource issues related to agriculture.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5324. Agroecology and Integrated Agriculture.**

This course will focus on integrative and ecological principles of agricultural production. Emphasis will be on sustainable agriculture, complex systems, production diversity, integrated animal-crop systems, resilience and small producers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5350. Foundations of Ethics and Leadership in Agriculture.**

This course prepares students for professional leadership and service in agriculture, with emphasis on applications of ethics and leadership principles. The course will focus on industry ethics and leadership theory in various professional settings in agriculture.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**AG 5351. Grant Development and Management.**

This course explores competencies of locating external agency funding for agricultural research, teaching and extension. The principles of producing a competitive proposal that includes multi-, cross and inter-disciplinary collaborations are also discussed. The development of the grant proposal, implementation, budget, and evaluation plan will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**AG 5352. Program Development and Evaluation.**

This course examines philosophies of program development, implementation and evaluation to meet stakeholders' expectations. Emphasis is placed on methodologies that effectively evaluate agricultural programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**AG 5354. Instructional Design in Agricultural Education.**

This course examines instructional design models appropriate from a pedagogical and andragogical viewpoint. Emphasis is placed on theories and models to support the design of print-based, web-based, or multimedia-based instruction. Students will prepare evaluation strategies to assess comprehensive instruction in a high-tech environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**AG 5355. Methods of Technological Change.**

This course explores the dynamics and culture of technological change in agriculture. Topics covered will include ways to implement change, skills for being an innovator and a change agent, how to predict the effects of change, and the integration of other sciences into agricultural sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**AG 5360. Advancements in Animal Science.**

Survey of the current knowledge and concepts in animal production including economic considerations and current production problems in breeding and feeding livestock.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**AG 5361. Food Technology and Meat Science.**

This course explores the science and instrumentation of meat science; including food safety, processing and evaluation of wholesale and retail cuts of beef, pork, lamb, and poultry; including fresh, cooked/smoked, grilled, and pickled products. The evaluation of consumer preference and economic returns based on product presentation will be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**AG 5362. Advanced Animal Science: Minerals and Vitamins in Animal Nutrition.**

This course is an advanced study of the utilization and requirements of minerals and vitamins in farm and ranch animals. It emphasizes ruminant and non-ruminant mineral and vitamin metabolism and utilization. The utilization of specific minerals and vitamins by different species will be used to explain and predict subsequent performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**AG 5364. Biology of Reproduction in Farm Animals.**

This course will focus on animal agriculture reproduction and examine the molecular principles of reproduction. Topics will include molecular reproductive endocrinology, advanced physiology and current research in animal reproduction science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**AG 5365. The Role of Animal Science in Society: An Integrated Approach.**

This course provides students with a broad understanding of the role animals have in society, the influences of animal production on economic development, changes in policy and social viewpoints of animal production, and the development of domesticated animals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**AG 5370. Special Problems in Technical Agriculture.**

Special problems will be selected to meet the needs of the individual student. May be repeated (once) for additional credit when the problem differs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**AG 5390. Foundation Studies in Agriculture.**

This course is a leveling course to provide prerequisite knowledge necessary for graduate-level coursework in Agriculture. Course content varies depending on academic preparation. This course does not earn graduate degree credit. Repeatable up to 9 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA  
**Grade Mode:** Leveling/Assistantships

**AG 5398. Professional Paper.**

This course is required for non-thesis students to prepare a professional paper of publishable quality. Graded on a credit (CR), no-credit (F) basis. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**  
**Grade Mode:** Credit/No Credit

**AG 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Integrated Agricultural Sciences. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AG 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**AG 5426. Soil Health and Development.**

This course focuses on the fundamental topics of soil health and development. These fundamentals include pedogenesis, mineral composition, tillage practices, soil ecosystem and sustainability, soil biology and soil physics.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5463. Animal Molecular Genetics.**

This course examines the theory and practice of molecular genetics of livestock. Topics covered include genetic concepts and theory, as well as applications of these concepts in animal agriculture; e.g., Mendelian genetics, genomic revolution, cloning, epigenetics and transgenics. The course emphasizes techniques and underlying biological principles in genetics.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AG 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**AG 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ASL 1410. Beginning American Sign Language I.**

Introduction to understanding and using American Sign Language within the cultural framework of the deaf community. Students who take ASL 1410 toward degree requirements must also complete ASL 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SGNL 1401

**ASL 1420. Beginning American Sign Language II.**

Continued practice in understanding and using American Sign Language within the cultural framework of the deaf community. Students who take ASL 1410 toward degree requirements must also complete ASL 1420.

Prerequisite: ASL 1410 with a grade of "D" or better. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SGNL 1402

**ASL 2310. Intermediate American Sign Language I.**

Continued development and review of American Sign Language within the cultural framework of the deaf community. Prerequisite: ASL 1420 with a grade of "D" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SGNL 2301

**ASL 2320. Intermediate American Sign Language II.**

More advanced practice in American Sign Language within the cultural framework of the deaf community. Prerequisite: ASL 2310 with a grade of "D" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SGNL 2302

**ANTH 1312. Cultural Anthropology.**

In this course students examine the nature of cultural variation of populations in the present and recent past. Its subjects include social, political, economic, and ideological aspects of human cultures. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ANTH 2351

**ANTH 2101. Biological Anthropology Laboratory.**

This laboratory course accompanies Biological Anthropology. It provides students with hands-on experience with the materials and methods of biological anthropology. Students examine human genetic and anatomical variability, anatomical and behavioral similarities and differences among living primates, human skeletal anatomy, and evidence for human evolution from the fossil record.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** ANTH 2101

**ANTH 2102. Introduction to Archaeology Laboratory.**

This laboratory course accompanies Introduction to Archaeology. It provides students with hands-on experience with the materials and methods of archaeology, and covers topics such as stratigraphy, site maps, lithic and ceramic analysis, and ethics. Corequisite: ANTH 2302 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 2301. Biological Anthropology.**

This lecture and accompanying laboratory course examine fundamental aspects of the biological nature of humans. Course content is divided into topics devoted to explaining the scientific method, evolutionary theory, genetics, speciation, variation and adaptation, nonhuman primates, and human evolution.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030

**Grade Mode:** Standard Letter

**TCCN:** ANTH 2301

**ANTH 2302. Introduction to Archaeology.**

This lecture and accompanying laboratory course examine the basic principles of archaeology. It includes a study of the kinds of sites; classification of stone artifacts; methods of archaeological survey and excavation; methods of dating by geological, faunal, and radiometric means; and the theoretical approach to archaeology. Corequisite: ANTH 2102.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** ANTH 2302

**ANTH 3101. Writing Anthropology.**

This course offers tutelage in professional scholarly writing, word processing software, library research, scientific and ethnographic writing styles, and effective use of anthropological literature. Because it provides core skills presupposed by advanced anthropology courses, students should enroll in it alongside their first writing-intensive anthropology electives.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3102. Skeletal Processing, Preparation, and Curation Techniques.**

In this laboratory-based course students will learn human skeletal processing techniques used in forensic anthropological casework and gain an introduction to human skeletal anatomy and variation. Prerequisite: ANTH 3381 with a grade of a "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 3201. Professionalization in Anthropology.**

This course surveys the breadth of careers open to people holding anthropology degrees. Issues discussed include professional ethics, specialized skill sets, the transferable skills of liberal arts degrees, broad trends in the labor market, and steps toward pursuing relevant careers.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3301. Principles of Cultural Anthropology.**

This course is an ethnographically-based analysis of major theoretical positions and debates in contemporary anthropology. (WI) Prerequisites: ANTH 1312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3302. Introduction to Linguistic Anthropology.**

This course provides an introduction to the study of linguistic anthropology. We will focus on the origin of language and its evolution and diversity, the interactions between language, culture and society, and modes of communication. This course will enhance a student's awareness of the complex interrelationships between language and other aspects of culture. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3303. Applied Cultural Anthropology.**

In this course students learn the methods applied cultural anthropologists use to address social problems such as poverty, sustainable development, conflict, climate change, community health, workplace and product design, education, and cultural heritage, as well as the value "thinking anthropologically" has for a wide range of careers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3304. Bioarchaeology.**

Bioarchaeology is the study of human skeletal remains in relation to the archaeological record. In this course students will study theories and methods used in the analysis of human skeletal remains in bioarchaeology to reconstruct patterns of subsistence, diet, disease, demography, biological relatedness, and physical activity of past populations.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 3305. Magic, Ritual and Religion.**

An examination of magic and religion in cultures of the world with an emphasis on recent works dealing with mysticism and the occult. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3306. World Prehistory.**

This course presents a survey of the prehistoric human record throughout the world. It focuses upon the achievements of early and modern humans, world colonization events, and the development of complex societies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3307. History of Evolutionary Thought.**

This course discusses the impact of evolutionary discourse within the context of its history. Students will develop a thorough understanding of evolution and its importance to anthropology, as well as to other scientific disciplines. (WI) Prerequisites: ANTH 2301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3308. Cultural Resource Management and Archaeology.**

This course surveys Cultural Resource Management (CRM) archaeology, the conservation and investigation of archaeological remains as mandated by federal and state laws. The course covers the history of CRM and its legal and regulatory framework, organization, methods, funding, employment prospects, and ethical and practical dilemmas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3309. Cultures Through Film.**

Through films, lectures, and discussions, students explore the various ways that ethnographic film interprets the cultural environment and social interactions of small-scale cultures around the world. We will also discuss anthropological interpretations of how historically U.S. (American) culture has dealt with concepts of the "other" and supernatural phenomena through film. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3311. Disease and Society.**

In this course students examine infectious diseases and the effect they have on human societies. The course is organized into case studies of specific infectious diseases, which focus on the biology and epidemiology of a disease as well its social impact.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3313. Aztec: Native Americans and Empire.**

This course presents an understanding of Aztec culture through archaeology, the interpretation of art, religion, and architecture, and the formation of a highly specialized and stratified society with an imperial administration. The course will emphasize an intellectual and religious outlook in intimate contact with the earth, sky, and the seasons.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3314. Latin American Cultures.**

This course examines different aspects of Latin American indigenous cultures from a variety of theoretical perspectives in anthropology. Emphasis is on the Maya, and different theoretical perspectives provide different interpretations of data. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3315. Archaeology of the Southwest.**

An examination of the prehistory and early cultures of the Greater Southwest from the first arrival of humans as early as 20,000 years ago to the coming of the Spaniards in the 16th century. The course covers several mammoth kill sites at the end of the Pleistocene; the emergence of Archaic hunters and gatherers and the appearance of agriculture about two thousand years ago, leading to the three major cultures in the southwest-the Mogollon, the Hohokam and the Anasazi, the last in multistoried pueblos and cliff dwellings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3316. The Origin and Evolution of Human Behavior.**

This course presents our current understanding of Old World Paleolithic Archaeology. The origin and evolution of hominid behavior, the initial colonization of the Old World, and the development of modern human behavior will be discussed for each continent. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3317. Rock Art Field Methods.**

This course will train students in rock art field methods. They will gain first-hand experience recording rock art sites through photography, field sketches, mapping, and written inventories. Students will generate a visual and written description of the art, which they will use to infer and explain past human behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3318. Ancient Cultures of the Texas Crossroads.**

This course will present our current understanding of Texas archaeology. The environmental and social contexts of prehistoric, protohistoric, and historic records of Native American and Spanish occupations in Texas are discussed. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3322. Peoples and Cultures of Africa.**

This course is a general introduction to the contemporary peoples and cultures of Africa. Students will examine the social structure, economy, political systems, and religions of African cultures in the context of the radical economic and social transformations affecting the area. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3324. Mexican American Culture.**

This course provides exploration of Mexican American culture with an emphasis on the US-Mexico transborder region. The course integrates history, anthropology, and ethnic studies to capture the broad diversity of Mexican American experiences. Some of the topics covered include identity, social movements, Chicana feminism, transnational migration, spirituality, and cultural expressions such as visual art, film, music, and performance. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3325. Medical Anthropology.**

This course focuses on how illness identities are culturally constructed, how adaptations or maladaptations to local environments affect health, how political and economic forces influence health and health behaviors, and how the practice of medical anthropology can contribute to solving urgent health issues around the world.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3327. Anthropology of Religion and Fundamentalism.**

This course provides students with current and historical approaches to the anthropology of religion with a particular emphasis on fundamentalism. It focuses on the development of religious fundamentalism in different cultural contexts, geopolitical situations, and religious traditions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3330. Archaeological Curation and Collections Management.**

This course provides technical training in and an understanding of the principles and methods of curating and managing archaeological collections. Students review the history of archaeological curation in the United States as well as relevant laws and regulations. Additional topics covered include types of repositories and storage facilities, costs of curation, policies, collection rehabilitation, archival processing, basic preventative conservation strategies, and using archaeological collections to educate the public.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 3331D. Dental Anthropology and Oral Biology.**

The biological development of the cranio-facial structures will be presented with emphasis on hard tissue anatomy and diseases. Dental traits will be discussed in relation to human evolutionary concepts. Forensic methods that support identification of human remains are emphasized. This course is appropriate for anthropology students and pre-professional dentistry. Prerequisite: ANTH 2301 or [BIO 1130 and BIO 1330] any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 3331E. Anthropology and the Law.**

This course explores the role of law as an instrument of social change, justice, and human rights. Topics include law as a social system, understanding legal reasoning, identifying key actors, how law influences change, how law is depicted in popular culture, and how law influences anthropological research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 3331F. Body Talk: Gestures, Communication, and Society.**

Communication involves the use of 'invisible' words and gestures, or 'visible actions.' This course focuses on gestures, what they are, how they are used, what role they play in communication and in thinking, and their cultural underpinning. Students will learn the theoretical and methodological issues involved in studying different gestures across societies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ANTH 3331G. The Archaeology of Cannibalism and Sacrifice.**

Students in this course explore kinds of violence in past societies considered especially shocking or controversial in the contemporary, developed West: human sacrifice and the consumption of the human dead. Avoiding exoticism and suspending moral evaluation in favor of anthropological inquiry, we will consider cannibalism and sacrifice as cultural expressions of universal human drives and preoccupations and as historically specific solutions to common problems in social organization. We will examine archaeological and ethnohistoric case studies drawn from a wide range of time periods, cultures, and regions in an effort to identify and explain diversity and commonalities among such practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3331I. Design + Anthropology.**

This course will begin by exploring the anthropology of design, including the practices, implications, and expansion of design under contemporary capitalism. Students will then use this knowledge to examine the growing field of design anthropology and learn how anthropologists provide actionable insights and research for design work today.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3331J. Race and Biological Anthropology.**

In this course students will learn where race concepts originated, examining the worldview and scientific mindsets that guided biological anthropology into the 21st century. We will explore how social race has become biological, put forth pragmatic solutions in the context of anthropology research, and help develop an informed scientific practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3331L. Social Impact: Anthropology of Innovation, Entrepreneurship, & Business.**

This course explores the nature of innovation under late capitalism via entrepreneurship. Drawing on the anthropology of business, design, organizations, economics and technology, students will review with a critical lens how people strive for better futures and what anthropology can do to improve these efforts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 3332. Myths and Moundbuilders.**

This course presents an anthropological approach to Native Americans of the Southeastern United States, their culture and beliefs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3335. The Anthropology of Native American Belief Systems.**

In this course students use anthropological approaches to investigate past and present Native American belief systems in order to determine the temporal range and evolving complexity of Native American religious and ritual expression.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3336. Locally Engaged Research.**

This course will provide students the opportunity to conduct hands-on anthropological research on a variety of topics in local communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3337. Language and Linguistics.**

This course is concerned with the theoretical and methodological study of language, what constitutes the knowledge of a language, how this knowledge is acquired, and how it is used. Other areas of interest include the properties of human language, its representation in the mind, learnability, origin, and change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3338. Geoarchaeology.**

This course will teach students how to interpret sediments and the nature of sediment accumulation at archeological sites. Course topics include sedimentology, natural depositional environments, weathering processes and soil development, stratigraphic analysis, and archaeological site formation processes. (WI) Prerequisite: ANTH 2302 or GEOL 1410 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3339. Contemporary Film and Global Culture.**

This course examines the relationship of recent film to both national culture and our increasingly globalized world culture. It focuses on the relationship between the creators of film, their intended audiences and the cultural context of both of these. It explores the way that film relates to current issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3340. Human and Primate Origins.**

An examination of the long and diverse record of human and nonhuman biological adaptations as viewed from the fossil record. It examines the functional and ecological challenges that may have been responsible for the path of human development.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3342. Primate Behavior.**

In this course, students will learn about the behavior, ecology and conservation of nonhuman primates (lemurs, lorises, monkeys, and apes).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3343. Human Variation and Adaptation.**

This course examines the physical variation observable within and between human populations. It emphasizes a functional approach whereby variation is examined in relation to biological adaptation. It explores the biological mechanisms responsible for change and evaluates the potential of biological components in human behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3345. Archaeology of Mesoamerica.**

This course examines the development of culture from early hunters and gatherers through the appearance of agriculture to the rise of civilization. The focus of the course is on the emergence of complex society among groups such as the Olmec, Aztec, and Maya. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3347. Archaeology of North America.**

This course describes human settlement of North America from the end of the Pleistocene to European discovery. It considers early occupation of arctic, plains, and forested regions and development during archaic times of Adena, Hopewell, and Mississippian societies in the Southeast and Mogollon, Hohokam, and Anasazi in the Southwest.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3348. Primate Conservation: Adapting to Rapidly Changing Landscapes.**

This course provides instruction on the ecology and conservation of primates and the flora and fauna in their ecosystems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3349. The Incas.**

The Incas were the largest Pre-Columbian empire in the Americas and this course will explore the origins of this civilization and how they conquered such a large area of South America. Using archaeological and historic information the class will examine various aspects of Inca society including religion, economics, and kingship.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3350. Gender and Sexuality in Cross-cultural Perspective.**

This course explores historical and contemporary issues related to gender and sexuality from cross-cultural perspectives. It will focus on cultural constructions of gender and sexuality and explore key themes in queer anthropology as well as US minority and Global South feminisms through expressive and documentary forms including music, film, art and performance. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3351. Anthropology of Peace and Violence.**

This class explores anthropological perspectives on peace and violence. It focuses on understanding violent practices within both traditional and current day societies including everyday violence and warfare. It explores the contributions of social structure, gender, religion, race, and ethnicity to violence. It examines efforts to build peace and reconciliation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 3352. Language and the Body.**

This class focuses on how language shapes our identities and deeply held beliefs about our bodies. Students will have an opportunity to engage in discourse analysis of media representations as well as collect and analyze their own conversational data using the methods of linguistic and cultural anthropology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3353. Human Structure and Function.**

Students study the structure and basic function of the human body with emphasis on the skeletal, muscular, and nervous systems. This course provides a basis for other courses in biological anthropology.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 3356. Archaeology of Andean Civilizations.**

This course examines the cultures of the Andes Region of South America with an emphasis on pre-Columbian and contemporary peoples of the area.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3357. Historical Archaeology.**

This course is designed to provide students with an intensive overview of historical archaeology method, theory, and artifacts in Texas and North America. Using the methods and theories of historical archaeology, students analyze historical narratives, which incorporates research, documents, and material culture from historic period sites.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 3358. Human Evolutionary Anatomy.**

This course is designed to give students an anatomical background to the study of human evolution with a focus on the comparative anatomy of apes, living humans, and fossil hominins.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 3359. Skeletal Processing, Preparation, and Curation Techniques.**

This course is laboratory based and students will learn human skeletal processing techniques used in forensic anthropological casework and gain an introduction to human skeletal anatomy and variation. Prerequisite: ANTH 3381 with a grade of a "D" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3360. Economic Anthropology.**

Reviews central issues in economic anthropology, using both case studies and theoretical writings. Analyzes production, exchange, distribution, consumption, property, economic surplus, inheritance, and types of economic structure. Materials will cover huntergatherer societies, simple agricultural societies, pre-capitalist complex state societies, and issues of development in nonindustrialized countries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 3361. Archaeological Field Methodology.**

In this course students will learn about planning, organizing, and carrying out archaeological field investigations from survey to excavation to specialized data recovery. The focus is on the research strategies, techniques and logistics necessary to design and accomplish successful field research. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3363. The Art and Archaeology of the Olmec.**

This course will present our current understanding of the art and archaeology of the Olmec culture, the earliest known civilization in North America. The Olmec culture is considered the influential foundation for later Mesoamerican civilizations such as the Maya and the Aztec.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 3366. Social Impact through Applied Research.**

This course introduces students to how research in anthropology and other disciplines can be used to create social impact—solutions to public problems. Students will explore what social impact is, barriers that prevent social impact from occurring, and how social impact can be created through the application of applied research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3367. Applied Statistics.**

This course will teach students basic statistical concepts through an anthropological lens. Students will learn to engage with data and statistics in everyday topics related to anthropology, the foundations of statistical analysis, and how to use the statistical programming language and software to explore and communicate data to the public.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 3377. Anthropology of Youth.**

This class will provide an overview of issues in adolescent and emerging adult health and development in national and international contexts.

Drawing from several disciplines including anthropology, education, public health, psychology, and sociology, we will critically examine existing research on youth and discuss underlying assumptions, research methodologies, and findings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3380. Forensic Anthropology.**

Forensic Anthropology is the recovery and analysis of human skeletal remains for modern legal inquiry. This course is an overview of the field of Forensic Anthropology illustrated with real forensic cases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3381. Human Osteology.**

The foundation of biological anthropology is the study of the human skeleton. This is a lab-intensive course in which students will learn how to identify skeletal elements, both whole and fragmentary.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 3382. Archaeology of Ice Age America.**

Precisely when the first people arrived in the Americas, where they came from, and how they got here are the subjects of longstanding debate.

This class will draw upon archaeological, biological, linguistic, and environmental evidence to reconstruct the earliest human prehistory of the New World.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 4303. Human Speech Sounds.**

This course is an introductory overview of human speech production and perception from an anthropological perspective. It describes speech anatomy and pays particular attention to the description of the acoustic and articulatory properties of speech as it occurs in real time. Students will study articulatory, acoustic, and auditory phonetics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 4304. Language, Culture and Society.**

This course seeks to introduce students to the fundamentals of linguistic anthropology, and the use of linguistics in anthropological fieldwork through lecture, discussion, and "hands on" class exercises.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 4309. Culture, Medicine and the Body.**

This course explores how the human body, functions of the body, and the practices of medicine and healing are situated and contextualized within cultural frameworks. Case studies cover body and health-related topics over the life course, from birth to death. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 4310. Theories and Issues in Anthropology.**

This course explores major theoretical and historical developments in anthropology, highlighting the discipline's unique four-field perspective that includes archaeology, biological and cultural anthropology, and anthropological linguistics. Topics stress the importance of anthropological thought in key scientific discoveries and cultural debates. Prerequisites: ANTH 1312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 4315. Archaeological Artifact Identification and Analysis.**

This course will train students to describe and analyze artifacts commonly recovered from archaeological sites. Current theories covering the production and analysis of chipped and ground stone tools, ceramics, bone and other materials will be presented, and scientific analytical methods discussed. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 4320. Rise of Civilization.**

This course consists of a definition of civilization and its components, its geographic setting, and the roles of religion, art, and the institution of the "Divine King" in the development of dynamic state societies in Egypt, Sumeria, the Indus Valley, and China in the Old World and that of the Olmec in Mexico and Chavin in Peru. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 4326. Field Methods in Forensic Anthropology.**

In this course students will learn how to locate, excavate and recover human remains, associated personal effects, and other materials in order to ensure legal credibility for all recoveries. Prerequisite: ANTH 3381 with a grade of "D" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 4337. Theory in Linguistic Anthropology.**

In this course students will be introduced to the major theories of linguistics through reading and discussing classic and contemporary literatures. Particular attention will be given to how the various theories have influenced linguistic anthropology. (WI) Prerequisites: ANTH 1312 or ANTH 3302 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 4339. Theoretical Concepts in Archaeology.**

This course provides a broad survey of theory in archaeology as it is practiced throughout the world. It includes both historical perspectives and contemporary usage. (WI) Prerequisite: ANTH 2302 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 4360. Directed Study.**

A one-semester course of independent reading, tutorial sessions, and individual research projects. Open to superior students by invitation of the professor and with the consent of the chair of the department. May be repeated for credit with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 4361. Qualitative Research Methods.**

This course provides instruction on qualitative research methods through lectures and hands-on activities, including designing qualitative research projects, collecting and analyzing qualitative data, and presenting qualitative results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 4363. Methods in Primate Research.**

In this course, students will learn about the methods used to study primates in captive and field settings.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 4381. Paleopathology.**

This course focuses on the study of diseases and maladies of ancient populations, and will survey the range of pathology on human skeletons from trauma, infection, syphilis, tuberculosis, leprosy, anemia, metabolic disturbances, arthritis, and tumors. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 4382. Methods in Skeletal Biology.**

This course is for students who wish to advance their osteological skills. Students will learn how to identify isolated and fragmentary skeletal remains to estimate age, sex, ancestry, stature, and health of an individual in past and present contexts. Prerequisite: ANTH 3381 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 4390. Internship in Anthropology.**

This course provides students with professional development through work or research-related experience. After consulting the internship coordinator, students choose placements matching their interests and develop individualized internship contracts. Interns meet to discuss career preparation and anthropological topics related to each intern's activities, keep a journal, and submit a final report. Prerequisites: Minimum 2.5 Major GPA and instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ANTH 4600. Bioarchaeology Field and Laboratory Methods.**

In this course students will be trained in the documentation, contextual assessment, and recordation of human skeletal remains in bioarchaeological settings. Students will engage in research projects, gaining practical laboratory and field experience. Prerequisite: ANTH 3381 with a grade of "D" or better or instructor approval.

**6 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 4630. Archaeological Field School.**

This course is designed to train students in the skills and techniques of modern archaeological survey and excavation of prehistoric sites. May be repeated for credit, but only six hours may be applied toward the major.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required

**Grade Mode:** Standard Letter

**ANTH 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 5301. Advanced Principles of Cultural Anthropology.**

This course is an ethnographically-based analysis of major theoretical positions and debates in contemporary anthropology. (Stacked course with ANTH 3301.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5302. Practicum in Teaching Anthropology.**

An introduction to key concepts and practices in the teaching of college-level Anthropology. The course provides training in the practical aspects of classroom instruction. Required for first-year teaching and instructional assistants in the Anthropology Department. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ANTH 5303. Speech Analysis.**

The focus of this course is the analysis of human speech sounds. It includes description of the acoustic properties of speech sounds, transcription of sounds using the International Phonetic Alphabet system, an understanding of the acoustic theories of speech, and practical experience in forensic speakers' identification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5304. Sociolinguistics.**

The focus of this course is on the complex interrelationships between language and other aspects of culture. Methods of sociolinguistics, theories of sociolinguistics, and current issues regarding the nature of language variation and change will be emphasized. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**ANTH 5305. Anthropological Statistics.**

In this course students will learn how to statistically analyze anthropological data. Students will gain a firm understanding of basic quantitative statistics, will be able to evaluate quantitative methods presented in anthropological research papers, and will be prepared for classes in more advanced statistical methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5306. Anthropology and Art.**

In this course students will investigate the function of art and symbolism in pre-literate archaeological cultures that existed at the tribal and chiefdom levels of political and social development. A multidisciplinary focus will use anthropology and art historical approaches as research tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5307. History of Evolutionary Thought.**

This course discusses the impact of evolutionary discourse within the context of its history. Students will develop a thorough understanding of evolution and its importance to anthropology, as well as to other scientific disciplines.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5308. Cultural Resource Management and Archaeology.**

In this course students will examine various topics relevant to cultural resource management including state and federal laws, survey, testing, mitigation, and developing final reports.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5309. Culture, Medicine and the Body.**

This course explores how the human body, functions of the body, and the practices of medicine and healing are situated and contextualized within cultural frameworks. Case studies cover body and health-related topics over the life course, from birth to death.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5310. Theories and Issues in Anthropology.**

This course explores major theoretical and historical developments in anthropology, highlighting the discipline's unique four-field perspective that includes archaeology, biological and cultural anthropology, and anthropological linguistics. Topics stress the importance of anthropological thought in key scientific discoveries and cultural debates.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5311. Seminar in Cultural Anthropology.**

In this course, students will learn the historical foundations of cultural anthropology, its key theories and methods, and examples of its contemporary practice. Topics will include evolutionism, functionalism, structuralism, ethnoscience, neo-Marxism, postmodernism, and modernity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5312. Seminar in Biological Anthropology.**

In this course, students will learn the historical foundations of biological anthropology, its key theories and methods, and examples of its contemporary practice in evolutionary theory, human variation, paleoanthropology, primatology, and skeletal biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5313. Seminar in Archaeology.**

In this course, students will learn the historical foundations of archaeology, its key theories and methods, and examples of its contemporary practice in New World and Old World archaeology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5314. Latin American Cultures.**

Comprehensive study of cultures from Latin America. (Stacked course with ANTH 3314.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5315. Archaeological Artifact Identification and Analysis.**

This course will provide students with the skills, knowledge and ability to describe, characterize, and analyze artifacts commonly recovered from archaeological sites. Current theories covering the production and analysis of chipped and ground stone tools, ceramics, bone and other materials will be presented, and scientific analytical methods discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5316. The Origin and Evolution of Human Behavior.**

This course presents our current understanding of Old World Paleolithic Archaeology. The origin and evolution of hominid behavior, the initial colonization of the Old World, and the development of modern human behavior will be discussed for each continent. (Stacked course with ANTH 3316).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5317. Rock Art Field Methods.**

This course will train students in rock art field methods. They will gain first-hand experience recording rock art sites through photography, field sketches, mapping, and written inventories. Students will generate a visual and written description of the art, which they will use to infer and explain past human behavior. (Stacked course with ANTH 3317).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5318. Texas Archaeology.**

This course will present our current understanding of Texas archaeology. The environmental and social contexts of prehistoric, protohistoric, and historic records of Native American and Spanish occupations in Texas are discussed. (Stacked course with ANTH 3318.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5320. Rise of Civilization.**

This course examines the components that led to the dynamic state societies in Egypt, Sumeria, the Indus Valley, and China in the Old World and that of the Olmec in Mexico and Chavin in Peru. (Stacked course with ANTH 4320.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5322. Peoples and Cultures of Africa.**

This course is a general introduction to the contemporary peoples and cultures of Africa. Students will examine the social structure, economy, political systems, and religions of African cultures in the context of the radical economic and social transformations affecting the area. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5324. Mexican American Culture.**

This class is an exploration of Mexican American culture with an emphasis on the US-Mexico transborder region. The course integrates history, anthropology, and ethnic studies to capture the broad diversity of Mexican American experiences. Some of the topics covered include identity, social movements, Chicana feminism, transnational migration, spirituality, and cultural expressions such as visual art, film, music, and performance. (Stacked course with ANTH 3324.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5325. Medical Anthropology.**

This course focuses on how illness identities are culturally constructed, how adaptations or maladaptations to local environments affect health, how political and economic forces influence health and health behaviors, and how the practice of medical anthropology can contribute to solving urgent health issues around the world.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5326. Field Methods in Forensic Anthropology.**

In this course students will learn how to locate, excavate and recover human remains, associated personal effects, and other materials in order to ensure legal credibility for all recoveries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5330. Curation of Archaeological Materials.**

This course provides students with the skills to prepare archaeological materials for curation, which includes the processes and techniques used to stabilize and preserve organic and inorganic materials. This training can be used to gain certification in the field of archaeological curation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5332. Myths and Mound Builders.**

This course presents an anthropological approach to the iconography of the Native Americans of the Southeastern Ceremonial Complex. (Stacked course with ANTH 3332.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5333. Research Design in Biological Anthropology.**

This course provides students with an introduction to the principles and processes by which research projects in biological anthropology are devised and executed. It focuses on the issues of finding a topic to research, defining its scope and limitations, developing a research bibliography, and elaborating a research design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5335. The Anthropology of Native American Belief Systems.**

In this course students use anthropological approaches to investigate past and present Native American belief systems in order to determine the temporal range and evolving complexity of Native American religious and ritual expression.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5336. Community Research Project.**

This course gives students the opportunity to conduct hands-on anthropological research on a variety of topics in local communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5337. Theory in Linguistics Anthropology.**

In this course students will be introduced to the major theories of linguistics through reading and discussing classic and contemporary literatures. Particular attention will be given to how the various theories have influenced linguistic anthropology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5338. Geoarchaeology.**

This course will provide students with the knowledge and ability to interpret sediments and the nature of sediment accumulation at archaeological sites. The course will provide students with a foundation in sedimentology, natural depositional environments, weathering processes and soil development, stratigraphic analysis, archaeological site formation processes. (Stacked course with ANTH 3338).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5339. Theoretical Concepts in Archaeology.**

This course provides a broad survey of theory in archaeology as it is practiced throughout the world. It includes both historical perspectives and contemporary usage.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5340. Paleoanthropology.**

Critical review of the human fossil record from the appearance of the earliest hominins to the appearance of modern human forms. (Stacked course with ANTH 3340.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5341. Gross Anatomy.**

Students in this course examine the macroscopic structure of organs and soft and hard tissues in the human body. The course is divided into these units: back and thorax, neck and head, and upper and lower limb. Cadaver-based dissection labs accompany lecture topics.

**3 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5342. Primate Behavior.**

An organized course that examines current research in nonhuman primate studies from an anthropological perspective. (Stacked course with ANTH 3342.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5343. Human Variation and Adaptation.**

An organized course that examines human physical variation and adaptation from an evolutionary perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5345. Archaeology of Mesoamerica.**

This course examines the development of early huntergatherers through the appearance of agriculture to the rise of civilization in Mesoamerica. (Stacked course with ANTH 3345.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5346. Bioarchaeology.**

Bioarchaeology is the study of human skeletal remains in relation to the archaeological record. In this course students study theories and methods used in the analysis of archaeologically derived human skeletal remains to reconstruct patterns of subsistence, diet, disease, demography, biological relatedness, and the funerary activities of past populations. Prerequisite: ANTH 3381 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 5347. Archaeology of North America.**

This course examines human settlement of North America from the end of the Pleistocene to European discovery. (Stacked course with ANTH 3347.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5349. The Incas.**

The Incas were the largest Pre-Columbian empire in the Americas. This course will explore the origins of this civilization and how they conquered such a large area of South America. Using archaeological and historic information the class will examine various aspects of Inca society including religion, economics, and kingship. (Stacked course with ANTH 3349.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5350. Gender and Sexuality in Cross Cultural Perspective.**

This course examines the relationships between women and men in societies around the world. (Stacked course with ANTH 3350.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5351. Anthropology of Peace and Violence.**

This class explores anthropological perspectives on peace and violence. It focuses on understanding violent practices within both traditional and current day societies including everyday violence and warfare. It explores the contributions of social structure, gender, religion, race, and ethnicity to violence. It examines efforts to build peace and reconciliation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5353. Applied Cultural Anthropology.**

This class focuses on how anthropology can solve practical problems in various disciplines, including behavioral health, education, human rights, community development, and business. Students will learn about client development, contract negotiations, project design, proposal writing, preparing deliverables, communicating results to a variety of stakeholders, teamwork, networking, and navigating ethical issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5355. Seminar in Culture Theory.**

An intensive examination of the principal theoretical positions in cultural anthropology, with an emphasis on the preparation of students with ethnographic analysis and fieldwork. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5356. Andean Civilizations.**

This course is a survey of civilizations in the Andean region of South America. Using archaeological data the class will examine cultural developments in the region from the earliest hunters and gatherers to the Inca Empire, the largest state in the Americas at the time of European contact. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5357. Historical Archaeology.**

This course is an advanced survey of historical archaeology methods and theories that will intensively examine current trends in historical archaeology. Students will also be exposed to the material culture from historic period archaeological sites in Texas and North America.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 5361. Qualitative Methods.**

This course provides instruction on qualitative methods and analysis. Students will learn through a combination of lecture and hands-on activities how to design qualitative research projects; collect qualitative data through methods such as interviews, focus groups and observations; analyze this data; and present qualitative results.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ANTH 5363. The Art and Archaeology of the Olmec.**

This course will present our current understanding of the art and archaeology of the Olmec culture, the earliest known civilization in North America. The Olmec culture is considered the influential foundation for later Mesoamerican civilizations such as the Maya and the Aztec. (Stacked course with ANTH 3363.) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ANTH 5373G. Research Design and Proposal Writing in Cultural Anthropology.**

This course will familiarize students with the basic principles and practices of effective research design and proposal writing in cultural anthropology. Students will acquire a practical experience in formulating a feasible and creative research project, performing a rigorous literature review, planning to protect human research subjects, and giving/receiving constructive peer reviews.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373I. Anthropology in Practice.**

This course introduces students to the application of anthropological ideas, methods, and skills in multiple employment sectors. Students will develop key job skills in communication, team work, networking, professional development, and project management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373J. Dental Anthropology and Oral Biology.**

The biological development of the cranio-facial structures will be presented with emphasis on hard tissue anatomy and diseases. Dental traits will be discussed in relation to human evolutionary concepts. Forensic methods that support identification of human remains are emphasized. This course is appropriate for anthropology students and pre-professional dentistry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373K. Nonverbal Communication-Gestures.**

Communication involves the use of 'invisible' words and gestures, or 'visible actions.' This course focuses on gestures, what they are, how they are used, what role they play in communication and in thinking, and their cultural underpinning. Students will learn the theoretical and methodological issues involved in studying different gestures across societies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373L. Cultural Heritage Management.**

This course introduces students to current problems and methods in the stewardship of cultural heritage, tangible and intangible, national and international. We will explore topics including ethics and law, development, tourism, public outreach and opinion, and ongoing threats to cultural heritage.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373M. Design + Anthropology.**

This course will begin by exploring the anthropology of design, including the practices, implications, and expansion of design under contemporary capitalism. Students will then use this knowledge to examine the growing field of design anthropology and learn how anthropologists provide actionable insights and research for design work today.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373O. Seminar on Race in Biological Anthropology.**

In this course students will learn where race concepts originated, examining the worldview and scientific mindsets that guided us into the 21st century. Students will explore how social race has become biological, drawing on literature from biological anthropology. Most importantly, students will explore pragmatic solutions in the context of anthropology research. Students will leave the course with an in-depth understanding of the role anthropology has played in current concepts of race and develop an informed scientific practice that they can apply.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5373P. Science, Technologies, & Organizations.**

This course explores the intersection of science, technology, and organizations through foundational theories in science and technology studies (STS) and organizational anthropology. Students will examine concepts like objectivity, facts, authority, policy, infrastructure, and organizational power. The course highlights feminist STS perspectives to investigate how culture and power influence knowledge, technology, and organizations. By understanding these relationships, students will learn to apply and advocate for anthropology in multidisciplinary teams and organizations, extending their expertise beyond academic settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 5374Y. Human Evolutionary Anatomy.**

This course is designed to give students an anatomical background to the study of human evolution with a focus on the comparative anatomy of apes, living humans, and fossil hominins.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ANTH 5374Z. Curation of Archaeological Materials.**

This course will examine the phenomenon of fundamentalism in a variety of religious traditions, both present and historical. Students will explore the political and social ramifications of fundamentalism in a world characterized by multiculturalism and globalization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ANTH 5375. Advanced Methods in Skeletal Biology, Part I.**

This course focuses on laboratory analytical techniques and data collection methods used to estimate the biological profile of modern, historic, or prehistoric human skeletal remains.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5376. Advanced Methods in Skeletal Biology, Part II.**

This course focuses on technical case report writing and evidentiary best practices in forensic anthropological analysis of human skeletal remains. In addition to biological profile estimation techniques, research methods and theoretical foundations used for trauma analysis and taphonomic interpretation will be reviewed. Prerequisite: ANTH 5375 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5381. Paleopathology.**

Paleopathology is the study of ancient diseases and is an important tool for understanding of past populations. In this course we will survey the range of pathology on human skeletons such as trauma, infection, syphilis, tuberculosis, leprosy, anemia, metabolic disturbances, arthritis, and tumors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ANTH 5382. Archaeology of the Earliest Americans.**

This course focuses on the scientific story of the first Americans: where they came from, when they arrived, and how they met the challenges of moving across the vast, unknown landscapes of North America. Topics include exploring the hemisphere's oldest sites and how people coped with changing global climates.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5385. Seminar in Anthropology.**

This course introduces students to specialized areas of anthropological inquiry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**ANTH 5390. Directed Study.**

Course of independent study open to individual students at the invitation of the faculty member with the approval of the department chair and the graduate advisor. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 5395. Internship.**

Under the direction of the thesis advisor and/or the internship coordinator, a student will conduct supervised work or research, related to a student's professional development, at a public or private organization. This course may be repeated once for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed their thesis proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 7199. Dissertation.**

Original research and writing in Applied Anthropology to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 7299. Dissertation.**

Original research and writing in Applied Anthropology to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANTH 7300A. Methods in Historical Archaeology.**

This course is an advanced survey of historical archaeology methods and theories that will intensively examine current trends in historical archaeology. Students will also be exposed to the material culture from historic period archaeological sites in Texas and North America.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7300B. Histological Analysis of Bone.**

Biomechanical adaptations and important metabolic processes, such as growth and development, are recorded in bone microstructure, and can be observable long after death and the decomposition of other tissues. Histological analysis provides a way to access this record, and is therefore integral to research in forensic anthropology, bioarchaeology, and paleopathology.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7300C. Introductory Qualitative Methods.**

This course provides instruction on qualitative methods and analysis. Students will learn through a combination of lecture and hands-on activities how to design qualitative research projects; collect qualitative data through methods such as interviews, focus groups and observations; analyze this data; and present qualitative results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7300D. Advanced Methods in Primatology.**

In this course, students will learn about the methods used to study primates in captive and field settings, including observational and experimental methods. They will read and discuss recent publications on methods used by primatologists and apply their knowledge to provided examples as well as their own research. Related topics for discussion include research design, ethics, and inclusion in regards to methodology and primatology. Students will emerge from this course with an extensive knowledge of how to apply the appropriate methods to specific questions and hypotheses in primatology, both in the lab and in the field.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7300E. Curation of Archaeological Materials.**

This course introduces students to current techniques and issues in the curation of museum and archaeological collections, combining discussion and presentations with applied work using Texas State's collections. Topics include the conservation, storage, and handling of artifacts; registering, documenting, and illustrating objects; and managing risk. We will also consider issues in the history, ethics, and governance of collections, as well as aspects of public outreach including exhibit design and education.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7300F. Gross Anatomy I.**

In this class, students will master the gross human anatomy of the back, upper limb, lower limb, head and neck. Students will dissect human cadavers in the lab each day, and will learn the muscles, blood vessels, nerves, and organs of these areas.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7300G. Gross Anatomy II.**

This course will allow students to learn the gross anatomical structures of the thorax, abdomen, pelvis and perineum. Students will dissect human cadavers in the lab each day, and will learn the muscles, blood vessels, nerves, and organs of these areas. Prerequisite: ANTH 7300F with a grade of a "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301A. Seminar in Forensic Anthropology.**

This seminar course is a critical survey of past and current research by forensic anthropologists. Through intensive review of the literature, students will understand the development of the discipline, current best practices, and new research directions within the field, and master the methods and theory used in forensic skeletal analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301B. Primate Conservation.**

This course introduces students to the diversity, distribution, and abundance of nonhuman primates. We will use principles from the field of conservation biology to examine the biological, abiotic, and anthropogenic factors related to primate extinction risk. Specifically, we will examine the various threats facing primate populations today, the ways that scientists define and monitor threatened/endangered populations, and the steps that are being taken to increase the likelihood of their survival.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301C. Design + Anthropology.**

This course will begin by exploring the anthropology of design, including the practices, implications, and expansion of design under contemporary capitalism. Students will then use this knowledge to examine the growing field of design anthropology and learn how anthropologists provide actionable insights and research for design work today.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301D. Cultural Heritage Management.**

This course introduces students to current problems and methods in the stewardship of cultural heritage, tangible and intangible, national and international. We will explore topics including ethics and law, development, tourism, public outreach and opinion, and ongoing threats to cultural heritage.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301E. The Archaeology of Hunter-Gatherers.**

This course is an overview of the development of hunter-gatherers as a focus of research in archaeology. Current methodological and theoretical approaches, especially the use of ethnographic and environmental data, will be demonstrated in an ecologically oriented survey of prehistoric hunter-gatherer research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301G. Mortuary Analysis: Perspectives on Death and Burial in the Past.**

This course on mortuary analysis examines the role of the dead within past human societies to understand social structures, cultural practices, and traditional beliefs. It integrates bioarchaeological evidence with anthropological theory, emphasizing the theoretical foundations of mortuary studies derived from archaeology, cultural anthropology, and skeletal biology. Through critical discussions and case studies, this course explores the dynamic relationship between the living and the deceased, highlighting the significance of the dead in human history.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301I. Medical Anthropology.**

This course examines the field of Medical Anthropology, reviews its primary theoretical orientations, and explores some of the health-related issues studied by medical anthropologists. The class also considers the practical nature of health-related research and how anthropologists can contribute to things like policy, treatment, and community interventions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301J. Applied Statistics Using R.**

This course introduces data science with the R language and environment. The goal is to develop foundations for statistical analysis, with special emphasis placed on the fundamentals of data science. Topics will include data organization and visualization, descriptive statistics, hypothesis testing, statistical modeling, and machine learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301K. Language in Society.**

This course examines the complexity of language variation, the social reciprocates of variation, and the significance of variation. Students will explore and correlate theoretical concepts with inclusive empirical case studies and use ethnographic methods to broadly engage the diverse use of language by individuals within society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301L. Linguistic Anthropology.**

This course enhances participants' understanding of essential topics, questions, theories, and methods in studying language and culture dynamics. Participants will learn about the crucial role that language plays in producing, reflecting, or furthering culture, and in orchestrating diverse social relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7301M. Science, Technologies & Organizations.**

This course explores the intersection of science, technology, and organizations through foundational theories in science and technology studies (STS) and organizational anthropology. Students will examine concepts like objectivity, facts, authority, policy, infrastructure, and organizational power. The course highlights feminist STS perspectives to investigate how culture and power influence knowledge, technology, and organizations. By understanding these relationships, students will learn to apply and advocate for anthropology in multidisciplinary teams and organizations, extending their expertise beyond academic settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7302. Teaching Anthropology.**

This course is an introduction to key concepts and practices in the teaching of college-level Anthropology. It provides training in the practical aspects of classroom instruction, and is required for first-year teaching assistants. The course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ANTH 7305. Anthropological Statistics.**

In this leveling course, students learn basic quantitative statistics, how to evaluate quantitative methods presented in anthropological research papers, and be prepared for more advanced statistical methods classes. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 7308. Cultural Resource Management.**

Students will examine topics relevant to cultural resource management (CRM), especially archaeology, but also history, architecture, and cultural anthropology, done in compliance with historic preservation and environmental laws. Topics include the history of CRM, legal and regulatory framework, organization, methods, funding, and ethical and practical dilemmas.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7310. Advanced Theory in Anthropology.**

In this course students examine advanced theory in anthropology, drawing from one or more of the sub-disciplines. It includes both historical perspectives and contemporary usages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7310F. Ethnography of the US-Mexico Borderlands.**

This course examines the history, cultural development, and contemporary politics of the US-Mexican border region from interdisciplinary perspectives with a focus on critical theory and ethnography. Topics discussed will include labor migration, transnationalism, structural violence, religion and spirituality, gender, social movements, political ecology, and creative expression.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ANTH 7311. Seminar in Cultural Anthropology.**

In this leveling course, students learn the historical foundations of cultural anthropology, key theories and methods, and examples of contemporary practice. Topics include evolutionism, functionalism, structuralism, ethnoscience, neo-Marxism, postmodernism, modernity, and ethno-racial formation. The course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ANTH 7312. Seminar in Biological Anthropology.**

In this leveling course, students learn the historical foundations of biological anthropology, its key theories and methods, and examples of its contemporary practice in evolutionary theory, human variation, paleoanthropology, primatology, and skeletal biology. The course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ANTH 7313. Seminar in Archaeology.**

In this leveling course, students learn the historical foundations of archaeology, its key theories and methods, and examples of its contemporary practice in New World and Old World archaeology. The course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ANTH 7315. Advanced Archaeological Techniques.**

The focus of this methods course is the analyses of archaeological materials, such as ceramics, lithics, or the images and symbols of pre-historic cultures. This course may be repeated once for credit, but no more than 6 hours will apply towards the doctoral degree.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 7326. Technical Methods in Anthropology.**

Technical field and laboratory methods provide a suite of tools for anthropologists and related disciplines to collect and analyze data from archaeological, bioarchaeological, forensic, and other contexts. This class focuses on practical aspects of data acquisition, analysis, and management for the various instruments (geophysical, geospatial, and imaging).

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7341. Professional Ethics In Anthropology.**

Anthropologists face a variety of ethical issues as they engage in research with human and animal subjects. In this course, students will focus on many topics including review boards (IRB, IACUC), collaboration with human groups, bioethics, advocacy and activism, repatriation, intellectual property and publication, cultural heritage preservation, and workplace ethics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7344. Proposal Writing.**

In this course, students will develop the expert skills necessary to write competitive research grants and contracts for applied anthropology projects. The goal of this course is for students to write a submission-ready grant to fund their PhD dissertation research. Prerequisite: ANTH 7341 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7351. GIS in Anthropology.**

Geographic Information Systems (GIS) provide a suite of tools for anthropologists. This class focuses on practical aspects of GIS for the acquisition, analysis and interpretation of anthropological data. Students will engage in a hands-on approach to learning GIS applications through data acquisition, thematic mapping, data analysis, and spatial analysis.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7352. Advanced Qualitative Methods.**

Instruction in this course includes methods necessary to conduct applied cultural anthropology research in interdisciplinary settings. Topics include contextual interviewing, diary studies, free listing, pile sorting, panel studies and surveys. Students will also learn how to design methodologies for different types of projects, including rapid qualitative inquiries.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7353. Applied Anthropology Methods.**

This class focuses on how anthropology can solve practical problems in various disciplines, including behavioral health, education, human rights, community development, and business. Students will learn about client development, contract negotiations, project design, proposal writing, preparing deliverables, communicating results to a variety of stakeholders, teamwork, networking, and navigating ethical issues.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7374. Advanced Human Osteology.**

This course is a detailed study of the human skeleton, with focus on individuals at all life stages. Topics include biomechanics, embryology, and histology. Students will learn to identify hard tissue features and landmarks on whole and fragmentary bones and relate these to the associated soft tissue anatomy.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7376. Forensic Analysis of Human Skeletal Remains.**

This course focuses on technical case report writing and evidentiary best practices in forensic anthropological analysis of human skeletal remains. In addition to biological profile estimation techniques, research methods and theoretical foundations used for trauma analysis and taphonomic interpretation will be reviewed. Prerequisite: ANTH 5375 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7385. Seminar in Anthropology.**

This course introduces students to specialized areas of anthropological inquiry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 7395. Professional Externship.**

Under the direction of the dissertation advisor, students will conduct supervised work or research, related to their professional development, at a public or private organization. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 7397. Directed Research.**

Under the direction of the dissertation committee chair, students will prepare for their candidacy exams by developing a reading list of the theory and methods used in their anthropological sub-discipline. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ANTH 7398. Collaborative Research.**

In this course doctoral students initiate, conduct, and participate in collaborative research with graduate faculty. This course may be repeated once for credit, but not more than 6 hours will apply towards the doctoral degree. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 7399. Dissertation.**

Original research and writing in Applied Anthropology to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANTH 7599. Dissertation.**

Original research and writing in Applied Anthropology to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ANTH 7695. Professional Externship.**

Under the direction of the dissertation advisor, students will conduct supervised work or research, related to their professional development, at a public or private organization. Prerequisite: Instructor approval.

**6 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 7699. Dissertation.**

Original research and writing in Applied Anthropology to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ANTH 7995. Professional Externship.**

Under the direction of the dissertation advisor, students will conduct supervised work or research, related to their professional development, at a public or private organization. Prerequisite: Instructor approval.

**9 Credit Hours. 1 Lecture Contact Hour. 40 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ANTH 7999. Dissertation.**

Original research and writing in Applied Anthropology to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ARAB 1410. Beginning Arabic I.**

Introduction to listening, speaking, reading, and writing skills within an Arabic cultural framework. Students who take ARAB 1410 toward degree requirements must also complete ARAB 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ARAB 1411



**ARAB 1420. Beginning Arabic II.**

Continued practice in listening, speaking, reading, and writing skills within an Arabic cultural framework. Students who take ARAB 1410 toward degree requirements must also complete ARAB 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ARAB 1412

**ARAB 2310. Intermediate Arabic I.**

Continued development and review of all language skills within an Arabic cultural framework. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ARAB 2311

**ARAB 2320. Intermediate Arabic II.**

More advanced practice in all language skills with greater emphasis on reading within an Arabic cultural framework. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ARAB 2312

**ARAB 3301. Levantine Arabic.**

An introduction to Arab dialects with a focus on Levantine Arabic ( Jordan, Syria, Lebanon, and Palestinian territories). The course will emphasize oral communication and using the dialect correctly in its cultural context. It will also compare Levantine Arabic to Modern Standard Arabic. Repeatable once with different content. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**ARAB 3302. Media Arabic.**

Introduction to Arab media designed to advance students' proficiency in Arabic. It will present cultural characteristics of Arab media and describe how those characteristics differ from those of US media. The course will increase students' vocabulary knowledge and enable them to understand various Arab media sources. Repeatable once with different content. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**ARAB 3303. Business Arabic.**

This course focuses on the use of written Arabic in business contexts, as well as economic, demographic, and cultural factors that influence commercial interactions in the Arabic-speaking world.(MULT)

Prerequisite: ARAB 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ARAB 3304. Arab Civilization and Culture.**

Students study the civilizations and cultures of the Arab world. The course provides background for understanding Arab societies.(MULT)

Prerequisite: ARAB 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ARAB 4390. Studies in Arabic Language and Culture.**

In this course students will conduct an independent study project on Arabic language or culture.(MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**ART 1301. Core I: Collaboration.**

This course introduces practical and theoretical content in disciplinary and interdisciplinary art and design practices. Through thematic collaborative projects, students will engage various 2D, 3D, and 4D materials, methods, tools, and concepts independently and in relation to each other.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** ARTS 1311

**ART 1303. Core II: Archive.**

This course builds upon interdisciplinary practices introduced in Core I. By creating and engaging with archives and collections, students will build a personal archive of inspiration and source material that uses different research and working methods from all five program areas of the School of Art and Design. Students utilize this personal archive to create a series of interdisciplinary outcomes.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2348

**ART 2313. Introduction to Fine Arts.**

An introductory course designed to give the student a fundamental understanding of the creation and appreciation of diverse modes of expression through the visual and performing arts. This course may not be repeated for credit by taking MU 2313, TH 2313, or DAN 2313.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050

**Grade Mode:** Standard Letter

**TCCN:** HUMA 1315

**ARTF 1302. Basic Drawing for Non-Majors.**

This class introduces a variety of media and techniques for exploring descriptive and expressive possibilities in drawing.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTF 1304. Color Theory.**

Introduction to color as a descriptive and expressive element of art, focusing on color perception and application.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2311

**ARTH 2301. Ancient to Medieval Art.**

A survey of the history of painting, sculpture, and architecture from pre-historic through medieval periods. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ARTS 1303

**ARTH 2302. Renaissance to Modern Art.**

A survey of art history from the fourteenth century through the twenty-first century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ARTS 1304

**ARTH 3300. Art Criticism and Writing.**

This course introduces students to the history and practice of art criticism and provides them with relevant tools and experiences to craft their own body of art criticism. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 3301. History of Modern Art.**

In this course students survey the stylistic trends, aesthetic issues, and evolving philosophies of modern art in Europe and the Americas from 1850 to 1965, emphasizing modern art's transcultural characteristics and its connections to its social and historical contexts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ARTH 3306. History of Photography.**

This course surveys the history of photography from its earliest manifestations until the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTH 3307. Issues in Contemporary Art.**

An issue-oriented survey of the diverse forms and concepts in contemporary art making practices, mostly from the United States, from 1965 to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTH 3316. History of Design.**

This course surveys movements in the history of design from the nineteenth to the twenty-first centuries. Graphic design is situated within the contexts of architecture, media, and other design disciplines. The course is organized chronologically and examines stylistic, national, and international trends. A main focus is the impact of ideology on design and the way design generates or reinforces social, political, and cultural values in particular places and times. Topics include the significance of the European avant-garde; the development of the New Typography; the rise of mass-market magazines; propaganda, war, and revolution; Olympic design; postmodernism; and more.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTH 4300. History of American Art.**

This course provides an introduction to American art and visual culture from ancient times to the 1950s. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4302. Latin American Art.**

This course surveys the rich and varied visual art of Latin American and Caribbean countries from the wars of independence to the present day with a focus on recurring themes that have resonated in art throughout the region, such as modernism, internationalism, nationalism, race, identity, and political activism. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4303. Pre-Columbian Art.**

A survey of the art of Pre-Columbian sites and cultures in Mesoamerica and the Central Andes, from pre-history to the European conquest. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4304. Global History of Cinema.**

This course is a transnational survey of the evolution of cinematic form, production and reception. Students will analyze the regional and global context of selected major film styles, philosophies and industries. Movement across geographical and cultural borders will be a narrative theme that unites the films discussed. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4306. Renaissance Art.**

An in-depth survey of the history of Italian Renaissance art, including key works of art representative of the Northern Renaissance. Course emphasizes the study of iconography and stylistic change, in conjunction with larger cultural developments. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4308. Asian Art.**

A broad survey of the art of Asian cultures including India, Japan, and China from pre-history to the present. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4309. Gender and Visual Representation.**

This course provides an introduction to art, theory, and visual culture concerned with issues of sexuality, gender experience and difference. It explores, questions and looks beyond the power dynamics involved in traditional categories of femininity and masculinity through their symbolic expression. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4310. Race and Representation.**

This course explores the variegated ways that race, and, by implication, identity and difference, is figured and represented in a range of cultural productions, including art, film and visual culture. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4311. History of Italian Art.**

Taught on-site and centered in Florence, Italy, this course represents a targeted immersion into Renaissance art and culture and includes the study of pivotal works of art and architecture across the Italian peninsula. May be substituted for ARTH 2301 or ARTH 2302. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ARTH 4312. The Arts in Popular Culture.**

This course examines popular culture, including the emergence of mass culture, and its complex intersection with the fine arts from the nineteenth century onwards. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4313. Hellenistic Art and Culture.**

This course focuses on the Greek aesthetic tradition from the fourth century BCE to the end of the first century C.E., with a cross-disciplinary emphasis on the interaction of Greek and non-Greek cultures from Northern India to the Italian peninsula. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4314. Art and Politics.**

This course explores various ways in which artists and patrons have worked to change or endorse political policy, exploring art both as a tool for social cohesion in support of a particular political party or ideal and as a means of political protest. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4315. History of Experimental Film.**

This course provides an overview of experiments in avant-garde and artists' films from 1920 until the present. Students will learn how to analyze the meaning in moving images that exhibit unconventional narratives and will examine reactions these films have provoked in audiences past and present.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4316. Islamic Art.**

This course will survey the art, architecture, and urban formations associated with the religion of Islam across Asia, Africa, and Europe. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4317. Spanish Colonial Art of the Americas.**

From a critical postcolonial perspective, this course surveys art and architecture created in the Spanish viceroyalties of the Americas between 1521 and 1821. The roles that art and architecture played in religion, government, social structuring, and identity formation are examined, with attention to unique styles and approaches that emerged as the cultures of indigenous Americans, Europeans, and Africans converged. The period is considered with attention not just to European culture, as it was imposed through colonialism, but also to the perspectives and cultural contributions of colonized people, both indigenous American and African. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4318. Postmodernism and Design.**

This course explores postmodern design as it emerged in the late 20th-century. Students study iconic examples of postmodern architecture, graphic design, furniture and interiors, as well as the political, social, and cultural contexts that impacted their production and reception. Students also study the representation of architecture and design in films and other forms of visual culture. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4320A. Documentary Photography.**

This course explores key issues in the theory, history, and practice of documentary photography. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4320C. Art and Activism.**

In this course, students learn about contemporary art activism, including its historical antecedents, theorization, and global trajectories.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4320D. Art and the Environment.**

This course examines the intersections of art and the environment. A range of interdisciplinary theories and concepts are considered as frameworks for understanding complex relationships between creative production and ecologies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4321P. Artists' Writing.**

This course explores ways in which visual artists have engaged with the written word in relationship to their art work. Readings will be taken from diaries, manifestos, critical and experimental essays, and works of fiction. Students will create their own writings and/or art work in response to weekly readings. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4321U. Contemporary Art in Italy.**

Taught on-site and centered in Florence, Italy, students consider a number of contemporary art and exhibition practices, with emphasis on discursive formations of the global. May be substituted for ARTH 3307. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ARTH 4321W. Contemporary Art in Mexico.**

This course explores contemporary art practices in Mexico through site visits, studio visits, readings and writing. Capitalizing on the city's dynamic artists, project spaces and museums, students will interact with some of the leading professionals in the arts. (MULT).

**3 Credit Hours. 12 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ARTH 4321Y. Modernism and Design.**

This seminar explores movements in modern design in the early and mid 20th-century. Topics include: graphic design's relation to art, architecture, and film; the rise of the avant-garde and the impact of ideology on design; synergies between design and commerce; and international developments in the post-WWII period. This course is conducted online; we will meet in person as a group approximately 4-5 times during the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4321Z. U.S. Latinx Art Histories.**

In this course, students will examine art created by Latinx diaspora communities across the United States and its histories.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4322. Special Problems.**

An advanced level, independent study in art history, aesthetics, and criticism. The emphasis of the course is on scholarship, research, and writing. May be repeated with different emphasis for additional credit. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4323. Art History Theories and Methods.**

This course introduces students to major theories and methods involved in the study of art and visual culture. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4325. Art History Internship.**

This course offers students the opportunity to experience and receive academic credit for professional activities related to the field of art history. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTH 4326. Art History Thesis.**

This course is designed for students to pursue a thesis project through independent research on art history or visual culture. The student will work closely with the faculty member to develop a rigorous academic project that may take the form of a research paper, art exhibition, or other scholarly endeavor. Prerequisite: ARTH 4323 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTH 4327. Video Art.**

This course follows the evolution of video art from the analog to the digital era. Video art that explores and critiques technologies of spectacle (cinema, television, the internet and virtual reality) is a special focus among the artworks that students view, discuss, research and interpret. Students learn how to identify and theorize liveness, closed circuit transmission, compositing and playback as medium-specific characteristics of video art. The course provides a nuanced examination of video art's existence between the contemporary art world and popular culture at large. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4328. Curatorial Practices.**

This course considers the history and cultural significance of the practice of curating and exhibition making, examines the role that exhibitions play in communicating knowledge, and explores the variety of display methods within the language of exhibits.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 4329. Baroque Art.**

This course explores developments in the art of the seventeenth and eighteenth centuries that are typically brought under the heading Baroque. Students investigate the reasons for the global spread of Baroque style and study its manifestations in particular regions and locales.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTH 5302. Special Problems Advanced.**

An independent study course involved with art history, aesthetics, and criticism. The emphasis of the course is on scholarship, research, and writing. May be repeated with different emphasis for additional credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 1301. Studio Art Foundations I.**

This course emphasizes a hands-on experience with drawing and two-dimensional design. Students engage in a series of short exercises and longer projects that incorporate contemporary art-making methods such as collage, photography, sculptural exercises, digital technologies, collaborative processes and interdisciplinary activities.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 1316

**ARTS 1302. Studio Art Foundations II.**

This course emphasizes a hands-on experience with three- and four-dimensional artmaking. Students engage in a series of short exercises and longer projects that incorporate contemporary art-making methods such as collage, video, drawing, sculpture, installation, performance, digital technologies, collaborative processes and interdisciplinary activities.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 1312



**ARTS 1303. Photography Foundations I.**

This is an introductory photography foundations course that introduces basic concepts in photography. The class focuses on creating photographs and interpreting their meanings. While this course introduces the technical aspects of shooting, editing, and printing photographs, the course's primary concern is the exploration of ideas. Assignments incorporate a large degree of self-direction as well as opportunities for collaborative reflection with their peers. Students form questions about the world and experiment with photographic form and technique in order to best express individual conceptual explorations.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2356

**ARTS 1304. Photography Foundations II.**

This course introduces students to photography's significant role in the construction of social and political narratives through the use of book making and relying on the marriage of digital and traditional methods and skills. Prerequisite: ARTS 1303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 2301. Beginning Expanded Media.**

In this course, students explore video as an interdisciplinary vehicle for creative expression, developing a technical and conceptual foundation in the medium. Topics include the fundamentals of moving image and sound production, screen culture, and video as a vehicle for artistic expression and social inquiry.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 2311. Beginning Ceramics.**

In this course, students explore clay as a vehicle for creative expression, developing a technical and conceptual foundation in the medium. Topics include an introduction to hand building, surface design, and the kiln-firing process.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2346

**ARTS 2321. Beginning Drawing.**

In this course, students explore drawing as a vehicle for creative expression, developing a technical and conceptual foundation in the medium. Topics include perceptual drawing from life, drawing from the human form, and descriptive and expressive drawing explored through a range of subject matters and material approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2323

**ARTS 2332. Queer Art and Visual Culture.**

This course explores the contributions to visual culture by queer (LGBTQIA+) artists and designers, highlighting the history of queer art through the twentieth century and examining the diverse, often cross-disciplinary manifestations of queer art and design. Students apply various artistic strategies and conceptual viewpoints of queer artists to their own works in a series of hands-on creative projects.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 2341. Beginning Metals.**

In this course, students explore metals as a vehicle for creative expression, developing a technical and conceptual foundation in the medium. Topics include design and fabrication, and using basic metalsmithing techniques with emphasis on sculptural forms and personal adornment.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2341

**ARTS 2351. Beginning Painting.**

In this course, students explore paint as a vehicle for creative expression, developing a technical and conceptual foundation in the medium. Topics include color, composition, and paint application.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2316

**ARTS 2371. Beginning Printmaking.**

In this course, students explore screen and relief printing as vehicles for creative expression, developing a technical and conceptual foundation in the medium. Topics include color, layer registration, and the formal elements of image making.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 2381. Beginning Sculpture.**

In this course, students explore sculptural materials and processes as vehicles for creative expression, developing a technical and conceptual foundation in the medium. Topics include reductive and additive processes, welding, wood-working, and introduction to other materials including plaster and paper mache to develop ideas.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** ARTS 2326

**ARTS 3302. Intermediate Expanded Media.**

In this course, students continue exploring formal, critical and technical approaches to video as an interdisciplinary medium. Topics include sound-image relationships and audio post-production techniques. Prerequisite: ARTS 2301 and ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3304. Advanced Expanded Media.**

In this course, students engage with and pursue a personal direction for their work. Emphasis is placed on research, experimentation, advanced processes and conceptual approaches in time-based media with an additional focus on historical and contemporary forms. Prerequisite: ARTS 3302 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3312. Intermediate Ceramics.**

In this course, students continue exploring formal, critical and technical approaches to the ceramic medium. Topics include wheel throwing, glaze calculation, and developing a studio practice. Prerequisite: ARTS 2311 and ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3314. Advanced Ceramics.**

In this course, students engage with and pursue a personal direction for their work. Emphasis is placed on research, experimentation, advanced processes and conceptual approaches in ceramic art practices, with an additional focus on historical and contemporary forms. Prerequisite: ARTS 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3322. Intermediate Drawing.**

In this course, students continue exploring formal, critical and technical approaches to drawing. Topics include narrative, process, and experimentation within the practice of contemporary drawing. Prerequisite: ARTS 2321 and ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3324. Advanced Drawing.**

In this course, students engage with and pursue a personal direction for their work. Emphasis is placed on research, experimentation, advanced processes and conceptual approaches in drawing with an additional focus on historical and contemporary forms. Prerequisite: ARTS 3322 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3342. Intermediate Metals.**

In this course, students continue exploring formal, critical, and technical approaches to develop personal conceptual direction related to metalsmithing and jewelry. Topics include exploration of materials and methods with an emphasis on industrial technology. Prerequisites: ARTS 2341 and ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3344. Advanced Metals.**

In this course, students engage with and pursue a personal, comprehensive body of work. Emphasis is placed on research, experimentation, advanced processes, and conceptual approaches related to the discipline of metalsmithing with an additional focus on historical and contemporary forms. Prerequisite: ARTS 3342 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3352. Intermediate Painting.**

In this course, students continue exploring formal, critical and technical approaches to painting. Topics include advanced exercises in color theory, personal imagery building, and the history and context of painting. Prerequisites: ARTS 2351 and ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3354. Advanced Painting.**

In this course, students engage with and pursue a personal direction for their work. Emphasis is placed on research, experimentation, advanced processes and conceptual approaches in painting with an additional focus on historical and contemporary forms. Prerequisite: ARTS 3352 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3361. Darkroom.**

This course introduces black and white aesthetics and techniques within a traditional and digital context.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3364. Introduction to Digital Photography.**

This course introduces students to the aesthetics of current digital imaging technology, including new digital cameras, scanning equipment, Macintosh computers, image-manipulation programs and printing devices. Prerequisite: ARTS 1303 with grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3365. Lighting.**

This course uses diverse environments to explore issues in controlled lighting in photography. Prerequisite: ARTS 1304 and ARTS 3364 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3367. Large Format Photography.**

This course introduces the basic materials, processes, techniques, and aesthetics of large format photography. Prerequisite: ARTS 3364 and ARTS 1304 and ARTS 3361 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3372. Intermediate Printmaking.**

In this course, students explore intaglio and lithographic printing as vehicles for creative expression, developing a technical and conceptual foundation in the medium. Topics include etching, stone and plate lithography, and the formal elements of image making.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3374. Advanced Printmaking.**

In this course, students engage with and pursue a personal direction for their work. Emphasis is placed on research, experimentation, advanced processes and conceptual approaches in any of the print mediums which the student has already been introduced to (screen, relief, intaglio, lithography) with an additional focus on historical and contemporary forms. Prerequisite: ARTS 2371 or ARTS 3372 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3382. Intermediate Sculpture.**

In this course, students continue exploring formal, critical and technical approaches to sculptural materials and processes. Topics include refining and expanding sculptural techniques with wood, metal, and casting with a focus on strategies for installation and display. Prerequisite: ARTS 2381 and ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3384. Advanced Sculpture.**

In this course, students engage with and pursue a personal direction for their work. Emphasis is placed on research, experimentation, advanced processes and conceptual approaches in the field of sculpture with an additional focus on historical and contemporary forms. Prerequisite: ARTS 3382 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 3392. Experimental Wet Media.**

In this course, students explore water-based media as a vehicle for creative expression, developing a technical and conceptual foundation in the medium. Prerequisite: ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4000. Senior/Thesis Art Exhibition.**

A senior level course in which all graduating students majoring in Studio Art with a studio specialization, Studio Art leading to All Level Certification, or in Photography, must participate during their last academic year. In consultation with thesis faculty, studio art and photography students will select work to exhibit from their Thesis I and Thesis II courses. Students earning teaching certification will select work to exhibit in consultation with art education faculty advisors.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4100. Special Problems in Studio Art.**

This course provides the skills to prepare, package, and present written and professional documents and documentation of the creative work. The course also covers additional topics required for pursuing a professional career in the arts, building community, and preparing for post-BFA opportunities.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4200. Professional Practice and Portfolio.**

This course covers professional topics required for pursuing a career in the arts, building community, and preparing for post-BFA opportunities. It is taken in conjunction with Thesis I-level classes; students develop written and professional documents and documentation of creative work.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4305. Issues in Expanded Media.**

In this course, students investigate contemporary issues in the discipline of expanded media. Potential course topics include but are not limited to animation, multimedia installation, and performance. Prerequisite: ARTS 3302 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4308D. Natural and Human Environment of Italy.**

This course uses Italy as the backdrop to enhance aesthetic understanding of both color (slide transparency) and black and white photography. A strong emphasis is placed on developing visual, conceptual and technical aspects of photography using advanced camera knowledge, chemistry, and sensitivity to local visual stimuli.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTS 4308Z. Casting as Copy, Effigy, and Replacement in Art.**

This course, students practice lost wax casting, direct method casting, and mold making techniques across a variety of disciplines and 3D mediums. Students use cast forms as a language to explore concepts of verisimilitude in art, the use of multiples, and the relationship between constructed forms and found objects. This class is a blend of contemporary ideas, cutting edge technologies and historic, time-honored hand-working traditions. Prerequisite: ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with grades of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTS 4309A. Chinese Culture and Calligraphy.**

This course explores Chinese art, culture, and language through calligraphy. By learning the Chinese language through calligraphy, students will identify the influence different written language systems can have on culture.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTS 4309B. The Unsettlements: Place, History, & Ancestry in Creative Work.**

This course introduces students to the creative and critical framework of the exhibition, The Unsettlements: Moms at the Texas State Galleries. The course will allow students to develop their own creative and critical abilities to imagine large-scale projects and long-term explorations through a sustained attention to issues of place, history, ancestry, relation, site-specificity, object ontology, and more.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTS 4309C. Illustration and Graphic Styles.**

In this course, students will explore the creation of illustrations and respond to diverse prompts across various media. Emphasis will be placed on research, idea generation and the development of a cohesive style, voice, and portfolio. Various analog and digital techniques will be demonstrated and practiced.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTS 4309D. Graphic Novels and 'Zines II.**

In this course, students will explore the development and creation of a sequential art short story that will be fully realized as a physically printed book. Emphasis will be placed on outlining story arcs, writing scripts, creating and editing page layouts for a visual narrative, and developing and following production timelines. The creation of a multi-page graphic art story through sketching, inking, and coloring will be demonstrated and practiced, as well as the printing of high resolution artworks and various bookbinding techniques. Prerequisite: ARTS 4321 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTS 4309E. Casting II.**

This course introduces the intermediate and advanced skills of lost wax casting, direct method casting, and mold making techniques as students develop a mature and marketable body of work. Cast forms will be utilized as a language to explore concepts of verisimilitude in art, the use of multiples, and the relationship between constructed forms and found objects. This class is a blend of contemporary ideas, cutting edge technologies and historic, time-honored hand-working. There is an emphasis on a continued and deeper exploration of casting concepts and processes as student incorporating advanced casting outcomes into the development of their own work. Prerequisite: ARTS 4308Z with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTS 4312. Studio Art Internship.**

A course designed to offer students the opportunity to experience and receive academic credit for professional related activities in the field of the studio arts. Requires consent of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4315. Issues in Ceramics.**

In this course, students investigate contemporary issues in the discipline of ceramics. Potential course topics include but are not limited to figurative sculpture, mold making, printing on ceramic, and digital designing for the ceramic artist. Prerequisite: ARTS 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4321. Graphic Novels and 'Zines.**

This class explores comics, sequential art, and graphic storytelling as contemporary media. Students are introduced to historical and contemporary examples of narrative art, including cinema, comic books and graphic novels. Students explore the theory and practice of sequential art, while creating original comics concerned with historical, personal, and literary subject matter.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4322. Disegno a Firenze: Drawing in Florence.**

This course focuses on drawing from various subjects in and around the city of Florence. Through daily hands-on practice, students address not only the fundamentals of monochromatic drawing, but also the increased perception that the act of observational drawing engenders. The subjects of students' drawings include: a variety of Renaissance artworks, historical architectural spaces, as well as city and landscape views. Corequisite: ARTH 4311 with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4325. Issues in Drawing.**

In this course, students investigate contemporary issues in the discipline of drawing. Potential course topics include but are not limited to drawing in space and time, collage, and drawing in plein air. Prerequisite: ARTS 3322 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4341. Digital Fabrication.**

This class provides the fundamental skills for integrating digital fabrication technologies with other art and design processes. Students are introduced to digital design and fabrication using 3D modeling software, 3D printers, and computer controlled machines. A variety of materials are taught through conceptual, technical, and creative problem solving. Prerequisite: [ART 1301 or ART 1303] with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4345. Issues in Metals.**

In this course, students investigate contemporary issues in the discipline of metals. Potential course topics include but are not limited to casting, forming and forging, enameling, mechanisms, and stone setting processes. Prerequisite: ARTS 3342 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4355. Issues in Painting.**

In this course, students investigate contemporary issues in the discipline of painting. Potential course topics include but are not limited to color theory, abstraction, and writing about painting. Prerequisite: ARTS 3352 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4360. Readings in Photography.**

In this course, students read, write, and create studio projects in reaction to historical and contemporary written accounts of the history, practice, and interpretation of photography. (WI) Prerequisite: ARTH 3306 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ARTS 4361. The Photographic Project.**

In this course, students define, research, and create two extended photographic projects focused on a single theme. Students explore various methodologies to conceptualize, execute, and evaluate a series of related photographs, based on a broad theme suggested by the instructor, such as identity, politics, place, or social media. In addition, students choose a field of inquiry within that theme to create works to be installed in a professional setting. Prerequisite: ARTS 3367 and ARTS 4360 both with grades of "D" or better. Corequisite: ARTS 4200 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**ARTS 4364. Advanced Digital Photography.**

This course explores advanced concepts and techniques in digital photography. Prerequisite: ARTS 3364 and ARTS 1304 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4367. Photography Thesis.**

This course is the Senior Thesis for photography majors, requiring a series of lens-based works and a written creative statement. It culminates in a senior thesis exhibition in the gallery. Prerequisite: ARTS 3367 and ARTS 4360 both with grades of "D" or better. Corequisite: ARTS 4000 with a grade of "CR".

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4368. Fine Art Photography Special Problems.**

An advanced level, independent study in photography which requires students to pursue a personal conceptual direction and to develop the appropriate technical and critical skills necessary for creating a cohesive body of artwork. May be repeated with different emphasis for additional credit. Must be an Art major or minor to enroll. Prerequisites: ARTS 2361; ARTF 1301, ARTF 1302.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4371. Risograph 101.**

This course introduces the operation of a Risograph Duplicator. Students learn how to create multi-color prints and small publications. The course approaches image creation and editing through a number of digital and analogue techniques. Technical understanding of the machine and traditional and experimental approaches to print is covered in this course. Prerequisite: ART 1301 and ART 1303 and [ARTC 1301 or ARTS 1301 or ARTS 1303] and [ARTC 1302 or ARTS 1302 or ARTS 1304 or ARTT 2372] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4375. Issues in Printmaking.**

In this course, students investigate contemporary issues in the discipline of print. Potential course topics include but are not limited to conceptual aspects of print, new technologies including laser engraving, book-binding techniques, and experimental forms. Prerequisite: ARTS 2371 or ARTS 3372 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4381. Soft Sculpture.**

This course emphasizes aesthetic direction in sculpture through the study of numerous materials that are fiber based with a focus on contemporary practices in papermaking, surface design, and material manipulation. Prerequisite: ARTS 2381 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4385. Issues in Sculpture.**

In this course, students investigate contemporary issues in the discipline of sculpture. Potential course topics include but are not limited to advanced casting, installation and working with found objects and readymades. Prerequisite: ARTS 3382 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4387. Thesis.**

In this course, students will create an original body of artwork and supporting material, including a written statement of intent, outlining the scope and objectives of the proposed thesis project. Selections from the thesis project will be presented to the public. Prerequisite: ARTS 4200 and [ARTS 3304 or ARTS 3314 or ARTS 3324 or ARTS 3344 or ARTS 3354 or ARTS 3374 or ARTS 3384] both with a grade of "D" or better. Corequisite: ARTS 4000 with a grade of "CR".

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 4388. Special Problems in Studio Art.**

In this independent study course, students in studio art pursue a personal conceptual direction and develop the appropriate technical and critical skills necessary for creating a cohesive body of artwork. Prerequisite: ARTS 3304 or ARTS 3314 or ARTS 3324 or ARTS 3344 or ARTS 3354 or ARTS 3374 or ARTS 3384 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTS 5301. 2-D Advanced Special Problems.**

An independent study in 2-D studio art, which requires a student to pursue a personal conceptual direction and to develop the technical and critical skills necessary for creating a cohesive body of artwork. May be repeated with different emphasis for additional credit. Permission of instructor required to enroll.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTS 5302. 3-D Advanced Special Problems.**

An independent study in studio art, which requires a student to pursue a personal conceptual direction and to develop the technical and critical skills necessary for creating a cohesive body of artwork. May be repeated with different emphasis for additional credit. Permission of instructor required to enroll.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 2371. Fundamentals of Art Theory and Practice.**

A survey and analysis of the theories and practices of art learning. Topics include: philosophy; history and theory of art learning; technology; artistic development; learning theories; assessment tools; program development; presentations and current realities; trends and issues. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTT 2372. Learning and Digital Media.**

In this course students examine theories and practices of using electronic media for the creation of art as well as for enhancement of the art learning process. Prerequisite: ART 1301 and ARTT 2371 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 3370. Art Theory and Practice.**

Introduces the theories and practices of children's art learning for the non-art major.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 3372. Art Theory and Practice for Children.**

This course is a survey and analysis of the theories and practices of teaching art to children. Topics include artistic development, art programming, content, philosophies, methodologies, objectives and assessment. It requires ten clock hours of field experience in an elementary-art-learning setting. Prerequisites: ART 1303 and ARTT 2371 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 3373. Art Theory and Practice for Adolescents.**

This course covers the theories and practices of adolescent art learning. Topics include: learning environments, artistic development, presentation methodologies, objectives and assessment, and other current topics. It requires ten clock hours of field experience in a secondary school art setting. Prerequisite: ARTT 2371 and ARTT 2372 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 4000. Senior Art Education Exhibition.**

A senior level course in which all graduating Art Education Seniors must participate during their last academic year. Work will be examined and produced leading to a showing in one of the Senior Student Exhibitions.

**0 Credit Hours. 0 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ARTT 4375. Pedagogy of Art Criticism, History & Aesthetics.**

In this course students will learn about the philosophies and practices of art criticism, art history, and aesthetics, as well as contemporary methodologies for analyzing and engaging with art. Prerequisites:

ARTT 3372 or ARTT 3373 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTT 4376. Special Problems in Art Theory and Practice.**

Individualized study focusing on personal skill and knowledge development related to art learning experiences. Research will include a review of literature, a design for practical experience, and documentation of results and conclusions. May be repeated with different emphasis for additional credit. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ARTT 4377. Professional Practices for Art Educators.**

This course prepares art education majors to pursue a career in EC-12 art education. The focus supports the development of secondary curricula, an art teaching portfolio, and advanced analysis of the roles of culture and technology in art teaching and learning. Prerequisite: ARTT 4378 and [ARTT 3372 or ARTT 3373] both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ARTT 4378. Emergent Issues & Advanced Topics in Art Education.**

This course introduces students to emerging ideas and advanced topics in the field of art education. Students address these issues through studio art practices and by developing relevant components for their teaching portfolio. Prerequisite: ARTT 3373 or ARTT 3372 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 4379. Art Education in the Community.**

In this course, students learn about community-based research, art, and methodologies. They participate in collaborations and field experiences/ internships with community partners in art/cultural centers, museums, schools (PK-12), businesses, and diverse learning communities and organizations. Prerequisite: ARTT 3373 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ARTT 4380A. Technology Applications in Art Education.**

In this course students will explore various ideas, techniques, and processes of creating computer art and digital media for use in teaching art in EC-12 grade levels. Prerequisite: [ARTT 2371] and [ARTT 2372] both with grades of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTT 4380E. Storying Identity in Art & Culture.**

This course explores identity as a construct made of individual and cultural components. Coursework is informed by auto-ethnographic traditions that consider artmaking (e.g., stories, poems, visual art) as an indicator of learning and development. Activities include daily journaling, peer critique, and making creative multimedia life-stories.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTT 4390. Art Education Thesis I.**

In this course students engage in exploratory and intermediate art education research and art making to outline the scope of their thesis exhibition. Students also develop a preliminary artist statement exploring art and art education objectives that lead to a thesis proposal and related body of work in a future semester. Prerequisite: ARTT 2372 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 4391. Art Education Thesis II.**

In this course students engage in advanced-level research in art education and art to focus and refine their thesis project. Students also participate in art education professional development, conceptualize and write an artist statement articulating the context of their artistic inquiry, and produce a cohesive body of work that culminates in their BFA Thesis Exhibition. Prerequisite: [ARTT 4378 or ARTT 4379] and ARTT 4390 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 5371. Research Foundations, Art Education Theories and Practices.**

In this teacher preparation course, students learn the fundamentals of art education theories and teaching practices. Primary areas of emphasis include: the history of art education, curriculum design, instructional practices focused on equity, diversity, and inclusion, the exploration of art materials and techniques, and art-making.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 5372. Research in Learning and Digital Media.**

This course examines theories and practices of using computational and electronic tools and materials for the creation of art, as well as for enhancement of the art learning process. Students design and conduct an individualized research project investigating the personal and institutional effects of computation in K-12 art and other schooling practices.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 5376. Research in Art Theory and Practice for Children.**

Individualized study focusing on art skill and knowledge development related to children's art learning experiences. May be repeated with different emphasis for additional credit. Teaching experience or admission to graduate degree program and permission of instructor required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTT 5377. Research in Art Theory and Practice for Adolescents and Adults.**

Individualized study focusing on art skill and knowledge development related to adolescent and/or adult art experiences. May be repeated with different emphasis for additional credit. Teaching experience or admission to graduate degree and permission of instructor required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 2298. Orientation to Athletic Training Profession.**

The purpose of this course is to provide the student with an introduction to the academic and clinical aspects of the profession of athletic training. The course includes the history of the profession, basic knowledge and skills, principles, and techniques used by an athletic trainer. The student will participate in educational observation of clinical experiences with a certified athletic trainer to gain more knowledge of the profession of athletic training. Prerequisite: HIM 2360 with grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 2356. Prevention and Care of Athletic Injuries.**

This course focuses on the theoretical and practical aspects of the prevention, treatment, and rehabilitation of athletic injuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 2400. Functional Anatomy.**

The students will learn to qualitatively analyze the movements of the human body while integrating musculoskeletal anatomy and neuromuscular physiology principles. Corequisite: BIO 2430 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 3298. Foundations of Athletic Training Practice.**

The purpose of this course is to provide the students with a foundation in clinical skills associated with the athletic training profession. The course will include observational experiences. Prerequisite: HIM 2360 and AT 2298 both with grades of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 3311. Clinical Assessment I.**

This course instructs students in the knowledge and skills used in the clinical evaluation of injuries and illnesses involving the head and face, brain, cervical spine, upper extremity, thorax, and pulmonary and cardiovascular systems. Prerequisite: AT 2356 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 3312. Clinical Assessment II.**

This course instructs students about the preliminary and secondary survey with emphasis on clinical assessment of lumbar spine and lower extremity injuries as well as abdomen, gastrointestinal, genitourinary, endocrine, dermatological, and systemic illnesses. Prerequisite: AT 3311 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 3358. Clinical Pathopharmacology.**

This course combines pathophysiology, the study of dynamic aspects of disease processes and study of drugs prescribed to prevent, diagnose, cure, or care for disease across the lifespan. Content includes etiology, pathogenesis, clinical presentation, implications for treatment, and pharmacological management. Prerequisite: BIO 2430 or [BIO 2451 and BIO 2452] either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 3400. Gross Applied Anatomy.**

This course provides a study of the structure and function of the human body with particular emphasis on the muscular, skeletal, vascular and nervous systems. Attention will be on the anatomy and physiology of the body systems focusing on understanding specific functions of body tissues. Laboratory study of the human cadaver is included. Prerequisite: AT 2400 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 4313. Clinical Therapeutic Interventions.**

This course provides a theoretical and clinical background in the use of therapeutic interventions in physical medicine, both modalities and exercise, for patients with musculoskeletal and neurological injuries. Prerequisite: AT 3311 and AT 3312 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 4360. Internship in Clinical Settings.**

Students will be introduced to the clinical aspects of allied health professions by being assigned to a minimum of two clinical sites. Prerequisite: AT 3311 and AT 3312 both with a grade of "C" or better and a minimum 2.75 Texas State GPA.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5101. Graduate Assistant Development.**

This course is required of all graduate assistants and provides regular in-service and planned periodic evaluations of instructional responsibilities. Graduate assistants are required to register for this course in the spring semester of their employment. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**AT 5120. Principles in Athletic Training.**

This course builds upon current competence of health and exercise sciences to instill an evidence based, graduate-level proficiency of best practices in athletic training and healthcare.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AT 5191. Capstone I.**

This course is a supervised project to analyze outcomes in a defined area of clinical practice. The course includes patient outcomes data collection in a practice-based research environment. Completion of full research sequence is required for graduation.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5192. Capstone II.**

This course is a continuation of the research sequence that culminates in a supervised project to analyze outcomes in a defined area of clinical practice. The course includes completion of data collection and analysis for an oral presentation and final paper and poster. Completion of this last course is required Prerequisite: AT 5191.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AT 5201. Graduate Assistant Development.**

This course is required of all graduate assistants and provides in-service and planned periodic evaluations of instructional responsibilities.

Graduate assistants are required to register for this course in the fall semester of their employment. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**AT 5230. Clinical Experience I.**

This course will integrate topics in athletic injury evaluation, management and intervention into an immersive clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 5320.

**2 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5231. Clinical Experience II.**

This course will integrate topics in athletic injury evaluation, management and intervention into an immersive clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 5230.

**2 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5232. Clinical Experience III.**

This course will integrate topics in athletic injury evaluation, management and intervention into an immersive clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 5230; AT 5231.

**2 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AT 5300. Musculoskeletal Assessment of the Lower Extremities.**

This course will present students with a study and critical analysis of injury and illness signs and symptoms. Specific tests and skills used in the clinical evaluation and assessment involving the lower extremities will be included. Prerequisite: AT 5400 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AT 5301. Musculoskeletal Assessment of the Upper Extremity.**

This course will present students with a study and critical analysis of injury and illness signs and symptoms. Specific tests and skills used in the clinical evaluation and assessment involving the upper extremities will be included. Prerequisite: AT 5400 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AT 5305. Musculoskeletal Assessment of Head/Face/Spine and Neurological Systems.**

This course will enable the student to critically analyze the specific tests and skills used in the clinical evaluation and assessment involving the head, spine and neurological systems. Prerequisite: AT 5300 and AT 5301 and AT 5400 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AT 5313. Therapeutic Interventions I.**

This course is designed to provide both a theoretical and clinical basis for the standardized systems approach to therapeutic modality applications to treat patients with musculoskeletal conditions and injury. Prerequisite: AT 5400 with a grade of "B" or better. Corequisite: AT 5301 and AT 5300 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5314. Therapeutic Interventions II.**

This course is designed to examine both a theoretical and clinical basis for the standardized systems approach to therapeutic exercise applications to treat patients with musculoskeletal conditions and injury. Prerequisite: AT 5313 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**AT 5320. General Medical Conditions Assessment and Care.**

This course will enable the student to recognize, evaluate, differentiate and manage common systemic and traumatic conditions and diseases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**AT 5333. Internship in Athletic Training.**

This 400-hour internship provides students with professionally related experience. Students may work with diverse clinical populations in varying athletic training settings. Internship is approved and supervised by Program Coordinator or assigned faculty. Prerequisite: Departmental approval.

**3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5334. Clinical Experience IV.**

This course will integrate topics in athletic injury evaluation, management and intervention into an immersive clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 5230; AT 5231; AT 5232; AT 5333.

**3 Credit Hours. 0 Lecture Contact Hours. 30 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5335. Clinical Experience V.**

This course will integrate topics in athletic injury evaluation, management and intervention into an immersive clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 5230; AT 5231; AT 5232; AT 5333; AT 5334.

**3 Credit Hours. 0 Lecture Contact Hours. 30 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5340. Research Methods and Evidence Based Practice in Athletic Training.**

This course is designed to provide the student with an understanding of the statistical terminology when reading and appraising research studies in order to use evidence to inform clinical practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5341. Pathopharmacology.**

This course will examine the physiological responses and progression of injuries, illnesses, and diseases to the physically active individual. Additionally, this course will provide instruction in the principles and issues of the physiological and psychological response to the pharmacological use and/or abuse of substances. Prerequisite: AT 5320.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5342. Administration and Leadership in Athletic Training.**

This course will evaluate administrative aspects of an athletic training program management such as: risk management, medical record keeping, facilities, third-party reimbursement, health informatics and other current professional issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5343. Interdisciplinary Approach to Athletic Training.**

This course will examine the practice and educational implications of effective and efficient interprofessional teamwork and collaboration in patient care.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5344. Advanced Clinical Decision Making.**

This course provides students various settings to explore aspects of patient evaluation, intervention and outcomes in a simulated learning environment. Students will identify issues in patient care including physical and psychosocial characteristics. Students will apply clinical decision-making skills learned in all courses leading up this final semester class.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5347. Independent Study in Athletic Training.**

This course may be taken by a student who desires to work on a research problem or investigation in Athletic Training. The student gathers and analyzes pertinent data and submits a report of the results of the research. Repeatable once for credit. Prerequisite: ESS 5346 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in AT 5399B. Graded on a credit (CR), progress (PR), no credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AT 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AT 5400. Gross Applied Anatomy.**

This course will examine the structure and function of the human body with emphasis on the skeletal and muscular systems. The course focuses on anatomy and physiology of systems of special interest to students preparing to become athletic trainers. Laboratory study of the human cadaver is included.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**AT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**AT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BILG 3321. Literacy Instruction for Emergent Bilingual Students EC-6.**

This course provides critical analysis and application of current reading and writing methods and materials with a focus on theories associated with literacy/biliteracy development and methodologies for emergent bilinguals. The course is taught in Spanish and English. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 3332. Foundations of Bilingual Education.**

This course introduces the sociocultural, linguistic, cognitive, and policy foundations of bilingual education and ESL education. The course is taught in Spanish and English and is designed for students to gain practice in academic reading and writing in Spanish. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to the Educator Preparation Program and 2.75 Overall GPA and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 4325. Classroom Management and Teacher-Student Relationships in Bilingual Classrooms.**

This course prepares students to build authentic, bilingual classroom communities, including effective methods for establishing shared responsibility, constructive communication, and successful teacher-student relationships. Classroom routines and pedagogical practices are discussed to mitigate difficulties and maximize learning and connection. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and a 2.75 Overall GPA and departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BILG 4350. Mathematics in the Bilingual Education Classroom.**

The course provides an in-depth study of the mathematics content and methodology derived from research-based principles. To develop the mathematical understanding of emergent bilinguals through a field-based approach, the course emphasizes using cognition and bilingualism as learning resources to sustain mathematical knowledge using equity based-instruction and assessment. Prerequisite: 2.75 Overall GPA required. Junior classification required. Must be declared as seeking EC-6 Bilingual Generalist teacher certification. MATH 1315 (or one of the following: MATH 1319 or MATH 2417 or MATH 2471 or MATH 2472); MATH 2311 and MATH 2312 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 4360. Methods and Materials for Teaching ESL in Bilingual Content Areas.**

This course addresses the content, methods, and materials of elementary ESL classroom instruction for English language learners across the curriculum as well as dual language learners learning through two languages. This course is taught in Spanish and English and offers students the opportunity to read and write in Spanish. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to the Educator Preparation Program and a 2.75 Overall GPA and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 4361. Transliterate Communities in Schools.**

This course explores how to provide equitable educational opportunities to emergent bilinguals and their families within and outside of schooling. Using relationship building and instructional practices, learners incorporate the multicultural, translingual and cognitive competencies of bilingual learners that emerge from their community, representing learning resources that advance academic achievement. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to the Educator Preparation Program and a 2.75 Overall GPA and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 4362. Teaching Across the Bilingual Content Areas EC-6.**

This course is a study of research-based content and instructional methods and strategies, materials and resources to teach bilingual learners the EC-6 academic curriculum based on content-related standards associated with the teaching of mathematics, science, social studies, and language arts. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to the Educator Preparation Program and a 2.75 Overall GPA and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 4365. Biliteracy Development for Emergent Bilingual Learners.**

This course targets the dynamic, reciprocal process of literacy development in Spanish and English for emergent bilinguals. Theories, instructional methods and strategies, texts, and materials will be examined through an integrated approach that considers sociocultural, cognitive, linguistic, and political factors. The course will be taught in both Spanish and English. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisites: Admittance to the Educator Preparation Program and a 2.75 Overall GPA and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 4665. Biliteracy Development and Assessment for Emergent Bilingual Learners.**

This course explores the dynamic, unique process of reading and writing development in Spanish and English for emergent bilingual learners. Theoretical frameworks, instructional methods, strategies, and materials for promoting biliteracy development are examined through an integrated approach that considers socio-cognitive, linguistic, historical, and political factors. This course is taught in Spanish and English and includes extensive experience in a bilingual elementary classroom. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and a 2.75 Overall GPA and Departmental Approval.

**6 Credit Hours. 4 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 5365. Biliteracy Development in the Bilingual Education Classroom.**

This course is taught in Spanish and English, targeting the reciprocal process of literacy development in Spanish and English as a second language. Theories, methods, and approaches address learning and teaching processes that support biliteracy development of emergent bilingual within contexts framed by sociocultural, cognitive, linguistic, and affective factors. Prerequisite: CI 5337; CI 5387 SPAN 3308; SPAN 3371; upper levels of SPAN; or advanced studies in SPAN with a grade of B or better; or, Bilingual Education certification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 5367. Policy and Practice in Dual Language Immersion Education.**

This course focuses on current research in bilingual education and language in education policy and practice that shapes program models, curricula, and instruction in two-way and one-way dual language education. The course will be taught in Spanish and English and requires student work in each language. Prerequisites: CI 5387, CI 5337; SPAN 3308; SPAN 3371; or upper level SPAN courses; or advanced studies in SPAN having earned a grade of B or higher; or Bilingual Education certification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 5374. Bilingual/ESL Academic Content Instruction.**

The focus of this course is the integration of native language instruction (Spanish) and English as a second language (ESL) to teach the academic content areas (mathematics, science, social studies, and language arts) for English Language Learners (ELLs) with an emphasis on the cognitive and sociocultural considerations. Prerequisite: SPAN 3308 or SPAN 3371 with a grade of "B" or better; or upper level SPAN course(s); or advanced studies in SPAN with a grade of "B" or better; or Bilingual Education certification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BILG 5388. The Politics of Language.**

Using a critical linguistic perspective, this course examines the sociopolitical aspects of language in local, national, and global contexts. Students learn about language ideologies and gain a profound understanding for how languages and language practices are intricately tied to the racial and economic power relations embedded in schools and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 1130. Functional Biology Laboratory.**

Fundamental techniques and instruments used in cellular biological research will be taught while emphasizing safety, measurements, and scientific methods. Students will design and implement controlled experiments, identify independent and dependent variables, analyze data, draw conclusions, and communicate results with appropriate tables and graphs in oral presentations and written papers.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** BIOL 1106

**BIO 1131. Organismal Biology Laboratory.**

This course introduces the students to the basics of experimental design, scientific method and inquiry, use of statistical analyses and writing research papers. Topics covered include Mendelian and population genetics, natural selection, population ecology, phylogeny, and behavioral ecology.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** BIOL 1107

**BIO 1320. Modern Biology I, Molecules, Cells, and Physiology.**

Provides students with basic scientific and biological principles. Current problems in biology and the ethics of science are presented with perspectives of public policy from a scientific viewpoint. This course is not recommended for majors in the natural sciences, including biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** BIOL 1308

**BIO 1321. Ecology, Evolution and Society.**

This course provides the non-science major an overview of the ecological and evolutionary principles that govern relationships between living organisms, including humans, and their environment. Special attention is given to environmental issues of current concern, such as overpopulation, climate change, pollution, resource depletion, and conservation biology.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering|Multicultural Perspective

**Grade Mode:** Standard Letter

**TCCN:** BIOL 1309

**BIO 1330. Functional Biology.**

This course provides the students with a strong foundation in cellular and molecular biology. Topics include biochemistry, energy metabolism, molecular bases of gene regulation and protein functions, cell division and control, and cell signaling. This course is required for all biology majors and is not recommended for non-science majors. Prerequisite: College Readiness in English Language Arts and Reading (ELAR) according to the TSI regulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 1306

**BIO 1331. Organismal Biology.**

This course provides science majors with a foundation in organismal biology, Mendelian and population genetics, evolution and ecology. Topic include: patterns of inheritance, genetics, evolution, speciation, phylogenetics, and behavioral population, community, and ecosystem ecology. This course is required for all biology majors and is not recommended for non-science majors. Prerequisite: College Readiness in English Language Arts and Reading (ELAR) according to the TSI regulations and College Readiness in Mathematics according to the TSI regulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 1307

**BIO 2400. Microbiology.**

Principles of microbiology, morphology, anatomy, physiology and taxonomy of representative groups of non-pathogenic organisms. Laboratory methods stress studies of pure cultures, the use of laboratory apparatus in quantitative determinations and the detection and identification of microbial populations in the environment. Prerequisites: BIO 1130 and BIO 1131 and BIO 1330 and BIO 1331 and CHEM 1341 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 2421

**BIO 2410. Intermediate General Botany.**

An introduction to the biology of plants and plant-like organisms, emphasizing their role in ecosystem processes, relationships between structure and function, and the evolutionary relationships among the major plant groups. Prerequisites: BIO 1130 and BIO 1131 and BIO 1330 and BIO 1331 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 2411. Intermediate Zoology.**

Provides biology majors a strong foundation in animal biology at the organismal level. The format will include details of animal form and function as well as concepts relating to classification, phylogeny, evolution, and ecology. Topics will include natural history, biogeography, adaptations to local environments, shared characters, and behavior. All material is presented in an accepted phylogenetic sequence. Prerequisites: BIO 1130 and BIO 1131 and BIO 1330 and BIO 1331 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 2430. Human Physiology and Anatomy.**

A course on human physiology covering the various organ systems. Principles of molecular biology, cell and tissue structure, anatomy and relationship of structure and function are stressed. May not be credited toward a Biology major or minor.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 2404

**BIO 2440. Principles of Microbiology.**

The Basic Principles of microbiology, morphology, physiology, immunology and the relationship of microorganisms to diseases. This course is designed primarily to meet the requirements for students in allied health sciences and other programs requiring only one semester of microbiology. This course may not be credited toward a biology major or minor. Prerequisites: BIO 1330 and CHEM 1341 both with grades of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 2420

**BIO 2450. Genetics.**

An introduction to basic principles of Genetics by studies of Mendelian, molecular, quantitative and population genetics. Topics include: classical transmission genetics, and gene mapping, DNA replication and repair, transcription, translation, control of gene expression, genetic engineering techniques, Hardy-Weinberg equilibrium, evolutionary change via natural selection, and genetic drift. Prerequisites: BIO 1130 and BIO 1131 and BIO 1330 and BIO 1331 and CHEM 1141 and CHEM 1142 and CHEM 1341 and CHEM 1342 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 2416

**BIO 2451. Human Anatomy and Physiology I.**

Part I of a two semester course on the structure and function of the human body. Designed specifically to prepare students for nursing and other health professions. Prerequisites: BIO 1330 and CHEM 1341 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 2401

**BIO 2452. Human Anatomy and Physiology II.**

This course is the second part of a two semester course on the structure and function of the human body designed specifically to prepare students for nursing and other health professions. Prerequisites: BIO 1330 and BIO 2451 and CHEM 1341 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** BIOL 2402

**BIO 3200. Genetic Engineering Technology.**

This course introduces the technologies used for genetic engineering with an emphasis on the CRISPR-Cas system. Students will examine various applications in medicine, agriculture, and biotechnology and evaluate the potential benefits and problems, including the underlying technological, ethical and safety concerns. Students will gain hands-on experience tagging genes in the model nematode worm, *Caenorhabditis elegans*. Prerequisite: BIO 2450 with a grade of "C" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 3210. Biology Pedagogy and Learning.**

This course provides an introduction to pedagogical ideas relevant to the teaching and learning of biology for biology learning assistants. Students will learn key education theories and methods from STEM education research and cognitive science. Students will evaluate the processes of teaching and learning and examine structures and practices that facilitate and/or inhibit student learning. Students will apply what they've learned to the teaching of biology as they collaborate with biology faculty as learning assistants for an undergraduate biology course and complete a final project. Prerequisite: Department approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 3300. Cell and Molecular Biology.**

Fundamentals of structure and function of prokaryotic and eukaryotic cells. This course includes cell and organelle structure, basic biochemistry, principles of thermodynamics and energy transformation, nucleic acid and protein synthesis, enzyme kinetics, cell motility and cell signaling. Prerequisites: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter



**BIO 3301. Biology of Sex and Reproduction.**

This course focuses on animals, especially vertebrates, and covers topics such as the evolution of sexual reproduction, genetic variation, sex differentiation during development, reproductive anatomy and physiology, reproductive endocrinology, gestation, disease transmission, and reproductive technologies. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 3308. Global Ecology.**

An interdisciplinary introduction to the science of global environmental change. Emphasis will be placed on understanding principles of earth system science, the scientific basis underlying the major components of global environmental change, the linkages between these components, and the central role of humanity in contributing to the observed changes. (WI) Prerequisites: BIO 1130 and BIO 1131 and BIO 1330 and BIO 1331 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 3341. Aquatic Toxicology.**

This course examines the basic concepts of aquatic toxicology, including uptake mechanisms, interactions, and elimination of different toxicants. Students will understand how toxic substances impact freshwater and marine organisms and identify potential health impacts to humans. Topics to be discussed include nutrients, metals, oil, pesticides, radionuclides, plastics, and emerging contaminants. Prerequisites: BIO 1331 and CHEM 1341 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 3371. Marine Resources.**

This course examines the exploitation and fragility of the marine environment and the economic importance of marine resources. Topics to be examined include ocean ownership, overfishing, aquaculture, shark finning, whaling, ocean mining, marine transportation, tourism, pollution, harvesting energy from the ocean, and the importance of creating marine reserves. Prerequisite: BIO 1331 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 3376. Introduction to Biotechnology.**

This course is an introduction to biotechnology. It provides an insight into how biotechnological applications can solve scientific and societal problems for the benefit of humankind. Prerequisite: BIO 1330 and BIO 1331 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 3406. Economic Botany.**

An introduction to the utilization of plants by humans and their economic and ecological significance. Laboratories will stress plant features beneficial to economic and societal needs. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 3421. Vertebrate Physiology.**

The study of the physiology of vertebrate organ systems, including the nervous system, musculoskeletal system, endocrine system, cardiovascular system, respiratory system, digestive system, reproductive system and urinary system. Mammalian systems will be emphasized. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 3425. Human Anatomy.**

This course introduces students to the anatomy of the human body. Aspects of both gross and micro anatomy of tissues, organs, and systems will be covered with an emphasis on hands-on laboratory exploration. This course is designed for students interested in a variety of health professions. Prerequisite: BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 all with grades of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 3426. Human Physiology.**

This course focuses on human physiology and covers topics such as the nervous system, muscular system, endocrine system, cardiovascular system, respiratory system, digestive system, exocrine system, and reproductive system. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 3430. Mycology.**

A study of the fungal kingdom including slime molds and lichens. Laboratory studies will emphasize taxonomy, morphology and culture techniques. Prerequisites: [BIO 2400 or BIO 2410] and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 3442. Virology.**

The structure, multiplication and genetics of bacterial, plant, and animal viruses. The role of viruses in human and plant disease. (WI) Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 3460. Aquatic Ecology.**

An introduction to the diversity and ecology of aquatic organisms. Students will learn to use ecological concepts to understand aquatic ecosystems and how they are impacted by human activities. They will also summarize and extract relevant information from scientific papers in aquatic ecology, analyze collected data, and communicate the results effectively. The laboratory sessions will include both lab and field work and at least a one-day field trip. Prerequisite: BIO 4416 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 3461. Plant Taxonomy.**

Principles of identification and classification of plants; nomenclature and characteristics of various plant groups with emphasis on the higher plants. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 3480. Histology.**

A study of the structural and functional relationships between cells and tissues in organs. The laboratory includes the study of prepared slides and of microtechnique. This course is designed to meet the needs of pre-professional students. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4126. Immunology Laboratory.**

This laboratory-based course will cover cells of the immune system and basic serological reactions, including bacterial and viral agglutination reactions, precipitation, immunoelectrophoresis, immunofluorescence, and enzyme-linked immunosorbent assays. (WI) Prerequisite: BIO 2400 and BIO 2450 both with grades of "C" or better. Corequisite: BIO 4326 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4166. Medical Microbiology Laboratory.**

This laboratory-based course will cover pathogenic bacteria emphasizing identification of selected groups of pathogens and the biological basis for virulence. (WI) Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better. Corequisites: BIO 4366.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4176. Microbial Biotechnology Laboratory.**

This laboratory-based course will cover use of microbes for biotechnological applications and is designed to provide practical explorations into fields of biotechnology. Topics include laboratory techniques for recombinant protein purification, fermentation, identification of markers in genetically modified food and bioremediation of pollutants. Prerequisite: BIO 2400 and BIO 2450 both with grades of "C" or better. Corequisite: BIO 4376.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4299. Undergraduate Research.**

Supervised individual research projects in a mentor-student relationship with a biology professor. May be repeated once for credit. Prerequisites: BIO 2450 with a grade of "C" or better and a minimum 3.0 Texas State GPA and instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4300. Neurobiology.**

This course will give students an overview of neuroscience, particularly the areas of neuroanatomy, neurophysiology, and evolutionary and developmental neurobiology. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4301. Evolution.**

Basic genetic principles applied to natural selection, adaptation, populations, speciation and man's future. Consideration is given to the origin of life, nature of chromosomal variation, evolution of genetic systems and certain other selected topics. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4304. Wildlife and Recreation: Impact, Policy, and Management.**

Students will be introduced to the impact human recreational activities have on wildlife habitats and populations. Management practices to enhance human-wildlife encounters or to minimize detrimental effects on wildlife populations will be presented. Prerequisite: BIO 4416 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4305. Nature Study.**

This course provides a comprehensive survey of natural events. It includes laboratory and field work emphasizing observation, collection and discovery of relationships. It is creditable only for those seeking elementary or middle school certification and is required for those seeking grade 4-8 Science or Science/Mathematics teaching certification. This course must be taken the semester immediately prior to student teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4307. Ecology of Rarity.**

This course will examine the ecology of rarity and its ability to inform public awareness and environmental policy. This course will explore how we define rarity, persistence and viability and address the question, "Is rarity more or less common than might be expected, and is there anything we can or should do about it?" Prerequisite: BIO 4416 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4311. Cancer Biology.**

Cancer Biology provides a foundation for understanding the complex molecular, biochemical, and cellular processes associated with cancer development. Topics include the role of tumor suppressor genes, oncogenes, DNA repair, apoptosis, ECM, cell-cycle control, cell signaling pathways, immune function and cancer-causing viruses. Emerging diagnostics and/or therapeutics will also be discussed. Prerequisite: BIO 2450 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4317. Interpretive Biology Programming and Design.**

In this course, students will explore the methods and principles used by the National Park Service, museums, environmental centers, and state park systems to interest a variety of audiences as well as interpret biology and natural environments effectively. Students will practice skills in both personal and non-personal interpretation by creating science outreach programs, interpretive literature, brochures, path waysides, and other interpretive media. Service-learning is an integral and mandatory part of this course. (WI) Prerequisite: [BIO 2410 or BIO 2411] and BIO 2450 with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4319. Biological Resources: Conservation and Planning.**

This course is an introduction to the protection and sustainable use of populations, species, habitats, and ecosystems. Course also includes study of the methods used to analyze biodiversity and population regulation. Corequisite: BIO 4416 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4326. Immunology.**

This lecture-based course will cover the biology of the immune system and its relationship to disease, emphasizing B and T cell immunity, immune diseases, hypersensitivities, transplantation, and cancer. (WI) Prerequisite: BIO 2400 and BIO 2450 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4327. Issues in Irish Biodiversity and Conservation.**

In this course, students will learn about Irish flora and fauna, ecosystems, conservation strategies in areas of high ecological concern, and public involvement. Emphasis will be placed on case studies and service-learning opportunities. Prerequisite: BIO 1131 and BIO 1331 both with grades of "D" or better and instructor approval. Corequisite: BIO 4328 with a grade of "D" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4328. Field Biology of Ireland.**

In this course, students will use multiple techniques to explore biodiversity across multiple ecosystems in Ireland. Prerequisite: BIO 1131 and BIO 1331 both with grades of "D" or better and instructor approval. Corequisite: BIO 4327 with a grade of "D" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4329. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4331. Human Dimensions of Wildlife and Fisheries Conservation.**

Humans play a role in nearly every aspect of wildlife and fisheries conservation. This course will provide students with principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will also have an opportunity to integrate human dimensions into local decision-making. Prerequisite: BIO 4416 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4332. Biology in Film and Television: An Analysis of the Biology in Fiction and Non-Fiction Film and TV.**

This course explores how biology is portrayed in popular motion pictures with an emphasis on analyzing biological accuracy, misconceptions perpetuated or portrayed, and investigating the rationale behind motion picture directors' and writers' decisions about how they portray biological content in the final product. Students will watch and discuss a curated list of films and television shows and write an analysis of each film or TV episode. Prerequisite: BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4337. Biology and Conservation of Sharks.**

This course examines the biology and conservation of sharks and their relatives (skates, rays, chimaeras, and sawfish). Topics to be examined include evolutionary history, distribution, anatomy and physiology, daily movements and migration, diet, reproduction, relationship with humans, fisheries, conservation, and field methods used in shark research. Prerequisite: BIO 1331 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4338. Tropical Ecology and Conservation.**

In this course students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. This is an immersive and intensive study abroad course combining traditional lecture, field-based instruction, and primary literature-based discussions while observing actual tropical ecosystems. Prerequisite: BIO 1130 and BIO 1131 and BIO 1330 and BIO 1331 all with grades of "C" or better and a minimum 2.5 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4343. Fish Physiology.**

This course examines the primary physiological functions in fish, including how fish sense and interact with the environment, maintain their energetic metabolism (respiration, digestion and excretion), reproduce and maintain water balance. Students will learn about the diverse adaptations fish use to cope with environmental and physiological challenges. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4350B. Biological Implications of Water Planning in Texas.**

Current topics in understanding the biological implications of water planning in Texas. This course will be of particular interest to students who have a background in aquatic biology and who intend to stay in Texas post-graduation. May be repeated once with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350D. Watershed Management Frameworks and Applications.**

Introduction to integrated watershed assessment and management tools for identifying programmatic water quality and quantity issues and their root causes and solutions, and their practical application. The scientific and socio-economic elements are considered within the context of planning and developing watershed protection plans and programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350E. Techniques in Aquatic Biology.**

This course will provide hands on experience with a suite of physical, chemical, and biological sampling techniques and gear used in applied river studies. Students will be exposed to the fundamentals of data quality objectives, accuracy, precision, detection limits, data visualization, exploratory analysis, univariate and multivariate statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350I. Bird Conservation and Management.**

This course is an introduction to the conservation and management of bird populations in an ecological context. Course covers a variety of species and spatial scales from landscape to ecoregion. Laboratory portion will involve field trips, intensive computer-based labs, and class discussion. Corequisites: BIO 4416 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350J. Environmental Physiology of Animals.**

This course is a study of how animals respond physiologically to changes in environmental temperature, moisture, salinity, partial pressure of gases, and toxins. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350K. Genomics.**

The course is a lecture covering modern genomics, including principles of genome function, the human genome, comparative genomics, genome sequencing, evolution and genomic change, databases and medicine, ethical, legal and social issues. The course also includes discussion of transcriptomics, proteomics, metabolomics, directed evolution, protein design, and systems biology. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350M. Wildlife Policy and Law in North America.**

This course provides the student with a historical and cultural context within which wildlife policy and law have developed in North America, particularly in the United States. Federal treaties, statutes, case law, and regulations pertaining to wildlife will be presented. Wildlife law from representative states will be referenced as well. Corequisite: BIO 4423 or BIO 4435 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350P. Tropical Ecology and Conservation Lab.**

This laboratory course complements the lecture course, in which students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Co-requisite(s):** BIO 43500

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350Y. Introduction to Laboratory Research Methods.**

This course is for students interested in undergraduate research and introduces the fundamental methods and practices utilized in biological research labs. This hands on course covers keeping a lab notebook, following standard protocols, and collecting/analyzing data. Student will be introduced to current research programs offered in the Biology department. Prerequisite: BIO 1330 and BIO 1331 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4350Z. Diversity and Cultural Impact of Geoparks.**

Students will explore biological differences in diversity across Geoparks in the United States and Ireland. Additionally, students will study the cultural impact that Geoparks have on the local community and national policy by focusing on differences between science communication strategies and community engagement practices conducted at the parks. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351A. Vertebrate Endocrinology.**

This course teaches function and organization of the endocrine system. It describes the major endocrine glands, the synthesis and release of their hormone products, and the interaction with target tissues. Endocrine control of digestion, growth, reproduction, and homeostasis will be compared between mammals and other vertebrate groups. Prerequisite: BIO 2450 and CHEM 2342 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter



**BIO 4351D. Ecology of Temporary Waters.**

Temporary waters (which regularly go dry) are often overlooked. This course explores their diversity, their ecological role and how these systems are impacted by humans. We will also look at the species that rely on temporary waters, their special adaptations, and their populations and community dynamics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351E. Natural History of America.**

In this field course students will examine the terrestrial and aquatic wildlife of a chosen study area in relation to their conservation and management. Local geology and climate change impacts on wildlife diversity will also be discussed. Prerequisite: BIO 1331 and BIO 1131 both with grades of "C" or better and a minimum 2.5 overall GPA and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351F. Marine Ecology and Conservation.**

In this field course students will examine the ecology, management, and conservation of marine flora and fauna, and the impact of humans on marine life. Prerequisite: BIO 1331 and BIO 1131 both with grades of "C" or better and a minimum 2.5 overall GPA and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351H. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351I. Global Change Biology.**

This course will give an in-depth analysis of the major global changes occurring in present day biological systems. The focus of the course will be on climate change, invasive species, eutrophication, land use change and biodiversity loss. Emphasis will be placed on peer-reviewed literature to better understand how biologists study processes at the global scale. Potential solutions to these global challenges will also be discussed.

Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351J. Comparative Immunology.**

While most textbooks would present the immune system of animals as a monolith with little variation between species, we are quickly learning that this is not the case. Indeed animal immune systems are immensely diverse. This class will consist of a taxonomic survey of metazoan immune systems, focusing on the evolutionary causes and ecological consequences of this diversity in immune systems across animals.

Prerequisite: BIO 4326 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351K. R for Biologists.**

This course broadly introduces biologists to the programming language R for statistical computing. The course will focus on the programming aspects of R using Base-R and tidyverse. This includes fundamentals like accessing the RStudio environment; loading, analyzing, and visualizing data; declaring variables, as well as navigating through and installing new modules. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351N. Marine Mammals, Reptiles, and Birds.**

This course is a field course where students will examine the ecology, management, rehabilitation, and conservation of marine mammals, reptiles, and birds. The impact of humans (e.g., pollution, climate change, habitat destruction, transportation, tourism) on their survival and rules and regulations in place to protect them will also be evaluated. Prerequisite: BIO 1331 and 1131 with a grade of "C" or better and Minimum 2.5 overall GPA and Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 4351P. Ecology and Conservation Abroad.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 4351Q with a grade of "C" or better.

**3 Credit Hours. 20 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4351Q. Ecology and Conservation Abroad Lab.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 4351P with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**BIO 4360. Molecular Biology.**

This course offers advanced insights into the realm of molecular biology. The curriculum covers a range of subjects such as gene expression (which encompasses the transcription and translation processes in bacteria and other organisms), post-translational protein modifications, chromosomal DNA replication, controls at cell cycle checkpoints, DNA damage and its repair mechanisms, and theories related to cancer and aging. Prerequisite: [BIO 2450 and BIO 2400] or CHEM 3375 or CHEM 4375, with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4363. History of Medicine.**

This course covers significant concepts, developments, individuals, and events in the history of medicine from antiquity to modern day. Topics include the impact of disease on medical practice, the development of hospitals as sites for care, teaching, and research, how medical science and technology are continuously defined by social, cultural, and political ideas, and the historical roots of several themes in medical ethics. This course will be delivered as an Education Abroad course. (WI) Prerequisite: BIO 2400 or BIO 2440 or BIO 2450 or BIO 2451 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4364. Explorations in Physiology.**

This course will cover the basic principles of physiological systems and the function of organ systems with an emphasis on humans and other mammals. The focus will be on the interplay between and among multiple organ systems and holistic systems integration. Other topics include the pathophysiology underlying common diseases, drug therapies and treatments, and emerging physiological research. This course will also provide the opportunity for experiential learning gained in diverse cultural settings. Prerequisite: BIO 2400 or BIO 2440 or BIO 2450 or BIO 2451 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4366. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their relationship to disease, epidemiology and the biological basis for virulence. Students may take only one of BIO 4345, BIO 4350G or BIO 4445 for credit. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4374. Principles of Zoo Management.**

This course is designed to introduce the principles of captive animal management within conservation and education-based zoos. Zoo management requires a broad understanding of the life history and biological needs of many different species; we will explore the ways modern zoos address these needs and the ways in which future zoos could address them more effectively. Specific topics will include animal husbandry, welfare, nutrition, and behavior as well as environmental enrichment, captive breeding, conservation, zoo regulatory frameworks, ethical concerns, and zoo careers. Prerequisite: BIO 2411 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4376. Microbial Biotechnology.**

This course provides an overview of how microbes (e.g., bacteria, viruses and yeast) are manipulated to solve practical problems through biotechnology. This course is based on topics of applied microbiology as recommended by American Society of Microbiology. Prerequisite: BIO 2400 and BIO 2450 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4377. Genome Informatics.**

The course will cover basic knowledge on genomics and its bioinformatics tools. Students will learn current topics on genomics and bioinformatics, and will analyze genomic data using statistical software. All the analyses will be performed using a personal and a cluster computer. Prerequisite: BIO 2450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4388. Habitat Ecology.**

The course will introduce students to the importance of habitat in understanding a wide range of processes and patterns in Ecology. Course will explore the process of habitat selection, in the context of animal behavior as well as population dynamics. Students will learn methods and techniques of statistically analyzing the habitat associations of species. The central role of habitat in species conservation will also be discussed. Prerequisite: BIO 4416 with "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4400. Plants Important for Wildlife.**

This course explores plant and plant part (specifically gall, fruit, seed, and twig) identification, phylogenetics, co-evolution of plant defenses, economic and ecological impacts of plant uses by wildlife. Prerequisite: BIO 2410 or BIO 2450 either with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4402. Earth Science I.**

The description and interpretation of earth phenomena considered from the standpoint of meteorology and astroscience. Includes field observations, methods of measurement and interpretation of data related to the physical environment and space technology. May not be counted toward a major or minor in biology. Required for those seeking grade 4-8 Science and Mathematics/Science certification.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4403. Earth Science II.**

The description and interpretation of earth phenomena considered from the standpoint of geology and oceanography. Includes field observations, methods of sampling and interpretation of data related to the physical environment. May not be counted toward a major or a minor in biology. Required for those seeking grade 4-8 Science and Mathematics/Science certification.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4408. Science Processes and Research.**

Students will analyze scientific research design, design research, interpret data, and communicate results. Stress will be placed on broad-field structure and integration of major science concepts and research-based science pedagogy. This course must be taken the semester prior to student teaching and is required for those seeking 7-12 Life Science or Science teacher certification. This course may not count as one of the four upper-level Biology courses required of general Biology majors, or one of the three upper-level Biology courses required of Biology minors.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4410. Field Biology of Plants.**

Ecological relationships and natural history of plants, including historical geology, geography, soils, vegetational regions and surface geology of central Texas. Emphasis is placed on plant-soil-water relationships to develop conservation concepts. Students will make a representative collection of plants. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4411. Morphology of the Vascular Plants.**

The structure, life-cycles and evolution of fossil and living vascular plants. Emphasis on such topics as the origin of land plants, evolution of the ovule, angiospermy, the flower and fruit. Prerequisites: BIO 2450 and CHEM 1342 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4412. Plant Anatomy.**

The anatomy of vascular plants stressing descriptive, development and comparative aspects of seed plants and the anatomical adaptations of plants to environmental factors. Prerequisites: BIO 2450 and CHEM 1342 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4413. Parasitology.**

The biology and biological significance of the common parasites of man and animals. Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4415. Ichthyology.**

An introduction to the morphology, taxonomy, natural history and evolution of fishes. Field trips will be made to collect specimens and laboratory periods will be devoted to morphological and systematic analysis. Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4416. General Ecology.**

The ecological relationships that exist between organisms and those relationships that exist between organism and environment. Laboratory sessions will be devoted to literature review and/or specific ecological problems. This course or BIO 4454 is required of all biology majors. (WI) Prerequisites: BIO 2450 and [BIO 2400 or BIO 2410 or BIO 2411] both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4418. Field Ornithology.**

This course is designed to introduce and provide an advanced knowledge of the application of various field, laboratory, and statistical methods and techniques in the study of avian species. The course will include topics related to survey methodology, sampling design, marking/banding, measurement/sample extraction, and aging/sexing of avian species.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4420. Natural History of the Vertebrates.**

Environmental relationships and natural history of vertebrates. Emphasis is upon taxonomy, speciation and biotic provinces. The laboratory will include field trips for the study and collection of animals in their natural habitats. Students will assemble a representative collection of animals. (WI) Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better and instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4421. Ornithology.**

Introduction to anatomy, behavior, ecology and identification of birds of Texas. Laboratory will emphasize field studies of birds and their habitat requirements. Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4422. Mammalogy.**

The taxonomy, distribution, ecology, behavior and evolution of mammals with particular emphasis on wild animals of the southwest. Laboratory will emphasize anatomy, identification, preparation of specimens and field exercises in the methods of population analysis. Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4423. Wildlife Management.**

Applications of the principles of ecology and natural history to the management of wildlife habitats and control of wildlife populations. Laboratory will involve demonstrations and practice exercises with wildlife management techniques and instrumentation and field trips to observe wildlife management projects. (WI) Prerequisites: BIO 2411 and BIO 2450 with grades of "C" or better and BIO 2410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4425. Biometry.**

Basic principles of statistical methods as applied to biological problems such as sampling techniques, analysis of data, experimental design and population dynamics. Emphasis will be on practical application. Prerequisites: BIO 2450 and [MATH 1315 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471] both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4429. Wetland Plant Ecology and Management.**

This course focuses on the biological, physical, chemical, and ecological aspects of major wetland ecosystems. The management and restoration of wetlands will also be discussed. Special attention will be spent on the ecology and identification of wetland plants. Prerequisite: BIO 2410 or BIO 2450 either with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4431. Bacterial Diversity.**

The overall goal of this research-based course is to isolate, cultivate, characterize, and identify under-explored bacterial lineages from environmental samples. Methods and techniques employed in this course include aseptic techniques, cutting-edge cultivation approaches, maintaining bacterial cultures, gel electrophoresis, DNA isolation, amplification, and sequencing. Prerequisite: BIO 2400 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4432. Bacterial Genomics.**

The course offers hands-on training on contemporary approaches, techniques, and bioinformatic tools used to study bacterial genomes. Topics covered include, DNA sequencing, genomic assembling, and annotation, with a strong emphasis in computation biology and genomic data handling/analytics. At the end of this course, students will be familiar with bioinformatics tools used to analyze genes and genomes. Prerequisite: BIO 4431 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4434. Herpetology.**

A course treating the origin and evolution of amphibians and reptiles; their reproductive and physiological tactics; taxonomy/systematics; and population biology. Emphasis will be placed on North American species and those groups inhabiting Texas. Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4435. Techniques in Wildlife Management.**

The basic methodology of practical wildlife management. This involves techniques in monitoring and data collection related to population dynamics and habitat parameters of wildlife species. Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better and instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4436. Tropical Biology.**

This course entails an analysis and evaluation of the governing principles of tropical ecosystems, including wildlife ecologies, geological processes, and environmental-cultural interactions. In the laboratories, students will compare ecological relationships that influence tropical biology, discuss peer-reviewed literature and examine tropical flora and fauna during field trips to regional sub-tropical areas. Prerequisite: BIO 2410 and BIO 2411 and BIO 2450 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4441. Cellular Physiology.**

Advanced cellular biology, including membrane physiology, thermodynamics, energy transduction and distribution, and cellular movement in non-muscle and muscle cells. Laboratory includes discussion of current research and exercises in cellular physiology. (WI) Prerequisites: BIO 2450 and [CHEM 2330 or CHEM 2341 or CHEM 2342] both with grades of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4446. Microbial Ecology.**

This course will illustrate the wide variety of bacteria in nature, their interactions with other organisms and the environments, and their roles in global cycling of elements such as carbon, nitrogen, and sulfur. Undergraduate research is a major component of this course. (WI) Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4447. Microbial Physiology.**

This course will cover fundamental concepts in bacterial and archaeal physiology, including central and specialized metabolism. Undergraduate research is a major component of this course. (WI) Prerequisites: BIO 2400 and BIO 2450 and CHEM 2142 and CHEM 2342 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4448. Bacterial Genetics.**

This course will cover concepts and mechanisms involved in the genetics of Archaea and Bacteria. Prerequisite: BIO 2400 and BIO 2450 both with grades of "C" or better. (WI).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4454. Plant Ecology.**

Physiological ecology and community structure and function in the organization of terrestrial plant ecosystems. Quantitative vegetational sampling and the use of field and laboratory physiological equipment are included in the laboratory. (WI) Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4455. Plant Physiology.**

Basic principles of plant physiology are studied in lecture and laboratory. One semester of organic chemistry is strongly recommended. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter



**BIO 4464. Vertebrate Anatomy.**

This course is a comparative study of vertebrate anatomy. Fossil histories are evaluated to understand how vertebrate radiation occurred in the geological past, along with changes in structure of organs and organ systems. Lab includes dissection of representative members of each major vertebrate group. Prerequisite: BIO 2450 with a grade of "C" or better. (WI).

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4465. General Entomology.**

Principles of morphology, physiology and taxonomy of insects. Laboratory time will be devoted to a taxonomic study of the common orders and families of insects. Prerequisites: BIO 2411 and BIO 2450 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4470. Limnology.**

The physical, chemical, and biological factors affecting productivity in lakes, ponds, and streams. Limnological sampling methods, chemical, and biological analysis of samples and hydrographic surveying are included in the laboratory. (WI) Prerequisites: BIO 2450 and CHEM 1342 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4472. Animal Behavior.**

This course presents all the major facets of the study of animal behavior, giving special attention to its evolution and ecological significance. We will discuss major conceptual models guiding past and present research in the field. Laboratories will emphasize experimental techniques and statistical analysis. (WI) Prerequisites: BIO 2450 and [BIO 2400 or BIO 2410 or BIO 2411] both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**BIO 4480. Cytology and Microtechnique.**

A study of cellular structure and microscopic technique. The lecture portion of the course presents cytology of all cell types and theoretical aspects of microscopy including light and electron-based technologies. The laboratory portion of the course provides training in standard light and electron microscopy, laser scanning confocal microscopy, and digital microscopy. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**BIO 4481. Internship in Biological Laboratory Technologies.**

The student will participate in the work of a selected biology unit (private, commercial, or governmental). A research paper, reporting the internship experience conducted at the biological unit under the supervision of a faculty member, will be required. This course may be credited toward a biology major with prior approval of the biology department adviser and chair. Prerequisite: BIO 2450 with a grade of "C" or better.

**4 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 4490. Principles of Developmental Biology.**

This course will cover basic principles of developmental biology in both plant and animal systems. The course will mainly address cell, molecular and genetic mechanisms underlying the development of model organisms, mainly focusing on *Drosophila* (animal) and *Arabidopsis* (plant). Prerequisite: BIO 2450 with grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 5100. Professional Development.**

This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis. Graded on a credit (CR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**BIO 5110. Seminar in Biology.**

Interactive discussion of timely issues and problems, designed to expose students to the current literature in their fields of interest and its critical analysis. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Header

**Grade Mode:** Standard Letter

**BIO 5114. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5214 and BIO 5314.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5166. Medical Microbiology Laboratory.**

This graduate laboratory-based course will cover pathogenic bacteria emphasizing identification of selected groups of pathogens and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5176. Microbial Biotechnology Laboratory.**

This laboratory-based course will cover use of microbes for biotechnological applications and is designed to provide practical explorations into fields of biotechnology. Topics include laboratory techniques for recombinant protein purification, fermentation, identification of markers in genetically modified food and bio-remediation of pollutants. Corequisite: BIO 5376.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5214. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation. See also BIO 5314.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5295. Fundamentals of Research.**

Designed to acquaint the beginning graduate student with materials and methods of research in the biological sciences. It is recommended that a graduate student take this course the first semester in residence.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5300. Neurobiology.**

This course presents the biology of the nervous system with emphasis on the human nervous system. Topics presented in lecture include neuroanatomy, cellular neurobiology, neurophysiology, developmental neurobiology, and neuronal plasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5301. Evolution.**

Basic genetic principles applied to natural selection, adaptation, populations, and speciation. Consideration is given to the origin of life, nature of chromosomal variation, evolution of genetic systems, and certain other selected topics.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5304. Wildlife and Recreation: Impact and Management.**

Students will be introduced to the impact human recreational activities have on wildlife habitats and populations. Management practices to enhance human-wildlife encounters or to minimize detrimental effects on wildlife populations will be presented.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5305. Methods of Nature Study for Teachers.**

This course provides a comprehensive survey of natural events. It includes laboratory and field work emphasizing observation, collection and discovery of relationships. It is creditable only for those seeking elementary or middle school certification and is required for those seeking grade 4-8 Science or Science/Mathematics teaching certification. This course must be taken the semester immediately prior to student teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5307. Ecology of Rarity.**

This course will examine the ecology of rarity and its ability to inform public awareness and environmental policy. This course will explore how we define rarity, persistence and viability. Is rarity more or less common than might be expected, and is there anything we can or should do about it?

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**BIO 5311. Cancer Biology.**

Cancer Biology provides a foundation for understanding the complex molecular, biochemical, and cellular processes associated with cancer development. Topics include the role of tumor suppressor genes, oncogenes, DNA repair, apoptosis, ECM, cell-cycle control, cell signaling pathways, immune function and cancer-causing viruses. Emerging diagnostics and/or therapeutics will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5314. Collaborative Research.**

This course allows master's level graduate students to initiate, conduct, and participate in research in collaboration with graduate faculty of the Department of Biology that is in addition to thesis research conducted under BIO 5399A or BIO 5399B. This course recognizes the collaborative nature of scientific investigation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5317. Interpretive Biology Programming and Design.**

In this course, students will explore the methods and principles used by the National Park Service, museums, environmental centers, and state park systems to interest a variety of audiences as well as interpret biology and natural environments effectively. Students will practice skills in both personal and non-personal interpretation by creating science outreach programs, interpretive literature, brochures, path waysides, and other interpretive media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5319C. Ecotoxicology.**

Topics to be covered include sources, types, and fates of toxicants, organism response to toxicants, toxicant effects at the population, community, and ecosystem levels, and monitoring and risk assessment. Examination of current literature will form the core of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5319F. Watershed Management Frameworks and Applications.**

Introduction to integrated watershed assessment and management tools for identifying programmatic water quality and quantity issues and their root causes and solutions, and their practical application. The scientific and socio-economic elements are considered within the context of planning and developing watershed protection plans and programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5327. Issues in Irish Biodiversity and Conservation.**

In this course, students will learn about Irish flora and fauna, ecosystems, conservation strategies in areas of high ecological concern, and public involvement. Emphasis will be placed on case studies and service-learning opportunities. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5328. Field Biology of Ireland.**

In this course, students will use multiple techniques to explore biodiversity across multiple ecosystems in Ireland. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5329. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and overwintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5331. Human Dimensions of Wildlife and Fisheries Conservation.**

Humans play a role in nearly every aspect of wildlife and fisheries conservation. This course will provide students with principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will also have an opportunity to integrate human dimensions into local decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5332. Biology in Film and Television: An Analysis of the Biology in Fiction and Non-Fiction Film and TV.**

This course explores how biology is portrayed in popular motion pictures with an emphasis on analyzing biological accuracy, misconceptions perpetuated or portrayed, and investigating the rationale behind motion picture directors' and writers' decisions about how they portray biological content in the final product. As part of this course students will watch and discuss a curated list of films and television shows and write an analysis of each film or TV episode.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5350G. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their ability to cause disease, emphasizing the biological basis for virulence, and research strategies for investigating infectious diseases. Students may take only one of BIO 5350G or BIO 5445 for credit. Prerequisite: BIO 2400 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350I. Emerging Infectious Diseases.**

Current topics in the emergence of viral and bacterial diseases in humans. This course will include new diseases, diseases previously seen and increasing in incidence, and diseases not previously seen in this country. This course will be of interest to students who are pursuing advanced degrees and courses in microbiology, biochemistry, and cell and molecular biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 5350J. Environmental Physiology of Animals.**

This course is a study of how animals respond physiologically to changes in environmental temperature, moisture, salinity, partial pressure of gases, and toxins. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350K. Genomics.**

The course is a lecture course in modern genomics, including principles of genome function, the human genome, comparative genomics, genome sequencing, evolution and genomic change, databases and medicine, ethical, legal and social issues. The course also includes discussion of transcriptomics, proteomics, metabolomics, directed evolution, protein design, and systems biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350M. Wildlife Policy and Law in North America.**

This course provides the student with a historical and cultural context within which wildlife policy and law (federal treaties, statutes, case law, and regulations) have developed in North America, particularly in the United States. Graduate students will research the development of Wildlife law in representative states as well.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350O. Tropical Ecology and Conservation.**

Students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems.

**3 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350P. Tropical Ecology and Conservation Lab.**

This laboratory course complements the lecture course BIO 5350O, in which students will obtain a first-hand knowledge of the ecology, biodiversity, conservation, and culture of tropical ecosystems. It is an immersive and intensive study abroad course combining traditional lecture and field-based laboratory instruction in tropical ecosystems.

Corequisite: BIO 5350O.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Co-requisite(s):** BIO 5350O

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5350Z. Diversity and Cultural Impact of Geoparks.**

Students will explore biological differences in diversity across Geoparks in the United States and Ireland. Additionally, students will study the cultural impact that Geoparks have on the local community and national policy by focusing on differences between science communication strategies and community engagement practices conducted at the parks. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351G. Omics Approach to Microbiology.**

This course covers contemporary approaches, techniques and bioinformatic tools used to study function and ecology in microbial communities. Topics covered will include microbiome, next-generation sequencing, metaproteomics, and their applications to clinical, agricultural, environmental and industrial needs.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351I. Global Change Biology.**

This course will give an in-depth analysis of the major global changes occurring in present day biological systems. The focus of the course will be on climate change, invasive species, eutrophication, land use change and biodiversity loss. Emphasis will be placed on peer-reviewed literature to better understand how biologists study processes at the global scale. Potential solutions to these global challenges will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351J. Comparative Immunology.**

While most textbooks would present the immune system of animals as a monolith with little variation between species, we are quickly learning that this is not the case. Indeed animal immune systems are immensely diverse. This class will consist of a taxonomic survey of metazoan immune systems, focusing on the evolutionary causes and ecological consequences of this diversity in immune systems across animals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351P. Ecology and Conservation Abroad.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351Q with a grade of "C" or better.

**3 Credit Hours. 20 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5351Q. Ecology and Conservation Abroad Lab.**

The purpose of this course is to provide a first-hand understanding of the natural history, biodiversity, ecology, and conservation of ecosystems that do not occur in the United States. It is an immersive and intensive study abroad course combining traditional lecture and field-based instruction in the field. Corequisite: BIO 5351P with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5356. Plant Physiology.**

Basic principles of plant physiology are studied in lecture and laboratory. Previous courses in biochemistry and genetics are strongly recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5363. History of Medicine.**

This course covers significant concepts, developments, individuals, and events in the history of medicine from antiquity to modern day. Topics include the impact of disease on medical practice, the development of hospitals as sites for care, teaching, and research, how medical science and technology are continuously defined by social, cultural, and political ideas, and the historical roots of several themes in medical ethics. This course will be delivered as an Education Abroad course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5364. Explorations in Physiology.**

This course will cover the basic principles of physiological systems and the function of organ systems with an emphasis on humans and other mammals. The focus will be on the interplay between and among multiple organ systems and holistic systems integration. Other topics include the pathophysiology underlying common diseases, drug therapies and treatments, and emerging physiological research. This course will also provide the opportunity for experiential learning gained in diverse cultural settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 5366. Medical Microbiology.**

This lecture-based course will cover pathogenic bacteria and their relationship to disease, emphasizing critical evaluation of research literature, disease transmission and the biological basis for virulence. Prerequisites: BIO 2400 and BIO 2450 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5374. Principles of Zoo Management.**

This course is designed to introduce the principles of captive animal management within conservation and education-based zoos. Zoo management requires a broad understanding of the life history and biological needs of many different species; we will explore the ways modern zoos address these needs and the ways in which future zoos could address them more effectively. Specific topics will include animal husbandry, welfare, nutrition, and behavior as well as environmental enrichment, captive breeding, conservation, zoo regulatory frameworks, ethical concerns, and zoo careers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5376. Microbial Biotechnology.**

This course provides an overview of how microbes (e.g., bacteria, viruses and yeast) are manipulated to solve practical problems through biotechnology. This course design is based on topics of applied microbiology as recommended by American society of Microbiology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5377. Genome Informatics.**

The course will cover basic knowledge on genomics and its bioinformatics tools. Students will learn current topics on genomics and bioinformatics, and will analyze genomic data using statistical software. All the analyses will be performed using a personal and a cluster computer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**BIO 5388. Habitat Ecology.**

The course will emphasize and reinforce in students an appreciation for the importance of habitat in understanding a wide range of processes and patterns in Ecology. Course will explore the process of habitat selection, in the context of animal behavior, population dynamics, and modeling. Students will learn and apply methods and techniques of statistically analyzing the habitat associations of species. The central role of habitat in species conservation will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5390. Problems in the Biological Sciences.**

Open to graduate students on an individual basis by arrangement with the faculty member concerned.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in BIO 5399B. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5400. Plants Important for Wildlife.**

This course explores plant and plant part (specifically gall, fruit, seed, and twig) identification, phylogenetics, co-evolution of plant defenses, economic and ecological impacts of plant uses by wildlife.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5402. Earth Science I.**

A study of astronomy and meteorology through observation, description, and interpretation of earth phenomena. Includes field observations, methods of measurement and interpretation of data related to the physical environment and space technology. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5403. Earth Science II.**

The description and interpretation of earth phenomena considered from the standpoint of geology and oceanography. Includes field observations, methods of sampling and interpretation of data related to the physical environment. Requires independent scientific and science education research and presentation of findings in a professional context.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5408. Science Processes and Research.**

Students will analyze scientific research design, design research, interpret data, and communicate results. Stress will be placed on broad-field structure and integration of major science concepts and research-based science pedagogy. This course must be taken the semester prior to student teaching and is required for those seeking 7-12 Life Science or Science teacher certification. This course may not count as one of the four upper-level Biology courses required of general Biology majors, or one of the three upper-level Biology courses required of Biology minors.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5410. Field Biology of Plants.**

Ecological relationships and natural history of plants, including historical geology, geography, soils, and vegetational regions of Central Texas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5411. Morphology of the Vascular Plants.**

A phylogenetic survey of living and fossil vascular plants that focuses on external morphology and reproductive biology. Topics include phylogenetic reconstruction, the origin of vascular plants, seed reproduction, and the origin of angiosperms. Emphasis is on broad-scale evolutionary patterns and origin of major taxonomic groups.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5412. Plant Anatomy.**

A descriptive and functional analysis of seed plants that focuses on internal structure. Topics include recognition and characterization of plant tissues, the structure of plant organs, and organ development. Emphasis is on pattern of tissue organization common to all seed plants and the functional basis for anatomical structure.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5413. Parasitology.**

The biology and biological significance of the common parasites of man and animals.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5415. Ichthyology.**

An introduction to the morphology, taxonomy, natural history, and evolution of fishes. Field trips will be made to collect specimens, and laboratory periods will be devoted to morphological and systematic analyses.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5418. Field Ornithology.**

This course is designed to introduce and provide an advanced knowledge of the application of various field, laboratory, and statistical methods and techniques in the study of avian species. The course will include topics related to survey methodology, sampling design, marking/banding, measurement/sample extraction, and aging/sexing of avian species.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5420. Natural History of the Vertebrates.**

Environmental relationships and natural history of vertebrates. Emphasis is on evolution taxonomy, speciation, behavior, and morphology. Laboratory will include field trips for the study and collection of vertebrates in their natural habitats. Students will assemble a representative collection of vertebrates.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5421. Ornithology.**

Introduction to anatomy, behavior, ecology, and identification of the birds of Texas. Laboratory will emphasize field studies of birds and their habitat requirements.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5422. Mammalogy.**

The taxonomy, distribution, ecology, behavior, and evolution of mammals with particular emphasis on wild mammals of the Southwest. Laboratory will emphasize anatomy, identification, preparation of specimens, and field exercises in methods of population analysis. Students may assemble representative mammal collection.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5423. Wildlife Management.**

Application of ecological principles and natural history concepts to the management of wildlife habitats and populations. Laboratory will involve demonstrations and practice exercises with wildlife management techniques and instrumentation, and field trips to observe wildlife management projects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5424D. Vertebrate Endocrinology.**

This course teaches function and organization of the endocrine system. It describes the major endocrine glands, the synthesis and release of their hormone products, and the interaction with target tissues. Endocrine control of digestion, growth, reproduction, and homeostasis will be compared between mammals and other vertebrate groups.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 5432. Bacterial Genomics.**

The course will offer hands-on training on contemporary approaches, techniques, and bioinformatic tools used to study bacterial genomes. Topics covered include DNA sequencing, assembling and annotating genomes, all with a strong emphasis on computational biology. At the end of this course, students will be familiar with bioinformatics tools used to analyze genes and genomes.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5435. Techniques in Wildlife Management.**

The basic methodology of practical wildlife management. This involves techniques in monitoring and data collection related to population dynamics and habitat parameters of wildlife species as well as field research.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5436. Tropical Biology.**

This course entails an analysis and evaluation of the governing principles of tropical ecosystems, including wildlife ecologies, geological processes, and environmental-cultural interactions. In the laboratories, students will compare ecological relationships that influence tropical biology, discuss peer-reviewed literature and examine tropical flora and fauna during field trips to regional sub-tropical areas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5441. Cellular Physiology.**

Advanced cellular biology, including membrane physiology, thermodynamics, energy transduction and distribution, and cellular movement in non-muscle and muscle cells. Laboratory includes discussion of current research and exercises in cellular physiology.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5443. Fish Physiology.**

This course examines the primary physiological functions in fish including how fish sense and interact with the environment, maintain their energetic metabolism (respiration, digestion and excretion), reproduce and maintain water balance. Students will learn about the diverse adaptations fish use to cope with environmental and physiological challenges.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5448. Bacterial Genetics.**

This course will cover concepts and mechanisms involved in the genetics of Archaea and Bacteria. Graduate students will learn current strategies dealing with traditional molecular genetics including post-transcriptional regulation involving small non-coding RNA. In addition graduate students will also write a critical review on a research article from relevant topic.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 5454. Plant Ecology.**

Functional ecology of terrestrial plants, plant populations, and communities. Laboratory emphasizes quantitative and experimental approaches to plant ecology and the use of field and laboratory physiology equipment.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5465. General Entomology.**

Principles of morphology, physiology, and taxonomy of insects. Laboratory time will be devoted to a taxonomic study of the common orders and families of insects.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5466. Phylogenetic Methods.**

Reconstructing phylogenies is important in most fields of biology. Course emphasis is on practical data collection, management, and analysis. Laboratory exercises will introduce phylogenetic and DNA analysis software, and WWW resources. Students will learn how to address questions in their own research using phylogenetic methodologies.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5470. Limnology.**

Physical, chemical, and biological factors affecting productivity in lakes, ponds, and streams. Limnology sampling methods, chemical and biological analysis of samples, and hydrographic surveying are included in the laboratory.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5472. Animal Behavior.**

This course presents all the major facets of the study of animal behavior, giving special attention to its evolution and ecological significance. We will discuss major conceptual models guiding past and present research in the field. Laboratories will emphasize experimental techniques and statistical analysis.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5480. Cytology and Micro-technique.**

Study of cellular ultra-structure and electron micro technique. Lecture portion of course will cover cytology of all cell types and theoretical aspects of light microscopy and electron microscopy. Laboratory portion will train students to proficiency in microscopy.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 5481. Internship in Biological Laboratory Technologies.**

The student will participate in the work of a selected biology unit (private, commercial, or governmental). A research paper reporting the internship experience conducted at the biological unit under the supervision of a faculty member will be required. This course may be credited toward a biology major with prior approval of the graduate advisor and department chair.

**4 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5490. Principles of Developmental Biology.**

This course will cover basic principles of developmental biology in both plant and animal systems. The course will mainly address cell, molecular and genetic mechanisms underlying the development of model organisms, mainly focusing on *Drosophila* (animal) and *Arabidopsis* (plant).

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.A. or M.S. with a thesis are expected to enroll in thesis each semester in which faculty supervision is received or laboratory facilities are utilized.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7100. Professional Development.**

This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**BIO 7102. Seminar in Aquatic Resources.**

This course is an interactive discussion of timely issues and problems, designed to introduce students to the range of scientific, socioeconomic and policy issues likely to be encountered within the field of aquatic resources. All students seeking a doctoral degree in Aquatic Resources must enroll in BIO 7102 at least twice.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BIO 7103A. Ecology and Society.**

Interactive discussion on relationships between society and the life-supporting ecosystems on which humans depend. Topics include roles of natural systems in social systems; effects of social, economic and political institutions on ecological systems and services; and the means by which humans develop and sustain desired ecological and social states.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103B. Aquaculture.**

The course comprises a survey of aquaculture production throughout the world. It also examines and discusses the impacts of aquaculture on nutrition, fisheries and the economy.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103D. Molecular Biology of the Cell.**

Interactive discussion of current literature on molecular biology of the cell. The course is designed to discuss concepts and their applications and methodology associated with the structure and function of the cell at cellular and molecular level.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103E. Contemporary Problems in Ecology.**

This course is an interactive discussion of the theoretical foundations and empirical basis for controversial topics in ecology, designed to develop critical thinking skills, and the ability to evaluate and integrate the biological, chemical and physical factors that affect the structure, functions, and interactions characterizing communities and ecosystems.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103F. Molecular Genetics of Plant Development.**

The study of plant development is rapidly changing as plant genome projects discover a multitude of new genes, and their expression and interaction patterns are understood. This course is designed to discuss concepts in plant development, and developmental processes as pathways of gene regulatory activities.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103G. Ecohydrology.**

A review of the concept of ecohydrology, its scientific foundation, and its ecological-hydrological linkages. Current topics in ecohydrology in the literature will be discussed, including manipulation of biota and hydrology interactions in a landscape, and the possibility of augmenting the resilience of ecosystems to anthropogenic changes.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103H. Integrated Waterbird Management.**

This course focuses on the ecology and management of waterbirds, with an emphasis on the inland and coastal waterbirds of Texas. The basic ecology of waterbirds, waterbird management techniques, and waterbird habitat management will be discussed.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7103I. Avian Ecology and Evolution.**

This course is an interactive discussion of avian ecology and evolution, providing students with a critical examination of theories, hypotheses, and lab and field-based data that support or refute their hypotheses. This course also discusses peer-reviewed literature that challenges some paradigms in avian ecology and evolution.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7104. Marine Pollution.**

In this course, students will read and discuss the scientific literature on the sources, bioaccumulation, trophic transfer, and health effects of contaminants in the marine environment. Papers will address a variety of marine life including plankton, crustaceans, mollusks, fishes, marine mammals, turtles, and birds. Contaminants to be reviewed include trace elements, PCBs, oil, pesticides, radionuclides, plastics, pharmaceuticals, illegal drugs, and personal care products.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7105. Environmental Issues through Documentaries.**

In this course, students will examine how environmental issues are addressed in documentaries. Students will learn how to critically evaluate documentaries for scientific content, imagery, biases, and ease of understanding. Topics to be examined include overfishing, the wildlife trade, habitat degradation, pollution, energy resources, climate change, sustainability, and conservation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7114. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7120. Population Biology Seminar.**

This course facilitates exploration of current topics in population and conservation biology through reading and discussion of contemporary primary and secondary literature.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7199A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7214. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7299A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7300. Communicating Science.**

This course explores how to successfully disseminate science through visualizations, oral presentations, and written works to multiple audiences. Special emphasis will be placed on communicating with the general public, media, granting agencies, and science peers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7301. College Science Teaching.**

This course is designed for graduate students in the sciences who are interested in improving their science teaching and/or are interested in pursuing careers in academia. This course focuses on the central question, "How do college students best learn science, and thus how do we best teach them?"

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**BIO 7302. Problems in Aquatic Resources.**

Individual study on specific state, national, or international aquatic resources issues, under direct supervision of a doctoral or associate faculty member. Students may not enroll in BIO 7302 more than twice for doctoral credit without the approval of the Graduate Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7303. Research.**

Research course for students who have not yet passed their Candidacy Exam, typically under direction of research-dissertation supervisor. Pre-candidacy students must enroll in course every semester until admission to Candidacy, although it may not be taken more than three times for doctoral credit without the approval of Graduate Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7308. History of Vegetation and Climate.**

An overview of past vegetation and its relationship to changing climate. Topics include principles of paleovegetation analysis, paleoclimatology, the rise of flowering plants, vegetation during the age of dinosaurs, the rise of the grasslands, and the Quaternary Ice Age. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7310. Global Aquatic Resources.**

Introduction to global, national, and regional aquatic resource issues, including scientific, environmental policy and socioeconomic components and perspectives. Water quantity and quality issues and their root causes in different regions of the world are examined, with an emphasis on case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7311. Ecology of Temporary Waters.**

The course explores the diversity of temporary bodies of water and of the species that rely on them, including their special adaptations, population and community dynamics, the ecological role of temporary waters, and how these systems are impacted by humans. Background coursework or independent study in ecology is recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7314. Collaborative Research.**

This course (concurrent enrollment allowed) allows Ph.D. level graduate students to initiate, conduct, and participate in collaborative research with graduate faculty of the Department of Biology that is in addition to research conducted under BIO 7303, BIO 7399A, or BIO 7699A. This course recognizes the collaborative nature of scientific investigation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7324. Natural History and Conservation of Large Mammals.**

This course will introduce students to advanced details of natural history, research, and conservation of large mammals. Topics considered will include natural history, range and population status (historic and current), importance to and interaction with humans, research design and analysis, and the development of conservation and management plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7326. Immunobiology.**

This lecture-based course will cover the mechanisms and biology of the innate and adaptive immune system. Emphasis will include relationship to cancer, transplantation, hypersensitivity (allergy), and disease. Students will evaluate current research in immunology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7327. Ecological Immunology.**

This course explores the roles of immunity in natural ecosystems, focusing on central concepts in ecological immunology. From viruses to parasites, pathogenic threats are omnipresent. As epizootic outbreaks become more common, it is important to integrate immunological knowledge with traditional ecological perspectives. Background coursework in immunology is recommended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7331. Human Dimensions of Wildlife and Fisheries Conservation.**

This course will provide principles, concepts, and case studies to understand how the human experience (e.g., culture, politics, economics) influences conservation outcomes. Students will have an opportunity to integrate human dimensions into decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7332. Introduction to R Programming for Biologists.**

This course introduces the programming language R. The course will focus on best practices in programming and the use of Base-R and RStudio. Topics include navigating the R and RStudio environment, installing packages, loading, manipulating, and visualizing data, declaring variables, writing loops, and writing functions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7333. Phylogenetic Comparative Methods.**

This course introduces students to modern phylogenetic comparative methods and teaches how to perform them. Topics include constructing phylogenies, dating phylogenies, finding and using previously published phylogenetic datasets, phylogenetic data visualization, and a variety of methods to test ecological and evolutionary hypotheses in a phylogenetic framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7336. Evolutionary Ecology.**

This course will use an evolutionary perspective to explore questions provided by natural selection and sexual selection through assessment of current theory and research related to topics such as competition, coevolution, and phenotypic plasticity. Students will achieve comprehension and familiarity with the field through discussions and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7342. Virology.**

This course examines the structure, multiplication and genetics of bacterial, plant, and animal viruses as well as the role of viruses in human and plant disease. Students are expected to become familiar with the research literature in virology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7346. Conservation Biology.**

Examination of the alteration of habitats and associated biological changes threatening the continued existence of species and basic ecosystems. Topics include conservation ethics, working paradigms, levels and loss of global biodiversity, conservation at population and ecosystem levels, restoration ecology, endangered species biology and conservation laws. Recent Advances are stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7353. Biogeography.**

Examines historical and ecological explanations of the geographic distribution of organisms including the role of geologic, climatic, and biologic changes. Emphasizes the historical and philosophical development of the science and modern methods of analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**BIO 7354. Applied Analyses of Populations.**

In this course students will learn and apply a variety of statistical techniques for analyzing populations. They will build code to conduct and compare statistical analyses as they apply to real population data. Students will use real-world data sets to generate objectives and test hypotheses including conducting all data visualization and validations, performing models, selecting appropriate models, and estimating latent variables and their predictors. Analyses include assessing the effects of environmental attributes on occupancy, relative abundance, abundance, space (habitat) use, home range size, local colonization, local extinction, survival, and recruitment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7355. Plant-Water Relations.**

Examination of the physiology and ecology of water use in higher plants, including the uptake, utilization, and movement of water, transpiration and adaptation to variable water availability including drought, and the ecological role of water in structuring plant communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7360A. Industry and Sustainable Aquatic Resources.**

Examination of industrial water needs and uses, the types and quantities of water pollutants produced by different industries, problems faced by industry regarding process water for different manufacturing activities, and the possibilities for industry to contribute to the goal of sustainable aquatic resources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360B. Environmental Linkages and Sustainable Aquatic Resources.**

Introduction to the environmental relationships between humans and other living beings and the ecological systems in which they exist. Emphasis will be on the potential for individual environmental problems to have serious impacts on other environmental components, as well as the nature of these impacts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360C. Role of State and Federal Courts in Protection and Maintenance of Aquatic Resources.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360D. Evolutionary Ecology.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360E. Advances in Water Quality Investigations.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360F. Approaches to Aquatic Resource Modeling.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360G. Molecular Techniques in Microbial Ecology.**

Lectures on molecular techniques used to analyze structure and function of uncultured microbial communities in the environment with selected examples of applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360H. Parasites and Diseases of Fishes and Other Aquatic Animals.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics

**Grade Mode:** Standard Letter

**BIO 7360I. Bayesian Statistics for Biology.**

This course examines the theory and mathematical foundations of Bayesian statistics and provides instruction and experience conducting Bayesian analyses using computer-based procedures. The course emphasizes practical applications for Bayesian statistical procedures for problems in biological sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360K. Evolution.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360L. Landscape and Biogeography of Texas.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360P. Regulation of Plant Growth and Development.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360Q. Spatial Ecology of Animals.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360R. Community and Ecosystem Ecology.**

Examination of current or emerging state, national and international aquatic resources issues, including root causes and their human and ecosystem interactions. The course may be repeated for credit, depending on the topic. No more than six hours can be counted for doctoral credit without the approval of the Program Director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360S. Soil Biology.**

An introduction to the biology of soil systems, including the roles of biota in forming and maintaining soils, and the interactions between biotic and abiotic components in soils.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360T. Karst Hydrogeology and Geomorphology.**

An introduction to, and advanced understanding of, karst hydrogeology, geology, and geomorphology, with emphasis on field and theoretical applications of this information to the study of karst systems, and recognition and understanding of karst landforms at the surface and their relationships with subsurface processes. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360U. Sustainability in a Changing World.**

Understanding the ecological-social interface, including policies, product development and actions towards sustainability, with emphasis on integrating and implementing theories and methods across disciplines, and improving the knowledge and experience base for public policy and decision-making regarding human-environment linkages within the context of sustainable development. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7360V. Techniques in Aquatic Biology.**

The course will provide hands on experience with a suite of physical, chemical, and biological sampling techniques and gear used in applied river studies. Students will be exposed to the fundamentals of data quality objectives, accuracy, precision, detection limits, data visualization, exploratory analysis, univariate and multivariate statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7360Y. Applied Bioinformatics.**

This course provides an introduction to scripting and other computational techniques used for visualizing and analyzing large biological datasets. Computational techniques include sequence and structural alignment, data mining, phylogenetic tree construction, and data clustering using UNIX, Python, and R. Students will gain a solid foundation in broadly applicable bioinformatics skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7361A. Discipline-Based Educational Research Methods.**

This course will expose science graduate students to educational research in a practical setting, supervised by a professor experienced in conducting discipline-based educational research, focusing primarily on qualitative methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**BIO 7361C. Advanced Genomics and Bioinformatics.**

This course provides hands-on experience in processing and analyzing data produced from contemporary genomics tools for thesis students with basic bioinformatics training. Prerequisite: BIO 7360Y with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7361D. Raptor Ecology.**

This course will examine the evolution, taxonomy, ecology, behavior, anatomy, physiology, and conservation of birds of prey of the world with emphasis on diurnal raptors, including those from Texas. Field trips will include at least two overnight visits to significant migration and over wintering areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**BIO 7399A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7402. Molecular Field Techniques.**

The application of molecular tools for identifying, quantifying, and interpreting biological diversity assessments in aquatic systems. The course focuses on micro organismal identification and vertebrate model systems.

**4 Credit Hours. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7405. Statistics and Experimental Design I.**

Introduction to inferential statistics, including exploratory and confirmatory data analysis, estimation and hypothesis testing, analysis of variance and regression, and non-parametric techniques, as applied to aquatic resource issues. Computer applications emphasized.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7406. Statistics and Experimental Design II.**

Introduction to the principles of experimental design, including randomization, replication, sample-size determination, completely randomized and randomized block design, factorial design, repeated measure design, and analysis of variance and covariance, as applied to aquatic resource issues. Computer applications emphasized. Prerequisite: BIO 7405 with a grade of "C" or better or instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7410. Aquatic Microbial Ecology.**

Examination of microbial organisms, communities, and interactions affecting the form, structure, and functional aspects of aquatic ecosystems. Field trips may be required. Prerequisite: BIO 2400 with a grade of "D" or better or instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7412. Environmental Hydrology.**

Overview of the properties, distribution, and movement of water over and under the land surface and its relation to sustainable aquatic ecosystems, including quantitative methods to assess cumulative impacts of human activities on such systems. Field trips may be required. Knowledge of calculus recommended.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7414. Ecology of Infectious Diseases of Wildlife.**

Concepts of the ecology of infectious diseases in wildlife are studied in depth with emphasis on their application to the management and conservation of wildlife species and for the control of zoonotic diseases. Prerequisite: Instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7419. Stream Ecology.**

Study of ecological theories, concepts, and processes occurring at the population, community, and ecosystem levels of organization in running water. Laboratory includes sampling methods, descriptive and comparative studies, experiments, and critical discussion of literature. Field trips may be required.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7426. Ecology and Management of Aquatic Macrophytes.**

Examination of aquatic macrophytes and their ecology, taxonomy, distribution and management. Field trips may be required.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7427. Principles of Population Biology I.**

This course provides a foundation in theory and mathematics of basic population biology. The course is divided into modular components, including defining evolutionarily significant units, ecology of populations, genetics of populations, and evolutionary genetics. A background in genetics and general ecology is recommended.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7428. Principles of Population Biology II.**

This course provides a foundation in theory and mathematics of basic population biology. The course is divided into modular components which include: 1) Ecology of Communities, 2) Evolution of Behavior, 3) Phylogenetic Methods, and 4) Biological Diversity and Conservation Biology.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7430. Mycology.**

This course provides an introduction to the organisms in the Kingdom Fungi and to fungus-like organisms, their ecology and evolution, and their role in industry and disease. Special emphasis will be placed on morphology, culturing, and using laboratory techniques for identification.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7433. Population Genetics.**

This course examines the theoretical foundations of population genetics, including the description of population genetic structure and the forces creating it. The course emphasizes application of principles to a wide range of current problems in evolution, systematics and ecology. Molecular methods, data interpretation and computer-based data analysis are emphasized.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7434. Herpetology.**

A course treating the origin and evolution of amphibians and reptiles; their reproductive and physiological tactics; taxonomy/systematics; and population biology. While cosmopolitan in scope, emphasis will be placed on North American species and those groups inhabiting Texas.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter



**BIO 7440. Aquatic Toxicology.**

Introduction to principles for identifying and assessing the adverse effects of chemicals and other compounds and mixtures on aquatic organisms and ecosystems.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7447. Microbial Physiology.**

Prokaryotes, including bacteria and archaea, are the most diverse group of organisms on earth. Many prokaryotes live in environments which are inhospitable to other life forms. This course covers major aspects of prokaryotic physiology that permit them to be so successful.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7466. Phylogenetics.**

Study of the use of phylogenetic methodologies in aquatic research, including practical data collection, management, and analysis in the reconstruction of phylogenies. Laboratory exercises will introduce phylogenetic and DNA analysis software. Prerequisite: BIO 2450 and BIO 4369 and BIO 5466 all with grades of "C" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7468. Groundwater Resources.**

Study of the geological, physical, chemical and biological factors influencing sustainable groundwater resources, including hydrologic linkages and interactions with surface aquatic resources. Emphasis will be on the karst aquifer systems of Central Texas, and other groundwater aquifer systems of the United States.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**BIO 7469. Introduction to Ecological Modeling.**

Mathematical models range from simple conceptual models to complex mechanistic models for mimicking behavior of natural systems. This course provides a broad overview of modeling objectives, techniques and assumptions, as well as the practical skills needed to conduct modeling projects. Computer applications emphasized. Prerequisite: MATH 2471 with a grade of "C" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BIO 7599A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7699A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**BIO 7999A. Dissertation.**

Original research and writing in Aquatic Resources, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**B A 1310. Introduction to Business.**

This course introduces freshmen to business and previews what students will experience in the McCoy College of Business. It surveys accounting, finance, economics, law, management, marketing, and information systems and analytics, both as individual components of an organization and collectively as part of an organization's strategy. Students learn about leadership, individual conduct, and the ethical and data-driven decision-making expected in college and the business and professional world.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**B A 2310. Introduction to Business in a Global Environment.**

The course introduces the modern business enterprise with an emphasis on the interdependence of the business functions in a global environment. Topics include the cross border impacts of culture, politics, and law on trade, investment, marketing, management, and accounting and financial systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**TCCN:** BUSI 1301

**B A 3110. Professional Development I.**

This course prepares students for the professional rigor expected in the McCoy College of Business and gives them a start on career planning and the development process. This process involves a variety of career exploration and development experiences designed to help students identify their passion, prioritize and focus their job search efforts, and develop their leadership, communication, and personal marketability. Topics include self-assessment, career passion discovery, career exploration and development exercises, and resume and interview training to assist in finding rewarding internships and full-time jobs. Prerequisite: B A 1310 with a "C" or better and a minimum 2.0 Overall GPA.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**B A 3120. Professional Development II.**

This course builds upon and expands students' basic understanding of career planning and development. A portion of this course is major-focused so that students are prepared for specific business roles. This course applies networking skills, company (prospective employer) analysis, internship/job analysis and search strategy, interviewing skills, and negotiation techniques to maximize the students' new-hire potential. Prerequisite: B A 3110 with a "C" or better and a minimum 2.0 Overall GPA.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**B A 4300. Independent Study in Global Business.**

This study abroad course introduces students to the international business environment. Topics include cultural, political, social, and economic factors affecting international business, and the regulatory and ethical environment of global businesses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**B A 4312. International Business Internship.**

Integration of professional and academic experience through internship in an international business related activity with an external employer. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**B A 4315. International Trade Operations.**

This course examines the basics of international trade operations, focusing on the procedures, documentation, and regulation pertaining to export and import operations from the perspectives of exporters, importers, and various intermediaries. Prerequisites: MGT 3375 and MKT 4310 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**B A 5100. Business Professional Development Seminar.**

This course is designed to contribute to the development of the business professional. Academic content is supplemented by training in soft skill topics to better prepare the students for a successful business career. Repeatable for credit with different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**B A 5351. Organizational Performance and Competitive Advantage.**

This course is designed to provide an integrative understanding of the firm. A variety of organizational models and perspectives will be incorporated to facilitate understanding of the complexities of the firm, its environments, and its relationships with stakeholders. Includes focus on case analysis issues and communication skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5353. Understanding and Analyzing Organizational Problems.**

An introduction to the concepts of economic theory and optimization, with an emphasis on developing skills in data and economic analysis to solve business problems. Coverage includes prices, costs, market structures, macroeconomic policies, and optimization. Corequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**B A 5368A. MBA Full Time Cohort International Experience.**

This course will focus on developing an understanding and analysis of issues related to business challenges in another country. Students will gain first-hand experience with the business practices, culture and economy of another country. Corequisite: MGT 5313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**B A 5396. Internship in Business Administration.**

This course is based on experiential learning while the student works in business administration. Students will integrate both professional and academic experiences through the internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**B A 5398. Independent Study in Business Administration.**

This course focuses on individual in-depth research. Students, in consultation with a faculty member, choose a selected area of study in business administration and work independently on a specialized project. Course may be repeated with approval of associate dean for graduate programs. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**BLAW 3301. Legal Environment of Business.**

The course surveys basic features of the American legal system and legal aspects of business transactions. Topics include generally the nature and sources of law, court systems and procedures, torts, contracts, agency, and ethics. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**BLAW 3360. Business Organizations and Government Regulations.**

This course studies corporations, partnerships, limited liability companies, securities law, law for small business, administrative law, consumer law, environmental law, antitrust law, and insurance. Prerequisite: BLAW 3301 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**BLAW 3363. International Business Law.**

This course studies the principles of international business law which emphasizes the commercial activities of the multinational firm conducting business in global economic, political, social and cultural environments. (MULT) (MULP).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Multicultural Perspective| Multicultural Content

**Grade Mode:** Standard Letter

**BLAW 3364. Commercial Law.**

This course studies sales law, negotiable instruments, secured transactions, suretyship, bankruptcy, personal property and bailments, real property, and creditors' rights and remedies. Prerequisite: BLAW 3301 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**BLAW 3367. Employment Law.**

This course studies the legal developments in the workplace, with emphasis on attempts to maintain a proper balance between employees' interest in earning a livelihood and employers' interest in operating their business efficiently and profitably. Prerequisite: PHIL 1320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**BLAW 4310. Sustainable Development & Law.**

This course examines the role of law and policy in balancing economic, environmental, and social issues for current and future generations.

Prerequisite: A minimum 2.0 overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**BLAW 4320. Legal Issues in Finance & Economics.**

This course surveys the ways that law impacts, and is impacted by, the practice of finance and economics. Prerequisite: BLAW 3301 with a grade of "D" or better and a minimum 2.0 overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**BLAW 4395. Independent Study in Business Law.**

An in-depth study of a single topic or related problem solved through business law research. May be repeated once for credit with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**BLAW 5310. The Employment Relationship.**

A study of trends in the rapidly evolving "law of workplace," with emphasis on how lawmakers attempt to balance the rights and responsibilities of employers and workers. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BLAW 5315. Legal Issues in International Business.**

This course examines legal issues relevant to international business transactions, emphasizing international trade, licensing of intellectual property, and foreign direct investment. Environmental, dispute resolution, labor, e-commerce, marketing, and ethical issues will also be discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**BLAW 5333. Legal Issues of Sustainability and Responsibility.**

Diverse frameworks and analytical methods underlying our understanding of sustainability are explored, including the legal aspects & impact on business, society, environment and economy. Topics include corporate governance, globalization, urbanization, energy, human population, food, natural resources, water and equity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BLAW 5364. Commercial Law.**

A traditional business law course which examines sales, negotiable instruments, creditor's rights and remedies, secured transactions, bankruptcy law, personal property, bailments, real property and landlord-tenant relationships. Prerequisite: BLAW 3301 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**BLAW 5368I. International Business Ethics.**

This course examines the legal and ethical challenges inherent in international marketing, international environmental and energy practices, international labor and employment practices, trade negotiations, foreign direct investment, intellectual property licensing, technology development, data collection mining, corporate tax inversion, and global corporate social responsibility. Students will also discuss the individual behavioral, organizational, and cultural factors that influence ethical and unethical business decisions in the global business environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 3304. Human Relations for Career and Technical Education Teachers.**

This course emphasizes the combination of psychological and sociological factors that influence relationships of CTE teachers in the pursuit of professional duties. Strategies for teaching students and mentoring employees on the dynamics of human relations are highlighted.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3313A. Special Needs Students in CTE.**

This course involves in-depth studies of characteristics, principles of inclusion, development and implementation of individualized programs of instruction and collaboration with school personnel for effective education of special needs students, including special education, limited-language proficiency, and gifted and talented students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**CTE 3313L. Civic Engagement as Global Citizenship.**

To live, compete, and innovate in a global society, students need learning experiences that are rooted in the messy intricacies of the real world. To provide such experiences, "Civic Engagement as Global Citizenship" is a field-based, experiential course that provides students with much needed boundary-spanning approaches to learning about community-based issues within the context of global citizenship.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 3313M. Creative Thinking.**

This course introduces students to creative thinking skills-building techniques. Students in this course will engage in weekly activities to practice creative thinking skill acquisition and will learn the importance of fostering creative thinking in the workplace. By the end of the course, students will have knowledge of past creative thinkers who have helped change the world and will have tools to become the next generation of change-making creative thinkers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 3313N. Problem Solving and Decision Making.**

This course surveys the great mental models, explores data types, and overviews basic analytical tools and models to make informed decisions. When problems arise, how do you confront them? How do you approach problems and make decisions? We form mental models all the time without knowing. But power comes when you consciously build a latticework of mental models and deliberately apply tools to make better decisions, solve problems and improve your outcomes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 33130. Health and Safety in the Workplace.**

Workplace health and safety refers to the right of every employee to carry out daily work in a safe environment—regardless of industry, size, location, and type of organization. This course provides the tools, guiding practices, and resources for maintaining a healthy and safe workplace, and for safeguarding one's person on the job, especially in workplaces where there are high risks of injury. Students' products from the course provides employers with evidence of worker competency in health and safety in the workplace.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 3313P. Project Management.**

This course offers tools, questions, reviews, guiding practices, and exercises that will help students build a roadmap to project management and leadership success. This course will help project managers at any level overcome some of the most common challenges they face by: effectively managing a demanding workload; leading and motivating a team; building effective relationships with senior stakeholders; managing risks, issues, and changes to scope; and delegating effectively.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 3313Q. Teamwork.**

In this course, students will learn the differences between a group and a team, how to lead a team, how to become an effective team player, and how to resolve conflicts in teams. This course describes the lifecycle of teams and team roles. Ultimately, students will be equipped with strategies for setting up teams and managing teams effectively.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 3313R. ACCEYSS Learning Community: Action-Research in Communities of Color to Equip Youth for STEM Success.**

This course is a Service-Learning Section designated course that introduces undergraduate students to culturally responsive, community-engaged, participatory, action, and P-20 STEM workforce research. During this course, students will work with the ACCEYSS (Association of Collaborative Communities Equipping Youth for STEM Success) Network, a local community partner, and its network of faith-based and community partners across the Greater San Marcos region. Students will learn data collection, data analysis, and other methodological approaches to conducting participatory action research at assigned ACCEYSS partner sites. Students will receive mentorship from the instructor and a postdoctoral scholar while learning in a real-world environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 3313Y. Excellence in Customer Service.**

This course prepares students to apply hard and soft skills to navigate various aspects of customer service. Topics include identifying customer needs, providing personalized service, building rapport, acting professionally, and handling challenging customers. Throughout the course, students will learn how to shift their mindset to one that is customer centered and service oriented.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 3315. Leadership and Professional Development.**

This course prepares students to examine and apply principles of leadership to create their own applicable model of influencing others. Topics covered include leadership behavior, strategic thinking, managing energy, and getting results within an organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CTE 3320. Effective Methods of Teaching and Training.**

This is an introductory/fundamental course for instructors in trade and industrial education seeking certification and technical trainers who are not seeking certification. It is designed to prepare these individuals to apply effective teaching principles and techniques, to prepare lesson plans, and manage classrooms. Practice teaching will be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3321. Work-based Learning in Career and Technical Education.**

This course is intended for teacher coordinators of work-based program in trade and industrial cooperative education. There is an emphasis on selection of occupations and appropriate training stations, student recruitment, instruction coordination in on-the-job educational experiences, state and local report preparation and required record keeping systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3322. Teaching and Training as Professions.**

This course emphasizes the professional requirements of teaching and training in a variety of settings. Professional topics include licensure and preparation for the profession, organizations, philosophical foundations of teaching and training, and the socio-political landscape of teaching and training.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CTE 3323. Technology Applications.**

This course covers the use and integration of computers in the classroom or office. Topics include history of computers, use of word processor, spreadsheet, and presentation software; overview of common computer programs; history and use of the Internet, and computer security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3324. Entrepreneurship in Schools, Communities, and the Workplace.**

Students will gain an in-depth understanding of entrepreneurship and its application in the contexts of schools, communities, and the workplace. This course intersects entrepreneurial concepts in career and technical education with educational entrepreneurship, social entrepreneurship, and intrapreneurship.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3330. STEM Literacy for the Workplace.**

This course focuses on the STEM literacy skills important for success in a diverse workplace.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3340. Occupational Skills for the 21st Century.**

This course allows students to explore past and present occupational trends, new and emerging occupations and the 21st century occupational skills necessary for success. Students will explore transferability of occupational skills and how these skills are applied and packaged for career transitions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3360. Private Aircraft Operations.**

This course explores the dynamics of flight through the investigation into and proper operations of private aircraft. Topics include theory and operation of flying, supplemented by learning acquired from flight simulator experiences and actual flight time combined with practical flight instruction. Students can attempt certification as a private pilot upon successful course completion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3361. Instrument Flight Rules for Aviation.**

This course provides students with a comprehensive review of the standard aircraft instrumentation array. Topics include how these devices operate as well as the nature of the information conveyed by them to a flight crew to ensure safe aircraft navigation, assessment of aircraft system function, and emergency response. To facilitate learning, the course provides opportunities for students to implement the concepts in real-world scenarios. Prerequisite: CTE 3360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3362. Theory of Commercial Flight.**

This course explores advanced aircraft systems, aerodynamics, federal aviation regulations, airports and airspace, navigation, and performance from the perspective of commercial aviation. Topics include theory of commercial aircraft operations and practical application to real-world aviation scenarios. Prerequisite: CTE 3360 and CTE 3361 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3363. Principles and Methods of Flight Instruction.**

This course focuses on techniques for teaching prospective pilots under visual and instrument rules. Topics include theory of adult learning, creation of lesson plans, learning modules, and appropriate assessments for aircraft operation instruction. Prerequisite: CTE 3360 and CTE 3361 and CTE 3362 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3364. Theory of Multi-Engine Aircraft Operations.**

This course explores multi-engine aircraft theory and aerodynamics, pre-flight requirements for safe operation of multi-engine aircraft, and flight and landing maneuvers for aircraft of this type. Topics include system operation of constant speed propellers, multi-tank and pump fuel systems, dual electrical systems, turbocharger and ice control systems. Students also learn to use performance charts based on multi-engine weight and balance. Prerequisite: CTE 3360 and CTE 3361 and CTE 3362 and CTE 3363 all with grades of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3370. Introduction to Leadership.**

This course provides an overview of current leadership theory and research with emphasis on practical application. Topics include leadership styles, models of effective leadership, and strategies for leadership success.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3380. Education and Training Programs in Workforce Settings.**

This course helps students investigate the range of programs related to education and training in Workforce settings. Students will investigate government policies, program coordination techniques, and organizations related to learning in the workplace. Students will explore local programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 3381. Strategies for Education and Training in Workforce Settings.**

This course provides an overview of identifying curriculum, individual learning styles, needs of learners in the workforce, instructional strategies, providing support for diverse learners, inclusive instructional strategies, and the use of technology and assessment in workforce settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CTE 4310. Independent Study in Career and Technical Education.**

This course is an independent study of various subjects in CTE. Work is done on an independent basis under the direction of the faculty member. Repeatable for credit with different emphases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CTE 4315. Creating a Purposeful Life Plan: A Journey of Self-Exploration and Discovery.**

This course introduces analytical tools and work-life balance principles students use as they develop their personal and professional goals in creating a purposeful life plan. The impact of social media platforms and mobile app technologies on the management of personal and professional goals is also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 4320. Aviation Safety.**

This course provides an in-depth exploration of safety in aviation operations and the role of leadership in threat and error management. Topics include issues of individual agency, crew factors, weather, and mechanical safety, as well as potential causes of error and accident.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 4321. Operations Risk Management.**

This course explores operations risk management as it relates to professional aviation. Topics include theories of risk planning, identification, and mitigation and the practical applications of these theories within the context of flight systems, environment, and human factors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 4322. Crew Resource Management.**

This course explores the theory and practical application of Crew Resource Management (CRM) for aviation professionals. Topics include situation awareness, communication skills, teamwork, task allocation, and decision making within a comprehensive framework of standard operating procedures (SOP) for aviation operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 4323. Aviation Weather.**

This course explores weather and its effects on aviation operations. Topics include weather theory, meteorological forecasting and reporting tools and the impacts of weather systems on safe aircraft operations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5301. Technology of Teaching.**

This course presents the research and theory related to the technology of teaching. Topics include learning theories, effective teaching techniques, motivation and performance, evaluation, and classroom dynamics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5303. Interdisciplinary Studies in Occupational, Workforce, and Leadership Studies.**

This course provides an overview of interdisciplinary studies' frameworks in the fields related to occupational, workforce, and leadership studies. Students investigate career options, develop plans of study, integrate interdisciplinary academic material, and refine interdisciplinary writing skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5306. Instructional Materials Development Technology.**

This course provides students opportunities to develop knowledge, skills, and abilities relevant to assessing instructional materials in education and training, within the context of real-world settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5308. Problems in Cooperative Training.**

This course provides a review of basic standards for cooperative education, underlying reasons for standards, and current issues/problems in cooperative education programs. Students will discuss and provide solutions to current dilemmas of cooperative education, through the use of organizational research techniques and organizational problem solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5312. Development, Organization, and Use of Instructional Material.**

This course involves the selection of lesson content, lesson planning, and instructional material development. The emphasis is on the effective development and evaluation of instructional materials. A variety of methods will be taught to gather and utilize instructional materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5313C. Teaching Entrepreneurship in Career and Technical Education.**

This course includes a study and analysis of ownership, marketing strategies, location, financing, regulations, managing, and protecting a business. Students will analyze current research and techniques in teaching entrepreneurship in CTE settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**CTE 5313L. Emergent Workplace Perspectives.**

This course examines the emergent and evolving nature of the modern workplace. Students will explore topics related to interdisciplinary perspectives in the workplace such as inequality related to gender and race, workers' rights, knowledge, control, the role of technology, and globalization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 5313M. Program Evaluation in Career and Technical Education.**

Students will gain an in-depth understanding of terminology and program evaluation, guiding principles, approaches and models, and professional standards utilized while conducting program evaluations of career and technical education (CTE) programs. Students will apply these concepts to design a program evaluation proposal for an existing or proposed CTE program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CTE 5314. Human Relations for Career and Technical Education Teachers.**

This course includes a study of methods of establishing and maintaining effective relationships with students, co-workers, families, business and industry, and community members. Strategies for teaching students and mentoring employees on the dynamics of human relations are highlighted.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5315. Leadership and Professional Development.**

This course provides an overview of leadership approaches used in various educational, training, and workplace settings. Students will explore current research on leadership and engage in activities geared toward building leadership skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5320. Effective Methods of Teaching and Training.**

This fundamental course is for trade and industrial educators seeking certification and technical trainers who are not seeking certification. It is designed to prepare them to apply effective teaching principles and techniques. Lesson plans will be prepared, classrooms managed, and practice teaching included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5321. Work-based Learning in Career and Technical Education.**

This course is intended for teacher coordinators of work-based programs in trades and industrial cooperative education. There is an emphasis on selection of occupations and training stations, student recruitment, instructional coordination in numerous on-the-job experiences, state and local reports, and recordkeeping requirements. Research is conducted on local districts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5322. Teaching and Training as Professions.**

This course emphasizes the professional requirements of teaching and training in a variety of settings. Professional topics include licensure and preparation for the profession, organizations, philosophical foundations of teaching and training, and the socio-political landscape of teaching and training. Research is conducted on reform efforts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5323. Technology Applications.**

This course covers the use of computers in the classroom or office. Topics include history of computers, philosophies of computer integration, research in computer use, overview of common computer programs, and history and use of the Internet.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5324. Human Performance in the Workplace.**

The course provides an overview of current quality improvement strategies utilized in business and industry settings. Topics include the teaching of Human Performance Technology (HPT), organizational culture, teamwork, leadership, measuring improvement, statistical process control, and restructuring of work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5330. Overview of Interdisciplinary Research.**

Students will become familiar with various interdisciplinary research methods, learn concepts related to research, and conduct reviews and critiques of academic research articles. The application of academic research to practical problems will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5355. Career Education and Occupational Information in Career and Technical Education Guidance.**

This course deals with the collection, evaluation, and interpretation of common occupational, career, and personal information. It includes an overview of current theory and research in occupational selection techniques, psychological and sociological factors in career selection, and job analysis. The emphasis is on the practical application in CTE settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5360. Organization Development in the Workplace.**

This course introduces theories and practices related to organizational development (OD), including strategies to improve organizational, group, and individual performance. Topics include major theories, concepts, skills, and techniques for the practice of OD and the interventions used to lead and manage organization change in various contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CTE 5390. Independent Study in Career and Technical Education.**

This is an independent study course involving the study of important and timely topics in CTE. Students complete the study at the direction of the faculty member. This course may be repeated with different topics with departmental permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CHEM 1135. Engineering Chemistry Laboratory.**

This laboratory course is designed to accompany CHEM 1335. This course introduces students to experimental measurements and the study of thermodynamics, kinetics, and equilibria. Corequisite: CHEM 1335 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1109

**CHEM 1141. General Chemistry Laboratory I.**

First of two laboratory courses in general chemistry for science-related majors. Course introduces the students to the basics of experimental measurements, including density, separation techniques, formula determinations, titrations, thermodynamics, gas laws, and descriptive chemistry. Corequisite: CHEM 1310 or CHEM 1341 either with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1111

**CHEM 1142. General Chemistry Laboratory II.**

Second of two laboratory courses in general chemistry. Laboratory techniques are emphasized, and applied to both qualitative and quantitative analysis. Prerequisites: CHEM 1141 and CHEM 1341 both with grades of "D" or better. Corequisite: CHEM 1342 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1112

**CHEM 1310. Introductory Chemistry for Non-Science Majors.**

A one semester principles course for students in non-science related majors, this course covers the major concepts of chemistry and the role of chemistry in contemporary society. (It is not intended as an introductory course for general chemistry or for science majors.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1305

**CHEM 1320. Foundations of Chemistry.**

This course is a preparatory course for CHEM 1335 and CHEM 1341. It provides a background in fundamental chemical mathematics, in writing and understanding chemical formulas and equations and in the application of scientific laws in the behavior of matter from macro to atomic levels. Students have the option to complete online ALEKS modules and test out of this course. Corequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 any with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [SAT Mathematics score of 550 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 1330. Chemistry for Non-Science Majors.**

This is the second of two lecture courses for non-science majors. The course surveys organic and biochemistry and current topics which may include energy-related topics, nuclear chemistry, environmental chemistry, medicinal chemistry, and synthetic and natural polymers. Prerequisite: CHEM 1310 or CHEM 1341 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1307

**CHEM 1335. Engineering Chemistry.**

This course is a one-semester lecture course that focuses on engineering-related applications. Topics include stoichiometry, gases, chemical bonding and structure, periodic trends, materials, energy, kinetics, equilibrium, and electrochemistry. Prerequisite: [[MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 any with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Mathematics score of 550 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better]] and [[CHEM 1320 with any grade of "C" or better] or [ALCH00 score of 80 or better]].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1309

**CHEM 1341. General Chemistry I.**

This course is the first lecture course in the general chemistry sequence for science-related majors, and covers atomic and molecular structure, bonding, states of matter, solutions, and descriptive chemistry.

Prerequisite: [[MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 any with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Mathematics score of 550 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better]] and [[CHEM 1320 with any grade of "C" or better] or [ALCH00 score of 80 or better]].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1311

**CHEM 1342. General Chemistry II.**

Second of two lecture courses in general chemistry for science-related majors, covering equilibrium processes, acid-base chemistry, and kinetics, and electrochemistry. A basic knowledge of algebra is needed. Prerequisite: CHEM 1341 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 1312

**CHEM 2130. Laboratory Technique in Organic Chemistry.**

An optional laboratory to accompany CHEM 2330, covers experimental techniques of preparation, purification, and determination of physical and chemical properties of organic compounds. Prerequisites: CHEM 1142 and CHEM 1342 both with grades of "D" or better. Corequisite: CHEM 2330 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 2141. Organic Chemistry Laboratory I.**

This laboratory introduces the student to the general techniques of organic chemistry. Prerequisites: CHEM 1342 with a grade of "C" or better and CHEM 1142 with a grade of "D" or better. Corequisite: CHEM 2341 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 2123

**CHEM 2142. Organic Chemistry Laboratory II.**

This laboratory involves the study of typical organic reactions. Prerequisites: CHEM 2341 with a grade of "C" or better and CHEM 2141 with a grade of "D" or better. Corequisite: CHEM 2342 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 2125

**CHEM 2150. Biochemistry & Metabolism Lab.**

An optional laboratory to accompany CHEM 2350. This laboratory examines the physical properties and chemistry of carbohydrates, amino acids, proteins, lipids and nucleotides. Course is designed for students majoring in nutrition, clinical laboratory science and agriculture. Prerequisites: [CHEM 2130 and CHEM 2330] or [CHEM 2142 and CHEM 2342] any with a grade of "D" or better. Corequisites: CHEM 2350 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 2330. Fundamentals of Organic Chemistry.**

A one-semester course which covers nomenclature, structure and reactions of organic compounds with an introduction to bioorganic molecules. Course is designed for students majoring in nutrition, clinical laboratory sciences and agriculture. Prerequisites: CHEM 1142 and CHEM 1342 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter



**CHEM 2341. Organic Chemistry I.**

This course covers the nomenclature, reactions and reaction mechanisms of the hydrocarbons and the alkyl halides. Prerequisites: CHEM 1342 with a grade of "C" or better. Corequisite: CHEM 1142 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 2323

**CHEM 2342. Organic Chemistry II.**

This course covers the nomenclature, reactions and reaction mechanisms of the major functional groups. Prerequisite: CHEM 2341 with a grade of "C" or better. Corequisite: CHEM 2141 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** CHEM 2325

**CHEM 2350. Biochemistry & Metabolism.**

A one-semester study of carbohydrate, proteins, lipids and nucleotides which presents both structure and intermediary metabolism along with an introduction to the function of enzymes and coenzymes.

Course is designed for students majoring in nutrition, clinical laboratory science and agriculture. Prerequisites: [CHEM 2130 and CHEM 2330] or [CHEM 2142 and CHEM 2342] any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3190. Cooperative Education.**

This course provides cooperative education students the opportunity to study particular problems in chemistry and biochemistry in an occupational setting. Problems are related to the student's work assignment, culminating in an industrial supervisor's evaluation and the student's technical report or presentation. A total of 3 hours of cooperative education credit may be applied to the student's major elective. Prerequisite: Minimum 2.25 Overall GPA and Instructor Approval.

**1 Credit Hour. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3245. Physical Chemistry Laboratory.**

Experiments illustrating principles and methods of physical chemistry are performed. Written reports on the experiments are prepared. (WI) Prerequisites: CHEM 3330 with a grade of "C" or better and CHEM 3410 with a grade of "D" or better. Corequisites: CHEM 3340 with a grade of "D" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**CHEM 3276. Experimental Biochemistry.**

Course introduces biochemistry minors to the fundamental techniques used in modern biochemistry. Experiments use the essential techniques employed in the study of proteins, enzymes and nucleic acids with emphasis on the use of modern instrumentation and the manipulation and analysis of experimental data. Prerequisites: CHEM 3375 or CHEM 4375 either with a grade of "C" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CHEM 3290. Advanced Cooperative Education.**

This course provides cooperative education students the opportunity to study particular problems in chemistry and biochemistry in an occupational setting. Problems are related to the student's work assignment, culminating in an industrial supervisor's evaluation and the student's technical report or presentation. A total of 3 hours of cooperative education credit may be applied to the student's major elective. Prerequisite: Minimum 2.25 Overall GPA and instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3330. Physical Chemistry I.**

The course covers principles of thermodynamics and thermochemistry, phase equilibria, electrochemistry and elementary kinetics including rate laws and mechanisms. Prerequisites: CHEM 1142 with a grade of "D" or better and CHEM 1342 and MATH 2472 both with grades of "C" or better.

**3 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3340. Physical Chemistry II.**

The course covers kinetics, quantum mechanics, spectroscopy, and other selected topics. Prerequisite: CHEM 3330 and PHYS 2326 both with grades of "C" or better.

**3 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3341. Descriptive Inorganic Chemistry.**

An analysis of atomic, molecular, and solid state bonding and structure with an emphasis on coordination compounds and bioinorganic chemistry. Representative compounds and reactions of the elements will be surveyed. Prerequisite: CHEM 2342 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3375. Principles of Biochemistry.**

This course provides biochemistry majors and minors with a rigorous introduction to biochemistry. Topics include the chemical function and structure of proteins, nucleic acids, lipids and carbohydrates, and enzyme mechanisms, kinetics and regulation. Corequisite: CHEM 2342 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3380. Analytical Biochemistry.**

This course is designed to acquaint the student with the chemical and physical principles of modern biochemical methods. Emphasis is placed upon the application of the methods to current problems in biochemistry and molecular biology and the interpretation of data. Prerequisite: CHEM 3375 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3381. Biochemistry Techniques.**

Course introduces biochemistry majors to techniques in analytical and physical biochemistry. Experiments reinforce fundamental concepts and utilize modern instrumentation. Experimental design, interpretation of results, and data reporting will be emphasized. (WI) Prerequisites: CHEM 3375 with a grade of "C" or better. Corequisite: CHEM 3380 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CHEM 3390. Physical Chemistry for Biochemists.**

A study of the theories and laws of physical chemistry as it relates to biochemistry. The topics covered include ideal and real gases, classical thermodynamics, reaction kinetics, phase equilibria, electrochemistry, quantum mechanics, spectroscopy and statistical mechanics. Prerequisite: MATH 2472 with a grade of "C" or better. Corequisite: PHYS 2325 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 3410. Quantitative Analysis.**

Course covers the general theory and practice of typical methods of gravimetric and volumetric analysis, satisfies the quantitative analysis requirements for chemistry majors, minors, pre-medical and pharmacy students. Prerequisites: CHEM 1342 with a grade of "C" or better and CHEM 1142 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CHEM 4099. Predoctoral Biomedical Research Development for Undergraduates.**

This course is a weekly professional development seminar for NIH-supported trainees and affiliates in the Texas State U-RISE program (NIH GM136483). Prerequisite: Instructor approval.

**0 Credit Hours. 0 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Credit/No Credit

**CHEM 4231. Advanced Laboratory I.**

An advanced integrated lab illustrating a variety of chemical techniques for the preparation, characterization and analysis of organic and inorganic materials. (WI) Prerequisites: CHEM 3245 and CHEM 3340 and CHEM 3410 all with grades of "D" or better. Corequisites: CHEM 4331 with a grade of "D" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**CHEM 4241. Advanced Laboratory II.**

An advanced integrated lab illustrating a variety of chemical techniques for the preparation, characterization and analysis of inorganic and organic materials. (WI) Prerequisites: CHEM 4231 and CHEM 4331 both with grades of "D" or better. Corequisite: CHEM 4341 with a grade of "D" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**CHEM 4295. Laboratory Development and Practice.**

This course develops the laboratory instructional abilities of students seeking either 8-12 Chemistry or 8-12 Physical Science Teaching Certification. Topics include both traditional laboratory techniques and guided inquiry techniques, safety, laboratory management, pedagogical theory and practical knowledge of laboratory experiments. Prerequisite: Minimum 2.5 Overall GPA.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CHEM 4299. Undergraduate Research.**

This course is available to undergraduate chemistry or biochemistry majors only. It may be repeated for credit but a maximum of four semester hours from this course are applicable toward advanced chemistry electives. Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CHEM 4310. Medicinal Chemistry.**

This course surveys modern approaches to drug discovery and mechanisms of drug action with the focus on molecular structures of drugs. Examples of drug discovery for the chemotherapy of cancer, microbial and cardiovascular diseases will be examined. Prerequisites: [CHEM 2342 and CHEM 2350] or CHEM 3375 or CHEM 4375 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4312. Organometallic Chemistry.**

This course will survey the structure, bonding, and reactivity of organometallic complexes. Homogeneous catalysis of the transition metals as well as the main group elements along with specialized "seminal research papers" in the field of organometallic chemistry will also be presented. Prerequisites: CHEM 2342 and CHEM 3341 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4331. Instrumental Analysis.**

The theory and methodology associated with the quantitative analysis of materials, i.e., electronics, spectroscopy, electrochemistry and chromatography are presented. Prerequisite: CHEM 3340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4333. Spectroscopy.**

The study of various spectrometric techniques in qualitative and structural analysis of chemical substances. Prerequisite: CHEM 2342 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4341. Advanced Inorganic Chemistry.**

This course will use group theory analysis to predict vibrational spectra and bonding in molecules, including metal complexes. Numerous approaches (acid/base, redox, etc.) will be employed to rationalize the products of inorganic and organometallic reactions. The materials properties of solids and nanomaterials will also be discussed. Prerequisites: CHEM 3340 and CHEM 3341 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4350. Modern Molecular Modeling.**

A study of the application of computational techniques to molecular modeling. Topics covered include quantum mechanical modeling, forcefield based molecular modeling, molecular energy minimization, molecular dynamics, vibrational spectra, solution of crystalline structures, diffraction patterns, molecular blends, phase equilibria, crystal morphology, physical property prediction and mesoscale modeling. Prerequisite: CHEM 3340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4351. Introduction to Polymers.**

This course is designed to develop the student's general understanding of polymer history and importance as well as terminology, structure, and synthesis. The overall scope of the course will be to develop the student's general knowledge of polymer synthesis and structure. Prerequisite: CHEM 2342 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4360. Molecular Biology.**

This course provides Biochemistry majors and minors with advanced knowledge of the field of molecular biochemistry. Topics include gene expression (transcription and translation of genes in bacteria and higher organisms), post-translational modification of proteins, chromosomal DNA replication, cell cycle checkpoint controls, DNA damage and repair, as well as theories of cancer and aging. Prerequisite: CHEM 3375 or CHEM 4375 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4371. Directed Study.**

Independent study on a particular subject area in chemistry or biochemistry. The specific study area, resource material, goals, and achievements will be approved by the instructor. Prerequisites: CHEM 2342 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4375. Biochemistry.**

This course provides a challenging introduction to biochemistry, covering the structure and function of nucleic acids, proteins, lipids, and carbohydrates. Major metabolic pathways of carbohydrates and lipids are also examined. This course is not intended for biochemistry majors. Corequisite: CHEM 2342 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4382. Advanced Biochemistry Research Laboratory II.**

This course is the second of two laboratory courses providing instruction in the modern techniques of biochemistry. Students will perform independent research projects involving isolation, manipulation and characterization of biomolecules. Results of these experiments and the scientific literature investigations will be used to prepare formal written reports and oral presentations. Prerequisite: CHEM 4481 with a grade of "C" or better. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CHEM 4385. Metabolism.**

A study of the biodegradation and biosynthesis of carbohydrates, lipids, amino acids, proteins, and nucleic acids. Prerequisite: CHEM 3375 or CHEM 4375 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CHEM 4390. Supramolecular Chemistry.**

This course is designed to be a survey of the nature of non-covalent interactions between host and guest species. Emphasis will be focused on the rational design of hosts, thermodynamic and kinetic parameters involved in binding and the applications of various binding/recognition phenomena. Prerequisite: CHEM 2342 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CHEM 4481. Advanced Biochemistry Lab I.**

The first of two laboratory courses providing instruction in the modern techniques of biochemistry. Experiments are performed on the isolation, manipulation and characterization of DNA, RNA and proteins. Students will prepare formal written reports and oral presentations. (WI) Prerequisites: CHEM 3381 with a grade of "C" or better and CHEM 3380 with a grade of "D" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**CHEM 5110. Seminar in Chemistry.**

A course designed to acquaint the graduate student with current research areas in chemistry. May be repeated twice for total of 3 semester hour credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5195. Professional Development of Graduate Assistants.**

This course is designed to develop and enhance graduate assistants' laboratory instruction abilities. Topics covered in the course include effective lecture techniques, laboratory safety, theory and practical knowledge on laboratory experiments and laboratory section management. This course does not earn graduate credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CHEM 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5285. Laboratory Development Practice.**

This course develops the laboratory instructional abilities of post-baccalaureate students seeking either 8-12 Chemistry or 8-12 Physical Science Teaching Certification. Topics include both traditional laboratory techniques and guided inquiry techniques, safety, laboratory management, pedagogical theory and practical knowledge of laboratory experiments.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CHEM 5295. Professional Development of Graduate Assistants.**

This course is designed to develop and enhance graduate assistants' laboratory instruction abilities. Topics covered in the course include effective lecture techniques, laboratory safety, theory and practical knowledge on laboratory experiments and laboratory section management. This course does not earn graduate credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CHEM 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5310. Medicinal Chemistry.**

This course surveys modern approaches to drug discovery and mechanisms of drug action with the focus on molecular structures of drugs. Examples of drug discovery for the chemotherapy of cancer, microbial and cardiovascular diseases will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5311. Natural Products, Anti-Infective, and Anti-Cancer Agents.**

This course is designed to introduce natural products by discussing their important classes (secondary metabolites), classification, nomenclature, structure, biosynthesis, occurrence and structure elucidation. The study of their utilization in medicine as leads for the development of new antimicrobial and anticancer agents will constitute the main focus of the course. The students will learn how to utilize their knowledge of organic chemistry and biochemistry gained in undergraduate courses toward the application of advanced research active areas at the chemistry-biology interface.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5312. Organometallic Chemistry.**

This course will survey the structure, bonding, and reactivity of organometallic complexes. Homogeneous catalysis of the transition metals as well as the main group elements along with specialized "seminal research papers" in the field of organometallic chemistry will also be presented.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5313. Principles and Applications of Mass Spectrometry.**

This course is designed for graduate chemistry and biochemistry majors. Sections of the course are devoted to the theory and practice of mass spectrometry. Application to chemistry, biochemistry, biology and materials science will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5320. Modern Molecular Modeling.**

The application of computational techniques to molecular modeling. Topics covered include quantum mechanical modeling, force field based molecular modeling, energy minimization, molecular dynamics, vibrational spectra, solution of crystalline structures, diffraction patterns, molecular blends, phase equilibria, crystal morphology, physical property prediction, and mesoscale modeling. Prerequisites: CHEM 3340 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5321. Advanced Organic Chemistry.**

Study of the relation of the following topics to structure and reactions of organic compounds: bonding, stereochemistry, acid-base concepts, physical organic chemistry, reactive species, and mechanisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5330. Physical Chemistry.**

Fundamentals of physical chemistry are surveyed, emphasizing application in the other chemical sub-disciplines. Topics include classical thermodynamics, kinetics, atomic structure, and molecular spectroscopy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5333. Spectroscopy.**

Study of various spectrometric techniques in qualitative and structural analysis of chemical substances. Students who have completed CHEM 4333 or its equivalent may not take this course for master's credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5341. Inorganic Chemistry.**

This course will review essential concepts in inorganic chemistry including atomic structure, bonding theory, acid-base chemistry, solid state structures, and coordination chemistry. Analytical techniques for characterizing inorganic structures will be discussed along with current topics in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5342. Bioinorganic Chemistry.**

This course is designed to provide a broad overview of metalloprotein active site design and reaction mechanisms catalyzed by metalloenzymes. Training sessions on the use of contemporary protein visualization tools will be provided and used throughout the course. Topics covered in the course include dioxygen transport and activating proteins, electron transfer proteins, dinitrogen (N<sub>2</sub>), and hydrogen (H<sub>2</sub>) activation, photosystem and oxygen evolution, zinc containing proteins, CO<sub>2</sub> reduction, and modern advancements in the field of bioinorganic chemistry. Students can expect to develop strong foundational knowledge in metalloenzyme structure, function, and reaction mechanisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5351. Introduction to Polymers and Polymer Synthesis.**

This course is designed to develop the student's general understanding of polymer history and importance as well as terminology, structure, and synthesis. The overall scope of the course will be to develop the student's general knowledge of polymer synthesis and structure. Students who have completed CHEM 4351 or its equivalent may not take this course for master's credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5353. Polymer Processing and Characterization.**

This course is designed to explore the areas of polymer processing and characterization. Students will be introduced to extrusion, injection molding, film formation, thermoforming, thermal-mechanical measurements, classical mechanical testing, thermal-optical measurements, and methods for determination of polymer molecular weight. Prerequisites: CHEM 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CHEM 5355. Physical Chemistry of Polymers.**

A study of the physical chemistry of polymers. Subjects covered include thermodynamics, kinetic polymerization, phase relationships, molecular geometry, spectroscopy of polymers, polymer physics and mechanical behavior, polymer blends, rheology, and polymer composites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5365. Separation Methods in Chemical Analysis.**

The principles of gas chromatography, capillary electrophoresis, and mass spectrometry are discussed with a balance among theory, practice, and application.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5366. Quantitative Methods in Biophysical Chemistry.**

This course will integrate the physical, chemical, and biological aspects of fundamental biophysical methods, including spectroscopy, calorimetry, and hydrodynamics. Students will develop a quantitative skillset in multiple analytical methods that are used to characterize a variety of biological systems. This course will provide students with the physical and chemical foundation to quantitatively study biological macromolecules at multiple levels of complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5370. Problems in Chemistry.**

Open to graduate students on an individual basis by arrangement with the faculty member concerned. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5375. Biochemistry.**

A course devoted to a study of the chemistry of carbohydrates, lipids, proteins, enzymes, and nucleic acids. A study of enzyme kinetics and thermodynamics of coupled reactions is included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5381. Physical Biochemistry.**

An introduction to the physical techniques of biochemistry with emphasis on the interpretation of experimental data obtained from electrophoresis, chromatography, immunological methods, ultracentrifugation, spectroscopy and emerging techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5382. Enzymology.**

A study of the chemical and physical properties of enzymes. Topics will include structure-function relationships, elucidation of chemical and kinetic mechanisms, and the role of enzymes in metabolism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5383. Molecular Biology & Molecular Genetics.**

This course addresses the basic genetic mechanisms of bacteria and eukaryotes and introduces some examples of the biochemical and genetic techniques employed to study cells, tissues, and organisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5384. Current Topics in Biochemistry and Molecular Biology.**

Course provides students with advanced knowledge in the areas of biochemistry and molecular biology. Topics include signal transduction and the molecular biology of cancer, as well as emerging topics in Genomics, Proteomics, and other new developments in biochemistry. May be repeated once for credit. Prerequisites: CHEM 5381 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CHEM 5385. Metabolism.**

A study of biodegradation and biosynthesis of carbohydrates, lipids, amino acids, proteins, and nucleic acids. Students who have completed CHEM 4385 or its equivalent may not take this course for master's credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5386. Proteins.**

This course will cover advanced biochemistry topics related to proteins. Topics will include protein structure, structure-function relationships, and current methodologies for examining proteins in addition to current findings in primary literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5387. Nucleic Acids Chemistry.**

This course will cover advanced biochemistry topics related to nucleic acids. Topics will include nucleic acid structures and properties, catalytic nucleic acids, protein-nucleic acid interactions, higher order complexes of protein-nucleic acids, and current methodologies for examining nucleic acids in addition to current findings in primary literature. Prerequisite: CHEM 5383 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5390. Supramolecular Chemistry.**

This course is designed to be a survey of the nature of non-covalent interactions between host and guest species. Emphasis will be focused on the rational design of hosts, thermodynamic and kinetic parameters involved in binding and the applications of various binding/recognition phenomena.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5391. Chemical Biology.**

This course will introduce the emerging field of chemical biology and common tools that are used to analyze and manipulate biological processes with small molecules. Students will develop a strong foundation in the design and synthesis of chemical tools to interrogate biological systems and focus on implementing and interpreting assays with these tools, using examples from the current literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 5395. Fundamentals of Research.**

Course is designed to acquaint the beginning graduate student with materials and methods of chemical research. (MULT & MULP).

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CHEM 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in CHEM 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 7101. Doctoral Assistant Development.**

This course is designed to prepare doctoral students employed as instructional assistants to perform effectively in diverse instructional settings. This course is seminar-based and covers topics related to teaching, research, and employment responsibilities. Completion of the course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CHEM 7110. Advances in Molecular and Biophysical Chemistry.**

This course is designed to provide students in the Integrated Molecular and Biophysical Chemistry PhD program a forum to discuss ongoing research progress and new discoveries through literature study. Students in the course will give informal 'work in progress' presentations and critically analyze recent publications in the field.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7199. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7200. Graduate Research.**

This course is designed to provide doctoral students with an elective research option to allow them to collect preliminary data as they develop their dissertation proposal.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7201. Graduate Laboratory Rotations.**

This course is designed to assist students in selecting a doctoral committee chair by having them work in several laboratories during their first semester in the program.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CHEM 7299. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7300. Graduate Research.**

This course is designed to provide doctoral students with an elective research option to allow them to collect preliminary data as they develop their dissertation proposal.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7305A. Physico-Chemical Properties and Metabolism of Xenobiotics.**

This course is designed to introduce students to the concepts of physico-chemical properties of small molecules and how these impact the ability of these molecules to be used as probes in biological systems, focusing on the role that metabolic processes play in limiting or activating chemical probes and the role of chemical probes in investigating these processes. Students will explore experimental and computational methods for determining the relevant properties of compounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CHEM 7311. Natural Products, Anti-Infective, and Anti-Cancer Agents.**

This course is designed to introduce the natural products by discussing their important classes (secondary metabolites), classification, nomenclature, structure, biosynthesis, occurrence and structure elucidation. The study of their utilization in medicine as leads for the development of new antimicrobial and anticancer agents will constitute the main focus of the course. The students will learn how to utilize their knowledge of organic chemistry and biochemistry gained in undergraduate courses toward the application of advanced research active areas on chemistry-biology interface.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7330. Environmental Chemistry.**

An introduction to environmental chemistry, with an emphasis on aquatic resources. Basic principles of geochemistry and atmospheric chemistry, as they relate to pollutant impacts on aquatic ecosystems, also will be examined. Prerequisites: CHEM 2142 and CHEM 2342 and CHEM 3410 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7342. Bioinorganic Chemistry.**

This course is designed to provide a broad overview of metalloprotein active site design and reaction mechanisms catalyzed by metalloenzymes. Training sessions on the use of contemporary protein visualization tools will be provided and used throughout the course. Topics covered in the course include dioxygen transport and activating proteins, electron transfer proteins, dinitrogen (N<sub>2</sub>), and hydrogen (H<sub>2</sub>) activation, photosystem and oxygen evolution, zinc containing proteins, CO<sub>2</sub> reduction, and modern advancements in the field of bioinorganic chemistry. Students can expect to develop strong foundational knowledge in metalloenzyme structure, function, and reaction mechanisms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7354. Eukaryotic Molecular Biology and Macromolecular Structure.**

This course is designed to cover the specific topics of the regulation of gene expression in eukaryotes, including eukaryotic DNA replication, DNA repair, DNA recombination, DNA transcription, RNA processing, translation, post-translational protein modification. This course will also introduce the application of macromolecular structure determination in eukaryotic gene expression and its regulation. Students can expect to develop a strong foundation in eukaryotic molecular biology, a strong ability to discuss literatures and some grant writing ability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7361. Quantitative Methods in Biophysical Chemistry.**

This course will integrate the physical, chemical, and biological aspects of fundamental biophysical methods, including spectroscopy, calorimetry, and hydrodynamics. Students will develop a quantitative skillset in multiple analytical methods that are used to characterize a variety of biological systems. This course will provide students with the physical and chemical foundation to quantitatively study biological macromolecules at multiple levels of complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7385. Metabolism and Metabolomics.**

This course is designed to introduce students to the metabolism of macromolecules and the principles and practice of metabolomics. It will cover (1) biosynthesis and biodegradation of carbohydrates, lipids, amino acids, proteins, and nucleic acids; (2) metabolomics principles; (3) applications of metabolomics in the biomedical field. Discussions of literature in metabolomics studies will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7391. Chemical Biology.**

This course will introduce the emerging field of chemical biology and common tools that are used to analyze and manipulate biological processes with small molecules. Students will develop a strong foundation in the design and synthesis of chemical tools to interrogate biological systems and focus on implementing and interpreting assays with these tools, using examples from the current literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7395. Fundamentals in Molecular and Biophysical Chemistry.**

This course is designed to provide a functional overview of the physics, chemistry, and biology concepts that are central to the practice of molecular biophysical chemistry. Students will develop a broad scientific foundation to pursue interdisciplinary projects within the biophysical and biochemical sciences, as well as productively interface and collaborate with colleagues across sub-disciplines throughout their doctoral studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHEM 7399. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7599. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7699. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHEM 7999. Dissertation.**

This course consist of original research and writing in integrated molecular and biophysical chemistry to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CHI 1410. Beginning Chinese I.**

Introduction to listening, speaking, reading, and writing skills within a Chinese cultural framework. Students who take CHI 1410 toward degree requirements must also complete CHI 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** CHIN 1411

**CHI 1420. Beginning Chinese II.**

This course provides continued instruction and practice in listening, speaking, reading, and writing skills within a Chinese cultural framework. Students who take CHI 1410 toward degree requirements must also complete CHI 1420. (MULT) Prerequisite: CHI 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** CHIN 1412

**CHI 2310. Intermediate Chinese I.**

This course provides continued development and review in listening, speaking, reading, and writing skills within a Chinese cultural framework. (WI)(MULT) Prerequisites: CHI 1420 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** CHIN 2311

**CHI 2320. Intermediate Chinese II.**

This course provides more advanced practice in all language skills with greater emphasis on reading within a Chinese cultural framework. (WI) (MULT) Prerequisites: CHI 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** CHIN 2312

**CHI 3301. Conversational Chinese.**

This course is designed to improve oral communication skills in Chinese using current video and text media. The course will include the development of vocabulary and grammar necessary for communication and will focus on selected cultural themes. Students' group video projects will be posted on a course blog. Course may be repeated once for credit when topics vary. (WI)(MULT) Prerequisites: CHI 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CHI 3302. Chinese for Business.**

This course focuses on the use of written and spoken Chinese in global business contexts, as well as exploring economic, demographic, and cultural factors that influence commercial interactions. Students learn to use formal Chinese to write reports, job-related letters, and emails and to give presentations. (MULT) Prerequisite: CHI 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CHI 3303. Chinese for Media.**

This course focuses on the study of Chinese-language media to enhance understanding of political affairs and social concerns while developing students' oral and written language skills. The course includes materials from various types of media outlets from across the Chinese-speaking world. (MULT) Prerequisite: CHI 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CHI 3304. Chinese-English Translation.**

This course engages students in translation as a method of improving their reading ability in Chinese as well as developing the cultural competence needed to render the nuances of Chinese texts into English. The course emphasizes key concepts of translation theory and methodology. Texts include media articles, literature, and professional or technical texts. Prerequisite: CHI 3302 or CHI 3303 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHI 3305. Modern Chinese Literature and Film.**

This course offers a survey of Chinese and Taiwanese literature and film in the Chinese language since the beginning of the 20th century. Readings include poems, short stories, and essays in styles as varied as revolutionary, romantic, modernist, nativist, popular, and experimental. Major themes of discussion include tradition and modernity, masculinity and femininity, elite and popular, individual and national identities, class consciousness, and tensions between Chinese and Western culture. This course is taught in Chinese. Written texts are level-appropriate excerpts or abridged editions of original works. Films are shown in Chinese with English subtitles. The course includes a service-learning component. Prerequisite: CHI 3302 or CHI 3303 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CHI 4390. Studies in Chinese Language and Culture.**

Students will conduct an independent study project in Chinese language or culture. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CE 1210. Introduction to Smart Infrastructure.**

This course is an overarching study of municipal and private infrastructure and the use of modern technology and techniques to monitor and manage these assets. Topics and case studies examine transportation, water resources, utilities, and other construction projects. General topics related to the civil engineering profession are also covered.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 2340. Infrastructure Materials.**

This course examines the composition, production, engineering properties, and in-place behavior of materials used to construct and repair infrastructure assets. Sensing devices used to monitor a material are discussed. Students will learn to follow standard test methods, perform data acquisition, conduct data analysis, and visualize test data. Prerequisite: CHEM 1335 and ENGR 3311 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter



**CE 2350. Structural Analysis.**

This course is an introduction to the loading, response, analysis, and monitoring of infrastructure assets. Determinate and indeterminate structures are studied. Analysis by classic and modern computational methods are covered. The analysis of data obtained from sensing devices in, on, or remote to an infrastructure asset is discussed. Prerequisite: ENGR 3311 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 3310. Applications in Smart Infrastructure.**

This course presents students with realistic civil engineering scenarios involving various infrastructure assets. The course is taught in a combination of classroom lectures and lab hands-on projects. With concepts learned in lectures, students work in teams on state of the art smart infrastructure sensor technologies to gather, transmit, and analyze measured data with the objective of developing a solution for each individual project. Prerequisite: CE 1210 and CS 1342 and ENGR 3373 all with grades of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 3320. Environmental Engineering.**

This course is an introduction to environmental engineering. Topics include treatment of water, wastewater, air pollution, solid waste pollution, and hazardous materials. Standard test procedures for evaluating physical, chemical, and biological treatment processes are introduced. The use of technology to manage treatment processes and facilities will be introduced. Prerequisite: CHEM 1335 and [(BIO 1130 and BIO 1330) or (BIO 1131 and BIO 1331) or GEOL 1410] all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 3330. Soil Mechanics.**

This course examines the engineering characteristics of soil. Topics include identification, compaction, shear strength, consolidation, vertical stress, and deformation. Standard laboratory test methods are followed. Advanced data analysis, interpretation, and visualization techniques are presented. Prerequisite: ENGR 3311 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 3331. Infrastructure Foundations.**

This course investigates foundation systems which support infrastructure assets. Shallow and deep foundations, piles, footings, mats, and retaining walls may be covered. Foundations are evaluated for consolidation, rate of settlement, stress distribution, elastic settlement, and bearing capacity. Life-cycle management of foundations will be examined. Prerequisite: CE 3330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 3350. Design of Reinforced Concrete Infrastructure.**

This course covers the analysis and design of reinforced concrete infrastructure assets. Topics include columns, beams, one-way slabs, and footings. Students will learn how to read, interpret, and use specifications and design codes. The use of technology to monitor the behavior of a reinforced concrete infrastructure asset will be introduced. Prerequisite: CE 2340 and CE 2350 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 3360. Transportation Planning and Infrastructure.**

This course is an introduction to the planning and design of transportation infrastructure assets. Social, economic, safety, and engineering issues impacting transportation are examined. Interactions between users, vehicles, and the infrastructure will be addressed. The expanding use of technology to enhance transportation systems will be examined. Prerequisite: IE 3320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4100. Civil Engineering Undergraduate Research.**

Undergraduate students investigate a special topic in civil engineering by developing a research idea, conducting a literature review, researching the topic, and presenting the findings. Research plans will be developed on an individual basis with strict faculty supervision.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4200. Civil Engineering Undergraduate Research.**

Undergraduate students investigate a special topic in civil engineering by developing a research idea, conducting a literature review, researching the topic, and presenting the findings. Research plans will be developed on an individual basis with strict faculty supervision.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4300. Civil Engineering Undergraduate Research.**

Undergraduate students investigate a special topic in civil engineering by developing a research idea, conducting a literature review, researching the topic, and presenting the findings. Research plans will be developed on an individual basis with strict faculty supervision.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4310. Infrastructure Sensor Technologies.**

This course is an advanced study of the sensor technologies available to monitor the performance and behavior of infrastructure assets.

Prerequisite: CE 3310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4311. Communication Systems for Smart Infrastructure.**

This course examines the issues and processes involved in the transmission of data between sensor devices and data storage centers.

Topics include data communication principles, transmission signals, wireless and wired communication systems, security, and examples of best practices. Prerequisite: ENGR 3373 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4320. Biological Wastewater Management.**

This course examines biological treatment processes for domestic and industrial wastewater. The use of sensor technologies to monitor the effectiveness of a treatment option is also addressed. Prerequisite: CE 3320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4321. Hazardous Waste Management.**

This course is a study of best management practices relative to hazardous waste. Topics include contamination processes, site investigations, detection, analysis methods, evaluation methods, and risk management, and treatment protocols. The use of technology to manage the life-cycle performance of contaminated hazardous wastes sites will be studied. Prerequisite: CE 3320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4322. Air Pollution Management.**

This course is an introductory study of air pollution. Topics include sources, quality, meteorological influences, atmospheric dispersion modeling, and control methods. The use of sensor technologies to monitor the effectiveness of an air pollution control option is also addressed. Prerequisite: CE 3320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4323. Physical and Chemical Treatment of Water.**

This course is a study of the physical and chemical processes used to clean water and wastewater. The use of sensors to monitor treatment processes is also addressed. Prerequisite: CE 3320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4330. Design of Retaining Structures.**

This course examines the design of geotechnical structures, such as a retaining wall, that retain soil or another material. The use of technology to manage the life-cycle performance of retaining structures will be studied. Prerequisite: CE 3331 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4350. Design of Prestressed Concrete Infrastructure.**

This course covers the analysis and design of prestressed concrete infrastructure assets. Topics include columns, beams, slabs, pipes, and piles. Students will learn how to read, interpret, and use specifications and design codes. The use of technology to monitor the behavior of a prestressed concrete infrastructure asset will be introduced. Prerequisite: CE 3350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4351. Design of Steel Infrastructure.**

This course covers the analysis and design of steel infrastructure assets. Topics include connections, columns, beams, and beam-columns. Students will learn how to read, interpret, and use specifications and design codes. The use of technology to analyze the behavior of steel infrastructure assets will be introduced. Prerequisite: CE 2350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4360. Intelligent Transportation Systems.**

This course is a study of the components, technologies, and infrastructure assets that comprise intelligent transportation systems (ITS). Smart technologies, data acquisition, and communication sub-systems will be examined within the context of personal, commercial, and public transportation. Coverage will include mobility, public safety, socio-economic and environmental factors impacting transportation systems. Prerequisite: CE 3310 and CE 3360 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4361. Highway Engineering.**

This course covers alignment, interchange, construction, and maintenance issues related to highways. Topics include cross-sections, horizontal and vertical alignment, sight distance, pavement design, drainage analysis, traffic engineering, highway capacity, and construction materials. The analysis of data obtained from sensing devices during construction or use of a highway is also discussed. Prerequisite: CE 3360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4362. Traffic Engineering.**

This course is a basic introduction of the components of a highway traffic system and fundamentals of traffic engineering; analysis of traffic stream characteristics, levels of service, and capacity of urban and rural highways; study of warrants for traffic control devices; design and analysis of traffic signals and timing plans; analysis of urban and highway traffic characteristics using simulation software. Prerequisite: CE 3360 with a grade of 'C' or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4370. Hydraulics.**

This course is an examination of the properties, distribution, and circulation of water. Topics include pipe flow, pipe networks, pumps, and open channel flow. The use of sensors to monitor fluid flow, pressure, and leaks will be addressed. Advanced data analysis and visualization techniques will be presented. Prerequisite: ENGR 3380 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4371. Hydrology.**

This course is an examination of surface and groundwater hydrology. Topics include the hydrologic cycle, groundwater flow, wells, storm water management practices, open channel flow, stream flow measurements, hydrologic routing, modeling, probability, and applications. The use of sensors to monitor hydrologic activity is also addressed. Prerequisite: CE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 4390. Civil Engineering Design I.**

This is the first in a two-course sequence meant to prepare students for engineering practice with a culminating major design experience. This course covers the planning, scheduling, budgeting, and management aspects of a technology-enhanced infrastructure design project. (WI) Prerequisite: CE 3330 with grade of "C" or better. Corequisite: CE 3310 and CE 3350 and CE 3360, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CE 4391. Civil Engineering Design II.**

This is the second in a two-course sequence meant to prepare students for engineering practice with a culminating major design experience. This course focuses on the completion of all phases of the design project. Prerequisite: CE 3320 and CE 4390 both with grades of "C" or better. Corequisite: CE 3331 and CE 4370 and GEO 4356 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CE 4392. Sustainable Infrastructure.**

This course examines the sustainability characteristics of various infrastructure assets. The assets and characteristics examined will be established by the course instructor. Examples include pervious pavements, sustainable construction materials, and sustainability in the design process. The use of technology to manage the life-cycle performance of an asset will be studied. Prerequisite: CE 3331, CE 3350, CE 3360, and ENGR 3380 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CE 5320. Water Quality Management.**

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5331. Computational Methods in Geosystems.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered. This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, etc. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 5391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7199. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the PhD research advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7299. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7320. Water Quality Management.**

This course is an advanced study of the processes used to monitor, measure, and manage water quality for municipal, commercial, or industrial use. The use of technology to enhance water quality management processes is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7322. Low Impact Development and Green Infrastructure.**

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development including water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7323. Soil and Groundwater Remediation.**

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. The significance of subsurface contamination and importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7330. Advanced Soil Mechanics.**

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CE 7332. Earth Retaining Structures and Slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7333. Fluid Flow in Porous Media.**

In this course, the fundamental theory of transport and fluid flow in heterogeneous porous media will be presented. First, the equations that govern transport and fluid flow processes will be derived. Both analytical and numerical methods will be used to solve these equations in order to characterize and predict flow fields in porous media. These skills will then be applied to practical problems that involve porous media such as soils, rocks, biological tissues, concrete, etc. The knowledge gained from studies of fluid flow in natural porous materials will be employed to design/optimize systems with engineered porous media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7336. Discrete Element Methods for Granular Materials.**

This course is an introduction to discrete element methods (DEM) as applicable to a range of problems in physics and engineering that deal with granular materials. It brings together various methods and skills for particle-scale or discrete-element numerical simulation of granular media. It covers a broad range of topics from basic concepts and methods towards more advanced aspects and technical details applicable to the current research on granular materials. This course particularly focuses on the transient motion of hard and soft particles encountered in geotechnical, geomechanical, geomaterial, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7340. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, and others. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course. Students will be asked to solve an infrastructure material related problem using advanced analytical and simulation tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7350. Highway Bridge Design.**

This course covers the design of highway bridge structures, including both the super- and sub-structure. Design is in accordance with current Federal Highway Administration (FHWA) specifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CE 7351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics include the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7353. Earthquake Engineering.**

This course covers the theories, principles, and concepts of earthquake waves and wave equations, structural dynamics, and the effect of earthquakes on structures, including modal analysis and linear and nonlinear analyses of single- and multi-degree of freedom systems. Additionally, different earthquake-resistant design principles (e.g., force-based, displacement-based, and energy-based) will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7360. Pavement Design.**

This course covers the design of concrete, asphalt, and pervious pavements. Included are highway pavements, urban streets, airport pavements, industrial pavements, and roller compacted concrete. Design is in accordance with current FHWA specifications. Common construction methods are also addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7361. Pavement Asset Management.**

This course discusses applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. Topics include methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7362. Advanced Traffic Engineering.**

This course evaluates components of transportation systems by applying principles of transportation engineering, geometric design of highways, and study of warrants for traffic control devices. Additional topics include analysis of traffic flow theory and characteristics, levels of service, and capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7363. Road Infrastructure Safety.**

This course provides an introduction to road infrastructure safety. Topics include fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and design based on safe system approach (SSA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7364. Non Destructive Testing and Forensic Studies.**

This course focuses on applications of non-destructive testing (NDT) technologies in pavement infrastructure forensic studies. The course covers typical modern NDT devices employed in transportation testing and evaluation including ground penetrating radar, 3-D laser scanning, falling weight deflectometer, traffic-speed deflectometer, high-speed inertial profiler, and impact echo. The course will provide in-depth content on the principles of these NDT technologies. Based on these technologies, a series of real-world projects will be comprehensively discussed as forensic study cases. The objective is to develop engineering decision making skills in effectively identifying the root-cause of distresses or failures based on the NDT test results.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7366. Advanced Statistical and Econometric Modeling.**

This course focuses on a comprehensive understanding of statistical and econometric analysis techniques, emphasizing their application in civil engineering and scientific data analysis. It covers model-estimation methods that extend beyond traditional statistics courses, providing students with a broad range of data-analysis applications while discussing underlying theories and limitations for proper comprehension and application. Prerequisite: CE 7363 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship

**Grade Mode:** Standard Letter

**CE 7370. Urban Stormwater Management.**

This course examines the planning, design, operation, and maintenance of urban stormwater management systems. Political, social, economic, and environmental influences on such systems are examined. The impact of extreme events on stormwater systems and the urban landscape are also considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7371. Remote Sensing in Hydrology.**

This course focuses on the basics of remote sensing, data collection, processing, and analysis for a wide range of applications for hydrology and water resources at different scales. Topics include the hydrologic cycle, relevant sensor types, the electromagnetic spectrum, active/passive microwave remote sensing (precipitation, soil moisture, snow, vegetation water content, etc.), thermal sensing of evapotranspiration, and the gravity method of groundwater. This course also covers an introduction to data assimilation and practical approaches with remote sensing data for water resources management including floods and drought monitoring.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7372. Water, Climate, and Disasters.**

This course introduces the interactions between water and climate systems and their relationship with occurrences, magnitude, and frequencies of natural disasters with a focus on climate impacts on hydrology, water resources, and extreme events (e.g., floods, drought, heat waves, landslides, and wildfires). This course covers disaster risk management and adaptation strategies for a sustainable and resilient natural environment and human society against weather and climate extreme disasters.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7390. Infrastructure Systems Analysis.**

This course is an advanced study of the planning, operation, and maintenance of municipal and commercial infrastructure assets. Political, social, economic, environmental, and engineering influences on infrastructure systems are addressed. Use of technology to enhance the safety and economic value of the infrastructure is also investigated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7391. Advanced Mechanics of Materials.**

This course is an advanced study of stress, strain, and deformation in elastic bodies. Topics covered include torsion, unsymmetrical bending, nonlinear beams, stress concentrations, beams on elastic foundations, Mohr's circle, and an introduction to the theory of elasticity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7393. Artificial Intelligence Applications in Civil Engineering.**

This course explores the interface between artificial intelligence (AI) and civil engineering. The course covers foundational topics including civil engineering basics, AI fundamentals, matrix algebra, and data preprocessing. The curriculum also includes specific AI methodologies, like supervised, unsupervised, deep learning, and explainable AI, in addition to natural language processing. It highlights emerging technologies in civil engineering and the ethical and social implications of AI in the sector.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7394. Climate Change Impact and Adaptation in Civil Engineering.**

This course provides an introduction to global and regional climate change processes, drivers, and impacts. Case studies are presented for the regional impacts of climate change on extreme weather, water availability, and energy and transportation systems. Students are introduced to a variety of natural hazards and possible mitigation approaches as well as principles of design, including adaptable design and design for failure. Students select the problems they want to solve and develop their projects. Students carry out exercises with relevant data sets, write critiques of key issues, and complete a focused term project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7395. Finite Element Modeling in Civil Engineering.**

This course is an introduction to finite element methods (FEM) as applicable to a range of problems in physics and engineering. A survey of finite element analyses with a review of differential equations, boundary conditions, integral forms and numerical integration will be covered. This course particularly focuses on the steady-state and transient problems encountered in geotechnical, geomechanical, and hydrological engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7396. Life Cycle Assessment of Infrastructure.**

This course provides analytical tools and methods for implementing principles of life cycle analysis for civil engineering infrastructure. Civil infrastructure systems are critical assets that are subjected to damage, service-life deterioration, and increasing maintenance and rehabilitation cost. Effective infrastructure management and principles of sustainable development can help to find an optimal compromise between economic growth and environmental protection for all stakeholders. Life cycle assessment (LCA) is an important decision support framework for estimating and assessing the environmental impacts attributable to the life cycle of civil infrastructure systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CE 7399. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7599. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7699. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CE 7999. Dissertation.**

This course includes original research and writing in civil engineering, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ARTC 1301. Introduction to Communication Design.**

This course introduces the field of Communication Design including terminology, creative visual thinking/problem solving, layout design, tools, and materials.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 1302. Imaging I.**

This course is an introduction to digital imaging emphasizing visual strategies, techniques, and concepts. Prerequisites: ARTC 1301 with a grade of "B" or better and [ART 1301 or ART 1303 with a grade of "C" or better]. Corequisite: ARTC 2000 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 2000. Admission Portfolio Review.**

During this course, students will prepare and present an entry-level design portfolio. Communication Design majors must pass Admission Portfolio Review to gain entrance into the program. Course is repeatable one time. Prerequisite: ARTC 1301 with a grade of "B" or better and ART 1301 and with a grade of "C" or better. Corequisite: ARTC 1302 with a grade of "B" or better.

**0 Credit Hours. 0 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ARTC 2303. Typography I.**

This course introduces the evolution and development of alphabets, letter forms, and typography in relationship to visual expression and communication. Prerequisites: ART 1301 and ART 1303 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 2304. Conceptual Strategies.**

This course focuses on concept development and ideation strategies through the production of various design forms. Prerequisites: ART 1301 and ART 1303 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 2305. Visualization and Presentation Techniques.**

Introduces rendering techniques, three-dimensional graphics, and digital imaging for visual presentations. Prerequisites: ARTF 1302 and ID 1310 and ID 1320 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 3301. Art Direction I.**

Students will develop advertising concepts that relate to the creative strategies, marketing platforms, and psychology specific to client-based communication, and the type of media used. Prerequisites: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 3303. Trademark Design.**

Focuses on the design process and concept development of trademark design (i.e., logo design, corporate identity, iconographic systems). The class emphasizes incorporating historic and contemporary methodologies and practices of trademark design within the context of the communication design discipline. Prerequisites: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 3304. Branding Systems.**

Focuses on the creation and application of integrated brand communication systems. Students will develop comprehensive brand identities, typographic elements and layout designs for print and digital media. Prerequisites: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 3307. Interactive Media I.**

This course introduces web site design, construction, basic user interface design, and explores the elements of HTML and CSS. Prerequisites:

ARTC 2303 and ARTC 2304 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 3313. Imaging II.**

This course uses advanced digital and traditional imaging as it applies to visual and verbal problem solving. The class emphasizes incorporating drawing, photography and appropriated images in order to reinforce and extend the possibilities of sourcing and manipulation of images digitally. Prerequisites: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 3320. Typography II.**

Introduces advanced issues in page structure and composition, content organization and management, typographic hierarchies, typeface selection, and typesetting. Prerequisites: ARTC 2303 and ARTC 2304 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4000. Senior Exit Review.**

A course in which all graduating seniors must participate during their last academic year. Work will be examined and evaluated while displayed in the Exit Review. Prerequisites: ARTC 4308 with a grade of "D" or better and instructor approval. Corequisite: ARTC 4315 with a grade of "D" or better.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ARTC 4200. Senior Show & Review.**

Students will be given the guidance and the studio time needed to polish their portfolios and to organize and produce the Communication Design Exit Review. Lectures will focus on best practices for professionals in communication design. Final portfolios will be evaluated while exhibited in the Exit Review. Prerequisite: ARTC 3304 and ARTC 4308 both with grades of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ARTC 4302. Art Direction II.**

Students develop strategic messages across print, digital, and social media and evaluate how conceptual direction and message must shift to accommodate various media. Students strengthen their verbal and visual conceptual skills and elevate their research abilities to create dynamic advertising campaigns, and unify brand position with communication.

Prerequisites: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4303. Art Direction III.**

This course allows students to create art direction projects based on individual professional goals. Faculty will assess each portfolio at the beginning of the course. Students will then address their portfolio content and work to create a body of art direction pieces. Prerequisite: ARTC 4302 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4305. Typography III.**

This course continues the study of letter form, typography, image and concept relationships for effective communication. Prerequisites: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4306. Environmental Graphic Design.**

Introduces a multidiscipline-based design practice centered around exterior and interior built environments. Students examine the visual, theoretical and applied aspects of defining a place through wayfinding, identity and information design. Prerequisites: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4308. Interactive Media II.**

This course explores advanced Web Site design, construction and User Interface design, advanced Web authoring for multiple platforms, and advanced Web typography. Prerequisites: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4309. Interactive Media III.**

Mobile application design. Exploration of User Interface design and Experience design for mobile devices. Students will learn to prototype applications that connect the physical and digital worlds. Prerequisite: ARTC 4308 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4310. Communication Design Practicum.**

Students are placed in regional graphic design firms and advertising agencies to gain professional design/art experience. May be repeated with different emphasis for additional credit. Prerequisite: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTC 4311. Digital Illustration.**

This is an illustration course using digital media to execute illustrations in a wide range of genres. Emphasis will be placed on developing unique approaches to manipulate traditional illustration techniques through digital means, as well as the creation of original digital illustration solutions. Prerequisites: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4313. Communication Design Special Problems.**

This course is an independent study requiring complex problem solving in Communication Design. Goals and objectives will be outlined in a written format. May be repeated with different emphasis for additional credit.

Prerequisite: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTC 4314B. Legal Issues in Communication Design.**

This course introduces students to the business and legal issues relating to communication design. Prerequisites: ARTC 3301 and ARTC 3303 and ARTH 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314H. Poster Design.**

Exploration and experimental usage of the written word integrated with visual imagery by using digital and traditional photographic, illustration, and other graphic elements utilized in poster design. Prerequisites: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314I. Learning from the Land of Design.**

The intent of this course is to broaden the students' understanding of the rich culture of Italian design from the Renaissance to modern Italy. Additionally, the student will learn how intense observation of design principles through sketching, photography and keeping a journal, becomes a method for design inspiration and problem solving. Prerequisites: ARTC 2303 and ARTC 2304 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314K. Introduction to Hand Painted Signs and Lettering.**

This course explores the historic underpinnings, proven techniques, materials and iterative processes associated with hand painted signs and lettering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314L. Guerilla Art Direction.**

This course examines guerilla advertising art direction strategies. Students will develop non-traditional advertising concepts that promote social causes, consumer products, and public events. Guerilla creative strategy concepts will integrate various types of media including social and mobile interactions with the targeted audiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314M. Design Portfolio Preparation.**

Design Portfolio provides students with a published ePortfolio that demonstrates unique problem-solving skills by design thinking methods, well-defined messaging, systems thinking, expansion of sophomore and junior projects, creation of one new project system, clearly stated project briefs and narratives, and exceptional final portfolio execution. Prerequisite: ARTC 3301 and ARTC 3303 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314O. Entrepreneurial Design.**

Students will focus on the interconnection between entrepreneurial thinking and innovation. They will develop innovation-driven venture skills and will gain open and critical thinking skills with a focus on community, understanding of calculated risk and the initiative to follow-through. Prerequisite: ARTC 1301 and ARTC 1302 and ARTC 2000 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**ARTC 4314P. Design Research.**

Design Research provides students with an applied foundation in the role of research and analysis in the communication design discipline. Prerequisite: ARTC 2000 and ARTC 2303 and ARTC 2304 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314R. Information and Data Visualization.**

This course teaches students how to utilize design thinking, conceptual strategies, and method-based approaches to create effective information and data visualizations. The course guides students to develop contextualized understanding of information and data by visually clarifying and organizing the key concepts and patterns within information and data sets. Prerequisite: ARTC 2303 and ARTC 2304 and ARTC 3307 and ARTC 3320 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4314T. Design Across Cultures.**

Students work cross-culturally through collaborative projects with students from a university program outside the US. Students work collaboratively to research design values and culture in an international context. The course concludes with at least one extensive communication design project that showcases student research. Prerequisite: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**ARTC 4314U. An Introduction to Artificial Intelligence (AI) for Communication Design.**

This course is an introduction to Artificial Intelligence (AI) for Communication Design which explores how designers interact with and use Artificial Intelligence (AI) for design outcomes and the ways designers create for AI. Prerequisite: ARTC 3301 and ARTC 3303 and ARTH 3316 all with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 4315. Senior Portfolio Presentation and Self-Promotion.**

This capstone course focuses on preparations for entry into professional practice via production of a final portfolio presentation; creation of a resume, business card, and self-promotions; and preparation for the interview process. Prerequisite: ARTC 3304 and ARTC 4308 both with grades of "D" or better. Corequisite: ARTC 4200 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4316. Book Design.**

This course will cover concept and content development, design, and execution of single edition and limited edition books through lectures, demonstrations, and studio work. Emphasis placed on creativity, problem solving, organizational ability, technical precision, and independent work ethic. Prerequisite: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4317. Motion Graphics.**

This course introduces theories, techniques, and practices of motion graphics. This course focuses on the successful integration of images, typography, and sound over time to create nuanced and complex messages. Experimentation, research, critical analysis, and concept development are emphasized. Focus is placed upon design concepts and process. Prerequisite: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4318. Package Design.**

In this course students explore the role of the communication designer by creating well-designed packaging that reinforces brand experience and meets global industry standards. Students design and create packaging through extensive research, ideation, and prototyping. They explore sustainable packaging solutions. Prerequisite: ARTC 3301 and ARTC 3303 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 4319. Design for Experiences.**

This course addresses the creation of user experiences informed by research, customer empathy, experience mapping, and design thinking. Projects involve creating research and problem framing documents, user flow and system diagrams, pattern libraries, and experience prototypes. Students also study design and innovation roles at enterprise-scale companies and independent consultancies. Prerequisite: ARTC 3307 and ARTC 3320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ARTC 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ARTC 5300. Graduate Assistant Development.**

This course is required as a condition of employment for graduate teaching and instructional assistants. It will provide in-service training and evaluations of instructional philosophies, techniques and responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ARTC 5301. Communication Design Foundations.**

This course may be taken only to fulfill communication design background. Students will acquire knowledge and graphic design skills necessary for advanced studies. This course does not earn graduate degree credit. Repeatable up to 3 times, with different emphases.

Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ARTC 5320. Web Design.**

Students will research, create, and produce advanced online products for Internet. Emphasis is placed on information architecture, interface design, and navigation constructs in order to produce unique online communications. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 5330. Typography.**

This course examines the traditional and experimental advanced usage of type as a visual tool to express meaning. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTC 5340. Contemporary Issues and Criticism.**

This course examines emerging issues in graphic design and design criticism, primarily from the turn of the 21st century to the present. Students will learn to analyze and critique graphic design, and will produce a work of critical writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 5341. Modernism and Design.**

This course explores the modernist movement in design, as it emerged in Europe and America in the early twentieth century. Topics include: visual cultural theory, the origins of modernism, Dada, Constructivism, DeStijl, the Bauhaus, and American modernism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 5342. Postmodernism and Typography.**

In this course, students explore the relationship between form and content through the lens of postmodern graphic design and typography from the 1960s through the early 2000s. The course begins with the emergence of postmodernism and traces its connections to contemporary developments, including: counter-archival, decolonizing, anti-racist, feminist, and queer perspectives in typography. This hybrid studio-seminar course approaches design history through a pluralistic practice of researching, writing, and designing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 5343. Communication Design Seminar.**

In this course students examine communication design research methods, modes of practice, and models of the creative process. Students will engage in individual research inquiries in order to develop the topic for their master's thesis in Communication Design, and to present at the MFA Thesis Forum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTC 5350. Special Problems in Communication Design.**

An independent study requiring complex problem-solving in communication design. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 5360D. Typeface Design.**

This course explores the detailed anatomy of typefaces in order to design custom typefaces through various applications. Students with an advanced knowledge of typography will research detailed type anatomy as well as historical, technological, and cultural typographic contexts. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360G. Interaction Design.**

This course focuses on designing a digital experience by connecting people, place, and technology. Students who are interested in digital placemaking, digital innovations/transformation, mobile technology, and exploring hybrid experiences are encouraged to enroll in the course. The course discusses communication, digital products, environments, and services as an ecosystem and the role a designer plays in a larger context. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360H. Mobile and Social Media.**

In this course, students explore the implications of social networking and mobile communications in contemporary communication design. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360I. Publication.**

This course explores the designer's role in the dissemination of information and examines the history and current practices of independent publishing. There is an emphasis on authorship, typography, and experimentation. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360J. International Perspectives in Design.**

In this course, students explore international perspectives in design. This course requires a field trip abroad and will conclude with one extensive communication design assignment based upon the field trip experience. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360N. Alternative Printing Methods.**

This course will explore hands-on printing methods for designers. Letterpress, screen-printing, and other alternative printing methods will be explored to visually express design concepts. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360S. Design Futures.**

Students will translate technological and socioeconomic issues into the near future. They will explore the role of design in solving or coping with the consequences of today's actions. The course will prepare students to think critically about the role of design in the evolution of humankind.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360U. Design Practice.**

This course introduces students to critical design practice and serves as one of several thesis preparation courses offered. Design Practice sets the foundation for building a significant and cohesive body of creative work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360V. Research through Making.**

This course further examines communication design research methods, modes of practice, and models of the creative process to advance thesis research through making and visualizing abstract ideas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360W. Exhibitions.**

In this course students will explore different methods of exhibition within traditional and alternative settings. They will experiment with collaborative and multidisciplinary strategies to produce speculative proposals for public and professional communities. Students will come away with an in-depth understanding of various exhibition contexts and the ability to analyze and select the exhibition strategies most appropriate to engage a specified inquiry. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360X. Generative Design.**

This course introduces the basics of generative art and design. Utilizing code as a creative medium, students engage in computation through a creative, thoughtful, and transformative approach. Students learn the potential of programming in the field of Communication Design. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5360Y. Design History Survey.**

This course surveys movements in design history with a focus on the modern and contemporary eras. Graphic design is situated within the contexts of art, architecture, film, and other design disciplines. Major themes include the rise and fall of the European avant-garde; art and editorial direction in the Interwar Period; and topics in post-WWII modernism and postmodernism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ARTC 5370. Professional Practice.**

Students are placed in regional and national advertising agencies, digital media studios, or graphic design firms to gain professional practice experience. Repeatable once for credit.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ARTC 5371. Design for Motion.**

In this course students are introduced to theories, techniques, and practices of designing for motion. As an essential medium of communication design, this course focuses on the successful integration of images, typography, and sound over time to create nuanced and complex messages. Experimentation, research, critical analysis, and concept development are emphasized. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTC 5372. Social Practice.**

In this course students are introduced to theoretical and conceptual aspects of socially engaged art and design. The course reconsiders the role of the designer in the context of participatory and public practices. Repeatable up to 3 times when the area(s) of study change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ARTC 5399A. Thesis.**

The course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in ARTC 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ARTC 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ARTC 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ARTC 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 1331. Introduction to Communication Disorders.**

Study of speech, hearing, and language development and its disorders; descriptions of communicative disorders and their etiologies for the speech-language pathologist, health professional, and classroom teacher.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 3312. Neuroanatomy for Communication Disorders.**

This is a lecture course that examines the organization of the brain, spinal cord, and peripheral nervous system. Significance of the areas of the nervous system that are primary or secondary for speech, language and hearing are the main focus of this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 3325. Anatomy and Physiology of the Speech Production System.**

Description of structure and function of the speech production system with emphasis on physical problems in speech, language, and hearing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 3359. Phonetics.**

The course is designed to analyze normal and abnormal phonological processes in children and adults. Proficiency in transcription using the International Phonetic Alphabet (IPA) is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 3369. Hearing Science.**

This course is designed to provide foundational knowledge in the areas of acoustics, auditory and vestibular anatomy/physiology, psychoacoustics, and speech perception across the lifespan.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 3375. Speech Science.**

This course is designed to provide a conceptual foundation in voice and speech production, speech perception, and acoustic analysis of voice and speech. The course will begin with the math and physics of acoustics, to provide students with a strong foundation in acoustics necessary to master speech science. Content will cover acoustical phonetics, theories of speech production and perception, and clinical application emphasizing acoustic instrumentation and software used in communication disorders. Examples of concepts to be covered include frequency, pitch, intensity, loudness, decibels, waveforms, spectra, spectrograms, filters, vocal tract transfer function, formants, and acoustic software for voice and speech analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 3377. Language Science.**

This course is designed to investigate various aspects of language, including its structure, processing, acquisition, and neurological organization. The course will cover at least the following topics of language science: Linguistics (the lexicon, morphology, and syntax), language acquisition (acquisition of multiple languages, disorders of language in children, role of culture in developing language), psycholinguistics (lexical processing, sentence processing, bilingual language processing), and neurolinguistics (brain imaging, disorders of language in adults).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 3462. Speech Sound Disorders.**

This course is designed to provide the study of principles and procedures for the identification, description, assessment, and treatment of speech sound disorders in children. Students will observe demonstrations of assessment and treatment procedures during lab. (WI) Prerequisite: CDIS 3325 and CDIS 3359 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**CDIS 4101. Advanced Independent Study.**

This course is designed to provide an in-depth study of selected topics in Communication Disorders for the exceptionally motivated student. Work is done on an independent basis with a faculty member and only with prior departmental permission.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 4201. Advanced Independent Study.**

This course is designed to provide an in-depth study of selected topics in Communication Disorders for the exceptionally motivated student. Work is done on an independent basis with a faculty member and only with prior departmental permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 4301. Advanced Independent Study.**

In-depth study of selected topics in Communication Disorders for the exceptionally motivated student. Work done on an independent basis with faculty member and only with prior departmental permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 4317. Service Delivery in Communication Disorders.**

Provides a foundation of clinical management to prepare CDIS students to work in a variety of settings. Emphasis will be placed on techniques of goal and objective sequencing, report writing, evaluation of services, ethics, and interdisciplinary collaboration. Prerequisite: CDIS 3462 and CDIS 4330 and [CDIS 4350 or CDIS 4466] all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**CDIS 4330. Speech and Language Development.**

This course is designed to acquaint students with acquisition of speech and language in children. Basic information from linguistics, psycholinguistics, psychology, and communication are examined for children in various stages of development. Prerequisite: CDIS 3377 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter



**CDIS 4335. Bilingual Speech Sound Disorders.**

Typical development of Spanish-English bilingual/bidialectal children's articulation and phonology will be discussed. Assessment and intervention of articulation and phonology with bilingual/bidialectal children will also be addressed. The information and theoretical foundations serve as a guide for students to critically evaluate and clinically apply research in bilingual populations. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 4340. Augmentative Communication Systems.**

This course is designed to review methods of non-oral communication as applied to hospital, rehabilitation, and school settings. Use of electronic communication systems emphasized. Prerequisite: CDIS 4330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 4344. Clinical Practicum in Communication Disorders.**

This course is the supervised clinical practicum in speech-language pathology. Must be taken each semester student participates in any supervised clinical practicum in speech-language pathology. Prerequisites: CDIS 1331, CDIS 3359, and CDIS 4330 all with grades of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**CDIS 4350. Survey of Neurogenic Communication Disorders.**

An introduction to acquired speech, language, cognitive and swallowing disorders resulting from brain injury. Basic neuroanatomy and physiology are reviewed, followed by discussion of the etiology, diagnosis, treatment, and prognosis of these disorders. Emphasis is placed on aphasia, motor speech disorders, right hemisphere syndrome, traumatic brain injury, dementia and dysphagia. Prerequisite: CDIS 3312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 4370. Aural Rehabilitation.**

Principles and procedures in the habilitation and rehabilitation of hearing impaired children and adults. (WI) Prerequisites: CDIS 4420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**CDIS 4371. An Introduction to Stuttering and Voice Disorders.**

This is an introductory course on childhood-onset stuttering and voice disorders. Specific to stuttering, students will learn the etiology, assessment and treatment of childhood-onset stuttering. Specific to voice disorders, students will learn the basic anatomy and physiology of voice, normal voice, types of voice disorders, their assessment and treatment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**CDIS 4420. Diagnostic Audiology.**

This course is designed to relate anatomy and physiology of the auditory system and the science of acoustics to the study of normal and pathological auditory function. Laboratory experience in administration and interpretation of audiological tests. Discussion of professional opportunities in the field of audiology and provision of audiological service to special populations will be held. Prerequisite: CDIS 3369 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**CDIS 4466. Language Disorders.**

The study of principles and procedures for the identification, description, assessment and remediation of language disorders in infants, children, and adolescents. Students will observe demonstrations of assessment procedures and types of language disorders within the context of clinical procedures. Describing observed behaviors and analyzing language samples will be emphasized. Prerequisite: CDIS 4330 with a grade of "C" or better.

**4 Credit Hours. 4 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**CDIS 5138. Augmentative & Alternative Communication.**

This course is designed to provide graduate students in Communication Disorders with theory-driven, evidence-based, and clinically oriented knowledge and skills related to augmentative and alternative communication (AAC). This course will meet the core knowledge and skill areas in AAC mandated by the Council of Academic Accreditation in Audiology and Speech-Language Pathology.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5262. Introduction to Research in Communication Disorders.**

This course is designed to acquaint students with research protocols in the behavioral sciences with an emphasis on speech-language pathology. Topics include critical thinking, research design, data collection, data analysis, research writing, and evidence-based practice. The course will emphasize critical analysis of the professional literature in speech-language pathology.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5301. Advanced Independent Study in Communication Disorders.**

Discussions of various areas of speech language pathology. Attention to individual needs of the student. Emphasis on independent study in habilitation and rehabilitation of communication disorders. This course is repeatable for credit and can be taught by different faculty covering different topics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5312. Neuroanatomy for Communication Disorders.**

This is a lecture course that examines the organization of the brain, spinal cord, and peripheral nervous system. Significance of the areas of the nervous system that are primary or secondary for speech, language, and hearing are the main focus of this course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5321. Clinical Practicum in Audiology.**

Supervised clinical practicum in audiology. Focus is on both diagnostic and rehabilitative audiological management of diverse populations. Must be taken every semester that a student participates in supervised audiology practicum. May be repeated for credit. This course does not earn graduate degree credit. Prerequisites: CDIS 4420 and CDIS 4370 or equivalents; instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required

**Grade Mode:** Leveling/Assistantships

**CDIS 5325. Anatomy and Physiology of the Speech Production System.**

Description of structure and function of the speech production system with emphasis on physical problems in speech, language, and hearing. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5330. Speech and Language Development.**

Course to acquaint students with acquisition of speech and language in children. Basic information from linguistics, psycholinguistics, psychology, and communication are examined for children in various stages of development. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5331. Stuttering.**

This course is designed to describe therapeutic intervention with children and adults who stutter. Techniques of assessment, management, and counseling are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5333. Language Disorders in School-Age and Adolescence.**

This introductory-level course will review assessment and intervention for language disorders in the school-age and adolescent population. The relationship between language and literacy will be discussed. Students will engage in detailed narrative analyses. Evidence-based practice and collaborative models of intervention will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5334. Assessment and Intervention of Speech Sound Disorders.**

This course is designed to study normal, delayed, and disordered child phonology in English and select dialects/languages. Course covers etiologies, characteristics, and anatomic/physiologic bases of delays/disorders, as well as their potential impact on phonological awareness and subsequent development in reading/writing. Prevention, assessment, and treatment of disorders will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5336. Motor Speech Disorders.**

The course reviews the neuroanatomic mechanisms underlying speech production and surveys the etiology, symptomatology, epidemiology, course, and prognosis of speech disorders resulting from impairment of the central and/or peripheral nervous system. Emphasis is placed on apraxia and the dysarthrias. Clinical application in assessment and rehabilitation of patients with neurogenically-based motor speech deficits is stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5337. Voice Disorders.**

This course is designed to describe the assessment of vocal function and disorders and the rehabilitation of the patient with vocal abnormalities due to vocal abuse, psychological, and/or organic etiologies, including laryngectomy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5339. Dysphagia.**

A review of anatomic and physiologic disturbances of swallowing in neurologically impaired and post-surgical head and neck cancer patients will be presented. Instrumentation, techniques of evaluation, and radiograph examination of deglutition will be reviewed. Rehabilitation procedures will be described in detail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5340. Cognitive Rehabilitation.**

This introductory-level course will review neuropathology and neurophysiology of traumatic brain injury and dementia, introduce relevant terms and models in cognitive rehabilitation, provide a framework for assessment and treatment, and discuss the functional impact of cognitive-communicative disorders on the patient and others. Prerequisites: CDIS 5336 and CDIS 5342 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5342. Aphasia and Related Disorders.**

The course develops an understanding of the etiology, symptomatology, assessment, remediation, and recovery patterns of acquired communication disorders that result from impairment of the central nervous system, with a focus on the aphasia and traumatic brain injuries. Coexisting problems caused by damage to cortical/sub-cortical structures will also be addressed. Recent advances in relevant clinical research and technology will be surveyed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5344. Advanced Clinical Practicum I.**

This course is designed to be the first of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 15-20 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Credit/No Credit

**CDIS 5345. Advanced Clinical Practicum II.**

This course is designed to be the second of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 20-25 clock hours of clinical practicum experience will be accumulated. This course must be completed with a grade of "CR" or higher to advance to CDIS 5346. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 with a grade of a "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship

**Grade Mode:** Credit/No Credit

**CDIS 5346. Advanced Clinical Practicum III.**

This course is designed to be the third of four clinical practicum experiences for first-year graduate students. Students will participate in a clinical practicum experience including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 both with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5347. Advanced Clinical Practicum IV.**

This course is designed to be the final of four clinical practicum experiences for first-year graduate students. Students will participate in clinical practicum experiences including assessment and remediation of a variety of communication disorders. Approximately 25-35 clock hours of clinical practicum experience will be accumulated. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 all with a grade of "CR" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5350. Multicultural Issues in Communication Disorders.**

Addresses the social, cultural, and linguistic factors that impact the clinical service delivery provided to culturally and linguistically diverse populations. A primary focus of the course will be to address general principles of assessment and intervention as they relate to the clinical management of individuals with communication disorders from diverse cultural and language backgrounds. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CDIS 5353. Phonetics.**

This course is designed to analyze normal and abnormal phonological processes in children and adults. Proficiency in transcription using the International Phonetic Alphabet (IPA) is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5363. Language Disorders in the Birth-to-5 Population.**

This introductory-level course will review assessment and intervention for language disorders in the birth-to-5 population. Use of assessment information to determine language disorders versus language difference will be addressed. Students will engage in detailed language sample analyses. Creating effective intervention plans using assessment data will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5369. Hearing Science.**

This course is designed to provide foundational knowledge in the areas of acoustics, auditory and vestibular anatomy/physiology, psychoacoustics, and speech perception across the lifespan.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CDIS 5370. Aural Rehabilitation.**

Principles and procedures in the habilitation and rehabilitation of hearing-impaired children and adults. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5375. Speech Science.**

This course is designed to provide a conceptual foundation in voice and speech production, speech perception, and acoustic analysis of voice and speech. The course will begin with the math and physics of acoustics, to provide students with a strong foundation in acoustics necessary to master speech science. Content will cover acoustical phonetics, theories of speech production and perception, and clinical application emphasizing acoustic instrumentation and software used in communication disorders. Examples of concepts to be covered include frequency, pitch, intensity, loudness, decibels, waveforms, spectra, spectrograms, filters, vocal tract transfer function, formants, and acoustic software for voice and speech analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5380. Communication and Aging.**

The influx of senior citizens in our population will require preparation for the increased incidence of communication problems due to normal and pathological aging processes. This course will address how aging affects communication, how communication disorders manifest in the aging population, and implications for professionals working with older adults.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5390. Seminar in Communication Disorders.**

Examination of current theoretical and clinical issues in Communication Disorders. Issues may include family management in communication disorders, language and literacy, issues in health care rehabilitation, instrumentation and entrepreneurship. May be repeated for credit.

Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CDIS 5391. Evidence-Based Practice in Second Language Acquisition.**

This course is designed for the discussion of various areas of bilingual speech language pathology with the primary focus on second language acquisition. The assessment and treatment of bilingual individuals diagnosed with communication disorders will also be addressed.

Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5392. Evidence-Based Practice in Autism.**

The course is designed to help students understand how to promote the social aspects of language in children diagnosed with Autism Spectrum Disorders within an evidence-based practice framework. In this course, students will critically examine standardized norm-referenced tests used to diagnose autism. Also addressed will be the broad range of evidence-based language intervention strategies recommended for children with Autism in the early years and once in school. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5393. Evidence-Based Practice in Stuttering.**

This course is designed to examine current evidence-based practice and clinical issues in childhood-onset stuttering. Issues addressed may include counseling approaches and strategies, treatment efficacy across the lifespan and family involvement in the therapy process for childhood-onset stuttering. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5394. Evidence-Based Practice in Neurogenic, Voice, and Swallowing.**

This course examines the current theoretical and clinical issues in communication disorders related to medically-based communication and swallowing disorders (neurogenic, voice, and swallowing disorders). Attention will be given to individual needs of the student in developing practical application of research to clinical practice. This course places emphasis on independent study in the habilitation and rehabilitation of medical-based communication and swallowing disorders and interprofessional practice. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5395. Evidence-Based Practice in Communication Disorders Across the Lifespan.**

This course is designed to examine current theoretical and clinical issues impacting individuals exhibiting communication disorders throughout the lifespan. A variety of topics such as home health, language, literacy, pediatric feeding, entrepreneurship, and professional issues in Communication Disorders will be addressed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5396. Evidence-Based Practice for Language & Literacy in Children Who are Deaf or Hard of Hearing.**

The course is designed to help students understand how to promote the language and literacy of children who are d/Deaf and hard-of-hearing within an evidence-based practice framework. In this course, students will critically examine the broad range of language and literacy treatment approaches that are used with children who are d/Deaf and hard of hearing in the early years and once in school. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CDIS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Communication Disorders 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5420. Diagnostic Audiology.**

This course is designed to relate anatomy and physiology of the auditory system and the science of acoustics to the study of normal, pathological auditory function. Laboratory experience in administration and interpretation of audiological tests. Discussion of professional opportunities in the field of Audiology and provision of audiological service to special populations will be held. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5462. Speech Sound Disorders.**

This course is designed to provide the principles and procedures for the identification, description, assessment, and treatment of speech sound disorders in children. Students will observe demonstrations of assessment and treatment procedures during lab. This course does not earn graduate degree credit.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5466. Language Disorders.**

This course includes principles and procedures for the identification, description, assessment, and remediation of language disorders in infants, children, and adolescents. Students will observe demonstrations of assessment procedures and types of language disorders within the context of clinical procedures. Describing observed behaviors and analyzing language samples are emphasized. This course does not earn graduate degree credit.

**4 Credit Hours. 4 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**CDIS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5689. Clinical Externship I in Communication Disorders.**

This course is designed to be the first off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 all with a grade of "C" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5690. Clinical Externship II in Communication Disorders.**

This course is designed to be the second off-campus clinical practicum experience for second-year graduate students. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to outside practicum sites, and students will be supervised by licensed speech-language pathologists employed at the designated setting. This course does not earn graduate degree credit. Prerequisite: CDIS 5344 and CDIS 5345 and CDIS 5346 and CDIS 5347 and CDIS 5689 all with a grade of a "CR" or better.

**6 Credit Hours. 1 Lecture Contact Hour. 30 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CDIS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**COMM 1310. Fundamentals of Human Communication.**

This course examines the speaking and listening principles and techniques that are fundamental for human communication. The course aids students in the development of basic verbal and nonverbal communication knowledge and skills in a variety of specific contexts including interpersonal, small group, and public speaking. The course has a specific multicultural focus with an emphasis on ethics and diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Communication Core 010|Component Area Core 090|Communication CAO 091|Lab Required|Time Conflicts Permitted

**Grade Mode:** Standard Letter

**TCCN:** SPCH 1311

**COMM 2111. Speech and Debate Activities.**

A course designed to provide credit for participation in speech and debate activities. May be repeated for a total of four credits.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 2315. Interpersonal Communication.**

This course studies communication principles and theories exploring interpersonal interactions with emphasis on conceptual foundations, personal growth and skill enhancement. Prerequisite: COMM 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** SPCH 1318

**COMM 2326. Interpretive Reading.**

A study of the techniques of the oral interpretation of literature with an emphasis on performance. Prerequisite: COMM 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 2330. Small Group Communication.**

This course focuses on communication in small groups and teams including an analysis of the structure and skills involved in managing the task and relational components of group work. Special emphasis is placed on problem solving discussion, effective meeting leadership and participation, and critical thinking. Prerequisite: COMM 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** SPCH 2333

**COMM 2338. Public Speaking.**

This course helps the student to develop personal speaking skills and introduces principles of contemporary types of speeches. Prerequisite: COMM 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** SPCH 1315

**COMM 3301. Empirical Research Methods.**

This course explores how to conduct and interpret communication research through the scientific method.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3302. Rhetorical Research Methods.**

Students will explore and apply methods of analysis and evaluation of rhetorical discourse with emphasis on developing critical research and writing skills. Students should complete COMM 3302 before enrolling in other advanced rhetorical studies courses. (WI) Prerequisite: COMM 1310 and COMM 2338 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**COMM 3310. Communication Theory.**

This course explores the practical ways in which communication theory operates to foster self-awareness, to make sense of personal experiences, and to cultivate critical thinking.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3316F. Rhetoric, Race, and Memory.**

This course explores how public articulations about what happened in the past inform our present and future. Through an exploration of how communities remember civil rights and racism, the course offers students with deeper insight into how communicative practices enable communal transformation and can sustain or disrupt communal identity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 3316I. LGBTQ+ Communication Studies.**

This course investigates how communication impacts LGBTQ+ people's experiences across their lives in relationships, organizations, healthcare, media, and society. Students examine how communication sustains both discrimination against LGBTQ+ people and their resistance, theorize how LGBTQ+ people navigate their holistic identities, and create LGBTQ+ justice across communication practices, cultures, and structures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**COMM 3318J. Communication in Health Organizations.**

This course examines the delivery and exchange of messages within health organizations. Specific communication contexts to be emphasized will include interpersonal conflict, negotiating, communication networks, communication environments, virtual systems of communication, channel/media selection strategies, communication climate, communities of practice, public relations communication campaigns, and organizational crisis management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 3319. Introduction to Organizational Communication.**

Applies communication and management theory along with contemporary research to understand messages in corporate, nonprofit, and volunteer organizations. Prepares the students to think critically about their organizational experiences and use theory to assess and manage communication processes including supervisor-subordinate communication, conflict, and cultures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**COMM 3320. Sport Communication.**

Sport Communication provides a theoretical foundation to understand and apply interpersonal, organizational, team, and public communication skills in sport settings. Sample topics include: fan culture, racial identity and gender, player/coach interactions, and crisis communication. Students gain practical knowledge and skills to optimize verbal and nonverbal messages in sport contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3322. Communication Career Readiness.**

This course helps students discover communication careers by assisting them in building a personalized career pathway through hands-on experiences, mentoring, networking, and examining the field of communication studies. Prerequisite: COMM 1310 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3324. Professional Skills for the Global Workplace.**

This course provides a survey of relevant skills necessary to work in an international work setting. Through discussion, site-visits, and application activities, students will leave the course with an understanding and ability to apply these skills in their careers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3325. Communication and Conflict Management.**

Demonstrates the ways communication skills can be used to manage conflict. The class also provides an analytic framework for diagnosing conflict, negotiation, and mediation. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**COMM 3326. Family Communication.**

This course examines theory and research trends regarding the dynamics of family communication. Topics include parent-child, sibling, marital, and inter-generational interactions; family culture and roles; divorce and stepfamilies; conflict; stress and well-being.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**COMM 3328. Communication and Gender.**

Investigates the interactive nature of communication and gender, the creation of gender identities, and the role of gender and communication in a variety of settings. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**COMM 3329. Intercultural Communication.**

Presents theory and application of communication skills for a culturally diverse world. Develops verbal and nonverbal abilities in social and professional intercultural contexts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COMM 3330. Nonverbal Communication.**

Introduces the conceptual foundations of nonverbal communication. Theoretical components, research methods and applications of nonverbal communication are also explored in a variety of contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3332. The Dark Side of Communication.**

This course examines communication that is considered challenging, complicated, stressful, or unpleasant. Topics include (but are not limited to) deception, teasing/bullying, jealousy, topic avoidance, and aggression. The phenomena covered range from the everyday to the extreme, and impact our well-being as well as our relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3335. Communication and Identity in International Work Cultures.**

This course explores how personal, cultural, organizational, and occupational identities shape workplaces.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3336. Diversity and Communication.**

This course examines various styles of formal and informal communication, and builds awareness and understanding of diversity. It will address diversity issues in social characteristics such as age, gender, race, and sexual orientation. It will address how society communicates about issues related to diversity. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COMM 3342. Interviewing Principles and Practices.**

This course explores the components and techniques that differentiate the interviewing process from other forms of communication. By understanding the intricacies of interviewing (goals, structure, question formats), students improve their ability to apply interview principles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3345. Argumentation and Debate.**

A study of basic principles of argumentation emphasizing analysis, evidence, reasoning, and refutation and their applications in formal and informal debate contexts. Students will do laboratory work with the University forensics squad. Prerequisite: COMM 1310.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3350. Public Advocacy and Civic Engagement.**

This course provides a theoretical foundation to understand the fundamentals of public deliberation, the individual's role in advocacy, and civic engagement in a democratic society. Sample topics include practices of engagement and inquiry, communication ethics, free expression and the responsibility of advocates.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 3358. Professional Communication.**

Application of self-presentation and interaction concepts and skills to the transition from undergraduate studies to professional life, including job selection, resume preparation and presentation, interviewing, and interaction management in business and professional settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4111. Practicum in Communication Studies.**

On-the-job experience working with faculty to assist with the department missions of teaching, research or service. Students may work in the department communication lab, assist faculty in the classroom, serve as faculty research assistants or other academic support tasks. May be repeated one time for additional credit. Prerequisite: Departmental approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 4307. Media Criticism.**

Explores the influence of media messages based upon communication and rhetorical theories in shaping perceptions and values. Focus is upon the rhetorical analysis of how the visual media of film and television communicate social, political, and personal attitudes and behaviors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4310. Methods of Teaching Communication Studies.**

A study of methods of teaching communication studies principles and skills for secondary school teachers. Students enrolled in teacher certification programs with a major in Nutrition, Consumer Affairs, Communication Studies or a second teaching field in Communication Studies should contact the Department of Communication Studies for approval to register. (WI) Prerequisite: COMM 1310, COMM 2315, COMM 2330, or COMM 2338; with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**COMM 4311. Instructional Communication Practicum.**

This course provides students with an overview of instructional communication research, including teacher immediacy and clarity, and student responsiveness and engagement. Students will also work with a faculty supervisor as an instructional aide in which they will facilitate experiential activities and learn to assess lower-division assignments. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**COMM 4315. Directed Research in Communication Studies.**

Individual or group research projects at the advanced level that are not offered in the present curriculum. Permission and project approval must be obtained from the departmental chair prior to registration. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dual Enrollment Permitted

**Grade Mode:** Standard Letter

**COMM 4320. Planning Communication Studies Activities and Events.**

This course is designed to assist individuals in the management and implementation of communication activities and events. The course includes practical experience in planning and directing individual events.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 4321. American Speeches.**

Analysis and evaluation of major American speeches and their influence on the history and culture of the United States from 1630 to the present.

Prerequisite: COMM 2338.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4322. Rhetoric of Protest Movements.**

Explores the persuasive strategies used by protest and political movements to promote social and political change. Focuses upon the application of critical perspectives in understanding the stages, leadership styles, and rhetorical appeals characteristics of movements in American society. (MULT) Prerequisite: COMM 2338.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COMM 4324. Organizational Rhetoric.**

Guided by principles of rhetoric, students will investigate a variety of functions for internal and external audiences. Functions will include building identity; managing issues, impressions, and crisis; and influencing organizational culture. Students will use this knowledge to create and analyze organizational messages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4325. Communication and Technology.**

This course explores how the use of information and communication technologies relates to interpersonal, organizational, public, political, and intercultural communication practices and outcomes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4326. Health Communication.**

This course provides students with an overview of major theoretical and practical issues for communicating about health issues in clinical, organizational, relational, and public contexts. Students will gain knowledge and skills to improve patient health outcomes through effective message strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4327. Social Media in Organizations.**

Social Media in Organizations prepares students to be effective social media writers, resourceful workers, critical consumers, and savvy job seekers. We will consider members' use of social media inside organizations as well as explore our peripheral connection with organizations as consumers and prospective employees.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4329. Communication Training and Human Resource Development.**

This course presents the principles and skills of developing and presenting communication training programs. An emphasis is placed upon applications of communication skill development, communication theory, and instructional communication research in organizational contexts. Prerequisite: COMM 2315, COMM 2330, or COMM 2338.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4331. Persuasion.**

An investigation of rhetorical and behavioral theories of persuasion, the devising of persuasive campaigns, as well as the consumption and generation of persuasive messages in a variety of communication settings. Applicable for careers in business, law, and human relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4336. Diversity and Inclusion Training.**

In this course, we recognize, challenge, and seek to change imbalances in power structures that deny equal respect, dignity, and rights to inclusion for the socially marginalized. Within an immersive educational environment, students apply diversity-related topics and instructional communication methods to conduct diversity and inclusion training sessions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4338. Advanced Public Speaking.**

In-depth critical analysis of speech construction and the development of presentation skills. Prerequisite: COMM 2338.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4341. Intercultural Communication in the Americas.**

This course investigates intercultural communication in various contexts of North, Central, Latin America and the Caribbean covered over two sections: (1) understanding the cultural differences (i.e., values, nonverbal communication, negotiation, business communication, family communication), and (2) understanding transitional experiences of migrants from Central and Latin America, and the Caribbean. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COMM 4345. Political Communication.**

A study of historical and contemporary political campaigns in the United States analyzing management strategies, promotional techniques, and rhetorical messages. Prerequisite: COMM 2338.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4346. Environmental Communication and Sustainability.**

In this course, students learn how to analyze environmental communication messages and how they influence our understanding of environmental issues. Students will examine public discourse including formal oratory, public debate, political communication, organizational communication, and mass mediated messages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4347. Leadership and Communication.**

An advanced course in communication designed to examine in detail the phenomenon of leadership in groups and organizations. Various theories and approaches to leadership will be surveyed with an emphasis on applying leadership principles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4350. Communication and Coping across the Lifespan.**

This course reviews research regarding the communicative management of stress during life transitions. We explore theoretical and practical implications of leading models of stress, coping, and support from communication and related disciplines with a specific emphasis on communicative processes (e.g., support and advice, disclosure and avoidance, advocacy) that facilitate and hinder the adjustment (e.g., psychological, relational, and physiological health) to stressors across the lifespan (e.g., emerging adulthood, family transitions and caregiving, chronic illness and end-of-life).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4351. Relational Communication.**

The study of theory and research trends regarding communication in close relationships, including attraction and intimacy; relationship development, maintenance, and dissolution; affection and support; and conflict. The theoretical and practical relevance of the social, emotional, and relational consequences of messages is emphasized throughout the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 4390. Communication Internship.**

This course provides on the job experience in a communication related role in an approved organization. Enrollment requires permission of the instructor, a minimum of 150 clock hours on the job, a written contract with the internship coordinator, and a final portfolio of work. May be repeated for additional credit. Prerequisites: 6 hours of upper level communication electives completed with a grade of "C" or higher. Restricted to full majors or minors in their junior or senior year. Good academic standing required.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 5100. Teaching Communication Studies.**

An introduction to curriculum, instruction, and assessment methods in the teaching of Communication Studies. Provides an orientation as well as regular in-service training and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate

Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**COMM 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COMM 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COMM 5301. Quantitative Research Methods in Communication.**

This course is an examination of quantitative research methods in speech communication. Measurement procedures, statistics, experimental design, and descriptive research methods are investigated, as well as a consideration of scholarly writing and library research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5302. Rhetorical Methods.**

A study of approaches to the analysis of public discourse directed toward establishing workable perspectives for students conducting rhetorical analysis. Required of communication studies majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**COMM 5303. Qualitative Research Methods in Communication.**

This course provides an introduction to qualitative methods of inquiry in communication. Students will learn and apply principles of qualitative research designs in data collection, analysis, and integration of narrative and non-numeric data in communication research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5304. Work/Life Intersections.**

This course examines those situations where work and life intersect, and how humans use communication to create, negotiate, and manage work/life intersections.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5307. The Dark Side of Communication.**

This graduate seminar will examine aversive and problematic interactions in interpersonal, organizational, health, and instructional settings. Sample topics include (un)fairness, backstabbing/betrayal, breaking up, end of life communication, deception, teacher misbehaviors, and bullying. Students will take a research-based approach to understanding these undesirable, yet common, messages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5309. Proseminar in Communication Research Methods.**

The goal of this course is to provide students with an overview of the methods used in the discipline of Communication Studies. To that end, we will begin by introducing students to the history of the discipline followed by overviews of rhetorical, quantitative, and qualitative research methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5310. Methods of Teaching Communication Studies.**

A study of the methods of the teaching speech communication principles and skills for secondary school teachers. Prerequisite: Admission to teacher certification program or permission of department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5312. Intercultural Communication.**

This course examines how culture evolves and is maintained through communicative systems of meaning. The many ways in which language, culture, and communication interact with, influence, and manifest in each other in everyday experience are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5313. Relational Communication.**

This course provides a comprehensive overview of relational communication theories and research. Students engage with theory and research frameworks to think critically about relational communication perspectives and contributions, understand the strengths and limitations of those perspectives, and learn to contribute to new knowledge of relational communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5314. Family Communication.**

This course explores the communication processes associated with families. Topic areas for exploration will include: storytelling, intimacy, conflict, rituals, religion, health-illness, and death. The goal is to further understand interdisciplinary research and theory related to family interactions embedded in larger webs of social, cultural, and generational relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5315. Directed Research in Communication Studies.**

A course to be offered to certain graduate students to allow for independent study in a specific area for which a regular course is not available. May be repeated with different emphasis for additional credit. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dual Enrollment Permitted

**Grade Mode:** Standard Letter

**COMM 5318. Interpersonal Communication.**

A review of current research in the area. Includes an examination of contemporary theories and research methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5319. Organizational Communication.**

Examines organizational communication theory and research in applied organizational contexts. Provides communication professionals with an analytical framework for improving communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5320. Directing Communication Studies and Theatre Activities.**

Designed to assist any teacher, whether of speech and drama or some other subject, in directing speech and drama activities. During the course, those in the class will actually direct debate, plays, declamation, and other activities. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 5321. Communication Assessment.**

An in-depth study of communication assessment techniques employed in the field of oral communication. Statistical, experimental, and observational methods of assessing oral communication in interpersonal, group, and classroom settings are included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5324. Seminar in Instructional Communication.**

Examines communication instruction theory and research and their practical applications in various instructional settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5325. Seminar in Human Communication Theory.**

This course is an examination of theories of human communication contexts including interpersonal, family, intercultural, organizational, and instructional communication. The course may be repeated with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5327. Contemporary Rhetorical Theory.**

A survey of the major contemporary theoretical perspectives and conceptual debates in rhetoric. Focuses upon critical interpretations and applications of theory in addition to study of primary theorists' writings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5329B. Communication and Negotiation.**

Examines theory, research, and practice of conflict management and negotiation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329D. Managing Communication Technologies in the Workplace.**

Examines how communication technologies both help and hinder workplace communication. Examines theory, practical applications, key scholars and empirical research. Heavy focus on using case studies that provide context for learning how to thrive in the contemporary organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329E. Communication and Organizational Culture.**

A seminar about communication and organizational culture. Discussion and materials explore communication practices that enable people to identify themselves as members of an organization and bind themselves to each other. Students will have the opportunity to analyze an organization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329G. Communication and Emotion.**

This course examines various ways in which interpersonal communication and emotion coexist and impact one another. The goal is to provide opportunities to learn about emotional experience and expression both in an abstract way (class readings and discussions) and in a more concrete fashion (conducting your own analyses and research).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329H. Work, Identity, and Difference.**

Work is influential in our social interactions, our understanding of our own and others' identities, and our navigations of difference. We will explore the communication challenges of contemporary work in the United States through researching the history of work, excessive work, and communication construction of difference at work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329I. Relational Health Communication.**

This course reviews the intersection of interpersonal and health communication theory, highlighting the impact of social involvement and communication processes on health outcomes, as well as the application of health communication theories in close relationship contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329J. LGBTQ+ Rhetoric and Advocacy.**

This course explores historical and contemporary developments in of LGBTQ+ rhetoric and advocacy. In doing so, the course also examines how approaches to the study of LGBTQ+ rhetoric and advocacy, in terms of theory and methodology, has changed and shifted over time.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329K. End-of-Life Communication.**

This course will examine communication at the end-of-life (EOL). Students will discuss how people approach the EOL, and the end of relationships, through communication. Course material will highlight challenges and current issues surrounding EOL communication between terminally ill individuals and their family, friends, and medical professionals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329L. Communicating Diversity and Inclusion.**

This course examines the relationship between communication and power imbalances that deny equal respect, dignity, and rights to inclusion for the socially marginalized. Building upon historical and contemporary research, students will be able to extend principles from the critical paradigm and instructional communication to act ethically when making decisions that impact socially marginalized groups, develop a research project that advances knowledge of diversity and inclusion, and conduct training to advance diversity and inclusion initiatives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329M. Health Communication Campaigns.**

Contemporary theory and research from the field of Communication Studies make it possible to understand how and why health messages may impact future communication and behavior. This course explores how health-focused information can produce shared meaning between message senders and receives. Using a transactional communication framework, students will examine impacts of relationships, organizational roles, and networks of social relationships in relation to health outcomes of patients, families, organizations, and communities. Theoretical and applied research is used to guide the analysis of evidence-based messages that prevent disease and illness, reduce health risks, and promote behaviors that improve health.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329N. Rhetoric of Diversity.**

The course delves into the academic literature on rhetoric, diversity, and inclusion. This course explores how the values of diversity and inclusion are products of rhetorical negotiation and definition, examining how these concepts are used in a variety of context and for a wide array of purposes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329O. Communication in Understudied Close Relationships.**

This course focuses on important relationships that may get 'glossed over' in standard interpersonal communication seminars. More specifically, we will examine the various types of close relationships that comprise modern society, and current issues that affect those bonds. Students will investigate how communication functions to develop, maintain, enrich, or limit these understudied relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5329P. Communication & Identity in International Work Cultures.**

This course explores how personal, cultural, organizational, and occupational identities shape workplaces. By traveling to multiple countries abroad, we will explore how different employees make sense of their work identities. Tours across the country will enable students to better understand culture's influence on work, and business site visits will allow students to observe work, communication, and identities in a variety of organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5330. Nonverbal Communication.**

A review of current theory and research of nonverbal communication behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5331. Persuasive Communication.**

An analysis of theories of persuasion. Emphasis placed on understanding established theories of attitude formation and change, contemporary persuasion, research, and the application of persuasion theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5332. Communication and Technology.**

Focuses on research and theories about the relationships between technology and communication behavior in interpersonal, group, and organization contexts. Also considers relationships between communication, technology, and culture.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5333. Health Communication.**

This course provides an overview of health communication theory and research to explore how interpersonal, organizational, and cultural messages shape views of illness and the health care system. Topics will include health literacy, health risk messages, e-health, health disparities, and physician-patient interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5340A. Rhetorical Movements.**

This course examines the unique phenomenon of "rhetorical movements". Unlike rhetorical inquiries that typically focus upon the discourse of those in power, the study of rhetorical movements analyzes how individuals, who often have no other resources but their voices and their bodies, come together to attempt social and political changes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5340B. Free Speech and Extremism.**

One of the most unique and important foundations of American society is the right to free speech. This course will begin with an examination of free speech in historical and contemporary society. Because free speech is often contested (and protected) through extreme controversy, we will also focus on extremist rhetoric.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5340C. Rhetoric of Women's Rights.**

This course examines the rhetoric of women's rights in the United States. We will analyze arguments of the nineteenth century abolitionist, temperance, and women's rights movements, and the public discourse of the twentieth century women's rights movements. We will also consider contemporary issues of gender and power in public argument.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5340D. Argumentation & Public Advocacy.**

This course explores the theory and practice of argumentation and public advocacy. The course provides an overview of contemporary approaches to the study of argumentation and ethics. The course emphasizes the application of theories of argumentation and advocacy to recent examples.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5340E. Science, Health, & Environmental Rhetoric.**

This graduate course explores the history, theories, and applications of rhetoric as it pertains to science, health and the environment. These fields are both interrelated and distinct in rhetorical studies. For instance, while environmental rhetoric includes the rhetorical construction of "wilderness," it also includes studies of environmental justice & health disparities across gendered/classed/racial lines as well as debates over climate science & scientific consensus. Students will gain a broader understanding of rhetorical theory and how to complete rhetorical critique. Students can also expect to read academic articles, lead class discussions, and engage in independent academic research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 5342. Historical Rhetoric and Social Influence.**

This course is an analytical study of speeches, speakers, groups, movements, and rhetorical strategies in history. Includes emphasis on the following topics: American Public Address, Rhetoric of Woman's Suffrage, and other historic topics of interest. This course may be repeated with different emphasis or topic for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 5343. Contemporary Rhetoric and Social Influence.**

The analytical study of speeches, speakers, groups, movements, and rhetorical strategies in contemporary society. Includes emphasis on the following topics: rhetoric and culture, rhetorical movements, and rhetorical genres. May be repeated with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 5344. American Speeches.**

This course is a survey of American public address. The class will study significant and representative speeches from different periods of American history. This class will examine what the study of American public address can teach us about history, communication, and social influence.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5345. Political Communication.**

Study of political communication in contemporary times. Course will cover the rhetoric of candidates and politicians, the structure of political campaigns, and campaign practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5347. Small Group Communication.**

An examination of theories and research evidence about communication in the small group.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5350. Applied Communication Studies.**

An application of communication principles and skills. Topics covered may include organizational, interpersonal, nonverbal and group communication, conflict management, communication technology, and persuasion analysis. May not be taken for credit by students pursuing M.A. degree in Communication. May be repeated for additional credit with department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 5355. Media Criticism.**

A rhetorical analysis of media from a Contemporary Cultural Studies perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5356. Gender and Communication.**

An examination of research and theories about gender communication, relationships, and qualitative research methods. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COMM 5360. Introduction to Empirical Research in Communication.**

Introduction to Communication Studies as a behavioral science. Students will learn principles of the scientific method; explore quantitative and qualitative methods; investigate variables across the field (persuasion, interpersonal, organizational, non-verbal, intercultural, and instructional); and analyze and apply research in Communication. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**COMM 5362A. Organizational Communication.**

Introduction to communication concepts in the context of organizations. Students will learn how communication influences contemporary organizations through familiarity with contemporary research. Students will be prepared to understand, investigate, and manage communication processes in organizations. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**COMM 5362B. Organizational Rhetoric.**

Introduction to the study of organizational rhetoric designed for internal and external audiences. Students will analyze and create messages based in theories of organizational rhetoric. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**COMM 5371. Communication Training and Development.**

This course examines the theory and practice of developing and presenting communication training sessions for organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5372. Organizational Communication Analysis and Development.**

This course examines communication problems in organizations and describes effective interventions. Provides communication managers and consultants with a broad range of tools and procedures for diagnosing and changing communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5374. Organizational Rhetoric.**

This course will include an examination of how organizations use symbols to accomplish a variety of functions for internal and external audiences, as well as exploring the concept of organization as rhetorical argument.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5390. Communication Internship.**

Students acquire on-the-job experience in a position with an organization, using skills and knowledge acquired through graduate coursework. The course requires written reports and other projects as specified by the supervising instructor. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5395. Capstone Research Project.**

Under the direction of a graduate faculty member, students develop and submit a research or applied project using knowledge and skills acquired through graduate coursework. Required for students not pursuing the thesis path. May be taken only once for degree credit. Prerequisite: Permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COMM 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Communication Studies 5399B. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COMM 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**COMM 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COMM 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COMM 7315. Directed Research in Communication Studies.**

Independent study of a specific communication research area. May be repeated with different emphasis for additional credit. Prerequisite: Doctoral level standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COMM 7325A. Instructional Communication.**

A review of instructional communication theory and research with an emphasis on the function of communication in instructional settings. Prerequisite: Doctoral level standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 7325B. Organizational Communication.**

A review of organizational communication theory and research with an emphasis on organizational development from a communication perspective. Prerequisite: Doctoral level standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**COMM 7325C. Communication Assessment.**

An in depth study of communication assessment techniques employed in the field of oral communication. Statistical, experimental, and observational methods of assessing oral communication in interpersonal, group, and classroom settings are included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 1308. Computer Literacy and the Internet.**

A study of the uses of computers and their effects on society. Text processing, spreadsheets, databases, and Web programming. Does not count for computer science credit towards a minor, a BS, or a BA in computer science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** COSC 1301

**CS 1319. Fundamentals of Computer Science.**

Provides fundamental knowledge of the six layers of computer science as per the ACM CS0 curriculum. The information, hardware, programming, operating system, applications, and communications layers are presented plus appropriate open computer laboratory exercises. Does not count for computer science credit towards a minor, BS, or BA in computer science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** COSC 1336

**CS 1342. Programming for Scientists and Engineers.**

This course is an introduction to computer science and problem solving techniques with applications in engineering and the physical sciences. Topics include an introduction to computer organization, data representation, algorithm development, and computer programming in a high-level language.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 1428. Foundations of Computer Science I.**

Introductory course for computer science majors, minors and others desiring technical introduction to computer science. Contains overview of history and structure of the digital computer, including binary data representation. Problem solving, algorithm development, structured programming, good coding style, and control structures of C++ are emphasized. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2417 or MATH 2471 with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Mathematics score of 520 or better] or [SAT Math Section score of 550 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** COSC 1437

**CS 2308. Foundations of Computer Science II.**

The course is an introduction to Abstract Data Types (ADTs) including lists, stacks, and queues. Searching and sorting, pointers and dynamic memory allocation, and simple classes and objects also will be covered. The course is a continuation of CS 1428. Prerequisite: CS 1428 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** COSC 2336

**CS 2315. Computer Ethics.**

This course is primarily for computer science majors, focusing on the ethical codes of the professional societies, the philosophical bases of ethical decision-making, and the examination of several contemporary case studies. (WI) Prerequisites: CS 1428 and [COMM 1310 or COMM 2338] and [ENG 1310 or ENG 1320 or ENG 1321 or ENG 3303] and [PHIL 1305 or PHIL 1320] all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CS 2318. Assembly Language.**

A course covering assembly language programming, including instruction sets, addressing modes, instruction formats, looping, logic, data representation, subroutines and recursion; and the interface between hardware and software. Prerequisites: CS 2308 and MATH 2358 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** COSC 2325

**CS 3190. Cooperative Education.**

This course provides cooperative education students the opportunity to study particular problems in computer science in an occupational setting. Problems are related to the student's work assignment, culminating in the student's technical report or presentation. A total of 3 hours of cooperative education credit may be applied to the student's major elective. Prerequisite: Minimum 2.25 Overall GPA and instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3279A. Career Preparation and Job Search Strategies.**

This course will help computer science students plan and launch their careers and find internships. Topics include career assessment, job search strategies, resume writing, interview skills, development of coding skills required for interviews, networking and negotiation. Prerequisite: CS 2308 and CS 2315 both with grades of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**CS 3290. Advanced Cooperative Education.**

This course provides cooperative education students the opportunity to study particular problems in computer science in an occupational setting. Problems are related to the student's work assignment, culminating in the student's technical report or presentation. A total of 3 hours of cooperative education credit may be applied to the student's major elective. Prerequisite: A minimum 2.25 Overall GPA and instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3320. Internet Software Development.**

A course providing foundations for the construction and design of static and dynamic Web pages with database applications. This will include server-side and client-side software development. Prerequisite: CS 2308 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3339. Computer Architecture.**

This course provides instruction on the use of fundamental hardware components. Topics include arithmetic logic units (ALU), single and multiple cycle datapath and control, Reduced Instruction Set Computer (RISC) vs. Complex Instruction Set Computer (CISC), pipelining, caches, Input/Output, virtual memory and related performance issues. Prerequisite: CS 2308 and [CS 2318 or EE 3420] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3354. Object-Oriented Design and Programming.**

The course covers object-oriented design principles and programming for students with prior programming experience. The topics include inheritance and polymorphism, object-oriented design process, UML diagrams, design patterns, exception handling and multithreading. Students will design and implement programs in Java. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3358. Data Structures and Algorithms.**

This is a course that covers classic data structures and the analysis of algorithms. Prerequisites: CS 2308 and MATH 2358 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3360. Computing Systems Fundamentals.**

This course covers fundamental concepts underlying the design and implementation of computing systems. It introduces students to problems that reoccur in computing systems and the tools and algorithms used to solve them. Topics include performance evaluation, resource management and scheduling, concurrency and synchronization, and communication and networks. Prerequisite: CS 2318 and CS 3358 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3369. Embedded Computer Systems.**

This course studies the architecture of embedded systems, micro-controllers, their peripherals, languages, and operating systems and the special techniques required to use them. Prerequisite: CS 2318 or EE 3420 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3378. Theory of Automata.**

An introduction to automata theory, computability, and formal languages. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3393. Software Testing.**

This course introduces basic concepts and techniques for testing software and finding bugs. Topics include test design, test process, unit, integration and system testing, manual and automatic techniques for generation of test inputs and validation of test outputs, and coverage criteria. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 3398. Software Engineering.**

The study of software design, implementation, and validation techniques through team projects. Structured analysis, programming style, and project documentation are emphasized in large software projects. (WI) Prerequisite: CS 3354 and CS 3358 and [CS 2315 or EE 2400] all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CS 4100. Computer Science Internship.**

Provides on-the-job training supervised by computer scientists in industry internship programs approved by the department.

**1 Credit Hour. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Credit/No Credit

**CS 4298. Undergraduate Research I.**

Supervised individual research project in a mentor-student relationship with a computer science faculty member. Cannot be given degree credit until the satisfactory completion of CS 4299. Prerequisites: Minimum 3.00 Major GPA and instructor approval.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Credit/No Credit

**CS 4299. Undergraduate Research II.**

Supervised individual research projects in a mentor-student relationship with a computer science faculty member. Prerequisites: CS 4298 with a grade of "C" or better and instructor approval.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4310. Computer Networks.**

This course covers the fundamental concepts in the design of computer networks and networking protocols with emphasis on the Internet (TCP/IP) architecture. The covered topics include: protocol layering, media access, internet routing, transport protocols, and applications. Prerequisite: CS 3360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4315. Introduction to Data Mining and Information Retrieval.**

This course covers fundamental concepts and techniques in data mining and information retrieval. Data mining topics include classification, cluster analysis and pattern mining. Information retrieval topics include Boolean retrieval, vector space model, and Web search. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4318. Compiler Construction.**

This course investigates theoretical and practical issues in the design and construction of modern compilers. Topics covered include lexical and syntactic analysis, syntax-directed translation, type checking, intermediate representation, code generation, and runtime systems.

A major portion of the course involves implementing a compiler from scratch for a C-like programming language. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4326. Human Factors of Computer Systems.**

Principles and methods in human factors and ergonomics applied to the design and use of computer systems. Prerequisite: CS 3358 with a grade of "C" or better. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CS 4328. Operating Systems.**

This course covers the principles of operating systems design.

The covered topics include: process management, CPU scheduling algorithms, inter-process communication and synchronization, memory management, virtual machines, and I/O device management.

Prerequisite: CS 3339 and CS 3360 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4332. Introduction to Database Systems.**

Introduction to database concepts, data models, file structures, query languages, database management systems. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4337. Introduction to Computer Vision.**

This course covers fundamental topics of computer vision. Topics include elementary image operations and transformations, template matching, feature extraction, object recognition, classification and tracking, deep learning, camera models and stereo vision, and image searching. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4346. Introduction to Artificial Intelligence.**

An introduction to the basic concepts of artificial intelligence; search techniques, knowledge representation, problem solving. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4347. Introduction to Machine Learning.**

This course provides systematic introduction to machine learning, covering basic theoretical as well as practical aspects of the use of machine learning methods. Topics include learning theory, learning methods, and recent learning models. Application examples include multimedia information retrieval, text recognition, and computer vision. Prerequisite: CS 3358 and MATH 3305 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4350. Unix Systems Programming.**

Fundamentals of Unix operating systems, Unix file system and environment, C memory allocation, development tools, processes and signals, threads, device drivers, and programming for security.

Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4353. Introduction to Graphical User Interfaces.**

This course covers abstract and practical foundations of graphical user interface design, evaluation, and implementation. Students will learn the fundamentals of computer graphics and interactive computer/human interfaces. The course includes a survey of usability measures, the major GUI standards, and GUI tools. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4355. Algorithms and Analysis.**

This course covers classic algorithms in computer science and their applications. Emphasis is on algorithm design, algorithm analysis, problem formulation, and problem solving. Topics include advanced tree and graph algorithms, advanced sorting and searching algorithms, greedy algorithms, dynamic programming, string processing algorithms, and algorithm complexity (time and memory). Prerequisite: CS 3358 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4368. Survey of Computer Languages.**

A survey of computer languages. Criteria for choosing languages to be covered include history, important development paradigms and environments, and language implementations. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4371. Computer System Security.**

Course covers practical aspects of computer system security including managing and producing code for secure systems. Theory, such as cryptography, is introduced as needed. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4372. Introduction to Digital Multimedia.**

The course covers concepts, problems and techniques in digital multimedia. Topics include digital representation and data compression of text, speech, audio, natural and synthetic images, and video, as well as multimedia applications, transmission, and standards. In addition, the course introduces perceptual aspects of multimedia signals and sources. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4379D. Distributed Ledger Systems and Blockchains: Theory and Applications.**

This course covers fundamental concepts underlying the design, implementation, research, and applications of Distributed Ledger Technology (DLT) systems (e.g., blockchains). It introduces implementations, applications, and performance evaluation of DLT systems. Topics include cryptographic encryption, security, anonymity, cryptographic data structures, DLT performance evaluation, DLT applications, and current DLT research. Prerequisite: CS 3358 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**CS 4379E. Introduction to Network Science.**

This course covers fundamental concepts and algorithms in the fields of social network analysis and network science as well as practical aspects of analyzing network-structured data. Topics include graph representations, network visualization, graph algorithms, random graph models, centrality measures, link analysis and ranking algorithms, and community detection and graph partitioning. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 4379Q. Introduction to Recommender Systems.**

This course covers the basic concepts of recommender systems, including personalization algorithms, evaluation tools, and user experiences. We will discuss how recommender systems are deployed in e-commerce sites, social networks, and many other online systems. Additionally, we will review current research in the field. Prerequisite: CS 3358 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**CS 4379Y. Introduction to Green Computing.**

Reducing energy consumption of mobile devices, cloud computing platforms, and supercomputers is a paramount but daunting problem. This course covers fundamental concepts and techniques in green computing, including a hardware energy efficiency roadmap; energy efficient software design, resource management, and storage solutions; and green data centers and mobile computing. Prerequisites: CS 3339 and CS 3358 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**CS 4380. Parallel Programming.**

This course teaches practical aspects of parallel programming. Topics include multi-core processors and shared-memory programming, hardware accelerator programming, and distributed-memory machines, and message-passing programming. Students will gain the knowledge and skills needed for developing parallel software by writing programs for a variety of parallel computers. Prerequisite: CS 3339 and CS 3360 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4381. Practical Game Development.**

This course teaches practical aspects of computer game design and implementation. Topics include graphics game engines, game physics, AI methods applied to games, and software architectures for computer games. Students will gain knowledge and skills needed for game development via team projects. Prerequisite: CS 3398 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4388. Computer Graphics.**

This course is a study of the hardware and software used in graphic representation and interpretation of data. Prerequisite: CS 3358 and [MATH 1317 or MATH 2321 or MATH 2417 or MATH 2471 or MATH 2472] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 4395. Independent Study in Computer Science.**

Open to undergraduate students on an independent basis by arrangement with the faculty member concerned. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Credit/No Credit



**CS 4398. Software Engineering Project.**

Students undertake a software development project. They work in teams, developing requirements and designs which they will implement and test. Prerequisite: CS 3398 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CS 5100. Advanced Computer Science Internship.**

This course provides advanced training supervised by computer scientists in internship programs approved by the department. Course cannot be counted toward any graduate degree, is open only to majors in the Department of Computer Science. May be repeated once. This course does not earn graduate degree credit. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5300. Professional Development of Graduate Assistants.**

This course is designed to develop and enhance the professional and technical skills of graduate teaching and instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5301. Programming Practicum.**

This course provides an intensive review of programming through data structures. Topics include syntax, semantics, problem-solving, and algorithm development. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CS 5302. Foundations of Data Structures and Algorithm Design.**

This course serves as a foundation course for computer science master's degree students who need reinforcement of fundamental concepts covered by CS 3358. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5303. Foundations of Computer Architecture.**

This foundation course for CS master's degree students who need CS 3339 concept reinforcement covers fundamental hardware components. Topics include ALUs, single and multiple cycle datapath and control, RISC vs. CISC, pipelining, caches, I/O, virtual memory, and related performance issues. It may be repeated once and is non-graduate degree credit. Prerequisite: Instructor Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5305. Foundations of Operating Systems.**

This course serves as a foundation course for computer science master's students who need reinforcement of fundamental concepts covered by CS 4328. Topics include the principles of operating systems, central processing unit scheduling algorithms, memory management, cooperating sequential processes, and device management. Credit for this course cannot be applied to a graduate degree.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 5306. Advanced Operating Systems.**

This course provides a study of modern operating systems, including network, distributed, and real-time systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5310. Network and Communication Systems.**

This course provides a study of network and communication systems. Students will be required to perform verification and implementation of protocols.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5316. Data Mining.**

This course covers fundamental concepts and techniques, plus recent developments in data mining and information retrieval. It provides relevant research training and practice opportunities. May not be taken for credit if the student has received credit for CS 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5318. Principles of Programming Languages.**

This course focuses on the principles of programming languages. Topics covered include programming paradigms, concepts of programming languages, formal syntax and semantics, and language implementation issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5326. Advanced Studies in Human Factors of Computer Science.**

This course provides a professional-level presentation of techniques and research findings related to human-computer interactions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5329. Algorithm Design and Analysis.**

This course provides an introduction to algorithm design and analysis, computational complexity, and NP-completeness theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5331. Crafting Compilers.**

Overview of the internal structure of modern compilers. Research on compilation techniques. Topics include lexical scanning, parsing techniques, static type checking, code generation, dataflow analysis, storage management, and execution environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5332. Data Base Theory and Design.**

This course covers computer system organization for the management of data. Topics include data models, data model theory, optimization and normalization, integrity constraints, query languages, and intelligent database systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5334. Advanced Internet Information Processing.**

This course integrates popular scripting and database programming languages to provide advanced information processing for Internet applications that demand database support and sophisticated, application-specific information processing. Prerequisite: CS 5332 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5338. Formal Languages.**

This course covers advanced topics in automata theory, grammars, Turing machines, decidability, and algorithmic complexity. A strong background in both data structures and discrete mathematics is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5341. Advanced Network Programming.**

Study of advanced concepts and programming skills in computer networks such as advanced TCP/IP, API, multicasting and broadcasting, reliable communications, advanced I/O functions and options.

Prerequisite: CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5343. Wireless Communications and Networks.**

Study of the fundamental aspects of wireless communications and wireless/mobile networks, introduction of wireless/mobile networking APIs. Prerequisites: CS 3358 with a grade of "B" or better and CS 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5346. Advanced Artificial Intelligence.**

This course covers knowledge representation, knowledge engineering, parallel and distributed artificial intelligence (AI), heuristic searches, machine learning and intelligent databases, and implementation of systems in high-level AI languages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5351. Parallel Processing.**

This course provides an introduction to the design and analysis of parallel algorithms, parallel architectures, and computers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5352. Distributed Computing.**

This course provides studies in advanced topics in distributed systems: concurrency control and failure recovery, management of replicated data, distributed consensus and fault tolerance, remote procedure calls, naming, and security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5369J. Advanced Human Computer Interaction.**

This course will cover state of the art human computer interaction topics such as perceptual compression, eye-gaze, and brain computer interfaces with emphasis on the human visual system, eye-tracking, and electroencephalography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369L. Machine Learning and Applications.**

Provides broad introduction to machine learning, including learning theory, and recent topics like support vector machines and feature selection. Covers basic ideas, intuition, and understanding behind modern machine learning methods. Discusses applications like face recognition, text recognition, biometrics, bioinformatics, and multimedia retrieval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Q. Recommender Systems.**

This course covers various concepts of recommender systems, including personalization algorithms, evaluation tools, and user experiences. Discussion of how recommender systems are deployed in business applications, design of new recommender experiences, and how to conduct and evaluate research in recommender systems. Cannot take for credit if already took CS 4379Q.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Y. Green Computing.**

Reducing mobile device, cloud computing platform, and supercomputer energy consumption is a paramount, daunting problem. This course covers state-of-the-art green computing research, including energy-efficient hardware and software design, power-aware resource management and storage solutions, green data centers and mobile computing. Cannot be taken for credit if received CS 4379Y credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5369Z. Distributed Ledger Systems and Blockchains: Theory and Applications.**

This course covers fundamental concepts underlying the design, implementation, research, and applications of Distributed Ledger Technology (DLT) systems (e.g., blockchains). It introduces implementations, applications, and performance evaluation of DLT systems. Additionally, through homework projects, the students will be introduced to current research on DLT systems and perform independent study and small-scale research on selected topics. Course topics include cryptography encryption, security, anonymity, cryptographic data structures, DLT performance evaluation, DLT applications, and current DLT research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 5375. Multimedia Computing.**

This course provides a study of the digital representation and processing of the three principal multimedia data types: image, audio, and video. Standards, storage media, and compression techniques for the three data types are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5378. Advanced Computer Security.**

This course covers various aspects of producing secure computer information systems that provide guaranteed controlled sharing. Emphasis is on software models and design, including discovery and prevention of computing systems security vulnerabilities. Current systems and methods are examined and critiqued.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5388. Advanced Computer Graphics.**

This course covers the algorithms and data structures used in representing and processing visual data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5389. Graphical User Interfaces.**

This course covers both abstract and practical treatments of using graphics to implement interactive computer/human interfaces. It includes a survey of the major GUI standards and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5391. Survey of Software Engineering.**

The course covers the software life cycle, emphasizing system analysis and design, including a survey of methodologies based on data flows and objects. The course includes a professional ethics component.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5392. Formal Methods in Software Engineering.**

The use of design and specification languages in producing software systems. Emphasis is placed on proving correctness of designs and implementations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5393. Software Quality.**

The latter half of the software life cycle is discussed. Topics include testing, performance evaluation, and software metrics. Appropriate software tools are studied and used.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5394. Advanced Software Engineering Project.**

Students produce a software project of significant size in a team environment. All aspects of the software engineering course sequence are integrated and put into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5395. Independent Study in Advanced Computer Science.**

Open to graduate students on an independent basis by arrangement with the faculty member concerned. Course is not repeatable for credit. Prerequisite: CS 3358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5396. Advanced Software Engineering Processes and Methods.**

The essentials of software engineering processes, methods, and tools for the evolutionary design of complex interactive software are discussed. Overviews of other topics like quality concepts, SEI CMM, information technology, and network technology are covered. Student completes a literature survey of the latest software engineering analysis and design processes, methods, and tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in CS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 7100. Graduate Computer Science Internship.**

This course provides advanced training supervised by computer scientists in internship programs approved by the department.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7199. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7299. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7300. Introduction to Research in Computer Science.**

This credit/no credit course is designed to develop research and communication skills for Ph.D. students. Topics covered include research processes, research methods, ethics, conducting literature review, critiquing papers, preparing research proposals, faculty research presentations, and the software tools and platforms available for conducting applied computing research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CS 7308. Computer Science Studies.**

This course provides foundations in computer science for students entering the doctoral program who may need certain background or leveling coursework. The course does not earn graduate degree credit. It is repeatable with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CS 7309. Professional Development of Doctoral Assistants.**

This course is designed to equip the doctoral students with skills and an understanding of the proper procedures to be effective doctoral instructional and teaching assistants. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CS 7311. Data-Driven Computational Methods and Infrastructure.**

This course covers computational and statistical methods for using large-scale data sets ('big data') to answer scientific and business questions. It focuses on framing research questions, understanding how data can answer them, and using modern software tools for scalable data storage, processing, and analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7312. Advanced Data Mining.**

This course provides in-depth coverage of advanced data mining and information retrieval principles and techniques. It also offers extensive training and practice opportunities in frontier research directions.

Prerequisite: CS 5316 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7313. Advanced Machine Learning and Pattern Recognition.**

This course provides students advanced theoretical and practical skills to learn, design, implement, and apply machine learning and pattern recognition approaches. The students will gain analytical and problem-solving skills by studying machine learning and pattern recognition techniques and applying them to solve real problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7314. Bioinformatics.**

This course introduces advanced algorithms for data-intensive computational analysis targeting biological applications such as drug response prediction, gene network analysis, and protein/RNA structure prediction. Main techniques include greedy search, linear regression, clustering, network analysis, expectation maximization, and Hidden Markov models, which are widely applicable beyond biological data.

Prerequisite: CS 5329 or CS 5369L either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7315. Network Science.**

This course provides in-depth coverage of the fundamentals and research frontiers of network science. The main topics include mathematical models and computational algorithms for analyzing the structure of complex networks and predicting dynamic processes on networks. Other topics include machine learning and data mining on graphs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7321. Human Computer Interaction: Concepts, Models, and Methodologies.**

This course provides an introduction to Human Computer Interaction (HCI) research, methods, and topics, including fundamentals of user interface and experimental design, usability, evaluation methods, software toolkits for interactive applications, graphics, visualization, mobile design, collaborative and social computing, biological factors, and human computation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7322. Human Factors and Ergonomics.**

This course combines knowledge in the fields of intelligent user interfaces, human factors, ergonomics, and environmental psychology. Topics include HCI principles, human information processing, anthropometry, principles of eye tracking and their effects on human factors research, as well as operations of biometrics systems and human factors influencing those systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7323. Image Processing and Computer Vision.**

Image Processing and Computer Vision are research areas with a variety of modern applications ranging from the analysis of images and videos to real-time processing of image streams coming from self-driving vehicles and robotic agents. This course will prepare students with advanced state of the art knowledge in those fields. Prerequisite: CS 5329 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7324. HCI Paradigms for Animation, Visualization, and Virtual/Augmented Reality.**

This course introduces advanced methods for enhancing user experience and presents effective HCI models via computer graphics, imaging, animation, simulation, visualization, augmented reality, and immersive virtual reality. Additionally, the course presents related science and engineering foundations as well as graphic design, cognitive science, and perceptual psychology theories and models. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7331. High-Performance Computing.**

This course covers the advanced design, analysis, and optimization of high-performance applications. Topics include high-performance computer architectures, including accelerators and systems-on-chip, performance modeling and benchmarking, data and control dependence analysis, data locality estimation, memory hierarchy management, techniques for exposing parallelism, and code transformations. Different workloads are studied. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CS 7332. Advanced Parallel Computing.**

This course covers advanced design of parallel algorithms, performance modeling, parallel hardware, language support for parallel programming, and programming models for shared- and distributed-memory systems ranging from handheld multicore devices to large-scale clusters and accelerators. The students will gain applied knowledge and skills by developing parallel software for multiple platforms. Prerequisite: CS 5351 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7333. Advanced Green Computing.**

This course covers hardware and software techniques to improve the energy-efficiency of computing systems. Topics include best practices in building energy-efficient data centers and mobile devices, current trends in reducing the energy consumption of processors and storage components, energy-aware resource management, software optimizations, and hands-on experience on power-measurable systems. Prerequisite: CS 5351 and CS 5369Y both with grades of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7334. Scalable Systems for Supercomputing.**

This course will teach basic aspects of building a scalable high performance computing (HPC) system. Specifically, it will focus on the design principles for scaling parallel communication and I/O operations for accessing HPC storage using a message-passing programming model. The course will use two large-scale systems—checkpointing for resilience and a parallel file system for storage as use cases to demonstrate how these principles are used in practice. Students will develop components of a scalable system and use software tools to measure and analyze their performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7341. Cyberspace Security.**

This course presents recent advances in methodologies, models, systems and applications of cyberspace security research. Topics include in-depth coverage of the state-of-the-art security technologies and research issues on information security, software security, network security, secure system design, secure programming, applied cryptography, vulnerability, and threats. Prerequisite: CS 5378 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7342. Advanced Computer Networking.**

This course covers recent research ideas, methodologies and approaches in networking research. The course focuses on the development of protocols and the analysis of related algorithms. Topics include new network architectures, cloud computing, software defined networking, wireless systems, social networks, and security and privacy. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7343. Mobile Networks and Computing.**

This course provides an in-depth study of wireless mobile communication networks, wireless network measurements and modeling, channel assignments and coverage, wireless network protocols, mobile data management, wireless security, and various wireless network applications including ad hoc, sensor networks, delay-tolerant networks, and mobile social networks. Prerequisite: CS 5310 or CS 5343 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7351. Advanced Software Engineering.**

Software engineering is the application of scientific methods to software development and maintenance. This course provides an in-depth study of advanced concepts and techniques of automatic software generation and analysis. Topics include software process programming, symbolic execution, model checking, property generation and checking, and runtime verification of complex software systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7352. Real-time Systems.**

This course covers issues related to the design and analysis of systems with real-time constraints. The problem of ensuring such constraints is ultimately a scheduling problem, so much attention is devoted to such problems. This course aims to provide a solid foundation for conducting research in real-time systems or related areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CS 7387. Research in Computer Science.**

This course covers current research topics in computer science under the direction of a supervising professor. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7389A. Service Computing.**

This course introduces concepts and principles for enabling the development of software as a service based on Service-Oriented Architecture (SOA), methodology of SOA systems development, the main technologies used in achieving SOA, and state of the art techniques and advances in emerging cloud and edge (Internet of Things) services. Prerequisite: CS 5329 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389B. Advanced Software Evolution.**

This topics course provides an in-depth study of state-of-the-art software evolution techniques and tools based on the current research literature. Software evolution has become increasingly important in software development. Software systems often evolve to fix defects, to improve performance, or to adapt to various other requirements. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389F. Secure Cyber-Physical Systems: Cryptography and Machine Learning.**

This course is designed to introduce students to the fundamentals of cryptography and machine learning and how they can be used to ensure security and privacy in cyber-physical systems (CPS). Topics will include an overview of cyber-physical systems, cryptographic techniques, machine learning algorithms, and security threats and attacks on CPS. The course will also cover privacy-preserving machine learning techniques and design principles for secure CPS. Students who successfully complete this course will be well-versed in cryptography and machine learning approaches for cybersecurity in CPS and be able to use these techniques to address practical real-world issues. Prerequisite: CS 3354 and CS 3358 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389G. Human-Centered Data Science.**

This course is to study the process of deriving insights from data in order to make optimal decisions. Human-Centered Data Science addresses various data science problems with attention to improve the quality of decisions by incorporating human experts in the learning process, e.g., interactive Machine Learning and eXplainable Artificial Intelligence. Prerequisite: CS 3358 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389H. Human-Centric Deep Learning.**

This course provides an in-depth exploration of deep learning, emphasizing multi-layer neural networks and their applications. Students will explore core topics like convolutional, recurrent, and graph neural networks, along with optimization algorithms and generative models. The curriculum uniquely integrates multimedia processing, Human-Computer Interaction (HCI), and "human in the loop" approaches, demonstrating how deep learning can be applied to image, video, and audio analysis, as well as to create user-centric and interactive systems. Practical aspects, including data preprocessing, model evaluation, and framework implementation, will also be covered, equipping students with the skills to apply deep learning techniques in a human-centered context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7389J. Advanced Natural Language Processing.**

This course is an interdisciplinary field that combines computational linguistics with statistical and machine learning techniques to enable the computer to understand, interpret, generate, and learn natural language. Natural Language Processing (NLP) introduces key concepts, tasks, and techniques, including recent advancements such as neural networks and large language models. It covers applications such as question answering, automatic speech recognition, and machine translation. Students will gain an understanding of fundamental concepts, advanced algorithms, and practical applications, and will also learn methods for acquiring and annotating text data, and representing linguistic structures. Familiarity with Linear Algebra and Python Programming is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CS 7399. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7599. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7699. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CS 7999. Dissertation.**

Original research and writing in computer science is to be accomplished under the direct supervision of the Ph.D. research advisor. While conducting dissertation research and writing, the student must be continuously enrolled each long semester. Graded on a credit (CR), progress (PR), no-credit (F) basis. Repeatable for credit. Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CIM 3330. Concrete Construction Methods.**

This course covers forming, shoring, placing and reinforcing operations. Transporting, placing, consolidating, finishing, jointing and curing concrete for cast-in-place foundations, pavements, slabs on ground, structural frames, and other structural members are studied. Other topics include waterproofing concrete foundations and erecting precast concrete members. Corequisite: CIM 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 3340. Understanding the Concrete Construction System.**

This course provides a detailed look at how the concrete construction industry works. The course includes a review of model building codes, building officials and their functions, concrete industry codes and standards, concrete construction processes, quality assurance systems, contract documents, estimating, construction scheduling and concrete construction markets. Prerequisite: CIM 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 3350. Precast and Prestressed Management.**

This course provides students with an opportunity to further develop their technical and laboratory knowledge in precast/prestressed concrete topics to include common shapes and uses, materials and methods, mix designs and batching in precast/prestressed, reinforcing and formwork in precast/prestressed, plant management, layout and processes, logistics and supply chain, quality control, technical sales, and cost estimating.

Prerequisite: CIM 3420 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 3366. Applications of Concrete in Construction.**

This course is a detailed study of the many uses of concrete in the construction of buildings, pavements and other facilities. Emphasis will be placed on the advantages, disadvantages, and unique problems faced by materials suppliers, contractors and design professionals when concrete is chosen for specific applications. Prerequisite: CIM 3330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 3420. Fundamentals of Concrete: Properties and Testing.**

This course examines effects of concrete-making materials (aggregates, cements, admixtures, etc.) on the properties of fresh and hardened concrete. Concrete mixture proportioning calculations and statistical analysis of strength tests are also studied. Prerequisite: MATH 2328 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CIM 4290. Capstone.**

This course will provide students the opportunity to work individually to develop a business plan with increased emphasis on the technical and financial aspects of the concrete industry, building upon previous coursework. Students then work in groups, preparing a proposal based on a real-world construction or concrete project. The final presentation will be made to an industry panel. A portion of this course includes guest speakers from the concrete industry. Prerequisite: CIM 4330 and CSM 3368 both with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 4299. Capstone II.**

This course is a continuation of CIM 4398; students continue developing a business plan with increased emphasis on the technical and financial aspects of the concrete industry, building upon previous coursework. The final presentation will be made to an industry panel. A portion of the course is a seminar with guest speakers from the concrete industry. Prerequisite: CIM 4398 with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 4310. Senior Concrete Lab.**

This course provides students with an opportunity to further develop their technical and laboratory knowledge and pursue a project of individual interest. A formal report/presentation will be required at the conclusion of the course. Prerequisites: CIM 3366 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 6 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 4330. Management of Concrete Products – Ordering and Scheduling.**

This course is designed to provide the student with a basic understanding of managing the ordering and delivery process common to all concrete products. Emphasis will be in planning, organizing and controlling at both the first-line supervisory and managerial levels.

Prerequisite: CIM 3340 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 4340. Concrete Problems: Diagnosis, Prevention and Dispute Resolution.**

Course involves diagnosing/preventing problems related to concrete production, testing, construction and performance. Students learn to identify causes of fresh and hardened concrete problems, i.e. fast and slow setting, air content variations, low strength, cracking and scaling. Pre-job conferences and dispute resolution methods are examined.

Prerequisite: CIM 3366 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 4350. Advanced Concrete Technology.**

This course provides students with an opportunity to further develop their technical and laboratory knowledge in advanced concrete properties, test methods and mix designs. Topics include high-performance concrete (HPC), self-consolidating concrete (SCC), roller compacted concrete (RCC), mass concrete, concrete repair, advanced fiber reinforcing, and chemical admixtures. Prerequisite: CIM 3420 with a grade of a "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CIM 4398. Capstone.**

This course covers the business aspects of the concrete industry with appropriate application to the student's career interests and builds upon the technical and practical industry components learned in previous courses. The final project will be presented to an industry committee. (WI) Prerequisites: ACC 2362 with a grade of "D" or better and CIM 4330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CSM 1260. Introduction to the Construction and Concrete Industry.**

This is an introductory course for Construction and Concrete Industry Management (CIM) majors. Residential, commercial, heavy, civil, and highway construction is explored including the concrete industry. The role of the contractor, architect/engineer, and owner are covered including contracts, careers, sustainability, and economic importance of the construction industry.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 1360. Introduction to the Construction Industry.**

This is an introductory course to the Construction and Concrete Industry. Major construction sectors are explored including: Residential; Building Construction; Heavy, Civil and Highway; and Industrial and Offshore, along with common construction materials used in the industry. The role of the Construction Owner, Architect/Engineer and Constructor are covered in addition to Contracts, Construction Documents, sustainability, and the economic and historical importance of the Construction Industry. Degree requirements, course sequencing and Construction Careers are also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 2160. Introduction to Construction Surveying and Site Layout.**

Common construction surveying and site layout techniques are studied using both optical levels and total stations. Benchmarks, building lines, property lines, differential and profiling are discussed in lecture with applied exercises performed in the laboratory.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 2262. Construction Lab.**

This lab provides hands-on experience for students to apply technical construction processes, equipment safety, and teamwork by building components using industry-standard materials and equipment. Practical application of techniques used in residential and commercial construction will be performed, as well as the use of innovative technology associated with the Virtual Design & Construction (VDC) movement in the industry.

**2 Credit Hours. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 2313. Architecture Design I - Construction Documents.**

This course is an introduction to the language and process of producing architectural construction documents in residential projects utilizing computers and CAD software. Site plans, floor plans, sections, elevations, and details are drawn individually and as a team as orthographic projection theory and its importance in resolving complex building geometry are covered.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 2342. Construction Materials and Processes.**

This course will introduce students to various types of construction materials including ceramics, ferrous, non-ferrous, and organic materials used in construction. Their properties, working characteristics and processes used to manufacture and assemble these materials are studied. Laboratory activities are used to reinforce lecture material. Prerequisites: [PHYS 1115 and PHYS 1315] or [PHYS 2325 and PHYS 2125] with grades of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 2360. Residential I: Construction Practices.**

This course deals with the process of constructing a home on an improved lot, including residential plan and specification interpretation, cost centers, profit and overhead, construction phases, subcontractor sequencing, materials, estimating, scheduling, building codes, permits, and mechanical, electrical and plumbing home requirements.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 2361. Construction Surveying.**

This course covers practical construction surveying and site layout applications for Construction Management. Topics covered include surveying terminology, the use of surveying equipment, grade, distance, and angular measurements, construction site layout and project control, surveying documentation with fieldwork conducted in the laboratory portion of the course. It also covers current technology in surveying equipment and processes. Prerequisite: MATH 2321 or MATH 2417 or MATH 2471 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 3360. Structural Analysis.**

This course is a structural engineering fundamentals class to include design loads, reactions, force systems, functions of a structure, and both the analysis and design of determinate structures by classical and modern techniques. Prerequisite: TECH 2351 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 3361. Commercial Building Construction Systems.**

This is a commercial building construction systems class that deals with soils, site work, heavy foundations, steel, reinforced concrete and pre-cast structures along with common assemblies. Commercial MEP's are studied along with CSI master format, as-built and shop drawings, schedule of values, AIA documents and appropriate building codes. Corequisite: CSM 2360 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 3363. Heavy, Civil and Highway Construction Systems.**

Selection, acquisition and capabilities of heavy construction equipment are presented. Applications of economics to performance characteristics and production of equipment is discussed. Sector-specific construction management methods are covered, including unit price estimating, equipment fleet design, repetitive scheduling and major components of highways, bridges and engineered facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 3366. Soils and Foundations.**

The properties of subsurface materials and the principles of subsurface construction are studied. Topics include soil classification and testing, soil mechanics, and foundation systems, including site layout, excavation, caissons, piles, slurry wall, slab, and spread footings. Prerequisite: TECH 2351 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter



**CSM 3367. Mechanical, Electrical and Plumbing Systems.**

This course covers typical Mechanical, Electrical and Plumbing (MEPs) systems found in residential and commercial construction along with design and installation methods used to conserve both energy and water in new and remodeled structures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 3368. Construction Finance.**

This course provides an introduction to financial analysis and financing of construction-related companies and projects. Topics include analysis of financial statements, contractor payment methods, construction loans, and project cost controls. Prerequisite: ACC 2301 or ACC 2362 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 3369. Residential II: Construction Business Practices.**

This course will prepare students in the business practices used by residential land developers and home-builders. Technical skills are applied to the work process inside conventional home-building departments and how those collaborating departments and co-workers operate to become an efficient and sustainable new home-building company. Prerequisite: CSM 2360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 4313. Architectural Design II - Technology in Construction.**

In this course students create individual and group commercial projects which include plans, elevations, sections, details, and 3D drawings utilizing 3D building information modeling (BIM) and other current technologies used in the industry. Structural, mechanical, electrical, plumbing, accessibility, and sustainable building issues are discussed. Prerequisite: CSM 2313 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 4360. Senior Construction Management Capstone.**

In this course students work in groups, preparing a bid proposal based on a real-life construction project involving contract negotiations, construction documents interpretation, estimating, bidding, scheduling, safety, and quality control plans. Emphasis is on developing leadership, team building, and written and oral communication skills. Students will be prepared to sit for the AIC Level 1 Examination after this course. Prerequisites: CSM 4313 and CSM 4361 and CSM 4364 and CSM 4369 and TECH 2190 all with grades of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 4361. Construction Estimating.**

This course covers the fundamentals of construction estimating, including feasibility and constructability, quantities, units, labor, equipment productivity, and different types of estimates such as preliminary, engineering, range, and contractor's detail bids. Plans and specifications are used along with estimating software to develop estimates commonly used in the construction industry. Prerequisite: CSM 3361 or CIM 3340 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 4364. Construction Project Management and Scheduling.**

This course covers the concepts of construction management beginning with contract documents through the effective management of manpower, machines, material, and money necessary to complete construction projects on time and within budget. Gantt Charts and PERT/CPM schedules are developed using contemporary software. Prerequisite: CSM 2360 with a grade of "C" or better. Corequisite: CSM 4361 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**CSM 4368. Sustainable & Lean Construction Practices.**

This course covers environmentally sustainable and lean management practices in building design and construction. The LEED system will be used to guide the course on sustainable practices, which covers aspects of sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and the CAD design process. It will also cover the integration and relationship between lean and sustainable construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**CSM 4369. Construction Contracts, Risks, and Ethics.**

Legal aspects of design and construction contract documents are presented, including contract formation, interpretation, rights and duties and changes. Legal liabilities are explored in the context of professional ethics for design firms and constructors. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CSM 4370. Residential Capstone.**

This is a course in residential construction related to developing communities and building homes. Students work in groups to develop proposals to select and develop raw land into buildable lots, design and schedule site-specific homes, and develop a marketing plan. Students will be prepared to sit for the AIC Level 1 Examination after this course. Prerequisite: TECH 2190 and CSM 3369 and CSM 4313 and CSM 4364 and CSM 4369 all with grades of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**CSM 4380. Construction Safety.**

This course is an introduction to the fundamentals of occupational safety and health for the construction industry. Topics include Occupational Safety and Health Administration (OSHA) policies and compliance, governmental regulations, standards, laws, worker's compensation, record keeping, environmental safety and health hazard identification, the hierarchy of controls to mitigate hazards, and creation of a written Safety Management Plan (SMP). (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**CSM 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5302. Fundamentals of Construction Contracts and Liability Issues.**

This course introduces students to the legal aspects of design and construction contract documents, including dispute resolution methods and professional ethics commonly used in the construction industry. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CSM 5304. Fundamentals of Construction Estimating.**

This course provides the student with a comprehensive introduction to the principles, techniques, technologies, and basic concepts involving methodologies and strategies used in the preparation of various types of construction estimates and bids. This course does not count as degree credit.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CSM 5306. Fundamentals of Commercial Building Construction Systems.**

This course is a commercial building construction systems class dealing with soils, site work, heavy foundations, steel, reinforced concrete, pre-cast structures and common assemblies. Commercial MEPs are studied along with CSI master format, as-built/shop drawings, schedule of values, AIA documents, and appropriate building codes. This course does not earn graduate degree credit.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**CSM 5313. Building Information Modeling.**

This course covers understanding the supervisory role of construction professionals in the design process including, directing a design team in the integration of construction documents for commercial buildings, coordination of site work, structural, architectural, mechanical, electrical, plumbing plans and contemporary CAD software for 2D& 3D design including Building Information Modeling. Prerequisite: CSM 2313 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5314. Technology Management in Construction.**

This course covers the supervisory role of construction professionals in the Virtual Design and Construction (VDC) process. Topics covered include directing a VDC team in the integration of construction documents for construction (architectural, structural, mechanical, electrical, and plumbing plans), coordination of site work, implementation of current CAD software for 2D and 3D design, the Building Information Modeling (BIM) process, and other technologies that have an impact on the construction industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5360. Construction Company Financial Control.**

Financial accounting and cost controls used at the company level in construction companies are studied. Topics include accounting systems, construction project profit calculations, and financial analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5362. Pre-Construction Services.**

The course will introduce students to designer/contractor interactions, including conceptual estimating and scheduling, the RFQ/RFP process and legal, insurance, risk allocation issues, along with procurement and selection.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5363. Construction Project Delivery and Leadership.**

This course covers methods of construction project delivery in detail and focuses on analyzing data to assess its impact on project outcomes.

Construction project delivery is covered along with contract strategies.

An owner approach to a method selection is developed within this class.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5364. Decision Making in Construction Management.**

This course focuses on the application of systems engineering and statistics used in solving construction and civil engineering problems.

Topics covered include network and linear programming models, construction and evaluation of decision trees to clarify a proper course of action considering uncertainty, probability distributions, sample statistics, linear regression models, risk analysis, and sampling plans for quality assurance. Personal computer usage emphasized for problem solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5365. Construction Project Controls.**

This course covers construction management cost and schedule concepts, cost/schedule management information systems, variance analysis, forecasting, resource management, project recovery strategies, and application of theory to practical problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5366. Soils in Construction.**

This course provides students with an in-depth examination of geotechnical principles as they apply to soil construction activities.

Topics covered include geological formations of natural soils, soil mineralogy, soil sampling, classification, soil testing, dewatering, safety and sustainability in soil construction, soil contamination and remediation, recycled content used in soil construction and innovative technologies in soil stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5367. Principles of Leadership in Construction.**

This course covers individual, organizational, and process/structure styles of leadership using a transformational model.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5368. Sustainable Construction.**

This course examines a breadth of sustainable construction techniques, including material production, material selection, sustainable design, the ecology model for design, life cycle cost analysis, and sustainable construction. The sustainable construction techniques are discussed relative to advanced sustainable framing, waste minimization techniques, LEED, and green roofs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5369. Construction Dispute Resolution.**

This course focuses on different mechanisms of dispute resolution in the industry. They are presented from the perspective of owner, designer, and contractor's liability/risk assessment. The course is comprised of best practices and pitfalls of negotiation, mediation and arbitration. Finally, a perspective on litigation is discussed, along with the fast changing world of case law. The course uses a collaborative model of contemporary research and industry case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5380. Construction Safety Management.**

This course covers the administration and application of 29CFR 1926 OSHA Construction Industry Regulations for the construction industry along with applicable state and federal construction safety laws related to construction, alterations, or repair work at construction sites. The roles of all participants at the construction job site concerning construction safety are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5384A. Construction Failure.**

This course covers a breadth of causes of construction failure, including how past failures can improve current construction practices and litigation is a likely response to failures in construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CSM 5390. Research in Construction.**

This course examines research methods used for construction, including such topics as designing experiments, scientific principles, problem solving techniques, producing a proposal, executing research, acquiring and managing data, statistical analysis methods, reporting results, and publishing. The course highlights up-to-date discussions on debates and concerns within the construction research community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CSM 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Construction Management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CSM 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CSM 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CA 1341. Consumers in the Marketplace.**

This course is an introduction to consumerism. Topics covered include: the consumer's role in the economy; consumer responses to the pressures of the economy (credit, inflation, and savings); and an analysis of the largest consumer expenditures (housing, food, and transportation).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** ECON 1303

**CA 1347. Family and Personal Resource Management.**

This course focuses on the analysis of family and personal management processes including resource identification and factors that impact management and decision making (i.e., public policy and career implications). Contemporary issues in the field are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CA 2341. Digital Applications in Consumer Finance.**

This course focuses on the technology applications that are used to analyze consumer's financial situation, needs, and goals. Topics include constructing personal financial statements; cash flow; time value of money related to education, retirement, life insurance; and amortization. Students will use calculators, Microsoft Excel, and personal financial planning software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CA 2351. Behavioral and Personal Financial Management.**

This course provides an investigation of behavioral finance as it impacts the individual, families, U.S. economic system, and ultimately society. Cognitive and social factors that impact the financial decision making of individuals are examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080

**Grade Mode:** Standard Letter

**CA 3341. Personal and Family Finance Goals and Strategies.**

In this course students will examine personal/family financial management during different stages of the family life cycle. Topics include budgeting/recordkeeping to achieve economic goals, the role of credit and the need for financial counseling; economic risks and available protection; and alternative forms of saving and investments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CA 3342. Consumer Law.**

This course explores the relationship between consumer laws (federal and state) and policy. Topics include consumer protection legislation which defines the consumer's rights/responsibilities and the appropriate avenues of redress on the part of the consumer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CA 3351. Consumer Financial Management I.**

Principles and practices of individual and family financial management relating to insurance needs and selection, investment strategies to realize financial goals and income tax planning to improve financial well-being will be addressed. Technical skills required of financial counselors, planners and human resource management are emphasized. Prerequisite: CA 1341 or CA 2351 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CA 3352. Consumer Financial Management II.**

Principles and practices of individual and family financial management relating to retirement and estate planning to improve financial well-being will be presented. Technical skills required of financial counselors, planners and human resource management will be emphasized. Prerequisite: CA 1341 or CA 2351 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CA 4301. Internship in Consumer Affairs.**

This course is an Internship program in Consumer Affairs related professions, services, business, or industry. Must meet college, department and program requirements. Repeatable for credit with different emphasis. (Capstone Course) (WI) Prerequisite: Departmental approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**CA 4341. Personal and Family Financial Counseling.**

This course is an in-depth study of the role of the financial counselor. Topics covered will increase awareness and knowledge of the characteristics of persons with financial difficulties, complexity of factors affecting such situations, desirable relationships between the helper and helped, and an awareness of community resources. Prerequisite: [CA 1341 or CA 1347 or CA 2351 or CA 3341] and [CA 3351 or CA 3352] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CA 4342. Personal and Family Financial Counseling Practicum.**

This course focuses on applying financial counseling and consulting skills consistent with accepting financial counselor roles. Content includes theoretical models of financial counseling. Prerequisite: CA 4341 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CA 4391. Independent Study in Consumer Affairs.**

This course involves independent reading and/or research on a specific topic related to students' primary area of interest. Work may consist of research, reviews, and integration of existing literature, or other appropriate independent work. Course may be repeated once for credit with approval of instructor.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COUN 3320. Introduction to Counseling and Psychotherapy.**

The course is designed for upper-division undergraduates considering a helping profession or who wish to know more about counseling before entering into graduate study. The course offers introduction to counseling, counseling theories, and interpersonal communication skills that facilitate counseling relationships. Repeatable for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**COUN 5178. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated twice for additional credit at the discretion of the department chair.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5301. Professional Counseling Orientation.**

This course is presented as a basis for future counselors to understand community counseling agencies, standards of preparation, and the role identity of persons providing direct counseling treatment interventions. This course includes information on the licensure process, professional organizations, ethical and legal aspects of practice, advocacy processes, and theoretical/applied information.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5305. Assessment in Counseling.**

This course will include problems and principles of administration, scoring and interpreting group and individually administered tests; utilization of test data for diagnostic, placement, predictive, and evaluative purposes; elementary statistical procedures; laboratory activities in test administration, scoring, and interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5307. Theories of Counseling and Personality.**

This course surveys systematically derived theories of counseling and personality from their origins in social discourse, philosophy, and psychology to the present time. Each theorist is presented biographically and the theory considered with regard to its clinical, cultural, and ethical relevance and application to diverse populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**COUN 5316. Counseling Diverse Populations.**

This seminar is designed to sensitize students to the roles societal power disparities, counselor's racial identity and awareness, and client racial/cultural identity play in counseling persons of diverse backgrounds.

The dynamics of counseling clients who are African-American, Asian-American, female, gay/lesbian, Latino/a, Native-American, and persons with disabilities, will be examined. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COUN 5328. Professional Orientation in School Counseling: Leadership, Advocacy, and Accountability.**

This course provides an orientation to identity and role of professional school counselors, and introduction to the study of comprehensive developmental guidance programs. Course reflects the Texas and ASCA Models with related standards. Topics include: program planning, implementation, and evaluation; use of data and accountability; leadership role; and ethical and legal practices in schools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5338. Advanced Issues in School Counseling: Counseling, Consultation, and Coordination of Services.**

This course includes advanced topics in counseling children and adolescents in schools. Emphasis will be placed on developmentally appropriate preventative and responsive counseling services.

Consultation and collaboration with parents, school personnel, community partners and contextual issues in school counseling will be addressed. Prerequisites: COUN 5316 and COUN 5328 and COUN 5368 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5344. Introduction to Addictions Counseling.**

This course provides an introduction to best practices in counseling clients dealing with substance and process addictions. Students gain a historical context and current understanding of the etiology, course, and progression of addictive disorders. Students learn to conceptualize addiction from contextual, systemic, relational, and holistic perspectives, with an emphasis on theory and research-driven counseling practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5346. Filial Therapy.**

Theoretical and practical application of the filial model will be addressed as well as techniques in training parents in the overall principles and methodology of child-centered play therapy. Prerequisite: COUN 5358 and COUN 5373 both with grades of "B" or better. Corequisite: COUN 5389 or COUN 5689 either with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5350. Advanced Counselor Ethics.**

This course focuses on ethical standards of professional counseling organizations and credentialing bodies, and applications of ethical and legal considerations in professional counseling settings. Emphasis is placed on national and current state board rules, records management, strategies for personal and professional self-evaluation, implications for practice, and client and professional advocacy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5351. Current Issues in Marriage, Couple and Family Therapy.**

This course provides students with information regarding special issues in marital, couple and family counseling, including: grief and loss; domestic violence; substance abuse in the family; lesbian, gay, bisexual, and transgender issues; divorce; and re-parenting. Prerequisite: COUN 5316 and COUN 5367 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5354. Basic Counseling Skills and Abnormal Behavior.**

This course is designed to introduce the student to basic counseling skills via role-play and practice session recording. The course also provides a general model for assessing abnormal behavior of clients and effective skills to elicit identifying behavior. Prerequisites: COUN 5307 and COUN 5350 both with grades of "B" or better. Corequisite: COUN 5301 or COUN 5328 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5355. Career Counseling.**

This course considers career choice and development as critical aspects of persons in material cultures where occupation is a major component of one's identity. Career concerns often addressed in counseling are presented and discussed along with the area of vocational guidance, occupational information, and preference inventories.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5358. Dynamics & Processes in Group Counseling.**

In this course, students will develop knowledge and skills in the basic principles of the dynamics that are characteristic of therapeutic groups. This course is an academic and clinical experience requiring highly active student participation in the form of honest, direct, and open communication combined with authentic self-exploration within the group setting. Corequisite: COUN 5354 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5359. Psychopathology in Clinical Mental Health Counseling.**

This course explores the principles of dysfunction in human behavior and systemic organization. This course includes diagnostic, preventive, and remedial methods and interventions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5360. Intermediate Methods in Marital, Couple and Family Counseling.**

Marital, couple, and family theory and techniques are discussed, selected, applied, and refined through lecture and supervised clinical practice. Specific skills include joining, diagnosis, goal formulation, treatment planning, termination, referral, and record keeping. Graded on a credit (CR), no credit (F) basis. Prerequisite: COUN 5316 and COUN 5354 and COUN 5367 all with grades of "B" or better. Corequisite: COUN 5359 and COUN 5369 both with grades of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5362. Practicum in Professional Supervision: Theories and Applications.**

Provides experience in supervising practicum or intern students and integrating the theoretical foundations and current issues of professional supervision. Emphasis includes ethical, multicultural, gender, age, and lifestyle concerns in supervisory relationships, and academic requirements for supervisory status for Texas Licensed Professional Counselor and Licensed Specialist in School Psychology credentials. Course can be repeated once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5366. Intermediate Methods in Adult Counseling.**

Counseling theories and techniques are discussed, selected, applied and refined through lecture and supervised practice. Specific skills include initiating the helping relationship process, diagnosis, goal formulation, treatment planning, termination, referral, and record keeping. Prerequisite: COUN 5316 and COUN 5354 both with grades of "B" or better. Corequisite: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5367. Marital and Family Counseling: Current Theories.**

This course is designed to examine the principles of communication and the goals of marital, couple and family counseling. Selected theories, approaches and techniques used in marital, couple and family counseling will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5368. Developmental Issues in Counseling Children, Adolescents, and Adults.**

Emphasis will be on understanding the interactions between the developmental needs of each of these age groups and counseling techniques and procedures used to deliver mental health services to each of these groups.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5369. Child and Adolescent Counseling Methods.**

This course focus is an overview of counseling interventions with children and adolescents in agency, school, and private practice. Group, individual, and systems techniques will be covered. Assessment of child psychopathology and techniques for consulting with parents will be included. Prerequisites: COUN 5368 with a grade of "B" or better. Corequisites: COUN 5354 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5370. Intermediate Methods in Counseling Adolescents.**

This course will provide an overview of the physical, social, psychological, and behavioral characteristics of the adolescent. This course has a supervised practice experience. Emphasis will be placed on counseling interventions utilizing current research. Prerequisites: COUN 5316 and COUN 5369 both with grades of "B" or better. Corequisites: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5372. Assessment and Treatment in Marriage and Family Counseling.**

This course addresses the assessment of individual, couple, and family functioning and the planning and implementation of marital, couple and family treatment methods. Prerequisite: COUN 5367 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5373. Intermediate Methods in Play Therapy.**

This course explores the philosophical basis for play therapy, the history of play therapy, theoretical applications, techniques, stages, ethical issues, and application to a variety of populations and diagnostic categories. This course has a supervised practice experience. Prerequisite: COUN 5316 and COUN 5369 both with grades of "B" or better. Corequisite: COUN 5359 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5378. Problems in Counseling.**

Individual problems not related to thesis. Designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5380. Introduction to Animal-Assisted Counseling.**

Animal-assisted counseling (AAC) is a goal-directed process in which a trained therapy animal works in partnership with a counselor to help clients resolve psychosocial challenges and achieve growth. This course will provide an introduction to the AAC field, the human-animal bond, evidence-based research in AAC, and positive training approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5381. Sandtray Therapy Methods.**

This course provides students with the philosophical basis for sandtray therapy as a therapeutic intervention for children and families, including a review of its history, applications, techniques, stages, and ethical issues. Didactic and experiential methods are used. Prerequisite: COUN 5369 with a grade of "B" or better. Corequisite: COUN 5389 or COUN 5689 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5389. Site-Based Internship.**

This course is an on-site practicum-internship occurring in a school or agency setting with supervision by on-site and university supervisors. It may be repeated based on the recommendation of the counseling faculty. Prerequisites: COUN 5689 with a grade of "CR" and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COUN 5391. Research Methods.**

This course provides an understanding of research methods and design, statistical analysis, needs assessment, and program evaluation relevant to the field of professional counseling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5394. Counseling Women.**

This elective course involves student exploration of gender in historical, social, and global contexts with emphasis on counseling approaches and interventions specific to the concerns of women and girls. Topics include gender development, gender socialization, sexuality, career and family, violence against women, body image concerns, and overall women's mental health. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**COUN 5395. Foundations of Trauma and Crisis Counseling.**

The course offers an introduction to principles of trauma counseling and crisis interventions. Topics include the neurobiology of trauma, diagnosis of trauma-related mental health concerns, and best practices related to trauma-informed counseling and crisis intervention addressing symptomatology of individuals, families, and communities directly or secondarily affected by crisis and trauma.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**COUN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in COUN 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**COUN 5689. Clinical Practicum.**

This practicum involves providing supervised counseling services to clients in university-affiliated counseling clinics and a staffing seminar. It may be taken up to three times (18 credit hours) based on the recommendation of the counseling faculty. Prerequisites: COUN 5358 and COUN 5369 and [COUN 5360 or COUN 5366 or COUN 5370 or COUN 5373] all with grades of "B" or better and instructor approval.

**6 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**COUN 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CJ 1310. Introduction to Criminal Justice.**

History and philosophy of criminal justice: ethical considerations, crime defined, overview of criminal justice system, law enforcement, court system, prosecution and defense, trial process, and corrections.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** CRIJ 1301

**CJ 2310. Police Systems and Practices.**

Police profession: organization of law enforcement systems, the police role, police discretion, ethics, police-community interaction, and current and future issues. Prerequisite: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** CRIJ 2328

**CJ 2350. The Courts and Criminal Procedure.**

Judiciary in the criminal justice system: structure of American court system, prosecution, right to counsel, pre-trial release, grand juries, adjudication process, types and rules of evidence, and sentencing. Prerequisite: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** CRIJ 1306

**CJ 2355. Correctional Systems and Practices.**

Corrections in the criminal justice system: organization of correctional systems, correctional role, institutional operations, alternatives to institutionalization, treatment and rehabilitation, and current and future issues. Prerequisite: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** CRIJ 2313

**CJ 2360. Fundamentals of Criminal Law.**

A study of the nature of criminal law: philosophy and historical developments, major definitions and concepts, classification of crime, elements of crimes and penalties using Texas Statutes as illustrations, and justifications of and defenses to criminal responsibility.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** CRIJ 1310

**CJ 3300. Juvenile Justice.**

A study of the juvenile justice process to include both the specialized juvenile law and the role of the courts, police and corrections in juvenile justice. Prerequisite: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 3322. Race, Ethnicity and Criminal Justice.**

This course examines the relationship between race/ethnicity and the criminal justice system. Theories of race/ethnicity and crime, the criminal justice system, and social systems including media, politics and economics are examined to form a comprehensive understanding of the social construction of race as it pertains to a racially disproportionate system. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CJ 3323. Mid-Level Management in Criminal Justice Agencies.**

Introduction and overview of the organizational theories of classical behavioral, and systems management concepts. Included in the course content are analyses of the functions of management in modern CJ organizations, internal and external environmental factors, individual & group dynamics, motivation, and leadership styles. Prerequisite: CJ 2310 or CJ 2355 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 3325. Incarceration in America.**

This course focuses on the role of the institution in the process of incarceration including the philosophy of imprisonment, the inmate subculture and special problems and programs in institutions. Prerequisite: CJ 2355 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 3329. Forensic Evidence.**

Investigator's role in collecting, preparing and presenting evidence in criminal trials. Special attention will be given to electronic evidence in addition to traditional physical evidence. Prerequisites: CJ 2350 and CJ 2360 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 3346. Research in Criminal Justice.**

This course covers the analysis of criminal justice research, survey methods, and the utilization of research in criminal justice. (WI) Prerequisite: CJ 1310 and [ISAN 1323 or CS 1308] and [CJ 3347 or PSY 2301 or SOCI 3307] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CJ 3347. Statistics For Criminal Justice.**

This course focuses on the theory and application of statistical inferential techniques and correlation and regression for behavioral science data and its applications in Criminal Justice. Emphasis is placed on the collection, analysis, and interpretation of statistical data in criminal justice settings. Prerequisites: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4301. Internship I.**

Field service training in public and private criminal justice agencies at the federal, state and local levels. The internship is designed to provide actual work experience, observation, and analysis in the student's chosen career field. (WI) Prerequisite: CJ 2310 and CJ 2350 and CJ 2355 and CJ 2360 and CJ 3346 and minimum 2.25 Texas State GPA and minimum 2.5 Major GPA.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Credit/No Credit

**CJ 4302. Internship II.**

Field service training in public and private criminal justice agencies at the federal, state and local levels. The internship is designed to provide actual work experience, observation, and analysis in the student's chosen career field. (WI) Prerequisite: CJ 2310 and CJ 2350 and CJ 2355 and CJ 2360 and CJ 3346 and minimum 2.25 Texas State GPA and minimum 2.50 Major GPA.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Credit/No Credit

**CJ 4309K. Intelligence Analysis.**

This course provides an overview of the importance of intelligence gathering in the global and domestic war on terrorism, and critically examines issues involved with the gathering of intelligence, techniques for the gathering of intelligence, methods of collecting, collating, analyzing and disseminating intelligence, and a review of current terrorist threats.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 4309L. Gangs and the Criminal Justice System.**

This course offers an introduction to street gangs and crime in the United States. Topics covered include the definition of gangs, gang members and gang activity, the history and development of gangs, the structure of gangs and gang members, the nature of gang activity, theoretical explanations of gangs, and the criminal justice system's response to gangs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 4309M. Active Shooter Response Experiential Learning.**

This experiential learning course connects training to respond to active shooter events to relevant research. Students will complete the ALERRT Level I Active Shooter Response Course, and then examine the research literature that underlies the training with an emphasis on identifying discrepancies and gaps and areas for improvement. Prerequisite: CJ 1310 and CJ 2310 both with grade of "D" or better and instructor approval. Corequisite: CJ 3346 and CJ 3347 both with grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 4309O. Use of Force Experiential Learning.**

This course uses experiential learning to connect use of force training to research. Students examine the research literature, take part in use of force training, and participate in scenarios with an emphasis on connecting their experiences to the literature. The course is physically demanding and involves close personal contact. Prerequisite: CJ1310 and CJ 2310 both with a grade of "D" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 4310. Special Problems in the Criminal Justice System.**

This course is a study of contemporary problems in the administration, management, organization and operation of criminal justice agencies. (Capstone Course). (WI) Prerequisite: CJ 2310 and CJ 2350 and CJ 2355 and CJ 2360 all with grades of "D" or better. Corequisite: CJ 3346 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CJ 4314. Terrorism in the United States.**

Terrorist groups operating in the U.S. are examined with special emphasis on the far-right (militia, Christian identity, neo-nazi, other racist groups). Analyzed are their belief systems and structures, organizational structure, tactics and targets, and weapons. Future trends are discussed, including the threat posed by nuclear, biological, and chemical terrorism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CJ 4316. Treatment in Community and Institutional Corrections.**

This course is a study of community based programs for adult and juvenile offenders, treatment modalities in various correctional settings, administration, legal issues, and future trends associated with community-based and institutional based treatment. Prerequisite: CJ 2355 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4321. Occupational Crime.**

A study of the problems of organized and upper social status criminal activities with emphasis on statutes and their application to fraud, embezzlement, deceptive trade practices and illegal trade practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4323. Special Operation Units in Law Enforcement and Corrections.**

This course introduces students to the basic principles of Special Operations Units (SOU) within criminal justice agencies. Topics include the necessity for such units, the changing nature of communities and policing in America, the principles of crisis management, the development/implementation of SOUs, selection/training/operationalizing of personnel, and types of SOUs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CJ 4325. Media and Crime.**

This course explores the nature of public knowledge of social problems and their solutions related to crime and justice, and the media's role in facilitating those outcomes. Using an interdisciplinary scholarship drawn from a wide range of empirical and theoretical perspectives, the course addresses the relationship between crime, media, and public opinion in an ever evolving media landscape. The course challenges students to think critically and to consider innovative ways to improve the intersection between crime, the media and criminal justice policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4326. Women and Criminal Justice.**

This course explores women's involvement in three primary areas of criminal justice - as victims, criminals and practitioners employed in criminal justice agencies. Topics covered include the impact of sex and gender on criminological theory, sentencing, prison subcultures, victimization and career choices. (MULT) (WI) Prerequisite: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**CJ 4329. Organized Crime.**

Survey of organized crime in contemporary society. Includes attention to crime types and methods, motivation, affiliations, and the effects of this type of criminality. Related legal and law enforcement perspectives will be covered, along with international and cyberspace issues. Prerequisite: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4331. Serial Murder.**

This course covers the phenomenon of serial murder and the police investigative response. Theories, concepts, and law enforcement analytic methods are covered in detail. Emphasis is placed on understanding the reality versus the myth of serial murder, serial killers, and criminal profiling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4332. Advanced Criminal Justice Management.**

A critical analysis of the nature of organizations within the criminal justice system. An analysis of theories of organizations and of organizational changes within law enforcement agencies. An examination of the quantitative data gathered by the Criminal Justice System and its effective use and presentation. Prerequisite: CJ 2310 or CJ 2355 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4334. The Death Penalty in the United States.**

This course examines the contemporary controversies that surround the death penalty, including its administration, modes of execution, disparities in application, deterrent effect, related social/economic costs, impact on international relations, and the potential for miscarriages of justice. The history of the death penalty, including Supreme Court developments, are also reviewed. Prerequisite: CJ 2350 and CJ 2360 both with grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4335. The Psychology of Antisocial Behavior.**

This course examines how psychological perspectives are used to explain antisocial behavior, by drawing on the intersection between theory and research in the following areas of psychology: developmental, child psychopathology, biological, personality, cognitive, and social.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4336. Wrongful Convictions.**

This course examines factors contributing to wrongful convictions and the criminal justice system's response from an interdisciplinary perspective using research from the disciplines of law, criminology, and cognitive and social psychology as a foundation for examining how wrongful convictions occur and might be prevented in the future.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4338. Sexual Offenses.**

This course examines the social and individual mechanisms responsible for the onset, persistence, and desistance of sexual offending using a criminological perspective. The current state of risk assessment, treatment, and responses from the police, community, and legal system are also examined. Prerequisite: CJ 1310 and CJ 2310 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 4340. Crime Theory and Victimization.**

This course examines the causes of crime, crime victimization and competing explanations for crime and the impact of crime on crime victims. The course draws on perspectives advanced by a number of diverse fields of inquiry, for example, biology, psychology, sociology, and the political and economic sciences. (WI) Prerequisite: CJ 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CJ 4350. Contemporary Legal Issues in Law Enforcement.**

An in-depth study of recent developments in criminal law and procedure. Their effects upon the criminal justice agency official in society will be given special attention. Includes specific case studies with emphasis on analyzing factual situations and legal issues. (WI) Prerequisite: CJ 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CJ 4352. Contemporary Legal Issues in Corrections.**

A study of the developing body of law defining the rights and duties of persons confined in penal institutions with equal emphasis on legal issues associated with probationers, parolees, and similar status's within the corrections branch of the criminal justice system. (WI) Prerequisite: CJ 2355 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CJ 4362. Readings in Criminal Justice.**

An individualized readings course tailored to the academic and professional interests and needs of the student. Emphasis is placed on developing in-depth knowledge of selected criminal justice subjects through directed research. Repeatable for credit with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CJ 4363. Independent Studies in Criminal Justice.**

Independent study and research on topics in criminal justice related to a student's primary area of interest. Work may include individual research, critical reviews or integration of existing body of knowledge. Course may be repeated with different emphasis once for credit with approval of department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CJ 4365. Comparative Criminal Justice.**

A survey of the organizational, administrative and philosophical principles of criminal justice systems around the world. (WI) Prerequisite: CJ 2310 or CJ 2355 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CJ 5101. Graduate Assistant Supervision.**

Prepares graduate student teaching and instructional assistants to perform effectively in diverse instructional settings and in their assigned instructional support roles. The course provides for regular and planned opportunities for continuing evaluation of instructional and assistive responsibilities. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CJ 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 5301. Graduate Instructional Assistant Training.**

This course prepares graduate instructional assistants (GIAs) to perform effectively in diverse instructional settings and in their assigned instructional support roles. In addition to familiarizing themselves with essential Texas State University policies and procedures, GIAs will learn about teaching strategies, ethical classroom behavior, and effective communication. This course is required as a condition of employment for GIAs at the School of Criminal Justice and Criminology, and does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CJ 5310. Administration of Justice.**

Introduction to the study of crime; explanations of criminal behavior; typologies of criminal behavior; the criminal justice system; and social reaction to crime and the criminal justice system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5315. Advanced Research Methods in Criminal Justice.**

The study of scientific research methods as used in the criminal justice system to include a review and critique of research on crime causation, law enforcement, courts, and corrections.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5316. Quantitative Data Analysis.**

This course provides an introduction to quantitative data analysis in criminal justice and makes extensive use of statistical software via command line interface. For the purposes of research and exploratory data analysis in criminal justice, topics include data construction and cleaning, variable coding, descriptive and inferential statistics, summary measures, and visual presentations of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5319. Crime Analysis.**

This course focuses on the evaluation, synthesis and dissemination of crime data to multiple audiences. Topics include the identification of local crime trends, the development of usable crime maps, and the assessment of practical police responses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5320. History and Philosophy of Justice.**

An exploration of historical approaches to social control of nonconforming behavior. The principal contributions of architects and theorists of systems of social justice are examined with emphasis on major Western European schools of thought. Special emphasis given to the development of the scientific method and its role in the contemporary system of justice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5321. Current Legal Issues in Criminal Justice.**

Case law and legislation, both state and federal, which have contemporary impact on practices and policies of criminal justice agencies will be examined in this course. Topics may vary to include such matters as civil rights liability, substance abuse and the law, juvenile crime, organized crime, tactics of enforcement, unionization, and other legal issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5322. Police in Society.**

This course provides an in-depth assessment of policing and the various types of community crime control. Core topics include the history of police, organizational and individual police discretion, police culture, use of force, minorities and the police, community oriented policing, and police problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5323. Special Operation Units.**

A course designed to acquaint students with basic principles of Special Operation Units (SOUs) within law enforcement, including the necessity for such units in the changing nature of policing communities. The principles of crisis management, the development of SOUs, selection/training/operationalizing of personnel and other strategic planning issues are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5324. Investigations.**

This course explores issues related to investigations. Topics covered include the history and state of investigations, investigative theory, interviewing, interrogation, polygraph, geographic profiling, serial crimes, and investigative failures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5325. Statistics for Criminal Justice.**

The study of basic and advanced descriptive and inferential statistics, with an emphasis on applications in the criminal justice system will be taught. Focus will be given to various multivariate statistical procedures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5330. Management Principles in Criminal Justice.**

The study of behavior in complex bureaucratic or administrative organizations with an emphasis on organizational behavior, group processes, and the managerial function. Concepts and practices of managing criminal justice agencies within the United States will be stressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5333. Race, Class, and Crime.**

This course addresses issues related to racial/ethnic minorities, socioeconomic status, crime trends, perceptions of crime and criminal behaviors. The social/historical constructions of race and class are covered as well as their intersectionality within the criminal justice system. Topics include racial/ethnic and socioeconomic disparities in offending, victimization, law enforcement and sentencing. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CJ 5334. Sex Offenders and the Criminal Justice System.**

This course explores sex offenders and the criminal justice system, and the issues faced by criminal justice professionals. Recent trends in assessment tools, sex offender treatment approaches, and legal responses to sex offenders are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5335. Advanced Crime Theory.**

This course will develop and apply analytical skills surrounding a wide range of theoretical concepts, assumptions, propositions, and variables aimed at explaining crime-related outcomes. In the process, students will learn how social scientists empirically (i.e., quantitatively and qualitatively) access theory and how theory influences public policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5340. Personnel Practices in Criminal Justice.**

The study of personnel decisionmaking within the criminal justice agency. Topics emphasized will include recruitment and selection, promotion, training, performance evaluation, and human resource allocation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5350. Current Issues in Criminal Justice.**

An in-depth presentation and discussion of vital contemporary issues in criminal justice, including research, process, procedure, and substance. General issues addressed remain constant and specific emphasis will vary depending on changes in contemporary issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5355. Intelligence Gathering and Operational Issues As Applied to Terrorism and Counterterrorism Operation.**

This course provides an overview of the importance of intelligence gathering in the global and domestic war of terrorism, and critically examines issues involved with the gathering of intelligence, techniques for the gathering of intelligence, methods of collecting, collating, analyzing and disseminating intelligence, and a review of current terrorist threats.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5360. Independent Studies in Criminal Justice.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of Criminal Justice. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 5370. Professional Paper.**

Students in the non-thesis option will complete their professional paper while enrolled in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 5380A. Ethics and the Criminal Justice System.**

This special topics course will explore ethical issues that are faced by criminal justice professionals, basic ethical systems, and applications to dilemmas of criminal justice professionals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380C. Drugs in Society.**

This special topics course will explore issues related to the "War on Drugs." Topics covered include theories of addiction, legal and philosophical issues of government response to drug use, and treatment strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380F. Police Problem-Solving Practicum.**

This course applies contemporary police problem-solving tools and techniques (including SARA, COMPSTAT, crime mapping, intelligence led policing and computer enhanced problem solving) to real world problems with practicum problems derived from situations commonly facing police practitioners such as common law enforcement "problems" such as noise abatement, property offenses and traffic violations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380H. Police Problem Solving Methodologies.**

This course addresses police problem solving methodologies. The course covers the history, state, and theory of police problem solving. Emphasis is placed on using problem solving methodologies to address real issues facing the community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380L. Geospatial Intelligence and Geographic Profiling.**

This course addresses the use of geospatial intelligence and geographic profiling in the military and intelligence environments. The course covers the theory, concepts, methods, and analysis of human geographic information. Emphasis is placed on understanding how geospatial knowledge can inform decision making and action plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380N. Applied Research Practicum.**

This course provides structured assistance to students who are preparing for significant independent research projects (i.e. Thesis, Professional Paper) by exposing them to the organizational tools, processes and techniques used by productive scholars. Ideally, students should expect to complete a viable research prospectus by the end of the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CJ 5380Q. Qualitative Research Methods and Data Analysis.**

This course provides students with a detailed and participatory introduction to the principles and use of common qualitative methods and data analysis used in social science research with a particular focus on the field of criminal justice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380R. Criminal Justice Policy.**

This course covers contemporary public policies designed to prevent and reduce crime and criminal offending. There is also an emphasis on different levels of evaluation that should be used to address specific criminal justice issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380S. Criminal Justice Leadership.**

This course provides an examination and critical analysis of the important theories, concepts, and current issues relevant to the field of public leadership in general, and criminal justice agency leadership in particular.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5380T. Crime, Criminal Justice and the Media.**

This course focuses on the relationship between crime, the criminal justice system (CJS), and the media. The role of the media in shaping knowledge about crime- and CJS-related issues is explored in depth, using examples from current events.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 5390. Criminal Justice and Security Internship.**

This course provides students with experiential learning opportunities with selected public and private external employers in the fields of criminal justice and security. The internship promotes the integration of academic and professional experience and provides a deeper knowledge of the issues faced by criminal justice agencies, security firms, and other organizations/companies that respond to crime problems. Prerequisite: CJ 5315 and CJ 5325 and CJ 5335 all with grades of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CJ 5399A. Thesis.**

This course represents a student's initial thesis enrollment. Credit is not awarded until student has completed the thesis in Criminal Justice 5399B.

**3 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CJ 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7199. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**CJ 7299. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7301. Instructional Assistant Supervision.**

This course prepares doctoral students employed as research or teaching assistants to perform effectively in diverse instructional settings. The course provides for regular and planned opportunities for continuing evaluation of students. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CJ 7309. Proseminar.**

This course introduces students to information that is useful to their success as Ph.D. students and after graduation. Topics include the criminal justice discipline, teaching, publishing, grants and fellowships, writing dissertations, and post-doctoral employment. Emphasis is placed on identifying and coordinating opportunities for research and scholarship among faculty and students. Must have completed 12 hours of doctoral credit in Criminal Justice to enroll in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7310. Philosophy of Law, Justice, and Social Control.**

A current, thorough, and comprehensive review of the criminal justice system focused on how the system functions, and its current needs and future trends. Students submit extensive critiques and participate in panel discussions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7311. Advanced Criminological Theory.**

An overview of the major criminological paradigms is presented focusing on the causes of crime and deviant behavior. The course includes a discussion of criminological theories from a philosophy of science perspective focusing on such issues as theory construction, theoretical integration, and the formal evaluation of theory and policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7313. Race and Ethnicity in Crime and Criminal Justice.**

An exploration of how issues related to racial and ethnic minorities and criminal behaviors impact criminal justice reactions. Topics include racial disparities related to law enforcement and sentencing, and policy implications related to policing, probation, pre-sentencing and post-release issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CJ 7314. Policing.**

This course examines current problems in American policing and the role of research in their examination and solution. Official crime and victimization statistics and measure of police performance are explained, with a focus on their collection, development, limitations, and utility. Methods and issues in policing research are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7315. Corrections.**

This course examines the history, forms, and functions of correctional institutions, their programs and policies, as well as theories of punishment. Topics include the structure and functions of prisons and jails, community corrections, intermediate sanctions, reentry, supermax prisons, and the death penalty.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7320. Quantitative Research Methods.**

A course that demonstrates the practical aspects of conducting criminal justice research that uses quantitative methodologies and design. Topics include the philosophy of science; research ethics; methodological designs in establishing causation; nonexperimental/descriptive research; sampling techniques; secondary data sources and data gathering techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7321. Linear Regression for Criminal Justice Research.**

Instruction on the use of advanced linear modeling techniques in criminal justice research is addressed. After completing this course, students should be able to evaluate quantitative research articles in the major criminal justice journals and be prepared to complete a major quantitative research project of their own.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7322. Advanced Research for Planning and Evaluation.**

An introduction to evaluation and research design methodologies, assessment techniques including modeling and case studies, agency management issues, and on-going policy implications. Course gives students an understanding of the principles and techniques commonly used to evaluate the effectiveness and efficiency of criminal justice interventions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7323. Applied Statistics and Quantitative Data Analysis.**

This is a course in statistics and data analysis for the purposes of original quantitative research. Topics include descriptive statistics, statistical inference for single and multivariable analysis, and principles underlying the techniques. This course makes extensive use of statistics software and data preparation techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7330. Qualitative Research Methods.**

A discussion of the methods and techniques used for achieving interpretable qualitative results in social research. Topics covered include ethnography, focus groups, in-depth interviewing and case studies. Students will be trained in inductive reasoning and coordinating qualitative with quantitative methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7331. Law and Behavioral Science.**

A review of the issues addressed in the application of the behavioral sciences to the criminal law system. Topics include criminal sanctions and diminished responsibility, civil commitment, victimology, psychology in the courtroom, the role of media, drugs, and alcohol to violence, and how the justice system reacts to violent offenders.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7336. Survey Research Methods for Criminal Justice.**

This course addresses the procedures and techniques used to create social surveys including question formulation, metrics, and question scaling. Students learn how to prepare face-to-face, telephone, and mail surveys, and are trained in sampling procedures related to survey administration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CJ 7350A. Forecasting, Trend Analysis, and Data Interpretation.**

A review of quantitative approaches to public policy analysis, the diverse conceptions of the goals and objectives that should be served by policy, and the appropriate role of the policy analyst. Policy consequences are traced to indirect and subtle incentives and disincentives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350B. Academic Scholarship and Communication.**

A course on conducting academic research, interpreting results and how to prepare manuscripts for publication in refereed journals. Included is a survey of the audiences, topical focus, and submission requirements of the major criminal justice, criminology, and law publications, along with specialized knowledge on achieving success in the scholarship environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350C. Qualitative Data Collection, Coding and Analysis.**

This course takes a structured approach to understanding and implementing the various information collection methods used in qualitative research, including formatting the information for coding, coding schemes, and information interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350E. Discrete Multivariate Models.**

This course focuses on regression models for discrete outcome variables, sometimes called limited or categorical dependent variables. Topics include maximum likelihood estimation, binary and multinomial logistic models and negative binomial models. Prerequisite: CJ 7321 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350F. Environmental Criminology.**

Crime distributes unevenly in space/time. As such, the course examines such questions as (1) What places are dangerous? (2) Why do we study specific crime types? (3) Where do crime types concentrate? (4) Where do offenders go in their normal activities? (5) What are the temporal patterns for crime? Prerequisite: CJ 7311 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350G. Seminar in Macro Criminology.**

This course has a macro focus, examining criminological theory and research that takes cities, geographical regions, states, and nations as the units of comparison. The importance and relevance of macro criminology for understanding the causes of crime and key criminal justice issues, such as police resources, are explored in depth. Prerequisite: CJ 7311 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350I. Introduction to Structural Equation Modeling.**

The course provides an introduction to structural equation modeling, which is sometimes called mean and covariance structure analysis or latent variable analysis. Topics include recursive and non-recursive models, path analysis, measurement models, and factor analysis. Prerequisite: CJ 7321 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350K. Criminal Justice Forecasting and Policy Analysis.**

This course examines the inputs and outputs of criminal justice programs. It covers forecasting methods using statistical bootstrapping techniques including line fitting methods, moving averages, cohort propagation matrixes, and systems simulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7350L. Sex Offenders: Theory, Research & Policy.**

This course will focus on application of theory to explain sexual offenses, research design issues related to researching this salient population of offenders (e.g., ethical issues, gaining IRB approval, research design limitations, social desirability problems in self-report data, and examining available data sources), and examining policy related issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CJ 7360. Independent Study.**

Students will work closely with a particular doctoral faculty member and develop in-depth knowledge in a specific topic area of criminal justice. Topics vary according to a student's program needs. Repeatable once for credit with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7399. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7599. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7699. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CJ 7999. Dissertation.**

Original research and writing in criminal justice to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**CI 2310. Education for Change.**

In this course students will increase their understanding of education, teaching, and learning from a social justice perspective. They will learn about pedagogy as a form of cultural politics and how teachers serve as cultural workers. The course also includes a survey of learning theories and the foundational knowledge bases for schooling, teaching, and learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** EDUC 1301

**CI 2311. Education and Equity in a Diverse Society.**

This course will examine elementary education from a sociocultural, sociopolitical, and sociohistorical lens to reveal the need for equity in the current American schooling system. Students will question, analyze, and evaluate key issues and connections between schooling, community, society and policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 2355. STEM in Early Childhood and Elementary Education.**

This course provides an overview of STEM (Science, Technology, Engineering, Mathematics) teaching and learning, including science and engineering practices. Students will participate in and learn how to facilitate asset-based, culturally responsive, inclusive, inquiry-based, and design-based learning experiences that promote the STEM literacy and identity of early childhood and elementary students. Prerequisite: [PHYS 1310 or PHYS 1315 or PHYS 1320 or PHYS 1325 or PHYS 1360 or PHYS 1365 or PHYS 1370 or PHYS 1410 or PHYS 1420] and [GS 2310 or GS 3310 or GS 3320 or BIO 1320 or BIO 1330] both with grades of C or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 3300. Middle School Curriculum and Instruction.**

Overview of developmentally appropriate curriculum adhering to state and national standards for grades 4-8. Includes the application of learning theory in a safe classroom environment with a focus on cooperative learning, direct instruction, discovery learning, technology, and learner-centered instruction. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. (WI) Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CI 3322. The Design and Application of Curriculum in School Settings.**

This course focuses on design and application of curriculum including content, instructional methodologies, assessment, data-informed decision making, and technology integration. Students will apply foundational theories of human development, learning, and social justice as they focus on the organization of content, instructional planning, classroom environment, and assessment. Prerequisite: A minimum 2.75 overall GPA and departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**CI 3325. Adolescents and Society.**

This course involves a study of contemporary biological, cognitive, and psychological theories and processes of adolescence that prepares prospective teachers to understand abilities, behaviors, and needs of learners and teachers within the context of teacher-student relationships. Roles of family, peer groups, and culture are examined with the aid of contemporary adolescent literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 3332. Foundations of Bilingual and ESL Education.**

This course examines the rationale, history, and philosophy of bilingual and ESL education and develops students' understanding of the cultural and psychological influences that mediate the learning process. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisites: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental approval. (MULT & MULP).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 3338. Social Studies in the Elementary and Middle School.**

The course provides learner-centered approaches to social studies knowledge, instruction, equity, communication, and professional development and prepares educators with strong foundations for powerful social studies teaching and learning practices including: (a) deep understanding/appreciation, (b) increased awareness of non-traditional approaches, (c) practical methods and applications, and (d) daily integration into teaching. Prerequisite: A minimum 2.75 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 3340. Teaching for Linguistic Diversity.**

This course provides pre-service content-area teachers a foundation to address the needs of multilingual learners in their classes. The course includes fundamental knowledge about language and communication, language acquisition, differentiated instruction and assessment, and ESL program types for pre-service teachers to implement appropriate and effective strategies to support the academic success of English learners. Prerequisite: CI 2310 or CI 2311 with a grade of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 3632. Foundations, Methods, and Materials for Teaching ESL in the Content Areas.**

This course examines the rationale, history, and philosophy of bilingual and ESL education and develops students' understanding of the cultural and psychological influences that mediate the learning process. Students will develop expertise in the content, methods, and materials of elementary ESL classroom instruction, including curricula and strategies for meeting the needs of English language learners in academic content areas. This course includes a field-based experience in a local elementary school that requires prior admittance into the Educator Preparation Program. Prerequisite: Admittance into Educator Preparation Program and Overall GPA 2.75 and [CI 2311 or CI 2310] and ECE 4300 both with a grade of a "C" or better.

**6 Credit Hours. 6 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CI 4270. Residency-Based Building Relationships in the Secondary Classroom.**

This course focuses on the development of appropriate classroom relationships based on current theory and research. This includes culturally responsive practices, social emotional practices, positive behavior interventions and supports, analysis of legal and ethical issues as they relate to classroom relationships, and field experiences in a variety of secondary environments. As this is part of a multi-course, residency-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Department Approval.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CI 4272. Residency-Based Teaching in Communities.**

This course will engage students in collaborative critical analysis and development of culturally responsive practices to respond to the educational needs of diverse learners in communities. Data-driven practices will be used to discuss issues of equity and access as well as to develop the ability to make evidence-based curricular choices. As this is part of a multi-course, residency-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental Approval.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CI 4300. Middle Level Philosophy and Schooling.**

Physical, social, emotional, cognitive, and moral characteristics of young adolescents in contexts of family, community, school, society. History and philosophy of middle school as a developmentally appropriate environment for young adolescents. Continued study of instruction that is affectively and cognitively appropriate for young adolescents. (WI) Prerequisite: A minimum 2.75 overall GPA and departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**CI 4325. Classroom Management and Teacher-Student Relationships.**

This course will focus on classroom management theories and models. Personal philosophy, beliefs, and style of teaching will be examined as they relate to the various methods of classroom management, student discipline, and teacher-student relationships. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CI 4332. Secondary Teaching: Curriculum and Technology.**

This course investigates secondary curriculum, its history, organization, development, and representation in instructional materials. Students learn how curriculum is decided, impacted, and assessed, and the role of technology in curriculum. Topics include local, state, and national standards, trends, and roles of culture and technology in teaching and learning. Junior classification required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 4338. Social Studies Curriculum & Pedagogy for the Middle School.**

This course examines how the teaching of social studies is informed by theory and research. In this course students will analyze the foundations of social studies as a discipline, social studies curricular issues, social studies pedagogy, controversial issues pedagogy, and the construction of conceptual, inquiry-based units. (MULT) (WI) Prerequisites: 2.75 Overall GPA; Junior classification; must be declared as seeking 4-8 grade teacher certification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**CI 4343. Instructional Strategies for the Secondary Teacher.**

This course focuses on research-based instructional strategies to engage diverse secondary student populations in rigorous and relevant learning. Preservice teachers develop instructional decision-making skills by creating, implementing, and reflecting on lesson plans that integrate technology and assessment of learning. Prerequisite: CI 2310 and CI 3325 and CI 4332 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 4345. Teaching Mathematics to Diverse Children in Early Childhood through 2nd Grade Classrooms.**

This course provides opportunities to develop knowledge and skills to elicit, understand, and extend children's thinking from early childhood to second grade. Through directed field experiences, students will participate in problem-solving and assessment practices that support inclusive, culturally sustaining mathematics teaching to racially, linguistically, and socioeconomically diverse children. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and MATH 2311 with grade of "C" or better. Corequisite: ECE 4310 or ECE 3610 or BILG 3332 or BILG 4325 with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter



**CI 4348. Teaching Mathematics to Diverse Children in EC-6th grade classrooms.**

This course focuses on providing instruction on and assessing the mathematical thinking of racially, linguistically, and socioeconomically diverse children in early childhood through sixth grade. Through directed field experiences, students will participate in problem-solving and assessment practices that support inclusive and evidence-based mathematics instruction. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and MATH 2311 with grade of "C" or better and 2.75 Overall GPA and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CI 4350. Teaching Mathematics to Diverse Children in 3rd - 6th Grade Classrooms.**

This course focuses on understanding and using children's mathematical thinking to inform teaching in third to sixth grade. Through directed field experiences, students will participate in problem-solving and assessment practices that support inclusive, culturally sustaining mathematics teaching to racially, linguistically, and socioeconomically diverse children. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and CI 4345 with grade of "C" or better and Departmental Approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 4351. Middle School Mathematics Methods Course.**

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions). Prerequisites: 2.75 Overall GPA; Junior classification required; must be declared as seeking 4-8 grade teacher certification; MATH 1315 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 with grades of "C" or better must be earned in all prerequisites.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 4355. Science in Elementary Education.**

Course provides an overview of science standards and content, research-based science pedagogy, and the scientific process skills required for a developmentally appropriate, inquiry-driven science curriculum that facilitates the development of scientific literacy for all students, including second language learners. Prerequisite: [PHYS 1310 or PHYS 1315 or PHYS 1320 or PHYS 1325 or PHYS 1360 or PHYS 1365 or PHYS 1370 or PHYS 1410 or PHYS 1420] and [GS 2310 or GS 3310 or GS 3320 or BIO 1320 or BIO 1330] and CI 2355, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 4360. Methods and Materials for Teaching ESL in the Content.**

This course addresses content, methods, and materials of elementary ESL classroom instruction, including curricula, strategies, and materials for meeting the needs of English language learners in all academic content areas. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. (MULT & Mulp) Prerequisites: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 4370. Building Relationships in the Secondary Classroom.**

This course focuses on the development of appropriate classroom relationships based on current theory and research. This includes culturally responsive practices, social emotional practices, positive behavior interventions and supports, analysis of legal and ethical issues as they relate to classroom relationships, and field experiences in a variety of secondary environments. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 4372. Teaching in Communities.**

In this course students will engage in critical analysis and development of culturally responsive curriculum for their content and their pedagogical content knowledge. They will develop critical analyses of the educational community from cultural, historical, and social standpoints in order to more effectively respond to the educational needs of diverse learners in communities. Data-driven practices will be used to discuss issues of equity and access as well as to develop the ability to make evidence-based curricular choices. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**CI 4378. Problems in Education.**

Individual problems related to areas of selected study for the undergraduate student, designed to meet individual differences for the purpose of certification. A letter following the course title on the permanent record will indicate the area of emphasis according to this code: (i) Elementary, (j) Secondary, and (l) Bilingual. Repeatable for credit with different emphasis. Prerequisite: Admittance to the Educator Preparation Program; 2.75 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5301. Methods for Teaching Middle School Mathematics.**

This course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5302. Practical Statistics for Educators.**

This course uses graphical and numerical techniques to explore school related data, characterize patterns, and describe departures from patterns. The study of statistics will allow teachers to critically evaluate students, their teaching, and the results of educational research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5303. Teaching Math in the Elementary School.**

This course is an in-depth study of the mathematics content and methodology derived from principles of learning and research. The course will explore the skills needed in cooperative planning, provide methods of organizing mathematical principles into lessons for pupils, and examine techniques for evaluating pupil progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5304. Science, Technology, Engineering, and Mathematics for Elementary Teachers.**

The importance of problem solving in elementary mathematics and science is explored. Class activities emphasize the role of mathematics in collecting, recording, analyzing, and communicating scientific observations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5305. Methods in Geometry for Elementary Math Teachers.**

This course focuses on study of congruency, similarity, transformations, coordinate geometry, and measurement using cognitively guided instruction. Van Hiele's model will be used, and the importance of modeling relationships with and without technology will be taught. This course is designed for elementary school teachers with a mathematics specialization. Justification: This course addresses competencies required for this certificate as delineated by the Texas Education Agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**CI 5307. Probability and Statistics Methods for Elementary Math Teachers.**

This course for elementary math teachers covers graphical and numerical techniques to explore data and describe patterns and departures from patterns using cognitively guided instruction. The course focuses on statistical inference, making and evaluating predictions, and designing problems to solve using the theory of probability and its relationship to sampling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5308. Emerging Frameworks for Gifted and Talented Education.**

This course focuses on emerging frameworks for gifted and talented education, including practical applications for teaching practices, program policies, and what a gifted education could be.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5309. Rethinking Talent and Transformation.**

In this course, students rethink talent and transformation in school and community contexts using various practices, frameworks, and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5310. Creativity: Theories, Research, Practices, and Issues.**

In this course, students examine creativity in relation to associated theories, research, practices, and contemporary issues. Relationships between creativity and topics such as education, everyday life, and social change are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5311. Practicum in Talent Development.**

This course is a capstone course in which students develop and apply knowledge and skills in talent development in an educational setting. Prerequisites: CI 5310 and CI 5308 or CI 5309; CI 5319 or CI 5383; and one of the following: CI 5324 or CI 5359 or CI 5368, all with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5312. Elementary Language Arts: Current Trends.**

A study of current trends in methods of instruction in the language arts, a study of research findings, and an examination of selected media and materials. Also identifies the relation of language arts to other aspects of the elementary school curriculum and the most effective diagnostic techniques for the language arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5313. Research Seminar in Human Growth and Development.**

Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual students according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affective processes, and peer relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5314. Human Growth and Development II.**

For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual students by a direct study of individuals in the classroom; emphasis on increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5315. Coaching Skills for Elementary Math Mentors.**

This course focuses on using guidance and feedback to help teachers improve math instruction. Specific attention is given to roles and responsibilities of math content coaches, including their function in coaching a professional learning community, and the roles of math mentors in helping new and experienced teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5316. Problem-Solving, Reasoning, and Modeling for Elementary Math Teachers.**

This course examines numerical reasoning and problem-solving with particular attention to heuristics, strategies, and modeling. Students will learn methods for mental computation and computational estimation, and algorithmic processes. The course is for elementary math teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5317. Teaching Strategies for Elementary Teachers: Alternative Models.**

Alternative teaching models based on learning theory. Course designed to assist the elementary teacher in selecting appropriate strategies for meeting student learning styles and to broaden the scope of elementary school methodology. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5319. Social, Emotional, and Cultural Contexts of Gifted and Advanced Development.**

This course explores social, emotional, and cultural context issues related to precociousness, creativity, and high performance in children and adolescents, with an emphasis on practices in school environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5322. Middle School Instructional Strategies and Practices.**

Course topics include middle school curriculum, state and national standards, developmentally and culturally responsive instructional strategies, assessment, and classroom management. Students are required to complete 30 clock hours of field experience in 4-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5323. Middle School Philosophy and Learning.**

Middle school philosophy focusing on young adolescents' cognitive, emotional, social, and physical needs. Instructional delivery strategies and assessments that are developmentally responsive and adhere to state and national standards. Positive learning environments that include family and community collaboration. Philosophical and historical foundations of the middle school movement. Prerequisite: CI 5322.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5324. Systems and Models for Gifted and Talented Education.**

This course examines systems, organizational models, strategies and assessment approaches that facilitate gifted and talented education in K-12 school settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5325. Comparative Education Systems.**

This course will compare global educational systems with the American education system. Students will observe classes, interview non-American educators and students, analyze research, and teach lessons in a school outside of the U.S. context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5326. Curriculum & Management in the Elementary & Middle School.**

Course topics include principles of curriculum development, the EC-8 curriculum, lesson and unit planning, instructional strategies that promote student learning, and classroom management. Students are required to complete 30 clock hours of field experience in EC-8 school settings. Prerequisite: Admittance to Educator Preparation.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5327. Principles and Practices in the Elementary School.**

Defines and interprets the newer trends in elementary school practices; the philosophy and objectives of the elementary school, and procedures for implementing these objectives; classroom organization and management; the principles of unified learning as applied to school experiences, procedures for planning and developing experiences, meeting individual needs, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5328. Elementary Social Studies: Curriculum Problems.**

Development and purposes of the social studies curriculum; contributions of the social sciences to the social studies curriculum; relation of the social studies to the total elementary program; curriculum construction, supervision, and evaluation; current issues and trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5329. The Elementary School Science Curriculum.**

An intensive study of the philosophies of discovery and inquiry as they relate to the elementary school science curriculum; laboratory experiences related to the objectives, content, methods, and materials of selected innovative programs. Examples: Inquiry Development Program, Elementary Science Study, Science-A Process Approach, Introductory Science Study, Science Curriculum Improvement Study, Minnesota Mathematics, and Science Teaching Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5330. Multicultural Teaching and Learning.**

Course topics include multicultural education theory and principles; research; current issues and trends; culturally responsive curriculum, teaching methods and materials, and teaching English language learners. Students will explore their cultures and other cultures to develop knowledge and sensitivity needed to teach in a multicultural multilingual society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5332. Multicultural Teaching and Learning of Mathematics.**

This course will acquaint students with current learning theories that conceptualize interaction and participation as crucial to learning mathematics in contexts that include English Language Learners (ELLs). Students will make practical/meaningful connections to classroom instruction by designing learning environments that include tools to support ELLs in learning mathematics with understanding. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5333. The Secondary Curriculum.**

A brief history of curriculum development with special emphasis on the Texas curriculum program; basic principles and techniques of curriculum construction and implementation; aims and purposes of the curriculum as a function in perpetuating and improving democratic ideals; and attention to significant research in curriculum development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5336. Methods and Materials for Teaching English as a Second Language.**

Identification and use of English as a Second Language (ESL) material and teaching strategies for teaching ESL as an integrated process including first and second language acquisition. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5337. Language Acquisition and Development.**

This course addresses the foundations for first and second language learning acquisition. Central concepts in child language development with special emphasis on language-minority issues will be presented and discussed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5339. Project-Based Instruction.**

This course will examine a theory driven perspective accounting for how adolescents and young adults learn and how project-based instruction (PBI) may be our best choice for bridging the gap between theory and practice. Students will observe secondary PBI classes, participate in a project and design a PBI unit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340A. Teaching History for Young Learners: Issues, Purposes, and Possibilities.**

This seminar-based course consists of the study of current trends, issues, and pedagogical applications specific to the teaching of history for young learners. The course examines the history of history education, issues in the teaching of history, and how to teach history from multiple perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**CI 5340C. Introduction to Specially Designed Instruction for Students with Disabilities.**

This course covers instructional principles for designing and implementing specially designed instruction (SDI) to meet students' individual needs. This course prepares students to design, teach, and evaluate a variety of instructional approaches. All approaches have empirical evidence for improving outcomes for students with disabilities, including dyslexia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**CI 5340D. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340E. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5340F. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5350. The Dual Credit Partnership.**

This course analyzes the collaboration between and practices of institutes of higher education and independent school districts that impact dual credit courses offered on secondary campuses. The course content focuses on theoretical, historical and policy contexts of the dual credit partnership, as well as the unique expectations of each institution and the needs of the students they serve. Students will examine curricular and programmatic strategies for implementing effective dual credit partnerships in the K-12 setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5351. Creative Teaching, Learning, and Leading in Advanced/Gifted Education.**

This course focuses on the practical application of creativity research and theories to advanced/gifted education teaching, learning, and leading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5352. Research and Current Topics in Talent Development and Creativity.**

This course focuses on current topics, emerging issues, and recent research related to talent development and creativity, with both theoretical and practical applications. Current topics and specific research approach emphases will vary. The course is repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 5354. Leadership in Gifted and Talented Education.**

This course focuses on leadership in gifted and talented education, including leading through the coordinator role and efforts toward transformative change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5359. Curriculum for Rigor, Depth, and Complexity.**

This course focuses on the understanding and design of K-12 curricula with rigor, depth, and complexity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**CI 5363. Strategies for Improving Secondary Teaching.**

This course focuses on the development and implementation of instructional strategies for the secondary education classroom. Students are required to complete 30 clock hours of field experience in a secondary school setting. Prerequisite: Admittance to Educator Preparation; CI 5333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5364. Advanced Instructional Strategies for Secondary Education Teachers.**

This seminar-based course consists of the study of instructional strategies for experienced secondary education teachers. The course examines the research and theory that correspond to the development and implementation of advanced instructional strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5368. The Politics and Creativity of Being and Becoming.**

This course examines different senses of politics and creativity in relation to contemporary questions of being and becoming. Implications for education, perception, and a different future are explored through research, philosophy, and art. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5370. Classroom Management, Discipline, and Legal Issues.**

Course topics include the development of an appropriate management and discipline system based on in-depth study of current theory and research. Students will study Texas School Law as it relates to classroom teachers and students. Some field work, school and state agency visitation may be required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5371. Advanced Classroom Management: Perspectives and Strategies for the Practicing Teacher.**

This course consists of the study of classroom management strategies for experienced teachers. Students will examine philosophical assumptions, research, and theory that correspond to the development and implementation of classroom management strategies, paying specific attention to the increasing racial, ethnic, language, gender, and social-emotional diversity among student populations. Additionally, it examines local, state, and federal policies that influence classroom management practices. Specific attention will be paid to current trends in the research and their potential impact in the individual classroom. Prerequisite: CI 5370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5372. Philosophical Foundations of Education.**

An overview of the field of educational philosophy as related to the spectrum of human events and the educative process in particular. Designed for master's degree students without previous graduate work in philosophy or philosophy of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5373. Professional Development for Teachers: Models, Research, and Theory.**

This seminar-based course consists of the study of current models, research, and theory of professional development for PK-12 teachers. The course examines the research and theory that informs current models of professional development that are implemented by schools to promote professional growth among teachers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5375. Problems in Elementary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give elementary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5376. Problems in Secondary Education.**

A workshop in innovative techniques or materials offered either on campus or off campus in approved sites. Designed to give secondary classroom teachers college credit for in-service type training; course gives an opportunity for teachers to upgrade their skills and knowledge.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5378. Problems in Education.**

Individual problems not related to Thesis or Research Problems. Designed to place emphasis on selected areas of study. A number following the course title on the permanent record will indicate the area of emphasis according to this code (2) counseling (7) Supervision (8) elementary (9) secondary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5381. Curiosity, Reimagination, and the Radical Imagination.**

In this course, students examine curiosity, reimagination, and the radical imagination in relation to associated research, practices, frameworks, and contemporary issues in schools and society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5383. Mentoring Across the Life Span.**

This course examines mentoring types and processes across the life span, with emphases on mentoring teachers and students in school and community contexts. Talent development purposes for mentoring are included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5387. Bilingual Education: Principles and Practices.**

A study of the current trends in bilingual education and elementary school practices, the philosophy and objectives of the bilingual elementary school program, classroom organization and management, and procedures for meeting individual needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**CI 5389. Action Research for Practitioners.**

This course prepares practicing teachers to conduct action research in educational settings. Students will design and implement an action research project based on a self-selected topic. Prerequisites: CI 5390 and CI 5302, plus 6 credit hours in the major, all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5390. Research Seminar in Education.**

Study of problems in the education of children in the schools. Topics include basic research procedures needed in the preparation of thesis or other research reports and development or skill in reading, analysis, and application of educational and behavioral research. A research paper is required of each student. CI 5390 must be completed prior to the semester of the comprehensive exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 5392. Inclusive and Responsive Learning Environments in the Secondary Classroom.**

This course focuses on approaches and strategies secondary teachers use to effectively manage instruction in the classroom. Specific issues related to adolescent development, learning theories, student diversity, and community involvement will be covered. Students will reflect on how these issues inform professional practices such as establishing inclusive classroom communities, managing student behavior and learning, and communicating effectively with parents and colleagues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5393. Content and Instructional Knowledge in the Secondary Classroom.**

This course focuses on frameworks and strategies for designing and implementing effective instruction in secondary classrooms. Topics include standards-based curriculum design, content literacy, collaborative learning, and student motivation. Students will also discuss evidence-based best practices for effective instruction and learning in secondary content areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5394. Assessment, Differentiation, and Reflection in the Secondary Classroom.**

This course focuses on approaches to and strategies for assessing student learning needs and outcomes, and reflecting on teaching practices in the secondary classroom. Topics include differentiating instruction for diverse student populations, analyzing teacher feedback and student assessment data to inform future instructional choices, and reflecting on teaching practices for professional growth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5395. Capstone for Education Students.**

This course focuses on the research and theories that correspond to effective teaching, professionalism, and professional development. Students will analyze their understanding of effective teaching to develop a professional development plan for improving their teaching in the future. Prerequisite: CI 5314 and CI 5333 and CI 5363 and CI 5370 and CI 5390 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Curriculum and Instruction 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**CI 7101. Introduction to the Research Experience.**

This course is designed to introduce students to the program and to the ongoing research activities of its faculty. Emphasis is placed on identifying and coordinating opportunities for joint research and scholarship among faculty and students. Students must enroll in the course for three semesters before dissertation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 7302. Research Methods and Measurement in Education.**

This course provides a comprehensive introduction to educational research with a focus on research design, research methods and methodology, and fundamental measurement issues in quantitative, qualitative, and mixed-methods research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7303. Educational and Psychological Measurement and Assessment.**

Philosophical and empirical foundations of measurement, assessment, testing, and evaluation. Topics include philosophical and mathematical foundations in research; empirical levels and measurement description; test construction; observational rating scales; measurement interpretation; social, legal, and ethical implications; item analysis/refinement for scale performance; reliability and validity evidence; and standardized and placement tests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7310. Teaching in College.**

Teaching strategies for teaching/instructional assistants focused on creating syllabi, adapting to diverse student populations, collaborating with colleagues and staff, implementing active learning strategies, fostering assigned reading, assessing learning, and integrating technology. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**CI 7326. Grant Development and Management.**

This course focuses on developing competitive grant proposals and understanding grant management resources. Strategies will encompass locating funding sources, evaluating proposals, developing proposals and budgets, and methods of meeting accountability requirements.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7351. Beginning Quantitative Research Design and Analysis.**

This course introduces students to quantitative research design and analysis. Topics include descriptive statistics; sampling techniques; statistical inference, including the null hypothesis, significance tests, and confidence intervals; and causal-comparative analyses, including t-test and ANOVA. Corequisite: CI 7302 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**CI 7352. Beginning Qualitative Design and Analysis.**

This course introduces students to the qualitative paradigm. Topics include distinctive features, alternative qualitative traditions, purposeful sampling, common data collection methods, inductive analysis, the role of the researcher, and evaluation of qualitative research. Corequisite: CI 7302 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7353. Intermediate Quantitative Research Design and Analysis.**

This course focuses on intermediate quantitative research design and statistical methods of data analysis related to problems in education, psychology, sociology, and biological sciences. The general linear model based univariate and selected multivariate statistical techniques are examined including theory/purpose, logic, practical implications, and interpretation of various analytic techniques. Prerequisite: CI 7351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7354. Intermediate Qualitative Design and Analysis.**

This course focuses on issues in design and implementation of qualitative research. Topics include influence of alternative traditions, literature in qualitative research, access to the field and ethical issues, researcher-participant relationships, purposeful sampling strategies, inductive analysis procedures, developing theory, and reporting research. Prerequisite: CI 7352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7355. Mixed Methods in Research and Evaluation.**

This course will cover mixed methods research designs that can be used in the evaluation of educational interventions and programs. Topics include mixed methods research designs, program evaluation models, quantitative and qualitative data analysis and interpretation, reading mixed methods research articles, and writing mixed methods research proposals and evaluation reports. Prerequisite: CI 7351 and CI 7352 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7358. Theoretical and Conceptual Frameworks in Qualitative Research.**

This course is intended for those versed in current paradigmatic and epistemological states of human inquiry and presents an opportunity to design a research project and address the major issues of a research career. Prerequisite: CI 7352 and CI 7354 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7359. Seminar in Quantitative Research.**

This course is a small-group seminar that focuses on analytic strategies specific to the doctoral student's dissertation topic. Examples include structural equation modeling, hierarchical linear modeling, log linear modeling, non-parametric analyses, factor analysis, factorial analysis of variance, and other multivariate statistical methods. Prerequisite: CI 7351 and CI 7353 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7360. Designing Educational Research.**

Students identify problems in Developmental Education, develop a strategic proposal to apply to these problems, and create an evaluation plan to assess the implementation of their proposal. Students also develop skills in critiquing research reports and in synthesizing research from Developmental Education. Prerequisite: CI 7353 or CI 7354 or CI 7355 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7378. Independent Study.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in the Department of Curriculum and Instruction. May be repeated for additional credit at the discretion of the program coordinator.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7386. Directed Research.**

Students will participate in an authentic research experience, either by working as part of a doctoral faculty member's research team or developing an original research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**CI 7388. Educational Leadership for Social Justice.**

This course provides an in-depth study of the theories and practices related to educational leadership in PreK-12 educational contexts through a social justice lens. Students will examine current social justice issues in schools and develop strategies for conceptualizing and implementing institutional change that works toward a more equitable education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**CI 7389A. Topics in Instructional Technology.**

This topic offers an in-depth study of systematic instructional design emphasizing the selection and use of appropriate media for delivering instruction to maximize student learning. Special emphasis in this topic is on the leader's role in influencing the use of technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**CI 7389C. Special Topics: Race Theory in Educational Research.**

This course will explore racial theories and paradigms applicable to the study of race in K-20 educational settings. Students will analyze foundational scholarship in the formation of racial theories, research methodology, key tenets of race research, and literature pertinent to current trends in educational research regarding race. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**DAN 1113. Conditioning for Dancers.**

In this course students will study body conditioning exercises and overall wellness. Topics include an introduction to, and practical application of, body conditioning methods based upon principles of functional fitness, in addition to Pilates, Aerobics, and Yoga techniques. Emphasis is placed on anatomical terminology and safe exercise.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 1212. Careers in Dance.**

This course familiarizes incoming students with careers in dance in numerous social, cultural, and professional contexts. The course introduce students to the artistic, philosophical, and cognitive implications of Dance, while examining a variety of dance-related careers.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TCCN:** DANC 2303

**DAN 1260. Jazz I.**

This course focuses on a beginning level of Jazz dance technique. Course content includes application of terminology specific to a beginning/intermediate Jazz technique, performance of movement phrasework, and exploration and application of elements of dynamic performance.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 1280. Ballet I.**

This course focuses on an introductory level of Ballet technique. Course content includes introduction to terminology specific to beginning level Ballet technique, body conditioning, performance and choreographic approaches, and critical analysis skills.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 1290. Modern/Contemporary I.**

In this course students explore beginning level modern and contemporary dance techniques. Topics include introduction to and application of modern and contemporary terminology and somatic approaches to movement. It focuses on body alignment, technical development and proper execution of exercises and combinations, including center combinations, progressions and repertory.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 2115. Pilates I.**

In this course students will be introduced to the Pilates method of body conditioning and an exploration of its six basic principles of Concentration, Control, Center, Fluidity, Precision and Breath. The focus is on the matwork as a study of sound movement principles and body alignment with an application of principles and exercises of the method to dance and sport specific activities. Study of the method emphasizes and encourages the importance of the mind-body connection as it relates Pilates principles to dance training.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 2116. Yoga for Dancers I.**

In this course students will examine Hatha Yoga for dancers with exploration of the asanas (postures), pranayama (breathing techniques), and meditation with an emphasis on mindfulness and relaxation. Students focus on the physical practice and proper alignment, balanced with a somatic understanding of yoga principles and philosophy.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 2201. Dance Composition I.**

In this course students will utilize improvisation as a creative dance technique in designing new movements for choreography. Using current trends in improvisational materials, this course places emphasis on designing original movement, while facilitating students in maintaining aesthetic forms and developing artistic discrimination. Prerequisite: DAN 1290 or DAN 2291 or DAN 3293 any with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TCCN:** DANC 1201

**DAN 2202. Dance Composition II.**

This course explores the basic principles of dance composition as it pertains to solo choreography, and the use of space, dynamics, and rhythm to build artistic compositions. Exploration of crafting materials in authentic expression will be facilitated. Prerequisite: DAN 2201 with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TCCN:** DANC 1301

**DAN 2210. Contact Improvisation.**

In this course students will cover improvisational movement techniques that explore weight-sharing, non-verbal communication, sensory awareness, risk-taking, and physical and emotional trust. Students will gain the physical and perceptual skills to enhance performance in all areas of creative expression. Principles will be applied through movement training, discussion, and performance.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** DANC 1201

**DAN 2261. Jazz II.**

This course focuses on a beginning/intermediate level of Jazz dance technique. Course content includes application of terminology specific to a beginning/intermediate Jazz technique, performance of movement phrasework, and exploration and application of elements of dynamic performance.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 2270. Hip-Hop I.**

In this course students explore hip-hop culture through dance. Course content will include an introduction to the core elements, history, and basic hip-hop dance foundation through physical practice, video assignments, and research.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 2281. Ballet II.**

This course focuses on a beginning/intermediate level of Ballet technique. Course content includes application of terminology specific to a beginning/intermediate Ballet technique, performance of movement phrasework, and exploration and application of elements of dynamic performance.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**DAN 2291. Modern/Contemporary II.**

In this course students study modern and contemporary dance techniques at a beginning/intermediate level. Topics focus on body alignment, technical development, and proper execution of exercises and combinations, including vocabulary and methodologies from several modern dance techniques and contemporary movement practices, exposing students to self and communal awareness.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 2313. Introduction to Fine Arts.**

An introductory course designed to give the student a fundamental understanding of the creation and appreciation of diverse modes of expression through the visual and performing arts. This course may not be repeated for credit by taking ART 2313 or MU 2313 or TH 2313. (MULP) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050|Multicultural Perspective| Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** HUMA 1315

**DAN 2365. Creative Movement for Children.**

This course uses rhythmical movement exploration and creative movement as both an art form and as a teaching tool. Through class activities, students develop effective facilitator skills and incorporate innovative strategies for teaching traditional material in non-traditional ways. (MULT) Prerequisites: DAN 2201 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Multicultural Content

**Grade Mode:** Standard Letter

**DAN 2368. World Dance and Cultures.**

World Dance and Cultures exposes students to the varied and rich traditions of dance in a wide range of historical and cultural contexts. Through lectures, group discussions, video analysis, live performance, movement exploration, and writing projects, students develop a broad appreciation of dance that encompasses a variety of dance practices. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** DANC 1305

**DAN 3111. Dance Activities.**

This course is designed to provide credit for participation in dance activities. It typically involves working on a departmental production.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3115. Pilates II.**

In this course students will study the Pilates method of body conditioning and an exploration of its six basic principles of Concentration, Control, Center, Fluidity, Precision and Breath designed by Joseph H. Pilates. Course content includes a variety of Pilates apparatuses such as the Cadillac, the Reformer, the Chair and the Ladder Barrel and incorporates the use of props such as towels, balls, pillows, rollers, discs and therabands. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3116. Yoga for Dancers II.**

In this course students will explore the material presented in DAN 2116, with the introduction of intermediate level understanding of asanas (postures), pranayama (breathing techniques) and meditation practices of Hatha Yoga. Students practice Hatha Yoga beyond the general scope, providing more in-depth anatomical, physiological, and somatic awareness for dance practices. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3171. Musical Theatre Dance I.**

This course involves the study of dance as it applies to musical theatre performance. It covers some of the styles that make up musical theatre including character dancing, the Charleston, and various ballroom dances. Prerequisite: DAN 2181 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3262. Jazz III.**

This course focuses on an intermediate/advanced level of Jazz dance technique. Course content includes application of terminology specific to a intermediate/advanced Jazz technique, performance of movement phrasework, and exploration and application of elements of dynamic performance. While exploration of movement is central to Jazz III, this course also focuses on body conditioning, investigation of performance and choreography, and development of critical analysis skills.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3271. Hip-Hop II.**

In this course students focus on complex weight shifts, directional and level changes, movement coordination in the vernacular, and musical accuracy. Practice activities are designed to challenge and improve motor skills, while enhancing the knowledge and practice of the proper foundation in form and technique.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3282. Ballet III.**

This course focuses on an intermediate/advanced study of ballet technique. Course content includes application of terminology specific to intermediate/advanced, performance of technical phrase work, and exploration and application of elements of dynamic performance.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3293. Modern/Contemporary III.**

In this course students will study modern and contemporary dance techniques at an intermediate/advanced level. This course focuses on technical development, performance quality, complex movement sequences, center combinations, progressions and repertory.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3330. Dance Curriculum Development.**

This course builds on a requisite knowledge of basic educational theory and lesson plan structure with an emphasis on developing and implementing a successful dance curriculum. Practical and effective strategies for teaching middle school and high school dance will be examined. Prerequisites: [DAN 1260 or DAN 2261 or DAN 3262 or DAN 4263] and [DAN 1280 or DAN 2281 or DAN 3282 or DAN 4283] and [DAN 1290 or DAN 2291 or DAN 3293 or DAN 4293] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**DAN 3331. Theory and Practice of Teaching Dance.**

This course is an introduction to child/adolescent development as it applies to the teaching of codified dance techniques in a dance studio setting. Students in this course study multiple genres, teaching/learning approaches, ability levels, ownership and directing roles, and methods for creating age appropriate lesson plans in Modern Dance, Ballet, Hip Hop and Jazz. Course content includes readings, videos, observations at local studios, peer activities and assignments. Prerequisite: [DAN 1260 or DAN 2261 or DAN 3262 or DAN 4263] and [DAN 1280 or DAN 2281 or DAN 3282 or DAN 4283] and [DAN 1290 or DAN 2291 or DAN 3293 or DAN 4293] all with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DAN 3332. Dance Concert Production.**

In this course students develop skills required to plan and execute dance concerts in standard educational institutions, as well as professional venues. The course will include an introduction to technical theatre and design concepts for performance: lighting, stage management, make-up, costuming, and music selection.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DAN 3340. Dance Touring Ensemble.**

Learning and performing dances from the repertory of current faculty members, artists-in-residence, and from the repertory of historic modern dancers. Dances performed locally and regionally. Enrollment by audition only. May be repeated for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3342. Performance Workshop.**

In this course students will experience being a member of a professional performance company. Students practice learning and retaining complex choreography, rehearsing and creating movement vocabulary, and cultivating an engaging performance presence. Experimentation, technique, and personal expression focuses the shared, collaborative art work created through the rehearsal process. This work is performed in a concert at the end of the semester. Corequisite: DAN 1260 or DAN 1280 or DAN 1290 or DAN 2261 or DAN 2281 or DAN 2291 or DAN 3262 or DAN 3282 or DAN 3292 or DAN 4263 or DAN 4283 or DAN 4293 any with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3345. Screendance.**

In this course students create and edit choreographic work for the camera in video format. The class is geared towards dancers, choreographers, and filmmakers. The course includes analysis and discussion of a selection of international screendance works; as well as applying practical skills in choreography, editing, and camera techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 3350. Dance Team Directing.**

This course is an introduction to dance team directing in middle and high school programs. Students develop skills in choreography, administrative organization, public relations, marketing, finance and communication. Prerequisite: DAN 3330 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**DAN 3368. World Dance and Culture.**

World Dance and Culture exposes students to the varied and rich traditions of dance in a wide range of historical and cultural contexts. Through lectures, group discussions, video analysis, live performance, movement exploration, and writing projects students develop a broad appreciation of dance that encompasses a variety of dance practices and traditions, including religious dance, folk dance, court dance, and social dance. Students develop tools for cross-cultural comparison to better understand the human impulse to dance and the social, political, and cultural conditions that support or repress dance expression.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**DAN 3370. Dance Composition III.**

In this course students will investigate dance composition elements as they relate to group forms, theme, development, and phrase manipulation. Prerequisite: DAN 2202 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**DAN 3380. Business and Marketing for Dance Artists.**

In this course students are introduced to business and marketing concepts geared towards the performing arts. Students will identify and explore how to carefully craft a personal brand and marketing platform that is specifically shaped for the dance community. The basic principles of business practices will form both the foundation of the course as well as the lens through which all classwork is viewed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DAN 3390. Dance in the Community.**

This course combines community service (creating dance for or with non-profit community organizations that serve at-risk populations) with readings, discussions, and collaboration on societal applications of performing arts. May be repeated once for credit when topics vary.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4263. Jazz IV.**

This course focuses on an advanced level of Jazz dance technique. Course content includes advanced technique and performance of movement phrasework, and exploration and application of elements of performance process. While exploration of movement is central to Jazz IV, this course also focuses on critical reflection on jazz choreography, investigation of performance and choreography, and development of conditioning regimen. Prerequisite: Instructor approval.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4271. Dance Internship.**

This course provides hands-on experience and career exploration and development in the dance industry, including but not limited to, arts management, dance studio administration, pre-professional dance company administration and Study Abroad/Study in America administration. This course requires a minimum of 150 hours of off-campus experience, a written agreement with internship coordinator and portfolio of completed work. Dance Internship offers students a professional learning experience that grants meaningful, practical work related to the dance field. Prerequisite: Instructor approval.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4272. Hip-Hop III.**

This course advances the foundation of Breaking and Hip-Hop as a cultural dance form, and challenges the dancers' musicality, form, technique, flow, foundation, finesse, and demands more advanced creativity to discover original movement vocabularies. In this course students explore advanced concepts of original movement creation in the vernacular, complex movement patterns, polyrhythms, seamless directional, level changes and apply a wide spectrum of dynamic qualities into their dance practice. Prerequisite: DAN 3271 with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4283. Ballet IV.**

This course focuses on an advanced study of ballet technique. Course content includes application of terminology specific to advanced performance of technical phrasework, and exploration and application of elements of dynamic performance. This course also focuses on body conditioning, application of performance process, exposure to complex choreographic structures and development of critical analysis skills.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4292. Somatic Principles in Dance.**

In this course students will analyze and perform somatic principles as applied to dance training. Students develop a high level of conceptual mastery and physical skill for their teaching and performing preparation. Prerequisite: DAN 1290 or DAN 2291 or DAN 3293 or DAN 4293 any with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4293. Modern/Contemporary IV.**

In this course students explore advanced levels of modern and contemporary dance techniques. This course focuses on dynamics, performance process and technical development through repertory including and incorporating methodologies from a variety of modern dance techniques and contemporary movement practices.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4330. Dance Kinesiology.**

This course is an experiential study of the human body in rest and in motion. Emphasis will be on the skeletal and muscular systems in consideration of applications to dance performance, teaching and creative processes, and injury prevention and rehabilitation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DAN 4350. Musical Concepts for Dance Performance.**

This course provides dance majors with a working knowledge of the essential vocabulary of music-rhythm, melody, form and harmony, together with an overview of musical styles throughout both time and geography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DAN 4360. Dance Independent Study.**

Designed to give supervised experience to qualified advanced students in dance. Independent study on research problems or actual production problems may be chosen. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4366. Writing and Reading About Dance.**

Surveys dance literature including an opportunity for students to familiarize themselves with resources, current publications, theoretical materials, and professional organizations in dance. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**DAN 4367. Advanced Choreography: Theory and Practice.**

In this course, students engage in choreography, costuming, and lighting design for a group dance of substantial length, justifying artistic choices in an accompanying documented paper. Prerequisite: DAN 2202 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4369. Dance in the 20th and 21st Centuries.**

Exposure to a wide variety of literature in the area of dance, the arts and sciences which specifically address the development of dance as an art-form and cultural phenomena in the 20th and 21st Centuries. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**DAN 4370. Contemporary Issues in Dance.**

This upper-level theory course is designed to provide opportunities to investigate the current moment in contemporary concert dance. Current trends in choreography will be explored in a variety of genres. Culturally relevant themes of gender, sexuality, social justice, commercialism, racism, and beauty will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**DAN 4371. Dance Internship.**

This course provides hands-on experience and career exploration and development in the dance industry, including but not limited to, arts management, dance studio administration, pre-professional dance company administration and Study Abroad/Study in America administration. This course requires a minimum of 175 hours of off-campus experience, a written agreement with internship coordinator and portfolio of completed work. Dance Internship offers students a professional learning experience that grants meaningful, practical work related to the dance field. Prerequisite: Instructor approval.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DAN 4380. Professional Development for Dancers.**

This course prepares students to work as professionals in the field of Dance. They will learn the skills necessary to create a Dance-specific resume and portfolio for use upon graduation, to seek and secure employment, and seek funding for Dance projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DAN 4470. BFA Senior Concert.**

In this course students choreograph, perform, and produce a dance concert, while applying feedback from faculty and peers throughout the process. Students engage in the creative, administrative, and promotional aspects of production. Prerequisite: DAN 3370 or DAN 4367 either with a grade of "C" or better.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DAN 4471. Dance Internship.**

This course provides hands-on experience and career exploration and development in the dance industry, including but not limited to, arts management, dance studio administration, pre-professional dance company administration and Study Abroad/Study in America administration. Prerequisite: Instructor approval.

**4 Credit Hours. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**DE 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5305. Diversity and Education in a P-16 Context.**

This course examines the core theories of diversity in a P-16 context. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to understanding postsecondary diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5321. The Community College.**

Introduction to the community college and to its roles and functions in American education. Special attention will be directed to evolution, development, and patterns of organization, purposes programs, personnel and current issues of the community college. Students take DAE 5383 or DE 5321 may not take DE 7321 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5324. Teaching Learning Strategies and Critical Thinking.**

Theory and pedagogy of learning strategies, problem solving, and critical thinking in the college and adult classroom. Topics will include variables in teaching and learning methods of assessment, and approaches to instructions. Students taking DAE 5371 or DE 5324 may not take DE 7324 for doctoral level credit.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5326. Curriculum Design in Postsecondary Developmental Education.**

This course focuses on principles and processes of curriculum design in postsecondary developmental education contexts. The course scope includes an emphasis on the foundational literature in curriculum theory, as well as historical and current curricular structures and best practices specific to developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5339. Assessment and Evaluation in Developmental Education.**

Foundations of students assessment and program evaluation for developmental education programs. Topics include: quantitative and qualitative classroom assessment; formative vs. summative assessment; test interpretation; social, legal, and ethical implications of assessment; reliability and validity; norm vs. criterion tests; placement test; program evaluation models; as well as formative and summative evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5365. Administration of Developmental Education.**

An overview of the field of developmental education and of the various types of programs designed to meet the needs of the underprepared learner. Special emphasis is on needs assessment, program design, implementation, management and leadership, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5373. Grant Development and Management.**

Course purposes include demystifying grant proposal writing and becoming acquainted with grant management resources. Student will locate funding sources, develop a proposal and budget, and explore accountability issues and processes for funded projects. Emphasis is on optimizing location and use of online grant information and developing professional networks. Students taking DAE 5373 may not take ED 7373 for doctoral level credit.

**3 Credit Hours. 1.5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5375. Learners in Developmental Education Contexts.**

This course provides a profile of the underprepared postsecondary student and an overview of the programs and instructional strategies appropriate for use with that target population. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**DE 5378. Problems in Developmental Education.**

This course is designed to examine topical problems faced by practitioners in developmental education. The topic of the course may change. Course may be repeated for credit with different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5379. Independent Study.**

Individual problems or research topics designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 5384. Internship in Developmental Education.**

Students seeking the M.A. degree must complete a one-semester, 150 clock hour practicum in an institution or agency other than their own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities involving program planning, management, budgeting, and evaluation. Prerequisites: foundation and core courses.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the Thesis 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 7199. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7299. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7301. Understanding Learners in Developmental Education Contexts.**

This course identifies the evolution, characteristics, demographics, and needs of learners in Developmental Education contexts. Emphasis is placed on understanding internal factors, including the cognitive, affective, and psychosocial needs of students, as well as on analyzing external factors, including the social, political and institutional forces that impact learners' educational experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7302. Policy and Politics in Developmental Education.**

This course addresses the policy and politics of planning, funding, implementing, and evaluating Developmental Education programs in postsecondary education. Readings and discussions focus on current and historical issues relevant to addressing the academic needs of educationally disadvantaged students from the perspective of researchers, program directors, policy analysts, and instructors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7303. Teaching and Learning in Developmental Education.**

The course focuses on the institutional development, intellectual development, learner development, and self-development for effective teaching and learning in developmental education. Topics include instructional and learner theories, pedagogies, assessment and evaluation techniques, and best practices for instruction and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7304A. Curriculum Design in Developmental Education.**

This course focuses on principles and processes of curriculum design and implementation in developmental education contexts, including examination of emerging research and issues. The course pedagogy also engages students in independent curriculum research, planning, and problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**DE 7304B. Theory and Research of Digital Literacies.**

This course focuses on understanding the complex relationships between technology, teaching, and learning in varied developmental education environments. Tools and strategies for planning, integrating, and assessing technology-supported instruction are explored within frameworks linking theory to practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**DE 7304D. Transformative Learning.**

This course introduces students to the core principles of transformative learning. The course is a theory-driven, project-based advanced class designed to enable students to develop theoretical perspectives, engage in intensive practice, and understand the use of transformative learning for applications with postsecondary individuals, groups, and organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7304E. Current Topics in Motivation Intervention Research.**

This course focuses on analyzing, synthesizing, discussing, and applying cutting-edge research on various types of motivation interventions in education. Emphasis will be placed on theory, research, and practice in postsecondary educational settings and Developmental Education contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7304F. Current Topics in Strategic and Self-Regulated Learning Intervention Research.**

This course examines cutting-edge research on strategic and self-regulated learning interventions. Emphasis will be placed on theory, research, and practice relevant to postsecondary educational settings, however, students will be encouraged to apply course content to their areas of interest which may be outside of postsecondary educational settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**DE 7305. Diversity in P-16 Educational Contexts.**

This course uses critical multicultural frameworks to trace the evolution of learners in a P-16 educational system. Students in this course examine school practices and policies in an attempt to map the educational trajectory and improve the educational experiences of P-16 students who are underrepresented and underserved. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7321. The Community College.**

Introduction to community college and to its roles and functions in American education. Special attention will be directed to evolution, development and patterns of organization, purposes, programs, personnel and current issues of the community college.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7322. Learning Support Centers in Postsecondary Settings.**

The course explores the learning assistance movement in postsecondary settings including its history, leaders, and current research. Topics include program planning; leadership, organization, and management; human and financial resources; facilities and equipment; legal responsibilities; equal opportunity and access; diversity; ethics; campus and community relations; and assessment and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7323. Academic Support for Students with Learning Disabilities.**

The course focuses on Learning Disabilities (LD) and Executive Function (EF) Disorders and their nature, prevalence, and significance in postsecondary environments. Topics include theories about the origins and nature of LD and EF, development across the lifespan, characteristics of individuals, and approaches to service, delivery and teaching. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DE 7324. Teaching Learning Strategies and Critical Thinking in Postsecondary Contexts.**

This course explores theory and pedagogy of learning strategies, problem solving, and critical thinking skills in postsecondary contexts. Topics include variables in teaching and learning, methods of assessment, and approaches to instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7325. Advising, Coaching, and Mentoring Learners in Postsecondary Education.**

The course will focus on theories and techniques of academic advising, coaching, and mentoring skills for learners enrolled in postsecondary education. Didactic and experiential activities will provide students enrolled in the course with opportunities to learn and practice skill development within these academic support programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7327. Student Motivation and Self-Regulation.**

This course focuses on research-based theories of student motivation and self-regulation. It also highlights practical applications of these theories for students in developmental education and postsecondary contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7380. Managing Developmental Education Programs.**

This course focuses on the theoretical and practical elements of management of Developmental Education programs in higher education. Readings and discussions focus generally on best practices in higher education leadership and specifically on best practices in leadership and management in Developmental Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**DE 7381. Practicum.**

A 150-clock hour, one-semester practical experience in an institution or agency other than one's own; site selection needs approval of program coordinator. Practicum students will participate in leadership activities to include program planning, management, budgeting, and/or evaluation.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**DE 7399. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7599. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7699. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DE 7999. Dissertation.**

Original research and writing in Developmental Education are to be accomplished under direct supervision of the dissertation chair. While conducting research and writing, students must be continuously enrolled each long semester (and in summer semesters as appropriate).

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**DVST 3301. Introduction to Diversity Studies.**

The course is a general, multi-disciplinary and comparative survey of U.S diversity issues. It highlights the traditional minorities, such as African, Latino/a American, Native, and Asian Americans, as well as European American ethnic groups. It also explores issues related to religion, age, sexual orientation, gender identity, and physical ability/disability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**DVST 3320. Introduction to Global Diversity Issues.**

This course provides an understanding of relationship between U.S and other nations in terms of economics, politics, and culture. Students will examine how colonialism shaped developed and underdeveloped nations, investigate grassroots activism in response to globalization and will examine how policies formulation by one country has consequences for other countries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DVST 3325. Social Difference of Groups in Society.**

This course introduces students to theories of social difference, such as race, class, gender, sexuality, age, and disability/ability using a case study analysis of social interactions within complex social, cultural, economic, or political systems. The focus is to explore the role of social institutions and organizations in constructing social difference and to study its impact on people's opportunities. Prerequisite: DVST 3301 with a grade of a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**DVST 5310. Diversity Studies: Theories & Issues.**

Focusing on the four major ethnic groups (Native Americans, African Americans, Mexican Americans, and Asian Americans), this interdisciplinary course introduces critical theories and issues relating to race, class, ethnicity, culture, and other areas of diversity in the United States. The literature component of the course will supplement the theoretical texts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DVST 5320. Global Issues in Diversity.**

Course provides framework for analyzing diversity globally. Examines how globalization acts to shape and re-shape ethnic identity and ethnic antagonism. Course investigates how the shaping and re-shaping of ethnic identity influences immigration policy, reproductive rights, LGBTQ rights, and healthcare delivery. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**DVST 5388. Independent Study in Diversity Studies.**

This course, which is part of an interdisciplinary minor, is open to graduate students on an individual basis by arrangement with the faculty member concerned. The course allows students to conduct research on diversity related topics in various academic fields. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ECE 3610. Early Childhood Education: Teaching and Curriculum in Programs for Young Children.**

This course emphasizes research, program development, and developmentally appropriate teaching strategies, materials and activities for children ages 3-6 and collaboration with families. A critical component will include directed field experiences in observation, participation, problem solving, assessing and teaching in programs for young children. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and ECE 4300 and ECE 4301 both with a grade of a "C" or better. Corequisite: CI 4345 with a grade of "D" or better.

**6 Credit Hours. 5 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 4300. The Languages of Children: Acquisition and Use.**

This course is designed to provide pre-service teachers with pertinent information regarding the development of language and cognition in pre-school and school-aged children. Information regarding language structure, the sequence of development as well as the cognitive and social aspects of language acquisition and use will be included. (MULT) Corequisite: CI 2311 with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ECE 4301. Play in Educational Settings for Diverse Learners.**

This course examines "play" as a fundamental mechanism for learning in schooling and society through historical, sociological, anthropological, and cultural perspectives with a focus on constructive play and sociodramatic play in educational settings. Students will explore equity in children's access to power and voice within play, deconstruct deficit-oriented views of children, examine the impact of play deprivation, and analyze how children acquire powerful cultural tools for problem-solving from home communities. In field experiences students will design inclusive play environments, utilize strategies designed to support and encourage children's play, and observe and document young children as they utilize play-based skills. Corequisite: CI 2311 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 4310. Seminar for Teachers of Young Children.**

This course provides directed field experiences in observation, participation, problem solving, assessing and teaching in programs for young children. In addition to course seminars, students have an approximately three-hour weekly placement in an approved preschool or kindergarten program. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 overall GPA and Departmental approval. Corequisite: CI 4345 with a grade of a "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 4352. Curriculum for Preschool and Kindergarten Children.**

This course emphasizes research, program development, and developmentally appropriate teaching strategies, materials and activities for children ages 3-6 and collaboration with families. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 4380. Independent Study in Early Childhood.**

In-depth study of selected topics of current need or interest in early childhood education. Work due on independent study basis with faculty member and only with permission of department. Repeatable for credit with different emphasis. Prerequisites: Admittance to the Educator Preparation Program; 2.75 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ECE 5318. Advanced Early Child Development: Readiness for Learning and Language Abilities.**

A study of the cognitive, affective, and psychomotor factors bearing on the young child's readiness for learning and acquisition of language. The course includes methods of child study, such as instruction, and practice in using observational techniques and anecdotal records. It includes the design and evaluation of specific readiness activities and guided field experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5319. Curriculum and the Young Child: Early Care and Education.**

This course is designed to investigate the organization and evaluation of curricula designed for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5330. Curriculum and the Young Child, II (Kindergarten).**

Advanced study of curriculum and materials used in educational programs for young children.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECE 5380. Independent Study in Early Childhood.**

In-depth study of selected topics of current needs or interest in early childhood education. Work done on independent study basis with faculty member and only with permission of department. Repeatable once with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECO 2301. Principles of Economics.**

A non-technical study of micro- and macroeconomic principles, including demand and supply, production and cost, market structures, aggregate output and performance of the economy, the business cycle and growth, unemployment and inflation, money and banking, fiscal policy, monetary policy, and international trade and finance. Not for business or economics majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**TCCN:** ECON 1301

**ECO 2314. Principles of Microeconomics.**

This course provides an introduction to the microeconomics of a modern industrial society. Emphasis is placed on supply and demand, cost and price concepts, market structures, income distribution, and similar issues.

**Prerequisite:** MATH 1315 or MATH 1319 or MATH 1329 or MATH 2331 or MATH 2417 or MATH 2471 any with a grade of "D" or better or ACT Mathematics score of 27 or better or SAT Mathematics score of 580 or better or SAT Math Section Score 600 or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**TCCN:** ECON 2302

**ECO 2315. Principles of Macroeconomics.**

This course provides an introduction to the macroeconomics of a modern industrial society. Emphasis is placed on the analysis of national income, economic stability, fiscal policy, money and banking, economic growth, and international trade. **Prerequisites:** [AG 2383 or ECO 2314 either with a grade of "D" or better] and [MATH 1315 or MATH 1319 or MATH 1329 or MATH 2331 or MATH 2417 or MATH 2471 any with a grade of "D" or better or ACT Mathematics score of 27 or better or SAT Mathematics score of 580 or better or SAT Math Section Score 600 or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**TCCN:** ECON 2301

**ECO 3301. Economics of Sports.**

This course focuses on the business and economics aspects of professional and intercollegiate sports. Topics include the role of sports leagues, the demand for sports, the structure of labor markets in the four major sports, salaries of professional athletes, antitrust legislation, and intercollegiate athletics. **Prerequisite:** ECO 2314 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ECO 3304. Environmental Economics for Decision Makers.**

Economic analytical tools and concepts are used to understand how the environment, economy, and businesses interact and the importance of public policy in shaping this interaction. Natural resources as inputs to production are explored. Current policy issues and environmental problems provide illustration and application. **Prerequisite:** ECO 2301 or ECO 2314 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter



**ECO 3305. Law and Economics.**

An analysis of the role of economics in the examination of law. This course considers the influence that economic theories have had on legal theory, including contracts, property, torts, business regulation, and crime. Prerequisite: ECO 2301 or ECO 2314 either with a grade of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ECO 3311. Money and Banking.**

A study of money and credit in the modern economy. Examines the development of modern money and banking systems, the structure of the Federal Reserve System, and monetary theory. Prerequisite: ECO 2314 and ECO 2315 both with grades of "C" or better and [MATH 1329 or MATH 2331 or MATH 2471] any with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ECO 3313. Labor Economics.**

A study of the application to labor markets of supply and demand principles. Topics include the work/leisure decision, time allocation in the household, the demand for education and training, the firm's use of labor inputs, the impact of unions, and discrimination in labor markets based on race and gender. Prerequisite: ECO 2314 with a grade of "C" or better and [MATH 1329 or MATH 2331 or MATH 2471] any with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ECO 3314. Intermediate Microeconomics.**

A study of theories of supply and demand; consumer and producer decision-making; firm pricing policies; product and resource markets under conditions of perfect and imperfect competition; and imperfect and asymmetric information. Prerequisite: ECO 2314 and ECO 2315 with a grade of "C" or better and [MATH 1329 or MATH 2331 or MATH 2471] any with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ECO 3315. Intermediate Macroeconomics.**

An analysis of the traditional and modern theories of inflation, unemployment, long-run economic growth, and stabilization policies for promoting economic stability. Prerequisite: ECO 2314 and ECO 2315 both with grades of "C" or better and [MATH 1329 or MATH 2331 or MATH 2471] any with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ECO 3317. International Economics.**

A study of the basis for trade among nations and the means of its financing, customs unions, balance-of-payments problems, and similar issues. (MULT) Prerequisite: ECO 2314 and ECO 2315 both with grades of "C" or better and [MATH 1329 or MATH 2331 or MATH 2471] any with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Multicultural Content

**Grade Mode:** Standard Letter

**ECO 3320. Emerging Market Economies.**

The course focuses on the structural characteristics of the emerging market economies, with an emphasis on analyzing the salient economic challenges and opportunities facing contemporary emerging market economies. (WI) Prerequisite: ECO 2314 and ECO 2315 both with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**ECO 3327. Public Finance.**

A study of the growth of the revenue and debt of the United States, taxation and tax incidence theory, and the effect of public expenditures and taxes on economic growth. (WI). Prerequisite: ECO 2314 and ECO 2315 both with grades of "C" or better and [MATH 1329 or MATH 2331 or MATH 2471] any with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**ECO 3334. Business Enterprise and Public Policy.**

A survey of the development and structure of American industry and of governmental regulation of business. (WI) Prerequisite: ECO 2314 with a grade of "C" or better; MATH 1329 or MATH 2331 or MATH 2471 with a grade of "D" or better; Overall GPA 2.0.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**ECO 3335. Managerial Economics.**

A study of the application of economic analysis in the formulation of business policies. Includes demand analysis and pricing policies. Prerequisite: ECO 2314 with a grade of "C" or better and [MATH 1329 or MATH 2331 or MATH 2471] any with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ECO 3353. Comparative Economic Systems.**

An analysis of the theory and practice of capitalism, socialism, and communism. Prerequisite: ECO 2301 or [ECO 2314 and ECO 2315] either with a grade of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ECO 4305. Urban and Regional Economics.**

A study of urban and regional economic issues including regional growth, crime, transportation, and the urban-rural interface. A focus on sources and uses of models and data unique to regional science and urban economics. (WI) Prerequisites: ECO 2314 and ECO 2315 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**ECO 4313. Econometrics.**

This course studies statistical estimation, inference and forecasting methods used in economic research with a focus on models and methods unique to economics. Prerequisite: ECO 2314 and ECO 2315 and [MATH 2328 or QMST 2333] and [MATH 1329 or MATH 2331 or MATH 2471] all with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**ECO 4381G. Empirical Data Analysis.**

The application of data analysis and visualization techniques to analyze relationships between economic variables and convey findings in a clear and impactful way using programs such as Excel, SAS, Stata, and Python. Topics include descriptive statistics, simple and multiple regression analysis, statistical inference, and best practices in data visualization. Emphasis is placed on applications and hands-on data analysis. Prerequisite: ECO 2314 and ECO 2315 and [MATH 1329 or MATH 2331 or MATH 2471] all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**ECO 4390. Internship in Economics.**

Integration of professional and academic experience through an internship with an external employer. Credit awarded as pass/fail or grade at departmental election. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Credit/No Credit

**ECO 4395. Independent Study in Economics.**

An in-depth study of a single topic or related problem solved through economic research. May be repeated once for credit with different emphasis. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**ECO 5302. Economic Theory and Policy.**

An intensive study of micro-and macroeconomic concepts; the price system as it functions under competition, monopoly, monopolistic competition and oligopoly; national income measurement and determination; business cycles; money and banking; monetary policy; fiscal policy and economic stabilization. May not be counted as an elective MBA course. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ECO 5310. International Economics.**

Examination of the patterns of trade and finance among nations, integrating the topics of exchange rates, trade barriers, customs unions, and macroeconomics policy into a unified treatment of international economic relations. (MULT) Prerequisite: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ECO 5316. Managerial Economics.**

The application of economic theory and analysis to the formulation of business policy, including demand analysis, production theory, linear programming, and pricing policy. (MBA with Technology Emphasis students complete TECH 5315.) Prerequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ECO 5320. Emerging Market Economies.**

The course focuses on the structural characteristics of the emerging market economies, with an emphasis on analyzing the salient economic challenges and opportunities facing contemporary emerging market economies. Prerequisites: B A 5353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7199A. Dissertation.**

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7199B. Dissertation.**

Original research and writing in Education-School improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7299A. Dissertation.**

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7299B. Dissertation.**

Original research and writing in Education-School improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7310. Instructional Roles in Counseling, Leadership, Adult Education & School Psychology.**

This seminar is intended to prepare graduate teaching and instructional assistants in the CLAS Department to function effectively in various instructional and instructional support roles. Required for first-year teaching assistants and GIAs. This course does not earn graduate degree credit. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ED 7311. Educational Philosophy in a Social Context.**

This course examines the philosophical foundations of education from the time of Plato through current writings. It frames these foundations through the lens of educational challenges of today. Readings include classical and current writings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7312. Leadership and Organizational Change.**

This course will familiarize students with different perspectives on organizations, different paradigms by which they might be viewed, and a survey of research done on organizations, organizational leadership and change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**ED 7313. Advanced Studies in Adult Learning and Development.**

This advanced seminar will examine research and theoretical literature on a variety of topics including: characteristics of adult learners; models of adult cognitive and psychosocial development; adult cognition, memory, and intelligence; and principles for facilitating adult learning. Restricted to Ph.D. in Education degree, Major in School Improvement.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7314. Community Development for Educators.**

Examines models and methods of community development as relevant to the practice and scholarship of formal and non-formal education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7315. Models of Inquiry: Understanding Epistemologies.**

This course examines the philosophies informing different research epistemologies, and examples of how these can be actualized methodologically. Philosophies to be analyzed include feminism, and race-based theory. This course will help students see the multiple possibilities for conducting research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7316. Advanced Studies in Adult Development.**

This course examines current theories of adult development, fundamental developmental changes in adulthood, and the implications for practice in adult education. Restricted to students admitted to the Education Ph.D. Program- APCE major or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7317. Instructional Leadership for Organizational Change.**

This course will introduce students to the major stream of research on instructional leadership and organizational change in education while analyzing models of leadership and change from critical, systemic, and cross-cultural context lenses. The relationship between instructional supervision, professional development, and curriculum development, with experiential applications will also be explored. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7318. Advanced Studies in Adult Learning.**

This advanced seminar will examine research and theoretical literature on a variety of topics related to adult learning such as: characteristics and diversity of adult learners; key theories of adult learning; alternative perspectives on adult learning; intelligence, aging and wisdom; and learning in the digital age. Restricted to students admitted to the Education Ph.D. Program – APCE major or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7319. Foundations of Educational and Community Leadership.**

This course examines the philosophical, political, psychological, cultural, ethical, and technological foundations of educational and community leadership, with a focus on the purpose of education and history of educational and community leadership in American education and how leadership shapes teaching and learning. Some topics related to educational and community leadership to be explored include decision and policy making, school culture, schools as learning communities, the change process, action plans, and research-based school improvement models/networks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7320. Literature Review for Research Writing.**

In this seminar course, students conduct a careful examination of a body of literature related to a research topic in adult/professional/community/lifelong education. The literature review tests research questions in relation to what is published about a topic, discusses various positions, crafts coherent arguments and addresses knowledge gaps. Prerequisites: ED 7352 or ED 7351, all with a grade of "B" or better. Restriction: Doctoral standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7321. Historical and Philosophical Foundations and Contemporary Issues in Adult Education.**

Examines historical and philosophical foundations for the study and practice of adult professional, and community education in formal and non-formal settings; and contemporary issues in adult education in a "learning society." Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7322. Human Resource and Professional Development.**

Examines the methods, practices, and issues of facilitating learning related to occupational, professional, and volunteer roles. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7324. Problems and Strategies in Program Planning Seminar.**

Addresses principles and procedures, issues and trends, utilization of assessment, goal setting, and other effective strategies for developing learning opportunities and programs responsive to human, professional, and community needs. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7325. Sociocultural Dynamics in Learning Communities.**

This course draws on interdisciplinary literature to explore social, cultural, historical, and political dynamics and its implications on education for people, organizations, and communities. This will involve an exploration of the sociocultural dynamics in learning communities through a personal lived perspective and through the ecologies of knowing framework (Guajardo et al., 2013; Guajardo et al., 2016): self, organization, and community. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7326. Policy and Politics as Practice.**

This course examines the historical and theoretical underpinnings informing educational policy, politics, and social justice. It addresses both the micro and macro levels of the context, values, and cultural norms guiding policy and politics as practice in a democratic society. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7327. Education Policy Development.**

This course equips students with the skills needed to analyze the origins and consequences of existing policy and to play active roles in policy development for educational equity and social justice. Prerequisite: ED 7326 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7328. Research and Analysis in Education Policy.**

This course engages students in a field-based educational policy research project using quantitative and qualitative techniques. Students will develop their skills to identify policy issues, gather and analyze data, and draw conclusions, and disseminate findings. Prerequisites: ED 7326 and ED 7327 and ED 7351 and ED 7352, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7329. Field-Based Experience in Educational Policy.**

This course provides fieldbased practice in policy analysis and development from a democratic and social justice perspective. With guidance from a university faculty supervisor and site mentor, the student will develop and implement a policy project related to democracy and social justice. Prerequisite: ED 7328 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7331. Foundations of School Improvement.**

Examines school improvement efforts from philosophical, political, psychological, cultural, ethical, and technological foundations.

Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7332. Facilitating School Improvement.**

Examines school culture, schools as learning communities, the change process, and research-based school improvement models, with experiential applications. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7333. Curriculum and Instructional Leadership.**

Examines the relationship between curriculum, instructional improvement, and teacher development, with experiential applications. Prerequisites: Core courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7334. Processes for Educational Evaluation and Analysis.**

This course focuses on the development of the requisite knowledge and skills to facilitate the evaluation and analysis of educational programs and initiatives in complex community and school settings to inform pedagogy, leadership and community development. The course includes the assessment, evaluation, and analysis of student learning at the individual, classroom, school, and system level; teacher assessment; and program assessment. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7341. Dissertation Proposal Development.**

In this course students approaching dissertation stage meet in a seminar designed to help them clarify their research problem and develop a preliminary proposal for the dissertation. Core and concentration courses must be completed with minimum grades of "B" in each course prior to taking ED 7341. Prerequisites: ED 7351 and ED 7352, and ED 7353 or ED 7354, all with a grade of "B" or better. Departmental approval required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7345. Human Resources and Instructional Management.**

This course focuses on the twin areas of human resource administration and instructional improvement. Topics addressed include legal requirements for personnel management, staff supervision, appraisal, and development, curriculum planning and alignment and student assessment. Students taking the course will complete an original research project under the instructor's direction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7347. The Superintendency.**

This course addressed issues critical to superintendents in Texas. These include leadership, leadership assessment, school board relations, and other governance issues, management strategies, the role of public education in a democratic society, and professional ethics. Students taking the course will complete an original research project under the instructor's direction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7349. School Finance and Business Management.**

This course focuses on the financing of public schools. Students will examine the school budgeting process, sources of school revenues, principals of taxation, methods of school fund accounting, and techniques of business management. Students taking the course will complete an original research project under the instructor's direction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7351. Beginning Quantitative Research Design and Analysis.**

Includes descriptive statistics; sampling techniques; statistical inference including the null hypothesis, significance tests, and confidence intervals; and causal-comparative analyses, including t-test and ANOVA.

Prerequisites: Core and Concentration courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7352. Beginning Qualitative Design and Analysis.**

Introduces the qualitative paradigm. Includes distinctive features, alternative qualitative traditions, purposeful sampling, common data collection methods, inductive analysis, the role of the researcher, and evaluating qualitative research. Prerequisites: Core and Concentration courses or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7353. Intermediate Quantitative Research Design and Analysis.**

This course focuses on issues in the design and implementation of quantitative research. Topics include ANOVA, ANCOVA, and MANOVA, correlation analysis, regression analysis, nonparametric tests, and relationships between experimental designs and statistical analysis techniques. Prerequisite: ED 7351 with a grade of "B" or better, or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ED 7354. Intermediate Qualitative Design and Analysis.**

Focuses on issues in design and implementation of qualitative research. Topics include influence of alternative traditions, literature in qualitative research, access to the field and ethical issues, researcher-participant relationships, purposeful sampling strategies, inductive analysis procedures, developing theory, and reporting research. Prerequisite: ED 7352 with a minimum grade of "B", or instructor's permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7357. Advanced Study in Action Research.**

This course examines underlying theory, practice, skills, and issues in action research. Conducting research in the area of action research is also addressed. This course is an appropriate elective for majors in School Improvement or Adult, Professional and Community Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7359. Seminar in Quantitative Research.**

This course is a small group seminar that focuses on analytic strategies specific to the doctoral student's dissertation topic. Examples include structural equation modeling, hierarchical linear modeling, log linear modeling, non-parametric analyses, factor analysis, factorial analysis of variance, and other multivariate statistical methods. Prerequisites: ED 7351 and ED 7353, all with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7364. Personal, Team, and Professional Development in Education.**

This course focuses on the interconnectivity and development of individuals and teams to acquire the knowledge, skills, and dispositions needed in professional education contexts to improve educational organizations, teaching, and learning. Because of its focus on education, it is recommended only for doctoral students preparing for careers in educational settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7371. Anthropology and Education.**

This course introduces the student to the basic concepts in anthropology and education and sketches the application of these concepts. It explores the research in anthropology and education with relevance to both K-12 schools and other, more general educational settings. The course is an appropriate elective for Education Ph.D. majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7378. Problems in Education.**

Individual problems or topics will be designed and completed to emphasize selected areas of study. May be repeated for additional credit at the discretion of the program coordinator.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dual Enrollment Permitted

**Grade Mode:** Standard Letter

**ED 7379. Independent Study.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in the Counseling, Leadership, Adult Education & School Psychology Department. May be repeated for additional credit at the discretion of the program coordinator.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ED 7389B. Seminar in International Educational Research: Chile.**

This course develops theoretical knowledge, methodological skills, and scholarly capacity for international educational research. It focuses on research within the complex educational environment of Chile, involving seminar components held at the university and research fieldwork in Chile. International research is framed as a form of service learning. Restricted to students in the PhD in Education program.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389C. Advanced Theory in Qualitative Research.**

This course features advanced study in qualitative research methods.

The course studies such methods as ethnography, case study, phenomenology, narrative analysis, post-qualitative research, grounded theory, or more advanced qualitative research in general and their constitutive field techniques. Prerequisites: Introduction to Qualitative Research and Intermediate Qualitative Research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ED 7389D. Advanced Theory in Qualitative Research: Narrative Research.**

The purpose of this course is to explore the possibilities of narrative research. The course will provide an overview of narrative inquiry, look at various theories and corresponding examples of research, and explore, analyze, and interpret data using narrative methods. Prerequisites: Introduction to Qualitative Research and Intermediate Qualitative Research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ED 7389E. Mexican Perspectives on Mexico - U.S. Immigration.**

The course gives U.S. educators an understanding of Mexican to U.S. immigration from Mexican women's perspectives. Students will read background information and visit Mexico where through lectures, field interviews, and field visits, they will view immigration from the "other side". They will analyze and write up data when they return. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**ED 7389H. Oracy and Language Expression for Educators.**

This course focuses on the theory and practice of language expression. It emphasizes the relationship between audience analysis, speaker goals, organized outlines, delivery and development of personal style of presentation skills. The course offers direct experience writing, delivering, and constructively evaluating public speeches in a variety of educational contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389I. Comparative Studies in International Adult Education.**

This course compares a model of adult learning, communities of practice (CoP) today with its practice in pre-historical times. It will involve international travel and working with scholars to contrast theory and practice in the United States with the new setting. Students from both contexts will be encouraged to present their work in a conference format.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389L. Writing for Publication.**

Students will hone their writing skills. Students will work individually and in groups, getting feedback from other students and the instructor. Topics include APA style, getting started, first drafts, polishing and tightening, re-writing, submitting a manuscript, responding to feedback/reviews and more. Restricted to masters' and doctoral students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**ED 7389M. Shifting Demographics in Texas: Exploring Education, Democracy and Healthy Communities.**

Students will explore the shifting population in Texas through multiple frames including historical, sociological, anthropological and political. Class will canvas the literature and emerging community conditions as a vehicle for imagining possible theoretical, policy and local responses to the conditions we see in schools and local communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389O. Educational Privatization: Policies, Actors, and Effects.**

This course interrogates the origins and outcomes of educational privatization. In this course, students will review the foundations of education as a public good, study frameworks and theories of privatization, trace public policies promoting privatization, delineate types of educational privatization over time, and examine the actors involved in educational privatization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389P. International Comparative Adult, Community, and Higher Education Research and Study: Italy.**

This course develops theoretical knowledge, methodological skills, and scholarly capacity for educational research. It focuses on comparative adult, higher, and socio-cultural education within the complex educational environment of Italy, involving seminar components held at the university and research fieldwork and presentation in Italy. Prerequisite: Should the student not be able to participate in the international component of the course, a domestic alternative can be discussed prior to enrollment.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389Q. Schools, Communities and Race in a Democratic Society.**

The class explores race through a personal lived perspective. This class will view race as a social construct. Students will interrogate the phenomena of race through multiple lens and frames, including but not limited to, an ontological perspective, its use in organizations, and its use in re-segregating society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389R. Understanding the Self: Anatomy of Engaged Scholarship.**

Successful leadership in school settings requires an understanding of human behavior. This understanding begins with knowledge of self and leads to the understanding of others at the micro and macro levels. The focus of this course is on you, the learner, and your surroundings. The goal is to enhance the student's self-awareness of values, beliefs, attitudes and the ecological context informing and impacting their school leadership experience. This understanding will inform the past, but also begin to inform your future as you matriculate through your course work. We will employ interdisciplinary literature to inform this work.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389S. Feminist and Critical Thought in Education.**

Feminist and Critical thought provides a means to examine and understand how issues of power shape and impact cultures, societies, and their associated policies and practices. In this seminar, students will engage with varying feminist and critical perspectives, frameworks, theories, epistemologies and methodologies to consider their application in examining their own educational journeys as well as current and systemic issues in education. Course readings and materials will primarily draw from the work of seminal and minoritized feminist and critical scholars, while providing students an opportunity to identify and explore course readings and materials of their choice as well.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7389T. LGBTQIA+ Issues in Educational Leadership.**

This course examines the intersectionality of gender identity, sexual orientation, and other identities within the educational context, offering a nuanced exploration of the social, legal, and psychological aspects that influence LGBTQIA+ experiences in schools. Participants will engage in critical discussions on policy development, cultural competence, and leadership strategies that promote diversity, equity, and inclusion. The course is designed to address the unique challenges and opportunities facing educational leaders in fostering inclusive and affirming environments for LGBTQIA+ individuals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ED 7399A. Dissertation.**

Original research and writing in Adult, Professional, and Community Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dual Enrollment Permitted

**Grade Mode:** Credit/No Credit

**ED 7399B. Dissertation.**

Original research and writing in School Improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dual Enrollment Permitted

**Grade Mode:** Credit/No Credit

**ED 7599A. Dissertation.**

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7599B. Dissertation.**

Original research and writing in Education-School improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7699A. Dissertation.**

The student conducts original research and writing in Adult, Professional, and Community Education, guided by the direct supervision of the dissertation chair. While conducting dissertation research and writing, students must be continuously enrolled.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7699B. Dissertation.**

Students produce a dissertation under direct supervision of dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled. Prerequisites: Core, Concentration, and Methodology courses or instructor's permission.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7999A. Dissertation.**

Original research and writing in Education-Adult, Professional and Community Education, to be accomplished under direct supervision on the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ED 7999B. Dissertation.**

Original research and writing in Education-School Improvement, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4170. Teacher Residency Seminar I.**

This course is paired with EDST 4370 to provide classroom instruction and discussions with university supervisors on topics students are applying in their clinical practice. As part of the teacher residency program, enrollment requires advanced selection and placement through a competitive process as well as program specific prerequisite and corequisite requirements. Prerequisite: 2.75 Overall GPA and departmental approval. Corequisite: EDST 4370 with a grade of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4171. Teacher Residency Seminar II.**

This course is paired with EDST 4371 to provide classroom instruction and discussions with university supervisors on topics students are applying in their clinical practice. As part of the teacher residency program, enrollment requires advanced selection and placement through a competitive process as well as program specific prerequisite and corequisite requirements. Prerequisite: 2.75 Overall GPA and departmental approval. Corequisite: EDST 4371 with a grade of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4370. Teacher Residency I.**

This course will allow students to apply knowledge and skills learned during the Educator Preparation Program while engaging in clinical practice with experienced mentor teachers in school settings. Students will receive additional support, instruction, and supervision from program faculty throughout the semester experience. As part of the teacher residency program, enrollment requires advanced selection and placement through a competitive process as well as program specific prerequisite and corequisite requirements. Prerequisite: 2.75 Overall GPA and departmental approval. Corequisite: EDST 4170 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 24 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4371. Teacher Residency II.**

This course will allow students to apply knowledge and skills learned during the Educator Preparation Program while engaging in clinical practice with experienced mentor teachers in school settings. Students will receive additional support, instruction, and supervision from program faculty throughout the semester experience. As part of the teacher residency program, enrollment requires advanced selection and placement through a competitive process as well as program specific prerequisite and corequisite requirements. Prerequisite: EDST 4370 and EDST 4170 both with grades of "C" or better and 2.75 Overall GPA and departmental approval. Corequisite: EDST 4171 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 24 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4380. Clinical Teaching All-Level I.**

Students will apply knowledge and skills learned during the teacher preparation program while engaging in clinical practice with experienced EC-6/4-8 mentor teachers in school settings with university instruction and supervision. This culminating experience is required for Texas teacher certification and is a half-semester course designed for students seeking All-Level certification. Prerequisites: Admittance to the Educator Preparation Program; 2.75 Overall GPA; additional coursework may not be taken concurrently except for the co-requisite; for undergraduate students, all other degree-required coursework must be completed; for graduate and post-baccalaureate students, all other certification coursework must be completed; requires departmental approval through Office of Educator Preparation application process. Corequisites: EDST 4381 with a grade of "D" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4381. Clinical Teaching All-Level II.**

Students will apply knowledge and skills learned during the teacher preparation program while engaging in clinical practice with experienced 7-12 mentor teachers in school settings with university instruction and supervision. This culminating experience is required for Texas teacher certification and is a half-semester course designed for students seeking All-Level certification. Prerequisites: Admittance to the Educator Preparation Program; 2.75 Overall GPA; additional coursework may not be taken concurrently except for the co-requisite; for undergraduate students, all other degree-required coursework must be completed; for graduate and post-baccalaureate students, all other certification coursework must be completed; requires departmental approval through Office of Educator Preparation application process. Corequisites: EDST 4380 with a grade of "D" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4390. Teaching Internship I.**

In this course students will apply knowledge and skills learned during the teacher preparation program while serving as teacher of record in a public school classroom under supervision of university faculty and mentorship by school district personnel. The internship is available to graduate or post-baccalaureate students who have met all admittance and preparation criteria and hold a Texas probationary or intern teaching certificate. Students serving as interns are expected to follow all district, university, and state policies, and will receive course credit after completion of EDST 4391 and being recommended for standard teacher certification by the university and the school. Prerequisites: A minimum 2.75 Overall GPA and departmental approval.

**3 Credit Hours. 5 Lecture Contact Hours. 35 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4391. Teaching Internship II.**

In this course students will apply knowledge and skills learned during the teacher preparation program while serving as teacher of record in a public school classroom under supervision of university faculty and mentorship by school district personnel. The internship is available to graduate or post-baccalaureate students who have met all admittance and preparation criteria and hold a Texas probationary or intern teaching certificate. Students serving as interns are expected to follow all district, university, and state policies, and will receive course credit after being recommended for standard teacher certification by the university and the school. Prerequisite: EDST 4390 with a grade of "D" or better and a minimum 2.75 Overall GPA and department approval.

**3 Credit Hours. 5 Lecture Contact Hours. 35 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4470. Clinical Teaching in Residency I.**

This course will allow students to apply knowledge and skills learned during the Educator Preparation Program while engaging in clinical practice with experienced mentor teachers in school settings. Students will receive additional support, instruction, and supervision from program faculty throughout the semester experience. As part of the teacher residency program, enrollment requires advanced selection and placement through a competitive process as well as program specific prerequisite requirements. Prerequisite: A minimum 2.75 Overall GPA and departmental approval.

**4 Credit Hours. 4 Lecture Contact Hours. 24 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4471. Clinical Teaching in Residency II.**

This course will allow students to apply knowledge and skills learned during the Educator Preparation Program while engaging in clinical practice with experienced mentor teachers in school settings. Students will receive additional support, instruction, and supervision from program faculty throughout the semester experience. As part of the teacher residency program, enrollment requires advanced selection and placement through a competitive process as well as program specific prerequisite requirements. Prerequisite: EDST 4470 with a grade of "C" or better and minimum 2.75 Overall GPA and departmental approval.

**4 Credit Hours. 4 Lecture Contact Hours. 24 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4680. Clinical Teaching 4-8.**

Students will apply knowledge and skills learned during the teacher preparation program while engaging in clinical practice with experienced 4-8 mentor teachers in school settings with university instruction and supervision. This culminating experience is required for Texas teacher certification. Prerequisites: Admittance to the Educator Preparation Program; 2.75 Overall GPA; additional coursework may not be taken concurrently; for undergraduate students, all other degree-required coursework must be completed; for graduate and post-baccalaureate students, all other certification coursework must be completed; requires departmental approval through Office of Educator Preparation application process.

**6 Credit Hours. 1 Lecture Contact Hour. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4681. Clinical Teaching 7-12.**

Students will apply knowledge and skills learned during the teacher preparation program while engaging in clinical practice with experienced 7-12 mentor teachers in school settings with university instruction and supervision. This culminating experience is required for Texas teacher certification. Prerequisites: Admittance to the Educator Preparation Program; 2.75 Overall GPA; additional coursework may not be taken concurrently; for undergraduate students, all other degree-required coursework must be completed; for graduate and post-baccalaureate students, all other certification coursework must be completed; requires departmental approval through Office of Educator Preparation application process.

**6 Credit Hours. 1 Lecture Contact Hour. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 4687. Clinical Teaching EC-6.**

Students will apply knowledge and skills learned during the teacher preparation program while engaging in clinical practice with experienced EC-6 mentor teachers in school settings with university instruction and supervision. This culminating experience is required for Texas teacher certification. Prerequisites: Admittance to the Educator Preparation Program; 2.75 Overall GPA; additional coursework may not be taken concurrently; for undergraduate students, all other degree-required coursework must be completed; for graduate and post-baccalaureate students, all other certification coursework must be completed; requires departmental approval through Office of Educator Preparation application process.

**6 Credit Hours. 1 Lecture Contact Hour. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 5291. Teaching Internship II.**

In this course students apply knowledge and skills learned during the teacher preparation program and serve as teacher-of-record in a public school classroom under the supervision of university faculty and mentorship of school district personnel. The internship is available to graduate or post-baccalaureate students who have met all admittance and preparation criteria and hold a Texas probationary or intern teaching certificate. Students serving as interns are expected to follow all district, university, and state policies, and will receive course credit after completion of EDST 5590 and 5291 and being recommended for standard teacher certification by the university and the school. Prerequisite: EDST 5590 with a minimum grade of "B" or better and a minimum 2.75 Overall GPA and departmental approval.

**3 Credit Hours. 5 Lecture Contact Hours. 35 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**EDST 5390. Internship for Alternative Certification I.**

This course provides an opportunity for students to apply knowledge and skills learned during the educator preparation program while serving as teacher of record in a classroom under supervision of university faculty and mentorship by school district personnel. The internship is available to graduate or post-baccalaureate students who have met admittance and preparation criteria and hold a Texas probationary or intern teaching certificate. Interns are expected to follow all district, university, and state policies, and will receive course credit after completion of EDST 5390 and 5391 and being recommended for standard teacher certification by university and Office of Educator Preparation. Prerequisite: A minimum 2.75 Overall GPA and departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 5391. Internship for Alternative Certification II.**

Students will apply knowledge and skills learned during the educator preparation program while serving as teacher of record in a public school classroom under supervision of university faculty and mentorship by school district personnel. The internship is available to graduate or post-baccalaureate students who have met all admittance and preparation criteria and hold a Texas probationary or intern teaching certificate. Students serving as interns are expected to follow all district, university, and state policies, and will receive course credit after completion of EDST 5390 and 5391 and being recommended for standard teacher certification by university and Office of Educator Preparation. Prerequisite: EDST 5390 with a grade of "C" or better and A minimum 2.75 Overall GPA and departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDST 5590. Teaching Internship I.**

In this course students apply knowledge and skills learned during the teacher preparation program and serve as teacher-of-record in a public school classroom under the supervision of university faculty and mentorship of school district personnel. The internship is available to graduate or post-baccalaureate students who have met all admittance and preparation criteria and hold a Texas probationary or intern teaching certificate. Students serving as interns are expected to follow all district, university, and state policies, and will receive course credit after completion of EDST 5590 and 5291 and being recommended for standard teacher certification by the university and the school. Prerequisite: A minimum 2.75 Overall GPA and departmental approval.

**5 Credit Hours. 5 Lecture Contact Hours. 35 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 5100. Educational Leaders' Continuing Professional Development.**

This course provides state-of-the-art continuing professional development for in-service, non-degree seeking educational leaders. New topics will be addressed with each offering. The course may be repeated once if necessary.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5339. Understanding Self: Developing a Personal Vision of Leadership.**

Successful leadership in organizational settings requires an understanding of human behavior. This understanding begins with the knowledge of self and leads to the understanding of others. The focus of this course is on the individual student. The intent is to enhance the student's self-awareness of values, beliefs, and attitudes related to successful school leadership.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5340. Shaping Organizations and Using Inquiry: Management and Leadership.**

This course includes an understanding of the basic structural components of educational organizations and the theoretical frameworks that describe organizational behavior. Students will focus on the process of action research, planning, decision-making, change in organizations, and leadership. Prerequisites: EDCL 5339, EDCL 5345, EDCL 5347, and EDCL 5348.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5345. Understanding People: Professional Development.**

This course includes fundamental issues related to the development of personnel, entry-level knowledge of staff appraisal, adult learning and development, and staff development. Prerequisite: EDCL 5339. Corequisite: EDCL 5339.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5347. Understanding Environments: Social, Political, Economic, Legal, and Technological.**

Concepts of the internal and external environment of educational organizations are explored. Entry level concepts are presented in areas of school environments. Prerequisite: EDCL 5339. Corequisite: EDCL 5339.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5348. Supervision of Instruction.**

Concepts of curriculum and instructional leadership models for schools will be developed. Factors such as curriculum leadership and instructional improvement are considered part of the internal environment of schools. Prerequisite: EDCL 5339 and EDCL 5345.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5349. Practicum in Instructional Leadership.**

Students obtaining an MA in educational leadership with a concentration in instructional leadership apply the knowledge and skills they have developed in their program of study in a school setting, with mentoring by a school administrator and under the supervision of a faculty member in the educational leadership program. Prerequisite: EDCL 5339, EDCL 5345, EDCL 5348, EDCL 6342, EDCL 6352, and EDCL 6358.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5351. Understanding Self Within School & Community Environments.**

Successful leadership in school settings requires an understanding of human behavior and its ethics within a diverse context. This understanding begins with knowledge of self and leads to the understanding of organizations within the micro and macro environments. The focus of this course is on you, the learner, and your school and community. The goal is to enhance the student's self-awareness of values, beliefs, attitudes and the ecological context informing and impacting their school leadership experience. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5352. Instructional Leadership, Supervision, and Professional Development.**

The relationship between school improvement and instructional leadership will be examined. The course will examine current research and trends related to professional learning and supervision in a school setting. Students will have an opportunity to learn about the design, development, implementation, and evaluation of individual, campus, and district professional development. The course is designed to promote leadership knowledge and skills that will enhance the instructional capacity of all campus staff members and thereby improve overall student success. Prerequisite: EDCL 5351 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5353. Campus Leadership and School Law.**

This course is designed to develop campus leadership skills in elementary and secondary schools, focusing on the role and functions of the principal as a leader. This course also surveys and examines the implications of legal issues likely to be encountered by a school leader, examining constitutional provisions, statutory laws, court decisions, and regulations governing public schools with special reference to state and federal relationships. Prerequisite: EDCL 5352 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 5388. Problems in Administration.**

Individual problems not related to thesis or research problems. Designed to place emphasis on selected areas of study. May be repeated once for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6342. Curriculum Design.**

Theory and practice in planning for curriculum needs assessment, development, implementation, and evaluation. Prerequisite: EDCL 5339, EDCL 5345, EDCL 5347, EDCL 5348, and EDCL 6352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6343. Continuous School Improvement.**

Applies the concept and principles of Total Quality Improvement to schools and classrooms and integrates Total Quality Improvement with other school improvement models. Prerequisite: All Level I core courses or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6344. Campus Leadership.**

This course develops campus leadership skills for elementary and secondary schools, focusing on the role and functions of the principal as a leader. Students practice skill development in evaluation processes, student activity programs, staffing patterns, site-based decision-making, community relations, and accounting procedures. Prerequisites: EDCL 5339, EDCL 5345, and EDCL 5348. Corequisite: EDCL 5347.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6348. School Law.**

This course examines the constitutional provisions, statutory laws, court decisions, and regulations governing public schools with special reference to state and federal relationships. Prerequisite: EDCL 5339, EDCL 5345, EDCL 5347, EDCL 5348, EDCL 6342, EDCL 6344, EDCL 6358, and EDCL 6387.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6351. Instructional Models.**

Characteristics of effective teaching are identified and correlated with learning theories and their corresponding instructional models. Matching instruction to the needs of learners and integrative approaches are emphasized. Prerequisites: All Level I and II courses or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6352. School as Center of Inquiry.**

Prepares the educational leader to be an intelligent consumer of research and to assume a leadership role in school-wide action research. This course is a prerequisite for EDCL 6358. Prerequisites: EDCL 5339 and EDCL 5345. Corequisite: EDCL 5345.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6358. Integrative Seminar.**

This course integrates key theories, concepts, and principles learned during the student's course of study. The student will complete a paper including an action research plan designed to solve an educational problem present within a specific educational setting. The master's student will defend the plan during the oral examination. Prerequisites: EDCL 5339, EDCL 5345, EDCL 5347, EDCL 5348, and EDCL 6352.

Corequisite: EDCL 5348.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 6387. Principal Field-Based Practicum I.**

The practicum provides students the opportunity to develop leadership skills needed by principals of elementary and secondary schools. Students will develop a practicum proposal in cooperation with their site-mentor and university supervisor. The course focus is on the development of administrative skills in a real world setting. Prerequisites: EDCL 5339, EDCL 5348, EDCL 6344, and EDCL 6358. Corequisites: EDCL 6344 and EDCL 6358.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 6388. Principal Field-Based Practicum II.**

This course is a continuation of EDCL 6387 and allows students to continue projects and activities begun in the fall semester and to work further with their on-site mentor and university supervisor. This course is offered in the spring semester only. Prerequisites: EDCL 5339, EDCL 6358, and EDCL 6387.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 6389. Superintendent's Practicum I.**

The practicum is intended to give prospective school superintendents the opportunity to hone their leadership skills under the guidance an experienced and successful school leader. Offered fall semester only and may be taken concurrently with other superintendent certification courses.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 6390. Superintendent's Practicum II.**

A continuation of EDCL 6389, this course allows students to carry through projects and activities begun in the fall semester and to work further with their on-site mentor and university supervisor. Offered spring semester only. May be taken concurrently with other superintendent certification courses. Prerequisite: EDCL 6389.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 7344. Campus Leadership.**

Develops the skills needed as a practitioner in elementary and secondary schools, focusing on the role and functions of the principal as a leader. Activities lead participants to practice skill development in evaluation processes, student activity programs, staffing patterns, site-based decision-making, community relations, accounting procedures, as well as other skills. Prerequisites: All Level I core courses, and EDCL 6342, EDCL 6343, EDCL 6348, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 7348. Public School Law.**

Examines constitutional provision, statutory laws, court decisions, and regulations governing public schools, with reference to state and federal relationships. Participants develop skills in researching and interpreting law, policy development and impact on public schools and communities. (Note: Students who took EDCL 6348 may not repeat this course for doctoral credit.)

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDCL 7387. Field Practicum, Part I.**

Students seeking Principal Certification must complete this field-based 2 semester internship focusing on actual experiences with each of the state standards. The practicum provides opportunities to plan, produce, participate in, and reflect upon campus leadership. (Note: Students who took EDCL 6387 may not repeat these courses for doctoral credit.)

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 7388. Field Practicum Part II.**

Students seeking Principal Certification must complete this field-based 2-semester internship focusing on actual experiences with each of the state standards. The practicum provides opportunities to plan, produce, participate in, and reflect upon campus leadership. (Note: Students who took EDCL 6388 may not repeat these courses for doctoral credit.)

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 7389. Superintendent Practicum I.**

The practicum provides prospective superintendents and district leaders with practical experiences to prepare for various roles and responsibilities of central office leadership. Students work under the joint mentorship of a practicing school superintendent and a university supervisor. Offered fall semester only. May be taken concurrently with other superintendent certification courses. Prerequisite: ED 7347 with a grade of "B" or better.

**3 Credit Hours. .5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDCL 7390. Superintendent Practicum II.**

This course is a continuation of EDCL7389 Superintendent Practicum I, providing prospective district leaders with practical experiences to prepare for central office leadership. Students work under the joint mentorship of a practicing school superintendent and a university supervisor. May be taken concurrently with other superintendent courses. Prerequisite: EDCL 7389.

**3 Credit Hours. .5 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EDP 1350. Effective Learning.**

A study of the acquisition of procedural knowledge through the application of human learning theory, cognitive behavior modifications, and developmental psychology. Generalization and transfer of this knowledge will be emphasized. Repeatable for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** EDUC 1300

**EDP 2150. Strategic Learning.**

Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for college-level academic strategies. Students use assessment instruments to help them identify their own strengths and weaknesses as strategic learners.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 3300. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of computers, mobile devices, and online applications in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5310. Introduction to Educational Technology.**

This course provides hands-on experience with a variety of educational uses of microcomputers in early childhood, elementary, middle, and high schools. Review of relevant research and discussion of current issues will also be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5315. Advanced Educational Technology.**

This course focuses on both instructional and multimedia design principles. Students will design, implement, and evaluate an extended technology project to solve an instructional problem.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5320. Models of Integration of Educational Technology.**

Students will examine trends and issues related to the integration of technology in instruction based on learning theory, learners' needs, teaching strategies/practices, social and psychological factors, and state/national standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5325. Managing Educational Technology.**

This course is designed to help the Educational Technologist manage the various needs and technologies in the school setting. Emphasis will be placed on planning for integration and management, hardware issues, software issues, and personnel issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5330. Implementing Technology in Education.**

This course is designed to introduce students to those leadership skills required for implementing technology in an education program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5334. Online Learning and Course Design.**

This course will examine theoretical and research perspectives of learning in an online context. Students will analyze online tools in relation to teaching objectives and design an online component to a course they teach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5335. Instructional Design for Educational Technology.**

This course will focus on the use of instructional design principles in Educational Technology to solve instructional problems. Topics covered include developing teacher training materials, courses, individualized instruction, websites, multimedia projects, workshops, and online instruction in the education setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5340. Issues in Educational Technology.**

This course will provide students with information on current issues and emerging trends to enhance their ability to function effectively as educational technology leaders at the school, district, or agency level. May be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**EDTC 5341. Digital Fabrication and Simple Electronics.**

This course focuses on the use of creativity within educational maker spaces and is intended for educators (and their students) to think creatively using digital fabrication and technology. A maker space is a place where people come together to create with technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EDTC 5345. Educational Technology Internship.**

The Educational Technology Internship allows the intern to apply theory into practice in a real world setting. The intern is provided site-based opportunities for applying leadership skills in training teachers to use technology in an educational setting.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**EE 2400. Circuits I.**

This course provides an introduction to the profession of Electrical Engineering and its specialties. Fundamental DC and sinusoidal steady-state circuit analysis techniques include Ohm's law, power, Kirchoff's laws, and Thevenin and Norton equivalent circuits. Prerequisites: MATH 2471 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 2420. Digital Logic.**

An introduction to fundamental computer technologies, including Boolean logic design, logic circuits and devices, and basic computer hardware are studied. Laboratories provide hands-on experience with electricity, combinational and sequential digital circuits, and computer hardware. Corequisite: CS 1428 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 3326. Numerical and Scientific Data Analysis Using Python.**

This course introduces Python programming for engineers. Topics include basics of Python programming, introduction to numerical Python (NumPy), scientific programming using Python (SciPy), data visualization using Matplotlib, data processing using Pandas and introduction to Object Oriented Programming using Python. Prerequisite: CS 1342 or CS 1428 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 3340. Electromagnetics.**

Topics in this course include wave propagation, Maxwell's equations, transmission lines, wave guides, and antennas. Prerequisite: EE 3400 and MATH 2393 and PHYS 2326 and PHYS 2335 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 3350. Electronics I.**

Analysis and design of active device equivalent circuits with emphasis on transistors, switching circuits, and operational amplifiers. Prerequisites: EE 3400 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 3355. Solid State Devices.**

Semiconductor materials, principles of carrier motion, operating principles and circuit models for diodes, bipolar transistors and field-effect transistors. Introduction to integrated circuits. Prerequisite: EE 3400 and PHYS 2326 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 3370. Signals and Systems.**

Frequency domain representation of signals and systems and frequency domain concepts for circuit analysis and design. Transfer function and frequency response, Laplace and z-transforms, Fourier series, Fourier transform, and sampling. Prerequisite: EE 3400 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter



**EE 3400. Circuits II.**

This course includes a brief review of EE 2400, transient analysis, application of Laplace transforms, Bode plots, and network principles. Materials learning in EE 2400 is extended and applied here. Prerequisites: EE 2400 and MATH 3323 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 3420. Microprocessors.**

Introduction to microprocessors, principles of operation, assembly language programming, timing analysis, and I/O interfacing.

Prerequisites: EE 2420 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**EE 4180. Electric Machines Lab.**

This course is the lab component of EE 4380 Electric Machines and consists of the hands-on exploration and analysis of various electric machines and their controllers. Prerequisite: EE 3340 with a grade of "C" or better. Corequisite: EE 4380 and EE 4360 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4321. Digital Systems Design Using HDL.**

This course will cover the design of digital systems using HDL including implementation of custom microprocessor and peripheral architectures. Prerequisite: EE 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4323. Digital Image Processing.**

This course provides the necessary fundamental techniques to analyze and process digital images. It covers principles, concepts, and techniques of digital image processing and computer vision. Prerequisite: EE 3370 and EE 3420 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4331. Introduction to Machine Learning for Engineering Applications.**

This course covers an introduction to machine learning focused on deep learning techniques using engineering applications with Python. Topics include model characteristics, neural network theory, classifiers for network and signal processing applications, regression and convolutional modeling for object-detection, time-series and forecasting machine learning models for Smart City concepts. Prerequisite: CS 1428 or CS 1342 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4332. Introduction to Computer-Aided Engineering Simulation on HPC Systems.**

This course covers the introductory development of simulations for engineering applications that are solved using High-Performance Computing environments. Topics include programming techniques for multicore processors, processor and memory architecture, computation for dense and sparse linear algebra applications, computational temperature analysis, fluid dynamics, stencil, stochastic algorithms, and other applications. Prerequisite: CS 1428 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4350. Electronics II.**

Analysis and design of integrated circuits, feedback, and frequency response. Prerequisites: EE 3350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Multicultural Perspective

**Grade Mode:** Standard Letter

**EE 4351. Fundamentals of Electroceramics.**

Introduction to binary and ternary phase diagrams, non-centro-symmetric crystal structures and symmetry groups, nonlinear dielectrics (including ferroelectricity, piezoelectricity, pyroelectricity), nonlinear magnetics, oxide wideband gap semiconductors, detectors and sensors, brief introduction to MEMS, radhard electronics, and spintronics technology. Research oriented labs related to materials processing, characterization, fabrication, and testing. Prerequisite: ENGR 2300 with a grade of "C" or better and a minimum 2.25 Overall GPA. Corequisite: EE 3355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4352. Introduction to VLSI Design.**

Analysis of design of CMOS integrated circuits. Introduction to CAD tools for VLSI design. Prerequisites: EE 3350 and [CS 2420 or EE 2420] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4353. Fundamentals of Advanced Semiconductor Technology.**

Key concepts of advanced semiconductor technology including Moore's law, MOSFETs and CMOS, CMOS scaling, high-K gate dielectrics, new channel materials replacing silicon, three dimensional device structures, compound semiconductor MESFET, HEMT, LED, Lasers and solar cells. Prerequisite: EE 3355 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4354. Flexible Electronics.**

This course will cover the materials systems, processes, device physics and applications of flexible electronics. The materials range from amorphous and nanocrystalline silicon, organic and polymeric semiconductors to solution cast films of carbon nanotubes. Real device discussions include high speed transistors, photovoltaics, flexible flat-panel displays, medical image sensors, etc. Prerequisites: EE 3350 and EE 3355 and EE 4350 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4355. Analog and Mixed Signal Design.**

Operational amplifier design applications, feedback, offset, stability, and compensation. Introduction to random signals and noise, discrete time circuitry analog-to-digital converters, and digital-to-analog converters. Prerequisites: EE 3370 and EE 4350 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4356. Power Electronics.**

This course provides an introduction to power electronics and the use of such circuits for the control and conversion of electric power. Topics include semiconductor power devices and characteristics, DC-DC and multilevel converters, power inverters, and AC voltage controllers. Prerequisite: EE 4350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4357. Introduction to Power Systems.**

This course introduces the analysis of various elements of power systems, including power generation, transformer action, transmission line modeling, symmetrical components, power factor correction, real and quadrature power calculations, load flow analysis, and economic considerations in operating systems. Prerequisite: EE 3400 or ENGR 3373 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4358. Introduction to Microelectromechanical Systems.**

This course will cover fabrication techniques for microelectromechanical devices and systems as well as provide an introduction to the design of micromechanical transducers. Co-requisite: MFGE 4392 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4359. Advanced Electronic Materials and Devices.**

This course introduces students to modern fabrication techniques, properties, and applications of conventional and emerging electronic materials. Topics include thin film deposition techniques and modern fabrication concepts, heterointerfaces, and structural, electronic, thermal, magnetic, and optical properties of electronic materials. The course includes discussions about practical devices, including solar cells, light-emitting devices, display devices, and emerging flexible electronic devices. Prerequisite: EE 3350 with a grade "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4360. Linear Control Systems.**

This course provides an introduction to linear continuous-time and discrete-time automatic control systems. Topics include time and frequency domain modeling and analysis, state variable analysis, feedback, transient and steady state response, stability, and sensitivity. Prerequisite: EE 3370 and MATH 3377 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4370. Communication Systems.**

This course covers transmission of signals through linear systems, analog and digital modulation, filtering, and noise. Prerequisites: EE 3370 and IE 3320 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4372. Communication Networks.**

This course covers data communication concepts, protocols, algorithms, 7-layer OSI model, physical media, LAN architecture and components, Ethernet, TCP/IP, and related standards. Prerequisite: EE 3420 with a grade of "C" or better. Corequisite: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4374. Introduction to Wireless Communication.**

Principles, practice, and system overview of mobile systems. Modulation, demodulation, coding, encoding, and multiple access techniques. Prerequisites: EE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4375. Building a Smart Grid Architecture.**

In this course, students will learn the current 20th-century power grid structure and the key elements required to transform it to a 21st-century Smart Grid. Topics include two-way power/data flow to monitor, control, manage and integrate traditional bulk generation and bulk/renewable/distributed generation. Prerequisite: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4376. Introduction to Telecommunications.**

Fundamentals of telecommunications, telephone networks, switching and transmission systems, circuit and packet switching, cell processing, and queuing theory and applications. Co-requisite: EE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4377. Introduction to Digital Signal Processing.**

Discrete systems, convolution, spectral analysis, and FIR and IIR filter design. Prerequisites: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4378. Data Compression and Error Control Coding.**

Introduction to information theory, information content of messages, entropy and source coding, data compression, channel capacity data translation codes, and fundamentals of error correcting codes. Corequisite: EE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**EE 4380. Electric Machines.**

This course teaches the principles and analysis of electromechanical systems. Students will develop analytical techniques for predicting device and system interaction characteristics, strengthen understanding of the phenomena and interactions in electromechanics, and learn to design major classes of electric machines. Prerequisite: EE 3340 with a grade of "C" or better. Corequisite: EE 4180 and EE 4360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4381. Sustainable Energy & Storage.**

This course examines the consumption and production of energy and the principles and technologies behind renewable energy sources. It also introduces the basics of energy storage systems such as batteries, gravitational, and hybrid. Prerequisite: EE 3400 and PHYS 2326 and CHEM 1335 all with a grade of "C" or better. Corequisite: EE 4357 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4382. Advanced Power Systems.**

This course is an advanced treatment of various elements of power systems, including symmetrical and unsymmetrical faults, symmetrical components, system protection, transient stability, transient operation of transmission lines, and supervisory control and data acquisition (SCADA). Prerequisite: EE 4357 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4390. Electrical Engineering Design I.**

This course is a team-based design of a system or component, which will include oral presentations and written reports. (WI) Prerequisites: EE 3420 and EE 3350 and EE 3370 and IE 3320 all with grades of "C" or better. Corequisites: EE 4352 or EE 4356 or EE 4360 or EE 4370 any with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**EE 4391. Electrical Engineering Design II.**

Advanced team-based design of a system or component, which will include oral presentations and written reports. (WI) Prerequisites: EE 4390 with a grade of "C" or better. Corequisite: EE 4352 or EE 4370 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**EE 4392. Microelectronics Manufacturing I.**

This course provides an overview of integrated circuit fabrication. This includes crystal growth, wafer preparation, epitaxial growth, oxidation, diffusion, ion-implantation, thin film deposition, lithography, etching, device and circuit formation, packaging, and testing. The laboratory component involves production and testing of a functional semiconductor device. Prerequisite: CHEM 1341 or CHEM 1335 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4394. Microelectronics Manufacturing II.**

Topics include atomic models for diffusion, oxidation and ion implantation; topics related to thin film processes, e.g. CVD and PVD; planarization by chemical-mechanical polishing and rapid thermal processing; and process integration for bipolar and MOS device fabrication. Students will design processes and model them using a simulation. Prerequisite: EE 4392 or MFG 4392 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 4399A. Dynamic Data Acquisition and Analysis.**

Methods for acquiring and analyzing dynamic (time-varying) data. Frequency domain analysis, analog-to-digital conversion, windowing, and digital filtering taught in the context of various industrial applications. Prerequisite: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**EE 4399B. Overview of Information Theory and Coding.**

Fundamentals of Information Theory, Huffman coding, image encoding techniques, Hamming and BCH error control codes, Reed-Solomon coding, convolutional codes and the Viterbi decoding algorithm. Prerequisite: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**EE 4399I. Fundamentals of Sound Systems Engineering.**

This course provides an introduction to sound systems engineering and its fundamental principles applied in developing audio and sound systems for various industries. This course will develop a theoretical and practical understanding of the fundamentals of sound engineering, including acoustics, audio components, sound processing, and test & measurement. Prerequisite: EE 2420 and EE 3350 and EE 3370 and PHYS 2326 and PHYS 2126 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**EE 5320. Advanced Computer Architecture and Arithmetic.**

This course teaches design and analysis of high-performance computer systems, focusing on quantitative analysis of the latest processors and compilers. Current processor architectures are surveyed for system design. Topics include instruction sets, parallelizing architectures, pipelining, I/O, memory and cache organization, parallel/vector processing, fast arithmetic units design, and implementation using HDL. Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5321. Computer-Aided Engineering Simulations on HPC Systems.**

This course covers development of simulations for engineering applications that are solved using High Performance Computing (HPC) environments. Topics include programming techniques for multicore processors, processor and memory architecture, computation for dense and sparse linear algebra applications, computational temperature analysis, fluid dynamics, stencil and stochastic algorithms, and other applications. Prerequisite: EE 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5323. Digital Image Processing.**

This course provides the necessary fundamental techniques to analyze and process digital images. It covers principles, concepts, and techniques of digital image processing and computer vision. Restricted to students enrolled in the MS Engineering program. Prerequisite: EE 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5330. Embedded and Real-Time Computing.**

This course teaches development of embedded computing systems with strong resource constraints. Key concepts include managing constrained memory and processing speed limitations, and programming for soft and hard real-time constraints. Students will learn use of a Real-Time Operating System (RTOS). Prerequisites: EE 3420 and CS 3339 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5331. Machine Learning for Engineering Applications.**

This course covers an introduction to machine learning focused on deep learning techniques using engineering applications with Python. Topics include model characteristics, neural network theory, classifiers for network and signal processing applications, regression and convolutional modeling for object-detection, time-series and forecasting machine learning models for Smart City concepts. Prerequisite: ENGR 5310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5350. Advanced Electronic Circuit Design.**

This course includes low and high power RF amplifier design techniques, oscillators, FM demodulators, limiters, and mixer design. Additional topics include circuit design to minimize intermodulation and other forms of distortion, and RD and high-speed analog circuits with emphasis on digital-friendly applications. Prerequisite: EE 4350 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5353. Fundamentals of Advanced Semiconductor Technology.**

In this course students will learn key concepts and trends of advanced semiconductor device technology. Topics include Moore's law, MOSFET, CMOS and scaling, high-K gate dielectrics, new channel materials replacing silicon, three dimensional and compound semiconductor device structures. In addition students will be involved in laboratories and seminar presentations. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5354. Flexible Electronics.**

This course will cover the materials systems, processes, device physics and applications of flexible electronics. The materials range from amorphous and nanocrystalline silicon, organic and polymeric semiconductors to solution cast films of carbon nanotubes. Real device discussions include high speed transistors, photovoltaics, flexible flat-panel displays, medical image sensors, etc. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**EE 5355. Electronic Materials and Devices.**

This course covers theoretical concepts applicable to the understanding of unique properties exhibited by electronic materials, especially by dielectrics, oxide semiconductors, ferroelectrics, pyroelectrics, piezoelectrics, magnetic, and multifunctional and multiferroic materials. The various microelectronic devices and modern novel technologies based on these materials are emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5357. Power Systems for Engineering.**

This course introduces the analysis of various elements of power systems, including power generation, transformer action, transmission line modeling, symmetrical components, power factor correction, real and quadrature power calculations, load flow analysis, and economic considerations in operating systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5360. Thin Film Technology.**

This course covers the theoretical and practical aspects of thin film technology in modern devices. The design and fabrication of thin film heterostructures is discussed. Growth and nucleation of epitaxial thin films with diverse properties and devices with combined properties will be emphasized. Prerequisite: EE 3350 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5361. Nanofabrication Technology for Semiconductor Device Processing.**

This course provides an overview of nanofabrication techniques for conventional and emerging micro- and nano-electronic devices. Topics include semiconductor crystal growth, wafer preparation, epitaxial growth, oxidation, control of dopant profiles for the formation of shallow junctions, ion-implantation, thin film deposition, photolithography, metallization etching, device and circuit formation, and testing. Prerequisite: EE 3350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5372. Advanced Networking.**

This course develops important theoretical and application topics related to advanced networking. Theoretical topics are introduced using mathematical treatments, including queuing theory and some random processes. The course includes applications of these topics to communications networks, and focuses on architectures, applications and technologies which affect modern computer and data networks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5374. Introduction to Wireless Communication.**

This course teaches principles and practices in designing and analyzing cellular and other wireless communication systems. Topics include RF propagation modeling, fast and slow fading, modulation, demodulation, coding, and multiple access techniques. Prerequisite: EE 4370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5375. Smart Grid: an Application Development Platform.**

In this course, students will learn how to develop real applications for the smart grid and model its performance with simulations and stochastic models. Topics include energy informatics, smart metering, home energy management, demand response, load disaggregation and APIs/ OpenData. The mathematical tools used include: Optimization/Control, Machine Learning and Stochastic Processes. Prerequisites: EE 3370 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**EE 5377. Statistical Signal Processing.**

This course develops the theory and applications of random processes using mathematical treatments, including elementary discrete and continuous time linear systems theory, elementary probability, and transform theory. Topics include applications of random processes to information and communication theory, estimation and detection, control, signal processing, and stochastic systems theory. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5380. Advanced Electric Machines.**

This course teaches the principles and analysis of electromechanical systems. Students will develop analytical techniques for predicting device and system interaction characteristics as well as learn to design major classes of electric machines.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5381. Advanced Sustainable Energy & Storage.**

This course examines the consumption and production of energy and the principles and technologies behind renewable energy sources. It also introduces the basics of energy storage systems such as batteries, gravitational, and hybrid. Current research in the field is examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5382. Advanced Power Systems Analysis.**

This course is an advanced treatment of various elements of power systems, including case studies, analysis of relevant peer-reviewed literature, symmetrical and unsymmetrical faults, symmetrical components, system protection, transient stability, transient operation of transmission lines, and supervisory control and data acquisition (SCADA).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 5398A. Antenna Theory, Design and Applications.**

This course covers the basic theory, design and applications of antennas. The topics include antenna radiation, fundamental parameters of antennas, linear wire antennas, loop antennas, antenna arrays, long-periodic antennas, horn antennas, microstrip antennas and modern nano-antennas. Prerequisite: EE 3340 or EE 3370 either with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398B. Electronic Materials and Beyond for Sustainable Energy.**

This course covers the basic science and technology for sustainable energy from the view of materials, where electronic materials are highly emphasized. The topics include solar cells, thermoelectrics, batteries, supercapacitors, artificial photosynthesis, fuel cells, biomass and nuclear energy. Prerequisite: EE 3355 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398C. Multimedia Signal Processing.**

This course covers theory and applications of digital signal processing to multimedia signals, including speech, audio, image, and video. Key concepts and algorithms are discussed first, followed by a review of relevant industry standards. Hardware architectures and real-time implementation concepts appropriate for multimedia signals are also included. Prerequisites: EE 3370 and [EE 4323 or EE 4377] both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 5398D. Electroceramics.**

This course covers binary and ternary phase diagrams, non-centrosymmetric crystal structures and symmetry groups, nonlinear dielectrics (ferroelectricity, piezoelectricity, pyroelectricity), nonlinear magnetics, oxide wideband gap semiconductors, detectors and sensors, introduction to MEMS, radhard electronics, and spintronics technology. Labs and additional research-oriented instruction are related to materials processing, characterization, fabrication, and testing. Prerequisite: EE 3355 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**EE 7354. Advanced Flexible Electronics.**

This course covers the materials systems, processes, device physics and applications of flexible electronics. Study of materials will include amorphous and nanocrystalline silicon, organic and polymeric semiconductors, and solution cast films of carbon nanotubes, graphene and other 2D materials. Contemporary research and advancement in the areas of high-speed transistors, switches, photovoltaics, and communication devices will be covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**EE 7359. Research in Electrical Engineering.**

This research course is for doctoral students in electrical engineering who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 1304. Engineering Graphics.**

This course covers the introduction to computer-aided drafting using CAD software and sketching to generate two- and three-dimensional drawings based on the conventions of engineering graphical communication in the tools and techniques utilized to produce various types of working drawings. Principles of multiview projections, geometric relationships, shape and size description, and pictorial methods are included with emphasis on technical applications and design problem solving.

Corequisite: MATH 2417 or MATH 2471 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** ENGR 1304

**ENGR 2300. Materials Engineering.**

This course covers topics including structure, properties and behavior of engineering materials including metals, polymers, composites, and ceramics. Mechanical, electrical, magnetic, thermal, and optical properties are covered. Prerequisite: [CHEM 1335 and CHEM 1135] or [CHEM 1341 and CHEM 1141] with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ENGR 2301. Statics.**

This course covers the theory of engineering mechanics. Topics include forces, moments, and couples acting on stationary engineering structures. Additionally, two and three dimensional equilibrium, free-body diagrams, friction, centroids, and centers of gravity are covered. Prerequisite: PHYS 2325 and 2125 with grades of "C" or better. Corequisite: MATH 2472 or MATH 2473 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** ENGR 2301

**ENGR 2302. Dynamics.**

This course introduces the fundamentals of kinematics and kinetics of individual particles, systems of particles, and rigid bodies. Topics include the rectilinear, curvilinear, and general motion, Newton's laws of motion, work and energy relationship, principles of impulse and momentum, and application of kinetics and kinematics to the solution of engineering problems. Prerequisite: ENGR 2301 and MATH 2472 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** ENGR 2302

**ENGR 3190. Cooperative Education.**

This course provides cooperative education students the opportunity to study particular problems in engineering in an occupational setting. Problems are related to the student's work assignment and culminate in an industrial supervisor's evaluation and technical report or presentation. This course may be taken up to three times for a maximum of three credits applying towards the major elective. Prerequisite: A minimum 2.25 Overall GPA and instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ENGR 3290. Advanced Cooperative Education.**

This course provides cooperative education students the opportunity to study particular problems in engineering in an occupational setting. Problems are related to the student's work assignment and culminate in an industrial supervisor's evaluation and technical report. This course maybe taken up to 2 times for a maximum of 3 credits applying towards the major elective. Prerequisite: A minimum 2.25 Overall GPA and instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ENGR 3311. Mechanics of Materials.**

This course covers the principles of the mechanics of materials and includes the following topics: stress and strain, elastic modulus and Poisson's ratio, constitutive equations, torsion, bending, axial, shear and bending moment diagrams, deflection of beams, and stability of columns. Prerequisite: ENGR 2301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**ENGR 3315. Engineering Economic Analysis.**

Interest formulas, economic equivalence, rate of return analysis, techniques of economic analysis for engineering decisions and an introduction to cost estimation. Prerequisite: MATH 1315 or MATH 2417 or MATH 2471 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ENGR 3373. Circuits and Devices.**

In this course, circuits and devices are introduced. Topics include circuit analysis and network theorems with emphasis on applications of analog and digital electronic devices, transducers, sensors, and electromechanical devices. Prerequisite: PHYS 2326 and PHYS 2126 and [CS 1428 or CS 1342] with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**ENGR 3380. Fluid Mechanics.**

This course is an introduction to fluid motion. Fluid flow, pressure, energy, and momentum are examined. Dimensional analysis is also covered. Sensing devices used to monitor a fluid are discussed. Students will learn to follow standard laboratory procedures, perform data acquisition, conduct data analysis, and visualize test data. Prerequisite: ENGR 2301 and MATH 3323 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ENGR 4299. Engineering Undergraduate Research.**

In this course undergraduates investigate a special topic in engineering by developing a research idea, conducting a literature review, researching the topic, writing a technical report, and presenting the findings. Research plans will be developed on an individual basis with strict faculty supervision.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ENGR 4390. Internship.**

Supervised on-the-job professional learning experience in engineering and other technical areas. This course provides practical work experience in their particular field of interest.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ENGR 4395. Independent Studies in Engineering.**

Open to undergraduate students on an independent basis by arrangement with the faculty member concerned.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**ENGR 5100. Seminar in Engineering.**

Graduate students attend seminars by invited speakers presenting relevant topics in academia and industry. The schedule of speakers will be developed each semester with strict faculty supervision. This course may only be taken for credit one time.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5101. Academic Instruction for Engineering Graduate Assistants.**

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENGR 5105. Engineering Internship.**

This course is a faculty-supervised, experiential, work-integrated learning course intended to help the student acquire engineering curriculum-related industrial experience and hence successfully make the transition into the workforce. Course cannot be counted toward graduation. Course may be repeated once. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5198B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5201. Academic Instruction for Engineering Graduate Assistants.**

This course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENGR 5298B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5310. Probability, Random Variables, & Stochastic Processes for Engineers.**

This course develops theory underlying analysis and design of systems. Fundamental distributional concepts, applications of statistical methods, and theory of stochastic processes are introduced to create a mathematical foundation for engineering analysis of physical systems involving randomness. Applications to engineering topics are taught, including estimation, control, and systems theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5321. Environmental Chemistry.**

This course introduces environmental chemistry, emphasizing aquatic resources and engineering. It also examines fundamental geochemistry and atmospheric chemistry principles relating to pollutant impacts on aquatic ecosystems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5322. Low Impact Development and Green Infrastructure.**

This course covers the principles and practices of Low Impact Development and Green Infrastructure (LID/GI) for sustainable development and water sustainability through rain harvesting, small systems, resource recovery, and technology-enhanced innovation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5323. Soil and Groundwater Remediation.**

This course covers various remediation technologies to clean up contaminated soil and groundwater. Topics include, but are not limited to, subsurface hydrology, contaminant fate and transport, physicochemical and biological remediation, monitoring, and brownfield redevelopment. Significance of subsurface contamination and the importance of environmental health will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5330. Advanced Soil Mechanics.**

This course is a fundamental graduate-level geotechnical engineering course, covering the physical, mechanical, hydraulic, and electrical properties of soil. The mandatory laboratory component will provide hands-on experience with characterizing soils for engineering purposes (stress-deformation and strength characteristics) and help to familiarize students with ASTM geotechnical laboratory testing procedures and standards.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ENGR 5332. Earth retaining structures and slopes.**

The course will cover the design and analysis of various earth retaining structures as well as slope stability analysis. Fundamental lateral earth pressure theories will be taught, followed by application through design for gravity walls, cantilever walls, mechanically stabilized earth walls, soil nails, and tiebacks. Slope stability analysis will include infinite methods, methods of slices, chart methods, and finite element methods with commercial software. Additional topics include slope remediation techniques and geosynthetics for slope stabilization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5333. Fluid Flow in Porous Media.**

This course presents the fundamental theory of fluid flow in heterogeneous porous media and introduces various theoretical tools to characterize and predict the flow field. This course focuses on the fluid flow theory in complex porous media, such as fractured porous media. Key concepts are introduced, and derivations of governing equations are presented thoroughly. Analytical and numerical techniques to solve governing equations are discussed. The students of this course use these fundamental equations to solve problems based on real-world situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5334. Advanced Foundation Engineering.**

This course examines advanced topics in foundations design including design, analysis and construction of shallow and deep foundations. Deep foundations include driven piles, drilled shafts, micropiles, and auger cast in place piles. The course will cover bearing/axial capacity, settlement, pile group effects, and lateral capacity of the various foundation types. Additional topics include subsurface exploration and analysis of pile behavior using wave equation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5341. Advanced Bituminous Materials.**

This course provides a comprehensive presentation of bituminous materials, mix design procedures, and construction techniques. Emphasis is placed on a fundamental understanding of asphalt cements and aggregates, and how these materials affect mixture design and pavement performance. Modern asphalt pavement design and construction practices are also introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5351. Advanced Reinforced Concrete Members.**

This course covers advanced topics related to reinforced concrete materials and specifications, and the behavior and design of reinforced concrete members. The topics includes the following: flexural behavior and design of reinforced concrete, behavior and design of slender columns, design of structural components, frame joints, and walls, serviceability and durability issues, and anchorage design using splices, hooks, and mechanical devices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5352. Advanced Prestressed Concrete.**

This course covers the theories, principles, and concepts of prestressed concrete, including analysis and design of prestressed components for axial, flexure, shear, and torsion. This course will also introduce the applications of prestressed elements in various types of infrastructure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5361. Pavement Asset Management.**

This course is about applications of pavement condition evaluation technologies, pavement distress data analysis and modeling, and pavement maintenance and rehabilitation decision making in the management of pavement systems. The course covers methods of evaluating field performance of rigid and flexible pavements by measuring surface distresses, profiles, friction resistance, and structural integrity. In addition, the course also discusses pavement performance evaluation models, and ranking and optimization methods for decision-making of pavement maintenance and rehabilitation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5362. Advanced Traffic Engineering.**

This course is an introduction to basic components of transportation systems and fundamentals of transportation engineering. Topics include geometric design of highways, study of warrants for traffic control devices, analysis of traffic flow theory and characteristics, levels of service, capacity of urban and rural highways, design and analysis of traffic signals and timing plans, and analysis of urban and highway traffic characteristics using simulation software.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5363. Road Infrastructure Safety.**

This course will cover topics including an introduction to road infrastructure safety, fundamentals of road safety analysis, highway safety management systems, count data modeling, crash severity modeling, highway safety design, basics of artificial intelligence and machine learning, human factors, and safe system design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENGR 5384. Problems in Engineering.**

Graduate students investigate a special topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. This course may be repeated once for additional credit with permission of the School Director. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENGR 5398A. Project.**

This course represents a student's initial project enrollment. No project credit is awarded until the student has completed the project in ENGR 5x98B. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5398B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the theses is completed in ENGR 5x99B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5598B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed. Prerequisite: Instructor approval.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**ENGR 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENGR 5998B. Project.**

This course represents a student's continuing project enrollments. The student continues to enroll in this course until the project is completed.

Prerequisite: Instructor approval.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENGR 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 1300. Developmental Writing.**

Basic composition skills. For students who have not satisfied TSIP requirements or for those who need developmental work before taking English 1310. Credit earned for this course does not count toward any degree offered by the university.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Developmental/Remedial

**Grade Mode:** Developmental

**ENG 1310. College Writing I.**

Expository writing as a means of exploring and shaping ideas. Emphasis on critical reading and the improvement of essays through revision. (MULP) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Communication Core 010|Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ENGL 1301

**ENG 1320. College Writing II.**

Continuation of English 1310. Expository writing as a means of analyzing and understanding texts. Research paper required. Requirements in sophomore English must be completed before a student takes any advanced work in English. (MULP) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Communication Core 010|Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ENGL 1302

**ENG 1321. Writing for Sustainable Change.**

This service-learning writing course focuses on supporting sustainable community initiatives in the local area. All writing assignments target real-world audiences in order to advance existing and/or proposed community projects. Writing assignments reflect a variety of genres, including multimodal texts and group-authored projects. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Communication Core 010|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** ENGL 1302

**ENG 2310. British Literature before 1785.**

Students study representative authors and works of British literature from the beginnings through the Neoclassical Period.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Component Area Core 090|Lang, Phil & Culture CAO 094|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** ENGL 2322

**ENG 2320. British Literature since 1785.**

Students study representative authors and works of British literature from the Romantic Period to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Component Area Core 090|Lang, Phil & Culture CAO 094|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** ENGL 2323

**ENG 2330. World Literature before 1600.**

Students study representative authors and works of literature from the ancient world to the early modern world. Readings may come exclusively from the Western tradition or from various literary traditions, such as those of Africa and Asia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Component Area Core 090|Lang, Phil & Culture CAO 094|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** ENGL 2332

**ENG 2340. World Literature since 1600.**

Students study representative authors and works of literature from the modern world. Readings may come exclusively from the Western tradition or from various literary traditions, such as those of Africa and Asia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Component Area Core 090|Lang, Phil & Culture CAO 094|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** ENGL 2333

**ENG 2359. US Literature before 1865.**

Students survey representative authors and works of US literature from the beginnings to the Civil War.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Component Area Core 090|Lang, Phil & Culture CAO 094|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** ENGL 2327

**ENG 2360. US Literature since 1865.**

Students survey representative authors and works of US literature from the Civil War to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Component Area Core 090|Lang, Phil & Culture CAO 094|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** ENGL 2328

**ENG 2371. U.S. Literature: Writing Identities.**

In this course students survey writers and texts that reflect a variety of identities and traditions throughout U.S. history, from the colonial era to the present. Students read and analyze literary texts; develop an appreciation of literature as an art form; and gain an understanding of the role of literature in its historical, social and cultural contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Lang, Phil & Culture CAO 094|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3301. Critical Approaches for English Majors.**

This course introduces the critical methods and practices underpinning rhetorical and literary analysis within various branches of English Studies and develops the skills of reading, writing, and research. It is required for majors and open to minors and should be taken in the first semester of upper division classes. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3302. Film and Video Theory and Production.**

This course covers the study of film and narrative theory combined with the practice of videography and video editing. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 3303. Technical Writing.**

This course concerns writing in technical professions. It emphasizes planning, writing, revising, editing, and proofreading proposals, reports, instructions, and other forms of professional communication for a variety of audiences. (WI) Prerequisite: ENG 1310 or ENG 1320 or ENG 1321 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Communication Core 010|Multicultural Perspective|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3304. Professional Writing.**

The principles of expository writing adapted for the workplace. Prepares students in non-technical fields to write documents commonly used in professional settings. Students compile a writing portfolio suitable for a job search or for application to professional school. Computer technology included. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3305. Life Writing.**

This course covers approaches to and/or practices of life writing in rhetoric and writing studies, including autoethnography, narrative inquiry, counterstorytelling, literacy narratives, scholarly personal writing, or personal writing. Specific content and focus vary by section. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3306. Writing for Film.**

This course is an introduction to screenwriting that combines the study of published film texts with workshop practice in writing for film. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3307. Introduction to the Study of Film.**

This course provides an introduction to basic film terms and concepts, various theoretical approaches to the study of film, and to important debates within film theory. Its focus will include, but is not limited to, theories of spectatorship, the debate between formalism and realism, psychoanalytic and feminist theories, and cultural approaches to film. This course should be taken before other upper-division film courses. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3308. Advanced Topics in Film.**

This course offers a focused examination of film as text, with an emphasis on critical, theoretical, cultural, historical, generic, and/or stylistic aspects. Specific content and focus vary by section and may include the history of classical Hollywood cinema; silent film; world, European, or national cinemas; or the documentary. This course may be repeated once for credit when its topic varies. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3309. The Southwest in Film.**

A survey of films of the Southwest, emphasizing the history and cultural diversity of the region as represented on screen. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3311. Practices in Writing and Rhetoric.**

This course concerns the study and practice of advanced expository writing, with a focus on achieving rhetorical dexterity and effective communication. Specific content and focus vary by section and may include The Essay, Nature Writing, Argument, Writing for the Government, or Online Communication. This course may be repeated once for credit when its emphasis varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3312. Internship in English Studies.**

Course offers a supervised work experience related to students' career interests. Prerequisites: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 3313. Scientific Writing.**

The course teaches composition techniques that include planning, organization, revision, usage, and audience identification necessary for writing in science and/or social science fields. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3315. Introduction to Creative Writing.**

A critical seminar for writers of fiction, poetry, and articles. Creativity, criticism, and revision are emphasized. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3316. Film Adaptation Studies.**

This course offers a comparative study of film adaptations from other media. Specific content and focus vary by section. This course may be repeated once for credit when its topic varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3318. Approaches to Writing and Rhetoric.**

This course focuses on approaches central to the study and practice of writing and rhetoric. Specific content and focus vary by section and may include Composition Theory, Theories of Technical Communication, Chicana/o/x Rhetorics, or Literacy Studies. This course may be repeated when its emphasis varies for up to 9 hours of English credit. (MULT)(WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3319. The Development of English.**

Origin and growth of the English language with particular attention to phonological, morphological, and grammatical changes; history of dialects, spelling, and dictionaries; sources of vocabulary. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 3320. Studies in Theory and Criticism.**

This course explores one or more theoretical and critical approaches, such as ecocriticism, film theory, trauma theory, or disability studies. It may be repeated once for credit when its topic varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3321. The Short Story.**

The short story throughout the world since Poe and Gogol. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3322. The European Novel.**

Major continental novelists from Cervantes to the present, read in translation. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3323. Modern Poetry.**

Modern poetry in English and English translation. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3325. Literature in Translation.**

This course examines major works of literature, in translation, since the eighteenth century. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3326. US Drama on Film.**

This course examines masterpieces of US drama and the films that have been made from them. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3327. Early Global Drama in English.**

This course studies examples of global drama from Aeschylus to Ibsen. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3328. Modern Global Drama in English.**

This course studies examples of world drama in English from Ibsen to the present. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3329. Studies in Mythology.**

This course examines myths in various contexts, such as ancient and/or contemporary cultures, mythic patterns in modern literature, and myths produced in popular culture. Specific content and focus vary by section. This course may be repeated once for credit when its topic varies. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3331. Black Literature.**

This course studies selected Black poetry, drama, fiction, and other cultural texts. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3333. Early US Literature.**

This course examines selected US literature from its colonial beginnings to 1865. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3335. US Literature, 1865-1945.**

This course examines selected US literature from the Civil War to World War II. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3336. US Literature, 1945 to the Present.**

This course examines selected US literature from World War II to the present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3338. The American Novel.**

A study of the novels and pertinent criticism from the beginnings in America. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3340. Special Topics in Language and Literature.**

This course covers a variety of topics proposed and taught occasionally by different English faculty members. Specific content and focus vary by section; past emphases have included Early Modern Evil, Sexing the Word, and The Beatles. This course may be repeated twice for credit when its emphasis varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Header|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3341. Studies in Global Literature.**

This course examines selections from ancient and/or modern literature from around the globe. Specific content and focus vary by section, and the course may be repeated once for credit when its topic varies. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3342. Editing.**

A study of editing, to include instruction in making editorial changes, preparing MSS for typesetter, marking galley and page proof; fundamentals of layout and design (typeface, paper, headlines, etc.); problems and possibilities in desktop publishing; and the current status of electronic publications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 3343. The Interdisciplinary Approach to Literature.**

This course studies a single topic using techniques from various disciplines such as history, sociology, psychology, environmental studies, and/or visual studies. It may be repeated once for credit when its topic varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3344. Chicana/o/x Narrative and Social History.**

This course examines narratives by people of Mexican descent living in the United States. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3345. Southwestern Studies I: Defining the Region.**

The first of two courses in a broad interdisciplinary survey of geophysical, cultural, social, literary, and political history of the Southwest that emphasizes regional and ethnic expressions of culture in architecture, art, economics, law, literature, philosophy and politics. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3346. Southwestern Studies II: Consequences of Region.**

The second of a two-course sequence in a broad interdisciplinary survey of geophysical, cultural, social, literary, and political history of the Southwest, emphasizing regional and ethnic expressions of culture in architecture, art, economics, law, literature, philosophy, politics, popular culture, religion, social science, and technology. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3347. American Poetry.**

Study of American poetry from its beginnings to present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3348. Creative Writing: Fiction.**

A seminar for writers of fiction, with emphasis on creativity, criticism, and revision. (WI) Prerequisite: ENG 3315 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3349. Creative Writing: Poetry.**

A seminar for writers of poetry, with emphasis on creativity, criticism, and revision. (WI) Prerequisites: ENG 3315 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3350. Global Medieval Literature.**

This course examines medieval contexts, genres, and writings across Europe and beyond. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3351. Early Medieval Literature of the British Isles.**

An introduction to Old English life and writings from early culture through Beowulf (texts in modern translation). (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3352. Medieval English Literature.**

Studies of important non-Chaucerian writings in the Middle Ages, some in modern translations. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3353. British Poetry and Prose of the Sixteenth Century.**

Major poets and prose writers from More to Spenser. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3354. Shakespeare.**

Selected plays from the earliest through Hamlet. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3356. British Poetry and Prose of the Seventeenth Century.**

Prose and poetry from Donne and Bacon to Milton and Dryden. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3357. British Literature, 1688-1750.**

This course explores late-seventeenth- and early eighteenth-century literature and the development of literary genres. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter



**ENG 3359. British Literature, 1750-1800.**

This course explores later eighteenth-century poetry and prose and the beginnings of the Romantic movement. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3362. The British Romantics.**

Course explores British poetry and prose of the Romantic Age. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3365. The British Victorian Period.**

British poetry and prose of the Victorian period, 1837-1900. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3368. The British Novel.**

Course explores British prose fiction. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3370. Twentieth- and Twenty-First Century British Literature.**

This course examines selected British poetry, fiction, and drama since 1900. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3371. Queer and Trans Texts.**

This course examines texts engaged with LGBTQIA2S+ culture in various media. Specific content and focus vary by section. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3372. Race and Ethnicity in Texts.**

This course examines depictions, representations, and engagements with race and ethnicity in a variety of texts. Specific content and focus vary by section. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3373. Gender and Sexualities in Texts.**

This course examines depictions, representations, and engagements with gender and sexualities in a variety of texts. Specific content and focus vary by section but may include feminist, queer, trans, and/or men's studies approaches. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3385. Children's Literature.**

A survey of traditional and contemporary literature for children with attention to literary history, aesthetic qualities, and critical approaches. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3386. Adolescent Literature.**

A survey designed to provide a critical philosophy and working repertoire of literature for adolescents. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3388. Women's Writing.**

This course examines selected writing by women, in various genres and from a variety of historical periods. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3389. Teaching English Language Arts in the Secondary Classroom.**

This course familiarizes future teachers with the discipline of English as a formal field and the practice of teaching English Language Arts. It is a required part of the student teaching sequence and prepares students for the English TExES (Texas Examination of Educator Standards). (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3390. Independent Study in Language and Literature.**

This course consists of an independent study with an individualized reading list, research project, and tutorial sessions, focused on a special problem in language and/or literature. (WI) Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3392. Women Writers of the Middle Ages.**

Religious and secular writings by women from the early Church through the 15th century. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 3393. Postcolonial Literatures.**

This course examines postcolonial literatures, such as Canadian, Caribbean, African, South Asian, or Australian, with discussion of aesthetic, cultural, and political issues surrounding them. Texts will be in English. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4310. Modern English Syntax.**

This course studies English syntax as described by traditional, structural, and transformational grammarians.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 4323. Studies in Autobiography and Biography.**

Selected works in autobiography and biography. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4325. Literature of the Southwest.**

The literature of Texas and the surrounding territory; various types of non-fiction prose, fiction, and poetry. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4334. US Romanticism.**

Course explores the US Romantic movement of the 19th century, with consideration of important authors, intellectual backgrounds, and literary relationships. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4343. Approaches to a British Author.**

This course examines the works of a British author, e.g. Charles Dickens, Mary Wollstonecraft, Virginia Woolf, or Zadie Smith. Specific content and focus vary by section, and the course may be repeated once for credit when its emphasis varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4344. Approaches to a US Author.**

This course examines the works of a US author, e.g. Gloria Anzaldúa, Cormac McCarthy, bell hooks, or Toni Morrison. Specific content and focus vary by section, and the course may be repeated once for credit when its emphasis varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4345. Approaches to a Global Author.**

This course examines the works of a global author, e.g. Dante Alighieri, Anita Desai, Paolo Friere, or Chinua Achebe. Specific content and focus vary by section, and the course may be repeated once for credit when its emphasis varies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4348. Senior Seminar in Fiction Writing.**

Workshop in writing fiction and evaluating manuscripts. Students produce portfolio of creative work. (WI) Prerequisite: ENG 3348 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4349. Senior Seminar in Poetry Writing.**

Workshop in writing poetry and evaluating manuscripts. Students produce portfolio of creative work. (WI) Prerequisite: ENG 3349 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4350. Senior Seminar in Film.**

This course integrates perspectives from English film and media studies, including film criticism, history, theory, screenwriting, and practical video skills. Each student will choose a focus, and all students will critique scholarly research, screenplays, and video projects that demonstrate concepts learned. Specific content and focus vary by section, and this course may be repeated once for credit when its emphasis varies. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4351. Chaucer and His Time.**

The works of Chaucer and their significance in an important literary and social era. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4355. The Later Shakespeare.**

The problem comedies, through the tragedies, to the plays of the final years; emphasis on reading in depth the plays, significant critical materials, and selected plays by Shakespeare's contemporaries. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4358. Milton.**

Milton's longer poems and most important prose writing. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ENG 4385. Advanced Studies in Children's or Adolescent Literature.**

This course studies children's or adolescent literature. Possible topics include a historical period, a geographical area, a genre, a single author, or a theoretical approach, with attention to developing critical and research skills. Specific content and focus vary by section, and this course may be repeated once when emphasis varies for up to six hours of English credit. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ENG 5199B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5299B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5300. Language Problems in a Multicultural Environment.**

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5301. Literary Scholarship.**

An introduction to scholarly resources, methods, theories, and responsibilities that guide the study and interpretations of literature in English. Literary texts chosen for detailed examination vary with expertise of the instructor. Required in first year of M.A. with a Literature Major.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5302. Media Studies.**

The study of film and media history, theory, and practice. Special topics may include videography, video editing, genre, filmmakers, and regional film.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5307. Visual Rhetoric.**

This course focuses on of this course is the investigation of image-based modes of rhetorical communication. The course includes theories of visual rhetoric and the analysis of the issues and implications of images.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5309. International Technical Communication.**

This course covers models and theories of cultural differences and how to ethically and effectively communicate with cross-cultural audiences verbally and non-verbally. Students also learn how to analyze international audiences in terms of their values, cultural needs, and communication styles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5310. Studies in English Language and Linguistics.**

A study of the English language, with special attention to phonology, morphology, syntax, semantics, dialectology, sociolinguistics, normal language acquisition, and/or writing and spelling systems. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5311. Foundations in Technical Communication.**

An introduction to the theory and practice of technical communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5312. Editing the Professional Publication.**

The editing, design, layout, and proofreading of a professional publication. This course is an internship. May be repeated one time with different emphasis.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5313. Studies in Principles of Technical Communication.**

A group of courses that provide students theoretical and practical information useful in any position in technical communication. Recent emphases include Digital Media and the web, Technical Editing, and Visual Rhetoric. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5314. Specializations in Technical Communication.**

A group of courses that provide students theoretical and practical information for specialized types of technical communication. Recent emphases include International Technical Communication Proposal Writing, Software Documentation and Writing for the Government. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5315. Graduate Writing Workshop.**

A studio course in which the primary texts are student manuscripts. Concentrations in fiction or poetry examine principles and techniques of creating, evaluating, and revising writing in these genres. The course requires class members to review writing produced by other workshop members.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5316. Foundations in Rhetoric and Composition.**

A group of courses providing students with theoretical, pedagogical, and methodological foundations in the field of rhetoric and composition. Emphases vary but include Contemporary Composition Theory and Composition Pedagogy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5317. Specializations in Rhetoric and Composition.**

A group of courses providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Center Theory, Practice, and Administration; Writing Across the Curriculum; Service Learning; and Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5320. Form and Theory of Fiction.**

An examination of traditional and current theory and practice in fiction. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of fiction in other literatures. For M.F.A. credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5321. Contemporary Fiction.**

Readings selected from canonical and/or experimental fiction. Recent emphases include novels into film, postmodern fiction, Magical Realism, and Saul Bellow. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5322. Form and Theory of Poetry.**

An examination of traditional and current theory and practice in poetry. Major emphasis will be placed on the British/American tradition, but some attention will be given to the practice and theory of poetry in other literatures. For MFA credit only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5323. Studies in Autobiography and Biography.**

A study of selected works in autobiography and biography with special attention to the art forms used in these works. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5324. Studies in Literary Genre.**

A study of one or more literary genres over several historical periods or from a variety of cultural perspectives. The course focuses on genres such as the following: the epic, the novel, the short story, the lyric, the pastoral, the romance, and Irish comic fiction. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5325. Studies in Literature of the Southwest.**

Selected Texas and Southwestern writers with emphasis on fiction. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5327. Research Methods in Rhetoric and Composition.**

This course introduces research practices in rhetoric and composition, focusing on the strategies, methods, paradigms, and perspectives that characterize qualitative and quantitative research. It considers research ethics, issues of representation, and the history and role of research in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5328. Directed Portfolio.**

Constitutes partial fulfillment of non-thesis option for students earning the MA in Rhetoric and Composition. Under guidance of a graduate faculty committee, students produce a portfolio of representative written work with written commentary and reflection. Repeatable once. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5329. User Experience (UX) and Usability Research.**

This course introduces foundational principles of user experience (UX) design theory and the practice of placing users and their needs as the focus of design. Along with the principles of human factors and user interface design, the course also focuses on user and task-analysis, field research methods, usability testing, and the UX process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5331. Studies in American Poetry.**

Selected poets with a survey of their works. Recent emphases include Walt Whitman, Emily Dickinson, Southern poetry, Denise Levertov, and Robert Bly. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5332. Studies in American Prose.**

Selected authors with special attention to novels. Recent emphases include William Faulkner, Ernest Hemingway, Richard Wright, and Zora Neale Hurston. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5335. Technical Editing.**

This course explores how to edit technical documents using different levels of editing, including copyediting and developmental editing. Students will also explore current trends in technical editing and publishing, as well as effective author-editor relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5336. Document Design.**

This course explores designing documents that utilize principles of design to maximize the effects of layout, style, color, information architecture, and typography. Students learn to coordinate content for information messaging and view documents as active, response-invoking artifacts in a variety of media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5340. Discourse Analysis.**

This course introduces theories and methodologies for the study of human discourse, or language in use. Discourse history, assumptions and principles, verbal and nonverbal communication, as well as society and culture's roles in a variety of discourse genres are analyzed and discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5341. Software Documentation.**

This course develops students' expertise in the management and production of writing that supports the efficient use of software in its intended environment. Major genres include software and hardware manuals such as tutorials, procedures, and reference manuals. Students address issues of user analysis, text design, graphics design, task orientation, etc.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5345. Southwestern Studies I: Defining the Region.**

An interdisciplinary course that surveys the physical, cultural, and social history of the Southwest, emphasizing architecture, art, literature, philosophy, politics, popular culture, and technology. Historical focus from the 15th to the mid-19th century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5346. Southwestern Studies II: Consequences of Region.**

Second course in a survey of physical, cultural, and social history of the Southwest, emphasizing regional and ethnic expressions of culture. This course moves from the broad overview of the first semester to more specific problems in the region and to the artistic products of regional culture. Historical focus is from the Civil War to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5353. Studies in Medieval Literature.**

Emphasis on authors, contexts, and genres of the medieval period. Recent emphases include Anglo-Saxon culture, language, and literature; Chaucer; non-Chaucerian medieval literature; pilgrimage literature. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**ENG 5354. Studies in Renaissance Literature.**

Emphasis on authors, contexts, and genres of the Renaissance. Recent emphases include Shakespeare, Renaissance epic, Tudor humanism, and John Milton. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5359. Studies in Restoration and Eighteenth-century Literature.**

Major writers of the period with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Johnson and his circle, Restoration and eighteenth-century drama, and the eighteenth-century novel. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5364. Studies in the Romantic Movement.**

The works of the Early Romantics or Late Romantics in context with attention to nineteenth- and twentieth-century scholarship. Recent emphases include Blake and the other arts, Coleridge, the Wordsworths, Shelley, and Keats. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5366. Studies in Victorian Poetry.**

Major Victorian poets with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include Tennyson, the Brownings, the Pre-Raphaelites, and Hopkins. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5368. Studies in Victorian Prose.**

Major Victorian prose writers with emphasis on scholarship and aesthetics as well as cultural and historical background. Recent emphases include George Eliot, non-fiction Victorian prose, Victorian women novelists, and Charles Dickens. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5371. Studies in Modern British Literature.**

Selected authors with a survey of their works. Recent emphases include Yeats, Wilde, Auden, and Post-World War II British poetry. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ENG 5372. Practicum in English Studies.**

An introduction to key issues and concepts in the teaching of English studies. Required for first-year instructional assistants in the English Department. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5381. Studies in Modern British and American Drama.**

A survey of major British and American dramatists and their European or world context. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Header

**Grade Mode:** Standard Letter

**ENG 5382. Practicum in Composition.**

An introduction to key issues and concepts in the teaching of expository writing at the college level. Required for first-year teaching assistants in the English Department who have not previously taken ENG 5372. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ENG 5383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5384. Critical Theory.**

A study of critical theory, emphasizing the history of criticism and/or contemporary critical theories. Repeatable with different emphases for up to nine hours of English credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5388. Studies in Literature for Children or Adolescents.**

A study of contemporary works, extending the student's knowledge of the literature and criticism in the field. Typical emphases are generic and/or thematic and include picture books, the contemporary novel, and the children's classics on film. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5389. History of Children's Literature.**

The history of children's literature from the Middle Ages through 1940. May be repeated with different emphases for up to six hours of graduate credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ENG 5390. Special Problems.**

Independent study under supervision of a graduate faculty member in English, with in-depth readings and research focused on a special problem in literature and/or language. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5391. Directed Studies in English.**

Students will conduct studies as necessary preparation for graduate-level coursework in English. The nature of the work varies depending on the student's level of academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ENG 5395. Problems in Language and Literature.**

Recent emphases include literary technique and literary theory. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 5399A. Thesis.**

First semester of thesis enrollment. No thesis credit awarded until student has completed the thesis in English 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ENG 5399B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5599B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 5999B. Thesis.**

Continuing thesis enrollment until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ENG 7300. Language Problems in a Multicultural Environment.**

An introduction to the study of multicultural language and linguistics with descriptive, psychological, social, and semantic emphases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7314. Specializations in Professional and Technical Communication Topics.**

Provides theoretical and practical information for specialized types of technical and professional communication.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7316. Foundations in Rhetoric and Composition.**

A course providing students with theoretical, pedagogical, and/or methodological foundations in the field of rhetoric and composition. Emphases vary but may include Contemporary Composition Pedagogy, Basic Writing Theory and Practice, and Writing Assessment. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7317. Specializations in Rhetoric and Composition.**

A course providing theoretical, pedagogical, methodological, and/or administrative grounding in specialized areas of rhetoric and composition. Emphases vary but may include Writing Across the Curriculum, Service Learning, Writing Center Theory and Practice, Computers and Writing, Literacy. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7326. Contemporary Composition Theory.**

Introduces students to the history of writing instruction in the university and to the theories of writing and composing that inform contemporary composition studies and the teaching of writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ENG 7383. Studies in Rhetorical Theory.**

An introduction to classical and rhetorical theory in various areas of English studies. Recent emphases include Teaching of Composition and Technical Communication. Repeatable with different emphases for up to nine hours of English credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1100. Lifetime Fitness and Wellness.**

This course introduces students to the concepts of health-related physical fitness. Emphasis is placed on learning how to teach these concepts. Students will design and implement an exercise program for enhancing health-related physical fitness. Restricted to majors or minors in Exercise and Sports Science, Athletic Training, or Health and Fitness Management.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PHED 1164

**ESS 1101. Seminar in Exercise and Sport Science.**

This course provides students with an introduction to the various areas of exercise science, including interventions for healthy versus clinical populations, professional opportunities, individual awareness of professional responsibilities, familiarization with current trends and issues, and professional literature.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1128. Aquatic Therapy.**

The course addresses basic principles and concepts of aquatic therapy and aquatic emergency management. This course prepares students for the American Red Cross Basic Water Rescue Certification.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1172. Beginning Field Sports.**

This course prepares students to become proficient instructors of field sports, including softball and soccer. Emphasis is on skill development, instructional practices, peer coaching, rules, terminology, offensive and defensive strategies, team organization, game play, referee skills, skills assessment, and conditioning for field sports. Restricted to majors or minors in Exercise and Sports Science, Coaching, or Health and Fitness Management.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1173A. Practicum for Teaching Individual Sports.**

This course provides for real-life application of concepts learned in ESS 1310. This practicum aligns with an accompanying section of an approved Team Sports ESS/PFW Activity course. Pre-Service teachers seeking All-Level Physical Education teacher certification will gain valuable experience in planning and teaching lessons from a models-based teaching perspective. Prerequisite: ESS 1310 with grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ESS 1173B. Practicum for Teaching Team Sports.**

This course provides for real-life application of concepts learned in ESS 1310. This practicum aligns with an accompanying section of an approved Team Sports ESS/PFW Activity course. Pre-Service teachers seeking All-Level Physical Education teacher certification will gain valuable experience in planning and teaching lessons from a models-based teaching perspective. Prerequisite: ESS 1310 with grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ESS 1173C. Practicum for Teaching Conditioning.**

This course provides for real-life application of concepts learned in ESS 1310. This practicum aligns with an accompanying section of an approved Team Sports ESS/PFW Activity course. Pre-Service teachers seeking All-Level Physical Education teacher certification will gain valuable experience in planning and teaching lessons from a models-based teaching perspective. Prerequisite: ESS 1310 with grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ESS 1175. Beginning Jogging and Conditioning.**

This course presents the proper biomechanics of jogging, safety rules, and conditioning principles relevant to the activity. Course topics include warming-up and cooling-down, hydration, monitoring and modifying intensity, training for road races, and jogging-related injuries. Students will also learn how to train individuals entering into a jogging program. Restricted to majors or minors in Exercise and Sports Science or Health and Fitness Management.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1176. Beginning Tennis, Badminton, and Other Racket Sports.**

This course prepares Exercise and Sports Science majors to be proficient instructors of racket sports, including tennis and badminton. The emphasis is on the fundamentals of racket sports and program development for the beginner. Restricted to majors or minors in Exercise and Sports Science, Health and Fitness Management, or Coaching.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1178. Beginning Volleyball and Basketball.**

This course prepares students to become proficient instructors of volleyball and basketball. Emphasis is on skill development, instructional practices, peer coaching, rules, terminology, offensive and defensive strategies, team organization, communication, game play, referee skills, skills assessment, and conditioning for volleyball and basketball. Restricted to majors or minors in Exercise and Sports Science, Health and Fitness Management, or Coaching.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1179. Beginning Weight Training.**

This course prepares students to be proficient instructors of all forms of resistance training. Emphasis is on understanding the proper, safe, and effective techniques of weight lifting. Students will learn how to develop resistance-training programs for untrained individuals with a variety of conditions.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1201. Group Exercise Instructor Training.**

This course is for students interested in becoming certified group exercise instructors. Students will learn how to safely and effectively conduct group exercise classes. Students will be trained to teach a variety of formats, such as high- and low-impact aerobics, step aerobics, kickboxing, yoga, and resistance training. Prerequisite: Major in Health and Fitness Management or consent of the instructor.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ESS 1298. Foundations of Sports Medicine.**

This introductory course provides an essential foundation for students beginning their course of study in the field of sports medicine. Students will understand key principles of professionalism, responsibilities, ethics and legal aspects, scope of practice, and health care job opportunities in the careers of sports medicine.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 1310. Introduction to Teaching Physical Education.**

This course is designed to provide pre-service physical educators an introduction to fundamental principles of teaching physical education in K-12 settings. Progressive steps in developing a basic understanding of pedagogical skills, physical education curriculum, and professional attributes needed to pursue the teaching profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 2320. Motor Development.**

This course provides the exercise science and physical education student with a knowledge base in the study of changes in motor behavior across the lifespan, the processes that underlie these changes, and factors that affect them. Prerequisite: Major or minor in Exercise and Sports Science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 2321. Curriculum Design & Implementation in Physical Activity Settings.**

This course is designed to teach students how to design and implement a comprehensive physical education program in school settings. Concepts from the course can be extended to include before or after school programs as well for all grade levels (K-12).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3117. Laboratory in Exercise Physiology.**

In this laboratory course, students perform experiments that highlight the physiological responses to exercise. This course also introduces students to basic techniques in the assessment of health and human performance, including the assessment of maximal oxygen consumption, body composition, anaerobic power and capacity, muscular fitness, movement economy, and dietary intake. Prerequisite: BIO 2430 or [BIO 2451 and BIO 2452] or [BIO 3425 and BIO 3426] any with grades of "C" or better and a minimum 2.0 Overall GPA. Corequisite: ESS 3317 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3180. Cardiopulmonary Resuscitation (CPR), First Aid, and Basic Life Support (BLS).**

This course will teach the fundamentals of Cardiopulmonary Resuscitation (CPR) and First Aid. An extension of the class will include Basic Life Support (BLS) i.e. epinephrine injection, supplemental oxygen administration, and automated defibrillation administration.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3303. Assistant Dive Instructor.**

This course provides students with the technical knowledge necessary to prepare for the Assistant Diver Instructor Scuba Certification. Topics include advanced diving physiology, air station operations, assisting instructors with beginning open-water dive students, and boat diving operations. Prerequisite: PFW 1201 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3304. Divemaster.**

This course provides students with the technical knowledge necessary to prepare for the National Association of Underwater Instructors Divemaster Scuba Certification. Topics include advanced diving physiology, organizing open-water dives, air station operations, assisting instructors with beginning and advanced open-water dive students, and boat diving operations. Prerequisite: Assistant Instructor Certification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3317. Exercise Physiology.**

Students learn the acute and chronic physiological responses to exercise. Emphasis is on muscle bioenergetics, muscle contractile properties, performance improvement through training and supplementation, as well as cardiopulmonary and endocrine responses to exercise. Prerequisite: BIO 2430 2430, or [BIO BIO 2451 and BIO 2452] 2452, with grades of "C" or [BIO 3425 and BIO 3426] any with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**ESS 3319. Introduction to Cardiopulmonary Exercise Physiology.**

This course introduces students to the cardiovascular and pulmonary systems, discusses the physiological dynamics, control mechanisms, and system interrelationships of the cardiovascular and pulmonary systems, and explores the effects of exercise on these systems, including the physiological factors that limit exercise tolerance across the spectrum of health and chronic disease. Prerequisite: BIO 2430 or [BIO 2451 and BIO 2452] and ESS 1101 all with grades of "C" or better a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3320. Biomechanics.**

This course provides an introduction to the mechanical foundations of anatomical function and human movement. Qualitative and quantitative biomechanical analyses of human movement are introduced to inform the prescription of technique, equipment, and training interventions. Prerequisite: BIO 2430 or [BIO 2451 and BIO 2452] or [BIO 3425 and BIO 3426] all with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3321. Teaching Elementary Children Physical Activity.**

This course introduces students majoring in Elementary Education and/or Exercise and Sports Science to physical education knowledge and movement concepts. It provides innovative techniques for incorporating physical activity within the elementary school setting. The course presents theory and then guides the students in applying those theories in a practical way.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3323. Psychosocial Aspects of Exercise and Sport Science.**

This course examines the psychological and social theories and research related to physical activity. Emphasis is on the determinants that influence exercise behavior and sport participation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3325. Applied Assessment of Physical Activity.**

This course is designed to provide students with a theory to practice approach in the assessment of physical activity within the physical education setting. Particular emphasis is placed on empowering students to use relevant and meaningful physical activity assessments in K-12 schools. Prerequisites: ESS 1310 and ESS 2320. Restricted to majors seeking all level Teacher Certification in Physical Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3329. Motor Learning.**

This course provides students with an understanding of the physiological, neurological, and psychological factors affecting performance and acquisition of motor skills. Students will examine the structural components underlying the learning of motor skills and draw upon examples from sport, physical activities, and rehabilitation. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 3340. Theory and Principles of Coaching.**

This course examines the theories and principles of effective coaching, including philosophy, ethics, strategies, team motivation and organization, coach-athlete relationships, performance analysis, and the administration of facilities, personnel, and contests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4100. Professional Development in Health and Fitness Management.**

This course prepares students to obtain a health and fitness internship and to actively participate in professional development activities including conferences, development of resumes, and interaction with health and fitness professionals. Must be taken the last long semester before internship. Prerequisite: A minimum 2.0 Overall GPA.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4101. Professional Development in Clinical Exercise Science.**

This course prepares students to obtain an internship related to clinical exercise science and to actively participate in professional development activities including conferences, development of professional materials, and interaction with clinical exercise professionals. Must be taken the last long semester before internship. Prerequisite: A minimum 2.0 Overall GPA.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4317. Fitness Assessment and Programming for Healthy Populations.**

Students are presented with current information on fitness assessment and exercise programming for healthy individuals of all ages and fitness levels. Emphasis is placed on preparation for multiple certifications offered by relevant professional organizations. Prerequisites: ESS 3117 and ESS 3317 both with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ESS 4318. Fitness Assessment and Programming Practicum for Healthy Populations.**

During this 80-hour practicum, students will acquire advanced knowledge and skills associated with appraising health risk, assessing fitness levels, and designing exercise programs for diverse populations through on-line, classroom, and laboratory settings as well as through field-based experiences by working in a variety of venues. Prerequisite: ESS 3117 and ESS 3317 with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4319. Fitness Assessment and Programming in Clinical Exercise Science.**

This course provides students with an opportunity to develop knowledge, skills, and competence required to assess and prescribe exercise for clinical populations and to gain knowledge related to managed care and rehabilitation with clinical patients. Prerequisites: ESS 3117 and ESS 3317 both with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4320. Resistance Training and Conditioning.**

This course discusses the development and evaluation of training principles and programs for diverse populations. Emphasis is placed on physiological adaptations and mechanical principles related to the application of resistance training. Prerequisites: ESS 3317 and ESS 3117 both with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ESS 4321. Fitness Assessment and Programming Practicum in Clinical Exercise Science.**

This course presents current exercise and sports science information on testing and programming for clinical populations. This course provides fundamental knowledge, competence, and skills necessary to conduct safe and valid assessments, interventions, and rehabilitation programs for patients with health problems. Students will spend 80 hours at a practicum site. Prerequisite: ESS 1101 and ESS 3117 and ESS 3317 and ESS 3319 all with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 1 Lecture Contact Hour. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4323. Adapted Physical Education.**

This introductory course provides All-Level teacher certification candidates in Exercise and Sports Science with content knowledge on legal mandates, evidence-based practices, and the characteristics of selected disabilities and their considerations when designing meaningful individualized physical activity experiences to meet the students with disabilities in school settings. Prerequisites: ESS 1310, ESS 2320 and 2.75 overall GPA. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ESS 4324. Adapted Physical Activity.**

This course introduces students to the field of adapted physical activity, including sport and leisure for persons with disabilities. This course provides content knowledge on how to instruct physical activities to individuals with unique needs in various settings. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ESS 4333. Fitness Assessment and Programming for Populations Requiring Special Considerations.**

This course provides practical information on fitness assessment and programming for persons requiring special considerations due to their age, pregnancy, obesity, diabetes, low back pain or other health conditions. Prerequisite: ESS 1101 and ESS 3117 and ESS 3317 all with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4337. Independent Study in Exercise and Sports Science.**

This course is for students who are interested in research related to Exercise and Sports Science. Students develop a research study, collect data, and analyze the results. Repeatable for credit with different emphasis. Prerequisites: A minimum GPA of 3.00 and special approval.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**ESS 4340. Internship in Coaching.**

This 220-hour internship provides students with work-related experience. Students will strengthen their coaching-related knowledge, skills, and abilities by observing and shadowing coaches as well as assisting with a range of tasks, including training athletes, managing the facilities, and organizing practices. Prerequisites: completion of all coursework required for the minor in Coaching and special approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 4351. Measurement & Evaluation in Exercise and Sports Science.**

This course introduces students to the fundamental principles and techniques of measuring human performance related to Exercise and Sports Science, as well as evaluating and interpreting the results of exercise science and human performance tests in children and adults. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4357. Water Safety Instruction for Service Learning.**

This course is designed for students to obtain the Red Cross Water Safety Instruction (WSI) certification, and learn how to teach using a Mastery Motivational Climate/TARGET approach. More than half of the semester will involve providing swim lessons to students grades K-6 from a San Marcos school. Students must be able to perform the following skills: front crawl, back crawl, breaststroke, elementary backstroke and sidestroke for 25 yards; butterfly for 15 yards; back float and tread water for 1 minute. Students with a current WSI certification will be exempt from the required WSI lab at the beginning of the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4624. Principles and Practices for Teaching Physical Education.**

This course provides students with an in-depth study of theory and curriculum encompassing the design and implementation of developmentally appropriate and culturally responsive physical education programs for children and adolescents. Emphasis is on implementing evidenced-based curricula that promote youths' enjoyment of and participation in lifelong physical activity. Prerequisites: ESS 1310 and ESS 2320 and ESS 3325, all with a grade of "D" or better, and 2.75 overall GPA.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 4660. Exercise and Sports Science Internship.**

In this 400-hour internship, students will apply theoretical health and fitness management principles and concepts to an organizational setting. This course requires students to participate in a health and fitness organization/agency and complete a semester-long planning and evaluation project. (WI) Prerequisite: A minimum 2.0 Overall GPA and department approval.

**6 Credit Hours. 0 Lecture Contact Hours. 25 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ESS 4661. Internship in Clinical Exercise Science.**

This course places the student in a professional work environment to apply the concepts of exercise rehabilitation in a cardiac care, respiratory therapy, or other healthcare setting, under the supervision of professionals in the field. Students are required to spend 400 hours in this internship position. Prerequisite: Department approval and a minimum 2.0 Overall GPA.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5101. Graduate Assistant Development.**

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ESS 5110. Research Seminar.**

The focus of this course engages students in research and professional development in Exercise and Sports Science. This seminar will allow students to gain exposure to a variety of scholarly activities in an interdisciplinary setting.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**ESS 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5201. Graduate Assistant Development.**

This course is required of all graduate teaching and instructional assistants in the department. This course provides regular in-service and planned periodic evaluations of instructional and professional responsibilities. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**ESS 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5304. Motor Learning and Performance.**

This course is designed to provide students the foundation for understanding the principles involved in enhancing motor skill acquisition, and physiological, neurological, and psychological factors affecting motor learning and performance. Inquiry is made into the various motor learning theories and concepts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5305. Advanced Fitness Assessment and Exercise Prescription.**

This course provides an intensive study of current scientifically based exercise testing and prescription procedures. Students will learn how to evaluate fitness and prescribe exercise through laboratory experiences.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**ESS 5306. Advanced Exercise Physiology.**

This advanced course will provide students with a thorough understanding of the acute responses to exercise and the physiological adaptations that occur in response to exercise training. Additional topics to be covered include environmental influences, aging, and sex differences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5307. Advanced Resistance Training and Conditioning.**

This course will include the development, instruction, and evaluation of resistance training exercises and programs for diverse populations and settings. Physiological and mechanical principles related to resistance training will be applied to study human performance, injury prevention, and rehabilitation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5308. Physical Activity, Disease Prevention and Treatment.**

This course will provide students with opportunities to examine the role of physical inactivity in the development of chronic diseases and the benefits of activity in prevention efforts. A special emphasis will be placed on activity assessment and intervention research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5309. Biomechanics for Exercise & Sports Science.**

Review of current research and research techniques in the biomechanics of exercise and sport science. Students will develop skills in reviewing, planning, and conducting biomechanical research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5310. Cardiopulmonary Exercise Physiology.**

The course will provide students with a thorough understanding of the structure, function, neural mechanisms, and integrated responses of the human cardiopulmonary system to acute and chronic exercise. In addition, basic cardiopulmonary pathology, pharmacology, and electrocardiography will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5311. Applied Neuromuscular and Skeletal Muscle Physiology.**

The course will provide students with a thorough understanding of the structure and function of neuromuscular and skeletal muscle physiology. This course will examine mechanisms that regulate skeletal muscle force production and human performance in response to acute and chronic exercise. In addition, advanced laboratory techniques will be introduced.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5312. Applied Exercise Metabolism.**

This course will provide students a thorough understanding of exercise metabolism. Students will develop advanced knowledge of the influence of various environmental and physiological factors on metabolism during exercise and the impact on physical performance and recovery. Students will also examine the relationships between metabolic factors and chronic diseases.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5313. Proprioception and Neuromuscular Control in Rehabilitation.**

This course provides for an advanced study of the concepts, theories, and current research related to proprioception and neuromuscular control as applied to the prevention, diagnosis, and clinical management of sport-related musculoskeletal injuries, neuromuscular disease, and concussions. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5314. Biomechanics of Musculoskeletal Injury.**

This course focuses on the application of biomechanical principles to the pathoetiology, diagnosis, and physiological capacity for healing of injuries to bone, ligament, tendon, cartilage, and other human tissues, with an emphasis on current injury research. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5317. Exercise Physiology.**

This leveling course provides an overview of the acute and chronic physiological responses to exercise. Emphasis is on muscle bioenergetics, muscle contractile properties, optimizing human performance through training and supplementation, as well as cardiopulmonary and endocrine responses to exercise. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent. Corequisite: ESS 5117.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Lab Required|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5320. Biomechanics.**

This leveling course provides an introduction to the mechanical foundations of anatomical function and human movement. Qualitative and quantitative biomechanical analyses of human movement are introduced to inform the prescription of technique, equipment, and training interventions. This course does not earn graduate degree credit. Prerequisite: BIO 2430 or equivalent with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5322. Inclusion and Diversity in Physical Activity and Sport.**

This course is designed to prepare physical activity and sport educators with knowledge, skills, and strategies to create inclusive learning environments. Culturally responsive teaching strategies that best accommodate the individual needs of children, adolescents, and adults, with diverse ethnic, racial, cultural, socio-economic, physical, and cognitive needs will be emphasized. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ESS 5327. Application of Strength and Conditioning Principles.**

Strength and conditioning programming techniques will be the focus, including appropriate assessment and exercise prescription for improved sport performance and injury prevention. This course will include both classroom instruction and hands-on experience utilizing advanced technologies and traditional and non-traditional equipment in the field of strength and conditioning. This course will also cover methods of evaluating athletic abilities to monitor progress of training that will guide exercise prescription. Prerequisite: ESS 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5328. Principles of Endurance Training.**

This course explores and critiques both established and novel exercise testing and training practices for athletes competing in endurance sports. Emphasis is on demonstrating an ability to develop testing and training procedures using evidence-based methods for endurance athletes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5329. Motor Learning.**

This leveling course provides students with an understanding of the physiological, neurological, and psychological factors affecting performance and acquisition of motor skills. Students will examine the structural components underlying the learning of motor skills and draw upon examples from sport, physical activities, and rehabilitation. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**ESS 5344. The Science of Teaching in Health and Human Performance.**

This course is designed to enhance instructional skills for professionals working in educational, sport, clinical, and community settings. Students incorporate evidence-based instructional practices and assess teaching using systematic, reliable, and valid measures. Students will be able to apply course concepts to implement effective instruction in diverse venues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5346. Research Methods in Health and Human Performance.**

A study of research methods related to techniques for searching the professional research literature, understanding, planning, and conducting professional research projects, as well as development of skills for writing research proposals related to human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5347. Independent Study in Exercise Science.**

The course allows students to receive individualized instruction while working on a professional project with a supervising faculty member. This course will require students to enhance their writing, research, teaching, and/or presentation skills. Repeatable once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5353. Curriculum Design, Implementation and Evaluation in Diverse Physical Activity Settings.**

This course is designed to explore evidence-based curricula across Exercise and Sport Science settings including, but not limited to clinical, strength and conditioning, community physical activity, and sports. Students will gain knowledge and understanding about the curriculum design process and program evaluation using current theory to practice models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5354. Developmental Sports Education: Youth Participants.**

This course is designed to provide sport educators with theory, research, and application strategies to implement developmentally appropriate sports programs for youth participants. Social, psychological, pedagogical, philosophical, and physical variables impacting youth in sport are examined. Emphasis is placed on promoting positive youth development by applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5355. Developmental Sports Education: High-Level Athletes and Coaching Effectiveness.**

This course is designed to provide sport educators with theory, research, and practical strategies to implement developmentally appropriate sports programs for high-level athletes. Psychological, social, and physical aspects related to athletes' success and well-being are examined. Research on coaching effectiveness is also explored with emphasis on applying evidence-based practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5356. Applied Statistics in Health and Human Performance.**

A study of quantitative statistical methods for planning and conducting experimental and correlational research, as well as techniques for statistical data analysis and interpretation applicable to health and human performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5357. Water Safety Instruction for Service Learning.**

This course is designed for students to obtain the Red Cross Water Safety Instruction (WSI) certification, and learn how to teach using a Mastery Motivational Climate/TARGET approach. More than half of the semester will involve providing swim lessons to students grades K-6 from a San Marcos school. Students must be able to perform the following skills: front crawl, back crawl, breaststroke, elementary backstroke and sidestroke for 25 yards; butterfly for 15 yards; back float and tread water for 1 minute. Students with a current WSI certification will be exempt from the required WSI lab at the beginning of the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5398. Internship in Exercise and Sports Science.**

This 240-hour internship provides students with work-related experience with children, adults, older individuals, or athletes in exercise settings. Students are provided an opportunity to prescribe and supervise age- and fitness-appropriate exercise programs and perform exercise tests. Prerequisite: ESS 5306 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis course credit is awarded until the student has completed the entire thesis required in ESS 5399B. Prerequisites: ESS 5346 and ESS 5356 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 5698. Internship in Exercise and Sports Science.**

This full-time internship provides students with a minimum of 480 hours of field experience. Students will work with children, adults, older individuals, or athletes in exercise or health care settings, and prescribe and supervise age and fitness appropriate exercise programs and perform comprehensive health-related assessments.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ESS 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the completed thesis is submitted for binding. Prerequisite: ESS 5399A.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ESS 7309. Biomechanics for Exercise & Sports Science.**

This course explores and studies the analysis and application of the mechanical principles involved in human motion. Emphasis is on quantitative analysis of movement in sport and exercise activities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 1310. Foundations in Family and Consumer Sciences.**

This course provides an overview of the field of Family and Consumer Sciences as it relates to human ecology, emphasizing its interdisciplinary nature, history, theories, career opportunities, and career readiness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 3303. Introduction to Research in Family and Consumer Sciences.**

This course examines practices in the social science research process, with an emphasis on general scientific literacy. Content will focus on technical and academic writing for use in the Family and Consumer Sciences profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**FCS 4101. Special Problems in Family and Consumer Sciences.**

A study of selected areas of Family and Consumer Sciences. Repeatable for credit with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dual Enrollment Permitted|Header|Time Conflicts Permitted

**Grade Mode:** Standard Letter



**FCS 4303. Research Procedures in Family & Consumer Sciences.**

The study and implementation of research procedures for use with family and consumer sciences programs. Includes instrument selection, recruitment and testing of subjects, coding, analysis and dissemination of data. Will include field based experiences using appropriate research procedures. Restricted to Senior Standing. (WI) Prerequisite: FCS 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**FCS 4304A. Family Finance II.**

This course is a study of financial management for individuals and families. Topics include financial inequality, investments, retirement planning, and estate planning. Prerequisite: CA 3341 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FCS 4304B. Introduction to Research Methods in Family and Consumer Sciences.**

The examination of practices in the social science research process with an emphasis on general scientific literacy and technical, academic writing for use with Family and Consumer Sciences programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**FCS 4304C. Teaching Textile Product Construction.**

This course is a teaching-oriented study of the techniques and technologies used to construct textile-based products. Its purpose is to help prepare students for teacher certification and teach textile product construction education content in secondary level FCS classrooms and also to learners of all ages.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FCS 4340. International Study in Family and Consumer Sciences.**

Study of Family and Consumer Sciences topics in international settings. Emphasis will be placed on cultural awareness and its application within FCS professions. Repeatable for credit with different emphasis. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FCS 4343. Occupational Education in FCS.**

Its purpose is to help prepare students for teacher certification and teach occupational education content in 11-12 grade FCS classrooms. Occupational education course in 11-12 grades such as Services for Older Adults, Hospitality Services, Childcare and Guidance and Food Production, management and services are designed for students to gain extensive management skills and practical work experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 4344. Instructional Management for Family and Consumer Sciences.**

This course provides students with hands-on application of the Texas Teaching Proficiencies as outlined by the Texas Teacher Evaluation and Support System (T-TESS) and the Danielson Framework. Principles and practices specifically needed for managing the FCS classroom will be addressed.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**FCS 4347. Family Policy.**

This course is an examination of policy-making and the significance of national, state and local policies that affect families. Students will analyze social policies, including government programs and legislation, and discuss how to influence change in policies. Use of the Internet and computer software programs such as Word, PowerPoint, and others required. Requires Senior Standing. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**FCS 4681. Family and Consumer Sciences: Clinical Student Teaching.**

Students will apply knowledge and skills learned during the teacher preparation program while engaging in clinical practice with experienced Family & Consumer Sciences mentor teachers in school settings with university instruction and supervision. This culmination experience is required for Texas teacher certification. Requires departmental approval through the OEP. Prerequisites: Admittance to the Educator Preparation Program, 2.75 Overall GPA; Additional coursework may not be taken concurrently; For undergraduate students, all other degree-required course work must be completed; For graduate and post-baccalaureate students, all certification coursework must be completed.

**6 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**FCS 5101. Graduate Assistant Development.**

This course is required as a condition of employment for graduate teaching and instructional assistants. This course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable up to 3 times.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**FCS 5301. Graduate Assistant Development.**

This course is required as a condition of employment for graduate teaching and instructional assistants. It provides information about the educational needs of Texas State University's diverse student body. It also identifies educational strategies and campus resources that support the learning of undergraduate students. This course does not earn graduate degree credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA|Multicultural Content

**Grade Mode:** Leveling/Assistantships

**FCS 5302H. Sustainable Consumer Economy.**

This course is a in-depth study of the role of consumption in the development of sustainable systems including the family, natural resources and economics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FCS 5302J. Statistics and Data Analysis for Family and Consumer Sciences.**

This is a graduate level course covering statistical techniques commonly used in the field of family and consumer sciences. Topics include descriptive statistics, Chi-Square analysis, analysis of variance and covariance, simple and multiple linear regression, logistic regression, and use of statistical software. Data analysis to support decision-making is emphasized. Restricted to students in one of the graduate FCS programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FCS 5302S. Sustainable Textiles.**

This course is an in-depth study of the relationship of fibers, fabrics, finishes and textile products end-uses with a particular focus on their impact on sustainability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FCS 5305. Sustainable Housing.**

This course is an in-depth study of the relationship between housing and sustainability with a particular focus on the role of materials, technology, policy and human factors in fostering healthy social, economic and natural systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5307. Sustainable Lighting.**

This course focuses on understanding the elements and principles of sustainable lighting and explains how it meets the qualitative needs of the visual environment with the least impact on the natural environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5310. Research Methods in FCS.**

This course will cover the evaluation of concepts, methods, and strategies for research in the disciplines of family and consumer sciences. The course will focus on the nature and ethics of scientific research, including design, sampling, measurement, and data collection. Restricted to graduate level majors in the School of Family and Consumer Sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5311. Statistics and Data Analysis for Family and Consumer Sciences.**

This is a graduate level course covering statistical techniques commonly used in the field of family and consumer sciences. Topics include descriptive statistics, chi-square analysis, analysis of variance and covariance, simple and multiple linear regression, logistic regression, and use of statistical software. Data analysis to support decision-making is emphasized. Restricted to graduate students in FCS.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FCS 5340. International Study in Family and Consumer Sciences.**

Study of Family and Consumer Sciences topics in international settings. Emphasis will be placed on an analysis of cultural differences and similarities and their application within FCS professions. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FM 1330. Introduction to Fashion Merchandising.**

Survey of the fashion industry including an overview of the development, production and distribution of fashion goods and services.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 1332. Textiles.**

A consumer-oriented study of the relationship of fibers, fabrics, and textile product end-uses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 2330. Aesthetics and Branding.**

The study of promotional strategies unique to the fashion industry. Emphasis is placed on techniques used at the retail level. Prerequisite: FM 1330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 2334. Fashion Product Analysis.**

This course focuses on the study of fashion product manufacturing, including textile product quality control issues important to manufacturers, retailers, and consumers. Emphasis is placed on specifying quality based on appearance, cost, durability, and end-use of textile products. Prerequisite: FM 1330 and FM 1332 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**FM 2337. Global Manufacturing and Logistics.**

This course is an introduction to the global supply chain in the fashion industry with an overview of the impact of cultural, political, and economic systems on the manufacturing and logistics of fashion products. Prerequisites: FM 1330 and FM 1332 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Perspective  
**Grade Mode:** Standard Letter

**FM 2338. Fashion in Society.**

This course explores the meanings embedded in everyday appearance perceptions and management that result from environmental, socio-psychological, and cultural influences. Course topics reflect about fashion's role in the construction of the self and how appearances shape one's experience in society. Also included is a critical examination of how these meanings influence clothing consumption practices (e.g., buying, using, disposing), which have implications for sustainability concerns associated with the fashion system. An opportunity is provided to connect the theoretical underpinnings of dress to consumption phenomena, from consumerism to minimalism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**FM 3320. Special Events Planning.**

This course is an in-depth study of selected topics and emerging issues related to the planning of special events. Course emphasis will be on planning, organizing, implementing and evaluating special events. Prerequisite: FM 2330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**FM 3330. Fashion Buying Principles I.**

Quantitative concepts used in merchandising fashion goods with an emphasis on profitability. Prerequisite: FM 2337 and [MATH 1315 or MATH 1316 or MATH 1319] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**FM 3332. Fashion Promotional Strategies II.**

The study of promotional strategies unique to the fashion industry. Emphasis is placed on techniques initiated by manufacturers and wholesalers of fashion products. Prerequisites: FM 2330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**FM 3333. Merchandise Presentation and Planning.**

This course is designed to apply critical thinking skills within the context of retail store space planning and presentation, product category management, and merchandise allocation for a variety of retail business types. Prerequisite: FM 2330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**FM 3334. Fashion Merchandising Administration.**

The study of human resource management in the fashion industry including recruitment, development, assessment, and compensation. Prerequisite: FM 1330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**FM 3335. History of Fashion.**

This course is a survey of textiles, dress and adornment from pre-history through the ancient Eastern and Middle Eastern cultures to the development of Western civilization ending with the Industrial Revolution.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**FM 3336. Modern Fashion Trends.**

This course is a chronological study of fashion, dress and adornment from the Industrial Revolution through modern times. Emphasis in the course is on the socio-economic, political, and technological factors contributing to the evolution of fashion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**FM 3337. Fashion Social Media.**

This course focuses on the management of social media to communicate and sell fashion products. Students measure and evaluate the influence of social media decisions on fashion consumers in order to design fashion-based social media campaigns that meet the needs of social media producers and consumers. Prerequisite: FM 2330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**FM 4101. Special Problems in Fashion Merchandising.**

A study of selected areas of Fashion Merchandising. Repeatable for credit with different emphasis.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**FM 4301. Internship in Fashion Merchandising.**

This course is an Internship in Fashion Merchandising-related professions focused on production, distribution, or retailing of fashion goods, or auxiliary services. Repeatable for credit once. Prerequisite: FM 3334 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**FM 4302B. Specialty Fashion Markets.**

An in-depth study of specialty fashion markets including historic background; significance of the market; terminology; product assortment, development, production and distribution; and trend analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FM 4302G. Creative Problem Solving.**

An in-depth study of selected topics or emerging issues of particular relevance to Fashion Merchandising professionals. Course may be repeated for credit with a different emphasis. Prerequisite: [FM 1332 or ID 2325 or NUTR 1362] with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FM 4302H. Digital Fashion Marketing.**

This course introduces students to the marketing strategies used to sell fashion products in the digital environment. It examines the analytical tools and strategies used in e-commerce, including online advertising, search marketing, email marketing, website optimization, and web analytics for online stores. Prerequisite: FM 1330 and FM 2330 and FM 3330 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FM 4320. Fashion Merchandising in Domestic Markets.**

An on-site study of domestic fashion market centers. Course examines the design, production, and distribution of fashion products and services at various market levels. Repeatable for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**FM 4331. Fashion Buying Principles II.**

This course is a study of the fashion merchandise buyer, planner, and allocator roles emphasizing retail merchandising functions. These include developing merchandise plans, selecting products, and negotiating terms. Using best-practice industry software, students will analyze merchandising data to manage inventory levels, and evaluate performance of sales and profit. Prerequisite: FM 3330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 4333. Advanced Merchandise Planning and Presentation.**

This course is an advanced study of category management strategies with an emphasis on recognizing and evaluating performance data in space planning. This capstone course focuses on creating visual displays based on product selection and projected profit and sales. Prerequisite: FM 3333 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 4334. Fashion Product Development.**

The course focuses on fashion product development for target markets. Emphasis of the course is placed on line development, product specification, color and textile selection, sizing, product costing and the use of industry product life-cycle management software. Prerequisite: FM 1332 and FM 2330 and FM 2334 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 4335. Principles of Fashion Consumption.**

This course focuses on the analysis of variables, concepts and theories related to the role of the consumer in fashion and fashion product consumption. Prerequisite: FM 2335 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 4337. Fashion Merchandising.**

The study of managerial decisions in fashion retailing with an emphasis on operational issues. Prerequisite: FM 1330 and FM 2330 and FM 3330 and FM 3334 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**FM 4338. Enterprise Development.**

Principles and procedures used in creating successful enterprises to meet consumer demand, including consumer research, logistical issues, and strategic planning. Examines various product and service offerings in traditional and non-traditional outlets.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FM 4339. Fashion Economics.**

Economic perspective of textile products, production and global sourcing with emphasis on U.S. fashion industries. (WI) Prerequisite: [FM 1330 and FM 1332 both with grades of "C" or better] and [ECO 2301 or ECO 2314 or ECO 2315 with a grade of "D" or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**FM 4340. Fashion Merchandising in International Markets.**

Study of Fashion Merchandising topics in international settings. Emphasis will be placed on market differences and cultural awareness, and the implications within Fashion Merchandising professions. Repeatable for credit with different emphasis. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**FM 4391. Independent Study in Fashion Merchandising.**

Independent reading and/or research on a specific topic related to students' primary area of interest. Work may consist of research, reviews, and integration of existing literature or other appropriate independent work. May be repeated once for credit with approval of instructor. (WI) Prerequisite: FM 1330 with a grade of "D" or better and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**FIN 3301. Real Estate.**

A study of basic real estate principles. Topics include legal instruments and processes, property management, valuations, planning, development and sales, financing, and private and public interests. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 3312. Business Finance.**

This course is an introduction to the finance function and to problems confronting financial managers. Topics covered include ratio analysis, time value of money, asset valuation, and risk and return. Prerequisite: ACC 2361 and CIS 1323 and [ECO 2314 or ECO 2315] and [MATH 1329 or MATH 2331 or MATH 2471] all with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 3313. Financial Management.**

This course is an advanced study of intermediate and long-term financing alternatives, the incorporation of risk analyses in capital budgeting and the determination of capital costs, capital structure, and dividend policies. Prerequisite: FIN 3312 with a grade of "B" or better and ACC 2362 and ECO 2314 and ECO 2315 and [QMST 2333 or MATH 2328] with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 3316. Financial Information Technologies.**

This course introduces students to the technology supporting financial modeling and decision making. Students in this course use computers to apply concepts and theories learned in the introductory Finance course. Students also rely on quantitative analysis and use the internet. Prerequisite: FIN 3312 with a grade of "B" or better and ACC 2362 and ECO 2314 and ECO 2315 and [QMST 2333 or MATH 2328] all with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 3318. Investment Analysis.**

This course investigates the principles of investing personal and institutional funds. Students in this course also examine information sources, exchanges, and regulations. Prerequisite: FIN 3312 with a grade of "B" or better and ACC 2362 and ECO 2314 and ECO 2315 and [QMST 2333 or MATH 2328] all with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 3325. Personal Financial Management.**

A study of modern money management, including budgeting, banking, real estate, insurance, consumer credit, and retirement and estate planning. Not for Business majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 3326. Financial Planning Insurance.**

An introduction to the steps in the financial planning process. Topics include assessing financial objectives, financial planning, and personal financial management. Insurance planning is emphasized. Prerequisites: FIN 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter



**FIN 3340. Fundamentals of Business Finance.**

This course is an introduction to the financial function within a business and the various tools used in financial decision-making. Topics covered will include financial statement analysis, risk and return, time value of money, and asset valuation. Prerequisite: (ACC 2301 or [ACC 2361 and ACC 2362]) and (ECO 2301 or [ECO 2314 and ECO 2315]) with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4315. Financial Modeling and Equity Analysis.**

This course reviews and extends students' ability to perform financial statement analysis and forecasting. The focus of the course will be on producing objective, high-quality company valuation research. Students will choose and defend inputs for quantitative analysis; they will also discover and illustrate the importance of qualitative factors in firm value and performance. Prerequisites: FIN 3313 and FIN 3316 both with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4317. Case Problems in Finance.**

An application of investment and financial management techniques and concepts to finance cases. Issues and alternatives are identified and evaluated. (WI) Prerequisite: FIN 3313 and FIN 3316 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**FIN 4318. Portfolio Management & Derivatives.**

An advanced investments course which includes the following topics: portfolio analysis and management, derivatives theory and pricing, and applications of derivatives in portfolio management. Prerequisite: FIN 3313 and FIN 3316 and FIN 3318 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4319. Financial Markets and Institutions.**

A study of financial assets, money and capital markets, institutional intermediaries, and the impact of interest rates. Affords a thorough examination of the financial system facilitating economic growth and development. Prerequisite: ECO 3311 and FIN 3313 and FIN 3316 all with grades of "D" or better. Corequisite: FIN 3318 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4320. Treasury and Working Capital Management.**

A study of working capital and short-term financial management. Major topics include cash collections, cash concentration, disbursement management, forecasting cash flows, management of receivables and inventory, banking relationships, and short-term investment and borrow strategies. Prerequisite: FIN 3313 and FIN 3316 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4321. Real Estate Finance.**

An analysis of problems involved in selecting and financing real estate investment opportunities. Prerequisite: FIN 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4322. Student Managed Investment Fund Practicum.**

The course examines the issues involved in the management and investment strategies of an endowment. It focuses on investment analysis, asset allocation, portfolio monitoring, evaluation, and rebalancing. May be repeated one time for credit with different emphasis. Prerequisites: FIN 3318 with a grade of "D" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4331. International Finance.**

A study of international finance principles and their application in a multinational financial management setting. (MULT) Prerequisite: ECO 3311 and FIN 3313 and FIN 3316 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Multicultural Content

**Grade Mode:** Standard Letter

**FIN 4340. Commercial Bank Management.**

Examines a variety of aspects of managing a commercial bank. Provides students with a conceptual framework for determining the effects of various decisions and environmental factors on a commercial bank's operations. Issues addressed include bank regulations, asset and liability management, analyzing bank performance, and capital management. Prerequisite: FIN 3313 and FIN 3316 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 4380A. Advance Capital Budgeting.**

A study of capital budgeting techniques, analyses (including risk), and strategies, and their implementation in capital assets investment. Prerequisite: FIN 3313 and FIN 3316 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**FIN 4380J. Introduction to Finance Analytics.**

This course examines how data can be turned into insights for advance Finance concepts (trading strategies, portfolio optimization, model evaluation, investment planning, etc.). This course will show how to use open-source software (R, Python) in a Finance context. This is a hands-on practical programming course with step-by-step source code, in-class exercises and full solutions provided. No previous knowledge of programming is required. However, to be successful in this course you need to want to learn to program. Upon completion, students will be aware of financial models related to investments and corporate finance and will be able to write simple code. Prerequisite: FIN 3313 and FIN 3318 both with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**FIN 4380K. Financial Engineering.**

This course starts with an introduction to the financial markets, basics of trading and market microstructure. It covers options, forward and futures contracts. By the end of this course students will have a good knowledge of how these contracts work, how they are used, and how they are priced. Students will develop the skills for using derivatives in hedging strategies and other techniques for risk management. Prerequisite: FIN 3313 and FIN 3316 and FIN 3318 all with grades of "C" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**FIN 4380L. Fixed Income Analysis.**

This course will cover fixed income products, analytical techniques for valuing bonds, and the quantification of bond exposure to various types of risk. The class will discuss the basics of pricing, the risk/return characteristics of fixed income and embedded option analysis, bond duration measures, convexity, credit and rating factors, and basic portfolio applications. Other topics will include: the structure of the U.S. bond market, securitization, yield curve, and forward rates. Prerequisite: FIN 3318 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**FIN 4380M. Commercial Credit Analysis.**

This course will examine conceptual issues and various practical applications relevant to the commercial lending activities of banks using finance principles. The course will closely follow the Credit Essentials Course from the Risk Management Association, with the goal of preparing students for the Credit Essentials Certificate Examination through RMA at the end of the semester. Topics will include identifying customer needs, analyzing financial statements, loan structuring and documentation, and problem loan identification. Prerequisite: FIN 3318 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**FIN 4380N. Selling Financial Services.**

This course examines principles and various practical applications involved in selling financial products and services with special focus on the practical implementation of selling these products in the banking industry. Cases, exercises, questions and assignments will be used to supplement textbook materials. Prerequisite: FIN 3313 and MKT 3343 both with grades of "D" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**FIN 4390. Internship in Finance.**

Integration of professional and academic experience through an internship with an external employer. Students must have completed at least nine hours of major courses. Credit awarded as pass/fail or grade at departmental election. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Credit/No Credit

**FIN 4395. Independent Study in Finance.**

An in-depth study of a single topic or related problem solved through finance research. May be repeated once for credit with different emphasis. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**FIN 5322. Investment Analysis.**

This course cover the application of finance theory to investment analysis. Topics include modern investment theories, asset pricing models and derivative pricing models, with a focus on application of derivatives to manage risk exposure. Prerequisite: B A 5352 with a grade of "C" or better or FIN 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5332. Portfolio Theory and Capital Markets.**

This course is designed to provide students with an overview of the strategies for creating and managing portfolios. At the end of this course, students should understand the tools for investment management.

Topics covered include portfolio construction and analysis, risk analysis, asset class management, derivatives, and portfolio performance analysis. Prerequisite: FIN 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FIN 5338. International Investments and Financial Management.**

Examination of economic incentives and rationale for international investment and financing. Topics include exchange rate risk exposure and management, global debt and equity investment and financing, foreign currency derivative markets, and general investment and financing strategy in global capital market. (MULT) Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FIN 5347C. Real Estate Investment.**

An application of capital budgeting to real estate investment decisions.

Prerequisite: FIN 5387 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**FIN 5352. Financial Management.**

This course introduces students to the major considerations in financial decision making. These considerations are analyzed by exploring the role of financial managers in creating value and maximizing shareholder wealth within the constraints of legal and ethical behavior. The development of critical thinking, quantitative applications, and analytical skills are major goals of this course because the topics require knowledge of specialized problem-solving techniques. Prerequisite: ACC 5361 with a grade of "C" or better. Corequisite: QMST 5334 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**FIN 5387. Managerial Finance.**

Concentrates on the finance function, analysis and budgeting of funds, management of current assets, short and intermediate-term financing requirements, long-term debt policy and capital structure, capital budgeting, and the concept of cost of capital. Risk and return trade-offs also are studied. Prerequisite: B A 5352 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FR 1410. Beginning French I.**

Introduction to listening, speaking, reading, and writing skills within a French cultural framework. Students who take FR 1410 toward degree requirements must also complete FR 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** FREN 1411

**FR 1420. Beginning French II.**

Continued practice in listening, speaking, reading, and writing skills within a French cultural framework. Students who take FR 1410 toward degree requirements must also complete FR 1420. (MULT) Prerequisite: FR 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** FREN 1412

**FR 1421. Beginning French for Speakers of Spanish.**

This course introduces speakers of Spanish to listening, speaking, reading, and writing skills within a French-speaking cultural framework. Students apply their knowledge of Spanish to communicate more effectively in French. Students may not apply credit to their degree plans for both FR 1420 and FR 1421.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FR 2310. Intermediate French I.**

Students will continue to develop and review all language skills within a French and Francophone cultural framework. (MULT) Prerequisite: FR 1420 or FR 1421 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** FREN 2311

**FR 2311. Intermediate French for Speakers of Spanish I.**

This course facilitates Spanish speakers to continue to develop and review all language skills within a French-speaking cultural framework. Spanish speakers will apply their knowledge of Spanish to communicate more effectively in French. Students may not apply credit to their degree plans for both FR 2310 and FR 2311. Prerequisite: FR 1420 or FR 1421 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FR 2320. Intermediate French II.**

Students will practice more advanced language skills with greater emphasis on reading within a French cultural framework. (MULT)  
Prerequisite: FR 2310 or FR 2311 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** FREN 2312

**FR 2321. Intermediate French for Speakers of Spanish II.**

This course exposes students to the practice of more advanced language skills with greater emphasis on reading within a French-speaking cultural framework. Spanish speakers will apply their knowledge of Spanish to communicate more effectively in French. Prerequisite: FR 2310 or FR 2311 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FR 3303. French Composition and Conversation.**

This course introduces students to extended writing and conversation in French. Students will examine contemporary French and Francophone life from a variety of focuses: social, cultural, and professional. This course will prepare students for taking other advanced literature, cultural, and business courses in French. (MULT) Prerequisite: FR 2320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 3305. Acting French.**

An introduction to upper division courses in French designed to strengthen reading skills and oral command of the language through the study and performance of short French plays from the classical to the contemporary period. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FR 3306. Masterpieces of French Literature.**

Masterpieces of French literature in various genres from different periods with emphasis on the modern period. Repeatable for credit with different emphasis. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 3308. French Translation I.**

This course introduces students to translation from French to English. Students identify key translation techniques, interpret and discuss French texts, and propose translations for them. They compare, analyze and evaluate translations and revise their own work based on suggestions. This course prepares students for a course in specialized translation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 3310. French Pronunciation and Intonation.**

Study and intensive practice of problems in French pronunciation and intonation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FR 3341. Advanced Grammar in French.**

A study of more advanced grammatical, syntactical, and stylistic problems in mastering the French language with the aim of strengthening students' command of the structure of French and developing skills for more effective writing. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FR 3350. History of French Cinema I, 1895-1960.**

This course introduces students to the history of French Cinema from the medium's origins in 1895 to the late 1950s. Students will learn about major developments in film narrative and technology in France from the silent to the classic eras. May be repeated for credit when topic varies. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 3351. Cinema of the French-Speaking World, 1960-present.**

This course introduces students to the history of cinema of the French-speaking world from the late 1950s to the present. May be repeated for credit when topic varies. (MULT)(WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 3381. Business French I.**

A course designed for students interested in business related careers. The course will help students to become familiar with basic French business language and the specifics of Francophone business cultures. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**FR 4304B. French Genre Fiction.**

This course focuses on the study of specific fictional works associated with a particular genre (e.g., crime fiction, the fantastic, and science-fiction) and the authors who are exemplars of that narrative category. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4304C. Francophone Literature, Cinema, and Culture.**

This course introduces students to the richness and diversity of the Francophone world through the study of its literature, film, and art. Prerequisite: FR 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4304D. Iconic Figures of the French-Speaking World.**

This course introduces students to major historical periods and/or cultural movements through the examination of an iconic figure-actual or allegorical-that served as a catalyst of events and cultural productions in the French-speaking world. The course may be repeated for credit when topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4307. Study of French Language.**

This course introduces students to the scientific study of the French language through discussion of readings with examples in both English and French. (MULT) Prerequisite: FR 3310 or FR 3341 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4308. French Translation II.**

This course provides a theoretical framework for the advanced study of translation and an introduction to specific fields such as legal, business, financial, technical and medical translation as well as localization. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4330A. History of French Media.**

This course introduces students to a survey of the history of the French press from the early modern to the post-World War II period. Topics include the roles of ideology and collective memory, of illustration and caricature, of propaganda and censorship, and of the development of the French intellectual figure. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4330B. Contemporary Issues in French Media.**

This course focuses on contemporary French media – printed, broadcast, and online – from the postwar period to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4341. French Composition and Stylistics.**

Students will incorporate their more advanced grammatical and syntactical skills with the study of style in the writing of compositions in French. Writing exercises will explore a variety of expository techniques from description, narration, dialogue, portraits, to the writing of letters. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4350A. French Poetic Realist Cinema.**

This course will study the films and directors associated with Poetic Realism, the film style of the 1930s in France and an important precursor to Italian Neorealism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter



**FR 4350C. French Directors' Series.**

This course offers students an in-depth examination of the films, themes, and styles associated with specific contemporary or classic French directors. Taught in English. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4370. Cultures of the French-Speaking World.**

This course is a survey of the cultural institutions of France or the French-speaking world. Repeatable for credit with different emphasis. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**FR 4380. Service-Learning in French.**

This course is a supervised work (business or educational) or volunteer (refugee shelter) experience in a French-speaking environment. Students work a minimum of 75 hours, performing duties at least 80% in French. Prerequisite: FR 2320 with a grade of "D" or better AND department approval.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**FR 4390. Studies in French Culture, Language, or Literature.**

A course designed to offer students an opportunity to pursue independent studies in special areas of interest beyond those of other catalog courses. The course is generally available only to graduating seniors who have completed at least two advanced courses or graduate students with special needs. May be repeated once for additional credit. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**GS 2310. Life Science Concepts.**

This laboratory course is designed to acquaint the student with the fundamentals of biological science and introductory chemistry. It cannot be taken for credit by science majors.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**GS 3310. Earth Science Concepts.**

This laboratory course acquaints students with the fundamentals of chemistry and earth space science. It is non-creditable for science majors but is a required course for select education majors. Prerequisites: PHYS 1310 or PHYS 1315 or PHYS 1320 or PHYS 1325 or PHYS 1360 or PHYS 1365 or PHYS 1370 or PHYS 1410 or PHYS 1420 any with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**GNST 4360. Integrated Career Preparation.**

This course is first in a two-part capstone sequence culminating in an applied project. Students will engage in self-analysis, identify marketable skills, and complete occupational and industry research. To complete this course, students will create an individualized career plan integrating three academic minors and identify a preliminary topic for an applied project to be developed in the second capstone course, GNST 4361-Integrated Project. (WI) Prerequisite: A minimum of 2.0 Texas State GPA and departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Writing Intensive

**Grade Mode:** Standard Letter

**GNST 4361. Integrated Project.**

This is the second course in a two-part capstone sequence culminating in an applied project. Students will complete an applied project, beginning with a formal proposal presentation containing career-specific problems or future graduate study research as identified in GNST 4360; a bibliography review; audience analysis; and an applied written solution. Students will end the course by completing a three-minute thesis-style (3MT®) presentation and a career portfolio to synthesize knowledge, skills, and abilities from both courses in the capstone sequence. (WI) Prerequisite: GNST 4360 with a grade of "D" or better and a minimum of 2.0 Texas State GPA and departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 1105. Meteorology Laboratory.**

Laboratory observations, calculations, and exercises of meteorological data and phenomena. Prerequisite: GEO 1305 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** GEOL 1147

**GEO 1305. Meteorology.**

An introduction to atmospheric science providing information on the properties of the atmosphere, the scientific principles that govern weather and climate, and interactions between the atmosphere and the other components of the Earth system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030

**Grade Mode:** Standard Letter

**TCCN:** GEOL 1347

**GEO 1309. Introduction to Cultural Geography.**

This course introduces students to the geographical perspective and focuses on spatial distributions of human activities and investigates underlying geographical processes that account for present and past cultural patterns such as population, folk and popular culture, language, religion, gender, ethnicity, politics, urban and rural land use, and economic development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** GEOG 1302

**GEO 1310. World Geography.**

This course stresses the similarities and differences of the major world regions. Emphasis is given to human behavior in a spatial context. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080|Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** GEOG 1303

**GEO 2110. Physical Geography Laboratory.**

This is a laboratory course that includes exercises and calculations to apply principles and concepts covered in introductory physical geography lecture classes. These include geographic tools, weather and climate, soils and biogeography, and geomorphology. Open only to students who have taken the lecture class at another college/university. Prerequisite: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better and instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 2310. Global Environmental Change.**

This course introduces the global perspective to examine Earth's environment and its systems, dynamics, and risks. Students use principles of scale, space, and distributions to analyze the changes in the environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 2410. Introduction to Physical Geography.**

A systematic study of the various elements that make up the Earth's physical environment, weather, climate, vegetation, soil, and landforms. Prerequisites: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 2420. Introduction to Geographic Information Techniques.**

The course will introduce the foundations of geographic information systems (GIS), global positioning systems (GPS), remote sensing, cartography, data analysis, and other tools and methods used by geographic information scientists. Maps, data collection, using and creating Internet content, and data analysis and display will be topics in the course.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 2426. Fundamentals of Geographic Information Systems.**

This course is an introduction to Geographic Information Systems (GIS), a tool for integrating and analyzing spatial data to visualize relationships, seek explanations and develop solutions to pressing problems. The foundations and theory of GIS will be emphasized. Prerequisites: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 2427. Management and Implementation of GIS.**

This course addresses strategies for successful GIS management and implementation in an organization-wide context and is organized around four primary issues: implementation planning, data management, technology assessment, and organizational setting. Prerequisite: GEO 2426 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 3301. Research Methods in Geography.**

This course provides an introduction to quantitative and qualitative research methodology, data collection and analytical techniques. Topics include descriptive, inferential, spatial quantitative statistics and qualitative methods such as case studies and content analysis. The course will introduce students to software applications that are designed for organizing, analyzing and visualizing data. Prerequisite: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3303. Economic Geography.**

This course investigates the geographic organization of economic activity with emphasis on the interconnections from global to local scales. Technological advances, resource creation and destruction, supply and demand, distribution and development, environmental impacts, and economic justice are addressed. Theoretical models are used to interpret past and current situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3305. Climatology.**

Introduction to the elements of climate and their use in environmental monitoring and analysis. Prerequisite: GEO 2110 or GEO 2410 or [GEO 1305 and MATH 1315] any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3307. Geography of Europe.**

The course presents a systematic and regional investigation of the physical and cultural processes and phenomena that have created the characteristic landscapes of Europe. Topics include the climate, landform regions, trade, transportation, urban growth, population change, and the evolution of economic integration in the region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 3308. Latin America.**

A regional survey of the physical and cultural geography of Latin America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 3309. United States and Canada.**

This course provides a systematic and regional analysis of the United States and Canada with emphasis on contemporary economic, environmental, political, and social issues. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 3310. Urban Geography.**

The study of city systems, form, and development with emphasis on functional patterns, economic base, industrial location, service, and social area analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3313. Natural Resource Use and Management.**

This course uses environmental concepts at all geographic scales to identify and analyze patterns and processes of resource use, and discusses management strategies to solve present and future concerns related to natural resources. Prerequisite: GEO 2110 or GEO 2410 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3320. Community and Regional Planning.**

This course examines the practice, history and development of community and regional planning in the U.S. focusing on specific methods and legal frameworks of community planning and cultivating sustainable development. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 3321. Energy Resource Management.**

An analysis of energy sources, their distribution and characteristics, and the problems associated with their use and management. (WI) Prerequisite: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 3323. Researching the City.**

This course covers data collection and analysis of urban life, and the factors considered in locating industry, business, housing, and community facilities. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 3328. Geography of North Africa and the Middle East.**

A regional treatment dealing with the physical features and cultural activities of the people in North Africa and the Middle East. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 3329. Geography of Texas.**

A physical and cultural geography of Texas with special emphasis on human resources and economic activities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 3332. Geography of South and Southeast Asia.**

This course is a systematic and regional overview of the physical and human geography of the countries of the Indian subcontinent and Southeast Asia. Topics include the monsoons, cultural diversity, rapid economic development, agricultural systems, and environmental problems. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 3333. Geography of East Asia.**

This course provides a regional overview of the physical and human geography of the countries of East Asia. This course also systematically examines the countries of this region by closely examining such topics as the impacts of high population densities and intensive land use practices. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 3335. Oceanography.**

An introductory course about the physical, chemical, geologic, and biologic characteristics of the oceans and coastal areas. Emphasis will be placed on the role of the oceans as a component of the global environment. Prerequisite: BIO 1320 or BIO 1330 or GEO 2110 or GEO 2410 or GEOL 1410 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3340. Political Geography.**

Political geography concerns the interrelationship between political activities and spatial distributions. Topics include the concept of the state, international spheres of influence and confrontation, boundaries, contemporary world issues and problems, and geographic aspects of electoral politics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3349. World Population.**

An in-depth study of the spatial distribution and movement of human populations. The course will emphasize current issues and analytical techniques. Topics will include the impact of population growth, spatial diffusion processes, migration trends and theories, explanation of regional demographic differences, and techniques such as population projections. Prerequisite: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3351. Health Geography.**

This course introduces concepts of health, health care, disease, and illness from a geospatial perspective. The course examines how people and societies interact geographically with the natural, social, and built environment in ways that result in varying degrees of health. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 3353. American Ethnic Geography.**

A geographical analysis of ethnic groups in the United States with emphasis on their settlement patterns, spatial interactions, and current problems. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 3411. Maps and Mapmaking.**

An introduction to reference and thematic map use and design. The course introduces basic cartographic mapping techniques for quantitative and qualitative data, teaches about geospatial analysis and interpretation, and enables students to design basic maps. Prerequisite: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 3416. Remote Sensing and Earth Observation.**

Introduction to the acquisition, mensuration, interpretation, and mapping of aerial photographs and satellite images for environmental monitoring and inventorying. Prerequisite: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2328 or MATH 2417 or MATH 2471 any with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 3425. Geomorphology.**

This course in Geomorphology investigates linkages between landscape forms and processes with emphasis on weathering, fluvial, aeolian, karst, and coastal processes. There will be various activities, including fieldwork, where students will demonstrate their grasp on fundamental processes in geomorphology. Prerequisite: GEO 2110 or GEO 2410 or GEOL 1410 any with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 3426. Advanced GIS.**

This course builds on the principles introduced in GEO 2426 and presents an in-depth examination of the technical aspects involved in spatial data handling, analysis, and modeling. Prerequisite: GEO 2426 and GEO 3301 both with grades of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 3434. Water Resources.**

This course analyzes within a geographical perspective, the formation, use, conservation, and management of water resources. The students will develop a working knowledge of the hydrologic, water quality, legal, economic, political, and societal factors that determine water availability, hazards, use, demand, and allocation. Prerequisite: GEO 2110 or GEO 2410 or [CHEM 1141 and CHEM 1341] any with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 4190. Independent Study.**

Individual study under direct supervision of a professor. May involve field trips. This course may be repeated for credit, but a student may not exceed six hours of credit in Independent Study.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 4290. Independent Study.**

Individual study under direct supervision of a professor. May involve field trips. This course may be repeated for credit, but a student may not exceed six hours of credit in Independent Study.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 4306. Geography of the Southwest.**

Though primarily defined by aridity, the southwestern United States is extremely diverse in its environments and its people. This course explores how people have related to this land. This course also examines current issues and future trends in natural resources and cultural processes in the region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 4309. Cultural and Political Ecology.**

This course examines cultural and political ecology, which employs concepts of culture formation/change and biological ecology to understand processes of adaptation and the influences of social/political power. It provides a holistic means to interpret pre-modern, non-western, and agrarian cultures as well as modern cultures as relates to their biophysical environment. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4310. Regional Field Studies.**

Observation, description, and analysis of a geographical environment based upon offcampus study in that environment. May be repeated once, provided the second study is in a different region, for a total of 6 semester hours. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4313. Environmental Management.**

This course provides an analysis of the causes of environmental problems, from local to global scale, and the evaluation of attempts at management and solutions of those problems. Emphasis will be placed on the role that geography can play in environmental degradation and management. Prerequisite: [GEO 2110 or GEO 2410] and [GEO 3313 or GEO 3321 or GEO 3434 or GEO 4350 or GEO 4352] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4314. River Basin Management.**

The purpose of this course is to study principles and practices of large-scale river basin management. Emphasis is on integrated management of land and water resources, including economic development and environmental protection issues. (WI) Prerequisite: GEO 3434 or GEO 4325 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4316. Landscape Biogeography.**

Investigation of present-day and post-Pleistocene spatial patterns of plants, animals, and biogeographical processes. Human interactions with biogeographical patterns is also addressed, as are methods for reconstructing Holocene patterns of biogeographic distribution. Course to be taught over every other year. Prerequisite: GEO 2110 or GEO 2410 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**GEO 4317. Water Resources Planning.**

This course examines water resources planning case studies related to water quality protection/mitigation and state/regional water supply planning from a policy practitioner's perspective. Students explore watershed and water supply planning to understand the elements involved, stakeholders, and strategy recommendations pursued including water-use conservation and efficiency measures. Prerequisite: GEO 3434 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4321. Cities and Urban Design.**

This course explores the interplay of intentional and natural processes shaping urban landscapes. It provides an introduction to the roles of spatial thinking and collaborative decision-making in urban planning and design. (MULT) Prerequisite: GEO 3310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 4322. Interpretive Environmental Geography.**

Students learn principles, themes, and techniques for effective interpretation of environmental information to audiences ranging from park visitors to professional conferences. Interpretive themes are drawn from geographic concepts including the physical and cultural landscapes and cultural ecology. Techniques emphasize effective use of traditional and digital presentation methods. (WI) Prerequisite: GEO 2110 or GEO 2410 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4323. Conservation Leadership.**

This course offers an in-depth introduction to the conservation movement and the philosophy, establishment, and operation of institutions engaged in that movement. Problems and attributes of leadership will be emphasized along with the operational implications, ethical issues and other considerations for successful implementation at non-governmental, local, state, and federal levels.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4325. Fluvial Processes.**

Students analyze modern principles of river processes and forms within a geographical perspective. This course examines the fundamental mechanics of fluvial channels with an emphasis on quantitative geographic evaluation of their processes. The course emphasizes natural scientific perspectives and includes linkages to ecology, engineering, resources management, and policy. Prerequisite: GEO 3425 or GEO 3434 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4326. Parks and Protected Places.**

This course serves as an in-depth introduction to the philosophy, establishment, and operation of Public Parks, Wildlife Refuges, Protected Areas, Non-Governmental Preserves and Historic Sites. Students will be introduced to the scientific and policy rationale for the creation of such areas as well as methods of classification and acquisition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4328. Geography of the Russian Realm.**

This course presents a regional and systematic overview of the physical and human geography of the countries of the former Soviet Union. The course examines in depth issues such as the legacy of the degraded landscape and environmental problems left by decades of Soviet industrialization. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4331. Geography of Food and Agriculture.**

This course critically evaluates local and global food systems, considering the implications of varying forms of production and consumption. Topics explored are related to sociocultural, economic, and environmental landscape change, the role of agriculture in both rural and urban places, and sustainability writ large. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4334. Groundwater Resources.**

This course examines, within a geographical perspective, the major concepts and principles that control groundwater availability and use. Students will analyze aquifer characteristics that determine water quantity and quality. Constraints on aquifer use including environmental, economic, societal, and legal factors will be analyzed for optimizing aquifer management and water-use policy. Prerequisite: GEO 3434 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4335. Directed Research.**

This course allows students to pursue advanced geographic research not offered in the present curriculum. Permission and project approval must be obtained from the supervising faculty member prior to registration. This course may be repeated for credit, but a student may not exceed six hours of credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 4336. Transportation Systems.**

This course is an examination of the evolution of urban transportation systems, policies, institutions, and methods in the United States. Principles, procedures, and techniques of transportation planning in the State of Texas are covered and students are introduced to the literature in transportation geography and methods of transportation analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4338. Planning Practicum.**

This capstone course focuses on methods and procedures used for planning and managing urban development on the local level. Topics include municipal ordinances, the development/redevelopment process and relationships between development, capital improvements and the local economy. Prerequisite: GEO 3320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4339. Environmental Hazards.**

Analysis of environmental hazards with respect to human use of the land. Includes geologic hazards and problems caused by floods and meteorological conditions. Prerequisite: GEO 2110 or GEO 2410 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4340. Fundamental Themes in Geography.**

Students will become familiar with the K-12 Geography Texas Essential Knowledge and Skills (TEKS) and the national geography content standards, identify instructional resources and materials, design instructional units, and fully develop grade level appropriate inquiry based lessons and student assessments. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4341. Water Policy.**

This course covers the evolution of water policy from the awareness of issues, through the political and legal process, to the implementation of specific plans, programs, and facilities. Prerequisite: GEO 3434 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4350. Solid Waste Planning and Management.**

A survey of the methods of solid waste disposal including waste storage, collection, transportation and disposal, and their short-and long-range effects on the environment. A practical course in the planning, implementation, and management of alternate methods of sanitary waste disposal. Prerequisite: GEO 2110 or GEO 2410 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4351. Geospatial Data Science and Health.**

This course examines how methods in geospatial data science can be used to study health outcomes from a geographic perspective, and how insights from these studies can be used to enhance population health efforts. Prerequisite: GEO 2426 and GEO 3301 and GEO 3351 all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4352. Air Quality Management.**

This course provides an assessment and analysis of air quality including types, sources, and effects of air pollutants as well as principles governing their dispersal and management. These aspects are analyzed considering physical science, economic, legal and social factors.

Prerequisite: [CHEM 1141 and CHEM 1341] or GEO 2110 or GEO 2410 or GEO 3305 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4355. Geography of Crime.**

This course provides understanding of geographical aspects of crime and criminal behavior. Students are exposed to theories and analysis methods and models explaining and predicting crime spatial patterns. Computer exercises give students hands on experience on crime pattern analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4356. Urban Infrastructure Management.**

This course examines life-cycle management of technology-enhanced urban infrastructure. Buildings, transportation systems, water and waste treatment facilities, and energy and communication grids are considered. Sensor data and other factors are analyzed to establish repair and rehabilitation strategies to improve an asset's functionality, safety, and economic value. (WI) Prerequisite: CE 3360 or [GEO 2426 and GEO 3301] either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4380. Internship in Geography.**

On-the-job training in a public or private-sector agency. Students must apply to the department internship director at least six weeks prior to registering for the internship course. This course may be repeated one time for additional internship credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 4390. Independent Study.**

Individual study under direct supervision of a professor. May involve field trips. This course may be repeated for credit, but a student may not exceed six hours of credit in Independent Study.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 4393A. Environmental Compliance.**

This course examines the implementation and enforcement of environmental statutes and regulations from a geographic perspective that includes physical environmental, cultural, social, economic, and legal parameters. The course focuses on current environmental requirements as applied to contemporary regulatory challenges including widely applicable innovative compliance strategies. (WI) Prerequisite: GEO 3321 or GEO 3434 or GEO 4350 or GEO 4352 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4393B. Business Geography.**

This course provides an exploration of the geospatial analysis of business activities in the United States with emphasis on site location, market segmentation and material/product tracking.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 4393E. Race, Class, and the American City.**

This course examines historical and contemporary intersections of race and class as they have been shaped by and continue to influence urbanization in the United States while emphasizing geographical understandings of space and place. Topics include segregation, immigration, civil rights, housing, crime, race and the environment, community development, and cultural.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 4393F. Geographies of the Holocaust and Genocide.**

This course examines the Holocaust as a complex historical event and frames the Holocaust in the context of, and in comparison to, other genocides. The course is explicitly geographical in methods and subject matter, focusing on how the Holocaust and genocide are planned, implemented, and experienced differently in different places.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 4393G. Geographic Elements of Environmental Law.**

A survey of environmental laws related to land, air, and water pollution. The nature of environmental problems will be studied as they relate to urbanization, industrialization, land development, noise, radiation and solid waste management, and the laws and guidelines that have been passed to alleviate such problems. Prerequisite: GEO 3321 or GEO 3434 or GEO 4350 or GEO 4352 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4411. Advanced Cartographic Design.**

This advanced course in cartography focuses on thematic map design. The objective is to produce a cartographic portfolio of well-designed, professional grade maps. Theoretical concepts and principles will be introduced using practical examples and written assignments. Prerequisite: GEO 3411 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 4412. Digital Image Processing and Machine Learning.**

This course is an introduction to the digital image processing of satellite scenes including restoration, enhancement, classification and machine learning, change detection, and mapping for environmental monitoring and inventorying. (WI) Prerequisites: GEO 3301 and GEO 3416 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 4417. Digital Terrain Modeling.**

The course focuses on the mapping, transformation, mensuration, visualization, and applications of digital elevation models in Geography. Prerequisite: GEO 2426 and GEO 3416 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 4420. GeoProgramming.**

This course develops advanced GIS concepts, techniques, analysis skills (e.g. spatial data manipulation), and provides hands-on experience with geoprogramming in GIS software programs. The course focuses on the application of basic programming skills to solve real-world GIS problems. Prerequisite: GEO 3426 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4422. Web Mapping.**

The course introduces students to modern interactive and dynamic mapping and GIS techniques that allow internet-based cartographic representations of temporal and non-temporal geospatial objects and phenomena. Prerequisite: GEO 3411 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 4424. GPS and GIS.**

Students will learn to plan and conduct fieldwork using Global Positioning System (GPS) to differentially correct GPS data, and to build Geographic Information Systems (GIS) applications using GPS technology. The course is project-based and involves working with external client(s). Prerequisites: GEO 3411 or GEO 3426 either with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 4427. GIS Consulting Practicum.**

This course requires students to work on a substantive GIS project in partnership with external clients in the GIS workforce. Through project-based teamwork, students develop GIS career skills and demonstrate competence in GIS techniques at the professional level. Prerequisite: GEO 3426 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 4430. Field Methods.**

Methods and techniques for observing, measuring, recording, and reporting on geographic phenomena are investigated in this course. Students will learn the use of instruments and materials in the collection of data for mapping and field research in the local area. (WI) Prerequisites: [GEO 2110 or GEO 2410] and GEO 3301 both with grades of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**GEO 5190. Independent Study.**

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for a total of six semester hours of credit. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5290. Independent Study.**

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for total of six semester hours of credit. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5300. Applied Research Design and Techniques.**

Students will be introduced to appropriate research methods for applied geographers. Emphasis will be placed on the scientific method, productive library research, data collection and analysis, fieldwork, effective writing, and the nature of graphic representation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5301. Multivariate Quantitative Methods.**

The use of multivariate descriptive and inferential statistics as applied to geographic data and problems, beginning with the general linear model and including topics such as multiple regression, principal components analysis, discriminant analysis, and clustering algorithms. Prerequisite: GEO 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5304. Qualitative Research Methods.**

This course introduces the qualitative research paradigm, including research design, methods of data collection, and inductive analysis. Standards of scientific research that call for a deeper evaluation of complex social relationships are emphasized. The focus and application will be oriented towards human geography and nature-society relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5308. Regional Field Studies.**

Study of geographic phenomena during field excursions to a particular site or region. Students will study the physical and/or cultural environments through off-campus field experience. Students will research, analyze, and report on major regional geographic features. Repeatable once for additional credit with a different site or region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5309. Geographical Analysis.**

A survey of typical spatial problems of interest to geographers, with emphasis on current research and application being undertaken by the faculty in the Department of Geography. Topics include environmental geography, geographic education, land use and regional development, and cartographic representation and geographic information theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5312. Managing Urbanization.**

Survey methods and procedures related to managing and preparing for urban growth. Selected topics for examination include transportation planning, housing, historic preservation, and environmental design. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5313. Environmental Studies.**

A critical analysis of the major causes of environmental change and human response to environmental problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5314. Geographic Elements of Environmental Law.**

A survey of environmental laws related to land, air, and water pollution. The nature of environmental problems will be studied as they relate to urbanization, industrialization, land development, noise, radiation and solid waste management, and the laws and guidelines that have been passed to alleviate such problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5315. Geographic Analysis of Global Issues.**

This course focuses on a critical analysis of contemporary global or regional issues from geographic perspectives. The course emphasizes research-based case studies associated with the topics and integrative approaches to the study of world regions and world cultures. The course may be repeated with permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5316. Applied Physical Geography.**

This course is a survey of methods and techniques used in the collection, analysis, and evaluation of information relating to problems within the physical environment. Emphasis will be on problems characteristic of particular geographic locations or specific environmental settings. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5317. Seminar in Applied Human Geography.**

A focus on the methods and techniques used in the collection, analysis, and evaluation of information relating to problems within the human geographical environment. Emphasis will be on problems pertaining to particular geographic locations or special environmental settings. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5318. Environment Problems of the U.S.-Mexico Border.**

This course serves as an in-depth introduction to the physical, social, and environmental landscapes of the region of the U.S.-Mexico Border. The course applies an interdisciplinary perspective to geographic understanding of the environmental and health-related issues experienced by residents of the borderlands. Special attention is given to management and planning solutions to the region's problems. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5319. Seminar in Nature and Heritage Tourism.**

This seminar focuses on the special geographic issues of nature and heritage tourism. Particular emphasis is placed on sites and activities, costs and benefits, commoditization and authenticity, resource protection, and substantive learning content of nature and heritage tourism activities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5322. Interpretive Environmental Geography.**

Students learn to use geographic theories and concepts to provide holistic and thematic interpretation of environmental information, as specified by interpretive principles. Students also learn advanced use of traditional and digital presentation techniques and research methods, which include audience assessment and program evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**GEO 5323. Researching the City.**

This course covers data collection and analysis of urban life and the factors considered in locating industry, business, housing, and community facilities. Attention will be paid to the location of manufacturing activities, commercial enterprises, and a variety of social service facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5326. Parks and Protected Places.**

This course serves as an in-depth introduction to the philosophy, establishment, and operation of public parks, wildlife refuges, protected areas, non-governmental preserves and historic sites. Students will be introduced to the scientific and policy rationale for the creation of such areas as well as methods of classification and acquisition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5329. Historical Geography of the Environment.**

This course examines the evolution of environmental problems using the techniques and analytical perspectives of historical geography. Special emphasis is given to the emergence of environmental challenges related to urbanization and climate change. Students in this class will engage with scholarship related to historical geography of the environment and develop original research related to environmental change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5330. Geography of Hazards.**

This course focuses on understanding and advancing scholarship in hazards research – the threats to life, health, and welfare caused by natural, technological, and/or social processes, and disasters. Special emphasis is placed on understanding the complexities of the assessment and management of risks, hazards, and disasters at multiple geographic scales.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5332. Environmental Geography of the Coastal Zone.**

Investigation of the physical geographic factors associated with the coastal zone and the role of human activities in problems and opportunities characteristic of this environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5334. Applied Water Resources.**

Application of techniques employed in water management including flood hazards, water supply assessment, and water management strategies. Students will apply principles to specific watersheds and water problems including the analysis of various physical, land use, and legal parameters.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5335. Directed Research.**

This course is directed research on various topics in applied geography under the supervision of a graduate faculty member. Students gain experience about the entire process of conducting applied research in geography. Students receive course credit after a directed research report is approved by a student's advisor and members of the student's committee.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5336. Transportation Systems.**

This course introduces key concepts and methods of transportation geography and transportation planning. Topics include, among others, the spatial structure of transportation systems, transportation economics, and logistics. Various methods, techniques, and technologies for transportation analysis, particularly Geographic Information Systems (GIS), will be explored and applied as part of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5339. The Geography of Land Management.**

This course explores U.S. land management philosophies, techniques, and development approaches. Major topics include land ethics/philosophies, U.S. traditions in cadastral geography, urban sprawl and green development, land conservation techniques, the role of local/state/federal regulations in land management, and the human environmental impacts of land development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5340. Active Learning in Geography.**

The course focuses on instructional strategies that will allow teachers to promote active learning in geography. Emphasis will be on how active learning can help students reach geography content and skills standards.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5341. Contemporary Issues in Geographic Education.**

This course examines current approaches to teaching geography in American education. Specific attention will be given to new classroom materials, curriculum reform efforts, and research developments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5342. Theory and Research Methods in Geographic Education.**

The course focuses on designing, conducting, and presenting empirical research on teaching and learning geography. This course emphasizes the critical analysis of theories, research methods, and key research questions in geographic education and developing a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5344. Curriculum, Standards, and Assessments in Geography.**

This course is a survey of major curriculum and assessment theories and practices in geography education. Geography is examined as a school subject that is part of the social studies, as an element of interdisciplinary studies, and as a stand-alone subject. The concept of teacher leadership frame discussions of geography subject matter and standards implementation in schools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5345. Spatial Thinking in Education.**

This course introduces the concept of spatial thinking and discusses how spatial thinking may be taught in the context of K-16 education. Students examine various instructional strategies to facilitate spatial thinking in the classroom and design grade-level appropriate learning experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5346. Inquiry-Based Teaching in Human Geography.**

This course introduces models of geographic inquiry for instruction in human geography at the secondary and postsecondary levels. Case studies examining contemporary issues will be paired with lessons and activities that support integrated and inquiry-based approaches to teaching human geography. Students develop inquiry lessons aligned with geography/social studies standards, the Advanced Placement Human Geography course, and introductory undergraduate courses in human geography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5349. Population Geography.**

An in-depth study of the spatial distribution and movement of human populations. Course will emphasize current issues and analytical techniques. Topics will include the impact of population growth, spatial diffusion processes, migration trends and theories, explanation of regional demographic differences, and techniques such as population projections. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 5350. Practicum in Teaching Geography.**

This course introduces key concepts in teaching geography and provides regular training and planned periodic evaluations of instructional responsibilities. Course topics include instructional and assessment strategies in geography and classroom management. This course is required for first-year instructional assistants in the Geography Department. Students do not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**GEO 5351. Regional Waste Management.**

The principles of effective solid waste planning and management will be examined as they relate to such activities as waste generation, storage and collection, transfer and transportation, processing and volume reduction, resource conservation and recovery, the disposal of wastes, and the handling of special wastes, particularly those of a toxic and hazardous nature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5352. Air Quality Management.**

A geographic assessment of air quality management in the United States. Spatial distribution of the types, sources, and effects of air pollutants. Meteorology and physics of air pollution dispersion. Legislative and regulatory approaches to pollution management. National, state, regional, and local policy development procedures. Geographic methods for air pollution management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5353. Emergency Management.**

This course provides an overview of the most important aspects of emergency management at all geographic scales, with emphasis on local, regional, and federal levels. Best practices and proper methodologies are emphasized as well as ways that students can develop the skills and capabilities for a career in this field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5360. Seminar in Planning Problems.**

A critical and in-depth examination of several problem areas currently facing the planner.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5365. Remote Sensing and the Environment.**

This course provides an examination and implementation of sophisticated approaches for processing satellite digital images with emphasis on environmental applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5367. Exploring Spatial Databases.**

This course covers principles of spatial ontologies and spatial semantics to facilitate appropriate database conceptualization, design and implementation. Course assignments and projects provide in-depth experience with database query languages. Course work is completed using a spatially-enabled Relational Database Management Systems (RDBMS). Prerequisite: GEO 5418 or equivalent with a grade of 'B' or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5368. Lidar and SfM Data Processing and Analysis.**

This course covers Light Detection and Ranging (lidar) systems and Structure from Motion (SfM) workflows for mapping and analysis of the environment. Students learn to successfully apply knowledge of lidar data and SfM workflows for a variety of Geographic Information Science applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5370. Seminar in Applied Physical Geography.**

Critical analysis of theories, models, and techniques of physical geographic research with the focus on application to real-world problems. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5371. Seminar in Geographic Education.**

This research seminar addresses contemporary topics related to geographic education. The emphasis is on applications of learning theories, teaching strategies, and innovative tools in geography classrooms. Course topics may vary depending on student and faculty interest. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5380. Internship.**

Application of techniques of applied geography in an actual on-the-job setting. Internships will be arranged and supervised by the Internship Director. May be repeated once for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5390. Independent Study.**

Individual study under direct supervision of a professor. May involve geographic field trips. GEO 5190, GEO 5290, and GEO 5390 may be taken for a total of six semester hours of credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5393B. Biogeography in Mountain Environments.**

This course examines how plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms and geological factors affect spatial distribution of animals and plants; all within the environmental limitation and conditions of mountains. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393D. Water Resource Planning.**

This seminar presents case-studies related to water quality protection and mitigation and to the planning of water supply at the state and regional level from a policy practitioner's perspective. The objective of the course is to identify the components of the planning process and its outcomes, including water-use conservation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393E. Geomorphology in the Anthropocene.**

This course will examine the ways in which humans interact with and affect geomorphological processes and landforms, and how humans directly act as geomorphological agents. The level at which human activities have transformed the surface of the Earth will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393G. Jobs, Careers, and Professional Development in Geography.**

This course introduces graduate students to research-based strategies for career planning and professional development in geography. Career opportunities for geographers in business, government, nonprofit, and academic organizations are examined. The course also analyzes professional identities, applications of geography in society, professional ethics, lifelong learning, work-life balance, and professional networking.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393H. Professional Development in Geographic Education.**

This course combines useful, dynamic geography content with a sensible professional development online delivery system. The content emphasis stresses the applicability of geography in our modern world thus offering jobs and careers to students. The message for teachers is that geography has become more oriented to student aspirations and civic and environmental responsibility.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393I. Geography and the Social Studies.**

This course examines on how geography fits within the social studies. It details how geography can be taught alongside history, economics, and civics for a well-rounded social studies curriculum. Attention is paid to technology, skills and perspectives. The course examines various social studies frameworks and standards. This course will prepare teachers to be versatile in their social studies knowledge and understanding. It will enhance a teacher's ability to teach geography across all of the social studies subjects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5393K. Advanced Web Cartography and Data Visualization.**

This course provides advanced training in the design and development of interactive, web-based data visualization systems with emphasis on the modern cartographic process and the spatial applications of interactive data visualization principles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 5395. Problems in Applied Geography.**

Designed to consider a selected topic relating to applied geography. Emphasis on the practical application of geographic tools, with individual or group participation in a specific project. Course topics may vary depending on student and faculty interests and may apply to any of the four graduate tracks: physical-environmental, urban and regional planning, geographic education or GIScience. Repeatable for up to six hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in GEO 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**GEO 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5408. Web Mapping.**

This course introduces students to modern interactive and dynamic mapping and GIS techniques that allow internet-based cartographic representations of temporal and non-temporal geospatial objects and phenomena. Prerequisite: GEO 3411 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5415. Geographic Applications of Remote Sensing.**

Students will focus on Geographic applications of the principles and practices of digital image processing, classification, and modeling using satellite images.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5417. Advanced Cartographic Design.**

This advanced course in cartography focuses on thematic map design. The objective is to produce a series of well-designed, professional grade maps (or an atlas) that students can use to build a cartographic portfolio. Theoretical concepts and principles will be introduced using practical examples and written assignments. Prerequisite: GEO 3411 with a grade of "D" or better or instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5418. Geographic Information Systems I.**

Course is concerned with the analysis and interpretation of maps stored in digital form. Students are introduced to concepts and practices involving computerized cartographic and geographic data input, storage and retrieval, data manipulation and analysis, graphic and tabular report generation, and cartographic modeling.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5419. Geographic Information Systems II.**

This course aims to develop more advanced GIS concepts and application issues, further spatial data manipulation and analysis skills, and provide hands-on experience with GIS hardware and software programs. The emphasis will be on practical application of skills to real world issues. Prerequisite: GEO 5418 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5424. GPS and GIS.**

Students will learn to plan and conduct fieldwork using Global Positioning System (GPS) to differentially correct GPS data, and to build Geographic Information Systems (GIS) applications using GPS technology. The course is project-based and involves working with external clients(s). Prerequisites: GEO 2426 with a grade of "D" or better or GEO 5418 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 5430. Field Methods.**

Course will emphasize common field techniques necessary in the construction of accurate maps. Various kinds of data collection techniques will be presented that will facilitate geographic research. Prerequisite: GEO 3301 with a grade of "D" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 5447. Technology in Geographic Education.**

The course focuses on the applications and implications of technology in geographic education. The emphasis is placed on the role of technology as an instructional tool to promote inquiry-based learning.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**GEO 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 5680. Internship.**

Application of techniques of applied geography in an actual on-the-job setting. Internships will be arranged and supervised by the Internship Director.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**GEO 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7190. Independent Study.**

Research in geography under the direction of a supervising professor. Repeatable once for additional credit with a different topic.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7199A. Dissertation.**

Original research and writing in Geography is to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7199B. Dissertation.**

Original research and writing in Geographic Education is to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7199C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7290. Independent Study.**

This course is designed to provide a student with credit while conducting independent research in consultation with his or her research advisor. Repeatable once for additional credit with a different topic.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7299A. Dissertation.**

Original research and writing in Geography to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7299B. Dissertation.**

Original research and writing in Geographic Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7299C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**GEO 7300. Advanced Geographic Research Design.**

The purpose of this course is to develop an appreciation for the process of research as practiced by contemporary professional geographers. Topics covered include formulating research problems, reviewing and critiquing published literature, developing and executing a research design, and completing a research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7301. Advanced Quantitative Methods in Geography.**

How to mathematically and statistically model geographic problems is the focus of this course. The application of multivariate statistical techniques to geographic problems and the problems that spatial data create in the application of statistical and other quantitative techniques are central issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7302. Nature and Philosophy of Geography.**

This course is a critical analysis of the historical development of geographic thought: its roots, its present status, and future directions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7304. Qualitative Research Methods.**

This course introduces the qualitative research paradigm, including research design, methods of data collection, and inductive analysis. Standards of scientific research that call for a deeper evaluation of complex social relationships are emphasized. The focus and application will be oriented towards human geography and nature-society relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7305. Historical Geography of the Environment.**

This course examines the evolution of environmental problems using the techniques and analytical perspectives of historical geography. Special emphasis is given to the emergence of environmental challenges related to urbanization and climate change. Students engage with scholarship related to historical geography of the environment and develop original research related to environmental change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7308. Advanced Regional Field Studies.**

Advanced study of geographic phenomena during field excursions to a particular site or region. Course includes preparation of site inventory, site guides, and on-site presentations. Repeatable once for additional credit with a different site or region.

**3 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7313. Environmental Systems.**

Theories and concepts involved in environmental systems will be examined. Tools and research issues relevant to their analysis will also be explored. Basic principles, as well as specific research questions and techniques, will be proposed to give students a foundation for analysis of current issues involving environmental systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7316. Remote Sensing and the Environment.**

A detailed examination and implementation of sophisticated approaches for processing satellite digital images with emphasis on environmental applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7318. GIS and Environmental Geography.**

This course examines the nature of environmental problems and explores the potential of GIS for environmental modeling and management. The conceptual basis for using GIS as well as the framing of environmental research problems will be covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7330. Geography of Hazards.**

This seminar examines research on issues related to the geography of hazards. Topics will be determined by instructor and student interests. Special emphasis will be placed on conceptual, theoretical, and methodological approaches to advance the study of spatial aspects of hazards such as risk, vulnerability, resilience, relief, recovery, and change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7334. Geographic Aspects of Water.**

This seminar is a critical analysis of developmental and current literature that define water's critical role in determining the physical and cultural characteristics of the earth. Principal focus will be placed on water's role on land use and as a critical resource.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7341. Urban Environment.**

Students in this course will critically engage with scholarly and governmental research relating to urban environments, urban environmentalism, and urban environmental management. Emphasis is placed on students developing and executing a unique, topically relevant research project aimed at improving our understanding of the way in which human-environment interaction influences, and is influenced by, urban geography and the urban experience. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7342. Theories and Methods in Geographic Education.**

This seminar is a critical analysis of previous and current literature concerning problems in pedagogy, philosophy, learning theory, research methods, teaching methodologies, and techniques of geographic education. A research paper will be required of each student on a topic related to the course content. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7344. Seminar in Geographic Curriculum.**

The seminar will be a survey and discussion of major curricula in geographic education. Geography will be viewed as a school subject that is part of the social studies, as an element of interdisciplinary studies, and as a stand alone subject.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7345. Contemporary Topics in Geographic Education.**

This course is a survey of initiatives and reforms in geography education spanning from the 1980s to the present day. Students are expected to develop and carry out research plans that address current theories in geographic education. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7346. Standards and Assessment in Geography.**

An introduction to assessment procedures in geography education is central to the course. Analysis of national standards in geography and how they have affected geographic learning in grades K-12 will be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7349. Population Geography.**

An in-depth study of the growth, movement, and spatial distribution of human populations is the central theme. Students will read and discuss professional articles that stress both theory and analytical techniques. Topics will include population growth and the environment, rural and small town depopulation, spatial diffusion processes, migration trends and theories, urban population growth, and techniques such as multivariate analysis and population projections. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GEO 7350. Practicum in Teaching Geography.**

This course introduces key concepts in teaching geography and provides regular training and planned periodic evaluations of instructional responsibilities. Course topics include instructional and assessment strategies in geography and classroom management. This course is required for first-year instructional assistants in the Geography Department. Students do not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**GEO 7352. Social Theory, Space, and Geography.**

This course examines key texts and concepts in social and political theory, focusing on theories of space and their mobilization in geographical research. Space and geography are approached with respect to several topics and debates in social theory including structuralism and agency, feminist theory and embodiment, racial formations, assemblage thinking and actor-network theory, hybridity, governance, and scale.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7361. Advanced Geographic Information Systems.**

This course provides exposure to advanced topics in GIS, particularly to quantitative methods and techniques for developing and interpreting models of natural and anthropogenic phenomena over the geographical space.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7362. Geographic Visualization.**

This course focuses on the interdisciplinary field of Geographic Visualization. Students will review visualization research in computer graphics, human computer interaction, GIScience, and cartography and relate the research approaches to useful and usable geographic visualizations. Prerequisite: GEO 3411 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7364. Geocomputation.**

Geocomputation reviews and analyzes concepts of computational modeling in Geography. The course will include modeling theory and advanced topics such as parallel processing, neural networks, cellular automata, scientific visualization, and fuzzy modeling. Students will practice model development, specifically spatially explicit simulation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7365. Theoretical Cartography.**

This course focuses on theoretical developments in cartography, and in particular looks at the role of maps and other graphic devices as tools for the discovery, analysis, and communication of geographical knowledge. Prerequisite: GEO 3411 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7366. Advanced Topics in Remote Sensing.**

The course focuses on advanced topics including the theoretical basis, mathematical foundations, and current research frontiers in remote sensing. Prerequisite: GEO 5415 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7368. Lidar and SfM Data Processing and Analysis.**

This course covers doctoral level skills in Light Detection and Ranging (lidar) systems and Structure from Motion (SfM) workflows for mapping and analysis of the environment. Students learn to successfully apply knowledge of lidar data and SfM workflows for a variety of Geographic Information Science applications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7369. Exploring Spatial Databases.**

This course covers principles of spatial ontologies and spatial semantics to facilitate appropriate database conceptualization, design and implementation. Course assignments and projects provide in-depth experience with database query languages. Course work is completed using a spatially-enabled Relational Database Management Systems (RDBMS). Prerequisite: GEO 7417 or equivalent with a grade of 'B' or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7370. Advanced Seminar in Environmental Geography.**

This research seminar focuses on the methods, approaches, issues, and concepts of major themes in environmental geography. Special emphasis will be placed on theoretical and conceptual understandings of how humans interact with the environment from a geographical perspective. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7371. Advanced Seminar in Geographic Education.**

This research seminar analyzes literature and research into recent trends in geographic education. Emphasis will be on new developments in curriculum, content, and teaching methodologies. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7372. Seminar in Geographic Information Science.**

This course deals with advanced and current research issues in Geographic Information Science. Based on this objective, the course aims at educating doctoral students to conduct research in Geographic Information Science as well as develop innovative applications of Geographic Information Science. May be repeated for credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7390. Independent Study.**

Research in geography under the direction of a supervising professor. Repeatable once for additional credit with a different topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEO 7393B. Biogeography in Mountain Environments.**

This course examines how plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms and geological factors affect spatial distribution of animals and plants; all within the environmental limitation and conditions of mountains. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393C. Managing Urbanization.**

This course examines survey methods and procedures related to managing and preparing for urban growth. Selected topics for examination include transportation planning, housing, historic preservation, and environmental design.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393D. International Migration.**

This course provides a survey of geographic and social science research conducted across various topics of international migration. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393E. Geography of Land Management.**

This course explores U.S. land management philosophies, techniques, and development approaches. Major topics include land ethics/philosophies, U.S. traditions in cadastral geography, urban sprawl and green development, land conservation techniques, the role of local/state/federal regulation in land management, and the human-environment impacts of land development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393F. Gender and Development.**

This course is a survey of geographic and social science research conducted across various topics of gender studies and international development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393G. Political Geography.**

This course is a survey of geographic and social science research conducted across various topics of political geography. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GEO 7393J. Soil and Society.**

This course explores the importance of soil resources for environmental and socioeconomic sustainability. Soil science will be introduced, but the majority of the course will focus on soil's value to societies. Specific topics that will be explored include soil geography, historical abuses of soil resources, and current conservation efforts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393K. Biogeomorphology.**

This course will examine the ways in which plants and animals interact with and affect geomorphological processes and landforms, and how geomorphological processes, landforms, and geological factors affect spatial distributions of animals and plants. The role of humans in affecting these interrelationships will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393M. Global Climate Change.**

This course examines various implications of global climate change, including impacts on science, politics, and society. Emphasis will be placed on anthropogenic influences across the 20th and 21st centuries, contemporary mitigation options, and future adaptation strategies amidst a complex and dynamic climate system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393N. Rivers and Society.**

This course examines river system processes and how they are influenced by human activities. We will discuss the principles and practices of large-scale river basin management with an emphasis on the different perspectives and motivations driving different management goals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393P. Advanced Seminar in Human Geography.**

This course will engage students in systematic critical analysis of the theories and methods of human geography. The students will conduct careful research on a topic in human geography.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7393Q. Geomorphology in the Anthropocene.**

This course will examine the ways in which humans interact with and affect geomorphological processes and landforms, and how humans directly act as geomorphological agents. The level at which human activities have transformed the surface of the Earth will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEO 7399A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7399B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7399C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7415. Geographic Applications of Remote Sensing.**

Students will focus on geographic applications of the principles and practices of digital image processing, classification, and modeling using satellite images.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7417. Geographic Information Systems.**

Course is concerned with the analysis of interpretation of maps stored in digital form. Students are introduced to the concepts involving computerized cartographic and geographic data input, storage and retrieval, data manipulation and analysis, graphic and tabular report generation, and cartographic modeling.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7418. Technical Foundations and Methods in Geographic Information Science.**

This course addresses technical foundations and methods in management, analysis, visualization, and dissemination of geographically-referenced data and information in digital form. Topics include data structures, algorithms, and a variety of methods used in GIS and spatial data analysis.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7419. Advanced Techniques in Geographic Information Science.**

This course develops advanced Geographic Information System (GIS) concepts and application issues, spatial data manipulation and analysis skills, and provides hands-on experience with GIS, programming, and spatial analytics hardware/software programs. Emphasis is placed on practical application of skills to real world issues using advanced GIS techniques and geoprogramming. Prerequisite: GEO 7417 or equivalent with a grade of "C" or better and instructor approval.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEO 7430. Field Methods.**

Methods and techniques for observing, measuring, recording, and reporting on geographic phenomena are investigated in this course. Students will learn the use of instruments and materials in the collection of data for mapping and field research in the local area. Prerequisites: GEO 2410 and GEO 3301 both with grades of "D" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7447. Spatial Graphics in Geographic Education.**

This course examines traditional and innovative geoinformation and geovisualization technologies and their relationship to spatial thinking and the teaching and learning of geography. The course reviews academic literature, research methods, and teaching methodologies related to spatial graphics in geographic education. The lab portion provides geovisualization design skills for geographic education.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEO 7599A. Dissertation.**

Original research and writing in Geography to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7599B. Dissertation.**

Original research and writing in Geographic Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit



**GEO 7599C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7699C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999A. Dissertation.**

Original research and writing in Geography, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999B. Dissertation.**

Original research and writing in Geographic Education, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEO 7999C. Dissertation.**

Original research and writing in Geographic Information Science, to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each semester (including summer) for at least three dissertation hours.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**GEOL 1410. Physical Geology.**

The study of materials making up the Earth, the processes that act upon them, and the results of these processes; the development of tools for the interpretation of earth's history and structure, and the major geologic concepts.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** GEOL 1403

**GEOL 1420. Historical Geology.**

A continuation of physical geology leading to consideration of the geologic history of the Earth (with special emphasis on North America), the evolution of life, the continents through geologic time and the principles and procedures used in the interpretation of earth history. Prerequisite: GEOL 1410 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** GEOL 1404

**GEOL 3410. Sedimentation and Stratigraphy.**

This course will allow students to study the principles of weathering, transportation, deposition, and lithification of sediments. Primary structures and textures of sediments are used to determine environments of deposition. Students will identify the recognition and classification of strata into stratigraphic units. Prerequisite: GEOL 3450 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEOL 3430. Structural Geology.**

This course examines the description, classification, and origin of Earth structures and the stresses involved in their formation. Students will explore solutions of structural geology problems using analytical geometry, geologic maps, contouring of data, and preparation of cross sections. Prerequisites: GEOL 1420 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GEOL 3450. Earth Materials.**

This course provides an introduction to crystal chemistry, physical properties, and identification of major rock-forming minerals, sedimentary, igneous, and metamorphic rocks. It brings together wide-ranging fundamental and key concepts in mineralogy and petrology to understand rocks and minerals and how they relate to the broader Earth, materials and environmental sciences. Prerequisite: GEOL 1410 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GEOL 4121. Directed Study.**

Independent study of a particular subject area in geology. Specific topic to be discussed and agreed upon prior to registration. May be repeated once with different emphasis and professor for additional credit. Prerequisite: GEOL 1420 with a grade of "C" or better and instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEOL 4320. Topics in Field Geology.**

This course provides on-site directed investigations of geology in locations remote from campus. Prerequisite: GEOL 1420 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**GEOL 4321. Directed Study.**

This course is designed to provide a student with an opportunity to conduct independent research for credit in consultation with his or her Geology instructors. The course may be repeated once with a different content or instructor. Prerequisite: GEOL 1420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**GEOL 4330A. Introduction to Petroleum Geology.**

This course discusses the origin and distribution of conventional and unconventional petroleum resources, source rocks, types of traps and seals, reservoir rock properties, exploration methods (seismic data analysis and interpretation, formation evaluation, subsurface mapping), reservoir characterization and modeling, reserves calculations.

Prerequisite: GEOL 1420 with a grade of "C" or better. Corequisite:

GEOL 4121 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEOL 4330B. Planetary Geology.**

This course is a survey of the application of geologic principles to the rocky planets and satellites in the solar system. Prerequisite: GEOL 1420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEOL 4330C. Survey of Economic Mineral Deposits.**

This is a survey of the geology of economic resource derived from the Earth including metals, nonmetals, energy related resources and ground water. Topics include genesis of economic deposits, methods of prospecting, methods of extraction, refining, and environmental impact. Prerequisite: GEOL 3450 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEOL 4330D. Tectonics and Geology of the USA.**

Study of the geology of the USA from the tectonic point of view. The different tectonic processes including continental extension and formation of an ocean, convergence and mountain building, volcanism and seismic activity will be studied and illustrated using mostly examples based on the geology of the USA. Prerequisite: GEOL 1420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**GEOL 4421. Hydrogeology.**

This course will provide the student with an introduction to the science of hydrogeology, a conceptual and quantitative understanding of groundwater from a geological/mathematical/geochemical perspective, and experience with hydrogeology applications. (WI) Prerequisites: GEOL 1420 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**GEOL 5421. Hydrogeology.**

This course will provide the student with an introduction to the science of hydrogeology, a basic conceptual understanding of groundwater from a geological/mathematical/geochemical perspective, and experience with hydrogeology applications.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**GER 1410. Beginning German I.**

Introduction to listening, speaking, reading, and writing skills within a German cultural framework. Students who take GER 1410 toward degree requirements must also complete GER 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** GERM 1411

**GER 1420. Beginning German II.**

Continued practice in listening, speaking, reading, and writing skills within a German cultural framework. Students who take GER 1410 toward degree requirements must also complete GER 1420. (MULT) Prerequisite: GER 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** GERM 1412

**GER 2310. Intermediate German I.**

Continued development and review of all language skills within a German cultural framework. (MULT) Prerequisite: GER 1420 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** GERM 2311

**GER 2320. Intermediate German II.**

More advanced practice in all language skills with greater emphasis on reading within a German cultural framework. (MULT) Prerequisite: GER 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** GERM 2312

**GER 3304A. German Cinema.**

This course explores German film, history, and theory. Emphasis is placed on the interrelation of German and American uses of the medium. The course includes classic style (1910s), German Expressionism (1920s), cinema of Nazi Propaganda (1940s), the period of reconstruction (1950s), and the German New, and New New Waves. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**GER 3304B. German Colonialism, Orientalism, and Exoticism in Film and Literature.**

This course surveys German colonial narratives and theories from the 19th and the mid-20th century. The course examines how critics today interpret the political and aesthetic tropes around which texts are organized, focusing on how these "colonial fantasies" emphasized national differences between German and other European powers. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**GER 3304C. The Many Faces of Weimar Cinema: German Expressionist Films.**

The course provides an overview of the changing roles of German cinema in the early 20th century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GER 3304D. German Translation.**

In this course, students approach translation as a method of improving their reading ability in German, not only through language, but also in terms of cultural competence in dealing with texts from the German-speaking world. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**GER 3305. German on the Stage.**

This course is designed to strengthen reading skills and oral command of the language through the study and performance of a classical or contemporary German-language play. May be repeated for credit twice with different topics. (MULT) Corequisite: GER 3310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**GER 3310. German Phonetics.**

This course introduces students to German phonetics, primarily German pronunciation, intonation, and stress. The course is taught in German. It may be repeated once with different content for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**GER 3320. Improving German Communication Skills.**

This course provides extensive practice in speaking and writing German and in mastering advanced grammatical structures in speaking and writing. The course may be repeated once with different content for additional credit. Prerequisites: GER 2320 with a grade of "D" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**GER 3341. Review of German Grammar.**

Students will review the foundations of German grammar and expand their skills at the intermediate/advanced level. A strong foundation in German grammar is essential for mastering the language and communicating effectively in it.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GER 3370. The Contemporary German-Speaking World.**

This course provides a background for a better understanding of Germany since the beginning of the twentieth century and of contemporary life and culture in Germany, Austria, and Switzerland. Course activities include oral and written reports. This course is taught in German. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GER 3380. Business German in Global Economy.**

An introduction to the individual economies of each German state, the language and standards of the German business world, the tourist industry of Germany, and Germany's role in the European Community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**GER 4300. Professional Internship in German.**

This course is a supervised work experience that provides an opportunity to use German in a professional setting. Planning sessions, training, and language lessons prepare students for the internship. Other requirements include reflective practice reports as assigned by the course instructor. Prerequisite: GER 2320 with a grade of "D" or better and department approval.

**3 Credit Hours. 1 Lecture Contact Hour. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GER 4310. Masterpieces of German Literature.**

An examination of major literary works representing the major genres and periods of German literature. The course may be repeated once with different content for additional credit. (MULT) Prerequisite: one GER 3000-level course or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GER 4340. Advanced Conversation, Composition, and Stylistics.**

This course is designed to strengthen command of the language through reading, writing, conversation, and oral presentations in German. The course may be repeated once with different content for additional credit. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**GER 4380. German Civilization.**

The course introduces the history and culture of the German-speaking world from the Middle Ages through the nineteenth century. Students explore historical events and developments that have shaped this part of Europe, and engage with original texts that reflect those developments. This course is taught in German. Prerequisite: GER 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**GER 4390. Studies in German Culture, Language, or Literature.**

A course designed to offer students an opportunity to pursue independent studies in special areas of interest beyond those of other catalog courses. The course is generally available only to graduating seniors who have completed at least two advanced courses or graduate students with special needs. Applications must be submitted prior to the registration period each semester. May be repeated once for additional credit. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**HIM 2360. Medical Terminology.**

Recognizing and understanding the vocabulary of the health care professions. Emphasis on medical prefixes, suffixes, and word roots as used in oral and written communications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 3301. Hospitals and Health Systems.**

This course will explore the organizational structure and delivery of healthcare in hospitals and health systems and the associated roles of HIM professionals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 3350. Legal Aspects of HIM.**

A study of the legal issues of Health Information Management with focus on statutory and regulatory requirements, case law and practical applications. Special legal problems associated with access to patient information, disposition of records, confidentiality and privacy, reporting requirements and compliance with current state and federal legislation are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 3364. Coding and Classification Systems.**

This course provides an introduction to ICD, CPT and other classifications and nomenclatures. Emphasis will be placed on the assignment of diagnosis and procedure codes. Management and use of encoding systems is examined. Prerequisite: Instructor approval.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**HIM 3367. Disease and Medical Science.**

This course provides an introduction to the general disease process. Stress is placed upon the occurrence of disease, the signs and symptoms of disease, the test values and findings of disease, and the therapeutic treatment of disease.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 3380. Quality Management for HIM.**

This course provides an overview of regulatory agency requirements for quality improvement, utilization management, and risk management. Methods for integrating these procedures for credentialing and peer review are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 3390. Principles of Management in HIM.**

This course provides a study of the principles of management in healthcare and related organizations. The course provides the opportunity to apply the fundamentals of management including ethical decision making and human resources in the expanded role of the HIM Professional.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 3463. Foundations of Health Information Management.**

This course is an introduction to the foundational principles of health information management. The content, structure, processing, use, analysis, and management of the health record will be explored. Instruction will include the use of the electronic health record and other common health information management software applications.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 4101. Problems in Health Information Management.**

Comprehensive study of selected problems related to professional practice issues and changes in the health information management field. Emphasis will be on problem solving and application of management skills. May be repeated with permission of department chair.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 4320. Principles of Information Governance.**

This course applies the principles of Information Governance to guide the HIM professional's evolving role in the transition from paper to electronic health records and managing the increasing volume of electronic health data. Topics include data architecture, analytics, integrity, quality and decision support; enterprise content management; and consumer informatics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 4331. Research and Data Analytics for HIM.**

This course provides an introduction to research methods and experimental inquiry to acquaint the student with skills to critique and conduct studies in the health information management domains. The course will also provide the foundation for compiling, analyzing, and displaying statistics related to the delivery of healthcare.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter



**HIM 4363. Comparative Record Systems.**

Theory and procedures for the maintenance and regulation of patient health information records in non-hospital medical care facilities to include long term care, ambulatory care, psychiatric care, rehabilitation and prison record keeping systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 4364. Coding and Compliance for HIM.**

This course provides a continued study of coding and classification systems including the role of mapping among clinical terminologies. Compliance activities and methods will be covered for HIM topics to include code audits, fraud and abuse, and clinical documentation improvement.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**HIM 4370. Finance and Reimbursement Methodologies for HIM.**

Course will address the reimbursement cycle from patient registration to claims billing with an emphasis on federal regulations and the role of HIM regarding payment systems. Topics will include accounting principles, budget processes, cost/benefit analysis, healthcare finance, compliance strategies, charge-master and casemix management, and payment systems and plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 4383. Seminar in Health Information Management.**

Problem-solving course designed to assimilate actual internship encounters and theory. Emphasis is on integration of knowledge and making transition to the applications required to function as a health information manager.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HIM 4385. Health Information Management Practicum.**

Assignments made to promote uniformity and competency levels required of entry-level health information management professionals with practical application of administrative, management, and problem-solving skills required to complete projects and portfolio material. (WI).

**3 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HIM 4388. Practicum.**

Faculty-led administrative training for the associate degree health information progression student. Emphasis is placed on analysis of HIM personnel functions, interdepartmental relations, use of health information technology, and committee assignments. Full-time participation of the student is required.

**3 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required|Time Conflicts Permitted|Writing Intensive

**Grade Mode:** Credit/No Credit

**HIM 4389. Professional Practice Experience.**

Supervised management experience and training in a healthcare or related setting. Student will participate in administrative, management, and problem-solving activities in the institutional setting. Full-time participation is required. Option for health information associate degree and post-baccalaureate students. (WI).

**3 Credit Hours. 1 Lecture Contact Hour. 40 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required|Time Conflicts Permitted|Writing Intensive

**Grade Mode:** Credit/No Credit

**HIM 4390. Contemporary Leadership Principles for HIM.**

An analysis of the expanded role of the Health Information Management professional in the healthcare environment and application of the principles involved. Topics include strategic planning and forecasting, marketing, entrepreneurialism, leadership, motivation, consensus building, workforce diversity, change management, work redesign/reengineering, and project management. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HIM 4393. Project Management for Health Information Management.**

This course provides pragmatic guidance in the management of HIM projects by analyzing critical success factors and skills required to organize, plan, monitor, and control projects in healthcare settings. Cost and schedule estimation techniques are presented together with proposal writing, negotiation, communication, risk management, HIM technology assessment, and quality measurement. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HIM 4501. Professional Practice Experience.**

Supervised management experience and training in a healthcare or related setting. Student will participate in administrative, management, and problem-solving activities in the institutional setting. Full-time participation is required in addition to scheduled campus visits. (WI).

**5 Credit Hours. 1 Lecture Contact Hour. 40 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Credit/No Credit

**HIM 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HIM 5300. Advanced Independent Study in Health Information Management.**

This course provides an in-depth independent study of a singular problem or related problem in the rapidly changing field of health information management. Special emphasis will be placed on the problem's current relevance and the value to the participant. May be repeated for credit with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5301. Health Information Technology for Managers.**

This course provides an in-depth analysis of the concept of health information technologies. A major focus will be on the analysis of how technology impacts overall hospital operations from both a clinical and administrative perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5302. Clinical Foundations of Health Information Management.**

This course provides clinical foundations for graduate students studying Health Information Management. Course content varies based on academic preparation and may include topics such as pathophysiology and pharmacology, medical terminology, anatomy and physiology, computing and statistics in a modular format. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**HIM 5311. Health Informatics and Data Visualization.**

This course provides an introduction to the fundamental concepts of health informatics, data analytics, data visualization, and decision support. Emphasis will be on quality-driven data-based decision making systems for business intelligence, clinical decision support, and consumer informatics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5320. Research Methods for HIM.**

This course provides an introduction to research study design, methods, descriptive and inferential statistics need to conduct research studies in the Health Information Management domains. The foundation for compiling, analyzing, and displaying healthcare statistics needed to report and monitor healthcare statistics in the workplace will also be covered. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5340. Healthcare Informatics.**

This course provides an overview and introduction to healthcare informatics. Topics in the course will include the information infrastructure, data needs, implementing healthcare information systems, decision making, privacy and security, consumer informatics and emerging technologies. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5341. Healthcare Terminologies and Vocabularies.**

This course will provide an overview of healthcare terminologies, code sets and classification schemes, and associated standards. Mapping and the relationship of Systematized Nomenclature of Medicine (SNOMED) to an administrative classification system such as International Classification of Diseases (ICD) will be explored. The purpose and differences encountered in mapping a terminology to a classification will be examined. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5342. Information Systems and Technology.**

This course provides an introduction to the fundamental concepts of health information technologies and information management strategic planning. A major focus will be design and selection of data-driven systems that offer strategic advantages, facilitate compliance and provide a return on investment. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5343. Advanced Data Analytics in Healthcare.**

This course introduces advanced concepts of healthcare data analytics. Students will explore, visualize, and analyze healthcare data sets. Topics include data manipulations, data transformations, developing data queries, visualizing data, and exploring data relationships with predictive modeling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5344. Healthcare Database Management Systems.**

This course introduces methods for healthcare database management. The focus is on the physical data modeling for healthcare decision making. Topics include database creation, populating databases, data query optimization, enforcing database integrity, designing database security systems, and exploring data relationships with database reporting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5351. Data Security, Privacy, and Confidentiality.**

This course provides a detailed assessment of how state laws and federal regulations influence the development and management of policies and technology to protect data security, privacy, and confidentiality of protected health information. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5352. Introduction to Healthcare Information Security.**

Students are introduced to the concepts, principles, and applications of healthcare information security including privacy, security, and infrastructure necessary to protect health information. Topics will include confidentiality, integrity, availability, authentication, fraud, eavesdropping, traffic analysis, intrusion detection and prevention, hacking, viruses, cryptography, and risk management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5353. Risk Analysis of Healthcare Systems.**

By examining computer systems, network, and security tools designed to discover vulnerabilities, students gain an understanding of how to protect electronic health record systems. In this course, students learn the techniques and methods required to perform computer and network security risk analyses in a healthcare environment. Security best practices and audit requirements for specific environments will be studied. Topics to be covered include internal and external penetration tests, wireless security technology, risk analysis methodology, and security audits.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5363. Health Data Content Structure and Standards.**

This course provides an in-depth study of the components and use of health records. Interoperability and healthcare informatics standards for collecting, maintaining and transferring healthcare data will be examined. The role of the HIM professional in developing an effective information governance program will be analyzed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5370. Healthcare Finance and Revenue Cycle Management.**

This course will focus on healthcare financial and revenue cycle/reimbursement management issues that impact the practice of Health Information Management. Specific topics covered include financial management, coding compliance, case mix index, revenue cycle, and reimbursement methods. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5380. Assessing Healthcare Quality.**

This course provides an in-depth study on quality improvement methodology to include data retrieval, display, outcomes analysis and the aspect of risk management for various sectors of healthcare. Mechanisms for promoting facility-wide participation in achieving optimum patient care as delineated in accreditation and government standards will be analyzed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5382. Compliance for HIM Topics.**

Compliance activities and methods will be covered for HIM topics to include HIPAA, fraud and abuse, coding auditing, severity of illness, data analytics, fraud surveillance, and clinical documentation improvement. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5390. Contemporary Leadership Principles for HIM.**

This course explores the expanded role of the Health Information Management professional in the healthcare environment. Topics include public policy development, executive decision making, strategic business alliances, change management, enterprise wide strategic planning, stakeholder engagement, training and development, information governance, cultural diversity and ethics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIM 5397. HIM Directed Practicum.**

This course provides a one semester, part-time practicum experience in a healthcare or related organization. Included is an orientation to the organization and completion of a project suitable for implementation at the site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIM 5399A. Thesis.**

This course represents a student's initial thesis enrollment to initiate the thesis project. No thesis credit is awarded until completion of HIM 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIM 5399B. Thesis.**

This course is a student's continued enrollment in the thesis. The student continues to enroll in this course until the thesis is submitted for binding. This course is repeatable for credit until the thesis is completed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HP 3302. Biostatistics.**

The course introduces major statistical concepts and procedures as applied to clinical science students with an emphasis on inferential statistics. Topics include: descriptive statistics, hypothesis testing, comparison statistics, relationship statistics, association statistics, and beginning epidemiological ratios. Students are introduced to major statistical packages. Prerequisite: MATH 1315 or MATH 1319 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**HP 3325. Healthcare Statistics.**

The course introduces major statistical concepts and procedures as applied to healthcare administration students with an emphasis on descriptive statistics. Topics include: healthcare statistical terminology, descriptive statistics, hypothesis testing, comparison statistics, relationship statistics, and association statistics. Prerequisite: MATH 1315 or MATH 1319 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HS 1310. Introduction to Health Professions.**

This course introduces students to various healthcare fields and their roles as health care providers. Students will examine the history of the respective fields, educational and credentialing requirements, job functions, perspective job outlooks and salaries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HS 3331. Healthcare Systems In The U.S..**

This course provides students with the knowledge and skill related to access and barriers to healthcare. Additionally, the healthcare providers' role in past and current health policy and healthcare delivery will be emphasized. Evaluation of quantitative global and U.S. healthcare data in relation to healthcare systems and evidence-based practices will be analyzed. Ethical topics will be discussed. This course is for non-nursing majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HS 3350. Foundations in Interprofessional Education and Collaborative Practice.**

This course introduces students to the foundational principles of interprofessional education and collaborative practice in healthcare. Students will examine the history, purpose, and best practices of team-based client and patient care, including the enabling, reinforcing, and interfering factors related to interprofessional education and practice. (WI) Prerequisite: [HA 3308 or HI 3301] and HS 1310 all with a grade of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HS 3374. Principles of Accounting for Healthcare Managers.**

This course provides an introduction to accounting useful in healthcare facilities and agencies, and demonstrates the application of accounting principles and techniques in the healthcare field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HS 4300. International Healthcare and Wellness.**

This course provides an introduction to the culture of a foreign country, with an emphasis on wellness, the health care environment, and language in the healthcare setting. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HS 4315. Capstone for Bachelor of Science in Health Sciences.**

This course will provide students with the opportunity to reflect on their studies as a whole and explore how they will use the knowledge they have obtained in their future career. Students will investigate career opportunities available to them after graduation and develop professional skills to ensure success post-graduation. Prerequisite: HS 1310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HS 4327. Legal Concepts of Healthcare.**

This course provides an overview of legal, regulatory, and ethical issues in healthcare. Topics include patient consent, privacy, confidentiality, torts, contract law, corporate liability, employment, labor, malpractice, antitrust, fraud and abuse, and key federal regulations. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HS 4379. Introduction to Financial Management for Health Sciences.**

This course is designed to prepare health professionals for managerial positions in healthcare organizations by providing sufficient knowledge of industry financial matters so they can provide input to the organization's chief executive officer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HS 5200. International Healthcare and Wellness.**

This course provides an introduction to the culture of a foreign country, with an emphasis on wellness, the healthcare environment, and language in the healthcare setting. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HS 5315. Principles of Healthcare Finance for Clinical Leaders.**

This course is designed to prepare allied health professionals in a leadership degree program for managerial positions in healthcare organizations by providing sufficient knowledge of industry financial matters so they can provide input to the organization's chief executive officer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HS 7200. International Healthcare and Wellness.**

This course provides an introduction to the culture of a foreign country, with an emphasis on wellness, the healthcare environment, and language in the healthcare setting. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HS 7356. Policy Development in the Healthcare Arena.**

Students will analyze changing healthcare paradigms to determine decision-points where policies can be affected. Course allows students to apply existing skills to real world policy issues at state and national levels and to analyze policy development from numerous stakeholders' viewpoints.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 3308. Healthcare Organization.**

Overview of the healthcare system and the role hospitals have played and continue to play in the future. Analysis of organizational structure of a hospital and other healthcare agencies, administrative and management elements necessary for policy determination, decision making, and control to achieve institutional goals and objectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 3309. Ethics in the Health Professions.**

This course introduces the student to a sound foundation in well-established ethical theories and a familiarity with terms, concepts and issues in ethics as applied to the health professions. Also provides practical methods for proceeding from considered reflection to informed action in solving ethical problems. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HA 3311. Independent Study in Healthcare Administration.**

An in-depth study of a single topic or problem confronting the healthcare industry. This course affords the student an opportunity to focus on a topic/problem or group of related problems impacting healthcare managers. This course may be repeated for credit with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 3315. Healthcare Administration History, Culture, and Language.**

An introduction to the historical and cultural development of modern healthcare administration in contemporary American society. Special attention is given to the mores of health services delivery including critiques and use of professional behavior and language. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Multicultural Content

**Grade Mode:** Standard Letter

**HA 3324. Supervisory Management for Healthcare Managers.**

Introduction to the following functions of supervisory management: planning, organizing, staffing, influencing, and controlling; as well as the connective processes of decisionmaking, coordinating, and communicating in healthcare organizations. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HA 3329. Human Resources in Healthcare Management.**

Human resource management as applicable to the healthcare field. Course will cover human resource planning, staffing, job requirements, job descriptions, sources of labor supply, training and education programs, salary administration, employee communications, legal considerations, union-management relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter



**HA 3340. Management of Health Information Systems.**

Provides an introduction to information systems for healthcare facilities and agencies. Covers determining what information is needed by whom; designing information flows, procurement of computer/telecommunication resources, assuring information security, and continuing management of information systems supporting healthcare delivery.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 3341. Project Management & Professional Development in Healthcare.**

This course examines the professional development and project management processes as applied to the healthcare industry. Emphasis is placed on staff development, needs analysis, task analysis, development of training and continuing education programs for healthcare personnel. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HA 3344. Patient Care Management & Quality Improvement in Health Care Integrated Delivery Systems.**

This course is an introduction of integrated delivery systems and their operations. It includes an examination of patient care management and the patient experience. A framework for understanding healthcare quality efforts is also an integral part of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 3347. Essentials of Healthcare Law.**

This course includes a review of the laws pertaining to healthcare institutions, physicians, and other healthcare workers who contribute to patient care. Tort and contract law are emphasized. The course addresses policy issues and ethics through topics like patient rights, reproduction, and end of life decisions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 3375. Principles of Accounting for Healthcare Managers.**

Provides an introduction to accounting useful in healthcare facilities and agencies, and demonstrates the application of accounting principles and techniques in the healthcare field. Prerequisite: HP 3325 and [ECO 2301 or ECO 2314] both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 3376. Financial Management for Healthcare Managers.**

A concentration in the fundamentals of healthcare financial management including the financial organization of nonprofit facilities, sources of operating revenue, management of working capital, and the allocation, control and analysis of resources. Prerequisite: HA 3375 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 4121. Problems in Healthcare Administration.**

In-depth study of a singular problem considered to be of immediate concern to the health care industry. Special emphasis is placed on problems unique to managers in the field of health administration. May be repeated with permission of department chair.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 4141. Healthcare Comprehensive Exam Review and Administration including Field Placement Orientation.**

A course in which each of the respective faculty will review their portion of the comprehensive examination that all HA majors are required to successfully pass during their final semester of study. The comprehensive exam will be administered at the conclusion of the course. In addition, students will be prepared to move from the classroom setting to a workplace scenario.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**HA 4221. Problems in Healthcare Administration.**

In-depth study of a narrow range of topics considered to be of immediate concern to the health care industry. Special emphasis on problems unique to managers in the field of health administration. May be repeated with permission of department chair.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 4305. Healthcare Services Marketing.**

The course applies the principles of services marketing to healthcare organizations. The course will present tools to identify and close the gaps that exist between customer expectation of services and the services provided and to ensure quality of health care.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 4315. Health Services Operations Management.**

An introduction to methodologies used to seek solutions to health administration problems which affect technical and professional personnel. Designed to place emphasis on techniques most directly applicable to models of administration and management decision making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HA 4318. Employment Law in Healthcare Management.**

This course examines the legal aspects of healthcare human resource management. Each of the major federal and state enactments impacting human resource management will be studied in depth. Prerequisite: HA 3329 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 4320. Seminar in Healthcare Administration.**

Current trends and problems in health administration affecting health administration technical and professional personnel. Designed to place emphasis in selected areas of administration and management. Research paper and presentation is required of each student. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HA 4322. Public Health Administration.**

This course introduces the healthcare manager to public health and its role in preventing illnesses and improving the health of the community. Students will learn about the role of the manager in disease prevention and how to participate and lead community efforts for the wellness of the community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**HA 4325. Healthcare Strategic Management.**

This capstone class integrates accounting, finance, marketing, MIS, and organizational behavior in the creation of sustainable competitive advantage. Health care case studies will be used to illustrate key concepts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**HA 4440. Practicum Internship A.**

Students with specialization in management participate in a health services based practicum. Experiences in providing opportunities for observation, participation, and practical application of administrative or management skills in the institutional setting are required. Must have a 2.25 major GPA and have completed all junior year major courses.

**4 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**HA 4441. Practicum Internship B.**

Studies tailored to particular interests and needs of individual students. A variety of experiences may be used to enrich the program for students with special needs or demonstrated competencies. This course is taken in the final semester of study.

**4 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**HA 4848. Healthcare Administrative Residency.**

Designed for students who have limited or no previous background in healthcare management/administration. Includes rotation through selected major departments, culminating in a major project. This course is taken in the final semester of study.

**8 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**HA 5111. Topics in Health Administration.**

An in-depth study of a singular topic or a related problem being faced by practicing managers in the rapidly changing healthcare industry. Special emphasis will be placed on the topic's current relevance and its utilitarian value to the participant. May be repeated if topic differs.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5191. Field Experience Orientation.**

This course will assist the student to prepare for the field experience and to prepare for the comprehensive exam. An extensive orientation to the field experience will be provided to better enable students to move from the classroom setting to a workplace scenario.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5300. Healthcare Organization and Delivery.**

A survey of the organization and delivery of health services focusing on the history and development of health systems as they relate to the overall health and medical care systems. Major attention is given to governing bodies, patient care organizations, and executive management structures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5301. Healthcare Administration Research Methods.**

A study of research methodology as it pertains to healthcare administration. Included are hypothesis forming, designing research, and the collection, manipulation and analysis of data. Knowledge of numeracy and statistics is essential.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5303. Information Systems Management in Healthcare.**

This course provides a comprehensive introduction to information systems management for healthcare organizations. It covers the determination of information required by whom, design of information flows, procurement of information systems technology resources, assurance of information security, and management of systems integration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5304. Healthcare Economics and Financial Theory.**

A study of economic theories that have an impact on the healthcare industry. Special emphasis will be placed on emerging economic research and its impact on potential policy ramifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5311. Trends in Health Administration.**

An in-depth study of singular trend or a related problem being faced by practicing managers in the rapidly changing healthcare industry. Special emphasis will be placed on the topic's current relevance and its utilitarian value to the participant. Examples of trends, which are typically offered, include trends in rural health, managed care ethical issues, and in total quality management. This course may be repeated for credit with a different subject area.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5316. Healthcare Financial Management.**

An introduction to healthcare financial management including the financial management in healthcare organizations, healthcare payment systems, financing and investment decisions, and financial planning, analysis, and control. Prerequisites: accounting, economics, and statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5321. Healthcare Law.**

An in-depth analysis of healthcare law and its effect on the relationships between the patient, the patient's family, the provider, and other interested third parties. Analysis of cases is the primary method of study.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5325. Health Care Quality Improvement Concepts and Tools.**

This course teaches the concepts of quality in health care and the use of quality improvement tools. Quality management will be explored using Lean Six Sigma continuous process improvement methodologies. This course is intended to help students learn and translate health care quality management theory, concepts, and knowledge into practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5334. Operational Decision Making for Healthcare Managers.**

An introduction to the fundamentals of selected operations research techniques essential to the analysis of healthcare managerial problem situations, the design of new and improved systems, and the implementation of systems to achieve desired systems performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5335. Public Health for Healthcare Administrators.**

This course introduces the healthcare manager to public health and its role in preventing illnesses and improving the health of the community. Students will learn of the role of the manager in disease prevention and how to participate and lead community efforts for the wellness of the community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5346. Healthcare Strategic Management.**

This capstone course examines mission, vision, strategy, and operations from both the formulation and implementation perspectives. Emphasis will be on the role of the manager/leader in strategic management analysis, creativity, and action. This course is available to HA majors only.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5355. Human Resource Management in Healthcare Facilities.**

A study of personnel administration in the healthcare facility and the environment in which it functions. Emphasis will be on the role of the Personnel Office in forecasting, developing, and managing human resources, in addition to a review of current legislation affecting the personnel function.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5356. Policy Development in Healthcare Arena.**

Prospective healthcare administrators analyze changing healthcare paradigm to determine decision-points where policies can be affected. Course allows students to apply existing skills to real world policy issues at state and national levels and to analyze policy development from numerous stakeholders' viewpoints.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5362. Healthcare Organizational Behavior/Theory.**

This course is a study of theory and concepts drawn from the behavioral and social sciences. These concepts are applied as a foundation and conceptual framework for the analysis, diagnosis, prediction and guidance of human behavior in healthcare organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5371. Marketing of Health Services.**

A study of marketing functions and principles as they relate to the healthcare delivery system. Analysis of marketing concepts such as market segmentation, marketing planning, marketing audit, marketing positioning, and marketing mix will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HA 5375. Healthcare Accounting.**

An introduction to financial accounting in healthcare with an emphasis on the preparation of non-profit financial statements for healthcare service organizations, control procedures for healthcare entities, and accounting issues unique to the healthcare industry. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**HA 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis, HA 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5450. Administrative Field Placement.**

A one-semester, full-time field experience which allows students to apply their foundational didactic education by means of rotations, experiences, and projects in a healthcare organization. This course is graded on a credit (CR), no-credit (F) basis. Prerequisite: Instructor approval.

**4 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HA 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5640. Administrative Practicum.**

A one-semester, part-time field experience designed for the student already working full-time in healthcare. The practicum provides a broader orientation to the student's organization and exposure to special projects.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5840. Administrative Field Placement.**

A one-semester, full-time field experience which allows students to apply their foundational didactic education by means of rotations, experiences, and projects in a healthcare organization.

**8 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HA 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 1310. History of the United States to 1877.**

A general survey of the history of the United States from its settlement to the end of Reconstruction. (WI) (MULT) (MULP).

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** American History Core 060|Multicultural Perspective|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 1301

**HIST 1320. History of the United States, 1877 to Date.**

A general survey of the history of the United States from Reconstruction to present. (WI) (MULT) (MULP).

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** American History Core 060|Multicultural Perspective|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 1302

**HIST 2310. Western Civilization to 1715.**

A general survey of western civilization from earliest times to the end of the 17th century. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 2311

**HIST 2311. History of World Civilization to the 17th Century.**

A general survey of world civilization from the earliest times to the 17th Century. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 2321

**HIST 2312. History of World Civilization from the 17th Century.**

A general survey of world civilization from the 17th Century to the present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 2322

**HIST 2320. Western Civilization, 1715 to Date.**

A general survey of western civilization from the Treaty of Utrecht to the present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 2312

**HIST 2327. History of Mexican America to 1865.**

This course is a survey of the economic, social, political, intellectual, and cultural history of Mexican Americans/Chicanx to 1865. Topics the course addresses include: conquest and mestizaje; the rise and fall of native and African slavery, colonial Mexico's relationship to other global economies, the development of New Spain's/Mexico's northern frontier, how gender and power shaped the emergence of Mexican identities, independence movements, mission secularization, Texas independence, the U.S.–Mexico wars, and U.S. expansion and civil war.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 2327

**HIST 2328. History of Mexican America from 1865.**

This course is a survey of the economic, social, political, intellectual, and cultural history of Mexican Americans/Chicanx since 1865. Topics the course addresses include: the making of borders and borderlands, the impact of the Treaty of Guadalupe Hidalgo, and uses gender to explain migration and citizenship and expulsion, nineteenth-century activism and displacement, industrialization and the making of a transnational Mexican working class, the Mexican Revolution, urbanization, WWII and organized advocacy, the Chicano Movement, changing identifications, globalization, and immigration restriction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 2328

**HIST 2381. African American History to 1877.**

This course is a survey of the social, political, economic, cultural and intellectual history of people of African descent in the formation and development of the United States to the Civil War/Reconstruction period. African American History to 1877 includes the study of African origins and legacy, trans-Atlantic slave trade and the experiences of African Americans during the Colonial, Revolutionary, Early National, Antebellum, and the Civil War/Reconstruction Era. This course presents African American history as an integral part of U.S. History.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** HIST 2381

**HIST 2382. African American History from 1877.**

This course is a survey of the social, political, economic, cultural, and intellectual history of people of African descent in the United States from the end of the Reconstruction period to the present. African American History since 1877 examines segregation, disenfranchisement, civil rights, migrations, industrialization, world wars, the Harlem Renaissance, and the conditions of African Americans in the Great Depression, Cold War, and post-Cold War eras. This course enables students to understand African American history as an integral part of US history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3310. History of Europe, 1815-1919.**

The background, course, and results of World War I, with emphasis on imperialism, diplomatic alliances, and nationalistic rivalries from the Congress of Vienna to the Paris peace settlements. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter



**HIST 3311. History of Europe Since 1919.**

The rise of Communism, Fascism, and Nazism; the background of World War II, and the post-war problems of peace. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3312. Renaissance and Reformation.**

The cultural, political, and economic changes that marked the transition from the Middle Ages in Europe to the modern period; special attention to the decline of the medieval church and the Protestant revolt. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3313. Europe During the Old Regime, 1600-1760.**

A study of European society and institutions in the 17th and 18th centuries with special attention to the development of absolute and constitutional monarchy, the scientific revolution, and the intellectual ferment of the Enlightenment. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3314. Revolutionary Europe, 1760-1815.**

A study of the dynamics of revolutionary change in France and the rest of the European continent from the period of the Seven Years War through the fall of Napoleon Bonaparte. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3315. History of England to 1603.**

The development of the English nation from prehistoric times to the end of the Tudor Dynasty in 1603. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3316. History of England Since 1603.**

The English nation and the British Empire from 1603 through the modern era. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3317. U.S. Women's History to 1877.**

This course surveys the diversity of women's experiences in the United States from the colonial era to 1877. The social, economic, political, and intellectual realms of women's worlds, both public and private, are explored. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3318. U.S. Women's History since 1877.**

This course surveys the diversity of women's experiences in the United States from 1877 to the present. The social, economic, political, and intellectual realms of women's worlds, both public and private, are explored. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3319. History of Brazil.**

This course surveys the history of Brazil, from pre-Columbian times until the present, with a focus on the development of a national culture. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3320. History of Mexico.**

A survey of the national period of Mexican history from the independence movement to the present. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3322. Colonial History of Latin America to 1828.**

A study of the colonial period of Latin America from the early Spanish and Portuguese colonization to the beginning of the period of independence. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3324. Latin America from Independence to Present.**

This course examines the history of Latin America from independence to present. Explores the challenges of formation and consolidation of the new states; of economic policy and development; the rise of Populism and the age of reforms; revolutions and revolutionary movements; and present challenges. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3325G. Modern Revolutions in Latin American History.**

This course will focus on the historical antecedents and events surrounding the Mexican, Guatemalan, Cuban, Chilean, and Nicaraguan revolutions. The purpose is to analyze these five revolutions and to come to an understanding of the current problems facing Latin America. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3325I. Resistance and Rebellion in Colonial Latin America.**

This research-based course analyzes the political dynamics of resistance, rebellion, and social control within Latin American colonial societies, from the pax colonial of the seventeenth century to the Age of Andean Insurrection of the second half of the eighteenth century. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3325J. Diplomacy Seminar.**

A senior-level seminar that explores overarching topics in Diplomacy (including intelligence, negotiation, speech and report writing, protocol, and media and risk management) through reading, writing, research and group discussion. This course is a required capstone for all Diplomacy minors and should be taken in the last semester of minor coursework. Departmental Approval required. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3326. The Southern Cone of Latin America.**

A topical survey of Argentina, Chile, Brazil, and Uruguay which stresses the political balance, geopolitical interests, and forces of commonality and division that have influenced this region since the colonial period. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3327. History of Mexico to 1848.**

A survey of Mexico from prehistoric times to the Treaty of Guadalupe Hidalgo. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3328. Militarism in Latin America.**

This course provides an in-depth survey of militarism and the causes and processes of transition to democracy in Latin America. Students examine the major characteristics of different types of military regimes in Latin America with particular attention to the military regimes in Argentina, Chile, Brazil, and Uruguay, and their relinquishing of power for democratic transitions. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3329. Spanish Borderlands, 1521-1821.**

A survey of the history of the Spanish frontier in North America and its hinterlands from the earliest explorations to the end of Spanish rule in 1821. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3332. History of Early Modern Spain from 1492 to 1808.**

This course traces the history of Spain and its transoceanic empire from the reign of the Catholic Monarchs, Isabel I of Castile and Fernando II of Aragon, in the late fifteenth century to the Peninsular War against Napoleon's invading forces in the early nineteenth century. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3333. History of Modern Spain from 1808 to Present.**

This course covers over two hundred years of Spanish history, beginning during Europe's revolutionary era through Spain's fall into fascism, its transition to democracy and integration into the European Union. Students will engage with issues related to Spain's history and culture, considering issues of religion, race, gender, sexuality, nationalism, and class. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3335. Spain of the Three Religions: Muslims, Christians, and Jews in Premodern Iberia.**

This course covers the history of Muslims, Christians, and Jews in Spain from Islamic conquests in the 700s to expulsions of Jews and Muslims from the peninsula in the 1400s and 1600s. For most of this 900-year chronology, however, Muslims, Christians, and Jews lived in close proximity, sometimes as neighbors, causing scholars to dub this era as "Spain of the three religions." This class investigates the dynamics between these religious groups as they evolved across time, exploring themes like the politics of conversion, the role of gender in interfaith relations, intellectual exchange, and the relationship between royal authority and religion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3337. History of U.S. Foreign Policy Making in the Muslim World.**

This course examines the history of U.S. foreign policy-making in the Muslim Middle East in the twentieth century by exploring selected incidents in the history of U.S. foreign policy towards the Middle East. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3338. History of Religion in India.**

This course surveys the historical development of religious traditions within India including Vedic, Buddhist, Jain, Hindu, Christian, Islamic, and Sikh traditions. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3340. History of the United States, 1877-1914.**

A survey of American history from the end of Reconstruction to the outbreak of World War I with an emphasis on the pertinent historical literature. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3341. History of the United States, 1914-1945.**

The study of American history from World War I through World War II with an emphasis on the pertinent historical literature. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3342. Social and Intellectual History of the United States, 1607-1865.**

A history of American culture, with emphasis on the development of religious, political, social, and philosophical ideas through the Civil War. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3343. Social and Intellectual History of the United States Since 1865.**

A study of the development of the United States after 1865, with emphasis on the social, political, economic, aesthetic, and philosophical ideas that have influenced contemporary American culture. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3346. The Civil War and Reconstruction.**

The history of the United States from the Compromise of 1850 through the election of 1876. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3349. The Constitution of the United States.**

An intensive study of the origin and development of the Constitution of the United States. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3352. Western America.**

A general examination of the Trans-Mississippi West, its major cultural, economic, political, and social frontiers, and its development as a region and as a national component, from 1803 to the present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3353. The U.S. - Mexico Border and its Communities: A History.**

This course is a thematic examination of the region including Texas, California and the states that include the Great Basin, the Southern Rockies, and the Sonoran Desert from Mexican Independence in 1821 to the present. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3357. History of U.S. Foreign Relations.**

A study of American diplomacy since the Civil War. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3359. African American History.**

A survey of African-American history, 1619 to the present. Emphases include African and European backgrounds, hemispheric slavery, slavery in early America, the antislavery movement, the Civil War and Reconstruction, post-Reconstruction culture and society, and Civil Rights movement. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3363. Colonial North America to 1763.**

An intensive study of selected topics in the history of the settlement and expansion of British North America, including the development of the social, economic, and political life of the American colonies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3365. US Early Republic, 1788-1828.**

History of the early national era, 1788-1828, with emphasis on development of the first party system in American politics, the social and economic issues, the expansion of southern slavery, and the western frontier. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3366. Introduction to Public History.**

This course offers an introduction to the work of public historians who interpret history outside the classroom in settings like museums, historic sites, archives, and national parks. Topics explored in this course include: methods used by public historians to preserve historic buildings and exhibit museum collections; how to engage the public with the past through storytelling and digital history projects; and the challenges faced by public historians to mediate popular memory and myth. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368B. Law and Society in Early America.**

A survey of American law and society from its European antecedents to the mid-nineteenth century. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368E. United States Westward Expansionism, 1776-1861.**

This course examines the expansion of the United State across the North American continent from the time of the American Revolution to the beginning of the Civil War. Special attention will be devoted to the Louisiana Purchase, the annexation of Texas, the Mexican Cession of 1848, and the Gadsden Purchase. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368H. LBJ's America.**

This is a team-taught course covering LBJ's evolution as politician. Beginning with LBJ's early career, students will learn the New Deal/Rooseveltian roots of LBJ's political philosophy. Second, students will discuss LBJ's presidency, Great Society, and Civil Rights legislation. Lastly, students will study LBJ's Cold War politics, particularly the Vietnam conflict. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368J. The Space Race.**

This course traces the history of space exploration, focusing on the competition between the United States and Russia since the launch of Sputnik in 1957. Themes include the creation and role of NASA, the scientific and economic impact of rocket science, and the political use of the space program. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368K. American Cultural History.**

This course examines the history of specific expressive, popular, and symbolic forms of US culture in shaping American intellectual life, aesthetics, and material culture during the post- Civil War – mid 20th century period. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368L. History of Mexican American Music in the Southwest.**

This class will explore Mexican American Music in all of its forms as it has developed in the American Southwest. The course will begin with an historical review of the region. It will then explore, from Islamic Spain to the contemporary Southwest, the development of musical language, styles and fusions. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368M. Popular Music and Social Movements in 20th Century America.**

The examination of music as both a reflection of historical trends and a tool of social change will illuminate the relationship between music, culture, politics, and protest movements in 20th-century American history. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368P. The U.S. and Britain in the Sixties.**

This course explores the political, social and cultural changes experienced by Americans and Britons during the "long 1960s" (1955-1975). Students will examine key events in each country separately before focusing on the commonalities and differences. Special attention will be paid to the transfer of movements across the Atlantic. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368S. History of Music and Race in the American South.**

This course examines how the complex musical landscape of the American South, including blues, gospel, jazz, folk, country, bluegrass, Cajun, zydeco, rockabilly, and others, reflects the interaction of larger social, historical, ethnic, racial, political, and economic forces in that region from the eighteenth century to the present. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368T. American Songbook.**

This course examines the music of American from the colonial era to the 1960s. By exploring songs as primary source documents, students will analyze lyrical themes that illuminate historical trends from diverse perspectives. Beginning with British America, the course traces musical contributions of many demographic groups that comprise American society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368U. U.S. - Cuban Relations.**

This course will provide students with an overview of relations between the United States and Cuba from 1865 to 2006. Themes include economic, political, military, and cultural inter-development through Cuban independence movements, U.S. military occupation, shared cultural and economic movements, and the growing animosity from Castro's Revolution to recent years. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368X. Organization of the Modern American State.**

This course analyzes changes in political culture, policies, and organizational dynamics that shaped the American state, 1870 - Present. It examines how interest groups, experts, and bureaucrats helped transform a weak American state into one that affects most parts of citizens' daily lives, despite America's traditional aversion to centralized power. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368Y. Walking in the Way of Peace, War & Slavery: Quakers in American History.**

From their earliest roles as agitators to the Puritan "Citty on a Hill" and as founders of Pennsylvania, "The Best Poor Man's Country," to their early embrace of abolition and notable pacifist resistance in the Revolution, Civil War, WWII and Vietnam the Society of Friends has played an out sized role in American History. This course will take a thematic approach to focus on several key points at the intersection of Quaker and American history, concentrating particularly on two issues: the Quaker relationship to slavery and the slave trade, and the Quaker response to warfare.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3368Z. A Global History of Pandemics.**

This class will investigate the history of pandemics. This course includes the Justinian plague of the 6th century, the Black Death of 1347-52, the smallpox pandemic caused by the Spanish Empire, the Spanish influenza outbreak of 1918, the polio pandemic, the influenza pandemic of 1957, the HIV/AIDS pandemic, and the COVID-19 pandemic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3371A. Conflict and Creativity in U.S. Urban and Suburban History.**

This course surveys the changing functions, scale, and quality of urban society in the United States. Special emphasis will be placed upon urban politics, or how changing demographics, physical environments, public and private institutions, and economies both grew out of and gave rise to political tensions between Americans. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter



**HIST 3371B. Health and Illness in American History.**

From concerns epidemics might undermine proper American racial orders to anxieties over democracy and health care financing (Obamacare), health and illness have reflected and shaped the ways Americans understand themselves, their policies, and their societies. This course examines two centuries of this complicated and fascinating history. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3371C. History Behind the Headlines: Current Debates in a Historical Perspective.**

This course will allow students the opportunity to explore the historical roots and development of some of the most pressing questions that dominate our current political climate and policy debates. Students will seek to put the past in the present, looking at how American history shapes the debates of today. We will cover topics such as the history of pandemics and our government response, the history of mass incarceration and police brutality, the rise of the conservative movement and neoliberal capitalism, and other immigration policy debates.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3371D. The History of U.S. Policing and Prisons.**

This course traces the historical development of policing and prisons in the United States, introducing students to the historical method and creating opportunities for original research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3372. Texas History: A Survey.**

A one-semester survey of Texas History which will emphasize political, economic and social development from prehistory to the twentieth century. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3373C. The History of Rural Women.**

This course surveys rural women in the United States from the founding of the nation to the present. Topics include women's work in the agricultural economy, female influence in community and agrarian organizations, and the relationship between rural and government services from regional, national, and global perspectives. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3373D. History of American Feminisms, 1960-2020.**

This course covers the history of feminist activism from 1960 to 2020 in the United States.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3374A. History of Christianity 1300-1700.**

This course examines selected individuals and movements that embody key concerns of Christians during the most tumultuous era in Western Church history. The course begins in the fourteenth century so that students may gain perspective on reform efforts predating, and decisively influencing, the break with Rome catalyzed by Martin Luther.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3374D. Reframing Medieval Power: Rulers of the Mediterranean.**

This course explores often overlooked rulers and centers of power of the Middle Ages to expand discussion beyond white male kings of Christian Europe. Powerful queens, African dynasties, and Muslim rulers are some narratives included alongside those of European monarchies. Readings include modern scholarship and medieval sources like mirrors for princes, crusade chronicles, and legal texts, as well as works on art and architecture. Assignments include short essays and discussion, and there will be a multi-day class role-playing simulation where students will be cast as real medieval people with personal goals and diplomatic missions to negotiate with their peers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3375A. Topics in Working Class History.**

Examines topics in US working class history with emphasis on the experiences of organized and unorganized workers in the context of their social, cultural, political, and workplace environments and the role of the working class in shaping US society. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3375E. History of Women's Health in the United States.**

This course examines the history of women's health and healthcare in the United States from Colonial America to present day debates over female bodily autonomy, including but not limited to abortion, access to prenatal, postpartum, and maternal care, birth control, and trans healthcare. Topics and themes covered in the course include the ways in which the state attempted to control women's access to sex-specific healthcare and how women demanded and created more transparency and forged new avenues of medical autonomy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3376. American Religious History.**

This course in religious history explores the theological, social, and political evolution of religions and the development of the leading trends in religious beliefs and practices in the United States from pre-European encounters to the present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3377. History of Country Music.**

This course examines the evolution of country music and how it reflects larger social, cultural, historical economic, political, ethnic, and demographic changes taking place within American society. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3378. History of the Blues.**

This course examines the evolution of the blues and other forms of African-American music throughout American history, with an emphasis on how blues music reflects the rich and complex traditions of the African-American community and helped give birth to rock & roll. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3379. History of Rock and Roll.**

This course traces the various ethnic, social, cultural, political, economic, and demographic forces in American society that helped shape rock and roll music. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3380. The Desegregation of the South from 1944-1970.**

Course will address the history and the historiography of the desegregation of the South from 1944-1970. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3381. Democracy and Education.**

This course provides an overview of the relationship (and tension) between democracy and education in the U.S. between 1865 and 1930, when emancipation, westward expansion, rural poverty, and growing immigrant and working-class populations motivated reassessment and reform of public education in an attempt to meet individual and societal needs. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3382. Immigration and US History.**

This course examines the history of immigration to the United States beginning with the colonial era and extending through present day. It considers the causes of immigration; the social, cultural and economic experiences of various immigrant groups; the development of immigrant group identities; and American responses to immigration. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 3384. History and Culture of Modern India.**

This course surveys the history of modern India. The course covers the Mughal Empire, British Colonialism, Mahatma Gandhi and the Indian Independence Movement, the establishment of the nations of India and Pakistan, and recent political and historical developments in India. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4304. Ancient Rome and the Mediterranean 500 B.C. to 500 A.D..**

A survey of Roman History from the Republican period to the fall of the Western Empire with emphasis on its Mediterranean milieu. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4307. Medieval European History, 300-1400.**

A study of the Latin West and the Byzantine East during the Middle Ages with emphasis on the continuity of Greco-Roman culture as it encounters Islam and the Barbarians. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4316. Roman and Medieval Britain.**

This course is a study in British history from the arrival of the Romans in Britain to 1603. This course integrates classroom discussions, readings, virtual excursions and discussions of the major events and features of Roman and Medieval history in Britain. Students are introduced to issues, personalities, movements and developments, encompassing political, governmental, constitutional, social, religious, economic and cultural topics. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4317. Tudor-Stuart England, 1485-1689.**

A study of the constitutional, social, political, and religious developments in England during the Tudor-Stuart dynasties. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318B. Race in the Middle Ages: Exclusion and Belonging in the Mediterranean.**

This course will teach students how a constellation of physical, cultural, and religious characteristics became encoded with racializing meanings before the 17th c. In the diverse Mediterranean, people justified violence, privilege, exclusion, and belonging by constructing notions of sameness and difference. Medieval race-thinking appears in Christian and Islamic literature, religious texts on curses, blood purity statutes, human diversity in art, laws about women's chastity, and geographies of so-called 'monstrous races.' Delving into such sources, students will pursue research that investigates how the history of race and racecraft is deeply related to medieval definitions of power, morality, community, and identity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318C. Spy vs Spy: Intelligence & Counterintelligence in World War II.**

This course examines key intelligence operations and agencies active in the Arab world/North Africa. Students assess tradecraft, querying the extent to which intelligence work complemented the Allies' domestic and foreign policies. Half of the course's content focuses on Queer, Trans, and LGBTQIAP+ experiences of World War II.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318N. Immigration in European History.**

While we typically think of Europe as a fixed, finite continent, its borders are more porous than we often realize. This class examines the movement of people from Europe and to Europe in the nineteenth and twentieth centuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318S. Britain and the World.**

Mainstream British history still neglects the world's influence upon domestic developments, and British overseas history remains largely confined to the study of the British Empire. This course takes a broader approach, investigating Britain's interactions with the wider world from 1688 to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318U. Industrial Britain.**

This course will examine the physical impact that industrialization had on the Great Britain - bridges, canals, factories - and the cultural/social effects on factory and seaside resort towns and ocean ports. The class will address what role industrialization played in Britain becoming world industrial and imperial power. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318W. Queer Youth History.**

This transatlantic course examines the emergence of both youth and queer culture in urban spaces through a study of gender, sexuality, race, class, and nationalism. With a wide-ranging chronological and geographical scope, the selected queer/youth cultures represent diverse spatial, aesthetic, economic, political, and socio-cultural histories.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318X. Scottish History from the Wars of Independence to the Present.**

This class will investigate the history of Scotland from the 13th century (the Wars of Independence from England) to the present day. It will focus on major personalities and important events both within and without Scotland as well as the culture and society of this proud and ancient nation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318Y. The Global Teenager.**

This course covers the historical development of the category of the teenager across the globe, exploring the similarities and differences of the teenage experience across a variety of regional contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4318Z. Podcasting History: Making Marginalized Voices Heard.**

In this course students will work collaboratively to create history podcasts on topics related to race, gender, class, nationality, and sexuality for public audiences. Students will learn relevant software and cultural history research methods, as well as how to script and record podcasts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4320. Origins of Christianity.**

A survey of the development of the institutional church from the founding of the first primitive communities of believers to the rending of Christian unity in the 16th century. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4323. France and the Modern World.**

This course surveys important phenomena in nineteenth and twentieth-century French history that have had an impact on the development of the modern world. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4325. Islamic History to 1798.**

This course explores the history and culture of the Arab and Muslim peoples in the Middle East and North Africa from the late 6th century to Napoleon's invasion of Egypt in 1798. Emphasis is placed on the interrelationships of indigenous socio-economic structures and intellectual developments in Islamic theology and Shar' a law. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4326. The Modern Middle East.**

This course emphasizes economic social and intellectual developments in the Arab Middle East and North Africa in the 19th and 20th centuries. Some attention will be paid to Iran in the period after World War II. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4327. The Problem of Palestine.**

Examination of Arab Palestine. Ottoman records to 1914, Israel's creation in 1948, and Jordan's loss of control of the West Bank and Gaza in 1967 will be surveyed. The Palestinian Diaspora, Yasir Arafat's leadership, and the "Intifada," also will be examined. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4328. History of India.**

This course is an introduction to the history of India from ancient times to the creation of the modern nation-state of India. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4331. Piracy Through the Ages.**

An activity based on greed, and sometimes survival, piracy has existed since humans took to the seas. This course investigates the global history of piracy beginning with the Vikings. The history of piracy in the Caribbean, Asia, and the Mediterranean will be covered and compared to the piracy of today. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4332. European Colonialism.**

This course explores the worldwide development of European colonial systems since the fifteenth century. The course emphasizes how native peoples responded to European attempts to introduce economic, political, and cultural prerogatives in a variety of world settings such as South and Southeast Asia, Africa, and North and South America.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4333. The History of Russia and Eurasia to 1917.**

A survey of Kievan Rus, Muscovy, and the Russian Empire to 1917. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4334. The History of Russia and Eurasia from 1917 to Present.**

A survey of the history of the former Soviet Union and post-Soviet society from 1917 to the present. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4335. 20TH CENT EAST EUR.**

A survey of the history of Eastern Europe. May be repeated with a different emphasis. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4336. Germany from 1815 to Present.**

The political, social, economic, and cultural development of Germany since Napoleonic times. Includes the Confederation period, unification under Bismarck, the Second Empire, National Socialism, and the post-war period. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4337. Germany and National Socialism, 1918-1945.**

Survey of German history and the Nazi movement. Topics covered will include the Weimar Republic, Hitler's rise to power, everyday life in Nazi Germany and in peace and war and the Holocaust. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4341. The History of Modern Britain.**

This course examines the history of imperial Britain from the early nineteenth century to the present day. Students analyze the cultural and intellectual foundations of modern British society, including the growth of its industrial economy, the development of representative politics, and the evolution of its relationship with empire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4342. Modern Africa.**

The course presents a chronological narrative of Africa from the beginning of the nineteenth century until the present day. Students engage with the continent's social, cultural, and intellectual history through topics and themes that include the spread of Islam and Christianity, the Atlantic and Indian Ocean trade worlds, twentieth-century colonialism, and anti-colonial nationalism. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4343. Modern China, 1600 to the Present.**

A survey of the political, social, economic, and intellectual history of China from 1600 to the present. Emphasis on the issues of domestic troubles and external aggression, and on the revolutionary changes in the 19th and 20th centuries. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4344. Modern Japan, 1600-Present.**

A survey of the political, social, economic, and intellectual history of Japan from 1600 to the present. Focus on the radical changes in the state, society, and economy in the 19th and 20th centuries and on the impact of these changes on Japan's status in the world today. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4345. Postwar Japan.**

This course explores Japan's development from the 1940s through the 1970s. The emphasis is on the continuities and discontinuities from the wartime to the postwar regime, American influence on policies and discourses on post-occupation society, the legacies of the war in culture and society, and the repercussions of economic affluence. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4346. Modern Korea.**

This course is a survey of the political, social, economic, and intellectual history of modern Korea, focusing on the external aggression and internal transformation between 1876 and 1910, the impact of the Japanese rule, the split into two Koreas in 1945, and the North/South developments and interactions since then. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4347. History of Hong Kong.**

This course is a survey of the political, social, economic, and intellectual history of Hong Kong from 1842 to the present. Focus is on British colonial rule, the Handover in 1997, and the current status of the Hong Kong Special Administrative Region of the People's Republic of China. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter



**HIST 4348. Mahatma Gandhi and Nonviolence.**

This course will offer students the opportunity to explore Mahatma Gandhi's leadership of the movement against British colonialism in India and the legacy of Gandhi's strategies of non-violent non-cooperation in other political movements of the twentieth century. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4349. History of Drugs.**

This course examines the impact of drugs on societies, how drug use has changed throughout history corresponding to major changes in society, and the ways in which drugs have influenced international trade and political economics. Psychoactive substances (from stimulants to hallucinogens) have played a major role in shaping human societies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 4350A. Slavery and Emancipation in the Americas.**

An Atlantic and continental perspective of the institutionalization of the slave trade, the adaptation of the plantation system and the evolution of slave laws, the various models of emancipation in the Americas, followed by the modified forms of indigenous and foreign slave labor adopted in the Americas. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350D. Empire and Identity in Central Asia.**

This course explores the historical development of local, ethnic, and national identity in Central Asia from the 13th-century Mongol conquest to the present. The course concludes with explorations of the transnational links within the region and the challenges and possibilities for the five Central Asian republics in the post-Soviet era. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350E. Gender in Latin American History.**

This course surveys the role of gender in Latin American history, from pre-conquest to the present. It analyzes Latin American politics, culture, and economics, and gives particular attention to the creation and resistance of social norms. The course strengthens analytical skills through extensive discussion and writing. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350K. Gender & Militarization in the Arab World.**

For women and men in the modern Arab world, national identity and sovereignty – or civil war – influence how they live. This class takes advantage of cutting-edge scholarship on the twentieth-century Middle East to hone students' skills in historical analysis. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350L. History of Southeast Asia.**

This course explores the region of Southeast Asia from its earliest origins through the periods of European colonialism, nationalism, revolution, and the transformation of old societies into new nations. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350R. Workers and Work in the Arab World.**

Of 255 million people in 22 predominantly-Arab countries in North Africa and the Middle East, over the past 150 years, most have worked at some kind of job or another. In this course we will consider how labor politics introduce state regulations to gender, national and sexual identities. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350T. Japanese Urban Life.**

Home to the world's largest city, Edo, at the end of the eighteenth century, Japan has been influenced over many centuries by a vibrant and distinctive urban culture. Through works of history, fiction, film, geography, and urban planning, this course introduces students to the characteristics and development of Japanese urban.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350V. History of Pakistan.**

This course is an introduction to the history and culture of Pakistan. Broadly covering the 5000 year history of the region, from origins, the introduction of Islam and creation of the modern state, the course focuses on the cultural developments of the region, along with highlights of major political developments. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4350Y. Development of Secularism in Ottoman Empire and Modern Turkey.**

The emergence of Turkey as a secular state is a peculiar example among the countries with predominantly Muslim populations. This course aims to provide students with an historical survey of the secularization of the Ottoman state and the development that led to the emergence of modern Turkey.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4352. Black Women and Black Protest in America.**

This course traces the participation of Black women in every stage of Black protest in America from slavery and Reconstruction thru the Civil Rights and Black nationalist movements to present day. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4353. WWI: The Great War.**

This course covers the history of the First World War by examining the experiences of both soldiers and civilians across multiple continents. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4360. History of the United States, 1945 to 1968.**

A study of the interplay of economic, social, political, and cultural forces that shaped American society from the end of World War II to the presidential election of 1968. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4361. History of the United States, 1968 to the Present.**

A study of the interplay of economic, social, political and cultural forces that have shaped American society from 1968 to the present. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4362. Peace and Nonviolence Movements.**

This course explores the origins, development, and impact of peace and nonviolence movements globally. It examines the roles that religion, class, gender, race, ethnicity, and nationalism have played in shaping social and political perceptions of injustice and public attitudes toward movement goals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4364. Military History of the United States.**

A specialized study of the military problems of the United States since 1789 and their impact upon non-military problems. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4365. Age of Revolution in North America, 1763-1789.**

A history of the American people during the age of the American Revolution, from the beginning of the crisis with Britain to the adoption of the Constitution. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4367. US Antebellum Era, 1812-1861.**

A survey of conflicting American attitudes about the desirability of a strong central government, rapid economic growth, aggressive national expansion, and human slavery in a democratic society. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4368. War and Society.**

A study of the relationship of war with social and cultural institutions from the 18th century to the present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4369. Introduction to Ethnohistory.**

This course familiarizes students with the ethnohistorical method, a multidisciplinary approach to the study of the historical, social, and cultural processes undergone by indigenous peoples before, during, and after contact with nation-states. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4371. Introduction to American Indian History.**

This course promotes understanding of the role played by the native peoples of North America in the history of the United States. Among the subjects to be covered through lectures and discussions: initial migrations and cultural development; impact of European conquest; adaptation; removal and reservation life; 20th century adjustments. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4372. Latina/o/x Histories.**

This course is a survey of the political, economic, and social-cultural role of Latinas/os in the United States. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4373. Economic and Social History of the Americas.**

Comparative history of the Americas with special attention to the United States, Canada, and Mexico. Explores different patterns of economic growth and their impact on societies and international relations. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4374A. History of American Sexualities.**

This course examines the history of sexuality in the United States from the colonial period to the end of the twentieth century. The course emphasizes the diversity of sexual behaviors, the role of sexual regulation, and modes of thought in the past.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4374B. History Lab: European Cinema and Film Festival.**

In this course, students will collaborate on a significant faculty-directed research project or public history project as part of a team. Students will learn research methods, project design strategies, and implementation skills. Projects can include working on peer-reviewed research, symposium organization, and/or exhibitions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4375A. Critical Issues in Texas History.**

Emphasis will be on significant critical issues in Texas history. Topics will include: Mexican independence, Texas and U.S. expansion, the Texas Revolution and the Mexican War, the Civil War and Reconstruction, Spindletop, the Depression and WWII, and the rise of urban, high-tech Texas. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4375B. African-American Experience in Texas.**

People of African ancestry have played a role in Texas history since Estebanico accompanied Cabeza de Vaca in exploring the region in the 1530s. As slaves, soldiers, and cowboys, Afro-Texans have participated in the state's development while being at the center of controversies regarding rights, racemixing and economic opportunity. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4376. The History of Texas Music.**

Examination of the evolution of music in Texas and the American Southwest, emphasizing how music reflects the richly diverse ethnic and cultural heritage of the region. It also considers the importance of ethnic identity and other social, political, and economic factors in shaping the Southwest, its people, and its music. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4377. Social Justice and Reform Movements in the United States.**

This course introduces students to the history of U.S. social justice movements. It defines activism as individual, community, and political acts designed to create social, political, and economic change at both the local and national levels. The course explores a series of topics, including the Black Freedom Movement, Chicano Movement, Indigenous Peoples Movement, voting rights, labor movements, and student activism, among other topics in U.S. social movement history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 4379. Internship in Public History.**

This course offers a supervised work experience related to students' career interests in historical institutions. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 8 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 4380. Historical Resources and Practices.**

This course is required for students seeking teacher certification in History. This course is an introductory methods course designed to familiarize students with general historical practice and its application in secondary teaching. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4388. Problems in History.**

This is an independent study course open to advanced students on an individual basis. Repeatable for credit with different emphasis. (WI)

Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 4399. Senior Seminar.**

This course is required for History majors not seeking teaching certification. In this course students refine skills and techniques essential to the historical profession. Students analyze primary and secondary sources, apply methods, and write a term paper. Prerequisite: 24 semester credit hours in History with a grade point average of at least 2.25 in those hours. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**HIST 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5301. Instructional Methods Practicum for Graduate Assistants.**

Required as a condition of employment for graduate teaching and instructional assistants. This course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**HIST 5307. Medieval European History: Contemporary Trends in Medieval Historiography.**

This course introduces graduate students to the craft of the medieval historian, with emphasis on major contemporary shifts in American historiography of the European Middle Ages.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5309D. Early Modern Spain.**

A seminar based on selected topics in political, social, intellectual, and economic history of Spain from 1450 to 1815. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5310. Western European History Since 1815.**

A seminar based on selected topics in the history of Western Europe from 1815 to the present. May be repeated with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HIST 5313. Early American History.**

A seminar based on selected topics in the Colonial Revolutionary and Early National periods of the United States history. May be repeated with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5314. Ethnohistory.**

This seminar seeks to familiarize students with current questions, methods, theories, and debates in ethnohistory, a multidisciplinary approach to the history of indigenous peoples. Materials studied will include both classic and recent ethnohistorical works. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5315A. American Sexualities.**

This course addresses the history of sexualities in the United States from the colonial era to present to shed light on the ways that sexuality has shaped social life, establish conventions, and created spaces to defy norms. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5315B. Queer History: GLBT Histories in the United States.**

This course examines the histories of different sexual minorities from the colonial era to present, though the majority of the course focuses on the twentieth century, to explore the rise of the modern lesbian, gay, bisexual, and transgender identities, politics, and culture. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316A. Women's Rights in Comparative Perspective.**

This course considers national, transnational, and global development of campaigns for women's rights since the nineteenth century. The course examines how women agitated for their rights in different cultural and historical moments. Students will gain familiarity with comparative feminisms, the gendered nature of liberal movements, and women's activism in national and international arenas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316B. Women and Empire.**

From 1492 until World War II the globe was dominated by imperialism. This course considers the ways that women, in the metropolises of Europe and throughout colonial settings, found their lives shaped by empire. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5316C. Women and Gender in the Early Modern Atlantic World.**

This course introduces students to the themes, topics, and issues that animate the histories of African, European, and indigenous women in the Atlantic World from 1500 to 1800. Emphasis will be placed on comparisons between empires and on the methodological challenges of researching early modern women.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318A. Eighteenth Century England.**

A seminar based on selected topics in political, social, intellectual, and economic history of England from 1688 to 1815. May be repeated with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5318C. The Age of the Stuarts.**

A study of selected topics in English history between 1603 and 1714.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5318D. European Imperialism.**

Europe's penchant for building empires helped to greatly enhance their influence (economic, political, and cultural) from the fifteenth to the twentieth century. The course will review the major European empires and discuss the extent of their influence during this 500 year span.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318E. European Sexualities.**

This course examines the history of sexuality of Europe in the modern era. It considers how the history of sexuality intersects with and explicates many of the crucial events in modern European history including empire, total war, communism, fascism, decolonization, and immigration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5318F. European Fascisms and Historical Memory.**

This course compares historical and contemporary manifestations of fascism in Europe. It considers how the historical memory of fascism has impacted historical memory of the past, contemporary movements, legal structures, museums, and other historical monuments in Europe today.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5319. The Age of the Tudors.**

This readings-based course emphasizes differing interpretations of selected topics in English history from circa 1485 to 1603. Constitutional, political, governmental, social, religious, and cultural aspects of the era are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5323A. Society and Culture in Brazil.**

This seminar explores the social and cultural history of Brazil through its various ages, the "Age of Sugar", the "Age of Coffee", the "Age of Pedro II", the "Belle Epoque", and the worlds of the sugar and coffee barons. It explores the character of these ages marked by the grand plantation houses, devotion to European models, and the conflict with a slave society, covering the years from the colonial period to the turn of the twentieth century. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5323B. History of Race and Slavery in Brazil.**

This course assesses the literature on race relations and slavery in Brazil. It situates the topic within a comparative, Atlantic framework and provides a critical understanding of the chief issues and debates in the field. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter



**HIST 5324B. Race, Class, and Nation in Modern Latin America.**

A seminar that examines the relationship between race, class, and nation building in Latin America, beginning with independence in the nineteenth century and continuing to contemporary times. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324C. Slavery and Emancipation in the Americas.**

This course examines slavery in the Americas in its full social, political, and economic context. Students will enlarge their understanding of slavery by using an international, transatlantic framework for comparison. The course strengthens analytical skills through extensive discussion as well as significant writing and research. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324D. Writing the History of Latin America: The Colonial Era.**

This readings seminar provides a critical assessment of the main themes and debates of colonial Latin American historiography. The course discusses the different paradigms under which historians have approached the cultures and societies of the region under Spanish and Portuguese rule, emphasizing on the latest trends and developments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5324E. Modern Latin American Revolutions.**

The course is a seminar that examines and compares the causes, consequences and results of Latin America's twentieth century revolutions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325A. History of Mexico to 1848.**

A topic course studying the history of Mexico from pre-historic times to the Treaty of Guadalupe Hidalgo. The course encompasses the development of Indian societies from the Yucatan to the American Southwest preceding the Spanish conquest, the social, economic, and political development of Spanish colonial Mexico, the War in Independence, and the formation of the new nation through the war with the United States. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325C. Revolutionary Mexico.**

A graduate seminar that explores the interrelated economic, social, political, and cultural conditions and forces that shaped revolutionary Mexico. Ideological currents that impacted the period will be examined. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5325D. Mexico Since the Revolution.**

This class is a Graduate Seminar covering the History of Post-Revolutionary Mexico. This course will explore the history of Mexico since the Revolution, including the social, cultural, and economic legacies of the Revolution, as well as the process of State building, one party rule, globalization, and the transition to democracy. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5335. Twentieth-Century Russia.**

A seminar based on selected topics in recent Russian history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5336. East European History.**

A seminar based on selected topics in recent East European history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5341B. Caribbean Transnationalism and Diplomacy.**

This seminar focuses on the international relations of the twentieth-century Caribbean, with emphasis on interactions between Cuba, the Dominican Republic, Haiti, Jamaica, the United States, and Venezuela. Students will analyze the ways that international action and response in these countries have affected policy, government, and international social movements. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5343. The Progressive Era.**

This course is a seminar on the rise of industrial capitalism and corporate power and the public response to the related restructuring of the social and economic order between 1890 and 1920, with particular emphasis on the strengths and weaknesses of progressivism as a democratic movement for reform. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5344. History and Memory.**

This course examines the way that groups shape the the collective memory of past events, how memory shifts over time, and the way it can be influenced by present influences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5345D. Oral History: Theory & Practice.**

A seminar based upon developing a theoretical and practical understanding of the techniques of oral historical research and document preservation and presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345M. History of Utopian Communities.**

This seminar examines utopian experiments in American History. Starting with John Winthrop's 1630 "City upon a Hill," the course explores both religious and secular communal ventures through the eighteenth and nineteenth centuries. The course concludes with an examination of counter-cultural, twentieth-century communes, intentional communities, and cultic separatists.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345N. Transformation of the South.**

This course is a readings research seminar on African-American culture and life in the twentieth century South from 1890-1971. The course provides the students with a thorough historical examination through biographies and community studies of specific issues and events that ended legal segregation in the South. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345O. Immigration and US History.**

This course focuses on North American immigration history from colonial times to the present and looks at how both immigrants and native-born Americans struggled to reconcile conflicting notions of identity and national loyalty. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345P. History of Mexican American Music in the Southwest.**

This class will introduce students to the musical history of Islamic Spain, Spanish Colonial Mexico, and Mexico and investigate the influences of these traditions on the development of Mexican-American music in the American Southwest. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345Q. Gender and Citizenship.**

This course is designed to introduce students to the literature in United States history that addresses issues of gender and how they relate to US citizenship from the colonial period to the present. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5345R. History of Country Music.**

This seminar traces the various ethnic, social, cultural, political, economic, and demographic forces in American society that have helped shape country music. Students will also explore how this uniquely American cultural idiom mirrors the historical evolution of the United States.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5345S. Theories and Methods in Popular Music History/Culture Studies.**

This is a course in the theories and methods of cultural studies and popular music history for graduate students. It is intended to review the history of debates and methodologies in the field to prepare students to do original work that fits into the larger conversations in popular music studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5345T. Biography and American History.**

In this class students will delve into the practice of biography and the ways in which biographers convey American history and culture through a life story.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5345U. Dark Tourism: Interpreting Historic Sites of Oppression, Death, and Disaster.**

This course examines issues and effective methods of interpreting historic sites open to visitors associated with tragic historical events and practices, such as battlefields, concentration camps, massacre sites, and plantation houses, that are to the public. Dark tourism sites in the United States and around the world will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5346. African American History.**

This course is an intensive readings and research seminar in African American History. Through the uses of lectures, biographies, institutional histories and community studies, students will be introduced to the different interpretive themes and methodologies that have created the myriad of historical interpretations and reinterpretations of African American History. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5347. Texas History.**

A seminar based on selected topics in the history of Texas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5348. History of Texas Music.**

This course examines the evolution of music in Texas and the American Southwest from pre-Colombian times to the present, with an emphasis on how music reflects the ethnically diverse history and culture of the region. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5350. The Frontier in American History.**

A seminar based on selected topics in the history of the frontier in American development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5351B. Cold War America.**

This course examines the Cold War years 1945 to 1960, concentrating on the domestic scene. The class will discuss the major issues of domestic politics, society, and culture, through the use of both primary and secondary sources. They will also examine the historiography of the period. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351C. Race, Gender, and Ethnicity in American Labor History.**

This graduate seminar explores the impact of race, gender, and ethnicity upon American Labor History. Readings integrate race, gender, and ethnicity as categories of analysis into the study of class formation, experiences, and consciousness within the American labor force. The focus will be on unorganized as well as organized workers in the context of their social, cultural, political, and workplace environments. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351D. Politics & Society of Postwar America, 1945-Present.**

This course will explore the interaction of political, economic, and social forces in the years following the Second World War. Emphasis will be placed on analyzing the interdependent relationship between political structures, social movements, and economic circumstances. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351E. Foundations of the U.S. Conservation Movement.**

The course will provide an overview of the conservation movement from the writings of Henry David Thoreau to publication of Rachel Carson's *Silent Spring*. Emphasis will be on social and cultural influences, with particular attention to government programs, naturalist literature, activism, movement leaders, and landmarks of environmental debate.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5351F. US Women's History.**

This course offers graduate students an introduction in the topics, themes, and issues that animate the history of women in the US. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5351H. US Latino/a History.**

This course explores the histories, cultures, and politics that shape Latino/a experiences in the United States and examines the way Latino communities helped shape the making of the nation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5353. Greater Southwestern History.**

A seminar based on selected topics in the history of the Greater American Southwest. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5358. Sectionalism & Slavery in the United States.**

This course assesses the literature on the causes and consequences of the sectional conflict between the American North and the South before the Civil War, with particular focus on works examining the slavery issue and the way it exacerbated American sectionalism, leading to the fracturing of the American nation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5361. Historiography and Methods.**

A general introduction to key concepts, approaches, and challenges involved in reading, researching, and writing history at the professional level.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5362. Military History.**

This seminar is based on selected topics in military history. May be repeated with different emphases up to nine hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5363. Antebellum American Society & Culture.**

This seminar explores the cultural dynamics, social relations, and political and economic structures that shaped the lives of ordinary Americans in the three decades before the Civil War. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5367. US Era of Civil War and Reconstruction.**

A seminar that examines the history of the causes, course, and consequences of the American Civil War and the efforts to reconstruct the American Nation in its aftermath. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5369. Music and Social Movements.**

This course examines the historical role music has played in a variety of social movements related to race, gender, ethnicity, religion, politics, economics, education, labor, civil rights, and other issues in U.S. history. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5371. The Practice of Public History.**

A seminar addressing the definition, evolution, and philosophy of public history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5372. The Practice of Museum Studies and Material Culture.**

A seminar addressing the history, organization, and functions of history museums.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5373. The Practice of Historic Preservation.**

A seminar addressing architectural history and preservation theory and practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5374. Public History Internship.**

Application of skills in public history in an on-the-job setting. Internships will be selected by the student and instructor, and will be supervised by the instructor. May be repeated once for additional credit.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5375A. Documentary Film.**

The use of film & video in public programming; research & produce documents.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375B. Archival Management.**

A seminar based on the history, theory, and practice of archival management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375C. Cultural Resource Management.**

This seminar addresses the management of cultural resources such as historic buildings, historic sites, and other tangible remains of our heritage. It explores how cultural resources are preserved and managed under federal and state law, and the nature of the regulatory practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375D. Material Culture in America.**

This course examines the interactions between people and things in American society. The ways in which Americans have created, used, altered, and thought about material objects help us to understand history. Readings and research will focus on the values and attitudes embodied in the production, use, and preservation of objects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375E. Management & Administration in Historical Organizations.**

This course provides an introduction to the non-profit based management, leadership, and administration issues and practices for historical organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375F. Education Programs in Historical/Cultural Institutions.**

This course will study the role of education programs as primary to the missions of historical and cultural institutions and will explore how institutions create and evaluate formal and informal education programs and materials for a variety of audiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375I. Heritage in a Global Context.**

Heritage management is the interdisciplinary approach to the preservation, protection, and public use of the historical record. This course examines definitions and approaches within a global context. Theory and practice will be analyzed through case studies and real world examples. Current issues, sustainability and maritime issues/practices will be included. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5375J. American Architectural History.**

This course will analyze the historical development of American architecture, and examine architecture as evidence of America's cultural, social, economic, and technological evolution from 1607 to the present. Focus will be placed on the role of historic American architecture in the practice of public history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375K. Evaluating Historic Sites.**

Every year millions of tourists flock to historic sites desiring to commune with "real" history, to "feel" the past. This course will introduce students to methods that scholars use to examine critically the interpretation of history at these sites without discounting the emotional connection to place that many visitors experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5375L. Controversy and History.**

This seminar explores how controversy, power relations, and politics are embedded in the practice of public history. It is designed to help the future practitioner navigate the complex political landscape of public history. This course is informed by the professor's experience as a consultant and federal historian. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5375M. Writing for Public History.**

This will be a course intensively focused on research and writing specifically for public history audiences through a variety of venues: journal articles, magazine/newspaper articles, brochures, promotional literature, personal essays, historical markers, reviews, websites, cultural resource management "gray literature," and professional papers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375N. Digital History.**

Students will study the history of print and digital media to better understand the practice of digital history. They will be introduced to a variety of digital approaches to the study of history, and they will produce and contribute to a variety of digital projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375O. Records Management & Institutional Archives.**

This course will introduce students to the principles and theories in records management and institutional archives. It will provide practical experience creating a records retentions schedule, researching retention requirements and best practices, appraising records with enduring value, and establishing archival series to accommodate ongoing acquisition of institutional records.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5375P. The Family and Child in History and Heritage.**

This course examines the historical development of the family and childhood using academic family history methods and public approaches to family heritage. It examines differing experiences of ancestors and concepts of family and childhood over time by race, class, and gender, reflecting shifts in culture, economy, and power relations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5376. Local and Community History.**

A seminar applying historical methods to the study of U.S. communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5377. Public History Project.**

A team project focusing on one or more aspects of public history- museum exhibit, historic site interpretation, historic resources survey, etc. Repeatable with a different emphasis.

**3 Credit Hours. 1 Lecture Contact Hour. 6 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**HIST 5379A. Public History Final Master's Project.**

This course will be the initial development of an individualized, advanced student project in cooperation with a client or host institution, focused on any one or a combination of the public history areas of historic preservation, archives, oral history, museums, local and community history or cultural resource management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5379B. Public History Final Master's Project.**

This course, to be taken during the last year of the Public History program, is the continuation of an individualized, advanced student project focused on any one or a combination of the public history areas of historic preservation, archives, oral history, museums, local and community history or cultural resource management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5381. Chinese Communism.**

The Chinese Communist movement from 1919 to the present. Will focus on (1) urban and rural aspects of Chinese Communism; (2) the rise to power of the Chinese Communist Party on mainland China in 1949; and (3) the construction of the Party-State and Socialism in the People's Republic of China. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5382. China and the Modern World.**

This course examines Chinese relations with the modern world from 1800 to the present, focusing on the external aggression and internal transformation between 1839 and 1945; the split into two Chinas in 1949; the mainland China/Taiwan developments, interactions between the two Chinese governments and among the world community since then. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HIST 5385. Topics in the History of the Modern Middle East.**

A seminar based on selected topics from current histories of the Middle East during the 19th and 20th centuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HIST 5388. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who need to prepare for their comprehensive exams (written and oral).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HIST 5390. Problems in Historical Research.**

This course is open to graduate students on an individual basis by arrangement with the department. May be repeated with the approval of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5395D. Interpretations of World History.**

A survey of world history that focuses on Western civilization as the catalyst of change in world history since the tenth century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**HIST 5395E. Mahatma Gandhi in World History.**

In this course students explore how writers have narrated Gandhi's life and interpreted his historical role. Students will research aspects of Gandhi's life using primary sources. The focus of the course will be the study of material left out of histories on Gandhi and reasons for omitted material. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395H. European Colonialism.**

This seminar examines the variety of European imperial and colonial experiences around the world from ancient to modern times through selected primary sources and historical literature. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395I. Global Cold War.**

This seminar will survey literature characteristic of the "new" Cold War historiography, and introduce students to primary sources available at Alkek required to write valuable original work. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**HIST 5395J. Foreigners in Japan, 1850-2000.**

This course investigates a central question that arises in discussions of Japan: What have been the effects of foreign influences on Japanese society? Materials for study focus on memoirs written by foreigners – from Europe, the Americas, and East Asia – as they describe their lives in the country through various eras since 1850.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HIST 5398. General Research Seminar.**

A seminar designed to enhance research and writing skills in history. May be repeated for credit as topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in History 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5588. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who need to prepare for their comprehensive exams (written and oral) and retain half-time status.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5988. Comprehensive Examinations.**

This course is designed for non-thesis master's degree students who, having completed all other coursework, need to prepare for their comprehensive exams (written and oral) and retain full-time status.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HIST 7372. Practice of Museum Studies and Public History.**

This course addresses the history, organization, and functions of history museums. Students will consider issues of representation and contestation, authority and voice in collections and interpretation, and will address practical approaches to curation, exhibit development and assessment, and the visitor experience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HIST 7373. The Practice of Historic Preservation.**

This course focuses on major aspects of the field of historic preservation including the history of the preservation movement, the National Register of Historic Places, federal regulations, historic properties and districts, American architectural styles, urban preservation, landscape preservation and cultural landscapes, preservation design, preservation technology, heritage interpretation, and preservation law.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HON 1390C. Greek Civilization: The Trojan War and the Western Imagination.**

The course will introduce students to Greek civilization and its impact on the western world by examining how one theme central to the Greek literary imagination-the Trojan War-influenced the development of later western literature. The course studies major texts in the Greek literary canon. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 1390D. Ideal Societies I: The Greek Experience.**

Culture and Civilization in 5th century Athens. The Greek Experience: towards a new vision of human nature and of society. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 1390F. Economic Thinking: Personal Values, Social Choice & Rational.**

This class explores the sociological and philosophical effects operating in conjunction with economic decision-making. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 1390H. Understanding Communication & Technology.**

The course is designed to focus on skills, research and theories about the relationships between technology and communication behavior. It teaches face to face communication skills in the contemporary technological environment. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 1390I. Role of the Storyteller in Society: Promoter, Protector or Provocateur.**

The course focuses on the role of the storyteller from ancient times to the present. Students will cultivate an appreciation for the oral tradition in the shaping of history, cultural identity, social mores and personal values. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2110A. Soundscape Research and Environmental Listening.**

How might we understand environmental sound as a kind of music? In this interactive short course, students will explore the research and scholarship of the "World Soundscape Project," understood both as a historical movement and a contemporary practice. We will examine primary and secondary source literature from musicians, sound artists, and environmentalists—including R. Murray Schafer, Barry Truax, and Hildegard Westerkamp. And, through a series of workshops, we will describe basic principles of environmental listening, analyze the local soundscape, and assess the aural conditions and qualities of San Marcos and central Texas.

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2110B. Research Experience.**

This course will provide students direct engagement with research at Texas State and in the surrounding region. Students will interact with faculty and graduate students, recognize different levels of research engagement, and gain an understanding of the role that research plays in graduate school. Students will also explore how undergraduate research can enhance and expand future learning and career opportunities by interacting with professionals and/or Texas State alumni.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2301A. Writing to Change the World.**

This course examines communication through writing to promote positive change in the world. This course will enable students to communicate their own arguments appropriate to the subject, occasion and audience. Students will choose a global issue on which to focus their writing, and perform related community service. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Communication Core 010|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2301B. Writing Yourself into Academia: Creating Portraiture.**

By studying a person, a group of people, an institution, or a concept, students will create carefully researched written "portraits" that integrate personal narrative, interviews, and academic research. Students will communicate their own arguments and develop ideas about the effect of the message to foster understanding and to communicate persuasively. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Communication Core 010|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2302A. Elementary Number Theory.**

This course engages students in the systematic study of problems in elementary number theory using definitions and logical deductions from these definitions. Emphasis will be on developing critical thinking and applications to modern problems. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2302B. Graph Theory and Applications.**

This course engages students in the study of important topics in graph theory through its applications and through proofs designed to strengthen mathematical techniques. The course will emphasize developing critical thinking and applications to modern problems. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2303A. Teaching Physical Science to Children.**

Course content includes both physics concepts and research findings on physics teaching and learning. Students will develop a deep understanding of fundamental concepts in physical science and how these concepts relate to making sense of everyday experiences. This studio-styled physics course is ideal for pre-service K-8 teachers. (WI).

**3 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2303B. Astronomy in Art, History, and Literature.**

In this class, students will combine astronomy and the humanities. They will create computer simulations of past celestial events. These results will be combined with evidence gathered from primary sources to investigate how astronomy affected history or appeared in the historical art or literature. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2303C. Building a Greener Future: One Home at a Time.**

Students will use basic scientific principles to investigate resource usage in our daily lives from the production of electrical energy and construction of housing to daily consumption including HVAC systems and major utilities. Students will compare energy conservation programs across the globe and evaluate how public policy effects energy consumption. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2303D. Everyday Biology.**

This course provides the non-science major with a strong foundation of scientific methods and basic biological concepts. Special emphasis is placed on reviewing biological concepts relevant to everyday life (both current and future) including disease, evolution, genetics, biotechnology, diet, and environmental biology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2304A. The Meaning of Death.**

By examining the moral and existential questions raised by our own mortality, students in this course will practice critical thinking and examine the variety of human responses to and understanding of death by focusing on how ideas, values, beliefs, and other aspects of culture express and affect human experience. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2304B. Eating Animals in America: Historical and Philosophical Perspectives.**

This course examines the changing nature of, and views about, the production and consumption of animals in America from the 18th century to the present. The course will focus on the ethical and philosophical issues raised by eating animals. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2304C. Nonviolence and Sustainable Social Change.**

This course examines nonviolence as the systematic endeavor to break cycles of violence, poverty, and racism. The course will focus on investigating the ongoing force of such cycles and to formulate effective understandings for subverting and reversing such trends to offer productive contributions toward more sustainable human development. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2304D. Reinventing Utopia.**

This seminar introduces students to utopian studies, a field of humanities that views utopia as an expression of a universal human desire for better ways of living and being. Whether in the form of religious paradises, literary fantasies, philosophical treatises, or intentional communities, cultures around the globe have dreamed utopias—imaginary worlds of peace, plenty, and human flourishing—to define their values, orient their projects, and explore the human condition. What can we learn from utopia's poets, philosophers, and architects, past and present, to help us reinvent utopia at a time when the planet may need it the most? (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2305A. African American Popular Music: Society, Politics, and Culture.**

This course is a reading-, writing-, and listening-intensive interdisciplinary survey of African-American popular music in America and its relationship to American culture, society, politics and the other arts. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050|Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2305B. Women and Texas Music.**

This course examines the lives and creative contributions of Texas women composers, performers, historians, and patrons, and their roles in the promotion and advancement of the arts, especially music, in Texas. This course will address topic-related issues of class, race, and identity formation. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050|Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2305C. Italy and Arts of the Islamic World.**

This course focuses on the interpretation of art in its historical context, introducing students to visual analysis and art historical interpretation to understand related scholarship exploring the relationship of Italy to the Islamic world in the medieval and Renaissance periods. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050|Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2305D. Honors Creative Arts.**

Students in this course develop broad familiarity with creative arts disciplines through project-based learning. Each project is rooted in a "real world" challenge familiar to the disciplines of art, music, theatre, and dance. To propose a tractable solution, students consult with experts and evaluate significant cultural-historical artifacts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2306A. American History Through Memoirs.**

Through studying memoirs this course focuses on American history since the end of the Reconstruction period. The memoirs, depicting interactions among individuals, communities, states, the nation, and the world, provide an understanding of how these interactions have contributed to the development of the United States and its global role. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Exclude from 3-peat Processing|Honors|Multicultural Perspective|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2306B. Baseball and the American Experience.**

This study of baseball focuses on American history since the end of the Reconstruction period. As a testing ground for the persistence of racial prejudice and the expansion of civil rights, and with advances in technology and management structure, the study of baseball will expose the American experience. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2306C. America in the 1960s: A History of Movements and Ideas.**

This course in the history of American social and protest movements from the end of Reconstruction through Occupy focuses in particular on the movements of the 1960s - the Civil Rights Movement, the New Left, the Women's and Homosexual Liberation Movements, and the Counterculture - and their enduring legacies in contemporary society. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2306D. Witches, Whores, Murderers & Thieves: Capital Crime in Early America.**

This course is an in-depth investigation into the social and legal culture of Early America through the study of microhistories. In this course, we will concentrate on a series of capital crimes, ranging from murder to witchcraft. The period will be the 17th century through 1850. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2306E. Early American History Through Biography.**

This course will examine early American history, from colonial times through 1877, through the lens of biography. Students will not only read biographical works on past figures but also analyze autobiographical writings that shed light on their lives. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2306F. Rethinking American Exceptionalism.**

This course introduces students to the major political, economic, social, intellectual, and cultural developments in American history through Reconstruction with a special emphasis on the origins and evolution of the tradition of American exceptionalism. Students will evaluate America's national ideology through an analysis of primary source documents and scholarly debate.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2306G. American Countercultures.**

This course introduces students to major political, economic, social, and cultural developments in American history through the lens of "counterculture." Although this term is usually associated with the 1960s, countercultures have flourished in the US since the mid-nineteenth century. As 60s guru Timothy Leary observed, countercultures bloom wherever and whenever members of a society embrace lifestyles, artistic expressions, and ways of thinking and being that diverge radically from the mainstream. Students will examine how countercultures from the transcendentalists to the hippies and beyond reflect the hopes and anxieties of younger generations and sometimes succeed in bringing about revolutionary change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** American History Core 060|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter



**HON 2307A. Democracy in America.**

This course is a study of functions performed in the American system of government, understood through the framework of Democracy in America, Alexis de Tocqueville's seminal study of American social and political life, the nature and distinctive character of modern democratic societies, and the problems and perils these societies confront. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Govt/Pol Science Core 070|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2307B. Contemporary Issues in American Politics.**

In considering conflicts between liberty and equality with emphasis on how these principles are defined within the American system of constitutional, students will examine literature addressing race, gender, class, and sexuality in relation to events such as national elections, and to works in modern and contemporary political thought. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Govt/Pol Science Core 070|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2308A. Economic Anthropology.**

This course covers central issues in economic anthropology including the production, exchange, distribution, consumption, property, economic surplus, inheritance, and types of economic structure in various cultures. Materials will cover hunter-gatherer societies, simple agricultural societies, pre-capitalist complex state societies, and issues of development in non-industrial countries. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309A. Origins of Civilization.**

By studying literary, mythic and philosophical works selected with special attention to narratives about the origins of humanity and civilization, students will encounter a variety of explanations of human existence. The course will broaden students' perspectives and provide insight into the background of contemporary world cultures. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309B. Re-Humanizing Communication.**

This course examines technology's impact on human communication. Students will examine their dependency on technology in order to re-humanize communication. Students will learn to express ideas through the development of interpersonal, small group, and presentational communication skills, developing command of oral, aural, written, and visual literacy in appropriate contexts. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Communication CAO 091|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309C. Great Ideas: Humanities I.**

By studying classical foundational texts in Western culture from interdisciplinary perspectives, students will understand the origin of great ideas and relate them to today's world. Texts are chosen around a particular theme by a team of instructors to focus on the earliest recorded works up to the Renaissance. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309D. Magic Realism in the Works of Gabriel Garcia Marquez.**

A study of selected works of Nobel Prize author Gabriel Garcia Marquez, this course offers unique insights into Latin American culture, filtered through the literary and journalistic vision of Colombia's world renowned author. Additional readings and films emphasize the complex nature of the Latin American culture and literature. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309E. Preserving Humanity in the Face of Conflict: The War Story Genre.**

This course provides students the opportunity to consider the human impact of several global conflicts that have occurred over the past forty years by focusing on novels, short stories, essays, and a memoir written about post-World War II conflicts in Vietnam, the Balkans, Iraq, and Afghanistan. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309F. CS Lewis: Chronicles of a Master Communicator.**

This course uses the writing and life of C.S. to examine communication theory and principles. Lewis's work as a speaker, teacher, broadcaster and educator provides a comprehensive body of work that students can evaluate as they master and apply rhetorical and communication theories. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Communication CAO 091| Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309G. Nature and the Quest for Meaning.**

The class focuses on American nature writing to recognize how authors communicate about nature. Students will examine the ways in which human beings experience the natural world - as an object of study, as a reflection of themselves and as a lens to look for meaning in their lives. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309H. Great Ideas: Humanities II.**

By studying foundational texts in Western culture from interdisciplinary perspectives, students will understand the origin of great ideas and related them to an understanding of today's world. Texts are chosen around a particular theme by a team of instructors to focus on works from the Early Modern period to the present. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309I. Plotting the American Experience.**

An in-depth critical study of plot in major contemporary American novels and stories from the last 20 years, both as a driving force in the works and as a reflection of the American moment in which each was written. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309J. Memoirs from Lives off the Neurotypical Map.**

To understand the growing neurologically differently abled/disabled, -ordered, and mentally different/ill population and our perceptions of them and ourselves, we will analyze memoirs and aesthetic works by this true fringe group and consider what being fundamentally different means, and how labels affect people in and out of the neurotypical majority. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309K. The Death Plot: Fiction, Memoirs, Poems.**

Students will read, discuss, and write about poems, fiction, and essays to analyze the end of life. Analysis will encompass literary, sociological, and psychological perspectives on death. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309L. Communication and Consumer Culture.**

This cultural study of the turn of the twentieth century in America focuses on advertising and popular cultural messages. Students will analyze the new culture of consumerism as they develop knowledge about communication theory and strategies and practice their own communication skills. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Communication CAO 091| Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309M. From Jay-Z to Kendrick Lamar: Politics, Power, and Identity in Hip Hop Literature.**

Students will read, discuss, and write about the poetry of Jay-Z and Kendrick Lamar along with other texts to analyze the artists' political engagement, power to effect change, command of language, and struggle with identity formation. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309N. Don Quixote and the Birth of the Modern Novel.**

An in-depth study of 16-17th century Spanish, medieval, Renaissance, and Baroque ideas, values, and culture in the study of Cervantes' Don Quixote, the first truly modern novel. Students will examine the novel's literary antecedents and its reception through the twenty-first century. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309O. Talking Like TED.**

This course develops presentational speaking and storytelling skills through the lens of TED Talks. Students will view and discuss well-received TED Talks and practice the verbal and nonverbal behaviors related to effective communication. This course also focuses on interpersonal and small group communication skills related to presentational speaking.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Communication CAO 091| Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309P. Honors American Literature.**

This course examines representative authors and works from American literature. Readings will be assigned from various literary genres and will be situated critically within a historical, social, and cultural context. Students will engage with course material through research and creative inquiry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2309Q. Honors British Literature.**

Students will read and analyze representative authors and works from British Literature. The course examines works in historical, social, and cultural context as a record of human experience. Courses employ a variety of teaching methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Lang, Phil & Culture CAO 094|Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2380F. Introductatino of Complementary/ Alternative Medicine.**

The course introduces students to complementary/alternative medicine (CAM) and its integrate with the traditional health care system. Emphasis is placed on historical, cultural, social, research and consumer aspects of CAM. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2380H. Building a Greener Future One Home at a Time.**

This course will focus on the science and engineering principles involved in building and maintaining a house. Students will investigate how choices of materials and design influence the cost, sustainability, and energy efficiency of housing. Laboratory experiences will develop these concepts and enable students to make common household repairs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2380J. Applying Statistics to Your World.**

This course engages students in active learning through statistical software, research studies, and simulations. Students will explore the elements of statistical thinking by collecting, modeling, and drawing conclusions from data while taking into account the nature of variability. Emphasis will be on engaging with real data and understanding statistical conclusions. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2390F. History of Ideas II: New England Roots of American Culture.**

An examination, through reading of significant works as well as a trip to important sites in New England, of the roots of American culture as it was influenced by the Puritans and Transcendentalists. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2390K. An Introduction to Arab Culture.**

This course will focus on educating students about different aspects of the Arabic culture. The relation between the Arabic language and the Arabic culture will be introduced through the discussion of cultural expressions. The course will also touch on the relation between the culture and Islam for the students to be able to differentiate between what is cultural and what is religious. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2390L. An Introduction to to Islam.**

This course will focus on educating the students about basic history and cultural practices related to Islam, the prophet of Islam and Islam's holy book, The Koran. It will also focus on the relationship between the Arabic language, the Arabic culture and Islam so the students will be able to distinguish between what is cultural and what is religious. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2391B. Role of Images in Mediating Reality.**

This course teaches students about subconscious influences on their perceptions of reality and their behavior, and the fundamentals of visual literacy by introducing students to visual literacy. Seeing is an avenue to higher-order thinking processes that will help students meet the professional, cultural and personal challenges of media. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 2391P. Spirituality and Religion: A Contemporary Global Perspective.**

This course examines spirituality and religion as a universal component of human life, explores the world's major faith traditions, investigates personal and cultural biases to allow students to expand their global perspectives. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3010. STEM Cognition and Pedagogy.**

This course provides an introduction to STEM pedagogy. Students learn key education theories and methods from STEM education research and cognitive science. They also evaluate processes of teaching and learning and examine structures and practices that facilitate and/or inhibit student learning. This class is one option for first semester Learning Assistants.

**0 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3100. Research, Fellowships, and Grant Proposals.**

Creating a strong external funding application requires both persistence and imagination. This course will demystify the fellowship, scholarship, and grant application process and push students to develop key competencies that will help them translate their academic and/or creative interests into viable proposals. Students will receive structured and sustained feedback on their work as they engage collaboratively with the instructor and their peers. As a guiding framework, this course will use prestigious national and international programs, such as Fulbright, Churchill, and Rhodes.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3210. STEM Cognition and Pedagogy.**

This course provides an introduction to STEM pedagogy. Students will learn key education theories and methods from STEM education research and cognitive science. Students will evaluate the processes of teaching and learning and examine structures and practices that facilitate and/or inhibit student learning.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380A. Design Thinking and the Art of Product Development.**

Students will explore the use of design-thinking and human-centered design methods for developing new products and services. The course will focus on techniques and methods to articulate problems from a customer's point of view and will also explore contemporary methods organizations use to manage product portfolios and risk management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380B. Idea Lab: Redesigning the Campus Experience.**

In this problem-based seminar, students become active change agents by utilizing design-thinking and other pedagogies to address specific challenges impacting the campus experience. Design-thinking draws upon diverse disciplines and methodologies, takes a human-centered approach to problem solving, and asks students to "prototype to test." All majors and backgrounds are welcome.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380C. Entrepreneurial Design: Utilizing Design Thinking to Create Disruptive Companies.**

Students will focus on the interconnection between entrepreneurial thinking and innovation. They will develop innovation-driven venture skills and will gain open and critical thinking skills with a focus on community, understanding of calculated risk and the initiative to follow-through.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380D. Unpacking the Gaze: Intersectionality and Creative Publication.**

This course gives students the opportunity to develop advanced interdisciplinary skills through creative inquiry, critical analysis, and the creation of art that responds to historical and contemporary notions of the gaze. The debates and issues raised by this subject matter will serve as a platform for interdisciplinary discussions and thus appeal to students from a variety of disciplines. The course will meet the needs of: 1) Studio Art students who seek an introduction to researched-based approaches to art-making; and 2) Students outside of the Arts disciplines who seek exposure to creative problem solving, thinking through materials, and research-based creative production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380E. Exhibition Design & Curatorial Practices.**

This course examines the role that exhibitions play in communicating knowledge and explores the variety of display methods within the language of exhibits. As every exhibition program reflects the hosting institutions' mission, students will learn how to conceptualize exhibits for a variety of subjects: historical, scientific, contemporary, research, and temporary pop-ups. By approaching the subject of exhibit design in this manner, students will gain a sense of their own agency as arts administrators. Concurrent to focused weekly readings/group discussions/experiments, we will workshop final exhibit projects from concept to design throughout the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380F. Design Across Cultures.**

Students will work cross-culturally through collaborative projects with international students from a university program in Europe. Students will research European design values and discuss with students from other cultures, while also presenting American design values. It will conclude with at least one extensive communication design project that showcases their research completed.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380G. Dramaturgy and New Play Development.**

The best friend to a new play is the dramaturg. The process of dramaturgy involves deep exploration into a new play's environment, characters, constructs, and themes. By working with a brand new text, students in the course will practice dramaturgical research skills that will aid in the development and production of said plays. Students in this course will experience first hand the journey of a new play: from inception to fully mounted production. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3380H. Regional Field Study: International Sustainable Transportation Engagement Program.**

This course offers a project-based approach to the study of sustainable transportation. Students work to collect primary data, present their findings, and engage with the local culture to develop a structured analysis of space and uses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3382B. Narratives In Psychology, Health, And Illness.**

This course explores the fields of narrative psychology and narrative medicine. Narrative psychology examines how stories and storytelling give significance to people's experiences. The course focuses on narrative representations of health, illness, and healing written by patients, physicians, and others to understand the connection between the individual and their social context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3382C. Emotional Intelligence: Applications for Life and Well-Being.**

In this course students examine the theory, research, and practice related to emotional intelligence. Emotional intelligence has far-reaching implications on health, mental health, education, the workplace, relationships, and more. Students learn the components, theory, and teaching of emotional intelligence and how it impacts a variety of behaviors and outcomes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3390H. Nature of Society: The Problem of Evil.**

The course will consist of a study of arguments and counterarguments about whether it is reasonable to believe in an all-knowing, all-powerful, and all-good God, despite the appearance of gratuitous evil. All major attempts to solve or dissolve the problem will be considered. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3390J. Don Quixote and the Birth of the Modern Novel.**

An in-depth study of Cervantes' Don Quijote, its literary antecedents, and its reception through the twentieth century. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3390K. Modern Democracy & Its Enemies.**

This course will focus on the key characteristics of 21st century democracy and the internal and external threats that challenge its health and continued existence. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3390P. Hollywood Amnesia.**

The course is designed to focus on films involving the topic of memory loss. Students will analyze the psychological, social and political considerations underlying this trend in time. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter



**HON 3390T. Frederico Garcia Lorca: Politics and Passion.**

Life and works of 20th century Spanish playwright and poet as a focal point for study of Spanish history, Andalusian folklore, gender and society, and literary styles. Themes are Spanish Civil War, gypsies and Flamenco music, surrealism and oral poetic traditions. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3390X. Investigating European Film: From Cultural Politics to Strategies of Desire.**

This course examines the vision of the United States that European filmmakers developed. Course topics will include the American myth, the figure of the star, the status of the foreigner and the identity politics supported by film production. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3390Y. Theory of Language: Language, Mind and the making of Reality.**

The course is designed for students to gain an understanding of psycholinguistics, providing insights into human cognition and how the mind creates meaning through study of syntax, semantics, pragmatics and metaphors. The course seeks to find universal principles of cognition that make human language and communication possible. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3391B. The Nature of Man: Shaping of the Modern Mind.**

This course explores the ideas and institutions that have created our modern conception of the world. The course examines the importance of industrial change, our interest in science and technology, the insights of the social sciences, and new philosophies about human kind and the human condition. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3391W. Service Learning: A Study Abroad Course.**

This study abroad course will center on students' experiences volunteering with non-profit and/or government institutions abroad. Discussions and written assignments will provide opportunities to analyze the volunteer experiences. Field trips will provide cultural components to add to the discussion and written assignments. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392M. The New and Literary Journalism.**

The new literary journalism examines the genres of the new and literary journalism in light of literature; certain eras in reportage, i.e., war dispatches, philosophy, and the social sciences, among other disciplines. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392N. Modern Organizations' Perspectives.**

The course provides a conceptual and practical perspective on Modern Organizations. It is designed to stimulate the student's curiosity about management practices of companies pursuing a competitive advantage through modern philosophies, and to identify potential areas to apply their chosen field of study. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392P. The Nature of the Human Experience: Technology & Gender in Film.**

Gender and Technology in Film will include a survey and analysis of films and theoretical and literary texts, with a focus on how gender, technology, and body images are depicted in film. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392R. Teaching Children to Write Poetry.**

A study of books by Kenneth Koch describing his work and lessons teaching poetry to children for the past 30 years. Students will examine his ideas about the importance of teaching poetry to children, using classical poetry as well as lessons that draw forth a creative response from children. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392T. The Nature of the Human Experience: Integrated Marketing Communications.**

Integrated marketing communications is an interdisciplinary course designed to acquaint students with the principles and practice of integrated marketing communications. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392V. Nature of Man: Elementary Number Theory.**

This course is the systematic study of problems using definitions and logical deductions from these definitions. Elementary number theory provides an ideal medium for such a study since all basic types of mathematical proofs occur in a setting requiring no prior background. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392X. The Nature of the Human Experience: The Contemporary African Novel in English.**

Novels by contemporary African writers from West Africa, East Africa, and Southern Africa will be read and discussed. The class will also study the effects of colonialism on traditional African cultures. Students will consider problems of language in the African novel. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3392Y. The Nature of the Human Experience I: Immortality.**

Is it reasonable to believe in life after death? The course will consist in attempts to answer this question with rational arguments. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3393F. The Nature of Man: Communication & Culture.**

This course is a cultural study of the turn of the twentieth century, with a focus on a critique of advertising and popular culture messages that communicated the new culture of modernism to an America in transition. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3393J. Sex, Drugs & Cabaret.**

This seminar considers European life in the years around 1900. Students will examine "high" modernism's themes, including: Urban experience, nationalism, anti-semitism, and explorations of sexuality in social science, law and the arts. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3393N. Violence in American Culture.**

The study of the life, times and thought of geniuses, focusing on the origin and evolution of their ideas and works and its effect on culture and civilization. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3393S. Entrepreneurs, Leaders, Teams: Best Practices.**

Writing Intensive seminar examining the "life stories" of selected entrepreneurs, identifies leadership qualities that may have contributed to success, and explores principles necessary for groups to become teams and for teams to become high performing. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3393T. The Voices of Eros in Poetry.**

This writing-intensive seminar examines erotic reality through the most private and intense verbal art - the poem. It explores philosophy, visual arts and religion in poetry. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3393V. Science & Politics of the Human Diet.**

This writing-intensive seminar on nutrition provides an exciting and personally relevant venue for learning science. Learning is based on scientific literature, dietary assessment, field trips and experimentation in a food science lab. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3393Y. Ethics of Care - East and West.**

This course compares contemporary western feminist ethics and ancient eastern thoughts regarding care. Each stresses personal relations, and high moral value placed on care. The course is interdisciplinary and studies gender and multicultural issues through a focus on care giving. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394C. Japanese Urban Experience.**

This course introduces students to urban Japanese life and culture through history, anthropology, literature, and film. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394G. Jazz: Cultural Diversity, Psychological & Political Zeitgests.**

This course is intended to help students appreciate cultural diversity and common unifying experiences leading to jazz, a uniquely American musical form. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394I. East Asian Tourism Today: Invention, Culture & Heritage.**

This course uses several disciplines to introduce students to the dynamics surrounding tourism in East Asia at the opening of the 21st century. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394J. Disturbing the Peace: The Politics of Language & Power in Hip-Hop Culture.**

This course introduces students to the language, film, literature, fashion, identity, and politics of hip-hop culture. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394N. Introduction to the Humanities I.**

This team-taught, interdisciplinary course examines the dilemmas that arise when individual desires conflict with the needs of society. Students analyze exemplary, original texts from the humanities tradition from the Classical period through the early modern era using the perspectives of literature, political theory, history, and philosophy. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394P. Individuals & Society: Intro to Humanities II.**

This interdisciplinary course examines the dilemmas that arise when individual desires conflict with the needs of society. Students analyze exemplary, original texts from the humanities tradition from the Enlightenment through the present using the perspectives of literature, political theory, history, and philosophy. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394Q. Modern Drama: Theatre of Revolt.**

This seminar and process-oriented course examines the era of modern drama (late 19th-20th century) through text and performance. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394R. Modern Art & Life: A Curatorial Seminar.**

This interdisciplinary course examines the intersection of art and life in the careers of artists who contributed to the birth of modern art. Students will learn about modern art's history and museum operations as they help to curate a major exhibition based on works in a local collection. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394T. Social Class Collison: the Post WWII British Novel of Manners.**

Using six novels, this course explores the social landscape of Britain when once-rigid class distinctions dissolved during WWII. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394V. Universal Human Rights: A Global Perspective.**

This course will examine universal human rights as an organizing framework for understanding the exceedingly complex global community in which we live today. It will examine significant social, political, philosophical, historical, legal, economic, geographic, and cultural factors that impact universal human rights. It will provide an overview of the challenges in implementing universal human rights, explore effective efforts to redress inequity, and examine opposing viewpoints. Finally, it will encourage students to engage in a critical intellectual inquiry and personal self-reflection. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394X. Magic Realism in the Works of Gabriel Garcia Marquez.**

A study of selected works of Nobel Prize author Gabriel Garcia Marquez, focusing on literature, history, politics and popular culture of Latin America. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394Y. The Quest for the Sacred in a Secular Age: Late-Modern Novels.**

The Protestant Reformation weakened the notion of a homogeneous, central religion, as did the theories of Charles Darwin and Sigmund Freud. Yet the sense that God was no longer a collective concept but a private belief didn't seem mainstream until the twentieth century. We will study five novels that explore this shift. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3394Z. The Black Image in Postwar America.**

This course explores the complex ways in which blackness has been figured and represented in postwar American as well as some of the strategies that have been used to respond, intervene, and subvert these frequently monolithic representations. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395B. Integral Ecology.**

This course explores multiple issues associated with the development of integral ecology, an emerging metadiscipline rooted in a perception of reality that goes beyond traditional scientific rationalism to an intuitive awareness of the oneness of life, the interdependence of its multiple manifestations, and its cycles of change. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395C. Fibers to Fabric: the Interlacing of History, Science, and Technology.**

This course focuses on the role of fiber products in the development of civilization and technology. Through interdisciplinary investigations, the course seeks to provide an in-depth understanding of fiber science and place current technological, social and environmental issues surrounding textiles in historical perspective. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395F. Museum Representations.**

This course explores how cultural and aesthetic values, history, and the scientific record are constructed and interpreted by the process of representation in museum exhibits. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395G. 19th Century German Lieder.**

This course explores the poetry and the music of Lieder to propose text-music relationships. This course will explore the genre—its history, primary composers, and its continuing tradition into the 20th century. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395H. Creating and Teaching Mathematical Lessons.**

This course provides students the opportunity to create and teach mathematical lessons for children that integrate algebra and geometry – building their own mathematical understanding using inquiry based methods. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395I. Ever Since Darwin: Celebrating Darwin's 200th Birthday.**

This course explores Darwin's quest in arriving at the theory of natural selection, his reasoning and evidence, as well as flaws and fallout. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395J. The Meaning of Death.**

How does the fact that we will die affect the possibility of our living a meaningful life? In this course we will examine answers to this question provided by philosophers, psychologists, literary writers, and film-makers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395L. Summer Study in France.**

Summer Study in France offers an intensive 35 hours a week, integrated program of oral and written French, phonetics and civilization, designed for intermediate students and supplemented with cultural activities. In addition, a week in Paris introduces students to the French architectural and artistic legacy. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395M. Humanity and the Natural Environment: A Study of Interrelationships.**

An interdisciplinary introduction to the interdependence between humans and their natural environment, emphasizing linkages between human activities and their impacts on environmental resources and sustainability, including the ecosystem goods and services provided by a healthy environment. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395P. Preserving Humanity in the Face of Conflict: the War Story Genre.**

This course provides students the opportunity to consider the human impact of several global conflicts that have occurred over the past forty years by focusing on novels, short stories, essays, and a memoir written about post-World War II conflicts in Vietnam, the Balkans, Iraq, and Afghanistan. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395Q. Vishnu, Bollywood, and Masala: South Asian Literature in Context.**

This course explores the culture of South Asia via its highly provocative literature, including religious texts such as The Bhagavad Gita, as well as contemporary texts by writers such as Salman Rushdie and Manil Suri. We will contextualize our literary discussions by examining the region's history, religious history, religions, and culture. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395R. Hip-Hop Culture and Positive Youth Development.**

Hip-Hop culture is examined within the context of human development over the life course. Cultural dynamics are examined alongside the social and political history of the United States. Through the lens of Hip-Hop, students will use skills in reflection, discussion and creative expression to develop strategies for personal growth and well-being. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395S. Geographies of the Holocaust and Genocide.**

This course examines the Holocaust as a complex historical event and frames the Holocaust in the context of, and in comparison to, other genocides. The course is explicitly geographical in methods and subject matter, focusing on how the Holocaust and genocide are planned, implemented, and experienced differently in different places.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395V. Introduction to LGBT Studies: An Interdisciplinary Approach.**

This course is an introduction to LGBT Studies, combining three academic disciplines: social, political, and historical; drama and fine arts; and English and Queer Theory. These disciplines will be integrated throughout the semester to assist student in developing a perspective of local, national, and global LGBT themes and issues. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3395X. Writing Yourself into Academia: Creating Portraiture.**

Portraiture is a cross-genre research methodology in which writers study a person, a group of people, an institution, or a concept. Students will create carefully researched portraits that integrate personal narrative, interviews, and academic research. Portraiture values students' lived experiences and has roots in anthropology, sociology, journalism, and creative nonfiction. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter



**HON 3395Y. Juke, Twang, and Shout: Popular Music and Race in the U.S. South.**

Amongst the genres of American popular music, styles heavily associated with the U.S. South tend to predominate, and the history of each seems to be entangled with that region's contentious racial history. This course will engage the history of musical production and performance in the South while also examining the hagiography of the South, its music, and its people. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396B. Playwriting: A Structured Approach to Writing for the Stage.**

This course develops the basic professional techniques and skills used in writing for the theatrical stage. Students analyze scripts and perform practical exercises in story and character development, study dramatic play and structure and develop a full-length dramatic play. Weekly readings and critiques assist writers in refining their scripts. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396C. Screenwriting: A Structured Approach to Writing for the Screen.**

This course develops the basic professional techniques and skills used in writing for the screen. Students analyze contemporary scripts and perform practical exercises in story and character development, study screenplay structure and format, and develop a full-length dramatic screenplay. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396D. Mythology, Science and Creation.**

Using religious studies scholarship on myth, the course surveys creation mythologies from around the world. Native American, African, Near Eastern (including Biblical), Greco-Roman, Old European, and Asian Myths will be included. Cosmological myths will then be compared to scientific cosmology and the current model(s) of the Universe's origin. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396E. Free Speech, Free Press and the Supreme Court of the United States.**

This course focuses on U.S. Supreme Court decisions related to the First Amendment and the five rights of religion, speech, press, assembly and petition. By examining how the high court has interpreted the First Amendment, students will learn about government's sometimes wavering commitment to our nation's most cherished rights. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396F. The Art of Storytelling: From Origins to Improv.**

This seminar examines the art and culture of storytelling from ancient to contemporary times. Students read and analyze stories from oral and written traditions and develop skills in creating and applying storytelling in social, business, political and entertainment environments. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396J. Transforming Creative Art: Literature in Performance.**

This seminar/workshop course examines the process of transforming literature into performance. Through close reading and analysis, students develop a critical understanding of the literary, sociological, and cultural attributes of a written work, and then develop approaches to transforming and presenting the work in performance-readings, dramatic productions, movies, improvisations. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396K. Hispanic Americans: Finding Their Identities and Their Voices.**

This course is an examination of critical moments in American social history that defined the Hispanic American social, political, educational, literary, and cultural experience, and how these experiences continue to impact Hispanic American identities and voices. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396L. Early American History through Biography.**

This seminar will acquaint students with major issues and events in early American history through the study of biography and autobiography. Students will study the lives of the individual, both prominent and lesser-known, from the American past, and these lives will be examined in the context of the larger historical narrative. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396M. Transforming Creative Art: Literature in Performance, Presenting Later Shakespeare.**

This seminar/workshop series examines the transformation of literature into performance using three examples from Shakespeare's later plays. Through close reading and analysis, students develop a critical understanding of literary, sociological, and cultural attributes of written works, and then develop approaches to transforming and presenting the works into dramatic performances. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396N. American History Through Memoir: From the End of Reconstruction to the Present Day.**

This seminar offers participants engagement with recent American history through the study of memoirs from a broad range of viewpoints. Seminar participants will be responsible for providing contexts for the readings from within the secondary literature, while the featured memoirs will relate recent American history "from the margins": including voices of Native peoples, African-Americans, political and cultural dissidents, and recent immigrants. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396Q. Public Policy for Energy, the Environment, and Global Sustainability.**

This course provides an interdisciplinary introduction to U.S. policy for energy, the environment, and sustainability. Emphasis will be placed on understanding the laws, regulations, and treaties that oversee air and water pollution, solid waste, hazardous waste, energy use, natural resources, climate change, and global governance for energy, environment, and sustainability. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396R. Sustainable Design and the Built Environment.**

This course examines contemporary issues of where we live and the interdependence of our home on the environment. Sustainable principles shall be emphasized with reference to social, economic, and ecological issues of the built environment. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396T. How We Decide: Making Decisions from the Inside Out.**

This interdisciplinary seminar enlightens students on the decision-making process using contemporary research from neuroscience, psychology, management, healthcare, etc. From this foundation students will examine case studies at the individual, group, and societal levels, and they will evaluate a cross section of decision aids such as heuristics, ethics, and computers. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396U. From White Slavery to Sex Trafficking.**

This course seeks to historicize the global migration of sex workers and the modern-day anti-sex trafficking movement by tracing the origins of the anti-white slavery movement in the late nineteenth century to the debates about sex work and sex trafficking of the twenty-first century. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396V. Witches, Whores, Murderers & Thieves: Capital Crime in Early America.**

This course is an in-depth investigation into the social and legal culture of Early America through the study of microhistories. In this course, we will concentrate on a series of capital crimes, ranging from murder to witchcraft. The period will be the 17th century through the Age of Jackson. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396W. The Dragon and the Spaceship: Fantasy, Utopia, and the Fiction of Estrangement.**

This is a course on world literature that looks specifically at otherworldly literature, including works frequently categorized as fantasy, utopia or dystopia, and science fiction. We will look at mostly modern texts written after 1800, with an emphasis on twentieth-century writers. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396X. Storytelling in Video Games.**

This course will examine how stories are crafted to fit the new interactive media of video games, how these new stories resemble traditional stories from the literary canon, and how these unorthodox plots, characters, and games are used to create a new form of literature. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396Y. Urban Horticulture.**

This course introduces the role urban landscape and the regional environment play in the quality of life. Students will consider commercial products, services of Horticulture, and people-plant interactions related to art, science, and practice. Students will learn the importance that land use decisions have on the sustainability of the environment. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3396Z. Eating Meat in America: Historical and Philosophical Perspectives.**

This course has two aims: first, to introduce students to the changing nature of, and views about, the production and consumption of animals in America from the 18th century to the present; second, to introduce students to the philosophical issues that eating animals raises. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397A. Revolution, Malaise, Reaction, and Sleaze: America in the 1970s..**

This course revisits the reputation of a decade. Many recent commentators have claimed the Seventies as a pivotal historical moment. We will engage questions regarding why this is so, and how an understanding of the 1970s helps us to orient ourselves in the contemporary political, economic, and cultural milieu. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397B. Plotting the American Experience.**

This course is an in-depth critical study of plot in major contemporary American novels and stories (1985-present), both as a driving force in the work(s) and as a reflection of the American moment in which each was written. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397C. Geography of Africa.**

This course is a systematic approach to the multifaceted aspects of the physical and human geography of the African continent. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397D. Urban Immersion: Seeing Cities through Cinema.**

This course explores themes in urban studies using full-length films and selected readings. Students will study the geo-political, economic, and socio-cultural dimensions of cities. Using cinema as a pedagogical tool immerses students in the urban experience more than traditional instructional methods, resulting in a richer understanding of the subject. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397E. Literary Barcelona.**

With Franco's 1939 victory, the Catalan language was banned from public use. This course will explore the undeservedly disadvantaged work of modern Catalan writers, and investigate texts, such as George Orwell's *Homage to Catalonia*, which stress Catalan social realities and affirm Barcelona as a place of literary imagination and vitality. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397F. America vs. the World: The History of a Love-Hate Relationship.**

This course explores the complex relationship between America and "the rest of the world" through an examination of the twin discourses of "American Exceptionalism" and "Anti-Americanism" from the time of European contact with the New World up through the post 9/11 era. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397G. Memoirs from Life Off the Neurotypical Map.**

To understand the growing neurologically disabled, disordered, and mentally ill population and our perceptions of them and ourselves, we will analyze memoirs and aesthetic works by this true fringe group and consider what being fundamentally different means, and how labels affect people in and out of the neurotypical majority. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397H. International Culture Course: the cultural characteristics and diversity of people outside the US.**

This study abroad course will cultivate student knowledge of the similarities and differences among international cultures, values, traditions, beliefs, and customs. Discussions and written assignments will provide opportunities to understand the cultural achievements and human conditions of a specific target country. Field trips will provide experience of cultural components. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397I. A Cultural History of Mexico in the 20th Century.**

This seminar will investigate the landscape of state and culture in the Republic of Mexico in the 20th Century and explore the creators, as well as the political supporters and detractors, of popular culture in terms of the fine arts, plastic arts, dance and theatre arts, poetry, music, literature, and photography. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397J. Extraordinary Leadership: Ownership and Influence.**

This course is designed to elevate the performance of leaders. Students are challenged to develop their potential in seminar-style sessions covering leadership definitions, theory, frameworks, and the global application of skills. Students explore their behaviors, motivations, values, influences, and character in an effort to increase self-awareness and to think critically. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397K. The Search for Right and Wrong in Politics.**

Using classic texts and works from literature and film, and current event videos, this course provides students with a foundation for understanding the intersection of politics and ethics and for achieving an understanding of how politics works. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397L. Economic Anthropology.**

This course reviews central issues in economic anthropology, using both case studies and theoretical writings. Students will analyze production, exchange, distribution, consumption, property, economic surplus, inheritance, and types of economic structure. Materials will cover hunter-gatherer societies, simple agricultural societies, pre-capitalist complex state societies, and issues of development in non-industrialized countries. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397M. The Death Plot: Fiction, Memoirs, Poems.**

A story or poem is finite. Life is too. When we arrive at its end, we hope to understand its meaning, or, as Peter Brooks said, "to connect ends and beginnings and make of the middle a highly charged field of force." Stories and poems about death provide this opportunity. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397N. Advanced Writing for Video Games.**

This course will teach students to write for video games based on techniques learned from observation and study. The course focuses on creativity and flexibility, two traits essential to game writing, and students will develop a marketable design document for an original video game working in design teams. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397O. Walking: An Active and Interdisciplinary Investigation.**

What has the act of walking meant historically and what does it mean today? What has been written about the experience of walking? What insights can walking with reflection bring? Students will explore these questions through readings in literature, history, and philosophy, and through art and the act of walking. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397P. Anti-Intellectualism in American Culture and Politics.**

Hostility to science, experts, and "book learning" is a common impulse that shapes contemporary American culture and politics. In this course, we will explore how anti-intellectualism promotes notions about media bias, encourages belief in implausible conspiracies, and spurs hyperpolarized politics, among other topics. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397Q. Women and Texas Music.**

This honors course examines the lives and contributions of Texas women composers, performers, historians, and patrons and their roles in the promotion and advancement of the state's music. Conducted in both lecture and class discussion formats, this course will address topic-related issues of class, race, and identity formation. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397R. Demonology, Possession, and Exorcism.**

People have believed in demons throughout Western civilization and continue to, despite advances in science and medicine. This course explores the social significance of demonology. What are the historical, psychological, political, and economic consequences of believing in demons? To explore such questions, students will examine demonology across cultures and employ a variety of disciplinary approaches. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397S. Human Language: its evolution, mental representation, and learning.**

Readings and discussions will concern human language's evolution, its representation in the mind/brain, and its learning by native and non-native speakers. Topics will include: evidence for language in other species including homo neanderthalensis; whether human language is innately specified; and similarities and differences between first and second language acquisition. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397T. Psychology in Film.**

In this course, we will identify and discuss psychological concepts in popular films from a variety of genres. We will address issues of conformity, consciousness, motivation, addiction and psychological disorders. The approach to the material will be interdisciplinary in nature with a special focus on modern behavioral neuroscience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397U. Quests for the Holy Grail.**

The course surveys the Celtic and Christian sources of grail legends, the major medieval grail quests, and post-medieval appropriation of the grail quest. Primary sources shall be examined through the methods of literary criticism, anthropology, and religious studies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397V. Phonetics.**

This course is an introductory overview of human speech sounds. It describes speech anatomy and pays particular attention to the description of the acoustic and articulatory properties of speech as it occurs in real time. Students will study articulatory, acoustic, and auditory phonetics. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397W. Alienation and Authenticity: In Search of the Modern Self.**

This course explores the problem of the self through major philosophical, literary, and social scientific works. Students will gain familiarity both with thinkers and ideas that shape discourse in the humanities and social sciences and theoretical perspectives for analyzing issues of selfhood in their own lives and fields of study. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397X. Nueva York: Hispanic and Latino Literature and Art in New York.**

This course offers an inter-American multidisciplinary approach to Hispanic and Latino writers and artists in New York City from the late nineteenth century to the present. Topics include exile, migration, identity, bilingualism, and civil rights through a variety of literary genres, artistic forms, cultural organizations, and academic disciplines. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3397Y. Deception, Risk, and Science Ethics of Research with Human Subjects.**

This course introduces the key ethical concerns related to human subject research. Students will analyze research projects in which scholars place individuals at risk in the interest of reaping some benefit to those individuals and/or society. A case-study approach will actively engage students in ethical decision-making. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter



**HON 3397Z. Makerspaces: Intersections of Art and Everything.**

This course will examine multidisciplinary concepts applied within makerspaces and complete hands-on design projects using beginner-level do-it-yourself techniques, including "upcycling" recyclable materials, 2D subtractive manufacturing (i.e. CNC machines that trim acrylic, cardboard, vinyl), 3D additive manufacturing (i.e. 3D modeling, printing), textiles (i.e. embroidery, sewing), and electrical circuits (i.e. micro-controllers, sensors). (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398A. Italy and Arts of the Islamic World.**

This course will challenge the traditional account of the development of Italian Renaissance art by exploring connections to Islamic culture of the surrounding Mediterranean world. Students will be introduced to visual analysis and interdisciplinary research techniques by which art and architecture can be used as documents in interpreting history. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398B. Modern Tibet: Politics, Identity and Representation.**

This course examines the political, religious, economic, environmental and cultural situation of modern Tibet, by reading works by Tibetan, Chinese and Western scholars, and by analyzing propaganda and stereotypes. Students will be exposed to modern Tibetan literature, art, pop music and film, as well first-hand accounts by class guests. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398C. Theatre and War.**

In "What It Is Like To Go To War", Karl Marlantes calls for ritual to aid young soldiers returning home. In this course students will analyze how classical and modern theatre can provide such a ritual, and be used as a tool to understand society's role in war. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398D. The Politics of Language in Schools and Society.**

Using a critical linguistic perspective, this course examines the sociopolitical aspects of language in local, national, and global contexts. Students learn about language ideologies and gain a profound understanding for how languages and language practices are intricately tied to the racial and economic power relations embedded in schools and society. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398E. CIVIL LIBERTIES AM.**

This course explores major civil liberties themes in depth, both historical and contemporary, such as religious free exercise, free speech and press, criminal procedure, capital punishment, right to privacy, equal protection (race and gender), due process, political participation, and disabilities rights. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398F. Anthropology of Peace and Violence.**

The class explores anthropological perspectives on peace and violence. It focuses on understanding violent practices within both traditional and current day societies including everyday violence and warfare. It explores the contributions of social structure, gender, religion, race, and ethnicity to violence. It examines efforts to build peace and reconciliation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398G. Psychology and Law: Protecting the Vulnerable.**

The course examines clinical, legal and psychosocial conditions of adults who, due to mental illness, developmental impairments, brain injuries or aging, are declared "incapacitated" and have court-appointed guardians. Students will serve as probate court representatives, (i.e., Court Visitors) who inspect living conditions/services for individuals under court-ordered guardianships (service learning component).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398H. Chinese Politics and Society through Literature and Film.**

This course offers an overview of the main political and social developments in contemporary China through the cultural production of Chinese writers and filmmakers who, following the tradition of the Chinese literati of imperial times, became main characters in the modern Chinese political scene. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398I. The Aesthetics of Failure.**

This course examines the role of failure as a creative and constructive part of life. We will consider failure across cultures and time periods, from various disciplinary perspectives, and through various media to define failure as more than the mere absence of success.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398J. The Body and Literature.**

This seminar explores the intersection of the human body and literature in 20th- and 21st-century American fiction. Works will be examined according to form, plot, structure, content, character, language, medium, scale and genre in their representation of the human body. We will also consider the ways in which formal innovations reflect the very body of the text. Through discussion and close reading, students will analyze the cultural significance of the human body in literature, and they will perfect their skills of careful reading, sound researching, and convincing arguing. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398K. Art as a Way of Knowing.**

Both art and science attempt to shed light on aspects of the human experience; yet modern society often presents these forms as dissimilar, merely opposites. In this course we will explore arts-based methodological research tools, and use artistic means in the process and presentation of social inquiry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398L. Soccer: Local Stories, Global History.**

A ball, a field, at least five people: elements which have evolved into a sports phenomenon, providing fodder for claims about national identity, and establishing the most watched activity ever. Soccer is too important to leave to the fans. This course investigates the institutions, aesthetics, and ideologies shaping the game.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398M. The Future of Work: Stratification, Low Growth, and Universal Basic Income in the 21st Century.**

Economic changes such as continued workplace automation and markedly slower growth imply big changes in social stratification in coming years. This course explores work and stratification in light of the "jobless economy" thesis, recent proposals for a universal basic income, and related likely cultural consequences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398N. The Anthropology of Religion and Fundamentalism.**

This course provides students with current and historical approaches to the anthropology of religion with a particular emphasis on fundamentalism. It focuses on the development of religious fundamentalism in different cultural contexts, geopolitical situations, and religious traditions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398O. Introduction to Statistical Genetics and Bioinformatics.**

This is an interdisciplinary course with a focus on the analysis of genetics and bioinformatics data. This course will cover basic genetics, statistics, programming, and cutting-edge research topics on statistical genetics and bioinformatics. Students will have hands-on experience of analyzing different types of genetic and bioinformatic data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398P. Wild Nights! Wild Nights!.**

A multidisciplinary study of the cultural, historical, and ecological significance of the night as revealed in poetry, fiction, and drama. The semester will begin with a historical study of the night pre-electricity, and will end with a consideration of the endangered nights of our post-electrical present and future.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398Q. Life Online: Epistemology, Ethics, and Culture on the Internet.**

Increasingly, our lives are lived online. We communicate, learn, play and love on the internet. In this course, we investigate the epistemological, ethical, and cultural implications of this shift. Class discussion will focus on current internet topics ranging from fake news to the aesthetics and ethics of internet memes. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398R. Culture, Medicine and the Body.**

This course explores how the human body, functions of the body, and the practices of medicine and healing are situated and contextualized within cultural frameworks. Case studies cover body and health-related topics over the life course, from birth to death. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398S. Geography of Food and Agriculture.**

The Geography of Food and Agriculture course will critically evaluate local and global food systems, considering the implications of varying forms of production and consumption and exploring topics related to sociocultural, economic, and environmental landscape change, the role of agriculture in both rural and urban places, and sustainability writ large.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398T. Dramatic Adaptation.**

Dramatic Adaptation is a writing course where students will be adapting non-dramatic works into stage plays. The course will begin with an introduction of the dramatic form, with regards to adaptation, in both principles and structure. Students will then create and write their own adaptations for the stage. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398V. Philosophy, Politics, and Economics.**

What are an individual's moral obligations to their community, nation, and world? How do governments and economic systems shape these obligations? Are capitalism and socialism really opposites? This course investigates these questions, and others, through the interdisciplinary study of "PPE," an emerging field that draws from philosophy, politics, and economics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398W. The Mathematics and Statistics of Gambling and Sports Betting.**

This course uses the scaffolding of gambling and sports betting to engage students in applied probability and statistical modeling. The course covers both descriptive and inferential methods. Topics include measures of central tendency, dispersion, and shape; probability and probability distributions; sampling distributions; estimation, hypothesis testing, linear models, and non-parametric analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398X. Language & the Body.**

Linguistic anthropologists believe that language not only reflects but also shapes and creates our social worlds. This class will focus on how language shapes our embodied identities and our deeply held beliefs through exploration of linguistic, cultural, and medical anthropological research and that of related social sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398Y. The Creative Spark: Interdisciplinary Perspectives on Creativity.**

From technology to the arts, the ideals of creativity and innovation are hotter than ever. But what exactly is creativity? This interdisciplinary course will draw on diverse perspectives (psychology, science, and arts) as we explore what it means to be creative and how to be more creative in our lives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3398Z. Political Ecology of Science Fiction.**

Political ecology considers how power relations and politics, as a form of society and culture, influence environmental systems and management. This course applies the concepts of political ecology to science fiction case studies as a means to uncover latent human-environment interactions and explore similar processes in the real world.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399A. Balinese Music and Its Cultural Context.**

This course examines the arts, culture and society of the island of Bali, Indonesia, with special attention to the practice and study of traditional musical forms and structures. The course also explores contemporary artistic trends and the impact of technology and tourism on the arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399B. Language, Culture, and Education.**

Students will consider the roles language and culture play in American education. Through converging scholarship from the fields of anthropology, language and literacy, and education, the course addresses relationships of power, knowledge, and identity in schools, as well as critiques of the effects of globalization, migration, and market-based approaches to schooling in the U.S. and international contexts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399C. Comics, Cartoons, and Contested Racial Identities in U.S. History.**

This course examines how comics have reflected, shaped, and challenged Americans' notions of racial difference from the nineteenth century to today. Along with reading recent scholarly books and articles, we will analyze a wide range of comics from various periods, tracking the interrelation of comics and larger patterns of U.S. race relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399D. Hell Across Cultures.**

Hell has a dual nature—existing as an afterlife, but always making commentary on its contemporary surrounding society. Using a variety of methodological approaches, this course explores the social significance of the idea of hell across a variety of religious traditions, including Buddhism, Islam, Christianity, Judaism, and popular culture.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399E. From Africa to Texas: A Black Language Odyssey.**

When different peoples speaking different languages meet and need to communicate, interesting things happen. Texas has several such populations, which have their own “new” ethnicities, languages, music and cuisine. This course will look at two of these groups, the Black Seminoles and the French Creoles, both originating in Africa, and both spoken today in Texas. It will also address the position of African American Vernacular English (“Black English”) in the context of creole theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399F. The Myths of Western Civilization: Decolonizing and Queering European History.**

Spanning from antiquity, this course deconstructs the concept and history of “Western Civilization.” Through the study of primary and secondary sources, students will consider how history can be written to include oppressed and marginalized voices while still attempting to understand the broad scope of European history and its legacy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399G. Graph Theory & Its Applications.**

This course introduces the most important topics of graph theory through its applications and in a lively style. It includes some examples of proofs selected with the purpose of strengthening mathematical techniques and offering challenging opportunities to have fun while doing mathematical research. Students seeking core curriculum credit for this course should enroll in HON 2302B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399H. Southern Gothic Storytelling: An Analysis Of Text And Performance.**

At its best, theatre will provoke thought and inspire change. Many productions nonetheless depict agreeable themes and characters to like-minded audiences, rendering critical and self-reflective aspects of the medium ineffective. However, one theatrical genre—Southern Gothic—effectively acknowledges and addresses this concern. By examining Southern Gothic theatre from analytical, performative, and historical perspectives, this course will showcase the genre's influences and impact, and it will explore how different contexts and cultures have shaped performance and interpretive decisions. Students will thereby discover how the Southern Gothic genre aims to honor and criticize the very culture it represents.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399I. Ethics, Science, And Society.**

This course will support students' engagement with ethical issues relating to the interactions of science and society. The material will include case studies from different science disciplines. Students will study a topic within their own field in depth for a final project. This course is intended for any STEM student. It will encourage students to consider the impact of scientific research across multiple disciplines. Students will also focus on a topic within their own discipline for their final project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399J. Ireland: Theatre, Postcolonialism, and Identity.**

This course will explore Irish theatre as a form of postcolonial discourse. It will also examine the role of theatre as a guiding force in the Irish Independence movement, and the importance of theatre in the continuing dialogue to define the Irish identity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399K. Data Visualization and Interpretation: Honors Statistics.**

A well known belief is that "a picture is worth a thousand words." Beyond merely analyzing numbers and interpreting the results, an effective way to interact with statistical data is through charts and graphs, which allow for visual interpretations of the frequency pattern of data in the context of data collection. This course explicates statistical theory and the meaning of data, both to ease comprehension and encourage evidence-based decision making. Students will use Tinker Plots, EXCEL, Tableau, and other appropriate software. Prerequisite: MATH 1315 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399L. Exploring The Italian World.**

This class presents an interdisciplinary study of contemporary society and culture in Italy. It will explore elements of civilization, arts, gender, politics, literature, and cinema. It will also introduce students to Italian-American studies by exploring significant cultural expressions from the multifaceted Italian world and their impact on American society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Honors|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399M. Negotiating the (Black/White) Color Line.**

This course uses literature, film, television, and other media to examine how Black Americans have negotiated the Black/White color line.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399N. Art, Media, and Environmental Justice.**

This course takes an interdisciplinary approach to the environmental justice (EJ) movement by focusing on media: film, photography, theater, art, and social media created at the intersection of environmental ethics and social justice. Students will learn EJ histories and be introduced to activists and artists working on issues ranging from housing and labor to climate and energy justice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399O. Improvisation & Interdisciplinary Play.**

This course offers an interdisciplinary study of improvisation from various entry points. Play, choice-making, connection, and collaboration will be explored through movement, sound, and dialogue. No prior experience with improvisation necessary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399P. Coming-of-Age Archetypes in Contemporary Literature.**

This course applies critical thinking to familiar myths that inform the various ways we are taught, grow up, and define ourselves. In the popular imagination, growing up to become a mature self happens quickly. But contemporary and "realistic" coming-of-age stories instead posit the enemy or danger as society itself. This course explores contemporary stories, poems, and personal "coming-of-age" essays with an inclusive and vibrant reading list by authors from various cultural and ethnic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399Q. Harry Styles And The Cult Of Celebrity: Identity, The Internet, And European Pop Culture.**

This course focuses on British musician Harry Styles and popular European culture since World War II to understand the cultural and political development of the modern celebrity as related to questions of gender and sexuality, race, class, nation and globalism, media, fashion, fan culture, internet culture, and consumerism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399R. Alien First Contact: Best Practices.**

What should humanity do if we come into contact with an intelligent alien species? That far-fetched premise directs attention to serious questions about the contingency and durability of social institutions, about the uses of technology, and about which elements of human society we value most universally.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter



**HON 3399S. Seminar on Public Policy: Netherlands Study Abroad Program.**

From congestion to climate change, major issues related to transportation have emerged as contentious and vexing urban policy areas. For metropolitan areas around the globe to continue to grow and thrive, the fundamental components of the transportation system need to be effectively managed. This class examines the policy divide between these two approaches through an experiential "field classroom."

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399T. Intellectual Property Law in Society.**

This course examines the structure and functions of government together with the laws supporting and regulating intellectual property, namely patents, trade secrets, copyrights, and trademarks. The relations between intellectual property policies and societal goals and regulations are also explored to help students develop an understanding of intellectual property law in a context related to their field of study. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399U. Public Memory.**

This course examines how a society's historical narratives are profoundly driven by public memory, which is not absolute truth; it is malleable and shifts over time. Those who control the narratives shape our interpretations of the past as well as the present. Throughout history, the construction of narratives about the past has been dominated by elites whose economic, racial, and gender locations have afforded them privilege. The course considers how expanding and diversifying who participates in this process can profoundly affect political and power debates in society. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399V. Cities And Society In Latin America: Power, Rebellion, and Creativity.**

This course takes a close look at Latin American cities and their historical, political, and cultural role. Case studies of particular cities will give students a deeper understanding of the region and students will link the history of these cities to vibrant cultural productions in the arts and literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399W. The Art of Bob Dylan: Explorations of Method and Performance.**

This course takes a critical look at the work of Bob Dylan, including his contributions as an author, musical performer, painter, sculptor, actor, and recent recipient of the Nobel Prize in Literature. By examining his place in American history, his evolving identities, and his curious methodologies, students will better understand American art and literature in popular culture. The course will explore intertextuality, appropriation, and originality through Dylan's work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399X. The Beat Generation and Explorations of the Self.**

This course will examine how the Beats set out to break free from the stifling conformity of the 1950s—in literature and in lifestyle—by revising and revisiting the 19th-century Romanticism of Emerson, Thoreau and Fuller (among others). Students will explore the forms, content, race, gender, patriotism, censorship, drugs, visions, religion, mass media, hair, and comics utilized in their creative output.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399Y. American Money.**

This course examines the laws, economics, finance, and historical evolution of the United States dollar from its legal birth in 1792 to present. Students will explore economic and financial theories of the dollar and its social, environmental, and economic impacts. Students may propose improvements to the modern American money system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3399Z. Soundscape, Environment, Music.**

This course provides an introduction to Sound Studies and Ecomusicology, combining reading, critical discussion, and field research. Participants will examine critically both foundational and current authors (artists, ethno/musicologists, philosophers, sociologists, scientists); apply, test, and synthesize the field's frameworks through creative activities (e.g. soundwalks and local ethnographies); and generate new scholarly and creative work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3480A. Relativity and Quantum Mechanics for Non-Science Majors.**

Principles of quantum mechanics and relativity will be discussed and analyzed including applications to theoretical problems and practical applications. The lab portion will teach basic electronics skills and allow students to perform classic experiments of modern physics. (WI).

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3480B. Building A Greener Future: One Home at a Time.**

This course will focus on the science and engineering principles involved in building and maintaining a house. Students will investigate how choices of materials and design influence cost, sustainability, and energy efficiency of housing. Laboratory experiences will elucidate these concepts. (WI).

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 3480C. Teaching Physical Science to Children.**

This studio-styled physics course is ideal for preservice K-8 teachers. Course content includes both physics concepts and research findings on physics teaching and learning. We will focus on developing deep understanding of fundamental concepts in physical science and how these concepts relate to making sense of our everyday experience. (WI).

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 4090. Honors Capstone.**

This course is designed for students to pursue an independent project of research, study, or creative achievement to fulfill the capstone requirement for graduating in the Honors College. Students in this non-credit bearing version of a capstone course should be enrolled in a similar course in their discipline. (WI).

**0 Credit Hours. 0 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Writing Intensive

**Grade Mode:** Standard Letter

**HON 4390A. Senior Seminar: Capstone Development.**

This course provides a structured environment for students to begin work on their capstone projects. Students will explore potential pathways, connect with faculty advisors, and take initial steps toward completing their projects. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 4390B. Honors Capstone.**

This course is designed for students to pursue an independent project of research, study, or creative achievement to fulfill the capstone requirement for graduating in the Honors College. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HON 4391. Honors Independent Study.**

Individual study under direct supervision of a professor for Honors credit. May involve field trips. This course may be repeated for credit but a student may not exceed six hours of credit in Honors Independent Study. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Honors|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**HDFS 1351. Lifespan Development.**

This course focuses on developmental principles underlying behavior as experienced in physical, intellectual, emotional and social changes across the lifespan. Emphasis is on adult development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 1355. Introduction to Family Relationships.**

This course covers a range of research-based topics including the universality and uniqueness of American families, the establishment and maintenance of relationships, family formation, parenthood, and other aspects related to individual and family relationships through the lifespan.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 2311. Statistics and Data Analysis for Human Development and Family Sciences.**

This course is an introduction to statistical concepts within the field of HDFS, including the implementation of statistical techniques using computer software. Concepts include the methods, assumptions, and limitations of statistical analysis, reporting statistical findings, and interpreting statistical results reported in media and scientific outlets.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 2351. Child Development.**

This course focuses on development across domains from conception to adolescence. The course includes opportunities to apply knowledge of child development to observations of children.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**HDFS 2353. Principles of Guidance.**

Students examine research, theory, and developmentally appropriate practices related to children's social development and child guidance techniques. Participation in the Child Development Center is required. Prerequisite: FCD 2351 or HDFS 2351 either with a grade of "D" or better.  
**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**HDFS 3344. Introduction to Infant and Early Childhood Mental Health.**

This course is an introduction to the study of social and emotional development of infants and young children within the context of the family. The emphasis of this course is on the role of the infant mental health specialist in strengthening the development of young children.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**HDFS 3351. Creative Experiences for Children.**

This course focuses on developmentally appropriate creative methods, materials, and planning for children's programs through language, literature, music, art, play, science, math, technology, and social studies. Participation in the Child Development Center is required. Prerequisite: FCD 2353 or HDFS 2353 either with a grade of "D" or better.  
**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**HDFS 3356. Introduction to Early Childhood Intervention.**

This course provides an interdisciplinary orientation to the professional discipline of Early Childhood Intervention (ECI) and the Early Intervention Specialist (EIS). Prerequisite: FCD 2351 or HDFS 2351 either with a grade of "D" or better.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**HDFS 3358. Practicum in Child Development.**

Students participate in structured practical experience in approved early care and education programs. Prerequisite: [FCD 2353 or HDFS 2353] and [FCD 3351 or HDFS 3351] both with grades of "D" or better.  
**3 Credit Hours. 1 Lecture Contact Hour. 6 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**HDFS 3359. Family Diversity.**

This course explores both the internal dynamics and external environments of diverse family forms, including prevalence, social conditions leading to and sustaining their existence, common stereotypes, and recent research. Prerequisite: FCD 1355 or FCD 3355 or HDFS 1355 any with a grade of "D" or better.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**HDFS 3394. Adolescent Development.**

This course analyzes adolescent development from a research and theoretical perspective. Emphasis is on current critical issues for adolescents in the context of family and society.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Multicultural Perspective  
**Grade Mode:** Standard Letter

**HDFS 4301. Internship in Human Development and Family Sciences.**

This course provides internship fieldwork in related professions, services, industry, or business for students in Human Development and Family Sciences. Students must meet college, school, and program requirements.  
**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Credit/No Credit

**HDFS 4302C. Human Welfare Across the Lifespan.**

This course will focus on the analysis of the dynamics of family, partner, and community violence occurring across the lifespan. Students examine history, theory, and research related to physical, sexual, and psychological abuse, including root causes, impacts on individuals and families, and best practices in working with survivors. Prerequisite: [HDFS 1351 or FCS 1351] and [HDFS 1355 or FCS 1355] all with a grade of "D" or better.  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

**HDFS 4304. Conducting Research with Latinx Adolescent Families.**

This course is an introduction to research with Latinx adolescent families and other marginalized populations. As research assistants, students explore current issues and gain hands-on research experience conducting interviews with Latinx adolescent families. Prerequisite: Minimum 2.5 Texas State GPA and instructor approval. (MULT).  
**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content  
**Grade Mode:** Standard Letter

**HDFS 4305. Conducting Research in Early Childhood.**

This course provides students an opportunity to explore and develop fundamental concepts, principles, and methods of research in early childhood, with emphasis on critiques, interpreting, and applying research results and participating in the research process. Prerequisite: Minimum 2.5 Texas State GPA and instructor approval.  
**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Credit/No Credit

**HDFS 4351. Cultural Diversity in Families.**

This course focuses on cultural diversity with an emphasis on different racial and/or ethnic groups, religions, and social classes. Students explore selected family science research methods and topics including family functions, family life patterns, multicultural groups, agents of enculturation, and family life education as they relate to cultural diversity. (WI)(MULT) Prerequisite: FCD 1355 or FCD 3355 or HDFS 1355 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HDFS 4352. Administration of Programs for Children.**

This course addresses the history, philosophy, and ethics of programs for young children. Emphasis is on responsibilities of the child care administrator in relation to staff, budgets, facility laws, and standards of agency management. Prerequisite: FCD 2353 or HDFS 2353 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 4353. Introduction to Child Life.**

This course introduces students to theoretical and practical methods of working with children and their families in health care settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 4354. Play and Child Development.**

This course focuses on the therapeutic aspects and learning objectives of play in infants, children, youth, and young adults. This course explores the foundations and theories of play in the growth, development and learning of children. Medical play, play therapy, music therapy, and art therapy are incorporated into the course curriculum. The influence of play environments on children's play is also explored. Prerequisite: HDFS 2351 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 4355. Family Theory.**

This course focuses on the study and comparison of various theories, family structures, and transitions. Interaction strategies to enhance successful family function across various family structures and transitions will be analyzed. Prerequisite: FCD 1355 or FCD 3355 or HDFS 1355 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 4356. Administration of Human Service Organizations.**

This course focuses on the implementation of human service organizations. Leadership and management of human service organizations, including staffing, strategic planning, problem solving, grant writing, and ethical leadership is emphasized. Prerequisite: FCD 2353 or HDFS 2353 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 4357. Grief and Bereavement in Children, Adolescents, and Parents.**

This course focuses on grief and bereavement throughout the life cycle. Topics include historical, current, cultural, spiritual, and religious perspectives, ambiguous loss, transitions, palliative care, self-awareness, and self-care. This course focuses on the health and well-being of children and families. Students analyze grief and bereavement implications for child life specialists.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 4358. Latinx Youth and Families.**

This course is an introduction to research regarding the development of Latinx youth and families, exploring the most common physical, cognitive, and socio-emotional aspects of development. Students learn that these changes are dynamically interrelated and diverse, often depending on factors such as gender and cultural values. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**HDFS 4391. Independent Study in Human Development and Family Sciences.**

This course provides opportunity for independent reading and/or research on a specific topic related to a student's primary area of interest. Work includes research, reviews, and the integration of existing literature or other appropriate independent work. (WI).

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**HDFS 5100. Introduction to Human Development and Family Sciences.**

This course focuses on gaining information and competencies important to graduate study success. It includes academic expectations for graduate students, as well as information related to the Human Development and Family Sciences graduate program.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5302A. Social Cognitive Development in Childhood and Adolescence.**

This course addresses foundations and theories of social cognitive development of children and adolescence. Current research on social cognitive development is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 5302B. Advanced Adolescent Development.**

This course focuses on theoretical analysis and current research of adolescent development. Topics may include developmental transitions, contexts, and issues in diverse adolescents in the contemporary society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 5302C. Administration and Evaluation of Family and Child Service Programs.**

This course focuses on the management and effectiveness of diverse family and child service programs. This course will include the following topics: management strategies, leadership skills, cultural responsiveness, program evaluation strategies and methods, fiscal management, and ethics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**HDFS 5305. Foundations of Play.**

This course analyzes foundations and theories of play as it relates to the development of children. Course content includes medical play, play therapy, music therapy, art therapy, and animal therapy as they are applied in professional settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5340. Advanced Cultural Diversity of Families.**

This course focuses on cultural diversity with an emphasis on contemporary, culturally relevant responses to societal trends. Topics include a critical analysis of cultural competency, multiculturalism, and the strategies implemented to successfully engage in meaningful interactions at the community level. The course incorporates family science research methods to explore topics including family structure and function, family life patterns, multicultural groups, and agents of acculturation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Co-requisite(s):** MULT 5340

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**HDFS 5341. Advanced Child Development.**

This course focuses on the developmental processes and influences from conception through adolescence and emphasizes the interactive relationship of biological and environmental factors in the total development of the child.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5343. Child Life Specialist.**

This course introduces students to the scope of Child Life practice, the impact of illness and injury on children and families, patient experience, family centered care, therapeutic play and psychological preparation for treatment and healthcare interventions. The course focuses on theoretical and evidence-based practices used in Child Life practice when interacting with children and families in a variety of healthcare settings. This course includes content necessary for pursuing application to Child Life Internships and the National Child Life Certification Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5344. Infant and Early Childhood Mental Health.**

This course provides an interdisciplinary understanding of the social and emotional development of infants and young children within the context of the family. Focus is on the role of the infant mental health specialist in strengthening the development of young children and the parent-child relationship.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5347. Grief and Bereavement in Children, Adolescents, and Parents.**

This course focuses on grief and bereavement throughout the life cycle. Topics include a historical overview of the theoretical models on grief and bereavement, influences on grief and bereavement responses, and current perspectives on helping the bereaved cope. Students analyze grief and bereavement implications for child life specialists.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**HDFS 5348. Pain and Anxiety Management for Children.**

This course provides child life students with theoretical foundations and applied non-pharmacological strategies for assessing children's pain and anxiety and assisting them with alleviation during healthcare experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5350. Research Design and Methods in Human Development and Family Sciences.**

This course includes evaluation of research concepts, methods, and strategies in human development and family sciences. The topics focus on the nature of scientific research, sampling, measurement, data collection, types of socio-behavioral research, data analysis, and evaluation of research reports.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5351. Advanced Theory in Human Development and Family Sciences.**

This course includes a critical evaluation of theoretical concepts and current research in human development and family sciences. Recent trends in family and developmental theories are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5352. Issues in Human Development and Family Sciences.**

This course examines current issues in human development and family sciences from conceptual, methodological, and multi-disciplinary perspectives. Emphasis is on current research and theories, and their application.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HDFS 5353. Program Evaluation in Human Development and Family Sciences.**

This course focuses on the diversity and effectiveness of family and child services programs at the federal, state, and community levels. Program evaluation strategies and measures, fiscal management, and grant writing are included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5355. Advanced Independent Study.**

This course provides opportunity for individual work on problems related to student's primary area of specialization. Work consists of empirical research or critical reviews and integration of existing literature. Course may be repeated once for credit when topics vary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**HDFS 5356. Advanced Program Administration.**

This course focuses on human services organizations. Management theory and strategies, strategic planning, program development and implementation, personnel management, and public policy are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5357. Comparative Studies in Child Development.**

This course focuses on the study of cultural values and beliefs and the reflection of these in child development practices. The interactive influence of culture and global policies is addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**HDFS 5358. Practicum in Human Development and Family Sciences I.**

This course provides opportunity for structured practical experience in human development and family sciences programs. Supervision is provided by a member of the graduate faculty and a designated individual at the work site. Focus is on experiential learning.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5359. Practicum in Human Development and Family Sciences II.**

This course provides a continued practical experience in human development and family sciences programs. Supervision is provided by a member of the graduate faculty and a designated individual at the work site. A research report is integrated with practical application. Prerequisite: FCD 5358 or HDFS 5358 either with a grade of "CR".

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. Focus is on identification of thesis topic, review of literature, and research design. No thesis credit is awarded until a student has completed the thesis in Human Development and Family Sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**HDFS 5659. Internship in Child Life.**

This course is a structured hospital experience for individuals who plan to pursue a career in child life. Students are provided the opportunity to work in a hospital setting under the direction of a certified child life specialist. Successful completion of this course is required for all applicants pursuing application to Child Life Internships and the National Child Life Certification Exam.

**6 Credit Hours. 0 Lecture Contact Hours. 38 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5660. Advanced Practicum.**

This course is a structured field experience for individuals who plan to pursue a career in the field of human development and family sciences. Students are provided the opportunity to work in a community setting such as a nonprofit organization, government agency, or healthcare setting. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**HDFS 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The focus of this course is on data collection, analysis, and writing of thesis. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**IE 1310. Introduction to Industrial Engineering.**

This course gives an overview of what industrial engineering is, how this field of study has evolved, what contributions of individuals have been key to its development, what are some of the methods and techniques that industrial engineers use to solve company's problems and what job opportunities exist after earning a degree in industrial engineering. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 any with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [SAT Mathematics score of 520 or better] or [SAT Math Section score of 550 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 3305. Introduction to Data Analysis.**

This course introduces principles and applications of data analysis using Microsoft Excel, Access, VBA, and machine learning. Students will utilize these applications to develop solutions to challenging industrial engineering problems. Emphasis will be placed on computing productivity in a spreadsheet-based setting to develop practical, useful decision support applications to facilitate engineering decisions. Corequisite: IE 3320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 3320. Engineering Statistics.**

This course covers the fundamentals of probability and statistics, including probability distributions, visualization techniques of large-scale datasets, interval estimation, hypothesis testing, and regression modeling. The students will be exposed to traditional engineering applications of statistical modeling, as well as those modern problems encountered in big data analysis. Prerequisites: MATH 2472 or MATH 2473 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 3330. Quality Engineering.**

Quality assurance systems, quality costs, statistical quality control, and approaches for engineering quality into products and processes. Prerequisite: IE 3320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 3340. Operations Research.**

This course covers models in operations research including linear programs, the simplex method, duality theory, sensitivity analysis, integer programs, and network flows. The emphasis is on learning to recognize, formulate, solve, and analyze practical industrial problems. The course also introduces commercial mathematical programming languages. Prerequisite: [CS 1428 or CS 1342] and ENGR 3315 and MATH 3377 and IE 1310 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 3360. Methods Engineering and Ergonomics.**

This course is a survey of methods for assessing and improving performance of individuals and groups in organizations. Techniques include various basic industrial engineering tools, work analysis, data acquisition and application, performance evaluation and appraisal, and work measurement procedures. Prerequisite: IE 3320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4310. Statistical Design of Experiments.**

Statistically designed experiments for engineering applications. Topics include analysis of variance, randomized complete designs, factorial designs, empirical models generated from controlled experiments, and response surfaces. Prerequisite: IE 3320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4320. Integrated Production Systems.**

Basic concepts in the design and control of integrated production systems to include forecasting, inventory models, material requirements planning, scheduling, planning, and shop floor control. Prerequisite: IE 3340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4330. Reliability Engineering.**

Reliability of components and systems, reliability models, life testing, failure analysis, and maintainability. Prerequisite: IE 3320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4335. Lean Six Sigma Methodologies.**

This course covers the principles and methodologies of Six Sigma and Lean Six Sigma. Emphasis is on the tools and techniques used in Lean Six Sigma projects, including statistical process control, experimental design, project management and Lean tools. Prerequisite: IE 3330 and IE 4310 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4340. Non-Linear Optimization Techniques.**

This course introduces engineering applications of mathematical modeling and computational methods for non-linear programming problems. Prerequisite: IE 3340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4342. Advanced Linear and Integer Programming.**

This course discusses advanced mathematical modeling computational methods for solving linear and integer programming problems in engineering. Additional topics include solution techniques, such as stochastic and dynamic programming, that may also apply for solving non-linear programs, and formulation and solution of decision models arising in manufacturing, service, supply chain, healthcare and electrical systems. Prerequisite: IE 3340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4350. Supply-Chain Engineering.**

The analysis of supply chain problems to include facility location, customer assignment, vehicle routing, inventory management, and the role of information and decision support systems in supply chains. Prerequisite: IE 3340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4355. Facilities Planning.**

Planning, design, and analysis of facilities. Emphasizes the principles and methods used for solving plant layout, facility location, material handling, automation, computer integration, and warehouse operations. Prerequisite: ENGR 3315 and MFGE 2332 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4360. Human Factors Design.**

This course will emphasize the applications of human factors engineering to systems design. Prerequisites: IE 3360 with a grade of "D" or better. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**IE 4370. Probabilistic Operations Research.**

This course describes probabilistic models in operations research to include queuing theory, simulation, and Markov chains. Emphasis will be placed on modeling applications to solve problems in industry and computing. Prerequisite: [CS 1428 or CS 1342] and IE 3320 with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4381. Introduction to Systems Engineering.**

This course is an introduction to the systems thinking process, systems of systems, and the fundamental considerations associated with the engineering of large-scale systems, or systems engineering. These topics include the system development process, needs analysis, concept exploration, concept definition, engineering design, integration and evaluation, and systems engineering management. Prerequisite: IE 3320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**IE 4392. Industrial Engineering Design I.**

Student teams apply engineering principles and standards under realistic constraints to develop solutions for industrial problems and/or systems engineering issues. This course is the first part of a two-course sequence and is followed by Industrial Engineering Design II (IE 4393). Prerequisite: IE 3330 and IE 3340 and IE 3360 all with grades of "D" or better. Corequisite: 6 hours from [IE 4310 or IE 4355 or IE 4370] both with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**IE 4393. Industrial Engineering Design II.**

Student teams complete implementation of solutions to industrial problems and/or systems engineering issues with realistic constraints. This course is the the second in a two-course sequence, and is continuation of Industrial Engineering Design I (IE 4392). Prerequisite: IE 4392 and 6 hours from [IE 4310 or IE 4355 or IE 4370] all with grades of "D" or better. Corequisite: 6 hours from [IE 4320 or IE 4350 or MFGE 4396] both with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**IE 4399D. Heuristic Optimization Techniques.**

Heuristic methods that search beyond local optima such as simulated annealing, tabu search, genetic algorithms, ant-colony systems, and particle swarm. Papers from the literature, problem-specific heuristics, evaluation methods and serial/parallel implementations are discussed. This course is an advanced undergraduate course for students in engineering and related fields. Prerequisite: [CS 1428 or CS 1342] and IE 3340 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**IE 4399F. Introduction to Data-Intensive Analysis and Simulation.**

This course covers the foundational topics in data science and consists of three parts: The first part focuses on data extraction from databases, sensors and social media. The second part reviews data-intensive analysis through statistics and machine learning tools. The third part introduces the concept of farming data using design of experiments methodologies and computer simulation. Prerequisites: IE 3340 and IE 4310 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**IE 4399G. Special Topics in Project Management.**

This course provides undergraduate students with solid foundations of project management. Classical, prescriptive and adaptive methodologies are presented. Students will get to know different standards in project management, whereas the main focus will be on those from PMI (Project Management Institute). This course covers all phases of project management and introduces the most relevant tools and techniques to initiate, plan and execute projects in different contexts successfully. In addition to techniques, the "soft" perspective of managing people and their cooperation within projects will be addressed in detail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**IE 5310. Advanced Statistical Design of Experiments for Engineers.**

This course examines the design and analysis of controlled experiments, demonstrating engineering applications of design of experiments (DOE) in the manufacturing and service industries. Topics include full and fractional factorial designs, response surface methodology, and Taguchi methods. In a semester-long project, students apply DOE to improve a real manufacturing process. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5320. Modeling and Analysis of Manufacturing Systems.**

This course covers the methods for modeling and analyzing manufacturing systems. Critical manufacturing issues that are addressed by these models include sustainable production systems, material handling systems, scheduling, and supply chains. Prerequisite: IE 3320 and IE 3340 and MFGE 4396 all with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5330. Advanced Quality Control and Reliability Engineering.**

This course provides in-depth knowledge in reliability modeling and maintenance optimization for components and systems. The course also covers advanced quality control techniques including multivariate process control. Methodologies are applied to solve practical problems arising from various industry domains. Restricted to students enrolled in the MS Engineering program. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5340. Applied Deterministic Operations Research for Engineers.**

This course introduces students to modeling of linear, non-linear, and integer problems applied to engineering design, manufacturing, service, supply chain, healthcare and electrical systems. Mathematical programming software is emphasized in class exercises, homework, and project. Techniques including revised simplex method, duality theory, sensitivity analysis, and networks are also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5343. Non-Linear Optimization Techniques for Engineers.**

This course covers engineering applications of mathematical modeling and computational methods for nonlinear programming problems. The primary goal of this course is to present techniques and strategies essential to optimize non-linear models. Prerequisite: IE 3340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5345. Advanced Optimization.**

This course covers advanced concepts in linear and integer programming. Solution techniques for stochastic and dynamic programming and formulation and solution of decision models in manufacturing, service, supply chain, healthcare and electrical systems are presented. Prerequisite: IE 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5347. Advanced Heuristic Optimization.**

This course covers heuristic methods that search beyond local optima such as simulated annealing, tabu search, genetic algorithms, ant-colony systems and particle swarm. Papers from the literature, problem-specific heuristics, evaluation methods, and implementations are discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5397. System Thinking and Analysis.**

This course is an introduction to systems engineering and the systems thinking process, providing important considerations related to the engineering of large scale systems. These considerations include system understanding, modeling and design, the system development process, needs analysis, concept exploration and definition, design, integration and evaluation, and systems engineering management. Prerequisite: ENGR 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**IE 5398A. Healthcare Systems Engineering.**

This course provides an introduction into healthcare delivery with particular attention to the application of systems engineering techniques. Topics include the organization of healthcare systems, characteristics of US healthcare, decision-making in the healthcare environment, health informatics, and performance measurement tools. Student project involves integration and application of systems engineering methodologies. Prerequisite: IE 5340 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398B. Response Surface Methodologies.**

This course continues the examination of the design and analysis of controlled experiments, demonstrating how design of experiments (DOE) and response surface methodologies (RSM) are used in product optimization and process improvement. Topics include factorial and fractional factorial designs, steepest ascent, fitting response surfaces, variance-optimal design, and mixture experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**IE 5398C. Data-Intensive Analysis and Simulation for Engineers.**

This course covers foundational topics in data science, including data-intensive analysis and simulation. Specific topics include data science, data extracting and preprocessing, data visualization, and design of simulation experiments. Prerequisite: IE 5310 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ID 1310. Introduction to Interior Design.**

This introductory lecture course investigates interior design from social, ecological, cultural, and spatial perspectives related to human habitation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**ID 1320. Design Graphics I.**

This course provides specialized training in manual and digital graphic communication required in the interior design profession. It includes architectural drafting, illustrative sketching, design diagramming and schematics, and basics of orthographic and perspective drawing with emphasis in both technical and aesthetic expression.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 2000. Interior Design Proficiency Review.**

During this course, students will study independently to prepare for a performance-based or portfolio review in which they will demonstrate the ability to apply essential interior design skills and knowledge. Interior Design majors must pass Proficiency Review to gain access to further interior design coursework. Prerequisite: ARTF 1302 and ID 1310 and ID 1320 all with grades of "C" or better. Corequisite: ARTC 2305 and ID 2322 both with grades of "C" or better.

**0 Credit Hours. 0 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**ID 2321. History of Interiors.**

Survey of historical styles of furnishings, architecture, and interiors from the Egyptian period to the Industrial Revolution.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 2322. Basic Interior Design.**

This course is an introductory studio for Interior Design majors, analyzing the elements and principles of design as applied to interior environments. Applications of these fundamental components, including finishes, materials, and styles, will be demonstrated by class projects. Prerequisite: ARTF 1302 and ID 1310 and ID 1320 all with grades of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 2323. Design Development.**

This course is an introduction to the process of design development and planning of interior space with an emphasis on graphic visualization as a creative process and design tool. Prerequisite: ID 2000 with a grade of "CR" and ID 2322 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 2324. People, Environment, and Behavior.**

This studio course focuses on the physical and psychological needs of inhabitants of interior space. Students are exposed to theories of environmental perception, human factors, and universal design principles to be applied to design solutions. User needs are demonstrated through the application of space planning throughout the design process. Prerequisite: ID 2321 and ID 2323 all with grades of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 2325. Materials and Sources.**

This course is an in-depth study of materials and finishes specified for residential and commercial interiors. Material properties, fabrication, installation methods, applications, sustainability, maintenance requirements and sourcing are addressed. Prerequisite: ID 2000 with a grade of "CR" and ID 2322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 2326. Technology for Interior Design.**

This course focuses on residential building construction documentation with a focus on interior design software. Students will apply building construction industry standards to create a residential building construction package through interior design software. Prerequisite: ID 2000 with a grade of "CR" and ID 2322 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 3320. Design Graphics II & Portfolio.**

In this course, students are exposed to various means and methods for using digital media throughout the interior design process. Instruction on presentation graphics, branding and digital publication strategies of a student design portfolio are also addressed. Prerequisite: ID 2322 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 3321. Contemporary Interiors and Architecture.**

A survey of contemporary styles of furnishings, architecture, and interiors from the 19th century to the present. Prerequisite: ID 2321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 3322. Studio I: Residential Interior Design.**

This studio course introduces students to various dimensions, purposes, and characters relative to the small and large residential spaces.

Prerequisite: ID 2324 and ID 3320 both with grades of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 3323. Studio II: Commercial Interior Design.**

This course focuses on the analysis, planning, design and furnishing of small to moderate commercial and other non-residential spaces.

Topics include design programming, the design development process, simple contract document preparation and visual and verbal presentation methods. Prerequisite: ID 2325 and ID 3322 both with grades of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 3324. Professional Practices.**

This course focuses on the business principles, ethics, and procedures for the interior designer. Prerequisite: ID 2323 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**ID 3325. Interior Lighting Design.**

This course focuses on the study of natural and manufactured light sources relative to the interior environment. Emphasis is placed on light science and technology and the effects on health, behavior, color and form, and includes issues of aesthetics, energy conservation, codes, evaluation, and specifications. Prerequisite: ID 2323 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 3326. Comprehensive Interior Design.**

This course is an advanced study of materials, systems, codes and other factors relating to public health, safety, and welfare in interior environments. Through lecture and application of resources, materials and design technologies, the course addresses specifying, scheduling, budgeting, and resource conservation. Prerequisite: ID 2324 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 3327. Building Construction in Interior Architecture.**

This course explores the understanding of interior construction and documentation for interior architecture projects. Expression of design intent as construction documents is reinforced in structured classroom experiences, guest lecturers, and on-site visits. Understanding of base building construction and systems will be demonstrated through completion of the set of drawings. Prerequisite: ID 2326 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 4120. Portfolio Design.**

Portfolio preparation and production for seeking employment with design firms. Includes instruction on graphic and publication design, business structures and portfolio strategies. For graduating interior design majors. Prerequisites: ID 4323 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 4301. Internship in Interior Design.**

Internship experience in the Interior Design profession. (Capstone Course) (WI) Prerequisites: ID 3323 and ID 3324 and ID 3326 all with grades of "C" or better and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**ID 4302A. Historic Preservation.**

Introduction to the field of historic preservation, including history, theory, planning, advocacy, law, conservation, and adaptive use, emphasizing the Secretary of the Interior's Standards for Rehabilitation. Students combine design and technical knowledge to approach historical design problems in creative, sensitive, and economical ways. Prerequisite: ID 3321 and ID 3322 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ID 4302C. Lighting Research and Applications.**

An in-depth study of light and color and its impact on people's behavior in interior environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ID 4302F. Color Theory and Design Applications.**

An introduction to color theory and principles with a fundamental understanding of the psychological and physiological effects color has on human perception. Characteristics of major hues which influence design and behavior and how to use, design, and apply color in the creative process will be studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ID 4302G. Color Theory & Design Applications.**

An introduction to color theory and principles with a fundamental understanding of the psychological and physiological effects color has on human perception. Characteristics of major hues which influence design and behavior and how to use, design, and apply color in the creative process will be studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ID 4302H. Study America Sustainable Chicago.**

This course focuses on individual student's exploration of interior design through global, sustainable, wellness and diversity lens. This course provides students with the opportunity to attend the interior design conference NEOCON in Chicago, and to select an issue or problem identifies during the conference to develop a design solution. Prerequisite: ID 2000 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**ID 4323. Studio III: Research and Advanced Commercial Interior Design.**

This course expands student understanding and application of design research methods including evidence-based design in the commercial interior environment. Topics include advanced design research methods, programming and large-scale space planning, finish selection/specifying, furnishings design and detailing, and presentation strategies through creative problem solving and contract document preparation.

Prerequisite: FCS 3303 and ID 3321 and ID 3323 and ID 3325 and ID 3326 and ID 3327 all with grades of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**ID 4324. Studio IV: Contemporary Design Issues.**

This course requires students to conduct specialized research in interior design to include design issues such as barrier free environments, medical facilities, historic preservation/adaptive re-use, international interiors, energy issues, sustainable design and design for special needs. Prerequisite: ID 4323 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ID 4391. Independent Study in Interior Design.**

Independent reading and/or research on a specific topic related to student's primary area of interest. Work may consist of research, reviews, and integration of existing literature, or other appropriate independent work. May be repeated once for credit with approval of instructor. (WI).

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**IS 4380. International Studies Seminar.**

A senior-level seminar that explores international topics through reading, writing, research and group discussion. Students will be expected to produce a significant research paper. This course is required for all International Studies majors and should be taken in the senior year of undergraduate study. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**IS 4387. International Studies Internship.**

A semester-long work and study experience in a local, national, or foreign setting. Internships must be approved by the director of the Center for International Studies. May be repeated for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**IS 4388. Diplomacy Seminar.**

This course is a senior-level seminar which explores overarching topics in Diplomacy, including intelligence, negotiation, speech and report writing, protocol, and media and risk management, through reading, writing, research and group discussion. This course is a required capstone for all Diplomacy minors and should be taken in the last semester of minor coursework. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**IS 4390. Problems in International Studies Research.**

The instructor and student create an in-depth research project on a topic of interest to both participants.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**IS 4687. International Studies Internship.**

A semester long work and study experience in a local, national, or foreign setting. Internships must be approved by the director of the Center for International Studies. Repeatable once for credit. Prerequisite: Minimum 3.0 Texas State GPA.

**6 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**IS 5387. International Studies Internship.**

A work/research experience in a government agency or company related to the students' career interests. The internship will consist of a minimum of 150 hours in the workplace and will require a research paper. This course may be repeated once for additional internship credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**IS 5390. Problems in International Studies Research.**

The instructor and student create an in-depth research project on a topic of interest to both participants.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**IS 5398. General Research Methods.**

The principal purpose of the General Research Methods seminar is to prepare students to successfully produce research papers and/or theses. Students in this course will produce a research paper using primary and secondary source materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**ITAL 1410. Beginning Italian I.**

Introduction to listening, speaking, reading, and writing skills within an Italian cultural framework. Students who take ITAL 1410 toward degree requirements must also complete ITAL 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ITAL 1411

**ITAL 1420. Beginning Italian II.**

This course provides continued practice in listening, speaking, reading, and writing skills within an Italian cultural framework. Students who take ITAL 1410 toward degree requirements must also complete ITAL 1420. (MULT) Prerequisites: ITAL 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ITAL 1412

**ITAL 2310. Intermediate Italian I.**

This course provides continued development and review of all language skills within an Italian cultural framework. (MULT). Prerequisite: ITAL 1420 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ITAL 2311

**ITAL 2320. Intermediate Italian II.**

This course provides more advanced practice in all language skills with greater emphasis on reading within an Italian cultural framework. (MULT). Prerequisite: ITAL 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** ITAL 2312

**ITAL 3308. Advanced Grammar and Composition.**

This course is designed to improve writing skills in Italian through the reading and writing of Italian texts. The focus is on writing skills and the reading of selected works from Italian literature. The course may be repeated once with different content. (MULT) Prerequisite: ITAL 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**ITAL 3309. Italian Film and Media Studies.**

This course engages students in a theoretical, methodological and critical debate on Italian film and media of the last 100 years. The course trains students to comprehend, analyze, and participate in Italian and global film and screen media cultures and industries, and to express their thoughts in Italian. The course includes screenings, workshops with visiting professionals, and talks on film and media-related issues. (MULT) Prerequisite: ITAL 2320 with a grade of "D" or better. Corequisite: ITAL 3308 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ITAL 4304. Italian Literature and Culture.**

This course addresses key historical and aesthetic issues related to Italian literature and culture in the last two millennia. Class discussions, oral presentations and written work provide students with opportunities to develop their Italian skills in the context of literary and cultural topics. Course may be repeated with different emphasis. (MULT) Prerequisite: ITAL 3308 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ITAL 4370. Italian Civilization.**

This survey of the cultural institutions of Italy provides a background for a better understanding of the Italian people, encompassing the development of Italian culture and the forces that have shaped modern Italy. Recent essays, films, and comparative analyses of Italo-American relations will also be presented. Repeatable for credit with different emphasis. (MULT) Prerequisite: ITAL 3308 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**ITAL 4390. Studies in Italian Language and Culture.**

Students will conduct an independent study project in Italian language and culture. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**JAPA 1410. Beginning Japanese I.**

This course is an introduction to listening, speaking, reading, and writing skills within a Japanese cultural framework. Students who take JAPA 1410 toward degree requirements must also complete JAPA 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** JAPN 1411

**JAPA 1420. Beginning Japanese II.**

This course provides continued practice in listening, speaking, reading, and writing skills within a Japanese cultural framework. Students who take JAPA 1410 toward degree requirements must also complete JAPA 1420. (MULT) Prerequisite: JAPA 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** JAPN 1412

**JAPA 2310. Intermediate Japanese I.**

This course provides continued development and review of all language skills in a Japanese cultural framework. (MULT). Prerequisite: JAPA 1420 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** JAPN 2311

**JAPA 2320. Intermediate Japanese II.**

This course provides advanced practice in all language skills in a Japanese cultural framework. (MULT). Prerequisite: JAPA 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** JAPN 2312

**JAPA 3304. Advanced Japanese Grammar I.**

Course designed to strengthen written command of the language through grammar instruction as well as readings and reports in Japanese. (MULT). Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**JAPA 3306. Modern Japanese Literature and Culture.**

Students analyze Japanese literature and culture while developing their proficiency in Japanese, increasing their vocabulary in the language, and extending their knowledge of critical kanji necessary for understanding the written language. (MULT) Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**JAPA 3307. Advanced Japanese Writing and Grammar.**

This is a writing-intensive course designed to strengthen students' knowledge of the structure of Japanese and written command of the language. Course may be repeated once with a different emphasis for additional credit. (WI) (MULT) Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**JAPA 3308. Advanced Japanese for Business.**

This is an advanced course designed to develop the skills needed to succeed in the complex business world of Japan. Course may be repeated once with a different emphasis for additional credit. (MULT). Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**JAPA 3309. Japanese Language through Popular Culture.**

Students will improve Japanese reading comprehension through the study of popular Japanese media such as manga (graphic novels) or anime (film animation) or kayoo kyoku (Japanese popular song). The course will emphasize how language is used to tell stories for diverse audiences. Repeatable with different emphases.(MULT) Prerequisite: JAPA 2320 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**JAPA 4301. Japanese-English Translation: Theory and Practice.**

This course introduces the concepts of translation theory, methodology, and practice. The course focuses on Japanese-to-English translation of a variety of sources, including newspaper articles, short stories, essays, social media posts, J-pop lyrics, business documents, and scripts from anime and drama.(MULT) Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**JAPA 4304. Advanced Japanese Grammar II.**

This course will build on skills learned in JAPA 3304 to further strengthen command of written Japanese through more advanced grammar topics, readings, and reports.(MULT) Prerequisite: JAPA 3304 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**JAPA 4310. Postwar Japanese Literature and Film.**

This course focuses on literature and film from the period after World War II in Japan in the context of postwar social, political, and cultural changes. (MULT) Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**JAPA 4320. Japanese Science Fiction.**

The course focuses on Japanese science fiction and its cultural contexts. (MULT) Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**JAPA 4330. Early Modern Japanese Literature & Culture.**

This course introduces students to literature, theater, visual arts, and other aspects of traditional culture of the Tokugawa era (1603-1867). Prerequisite: JAPA 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**JAPA 4390. Studies in Japanese Language and Culture.**

Students conduct an independent study project in Japanese language or culture. The course is recommended for students in their last year who have already completed at least one advanced course. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**LAT 1410. Beginning Latin I.**

Introduction to reading and writing skills in Latin with a Latin cultural framework. Students who take LAT 1410 toward degree requirements must also complete LAT 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** LATI 1411

**LAT 1420. Beginning Latin II.**

Continued practice in reading and writing skills in Latin within a Latin cultural framework. Students who take LAT 1410 toward degree requirements must also complete LAT 1420. (MULT) Prerequisites: LAT 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** LATI 1412

**LAT 2310. Intermediate Latin I.**

Introduction to complex grammatical structures and syntax of Latin. Focus on the application of the rules of grammar and syntax to the translation of original classical texts. Some attention given to the diction and written styles of individual authors. (MULT) Prerequisites: LAT 1420 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** LATI 2311

**LAT 2320. Intermediate Latin II.**

Continued acquisition of complex grammatical structures and syntax. Introduction to reading Latin poetry. Some attention given to meter and scansion as needed. (MULT) Prerequisite: LAT 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** LATI 2312

**LATS 2300. Introduction to Latina/o Studies.**

This course is an introduction to Latina/o studies, which includes an emphasis upon the historical origins, the demographic changes, and contemporary issues facing Latinas/os. It will focus on the development of Latina/o ethnicities, identities, and their impact in American society. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**LATS 4300. Independent Research in Latina/o Studies.**

This course is an independent study course in Latina/o Studies with readings, research, and tutorials for students pursuing projects outside the context of regularly offered courses. Students engage in learning about Latina/o Studies through readings, research, an oral presentation, and the creation of a bibliography approved by the instructor. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**LATS 4325. Latina/o Identities, Communities and Social Change.**

This course examines the social continuities, sociopolitical and geographic complexities, and diversities of Latina/os in the U.S. It focuses on crucial issues confronting Latinas/os such as the role of race, culture, identity, community development, and leadership practices influencing public policy. (MULT) Prerequisite: LATS 2300 with a minimum grade of a "C".

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**LS 5310. Introduction to the Paralegal Profession and Legal Technology.**

This course provides an introduction to the paralegal profession and law office technology, including the history of and current issues facing the profession, paralegal associations, paralegal regulation and certification options, paralegal ethics, and the skills necessary to become an effective paralegal, with an emphasis placed on legal technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5320. Legal Research.**

This course provides a study of the legal research process, including primary and secondary sources of law and related finding tools and legal citation rules; research using books and online tools; and provides a basic introduction to legal writing, including how to brief cases and prepare legal research memoranda.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5330. Legal Theories and Analysis.**

This course is a study of statutory and case law development of basic legal theory including tort theory, contract theory, and evidence theory. This course is intended to assist students in gaining knowledge of fundamental legal theory, reasoning, and analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5340. Litigation.**

This course is a study of statutory and case law relating to civil procedure in order to develop an understanding of litigation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5341. Administrative Law.**

This course deals with the origin, development, and theory of Administrative Law as well as the agencies and tribunals that administer the law. Emphasis is on enforcement, quasi-legislative and quasi-judicial powers of federal administrative agencies and state tribunals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5343. Family Law.**

This course examines Texas law, dealing with pre-marital contracts, marriage relationships, annulment, abortion, adoption, juveniles, Family Code, divorce, support for children, custody, and separation agreements.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5349. Business Organizations.**

This course is a study of the federal and Texas law relating to corporations with particular emphasis on the preparation of initial and amended articles of incorporation, satisfaction of state filing requirements, the drafting of employment agreements, and other activities necessary to the maintenance, merger, and the closing of corporations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5350. Legal Drafting.**

This course is a study of legal drafting styles, forms and techniques, including legal document drafting, objective, informative document drafting, and persuasive-style drafting of trial and appellate briefs. Prerequisite: LS 5320 with grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5351. Estates and Trusts.**

This course is the study of Texas laws relating to estates and trusts with emphasis on the preparation of documents regarding the administration of estates.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5353. Real Estate.**

This course is a study of Texas laws concerning real properties, conveyances, recordation, taxation, and sales regarding real property. Students are familiarized with various records dealing with real property maintained by public officials and develop an understanding of the procedures by which titles are searched. Repeatable with different emphasis for a maximum of 6 credit hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**LS 5359. Alternative Dispute Resolution.**

This course is an in-depth study of procedural and substantive legal principles of alternative dispute resolution. Emphasis will be placed on procedures and practical applications of negotiation, mediation, arbitration, and alternative adjudicative processes with integration of ethical and policy issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5360. Advanced Litigation.**

This course is a study of the use of the American legal system to resolve disputes between individuals and entities. Emphasis is on trial advocacy planning, analysis, preparation, and strategy. Students develop skills necessary to understand and to participate as an advocate in the trial process. Prerequisite: LS 5320 and LS 5340 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5361. Criminal Law and Procedure.**

This course is a study of the state and federal statutory and common law relating to the criminal justice system. This course includes the study of the criminal litigation process and procedure with emphasis on theory and practical legal assistant skill development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5363. Social Legislation.**

This course is a study of Texas and federal laws established by statute to remedy various social problems including worker's compensation, unemployment compensation, bankruptcy, and commercial transactions. This course includes a study of statutory and case law development. May be repeated with different emphasis for a maximum of 6 credit hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**LS 5370. Advanced Legal Research & Writing.**

This course has four components: (1) refinement of skills in computer-assisted and manual legal research; (2) legal analysis, legal writing, and organizing, complex legal documents; (3) techniques of persuasive argument; and (4) applied research project. Prerequisite: LS 5350 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5371. Intellectual Property Law.**

This course covers principal tenets of intellectual property, including trademarks, copyrights, patents, and trade secrets. Students analyze a wide variety of intellectual property issues, the impact of intellectual property in our current society, and the practical and theoretical concerns raised by the interplay of state and federal laws.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5373. Contract Law.**

This course is a study of contracts (e.g., real estate contracts, employment contracts; contracts for services; construction contracts; e-contracts); the common law and statutory law of contracts (e.g., Statute of Frauds; Uniform Commercial Code; Uniform Computer Information Transactions Act; Uniform Electronic Transactions Act), and contract drafting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LS 5380A. Texas Water Law.**

This course examines the chief legal issues that will determine the future of water policy in Texas, with a focus on how state and local agencies administer the state's ground and surface water legal regimes and regulatory framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**LS 5380B. Environmental Litigation.**

This course conducts an in-depth examination of researching, filing, and litigating claims under federal and state environmental statutes. The course focuses on the aspects of environmental litigation that make it different than its non-environmental counterparts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**LS 5388. Directed Reading and Research.**

This course is an advanced reading and/or research on various topics in legal studies under the direction of a graduate faculty member. May be repeated once with different emphasis and professor for a maximum of 6 credit hours. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**LS 5389. Law Office Internship.**

This course emphasizes problems, procedures, and ethics in the legal-working environment. Students are involved in internship consisting of approximately 10-15 hours a week to gain experience in the legal-working environment. Course is required unless the student has related experience and has, with program director permission, elected to take a practicum. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**LS 5399. Applied Research Project.**

This course is the applied research project for the Master of Arts in Legal Studies degree. Students work with the supervising instructor to complete an applied research project to submit for oral examination. Prerequisite: LS 5370 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LING 3301. Introduction to Translation.**

This course provides a foundation for translating various types of texts by building a conceptual framework for confronting practical problems that arise in translation and by introducing key principles and techniques of text analysis and translation strategies. Prerequisite: SPAN 2320 or FR 2320 or GER 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LING 4307. Foreign Language Acquisition.**

An introduction to the nature of language development and to the theories that describe foreign language acquisition and development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**LING 4390. Independent Study in Applied Linguistics and Language Learning.**

This course is generally open only to students with special needs. Students select a topic in line with their special interests and requirements. May be repeated once with different topic for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**LTCA 5302. Elder Abuse and Mistreatment.**

This course provides an introductory overview of key theories, concepts/principles, issues, practices and challenges in elder abuse and mistreatment (EA/M). Course content includes: definitions and theories, incidence and prevalence, risk/protective factors, assessment, prevention, intervention, factors affecting screening/reporting, and the impact of EA/M on victims, caregivers, family and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5305. Environmental Design for Dementia.**

The potential of the physical environment to play an active role in supporting independence, stimulation, and life quality for individuals with dementia will be explored in this course. Emphasis will be placed on principles behind environmental design and the importance of utilizing the physical environment as a therapeutic tool.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5322. Environmental Management in Long Term Care.**

Students will compare performance analyses of long-term care facilities with a focus on organizational culture, and internal and external customer satisfaction. Plans of managerial action to maximize customer satisfaction will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5323. Governance Management in Long Term Care.**

Focuses on regulations for the operation of long term care facilities as promulgated by state and federal governments. Reviews the minimum requirements for licensure and the standards for Medicaid certification in Texas. Also examines specific activities and functions regarding accountability and enforcement procedures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5324. Personnel Management in Long Term Care.**

An examination of management issues in long-term care primarily in the critical areas of human resources, public relations, and marketing. Examples include staff recruitment and retention programs, training needs analysis, and marketing plan formulation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5325. Resident Care Management in Long Term Care.**

Administratively oriented content related to nursing care, quality indicator, and geriatric pharmacology utilized in long term care facilities. The course content reflects the relative legislative requirements mandated for nursing homes and other long-term care facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5335. Financial Management in Long Term Care.**

Students will examine the fiscal performance of selected facilities utilizing data from annual Medicaid cost reports with a focus on revenue enhancement and census development. Students will contrast various systems for determination of reimbursement and use reimbursement issues in a strategic planning sense.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**LTCA 5681. Internship in Long Term Care.**

This course is an internship where the student works directly with an administrator in a licensed nursing facility and is exposed to aspects of facility operation and management. Students are required to complete 1,000 hours. To meet 1,000 hour licensure requirement, this course can be repeated up to two semesters.

**6 Credit Hours. 0 Lecture Contact Hours. 24 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MGT 3301. Introduction to Management.**

This course is an introductory course in management for non-business majors. The course is a fundamental study of management practices in modern organizations. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 3303. Management of Organizations.**

A study of management functions in modern organizations, the internal and external environmental factors affecting organizational efficiency, and the application of quantitative and behavioral science to management study. Prerequisite: A minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 3353. Business Communication.**

This course provides an introduction to the uses of communication in business and focuses on communication models, general semantics, effective writing style, selection and organization of content and medium(s), effective oral communication, employment communication, and causes of miscommunication. Students will not receive credit for both MGT 3353 and MGT 3453. (WI) Prerequisites: ENG 1310 and [ENG 1320 or ENG 1321] and [COMM 1310 or COMM 2338 or COMM 2315] all with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 3360. Studies in Entrepreneurship.**

Students gain personal insights into entrepreneurship as entrepreneurs describe their contributions, reveal the sources of ideas, and discover ways of growth and success. Includes starting and managing businesses as well as ownership forms, sources of funds, location analysis, facility requirements, management, marketing, and feasibility plans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 3361. Small Business Operations and Financials.**

This course is a study of funding and financial concepts necessary to effectively operate a successful small business. Students will use software programs to maintain working capital and a complete set of books related to running businesses. Prerequisite: ACC 2301 or ACC 2361 either with a grade of "D" or better. Corequisite: MGT 3360 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 3362. Family Business and Franchising.**

This course addresses the important and unique management aspects of family businesses and franchises. Family business topics include family culture, communication, conflict resolution, succession, and estate planning. Franchising topics include franchise selection, contracts, legal issues, and current trends in franchising. Issues affecting both the franchisee and the franchisor are explored. Prerequisite: MGT 3361 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 3375. International Business.**

International business perspectives underlying different business functions. Concepts, processes, and philosophical bases for international operations in selected global markets are emphasized with culture and global dynamic environment as the basis. A project is required. (MULT) (WI). Prerequisite: MGT 3303 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 3453. Business Communication and Professional Development.**

This course is designed to enhance critical professional skills including interviewing, networking, teamwork, emotional and cultural intelligence, public speaking, and applicable ethical considerations. It introduces theories of business communication including communication models, general semantics, and causes of miscommunication. Students will not receive credit for both MGT 3453 and MGT 3353. (WI) Prerequisites: ENG 1310 and [ENG 1320 or ENG 1321] and [COMM 1310 or COMM 2338 or COMM 2315] all with grades of "D" or better and a 2.0 overall GPA.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4330. Operations Management.**

A study of the various aspects of managing production and operations management functions in manufacturing and service organizations. Methods necessary for analyzing and solving related problems to design, operations, and improvements of the systems that create products and/or services in a global supply chain environment are investigated and emphasized. Prerequisite: MGT 3303 and [IE 3330 or QMST 2333 or TECH 3364 or MATH 2328] both with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4335. Strategic Management and Business Policy.**

An integrative course in strategic management and business policy that utilizes the case method of instruction. A capstone course involving the analysis of business through the application of principles of accounting, communications, economics, finance, management, marketing, quantitative methods, and related disciplines. (Capstone Course) (WI) Prerequisite: MGT 3303 and MKT 3343 and FIN 3312 and [QMST 2333 or MATH 2328] all with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter



**MGT 4340. Quality Management and Beyond.**

A conceptual and practical overview of the role of quality as a system for establishing a "world class" competitive position. It explores philosophies and ideas of the leading thinkers in quality management, impact of process improvement methods, quality requirements definition and organizational change as it applies to total quality initiatives. (WI) Prerequisite: [QMST 2333 or MATH 2328] with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4350. Business Plan Development.**

Students work in teams to select, create, and write solid business plans for proposed or real businesses. Prerequisite: MGT 3361 with a grade of "D" or better. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4351. Applied Entrepreneurship.**

Students design, staff, operate, and manage a business or service. Business teams develop financial and operational control systems and procedures for organizational, group, and individual performance evaluations, implement service and business projects, and provide a final public report. Prerequisite: MGT 4350 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4353. Integrative Field Project.**

Students work directly with entrepreneurs to research projects and recommend solutions. May involve providing business development assistance to entrepreneurs. Students may work individually or in teams. Project results are summarized in a comprehensive written report and a formal oral presentation. Prerequisite: MGT 3360 with a grade of "D" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4370. Business Ethics.**

This course examines a variety of ethical issues in business from the point of view of practicing manager and corporate leaders. This course is designed to enhance moral awareness and facilitate individual development with respect to making ethical decisions that contribute to effective corporate management and leadership. Prerequisite: MGT 3303 and PHIL 1320 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4371. Business, Government, and Society.**

An integration of a number of disciplines and value systems which affect and determine the proper role of business in satisfying the needs of customers, creditors, community, government, stockholders, managers, employees, suppliers, and society in general. (WI) Prerequisite: MGT 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4372. Effective Leadership.**

This course facilitates the development of leadership capabilities and addresses the complexities, paradoxes, and decision-making challenges of leadership. Through self-assessments, readings, lectures, and assignments students gain an appreciation of effective leadership approaches and are provided with opportunities to practice new leadership behaviors. Prerequisite: MGT 3303 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4373. Human Resource Management.**

A study of the principles of human resource management in public and private institutions. Stresses the human resource aspects of recruitment, selection and placement, performance appraisal and compensation. Prerequisite: MGT 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4375. Organizational Behavior and Human Relations.**

A study of the role of the individual in formal organizations, group dynamics, motivation theory, communication and leadership. Integrates behavioral science concepts. Prerequisite: MGT 3303 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4377. Labor Relations and Collective Bargaining.**

A study of unions and their impact on private and public employment. Examines union growth and governance, collective bargaining, contract negotiation and administration, and arbitration and mediation. Prerequisite: MGT 4373 with a grade of "D" or better. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4378. Training and Development.**

This course is designed to develop theoretical and applied perspective on needs assessment, design, development, delivery and evaluation of training and development in organizational contexts. Prerequisites: MGT 4373 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4379. Organizational Staffing.**

A study of current theory and practice in the process of selecting the right employees for positions within the organization, including HR planning, EEO, job analysis, recruitment, and selection procedures. Prerequisite: MGT 4373 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4380. Compensation Management.**

A study of the compensation administration in public and private organizations, with stress on the determinants of general wage levels; job analysis and evaluation; incentive, merit, seniority, and executive compensation; fringe benefits, and wage and salary control. Prerequisite: MGT 4373 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4382. Leadership Development: Business as Unusual.**

This course is a directed study and practical application of the principles of "Business as Unusual." Students will develop leadership skills through an intensive, highly interactive class format. Students will be paired with upper-level business professionals for one-on-one coaching and mentoring. Prerequisite: MGT 3303 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4385. Management Thought: Past, Present, and Future.**

This course examines how thinking about management has developed over time. It discusses changing social, political, and technological forces challenging managers to think in new ways. Significant management ideas will be examined in their contexts for the purpose of better understanding how to successfully manage for the future. Prerequisite: MGT 3303 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4386. Professional Skills for the Global Workplace.**

This course provides a survey of relevant skills necessary for workplace communication in an international work setting. Through discussions, site visits, and application activities, students will leave the course with an understanding and ability to apply these skills in their careers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4390A. Advanced Business Communication.**

An advanced study of the uses of business communication in modern organizations. Students gain experience in making decisions involving selection and organization of communication content, and in choosing an appropriate medium for presentation of information. Emphasis is placed on gaining proficiency in various business communication processes. (WI) Prerequisite: MGT 3303 and MGT 3353 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MGT 4390G. Cross-Cultural Human Relations.**

This course is designed to develop theoretical and applied perspectives on cross-cultural human relations within a variety of international business contexts. (MULT) Prerequisite: MGT 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**MGT 4390J. Organizational Change & Decision-Making.**

This course presents an overview of the change process and stresses the key decision-making issues involved in reengineering and renewing organizations. Problems dealing with resistance and conflict during major change will be explored. Key decision processes for individuals, teams, and organizations are provided to make change possible and sustainable. Prerequisite: MGT 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**MGT 4390K. Business Creativity and Innovation.**

Focuses on the importance of creativity and innovation to business organizations. Topics include the generation of creative ideas, transformation of ideas into commercially viable products/services, legal protection of new products/services, and environmental factors contributing to innovation success. Course objectives are met primarily through classroom discussion and exercises. Prerequisite: MGT 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**MGT 4390R. Transformative Leadership for Nonprofits (NPs) and Non-Governmental Organizations (NGOs).**

This course provides a practical and strategic understanding of the legal, management and marketing challenges facing nonprofit and non-governmental organizations and the transformative leadership required to guide them as they attempt to do something positive for people, society and/or the environment beyond or between the roles of government and business.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**MGT 4390S. Business Contracts/Negotiation.**

This course focuses on techniques for the development and strategic planning required for successfully negotiating business contracts, negotiation skills, and conflict resolution issues/techniques. Prerequisite: MGT 3303 with a grade of "D" or better. Corequisite: MGT 4373 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**MGT 4390T. Effective Teams and Groups.**

An examination of and the consequent development of those skills necessary to effectively manage and increase the productivity of task-oriented groups and teams. Issues, problems, and concepts frequently encountered are addressed, as well as possible solutions. Prerequisite: MGT 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**MGT 4390U. Management for Sustainability.**

This course is designed to take a broad look at Sustainability from both Ecological and Managerial perspectives with a goal of developing an awareness and understanding of the major issues and shifts that today's organizations and societies are facing as they undertake their journey to become more sustainable. Prerequisite: MGT 3303 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Topics

**Grade Mode:** Standard Letter

**MGT 4392. Human Resource Management Internship.**

This course integrates professional and academic experience through internship with an external employer. Prerequisites: MGT 4373 with a grade of "D" or better and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4393. Entrepreneurial Internship.**

The internship class provides integration of prior professional and academic experience through an entrepreneurial internship with an external employer. Prerequisite: MGT 3360 with a grade of "D" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4395. Management Internship.**

This course provides an integration of professional and academic experience through internship with an external employer. Credit is pass/fail or grade at department election. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 4399. Independent Study in Management.**

Directed research and extensive written assignment(s) on a selected topic related to student's area of interest. Work may consist of literature reviews, integration of literature, or other appropriate independent research, and/or practical application of research. May be repeated once with different emphasis for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MGT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5301. Graduate Assistant Development.**

Completion of this course is required as a condition of employment for graduate assistants. The course is seminar based and covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MGT 5310. Organizational Change Management.**

Presents an overview of the process of change in an organization and stresses the key issues involved in reengineering and renewing organizations. Problems dealing with stress and conflict during major change will be explored along with practical ideas on building effective teams to make change possible and sustainable.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5311. Process Improvement Management in Organizations.**

Learn existing and latest developments in process improvement techniques for continuous improvement and the role of quality as a system for establishing an organization's competitive advantage. Process mapping is emphasized and assessment of effectiveness in the interactions of the managerial and technical systems of organizations is also studied.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5312. Seminar in Management.**

Development of philosophy, strategy, and tactics in managing an enterprise. Administrative processes common to all enterprises, such as entrepreneurship, business and society, leadership and group behavior in organizations, business ethics, and international management. (Course may be repeated for credit with different course focus.).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5313. Strategic Management.**

An integrative approach to policy formulation and administration (decision making) to achieve organization objectives. Should be taken the last semester of student's MBA program. Prerequisite: ACC 5361 and FIN 5387 and MKT 5321 and QMST 5334 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5314. Organizational Behavior and Theory.**

Organizational behavior and structure as influenced by environmental variables and system relationships. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5315. New Venture Management.**

This course provides an overview of the entrepreneurial process from the initial idea through start-up, growth, and harvest. Students learn how to write a business plan, manage all the elements of an entrepreneurial business, and develop a better understanding of the requirements of the entrepreneurial life path.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5318. Cross-Cultural Management.**

The global environment requires sensitivity to and the adaptation of leadership and management skills and practices, and the culture-bound differences in workplace behavior and attitudes. Explores how differences in cultural core values shape behavior and attitudes of workers, managerial colleagues, and negotiating partners. (MULT) Prerequisites: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5321. Supply Chain Management.**

A variety of tools and frameworks provide students and understanding of the basis behind supply chain decision making. Topics include supply management concepts, demand-supply management, pull/push system, capacity and resource allocation, performance measurement, relationship assessment, and outsourcing in an integrated supply chain. Require graduate standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5325. Managing Business Creativity.**

This course focuses on the means by which businesses and individuals foster and maintain their creative and innovative skills. Key topics include: idea generation and refinement, idea screening, prototype development, and feasibility analysis. Objectives are met through classroom exercises, case analysis, guest speakers, and individual and team projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5330. Seminar in Human Resource Management.**

A study of current developments and practices in human resource management, including employment laws; planning, recruitment and selection; training and development programs; wage and benefits administration; performance management, human relations and productivity; labor relations; safety and health; and current contributions to human resource management theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5333. Problems in Business Administration.**

The student is here given the opportunity to work in the field of his special interest, particularly in the subjects of accounting, business law, marketing, statistics, finance, and insurance. The course will be conducted by conferences between the student and instructors concerned. Problems will be assigned as nearly as possible for the needs of the individual student.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5335. New Venture Launch.**

The purpose of this class is to ensure students gain a full understanding of what it takes to start and grow a business. Students learn the process of creating a new venture from the inside by planning, organizing and launching an actual business. Prerequisite: MGT 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5336. Compensation and Benefits.**

This course addresses the rewards systems in organizations. Strategic and technical considerations in designing, administering and managing compensation and benefits plans in organizations, including job analysis and evaluation, wage levels and structures, legal issues, individual and group incentives, and benefits are considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5337. Organizational Staffing.**

A study of the methods involved in recruitment and selection of employees with an emphasis on measurement, job analysis, performance appraisal, legal issues, and the role of human resource planning and strategy. This course relies on statistics to teach students to make reliable and valid employment decisions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5338. Human Resource Development.**

A study of theoretical and applied perspectives on needs assessment, design, development delivery and evaluation of training and development as well as organizational change and development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5339. International Human Resource Management.**

A study of challenges that decision makers consider when managing their human resources across the globe. Drawing on theories and models from cross-cultural and international management areas, this course covers such topics as globalization, culture, emerging international assignments, and expatriate recruitment, selection, training, repatriation, and career management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MGT 5380A. Business Ethics Leadership.**

This course examines a variety of ethical issues in business from multiple stakeholder perspectives (top management, employees, community members, etc.). The course is designed to enhance moral awareness and facilitate individual development with respect to making ethical decisions that contribute to effective corporate management and leadership.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MGT 5380C. Group Dynamics in Organizations.**

This course explores the theoretical framework of group interactions as well as the practical workplace challenges associated with organizing, participating on, and managing teams and groups. It addresses the development and use of teams to improve business organizations and is recommended for graduate students preparing for business careers.

Prerequisite: B A 5351 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380D. Labor Relations and Negotiation.**

This graduate level course is a study of labor organizations and their impact as well as negotiation and conflict resolution issues. The course will examine the National Labor Relations Act (NLRA), union and employer rights under the NLRA, union organizing, collective bargaining, negotiation, contract administration, mediation and arbitration.

Corequisite: MGT 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380E. International Leadership.**

Course will include lectures, business engagements, cultural excursions, and a service-learning project. To reinforce the theories discussed in class students will interact directly with managers, employees, and international business professionals, learn perspective on cultural and leadership issues. Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**MGT 5380F. Management for Organizational Sustainability.**

This course is designed to take a broad look at Sustainability from both Ecological and Organizational perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5380G. Artificial Intelligence (AI) for Business Managers.**

This course provides a basic foundation in artificial intelligence for students of the business school by introducing a means to make economically sound decisions regarding the implementation areas. In this course all students of the business school may implement small projects in the functional disciplines of the business school (e.g. marketing, finance, etc.). It could also be of interest for students of the School of Engineering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MGT 5390. Managerial Data Analysis.**

Designed to prepare managers to make more effective decisions based upon evidence from data analysis. Covers all elements of the general linear model from t-tests to multiple regression analysis. Involves acquiring and analyzing data for prediction and explanation, developing reports with actionable recommendations, and communicating results for managerial decision-making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5391. Managing the Communication Process.**

The study and application of theory and psychology of managerial communication using written, oral, and technological modes to communicate within the business environment. The course includes the process and product approach to graphics, leadership, problem solving, prioritizing, interviewing, and communicating change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5395. Graduate Business Internship.**

Integration of professional and academic experience through internship with an external employer. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MGT 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in MGT 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MGT 7314. Organizational Behavior and Theory.**

This course focuses on organizational behavior and structure as influenced by environmental variables and system relationships. Topics include personality, motivation, teams, and leadership. These key concepts and others such as perception, emotions, and culture act interdependently, are influenced by, and in turn influence the environment in which the system operates.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 2132. Manufacturing Lab 1: Manufacturing Process and Digital Engineering.**

In this lab, students get hands-on experience in reading CAD drawing standards, lab safety, machine tools operation, welding, plastics and composites manufacturing, mechanical testing, and the use of Excel spreadsheets and functions in solving practical problems. Corequisite: MFGE 2332 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 2332. Material Selection and Manufacturing Processes.**

This course provides an overview of material processing, material selection, and process parameter determination. Processes covered include material removal, forming, casting, polymer processing, semiconductor manufacturing, and assembly. Corequisite: ENGR 1304 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 3116. Manufacturing Lab 2: Computer Aided Design and Manufacturing.**

In this lab, student conduct hands-on experiments on digital manufacturing processes including 2D and 3D CNC machining, additive manufacturing, laser cutting, and waterjet cutting. Corequisite: MFGE 3316 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 3316. Computer Aided Design and Manufacturing.**

This course introduces Computer Aided Design and Manufacturing (CAD/CAM), design process, description of wireframe, surface, and solid models, transformation and manipulation of objects, data exchange, process planning, and machine elements. Topics include fundamentals of computer numerical control (CNC) programming for turning and milling processes, fundamentals of Computer Aided Design and Manufacturing (CAD/CAM) systems, and CNC code generation by CAD/CAM software for 2D and 3D operations on CNC machines. Prerequisites: ENGR 1304 and ENGR 2300 and MFGE 2332 with grades of "D" or better. Corequisites: MATH 2471 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4176. Manufacturing Lab 3: Intelligent Robotics and Control.**

In this lab, students conducting hands-on experiments on intelligent robotics, control system and instrumentation including industrial robot applications, PLC control systems, PID control systems, sensors and devices Prerequisite: ENGR 3373 with a grade of "D" or better. Corequisite: MFGE 4376 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4315. Energy and Thermofluids Engineering.**

This course covers core engineering concepts of energy and thermofluids based on fluid mechanics, thermodynamics, and heat transfer. The main topics include properties of pure substances, fluid statics and dynamics, differential analysis of fluid flow, viscous flow in pipes, external flows, open channel flows, mass and energy analysis of control volumes, first and second laws of thermodynamics, steady-state and transient conduction, internal and external forced convection, natural convection, and fundamentals of radiation. Prerequisite: MATH 3323 and PHYS 2326 and PHYS 2126 with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4318. Additive Manufacturing.**

In this course CAD standards, development of additive manufacturing technology, photopolymerization, powder bed fusion, extrusion-based systems, printing processes, sheet lamination processes, beam deposition processes, design for additive manufacturing, and safety considerations in a hands-on approach will be explained. The concept learned from this course will help students manage large systems or complex infrastructures in a more efficient and sustainable way. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4355. Design of Machine Elements.**

This course will cover the general procedures in designing various machine elements. These elements include shafts and flexible elements, springs, welded/riveted/brazed joints, screw fasteners, rolling/sliding contact bearings, gears, cams, and followers. Emphasis will be placed on using standard design practices. Prerequisite: ENGR 3311 or TECH 2351 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4357. Dynamics of Machinery.**

This course will cover kinematics and kinetics of particles; kinematics and kinetics of rigid bodies in two and three dimensions; application of dynamics to the analysis and design of machine and mechanical components; mechanical vibrations; linkages; gear trains; and balancing of machines. Prerequisite: [ENGR 2301 or ENGR 3375] and MATH 3323 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4363. Concurrent Process Engineering.**

Integrated design and development of products and processes; impact of ethical issues on design; the discussion of real-world engineering problems and emerging engineering issues with practicing engineers; preparation of reports; plans or specifications; cost estimation; project management, communication and the fabrication of an engineered product/system. (WI) Prerequisites: ENGR 3311 and MFGE 4365 both with grades of "D" or better. Corequisites: IE 3330 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MFGE 4365. Tool Design.**

Design of single and multi-point cutting tools, jig and fixture design, gage design, and the design of tooling for polymer processing and sheet metal fabrication. Laboratory projects will involve the use of computer aided design and rapid prototyping. Prerequisite: MFGE 3316 or TECH 2310 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**MFGE 4367. Polymer Properties and Processing.**

Structure, physical & mechanical properties, design considerations and processing methods for polymer-based materials are presented. Processing methods include: injection molding, blow molding, thermoforming, compression molding, extrusion, filament winding, lay-up methods, vacuum bag molding and poltrusion. Prerequisite: MFGE 2332 or TECH 4362 or ME 3361 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4376. Control Systems and Instrumentation.**

This course covers the theory of automated control systems and its application to manufacturing systems. Topics include modeling of systems, time and frequency domain feedback control systems, stability analysis, transducer and sensor technology, and digital control. Prerequisite: ENGR 2300 and PHYS 2325 and PHYS 2125 and [EE 3370 or MFGE 2332 or TECH 4362] all with grades of "D" or better. Corequisite: MATH 3323 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4377. Introduction to Polymer Nanocomposites.**

This course introduces reinforced polymer nanocomposites, focusing on materials, manufacturing, characterization, and applications. Topics include primarily nanoclay polymer matrix composites. The course will emphasize challenges in low-cost manufacturing for industrial applications, commercial successes, and impact on current and future materials market. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4378. Introduction to Industrial Robotics.**

This course covers the basic principles and techniques involved in industrial robotics. Emphasis is on industrial robot applications, analysis of robot manipulators, components of industrial robots, robot programming and control. Prerequisite: MFGE 4376 or [ME 3351 and ME 3151] with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4390. Manufacturing Engineering Design I.**

This course is the first of a two course sequence involving integrated design and development of products and processes, impact of ethical issues on design, the discussion of real-world engineering problems and emerging engineering issues with practicing engineers, preparation of reports, plans and specifications, cost estimation, project management, and communication. Prerequisites: ENGR 3311 with grades of "D" or better. Corequisite: IE 3330 and MFGE 4365 both with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**MFGE 4391. Manufacturing Engineering Design II.**

This course is the second of a two course sequence involving implementation of Integrated design and development of products and processes; impact of ethical issues; the discussion of real-world engineering problems and emerging engineering issues with practicing engineers; preparation of reports, plans and specifications; cost estimation; project management; and communication. Prerequisites: IE 3330 and MFGE 4390 both with grades of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**MFGE 4392. Microelectronics Manufacturing I.**

This course provides an overview of integrated circuit fabrication including crystal growth, wafer preparation, epitaxial growth, oxidation, diffusion, ion-implantation, thin film deposition, lithography, etching, device and circuit formation, packaging and testing. The laboratory component involves production and testing of a functional semiconductor device. Prerequisites: CHEM 1341 or CHEM 1335 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**MFGE 4394. Microelectronics Manufacturing II.**

This course covers topics including atomic models for diffusion, oxidation and ion implantation; topics related to thin film processes i.e. CVD, PVD; planarization by chemical-mechanical polishing and rapid thermal processing; and process integration for bipolar and MOS device fabrication. Students will design processes and model them using a simulation. Prerequisite: EE 4392 or MFGE 4392 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MFGE 4395. Computer Integrated Manufacturing.**

This course is an overview of computer integrated manufacturing in the digital world. Topics include control strategies for advanced manufacturing, automated testing, distributed manufacturing, automated material handling systems, manufacturing databases and their integration, and man/machine interfaces. (WI) Prerequisites: MFGE 3316 and [CS 1428 or CS 1342] with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MFGE 4396. Manufacturing Systems Design.**

Applications of simulation modeling to the design and analysis of manufacturing systems are presented in this course. Topics covered include queuing theory and discrete event simulation methods. Design projects will involve the use of current simulation language for modeling and analysis of manufacturing systems. (WI) Prerequisite: IE 3320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MFGE 4399C. Introduction to Industrial Robotics.**

This course will cover the basic principles and techniques involved in industrial robotics. Emphasis will be placed on industrial robot applications, analysis of robot manipulators, components of industrial robots, robot programming and control. Prerequisite: MFGE 4376 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**MFGE 5315. Energy and Thermofluids Engineering.**

This course covers core engineering concepts of energy and thermofluids based on fluid mechanics, thermodynamics, and heat transfer. The main topics include properties of pure substances, fluid statics and dynamics, non-Newtonian fluid, differential analysis of fluid flow, viscous flow in pipes, external flows, boundary layer, open channel flows, mass and energy analysis of control volumes, first and second laws of thermodynamics, steady-state and transient conduction, internal and external forced convection, natural convection, fundamentals of radiation, and mass transfer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5316. Advanced Computer Aided Design and Manufacturing.**

Topics include design process, mathematical presentation of wireframe/surface/solid modes, transformation and manipulation of objects, finite element analysis, data exchange, process planning, fundamentals of multi-axis NC programming for turning and milling processes, fundamentals of CAD/CAM systems, CNC code generation by CAD/CAM software for the CNC, and waterjet machines. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5318. Additive Manufacturing.**

In this course CAD standards, theory, techniques, applications, and development of additive manufacturing technology, photopolymerization, powder bed fusion, extrusion-based systems, printing processes, sheet lamination processes, beam deposition processes, design for additive manufacturing, and safety considerations in a hands-on approach will be explained. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5320. Polymer Nanocomposites.**

This course covers polymer nanocomposites focusing on materials, manufacturing, characterization, and applications. The primary focus is on fiber reinforced polymer nanocomposites. Morphological, Thermal, Mechanical, and Electrical Characterization will be discussed in detail. Applications include fire-resistant, ablative, fatigue-resistant, impact-resistant, and bio-based composites. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MFGE 5326. Advanced Robotics in Manufacturing Automation.**

This course covers principles and techniques involved in advanced robotics. Topics include introduction to robotics, industrial robotics, robot kinematics, path planning, robot dynamics, advanced control, force control, sensors and actuators, mobile robotics, and introduction to nanorobotics. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5330. Multiscale Manufacturing.**

This course covers the multiscale manufacturing processes, techniques, and applications. Topics include micro and nano-manufacturing, polymer and semiconductor fabrication, thin film technologies, bulk and surface micromachining, physics of multiscale manufacturing, microelectromechanical (MEMS) devices, and design issues for fabrication of micro and nano-systems. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MFGE 5398B. Advanced Composite Materials.**

This course examines various aspects of fiber-reinforced polymeric composites. The topics covered include constituent materials (fibers and matrices), mechanics, performance, manufacturing, and introduction to nanocomposites. This course also provides introductory treatments concerning ceramic matrix composites, metal matrix composites, and carbon/carbon composites.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MKT 3340. Entrepreneurial Marketing.**

Entrepreneurial Marketing is the primary means of fast growth. Students learn to identify and develop the most efficient ways to grow a business with a toolkit of new marketing practices that can help startups and emerging firms gain a foothold in crowded markets. This course is appropriate for the students who have an entrepreneurial mindset, which is a way of thinking or set of skills that enable people to identify and make the most of opportunities, overcome and learn from setbacks, and succeed in various settings. Prerequisite: MKT 3343 and [QMST 2333 or MATH 2328] both with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3343. Principles of Marketing.**

This course studies the strategic marketing process, which creates value for consumers and organizations through integrated production and distribution of products. It examines the marketing process in the context of the global, cultural, economic, legal/regulatory environment. It also examines ethical and socially-responsible marketing and the impact of information technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3350. Consumer Behavior.**

A study of the role of the consumer in marketing. Considers the motivation, personality, attitudes, perceptions, lifestyle, and decision-making processes of consumers. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3355. Retailing.**

A study of the principles of retail store management, including market and trade area analysis, store location and design, organization and operation management, merchandising, inventory control, and promotion and pricing policies. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3358. Professional Selling.**

A study of the professional selling process including strategically planning sales calls, strengthening communication skills, responding helpfully to objections, obtaining commitment and building partnerships. Examines cultivating committed relationships, strategic alliances, and partnering skills to provide total sales quality to the company, suppliers, and customers. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3360. Sales Management.**

A study of issues related to planning for, managing, motivating, directing, and controlling a sales force and related sales territories. Both international and domestic perspectives are addressed. Special emphasis is given to the efficiency (cost consideration) and effectiveness (satisfaction consideration) of sales management. Prerequisite: MKT 3358 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3362. Studies in Free Enterprises.**

The course will focus on developing goal setting, project identification, project planning and management, marketing, financing, and implementing student directed educational programs. The projects are aimed at increasing citizen awareness and understanding of business and economic issues. (WI) Prerequisite: MKT 3343 with a grade of "D" or better and a minimum 2.0 overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MKT 3365. Services Marketing.**

The services sector dominates the U.S. economy and is becoming critical for competitive advantage in companies across the globe and in all industry sectors. This course examines the foundations of services marketing, which are necessary to create, promise, and deliver a successful, interactive customer experience. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3370. Marketing Research.**

This course offers a comprehensive study of marketing research process that includes formulating a problem, developing a research plan, determining a sample, analyzing data, preparing a research report, and linking the consumer, customer, public, and marketer through information. Prerequisite: MKT 3343 and [QMST 2333 or MATH 2328] both with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter



**MKT 3375. Marketing for Social Change.**

This class uses marketing principles and techniques to influence a target audience to voluntarily accept, reject, modify, or abandon a behavior for the benefit of individuals, groups, or society as a whole. In this hands-on course students develop and implement marketing campaigns for social change on behalf of non-profit clients. (WI) Prerequisite: MKT 3343 and MKT 3350 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MKT 3380. Sports Marketing.**

Examines four components of sports marketing, including: (1) the foundation of sports marketing, (2) marketing through sports, including sponsorship, endorsement, and licensing strategies, (3) the marketing of sports, including marketing mix strategies, and (4) emerging topics in sports marketing, including relationship marketing, technology, and controversial issues. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3385. Ethnic and Niche Marketing.**

The course introduces students to marketing approaches used to understand and market products/services to U.S. ethnic and/or subgroups of consumers. The course includes consumer behavior and research techniques as well as implications to the marketing mix. Prerequisite: MKT 3350 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3387. Digital Marketing.**

Introduces methods for dynamically and directly reaching customers using digital promotion methods. Through discussion of digital marketing concepts and hands-on projects and assignments, students explore how website design, search engine optimization, paid search, digital display advertising, email marketing, and social media can be utilized to achieve desirable marketing outcomes. Prerequisite: MKT 3343 and [ANLY 2333 or MATH 2328] both with a grade of "C" or better and minimum 2.0 GPA overall.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 3390. Marketing Health Care.**

A study of marketing and its role in health care, including buyer and service provider behavior, relevant marketing principles and strategies, and emerging topics, such as medical tourism, universal health care, and health care regulations. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4310. International Marketing.**

A study of the international planning and coordination of marketing functions, marketing policies, and the analysis of marketing on an international scope including environmental and cultural aspects. (MULT). Prerequisite: MKT 3343 with a grade of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Multicultural Content

**Grade Mode:** Standard Letter

**MKT 4315. Service Design.**

Service Design involves the planning and organizing of people, infrastructure, communication, and material components of a service in order to improve its quality and the interaction between service providers and customers. This course aims to provide hands-on experience that will enable students to develop competences in service design. Prerequisite: MKT 3365 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4325. Advanced Topics in Service Marketing.**

This class is a comprehensive study of services marketing theories, concepts, and strategies; it includes an examination of cost controls, research methodologies, branding, customer service innovation, consumer behavior, and service delivery. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4330. Promotional Strategy.**

Analysis of promotional methods used in marketing and their relation to other business functions. Examines advertising, selling, and sales promotion. Prerequisite: MKT 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Multicultural Perspective

**Grade Mode:** Standard Letter

**MKT 4337. Marketing Management.**

An integrative course that applies management concepts and techniques to the solution of marketing problems. Analyzes market segments and product positioning, product and product line price, channels of distribution, and promotion. (WI) (MULP) Prerequisite: [QMST 2333 or MATH 2328] and MKT 3343 and six additional hours of marketing courses all with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin|Multicultural Perspective|Writing Intensive

**Grade Mode:** Standard Letter

**MKT 4340. Marketing Analytics Foundations.**

The course explores data analysis techniques that are applied to real-world business problems. Students will learn how to analyze business data and how to make strategic decisions. In addition, students will learn how to monitor and predict marketing and sales metrics and how to turn data into actionable plans. Through discussions of marketing concepts and hands-on projects and assignments, students will learn how to use analytics to create positive organizational outcomes. Prerequisite: MKT 3343 and [ANLY 2333 or MATH 2328] both with grades of "C" or better and a minimum 2.0 overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4341. Marketing Data Visualization.**

This course delves into the role of data visualization in modern marketing. Students will use the industry's top data visualization tools to analyze and present marketing metrics for actionable insights. We'll tackle best practices for organizing and presenting data using real-world scenarios. All course materials, assignments, and projects will be conducted in cutting-edge, highly demanded data visualization platforms, giving you the skills needed to tell compelling, data-driven stories. By the end of the course, you'll be adept at understanding your data, crafting clear visual narratives, and effectively communicating your findings to a target audience—all through the use of data graphics. Prerequisite: MKT 3343 and [ANLY 2333 or MATH 2328] both with grades of "C" or better and a minimum 2.0 overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4392. Sales Internship.**

This course integrates professional and academic experience through internship with an external employer. Credit awarded as pass/fail or grade at departmental election. Prerequisites: MKT 3343 and MKT 3358 both with grades of "D" or better and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4393. Services Marketing Internship.**

This course integrates professional and academic experience through internship with an external employer. Credit awarded as pass/fail or grade at departmental election. Prerequisites: MKT 3343 and MKT 3365 both with grades of "D" or better and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4395. Independent Study in Marketing.**

Directed research and extensive written assignment on a selected topic related to student's area of interest. Work may consist of literature reviews, integration of literature, or other appropriate independent research. May be repeated once for credit with different emphasis. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Writing Intensive

**Grade Mode:** Standard Letter

**MKT 4396. Directed Study in Professional Sales.**

Directed study and research in selected professional sales topics. May be repeated for credit with a different emphasis. Prerequisite: MKT 3343 and MKT 3358 both with grades of "D" or better and a minimum 2.0 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 4397. Directed Study in Marketing.**

Directed study and research in selected marketing topics, including the development of a promotional or marketing plan. Course can be offered as individual instruction or as an organized class. Repeatable for credit with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Business Admin|Dual Enrollment Permitted

**Grade Mode:** Standard Letter

**MKT 4399. Marketing Internship.**

Integration of professional and academic experience through internship with an external employer. Credit is awarded as pass/fail or grade at departmental election. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Business Admin

**Grade Mode:** Standard Letter

**MKT 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5321. Marketing Management.**

A study of the planning and coordination of marketing functions, marketing policies, and the analysis of marketing administration.

Prerequisite: B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5322. Marketing Research Methods.**

An advanced study of the marketing research process to include problem formulation, determination of sources of information and research design, design of data collection forms, design of the sample, collection of the data, analysis and interpretation of the data, preparation of the research report, and oral presentation of the research findings.

Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5323. Qualitative Research in Marketing.**

This course examines qualitative methods as used in marketing and market research. Topics include the design and execution of qualitative research projects using various qualitative methodological approaches.

Activities include application of qualitative methods for conducting research. Students will apply learning in a qualitative research project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5330. International Marketing.**

An application of marketing concepts to the global business environment. Examines marketing in the light of international economic, social, cultural, business, and environmental factors. Prerequisite:

B A 5351 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5331. Integrated Marketing Communications.**

An analysis of consumer behavior in the marketplace and its application to the preparation and presentation of a complete integrated marketing communications plan for a local, regional, and/or national client.

Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5335. Services Marketing.**

Services dominate the U.S. economy and are becoming critical for competitive advantage in companies across the globe and in all industry sectors. This course examines the foundations of services marketing, which are necessary to create, promise, and deliver a successful, interactive customer experience. Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5340. Digital Marketing.**

This course examines marketing strategies in the digital environment. It examines the latest technology and analytical tools used in e-marketing and e-commerce, including online advertising, mobile marketing, social media marketing, search marketing, email marketing, and web analytics.

Prerequisite: MKT 5321 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5341. Social Media Marketing and Analysis.**

This course provides a conceptual foundation and practical approach for conducting social media analysis and developing a social media marketing plan and/or campaign will be presented. Students will gain hands-on experience using social media strategically to achieve desired marketing goals through a hands-on project. Students will also earn applicable digital marketing certifications. Prerequisite: MKT 5321 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5345. Marketing Analytics.**

This course is a study of the scientific approach that connects customer data and competitive information to drive marketing decision-making. The course explores customer data analysis techniques and their theoretical foundations that are applied to real world business problems. Students will learn software, conduct data analysis and communicate the results. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5346. Contemporary Topics in Marketing Analytics.**

This course covers contemporary topics in marketing analytics. Students will learn (1) concepts and methods in strategic marketing analytics, (2) analytical and mapping tools in geospatial data and information, (3) concepts and methods in Bayesian Networks, (4) Topic Analysis using big data in marketing, and (5) other emerging analytical tools and methods in marketing. Prerequisite: QMST 5334 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5347. AI and Data Visualization for Marketing.**

This course consists of applied training in foundational topics for artificial intelligence and data visualization. It covers both prediction as well as classification problems. While many technical aspects are covered, the main emphasis is on knowing how to apply a wide range of modern techniques to specific marketing problems. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5348. Python for Marketing Analytics.**

This course consists of learning Python and using this programming language for data analysis and visualization. This course will help to leverage the power of historical data and to develop models that project future trends. Python will be used for exploratory data analysis, market forecasting, customer segmentation, deep learning, social media analysis and analysis of marketing images and videos. Prerequisite: MKT 5321 and QMST 5334 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5350. Strategic Marketing Analysis and Planning.**

This course examines strategic marketing decision making through the analysis and interpretation of marketing intelligence, metrics, and dashboards. Topics will include data-driven decision making on marketing challenges pertaining to customers, brands, marketing mix decisions, online strategy and social media, market performance, and firm profitability. Prerequisite: MKT 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MKT 5395. Independent Study in Marketing.**

Individual problems or topics will be designed and completed to emphasize selected areas of study in Marketing. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5397I. Entrepreneurial Marketing.**

Entrepreneurship involves the discovery, implementation, and pursuit of new business opportunities. Successful execution of an entrepreneurial idea requires an effective marketing plan and related skills. In this course, we will investigate how marketing concepts (product, price, promotion, place, people, processes, brand image, segmentation, targeting, positioning, quality perceptions) can facilitate entrepreneurs' realization of their ideas. A conceptual foundation and practical approach for developing an entrepreneurship-focused marketing plan will be discussed. Using a hands-on approach, students will gain skills and knowledge on the effective use of marketing concepts to achieve entrepreneurial goals. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MKT 5398. Internship in Marketing.**

Internship in marketing is an external employer supervised, experiential learning course that enables a student to integrate professional and graduate business coursework. Prerequisite: Instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MKT 5399A. Thesis.**

This course represents a student's initial thesis enrollments. No thesis credit is awarded until student has completed the thesis in Marketing Research and Analysis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MKT 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MKT 7321. Marketing Management.**

This course covers concepts, activities, and techniques related to the planning and coordination of marketing functions, marketing policies, and the analysis of marketing administration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 1100S. Interviewing for Storytelling.**

This course students cover source selection, interview preparation, interviewing techniques, and how to use material from the interview. Students will learn and practice interviewing skills over the course of the semester. They will also discuss what makes a successful interview. Prerequisite: MC 1313 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 1301. Introduction to Mass Communication.**

A survey of the mass media and other areas of mass communication designed to acquaint the student with the field of communication and what it offers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** COMM 1307

**MC 1313. Media Writing.**

This course is an introduction to the major forms of Media Writing: electronic media, journalism and digital. (WI).

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** COMM 2311

**MC 2111. Media Practicum.**

Students perform supervised media work of at least 60 hours for the semester. Credit requires prior written contract with a supervising faculty member. May be repeated twice. Prerequisite: Minimum 2.0 Overall GPA and instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MC 3100. Grammar for Media Professionals.**

Students will refine their English grammar skills to a proficiency level needed to be successful communication professionals and media practitioners.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3111. Drone Bootcamp.**

This course explores new tools and skills relevant to the digital age, particularly the usage of drones in reporting, videography and multimedia. This course introduces the concepts and practical usage of drone storytelling and prepares students to take the FAA Part 107 exam.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3112. Social Media Analytics Platforms.**

This course prepares students for and assists them in achieving industry-recognized social media certifications.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3113. 3D Drone Modeling.**

This course explores new tools and skills relevant to the digital age.

Students explore the growing field of photogrammetry and using drones to produce 3D models.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3114. Career Exploration: Destination America.**

This career exploration course provides opportunities for students to visit and network with media professionals in the United States. It immerses students in a wide range of organizations. Meetings could include PR firms, ad agencies, governmental organizations, professional sports teams and museums.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3115. Digital Media Tools and Skills.**

This course explores new tools and skills relevant to the digital age.

Topics can include data visualization, spreadsheet usage, media-creation software, mobile reporting, drones and sensors in journalism and video editing.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 3116. Digital Media Innovation Concepts.**

This course explores concepts relevant to the digital age. Topics may include digital media history, ethics, law and will address online privacy, security, crime, identity and censorship.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3117. Freelancing for Media Professionals.**

This course provides a practical overview of business topics related to all media and communication fields. Students learn the art of freelancing, networking, negotiating and other topics designed to assist in developing their career.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3118. Careers in Media.**

This course allows students to engage in career exploration in the media professions.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3119. Fundamentals of Layout and Design.**

Students learn desktop publishing basics using appropriate software. The course covers topics including creating documents for print or digital use, mastering tools required to create a simple page layout consisting of text and imagery and preparing files for review or publication.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3120. Editing and Enhancing Digital Imagery.**

In this course students learn how to edit, enhance, and create digital imagery for print and web use.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MC 3121. TV News Production.**

In this course, students will serve as the production crew for the TV News course.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 3122. Search Engine Optimization Fundamentals.**

In this course, students will examine the strategic use of search engine optimization (SEO) in relation to website design, content creation and marketing. Students will explore the fundamentals of SEO and skills like link building and keyword research, which are needed to perform SEO tasks for businesses and organizations. Prerequisite: MC 4381 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3306. Writing for the Electronic Media.**

The study and practice of writing copy for the electronic media, including the composition of commercials, news stories, public service announcements, promotions and documentaries. (WI) Prerequisites: MC 1313 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MC 3307. Audio Production.**

This course covers the basics of digital audio production with emphasis on techniques used in producing commercials, public service announcements and promotions. Lab requirements include various studio and field recording experiences and structured group meetings.

**3 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MC 3311. Video Production.**

In this course, students will explore the basics of analog and digital video production. Emphasis on techniques used in producing newscasts, commercials, public service announcements, promotions. Lab requirements include field and studio production.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MC 3312. Television News.**

In this course, students will explore standard theory and practice of electronic news gathering and production, including writing copy to match video and synchronization of audio and video in news stories. Students work on a campus news program. (WI) Prerequisites: [MC 3306 or MC 3321] and [MC 3311 or MC 4323 or MC 4324] both with grades of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MC 3313. Foundations of Public Relations Writing.**

This course introduces students to a wide range of print & digital publications and writing assignments found in public relations.

Prerequisite: MC 3343 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MC 3314. Social Media for Strategic Communication.**

This course explores emerging technologies and media influencing strategic communication research and practices. Prerequisite: [MC 3343 or MC 3367] and MC 4381 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3319. Visual Communication.**

This course studies the principles, theories, and language of visual communication, emphasizing the evaluation and use of images in mass media. It is designed to help you integrate words and pictures in mass communication and to gain a greater appreciation of our visual world.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3321. News Writing and Reporting I.**

Integrating writing and reporting skills to produce stories across media platforms, including print and online, with an emphasis on storytelling.

The study of techniques for locating and assessing information from multiple sources, including interviewing, fact verification, online research and the use of libraries. (WI) Prerequisites: MC 1313 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MC 3343. Introduction to Public Relations.**

This is the introductory course for the public relations sequence.

Students will explore the functions of public relations in the digital age in the development of strategic communications for corporations, companies, government offices, non-profit organizations and public relations agencies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3355. Mass Media and Society.**

This course offers an examination of the roles of the mass media in American society, including an analysis of the philosophical basis of media structure; mass media as business; media effects of public issues, morals and tastes; and other contemporary issues within a global media context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3360. Public Relations Research.**

Students study the principles, techniques and problems of social science research and digital analytics as they relate to the planning and evaluation of strategic communication. Prerequisite: MC 3343 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3367. Advertising.**

A broad overview of advertising including history, role and responsibility, and impact of the digital revolution. Key topics will be research, account service, media planning, creative, sales promotion, public relations, campaigns, and the advertising agency.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3372. Advertising Media Planning.**

This course is the study of planning and buying messages in traditional and new media to creatively and effectively reach targeted prospects. Attention is given to media characteristics, scheduling, testing and buying efficiencies. Prerequisite: MC 3367 and MC 4317, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3375. Electronic Media as Entertainment.**

This course will explore the principles and strategies of winning audiences for the electronic media: television radio, cable, satellite and the internet.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3379. Client Management.**

This course is the study of managerial methods in strategic communications. Students develop leadership skills, demonstrate managerial tactics and grow professional communications abilities including: setting goals, managing strategic brand building, new business development, budgeting and growing and maintaining client-agency relationships. Prerequisite: MC 3343 or MC 3367 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 3383. Editing and Managing Content.**

In this course students will incorporate words, images, sound and data into storytelling across platforms. This course tightens the focus on audience, accuracy, meaning, logic, organization, style and form. (WI). Prerequisites: MC 1313 or MC 3313 either with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MC 3390. Media Design.**

This course is the study and application of advanced principles of media design including: basic design principles, typography, color, photography, video, and multimedia.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Dual Enrollment Permitted|Lab Required|Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MC 3394. Management of Electronic Media.**

The study of the management of electronic media, including sales, federal regulation, and responsibilities to society, community and stockholders.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4130. Internship.**

This course requires a minimum of 100 hours of off-campus experience, written contract with internship coordinator and portfolio of completed work. Students cannot gain more than six hours of credit for any combination of: MC 4130, MC 4230 and MC 4330. Prerequisites: 30 credit hours, good academic standing, and appropriate sequence coursework.

**1 Credit Hour. 0 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 4230. Internship.**

This course requires a minimum of 150 hours of off-campus experience, written contract with internship coordinator and portfolio of completed work. Students cannot gain more than six hours of credit for any combination of: MC 4130, MC 4230 and MC 4330. Prerequisites: 30 credit hours, good academic standing, and appropriate sequence coursework.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 4301. Media Law and Ethics.**

This course offers a study of law governing journalism, advertising, electronic media and public relations. Restricted to junior standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4302. History of Mass Media.**

Students will study the development of mass media, advertising and public relations in the United States from 1690 to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4303. International Advertising.**

Overview of international marketing and advertising; problems and opportunities of a global economy. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 4304. Advertising Portfolio.**

In this course students create and produce professional advertising portfolios by serving as copywriters and art directors as part of collaborative teams. Prerequisites: MC 3367 and MC 4333 both with grades of "C" or better. Corequisite: MC 4338 with a grade of "D" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MC 4305. Theories of Mass Communication.**

A study of the predominant theories of communication, including mass media effects, functions and controls. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MC 4306. Advertising Competition.**

This course focuses on developing an integrated marketing communications campaign for a national client as part of the National Student Advertising Competition. Students will create a campaign from the developmental through the execution process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 4307. Advertising Campaigns.**

In this course students develop, coordinate and evaluate a complete advertising campaign for specific clients. Students conduct market research, formulate objectives and strategies, recommend media plans and develop creative executions through plans books and presentations. (WI) Prerequisites: MC 3372 and MC 4317 and MC 4333 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MC 4308. Women and Minorities in the Media.**

Analysis of the images of women and minorities in the media and their status as media professionals. Includes study of the alternative media. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 4309. Visual Literacy: Film.**

The course will teach how meaning is constructed in visual images by using film as a practical medium. It provides the necessary skills to critique and create effective images. It is especially useful for students majoring in image-based sequences of the mass communication major, particularly broadcasting and advertising.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4310. International Communication.**

A study of media systems worldwide in different socioeconomic contexts and an examination of patterns of international communication flow. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 4311. Independent Study.**

Students complete an academic project requiring the equivalent of 160 hours work. Requires prior written contract with faculty member and portfolio of completed work. Cannot be repeated.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 4312. Photojournalism.**

In this course students develop skills in camera operation, learn computer software applications and learn how to combine words with stories.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4313. Advanced Writing for Public Relations.**

This course provides an examination and application of digital and traditional communication tools required for effective public relations. Emphasis is placed on the strategic use of digital media in a modern communication society. (WI) Prerequisites: MC 3313 and MC 3343 both with grades of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MC 4315. Web Design Publishing.**

In this course students develop skills in web page construction including Web editing, image and graphic manipulation, animation, and audio and video editing. Prerequisite: [MC 1313 or MC 3313] and MC 4381 both with grades of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4316D. Advertising Media Sales.**

An overview of advertising, media selling, and salesmanship, sales strategies, sales management, and case histories designed to acquaint students with a vital function of the business. Prerequisite: MC 3367 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 4317. Advertising Strategic Planning.**

This course is a hands-on introduction to applied advertising research and account planning. Primary, survey and qualitative research methods are designed, executed and presented by students for the purpose of integrating the consumer's perspective into creative strategy.

Prerequisites: MC 3367 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4318. Media Ethics.**

The study of freedom and responsibilities of the mass media practitioners and institutions, explored within the framework of ethical theories. Consideration of values, codes of ethics, moral development, professionalism and institutional constraints as applied to the media of information, persuasion and entertainment will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4319. Latinas/Latinos and the Media.**

The course focuses on demographic developments related to Latinos in the US; their portrayals in the media; the effects those portrayals; the history and current status of selected Latino-oriented media and ancillary media companies and organizations; and the role of the media in Latino politics. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 4320. Public Relations Campaigns.**

This course is a comprehensive study of effective public relations in a modern society. Students learn the professional approach to the practice of public relations that includes internet applications and how to evaluate its function and value while applying ethical standards of conduct. (WI).

Prerequisite: MC 3360 and MC 3314 and MC 4313 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MC 4322. Health Communication Campaigns.**

This class will provide an overview of the theory and practice of designing, producing and evaluating health-communication campaigns. We will examine persuasive approaches to behavioral change; audience, message and channel factors in campaign development. Our work will emphasize communication approaches, including mass media, social marketing and "new media."

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4323. Multimedia Journalism.**

Students will be introduced to topics related to online journalism. Topics covered will include the online journalism profession, Web credibility, online reporting sources, cyberlaw including libel and copyright, blogging and podcasting, and basic multimedia design. Students will both critique and create online materials. Prerequisites: MC 1313 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4324. Visual Storytelling.**

This course is an introduction to basic elements of video journalistic storytelling for today's converged newsrooms. Students gather information using journalism practices, such as in-person interviews, and learn to use video newsgathering technologies to produce stories for online and other digital platforms.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4325. Coding and Data Skills for Communicators.**

Students are introduced to programming and data concepts relevant to communicators. Data visualization and storytelling tools and techniques are covered as related to journalism, advertising and public relations.

Prerequisites: MC 4315 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4326. Advanced Social Media and Analytics.**

This course will provide students with an advanced understanding of social media, marketing plans and social media analytics. Students will build company and/or journalistic profiles on social networks - Facebook, Twitter, Pinterest, YouTube, Instagram and more - to engage with audiences and communities and utilize analytical tools to track success. Prerequisite: MC 4381 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MC 4327. Mobile Media and Development.**

This course will introduce students to mobile communication and production that is relevant to mass communication. As mobile devices are a vital communication medium in our everyday life, it is essential to understand how mobile communication works and how to effectively produce online content for mobile devices. Prerequisite: MC 4315 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4328. Digital Media Innovation Capstone.**

In this course students explore innovation, creativity and product development associated with digital entrepreneurship. Through a speaker series, students will be introduced to important concepts and ideas from thought leaders and innovators at the intersection of media and technology. Prerequisites: MC 4315 and MC 4326 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 4329. Sports Media.**

Sports Media explores the synergy among sports, athletes, media, public relations, advertising-marketing-promotion, and sports information disciplines and audiences in a multi-platform media environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 4330. Internship.**

This course requires 180 hours of off-campus experience, written contract with internship coordinator and portfolio of completed work. Students cannot gain more than six hours of credit for any combination of: MC 4130, MC 4230 and MC 4330. Prerequisites: 30 credit hours, good academic standing, and appropriate sequence coursework.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**MC 4331. Strategic Sports Communication.**

This course focuses on the application of communication strategies and tactics used by sports teams and leagues to manage relationships with various stakeholders and promote their brand using multiple mass media channels. Students will learn about emerging trends in strategic sports communication and the sociological aspects of sports fans.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 4332. Public Relations Fundraising and Special Events.**

This is a specialized course dealing with the development and implementation of fundraising. Topics include grants, special events, and annual/capital campaigns. Prerequisite: MC 3313 and MC 3343 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 4333. Creative Thinking & Advertising Concepting.**

This course focuses on the advancement of creative thinking and translating those skills into developing a creative concept to support an advertising strategy. This class will provide tools to develop ideas, and an understanding how the creative team works with other teams in advertising. Prerequisite: MC 3367 and MC 4317; A minimum grade of "C" is required in all prerequisites.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**  
**Grade Mode:** Standard Letter

**MC 4335. Mass Communication Capstone.**

This course integrates a variety of mass communication skills to produce a substantial project or research for the mass communication major capstone. Prerequisite: MC 3360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Writing Intensive  
**Grade Mode:** Standard Letter

**MC 4336B. Documentaries.**

A course in reporting and production of comprehensive public affairs and feature stories for the electronic media. Prerequisite: MC 3312. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive  
**Grade Mode:** Standard Letter

**MC 4336H. Web Content Strategy for Organizations.**

This course builds on students' web development skills to focus on strategic content creation and management with an emphasis on building sites for small- to medium-sized organizations. Students will learn to understand an organization's messaging needs and create effective websites using state of the art content management techniques. Prerequisite: MC 4315 with a grade of "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

**MC 4336I. Video and Broadcast Production for Sports.**

In this course, students will develop the production skills required in sports broadcast and production. This includes field producing live sport broadcasts, control room operation, interviewing for sports, and shooting video and editing video and audio for sports. This course will also include a section on announcing, reporting and interviewing for sports.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing|Topics  
**Grade Mode:** Standard Letter

**MC 4337. Data Journalism.**

Students will use a variety of tools and software to acquire and analyze data to produce news stories and data visualizations. Prerequisite: MC 1313, MC 4381; with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**MC 4338. Advanced Advertising Copy and Layout.**

This course is an advanced copywriting and advertising layout course. Students expand their creative concepting abilities, digital techniques, art direction skills and writing capabilities to create professional-level creative ad campaigns. Prerequisite: MC 4333 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**  
**Grade Mode:** Standard Letter



**MC 4339. Advanced Strategic Planning.**

In this course students expand upon skills learned in account planning to further students' ability to define business problems, analyze data, discover insights and define appropriate communications strategy.

Prerequisite: MC 3372 or MC 4333 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4340. Media Analytics and Strategy.**

In this course students strategically and creatively analyze media metrics to identify problems/challenges and use insights gathered to develop a strategic media plan. Prerequisite: MC 3372 and SOCI 3307 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4341. The Power of Brands.**

This course explores how companies use their brands to create awareness, shift perceptions, gain market share and connect emotionally to consumers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4342. Strategic Professionalism.**

This course provides students with the knowledge and skills necessary to present themselves and their creative ideas in a professional and strategic way. This course provides students skills for creative and strategic presentations, business etiquette, business communications/writing, job search skills/tactics and professional self-promotion with the Strategic Communications industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4343. Immersive Storytelling.**

This course examines storytelling opportunities brought on by immersive technology (virtual, augmented and mixed reality). Providing hands-on experience with 360 video cameras, virtual reality headsets, smartphones and other applications, students explore new ways for the media to communicate with audiences and consumers. Prerequisite: MC 4381 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4345. Drone Storytelling.**

This course explores storytelling opportunities using drones – both traditional photography and videography from the air and innovative methods like photogrammetry, or the use of 3D modeling technology. Prerequisite: MC 4381 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4346. Artificial Intelligence and Automation for Media Professionals.**

This course focuses on new storytelling opportunities brought on by advances in artificial intelligence in the digital media industry.

From generative AI to virtual assistants, students will learn machine-learning techniques and gain hands-on experience building automated experiences. Prerequisite: MC 4381 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4347. Social Media Video.**

This course provides students an opportunity to produce short-form and long-form video storytelling for social media. Students learn how to develop a brand's video marketing strategy across multiple social media platforms. Prerequisite: MC 4381 with a letter grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4348. Visual Production Capstone.**

This course exposes students to immersive and in-depth visual storytelling, including photography and video techniques. Students create long-form, documentary-style visual content in the field and in a studio and will learn emerging techniques in visual storytelling. Prerequisite: [MC 3306 or MC 3321] and [MC 3311 or MC 4323 or MC 4324] both with a letter grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4356A. Science Writing and Reporting.**

Students learn to interpret complex concepts and present accurate, engaging news and feature stories about the latest research.

Prerequisite: MC 1313 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 4356B. Editorials, Columns, and Reviews.**

The study and writing of newspaper, magazine and online editorials, columns, and books, film and music reviews. Prerequisite: MC 1313 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MC 4356C. Community Affairs.**

A lecture-discussion course, dealing with the coverage of local economy and business, government and social services functions as well as political activities like elections and lobbying efforts. Prerequisite: MC 1313 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MC 4356F. Feature Writing.**

A course designed to expose students to the art of feature writing through the study of acclaimed works of literary journalism. Students will develop a narrative voice of their own while studying and analyzing the techniques of a diverse group of writers. (WI) Prerequisite: MC 1313 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MC 4357. Sports as News.**

In this course students report, write and produce content for both print and electronic media. Students interview players, coaches and administrators of collegiate athletics and work with media professionals to better understand challenges and demands of contemporary sports coverage. Prerequisites: MC 1313 or MC 3313 either with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4376C. Public Relations Case Studies.**

Public Relations Case Studies will seek, with case studies and problems, to help future practitioners develop agility in the principles and the application of effective two-way communications in a wide variety of situations likely to confront them and their employers. Prerequisite: MC 3343 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 4376D. Public Relations Writing & Design.**

Students will gain a broad understanding of the wide range of print publications and writing assignments found in public relations. They will learn how to research, organize, write and design a variety of print pieces for targeted audiences using a popular design and layout program. (WI) Prerequisites: MC 3313 and MC 3343 both with grades of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MC 4376F. International Strategic Communication.**

This course will explore advertising and public relations practices in foreign countries through readings, discussion and site visits within media organizations in foreign countries. Marketing practices abroad will be compared to those in the United States. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**MC 4376G. Media Relations.**

This course is an introduction to the role that media relations play in strategic communication. It explores the strategies and tools used by public relations professionals to form beneficial relationships with the media. Topics include analyzing the media landscape, creating media lists, analyzing news opportunities, handling media interviews and live news events, developing media training, producing strategic media plans, employing new media strategies, and evaluating media relations efforts. Prerequisite: [MC 3313 or MC 1313] with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 4377. Crisis Communication for Strategic Communication.**

This course examines strategic communication practices throughout the three stages of a crisis event. Special emphasis is placed on crisis planning, media relationships, image restoration, ethical responses, and organizational learning. Prerequisite: MC 3313 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 4381. Fundamentals of Digital and Online Media.**

Students will be introduced to topics related to digital/online media and mass communication. Course covers the effects of the Internet and related technologies on the fields of journalism, interactive advertising and public relations, search engines, personal branding, social networking and mobile platforms.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MC 4382L. Feature Writing and Freelancing.**

This course is designed to introduce students to the technical expertise, research methods, interviewing skills and narrative techniques pertinent to feature writing. The course also explores how to target a feature story to a specific audience and how to submit feature stories for publication to newspapers and magazines. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MC 4382O. Travel Journalism.**

Exploration of techniques of writing journalistic travel narratives for the media. The course may involve travel at the student's own expense.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MC 4382Q. Media in Asia and Southeast Asia.**

This course will study media systems in Asia and Southeast Asia and examine the different socioeconomic contexts and patterns of information flow. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**MC 4382Y. Mobile Storytelling in the Outdoors.**

This course explores mobile tools and skills relevant to the digital age, particularly the usage of smart phones in storytelling. Students will use those skills to produce video and social content in the outdoors.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 4386. Journalism Project.**

This is a senior portfolio course integrating a variety of journalism skills to produce a substantial work ready for publication online and in print.

(WI) Prerequisites: MC 3321 and MC 3383 and [MC 4323 or MC 4324] all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**MC 4387. Storytelling and the Border.**

In this course students will be introduced to long-form nonfiction writing. Students will concentrate on multimedia reporting while focusing their reporting on the relationship between Central Texas and the U.S.-Mexico border. Students will provide coverage and analysis of news and trends.

(WI) Prerequisite: MC 1313 and [MC 4323 or MC 4324] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MC 4388. Advanced Photojournalism.**

This course builds upon the skills acquired in MC 4312-Photojournalism. Students develop their photojournalism skills by using advanced photojournalism techniques to produce projects, such as those that profile a segment of an area population and others. Prerequisite: MC 4312 with a letter grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: MC 5399A and completed course work.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MC 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: MC 5399A and completed course work.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MC 5300. Teaching Techniques in Mass Communication.**

This course is an introduction to curriculum, instruction, and assessment methods in the teaching of Mass Communication. It provides an orientation as well as regular in-service training and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. This course is only open to graduate teaching and instructional assistants.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MC 5301. Mass Media and Society.**

A seminar devoted to analysis and discussion of significant contemporary issues in mass communication, including a study of the history of the development of mass communication media. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5302. Research Methods in Mass Communication.**

Investigation of the tools and techniques of both qualitative and quantitative research methods used in the study of mass communication, including surveys, content analysis, experimental designs and case studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5303. Theories of Mass Communication.**

Examination of the literature of mass communication theory and discussion of theoretical approaches and models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5304T. Health Communication Campaigns.**

Provides an overview of the theory and practice of designing, producing and evaluating health-communication campaigns. Examines persuasive approaches to behavioral change as well as audience, message and channel factors in health-campaign development. Emphasizes communication approaches, including mass media, social networking and new media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MC 5306B. The Psychology of Social Media.**

This course reviews social cognitive theories and research about the way social media users both produce and consume social media messages. It will examine clinical psychological and psychiatric effects that take place among social media users who do not have a clinical diagnosis. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306F. Content Analysis.**

Content analysis is a systematic way to analyze the content of documented communications, whether they are written, audio/visual or digital. This course will examine the methodological steps involved in conducting a quantitative content analysis, design and execute a content analysis study. Corequisite: MC 5303 or MC5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306H. Foundations For Mass Communication Graduate Studies.**

This course will familiarize students with the structure of the mass communication discipline, prominent theorists and historical developments, as well as expose them to the process of research and writing in the discipline of mass communication. Corequisites: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306I. Collecting, Analyzing and Presenting Data.**

This course will introduce students to skills for working with data as well as perspectives from which to think critically about the use of data in contemporary society. It will focus on three stages of working with data: collection, analysis and presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306J. Mass Media Design.**

Study and application of advanced principles of media design including: basic design principles, typography, color, photography, video, and digital media. Students will learn production skills for existing and new media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306L. Refugees, Nonprofit Organizations and Strategic Communication.**

This course analyzes strategic communication of nonprofit organizations serving refugees and asylum seekers. Students are introduced to organizations that serve these marginalized populations in Texas and to the problems, challenges and opportunities these organizations face. Students will conduct research and produce a project on an issue related to this topic.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306M. Social Media Strategies, Campaigns and Analytics.**

This course will expose students to the principles and strategies behind social media campaigns. It will discuss the interactions, channels, SEO, and social media metrics used to gauge the success of a social media campaign. Students will also examine successful social media case studies. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5306N. Mass Communication History.**

History of Mass Media is a course that examines the development of the American mass media, including advertising and public relations, from 1690 to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MC 5307. Project.**

A major communication effort to demonstrate command of the skills necessary to work at advanced levels in mass communication. For example, it may be broadcast documentary, advertising or public relations campaign, or a newspaper series. This course is the master's capstone for those on the professional project track. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5308. Seminar in Strategic Communication.**

This course broadens students' understanding of issues related to advertising and public relations through an integrated communication perspective. Students learn the decision-making process, learn what problems real organizations experience and evaluate how they resolve issues in such areas as client-agency relationships, strategic planning/management and globalization. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5309. Gender, Race, and Class in the Media.**

This course takes a theoretical approach to the study of representations of gender, race, and class in the mass media. A historical overview will be followed by an in-depth look at current conditions. (MULT). Corequisite: MC 5303 or MC 5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 5310. Global Media Issues.**

This course examines the media systems worldwide in different socioeconomic contexts and studies the patterns of international information flow. The course includes theories governing international communication. Students learn how and why communication takes place between different nations and the impact of this communication on individual nations. (MULT). Corequisite: MC 5303 or MC 5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 5311. Independent Study.**

Study of a special interest that offers academic or professional improvement and growth in the field of Mass Communication. May be repeated once with different emphasis for additional credit. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 5312. Digital Media Design.**

This course instructs students in Web development and design. Students learn Hypertext Markup Language (HTML) and Cascading Stylesheets (CSS) coding and are introduced to graphics and multimedia programs and web development frameworks. The class addresses the history and social implications of creating for the web. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MC 5313. Media Law and Ethics.**

Study of laws and regulations as they pertain to media operations and the internal and external codes that guide media behavior. Freedom and responsibilities of the mass media practitioners and institutions will also be explored within the framework of ethical theories. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5315. Creative Problem Solving in Mass Communication.**

This class examines the psychology of creativity and its application in mass communication to media management, broadcasting, advertising, and public relations. Students learn a variety of ideation techniques and structured creative problem solving methods to better understand their own creative thinking process and how to facilitate creative thinking in groups. Corequisite: MC 5303 or MC 5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5316. Digital Media Issues.**

This course will examine the role of digital media, including the Internet, Web and mobile technologies. Issues discussed will include social media and cyberculture research, technology diffusion, data journalism, analytics and the effects of digital technologies on society and culture, with a focus on ethics and regulation. Corequisite: MC 5303 or MC 5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5317. Advanced Digital Media.**

This course builds on web development skills to create interactive presentations and data visualizations. Students are introduced to advanced programming and data concepts relevant to communicators. Theoretical and practical considerations of emerging technologies to the media industry will be integrated with production techniques. Prerequisite: MC 5312. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MC 5318. Media Ethics.**

The study of freedom and responsibilities of mass media practitioners and institutions, explored within the framework of ethical theories. Students will learn philosophical constructs as well as contemporary ethicists. Consideration of values, codes of ethics, moral development, professionalism, and institutional constraints as applied to media of information, persuasion and entertainment. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5319. Mass Media and Politics.**

The class will review key literature in the area of mass media and politics. It examines the relationship between the press and the government, as well as how the mass media covers politics at the statewide and national level. Corequisite: MC 5303 or MC 5302.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MC 5321. Latinos and Media.**

An immersion into the study of Latinos, their representations in media, and media oriented to Latinos. The course will require students to engage in in-depth research about Latinos and media issues. (MULT) Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 5322. Global Media Strategy in Advertising and Public Relations.**

This course provides an in-depth examination of multinational communication organizations, including news media, public relations, and advertising companies. In addition, the course examines organizational roles, impact and strategic functions in a global marketplace. (MULT) Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MC 5323. Current Issues in Mass Communication.**

This course examines current theoretical and professional issues in mass communication. This course may be repeated once with a different emphasis for credit. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 5324. Media Writing.**

This course is designed to impart media writing skills. Students learn information gathering, interviewing skills, and writing techniques pertinent to different media. Students produce content (e.g., stories and digital pieces) that could be published across a wide variety of media outlets.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5326. Strategic Communication Campaigns.**

This course is a comprehensive study of strategic communication campaign planning with emphasis on public relations and advertising. Students combine theory and practice to develop, coordinate and evaluate advertising/public relations campaigns for key audiences. Prerequisite: MC 5308 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5327. Visual Communication.**

This course examines the principles, theories, and language of visual communication, emphasizing the evaluation and use of images in digital mass media. Students will learn about media influences on their perceptions of reality and their behavior, the elements of visual literacy, and multicultural and global perspectives in visual media. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5328. Digital Story Production.**

This course involves discussion, development and analysis of multimedia stories, documentary video, and digital media. Students explore digital media techniques used in writing and producing multimedia stories. They learn visual aspects of storytelling and how to produce digital stories.

Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MC 5329. Media Systems in Latin America.**

Students analyze media systems Latin America within their historical, cultural and political contexts. The course provides a comparative perspective of the role of the media within the region, their national markets and international Latino market. Students will ground these investigations with theories of international communication and information flow. (MULT) Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MC 5330. Internship in Mass Communication.**

Students acquire on-the-job experience in an off-campus media setting where they can apply the skills and knowledge acquired through mass communication graduate course work. Requires 180 hours of work off-campus, a written report, a portfolio of work product, and a supervisor's evaluation. Prerequisite: Departmental and Instructor approval. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MC 5332. SXTXState Project.**

This course involves attendance at and coverage of the South By Southwest Interactive Conference. Students will prepare for the event, attend panels, interview participants and produce digital content about the experience. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5333. Digital Media Entrepreneurship.**

This course explores innovation and creativity associated with digital entrepreneurship. Students will be introduced to important concepts and ideas from thought leaders and innovators at the intersection of media and technology. Students will research and develop their own digital media products. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5334. Storytelling Across Platforms.**

Students learn the tools, channels and techniques available for multimedia storytellers. The course introduces new and emerging ways to tell stories, including social media, photo and video platforms, branding and audience engagement, mobile media and data visualization. Prerequisite: MC 5328. Corequisite: MC 5302 or MC 5303.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MC 5335. Code Camp I.**

In this course students are immersed in programming concepts relevant to communicators. Students will practice document object model manipulation using appropriate software to create interactive Web projects. Prerequisite: MC 5312 with a grade of "B" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MC 5336. Code Camp II.**

In this course students are immersed in data and visualization concepts relevant to communicators. Students will create interactive data visualization projects. Prerequisite: MC 5312 with a grade of "B" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MC 5337. Global Media in the Connected World.**

This course critically analyzes the role and use of traditional, digital and social media in a connected world. Students examine the prospects, challenges and applications of global media in areas such as socioeconomic development, political participation, digital divide, strategic communication, global crises and global entertainment.

Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5338. Ethics and Crisis in Strategic Communication.**

In this course students examine strategic communication practices throughout the stages of a crisis and ethical considerations. Special emphasis is placed on the crisis cycle, media relationships, image restoration, ethical responses, and organizational learning. Prerequisite: MC 5308 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5339. Managing Digital Content.**

This course introduces concepts, skills and processes for working with content management systems. Students learn to assess organizations' content needs and to develop appropriate content management solutions. Topics covered in this course include user research, information architecture and content strategy. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MC 5340. Media Product Strategy.**

This course examines current theoretical and professional issues in mass communication. Specifically, this course provides students with practical knowledge of theories of human-computer interaction, and communication design principles and standards. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5341. Feature Writing.**

This course provides an in-depth understanding of the technical expertise, research methods, interviewing skills and narrative techniques pertinent to feature writing. The course also explores how to target a feature story to a specific audience and how to submit feature stories for publication to newspapers and magazines, print and online. Prerequisite: MC 5324 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5342. Global Media Systems.**

This study abroad course prepares students to think critically and analytically about media systems and functions in different countries with emphasis on the location/s of the study abroad program. The course provides students with practical knowledge and insights gained by visiting media organizations abroad. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5343. Global Strategic Communication Practices.**

In this course, students analyze and discuss issues and challenges of contemporary global strategic communication practices and focus on gaining first-hand experience by visiting public relations, advertising and other communication agencies abroad. This course provides professional development and networking opportunities. Prerequisite: MC 5302 or MC 5303 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Standard Letter

**MC 5344. Data Storytelling in Mass Communication.**

In this course students will be introduced to data-related topics and skills that will further their careers in a variety of communications professions. Data visualization and storytelling tools and techniques are covered as related to journalism, advertising and public relations. Prerequisite: MC 5324 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5345. Advanced Digital Story Production.**

This course examines current theoretical and professional issues in visual digital storytelling. Students explore advanced digital media techniques used in writing and producing multimedia stories. Students produce sophisticated visual digital stories for use across a variety of platforms using differing styles. Prerequisite: MC 5328 with a grade of a "B" or better. Corequisite: MC 5303 and MC 5302 both with a grade of a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MC 5399A. Thesis.**

A scholarly study of communication behavior, the purpose of which is to broaden understanding of what mass media do, how they do it, and with what effects. It may be quantitative, historical or rely upon another appropriate methodology. No thesis credit is awarded until student has completed the thesis in MC 5399B. Prerequisite: Completed course work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MC 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: MC 5399A and completed course work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MC 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: MC 5399A and completed course work.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MC 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Prerequisite: MC 5399A and completed course work.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MC 7304A. Seminar in Advertising and Public Relations.**

Analysis and discussion of the development and role of advertising and public relations in the field of mass communication. Prerequisite: Doctoral level standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MC 7304B. International Communication.**

A review of international communication theories and a critical examination of the world media systems and information flow patterns. (MULT) Prerequisite: Doctoral level standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**MC 7311. Directed Research in Mass Communication.**

Independent study of a specific mass communication research area. May be repeated with different emphasis for additional credit. Prerequisite: Doctoral level standing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7100. Doctoral Assistant Development.**

The course is designed to equip the doctoral students with skills and an understanding of proper procedures to be effective teaching assistants. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MSEC 7101. Commercialization Forum.**

The course is a seminar series exposing students to commercialization issues. The series includes as speakers: successful entrepreneurs, businessmen, research directors, production and process control engineers, intellectual property and licensing experts, management consultants, and technology transfer specialists. Repeatable four times for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MSEC 7102. MSEC Seminar.**

This course is an introduction to current materials science and engineering topics with presentations by subject matter experts as the basis for weekly discussions. Students participate by asking questions and actively engaging the seminar speaker. Students are also expected to give public presentations based upon their own field of research at the STAR (Student Technology and Research) Showcase. Repeatable four times for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MSEC 7103. Research in Materials Science, Engineering, and Commercialization.**

This research course is for students in Materials Science, Engineering, and Commercialization who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor. Repeatable (with MSEC 7203 & MSEC 7303 hours) for doctoral credit up to 6 hours.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7199. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7203. Research in Materials Science, Engineering, and Commercialization.**

This research course is for students in Materials Science, Engineering, and Commercialization who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor. Repeatable (with MSEC 7103 and MSEC 7303 hours) for doctoral credit up to 6 hours.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7299. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7301. Practical Skills in Commercialization and Entrepreneurship.**

This course is the first of a two-course series to impart business and commercialization skills by producing a business plan. Key areas covered include intellectual property law, technology transfer and licensing strategies, business plan development, business finance strategies, management structures, project management methods, statistical quality and process control.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7302. Leadership Skills in Commercialization and Entrepreneurship.**

Leadership Skills in Commercialization and Entrepreneurship (3-0). This course is the second of a two-course series to impart business and commercialization skills by producing a business plan. Key areas covered include intellectual property law, technology transfer and licensing strategies, business plan development, business finance strategies, management structures, project management methods, statistical quality and process control. Prerequisite: MSEC 7301 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7303. Research in Materials Science, Engineering, and Commercialization.**

This research course is for students in Materials Science, Engineering, and Commercialization who have not yet passed their candidacy exam, typically under supervision of the PhD Research Advisor. Repeatable (with MSEC 7103 & MSEC 7203 hours) for doctoral credit up to 6 hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7304. Collaborative Research/Commercialization Experience.**

This course allows Ph.D. level graduate students to initiate, conduct and participate in a collaborative research or commercialization experience with graduate faculty in addition to research conducted under MSEC 7103, MSEC 7303, MSEC 7199 and MSEC 7399. This course recognizes the collaborative nature of the scientific and commercialization enterprise. Repeatable for doctoral credit up to 6 hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MSEC 7310. Nanoscale Systems and Devices.**

This course is an in-depth treatment of physical phenomena in nanoscale structures, and consequences for electronic, photonic, mechanical and other types of devices. The course provides a strong background in devices with applications in nanoelectronics, biomedical systems, micro- and nanoscale manipulation, adaptive optics, and microfluidics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7311. Materials Characterization.**

This course covers skills and knowledge required for microscopy methods including transmission electron microscopy, scanning electron microscopy, scanning tunneling electron microscopy, atomic force microscopy, and confocal microscopy. It covers x-ray and neutron diffraction techniques including structure analysis, powder and glancing angle diffraction, pole figure, texture analysis, and small angle scattering.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MSEC 7315. Quantum Mechanics for Materials Scientists.**

This course includes quantum-mechanical foundation for study of nanometer-scale materials, principles of quantum physics, stationary-states for one-dimensional potentials, symmetry considerations, interaction with the electromagnetic radiation, scattering, reaction rate theory, spectroscopy, chemical bonding and molecular orbital theory, solids, perturbation theory, and nuclear magnetic resonance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7320. Nanocomposites.**

Characteristics of nanoparticles utilized in nanocomposites, techniques for surface modification, methods for nanoparticle dispersion forming nanocomposites, types of nanocomposites, characteristics of nanocomposites, analytical methods for characterization of composites, and common applications will be discussed. Particular attention will be given to the science and theories explaining the unique behavior of nanocomposites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7325. Principles of Technical Project Management.**

This course includes planning, budgeting, identification of risks and risk mitigation approaches, resource allocation, review of milestones and schedules, and evaluating projects to measure success. Responsibilities of project managers in the areas of problem solving, motivating and managing creative technical staff in project and matrix organizations will be included.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7330. Computational Materials Science.**

Application of computational techniques to molecular and atomic modeling of materials is discussed along with quantum mechanical modeling, density functional theory approaches, forcefield based molecular modeling, mesoscale modeling, energy minimization, molecular dynamics, vibrational spectra, crystal structures, phase equilibria, physical property prediction, and electronic structure related to magnetic and electrical properties. Prerequisite: CHEM 3340 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7340. Biomaterials and Biosensors.**

The course covers the growing field of biomaterials science including materials for prosthetics and implants, mimetic materials, biosensors, diagnostic devices, and drug delivery systems. Particular attention will be given to nanomaterials for diagnosis and treatment of diseases including targeted cancer treatments, drug delivery systems, and advanced imaging methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7350. Frontiers of Nanoelectronics.**

This course provides an introduction to the operating principles of nanoscale electronic and optical devices. The emphasis is on how leading edge nano-fabrication technology takes advantage of quantum mechanics of reduced sizes and dimensions. Specific examples of devices based on quantum wells, wires, dots and molecular electronics are given.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7355. Fluid Flow in Porous Media.**

In this course, the fundamental theory of transport and fluid flow in heterogeneous porous media will be presented. First, the equations that govern transport and fluid flow processes will be derived. Both analytical and numerical methods will be used to solve these equations in order to characterize and predict flow fields in porous media. These skills will then be applied to practical problems that involve porous media such as soils, rocks, biological tissues, concrete, etc. The knowledge gained from studies of fluid flow in natural porous materials will be employed to design/optimize systems with engineered porous media.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7360. Nanomaterials Processing.**

The course will cover various aspects of materials processing related to semiconductor devices. Topics covered include properties of electronic materials, thin film deposition, etching, lithography, and related device physics with an emphasis on the nanoscale. Fabrication and characterization techniques will be covered, including clean room usage. Prerequisite: MSEC 7401 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7370. Advanced Polymer Science.**

Advanced topics in polymer science are discussed with a focus on high performance polymers such as high impact, conducting, shape memory, high temperature and the underlying phenomena that provide these unusual properties, and advanced polymer topic areas such as flame retardancy, barrier properties, dielectric properties, rheology, and fiber reinforced composites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7395A. Microwave & Power Device Physics and Materials.**

This course will develop an understanding of basic microwave and power device physics and technology and the advanced materials that are used in today's cutting-edge research & development. The primary focus will be wide bandgap semiconductor materials and devices, and their performance metric versus the industry standard Si-based devices. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**MSEC 7395B. Thin Film Photovoltaic Devices.**

This course is a survey of the Materials Science of photovoltaic devices with emphasis on device physics including the photovoltaic effect, photon absorption, electrons and holes, generation and recombination, the pn-junction, charge separation, monocrystalline solar cells, thin film solar cells, III-V solar cells, and losses. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395C. Materials for Sustainable Energy.**

This course introduces principles and applications of sustainable energy materials used for energy generation, conversion, and storage. Topics of study include principles (thermodynamics, kinetics, transport phenomena, equivalent circuits, catalysis, and electrochemistry) and selection and performance criteria important for applications including batteries, supercapacitors, fuel cells, electrolyzers, dielectrics, biomass, and piezoelectrics. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395D. Polymer Characterization and Processing.**

This course will cover the concepts critical to the characterization and processing of organic polymers. Topics critical to characterization will include molecular weight determination, thermo/mechanical characterization, X-ray scattering, and polymer spectroscopy. Processing topics will include polymer rheology, principles of polymer processing, solution processing, and extrusion. Prerequisite: CHEM 4351 or CHEM 5351 or MSEC 7370 any with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395E. Industrial Ecology and Sustainability Engineering.**

This course covers the basic principles of life cycle analysis (LCA) of engineered products, materials, and processes. Topics covered include: biological ecology, industrial ecology, resource depletion, product design, process design, material selection, energy efficiency, product delivery, use, end of life and LCA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395F. Catalysis in Materials Science.**

This course introduces principles and applications of catalysis in materials science. The primary topics of study will include catalysis as a means of synthesizing materials and materials as catalysis. Subtopics will focus on specific catalysts (Ziegler-Natta, ROMP, and cross-coupling catalysts) and specific catalytic processes (hydrogenation, photoredox, and electrocatalysis).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395G. Applied Plasma Physics.**

Applied plasma physics focusing on the broad range of technical plasma devices, and to analyze and describe the main plasma physical characteristics and principles of operation. Emphasis will be on physical insight, application, and problem solving. Prerequisite: MSEC 7401 and MSEC 7402 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395H. Environmental Chemistry.**

Advanced study in environmental chemistry, with an emphasis on aquatic resources and materials science and engineering. Principles of geochemistry and atmospheric chemistry will be covered as they relate to environmental pollution monitoring and control. Principles and applications of green chemistry will also be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395I. Structure and Properties of Alloys.**

This course in an advanced exploration of the structure and properties of engineering alloys. Strengthening mechanisms of alloys are explored with specific applications to the alloys studied. The processing, properties, and structure of ferrous and nonferrous alloys are explored including new and emerging alloys. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395J. Advanced Concrete Materials and Durability.**

This course delves into a comprehensive coverage of Portland cement concrete materials as well as resilient and sustainable materials used for building and transportation infrastructure. Topics include cement and aggregate properties, chemical and mineral admixtures, mixture proportioning, concrete microstructure, concrete durability, long-term performance, durability prediction and modeling, durability of alternative cement, multi-scale assessment, and dimensional stability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395K. Electrical and Magnetic Characterization Methods.**

This course introduces electric and magnetic characterization methods important to metals, magnetic and semiconductor materials and devices. Various measurement techniques and methods will be reviewed. Students will learn to work with characterization tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395L. Advanced Solid State Physics.**

This course reviews models of a solid and energy band theory. Additional topics may include interaction of electromagnetic waves with solids, lattice vibrations and phonons, many body effects in solids, device physics, quantum phenomena, carrier transport properties, current device configurations, and materials interface problems. Prerequisite: MSEC 7401 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395M. Semiconductor Devices and Processing.**

This course addresses the basics of semiconductor devices, silicon and compound semiconductor material fabrication, photolithography, etching, control of dopant profiles for the formation of shallow junctions needed for nanoscale devices, ion implantation and microstructure engineering, different types of doping phenomena, the carrier action and charge transport properties, defect microstructures, low-resistivity Ohmic contacts, and different fabrication concepts of conventional and emerging micro-/nano-electronic devices. In addition, students will be involved in laboratory projects and seminar presentations. Prerequisite: MSEC 7401 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395N. Advanced Infrastructure Materials.**

This course provides a comprehensive presentation of advanced infrastructure materials including cement concrete, asphalt concrete, wood, steel, etc. Emphasis is placed on a fundamental understanding of the raw ingredients of cement concrete and how these ingredients affect concrete fresh and hardened properties. A brief introduction of other common infrastructure materials is also included in this course. Students will be asked to solve an infrastructure material related problem using advanced analytical and simulation tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7395O. Modern Concepts in Materials Science.**

This course provides an overview of the modern concepts and principles that are used to describe and predict the physical properties of materials. An emphasis will be placed on developing and applying fundamental materials science concepts: atoms and atomic bonding, fundamentals of crystallography, elementary diffraction by solid-state materials, defects, solid solution and phase equilibrium. Particular attention will be given to the science and theories explaining the unique behavior of different classes of materials, i.e. ceramics, metals, polymers, electronic materials and composites.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MSEC 7399. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7401. Fundamental Materials Science and Engineering.**

Course covers fundamentals of chemical kinetics, physical properties, and continuum mechanics. Topics include electronic and atomic structure, structure of crystalline materials, imperfections, thermodynamic and kinetic principles and equations for closed and open systems, statistical models, phase diagrams, diffusion, phase transformations, conservation laws, and kinematics.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7402. Advanced Materials Science and Engineering Concepts.**

Fundamentals of quantum mechanics, physics of solid state, and physical electronics and photonics for advanced materials will be discussed. Topics will include quantum basis for properties of solids, lattice vibration, free electron model for magnetism, semiconductors, nanostructures and mesoscopic phenomena, superconductivity, and recent advances in new types of materials. Prerequisite: MSEC 7401 with a grade of "C" or better.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MSEC 7599. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7699. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester. Repeatable for credit.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MSEC 7999. Dissertation.**

Original research and writing in Materials Science, Engineering, and Commercialization, is to be accomplished under direct supervision of the PhD Research Advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MATH 1101. Math Education Intervention.**

Students benefit from innovative, research-based approaches for learning mathematics, and this course will deliver supplemental mathematical instruction as one such intervention. Students will be assessed using college readiness indicators or other information to determine individualized approaches. The course is designed for students in 1000 level mathematics courses who feel they would benefit from additional course based support. Prerequisite: Departmental Approval. Corequisite: MATH 1312 or MATH 1315 or MATH 1316 or MATH 1319.

**1 Credit Hour. 0 Lecture Contact Hours. 24 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Credit/No Credit

**MATH 1300. Elementary Algebra.**

This course is designed to review and strengthen basic mathematical skills. Topics may include number concepts, computation, elementary algebra, geometry, and mathematical reasoning. The credit earned for this course does not count toward any degree offered at this university.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Developmental/ Remedial|Dif Tui- Science & Engineering

**Grade Mode:** Developmental

**MATH 1311. Intermediate Algebra.**

This preparatory course for college algebra includes linear equations and inequalities, rational expressions, exponents and radicals, quadratics and word problems. This course is designed for students who've graduated from high school with no more than the minimum mathematics requirements or for students who've been away from mathematics for years. Prerequisites: TSI Assessment Test Score of 345 or more.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Developmental/ Remedial|Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Developmental

**MATH 1312. College Statistics and Algebra.**

Algebra (as used in elementary statistics) is studied, including linear and quadratic equations, inequalities, functions and their graphs, logarithms, systems of equations, and applications of mathematics. Emphasis is made on statistical concepts, such as least squares regression, distributions confidence intervals, & hypothesis testing. This course is not intended to substitute for MATH 1315 as a prerequisite. Prerequisite: College Readiness in Mathematics according to the TSI regulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 1315. College Algebra.**

Course topics include linear and quadratic equations, inequalities, functions, exponentials and logarithms, systems of equations using matrices, applications, and other college algebra topics as time permits. Prerequisite: College Readiness in Mathematics according to the TSI regulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1314

**MATH 1316. Survey of Contemporary Mathematics.**

This course is a study of the uses of mathematics in society today. Emphasis is on concepts rather than technical details. Prerequisite: College Readiness in Mathematics according to TSI regulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1332

**MATH 1317. Plane Trigonometry.**

This course covers right triangles, radian and degree measures, trigonometric functions and their graphs, trigonometric identities, including multiple and half-angle identities, inverse trigonometric functions, trigonometric equations, general triangles, and complex numbers. Prerequisite: [MATH 1315 with a grade of "C" or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1316

**MATH 1319. Mathematics for Business and Economics I.**

Topics from college algebra and finite mathematics applied to business and economics are covered, including applications of equations and inequalities, simple and compound interest, and annuities. Prerequisite: College Readiness in Mathematics according to the TSI regulations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1324

**MATH 1329. Mathematics for Business and Economics II.**

This course covers topics from finite mathematics and elementary differential calculus applied to business and economics. Prerequisite: [MATH 1315 or MATH 1319 with a grade of "C" or better] or [ACT Mathematics score of 27 or better] or [SAT Math Section score of 600 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1325

**MATH 2311. Principles of Mathematics I.**

This course is intended to build and reinforce a foundation in fundamental mathematics concepts and skills for teaching. It includes the conceptual development of the base ten numeration system, the structure and properties of the various number systems and operations, and number theory. All topics are explored with an emphasis on problem-solving and critical thinking. Prerequisite: MATH 1312 or MATH 1315 or MATH 1319 or MATH 2321 or MATH 2417 any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1350

**MATH 2312. Informal Geometry.**

As a continuation of MATH 2311, this course builds and reinforces a foundation in fundamental mathematical concepts and skills. It includes the concepts of geometry, measurement, probability, and statistics with an emphasis on geometry and measurement as well as problem-solving and critical thinking. Prerequisite: MATH 2311 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1351

**MATH 2321. Calculus for Life Sciences I.**

This course studies exponential, logarithmic, and trigonometric functions and their applications, limits, derivatives, indefinite and definite integrals, and the Fundamental Theorem of Calculus. Applications from the life sciences receive particular emphasis. Prerequisite: [MATH 1315 or MATH 1319 or MATH 1329 or MATH 2417 with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Math Section score of 550 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 2313

**MATH 2328. Elementary Statistics.**

This course is an algebra-based introduction to descriptive statistics, the interpretation of data, random sampling, design of experiments, probability, and the Central Limit Theorem. Inferential statistics topics include the foundational concepts for confidence intervals and hypothesis testing for simple experiments. Prerequisite: [MATH 1312 or MATH 1315 or MATH 1319 with a grade of "C" or better] or [MATH 1329 or 2321 or MATH 2417 or MATH 2471 with a grade of "D" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Math Section score of 550 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 1342

**MATH 2331. Calculus for Life Science II.**

This course is an extension of MATH 2321 and includes techniques and applications of integration, differential equations, probability, and discrete and continuous distributions. Prerequisite: MATH 2321 with a grade of "C" or better or MATH 2471 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 2358. Discrete Mathematics I.**

This course is a study of discrete mathematical structures commonly encountered in computing hardware and software are studied. Topics include logic, functions, elementary set theory, proof techniques, mathematical induction, numeric sequences, elementary number theory, and graph theory. Prerequisite: [MATH 1315 or MATH 1329 with a grade of "C" or better] or [MATH 2417 or MATH 2471 with a grade of "D" or better].

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 2305

**MATH 2393. Calculus III.**

The course topics include vectors and the geometry of space, functions of several variables, vector-valued functions, partial derivatives, extreme values, multiple integrals, vector fields, line and surface integrals, Green's Theorem, Stokes' Theorem, the Divergence Theorem, and applications of the preceding in the sciences. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** MATH 2315

**MATH 2417. Pre-Calculus Mathematics.**

This course is a survey of functions, trigonometry, and analytic geometry. Students' algebraic skills are reinforced throughout the course.

Prerequisites: [MATH 1315 or MATH 1319 with a grade of C or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Math Section score of 550 or better] or [Accuplacer College Mathematics score of 86 or better] or [Compass College Algebra score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test of 263 or better].

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** MATH 2412

**MATH 2471. Calculus I.**

This first course in differential and integral calculus covers limits and continuity, functions and graphing, derivatives, integrals, and applications of calculus to science, engineering, and other technical fields. Prerequisites: [MATH 2417 with a grade of C or better] or [ACT Mathematics score of 27 or better] or [SAT Math Section score of 600 or better] or [Accuplacer College Mathematics score of 103 or better] or [Compass Trigonometry score of 46 or better] or [Next-Generation Advanced Algebra and Functions Test score of 276 or better].

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Mathematics Core 020|Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** MATH 2413

**MATH 2472. Calculus II.**

This course continues the study of differential and integral calculus from MATH 2471. The topics include techniques of integration, improper integrals, parametric equations and polar coordinates, applications of calculus, sequences and series, and an introduction to partial derivatives. (MULP) Prerequisite: MATH 2471 with a grade of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Mathematics CAO 092|Dif Tui- Science & Engineering|Lab Required|Multicultural Perspective

**Grade Mode:** Standard Letter

**TCCN:** MATH 2414

**MATH 2473. Integral Calculus with Multivariables and Series.**

This course is a continuation of differential and integral calculus. Select topics from Calculus II and Calculus III are covered including methods of integration, sequences and series, and introduction to partial derivatives. Prerequisite: MATH 2471 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Component Area Core 090|Mathematics CAO 092|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3305. Introduction to Probability and Statistics.**

This is a calculus-based probability and statistics course. Topics include probability, conditional probability, discrete and continuous random variables, univariate and multivariate distributions of random variables, mathematical expectations, and moment-generating functions. Prerequisite: MATH 2472 with a grade of "C" or better.

Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3306. Introduction to Statistical Methods.**

This is a calculus-based statistics course covering such topics as essential descriptive statistics, probability, discrete and continuous probability distributions, sampling distributions, concepts of estimation and hypothesis testing, confidence intervals, hypothesis tests based on one or more samples, and simple linear regression. Prerequisite: MATH 2472 with a grade of "C" or better and a 2.75 overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3315. Foundations of Geometry.**

In this course students seeking teacher certification will study Euclidean Geometry and will be introduced to non-Euclidean Geometries. Dynamic geometry software and historical aspects of geometry will be integrated into the course. This course may not be applied to a minor in mathematics. Prerequisite: MATH 2321 or MATH 2471 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3323. Differential Equations.**

In this course various methods of solving common types of ordinary differential equations are studied. Students learn the conditions under which solutions to first-order and second-order ordinary differential equations exist and are unique. Applications to science, engineering, and technology receive emphasis throughout the course. Prerequisite: MATH 2472 or MATH 2473 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter



**MATH 3324. Applied Multivariate Statistics.**

This course is an introduction to applied multivariate statistical methods including multiple regression, analysis of variance, logistic regression, and time series. In addition, this course introduces the student to the use of statistical software including the proper application, limitations, and interpretations of results. Prerequisite: [MATH 2471 or MATH 2321] and [MATH 2328 or MATH 3305] both with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3325. Number Systems.**

In this course, students construct the natural numbers algebraically, establishing the basic vocabulary and proof techniques of abstract algebra and the structural properties of the natural, integral, rational, real, and complex number systems. Corequisite: MATH 2471 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3330. Introduction to Advanced Mathematics.**

This course introduces fundamental methods of proof and the core language of modern mathematics. Topics include the theory of sets, logic, relations, functions, the cardinality of sets, and related subjects. Prerequisite: MATH 2471 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3348. Deterministic Operations Research.**

This course provides a broad overview of deterministic operations research techniques. Linear programming, including the simplex method, duality, and sensitivity analysis, will be covered. Further selected topics are integer programming, dynamic programming, scheduling models, game theory, and associated topics. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3376. Applied Linear Algebra.**

This course covers linear algebra and matrix theory while considering their computational aspects. Topics include a variety of methods for solving systems and related properties. Emphasis is placed on topics useful in civil engineering, applied mathematics, and other disciplines, serving as a preparatory course for the finite element method. Prerequisite: MATH 2472 or MATH 2473 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3377. Linear Algebra.**

An introductory course in linear algebra covering systems of linear equations, vector spaces, linear transformations, matrices, and additional topics as time permits. Mathematical proofs are an essential part of this course. Prerequisite: MATH 2472 with a grade of "C" or higher.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3380. Analysis I.**

This is a course covering the introduction to the theory of real functions. Topics include limits, continuity, derivatives, and associated topics. Prerequisite: MATH 3330 and MATH 2472 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3383. Numerical Analysis I.**

This course focuses on basic numerical methods in mathematics to solve functional problems in fields such as engineering and applied sciences.

This course covers instructions in computer arithmetic, solutions of equations, interpolation, numerical differentiation/integration, and applications to scientific and industrial applications. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 3398. Discrete Mathematics II.**

This course continues the studies in Discrete Math I, topics include combinatorics, countability and counting arguments, discrete probability, relations, recursion and recurrence, generating functions, algorithms, and growth of functions. Prerequisite: MATH 2358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4302. Principles of Mathematics II.**

Algebraic reasoning and probability with selected topics from quantitative reasoning, measurement, statistics, and geometry are integrated with middle school pedagogical practices such as inquiry-based learning and the use of technology. Appropriate correlated lessons, writing components, and culturally responsive teaching are incorporated. (WI) Prerequisite: MATH 2312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**MATH 4303. Capstone Mathematics for Middle School Teachers.**

A rigorous, integrated, analytical perspective of mathematical topics; quantitative reasoning, geometry and measurement, probability and statistics, number theory, and algebraic reasoning. This course may not be applied to a mathematics minor. Must be taken before student teaching. Prerequisite: [MATH 2331 or MATH 2472] and MATH 3315 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4304. Capstone Mathematics for Secondary Teachers (of Mathematics).**

Basic concepts underlying algebra, geometry, trigonometry, and calculus are taught from an advanced standpoint, including historical, philosophical, and cultural significance. This course may not be applied to a minor in mathematics. Must be taken before student teaching. Prerequisite: MATH 3315 and [MATH 2331 or MATH 2472] with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4305. Advanced Probability and Statistics.**

This mathematical statistics course focuses on statistical inferences and data analysis. Topics include functions of random variables and their distributions, the Central Limit Theorem, point estimators and their properties, concepts and applications of interval estimation of population parameters, and the theory and applications of statistical tests of hypotheses. Prerequisite: MATH 3305 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4306. Fourier Series and Boundary Value Problems.**

Advanced solution methods for ordinary differential equations and partial differential equations are studied, focusing on series approximations and Fourier series solutions. Applications of boundary value problems typical of scientific applications are studied. Prerequisite: MATH 3323 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4307. Modern Algebra.**

This course covers structures, structure-preserving functions, and other fundamental concepts of modern algebra, emphasizing group theory. Prerequisite: MATH 3330 and [MATH 3325 or MATH 3377] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4311. Introduction to the History of Mathematics.**

This course is a survey of the development of major mathematical topics, including geometry, algebra, calculus, and advanced mathematics. Philosophical and cultural aspects will be integrated with the structure, theorems, and applications of mathematics. (WI) Prerequisite: MATH 3315 and [MATH 2331 or MATH 2472] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**MATH 4315. Analysis II.**

A continuation of MATH 3380, this course's topics include differentiation, integration, series, and sequences of functions, and associated topics. Prerequisite: MATH 3380 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4327. Introduction to Complex Analysis and Its Applications.**

This course introduces topics in the theory of functions of a complex variable (contour integrals, series, residues of analytic functions, and conformal mappings) with engineering and science applications. These include solving boundary value problems, locating zeros of analytic functions, analyzing two-dimensional heat and fluid flows, and calculating inverse Laplace transforms. Prerequisite: [MATH 2393 or MATH 2473] and MATH 3323 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4330. General Topology.**

In this course, students study the concepts of convergence, continuity, compactness, connectedness, and fixed points in topological spaces, particularly in metric spaces. Prerequisite: MATH 3330 and MATH 2472 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4336. Studies in Applied Mathematics.**

This course covers selected topics including Laplace transforms, complex variables, advanced calculus for applications, calculus of variations, integral and differential equations, vector analysis, and other topics from applied mathematics. It may be repeated once for credit with a different topic. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4337A. Topological Data Analysis.**

This research-based course introduces students to computational topology and topological data analysis. In addition to studying existing data studies from the recent scientific literature, students will also analyze a data set they have personally chosen. Students will present their progress and results both orally and in writing. Prerequisite: MATH 3377.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MATH 4337B. Research in Discrete Mathematics.**

This course is an introduction to creative mathematical activities. It provides an opportunity to perform research in discrete mathematics, as well as to learn how to present mathematical results both orally and in writing. These skills are essential for those students continuing into graduate studies. Prerequisite: Texas State GPA 3.25; MATH 2358. Corequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MATH 4337C. Numerical Methods for Ordinary Differential Equations.**

This research-based course has students investigate known methods of numerically solving ordinary differential equations (Runge-Kutte, Adams, Predictor-Corrector, etc.). Students will research the effect of variations on these methods by implementing their algorithm modifications in mathematical software and reporting on their results. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**MATH 4337D. Topics in Topology and Algebra.**

This course introduces students to modern research methods in topology and algebra. Specific topics will vary based on student interest and input, but the basic concepts and methods of algebraic topology (homology and cohomology groups, homotopy groups), homotopy theory, and simplicial methods form the backbone of this course. Prerequisite: MATH 3330 with a grade of "C" or better and a minimum 2.0 Texas State GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**MATH 4337H. Undergraduate Research in Topology and Artificial Neural Networks.**

The course will introduce the mathematics behind Artificial Neural Networks (ANN) with an eye towards applying topology to study ANN's. Topics include general machine learning concepts, feedforward neural networks, the gradient descent algorithm, the universal approximation theorem, convolutional neural networks, topology, and VC dimension. Students will customize a basic artificial neural network written in Python through hands-on projects. Prerequisite: MATH 2471 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 4350. Introduction to Combinatorics.**

This course presents fundamental combinatorial concepts, including standard techniques and methods of proof specific to the field. Topics include advanced counting, generating functions, linear and nonlinear recurrence relations, combinatorial designs. Applications of the topics will be explored as time permits. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4383. Numerical Analysis II.**

This course focuses on various mathematical and computational methods in modeling, analyzing, and simulating scientific and engineering problems. Topics include approximation, optimization, differential equations, scientific computation, and scientific and industrial applications. Prerequisite: MATH 3383 and MATH 3323 both with a grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 4393. Introduction to Finite Element Methods.**

This course introduces weak formulations of the partial differential equations and the finite element approximation of this weak form. Theory and computations are balanced. Topics include finite element methods for approximating solutions of partial differential equations and related properties. Emphasis topics are in civil engineering, applied mathematics, and related disciplines. Prerequisite: [MATH 3376 or MATH 3377] and MATH 3323 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**MATH 5111. Graduate Assistant Training.**

This course is concerned with techniques used in the teaching of mathematics. This course is required as a condition of employment for graduate teaching and instructional assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MATH 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5272A. Teaching Geometry through Problem Solving and Discovery Learning.**

This course investigates the problem-solving heuristics embedded in the secondary school geometry curriculum and explores how to implement problem solving in geometry classrooms. This course also examines the unique "Hungarian style" method of discovery learning in mathematics, developed for students aged 12-18. The method referred to as the Pósa Method is similar to inquiry based learning with an emphasis on problem solving.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5272B. Gamification and Playfulness in Teaching Mathematics.**

This course focuses on the non-game context of education and presents applications of game elements with special attention to teaching mathematics. Mathematics concepts are uncovered through the use of mathematical games and hands-on manipulatives that foster playfulness.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5301. Partial Differential Equations.**

Theory and application of partial differential equations; derivation of the differential equation; use of vector and Tensor methods; equations of the first order; wave equations; vibrations and normal functions; Fourier series and integral; Cauchy's methods, initial data; methods of Green; potentials; boundary problems; methods of Riemann-Volterra; characteristics. Prerequisites: MATH 3323 and consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5303. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress. Cannot be used on a degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5304. Topics in Mathematics for the Secondary Teacher.**

A study of the current trends and topics found in the secondary school mathematics curriculum with the goal of improving the mathematical background of the secondary teacher. Course content will be flexible and topics will be selected on the basis of student needs and interests. Cannot be used on degree plan for M.S. degree. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5305. Advanced Course in Probability and Statistics.**

Advanced topics in probability and statistics. May be repeated once with different emphasis for additional credit. Prerequisite: MATH 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5307. Modern Algebra.**

Topics in modern algebra. Material will be adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5311. Foundations of Differential Equations.**

A critical study of the foundations of derivation equations, operator spaces, and such basic topics. Recent developments in this field will be investigated and independent investigation will be encouraged. Prerequisite: MATH 2393 and [MATH 3380 or MATH 5382] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5312. Functions of a Complex Variable.**

Modern developments in the field of a complex variable. Prerequisite: MATH 2393 and MATH 4315 and [MATH 3380 or MATH 5382] all with grades of "C" or better or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5313. Field Theory.**

Topics in field theory, separable extensions, and Galois Theory.

Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5314. Number Theory.**

Topics in algebra selected from quadratic forms, elementary number theory, algebraic or analytic number theory, with material adapted to the needs of the class. Prerequisite: MATH 4307 with a grade of "C" or better, or MATH 5384 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5315. Mathematical Statistics.**

This course discusses theoretical aspects of estimation theory and hypothesis testing procedures, with some of their important applications. The main topics include convergence of random variables, parameter estimation, properties of estimators, interval estimation, sufficiency and applications to the exponential family, hypothesis testing, decision theory, and Bayesian inference. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5317. Problems in Advanced Mathematics.**

Open to graduate students on an individual basis by arrangement with the mathematics department. A considerable degree of mathematical maturity is required. May be repeated with different emphasis. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 5319. The Theory of Integration.**

A course in the theory of integration with special emphasis on the Lebesgue integrals. A course in the theory of real variables, with a knowledge of point set theory, is desirable as a background for this course. A considerable amount of mathematical maturity is required. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5329. General Topology.**

Point-set topology with an emphasis on general topological spaces; separation axioms, connectivity, the metrization theorem, and the C-W complexes. Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5331. Metric Spaces.**

Point-set topology with an emphasis on metric spaces and compactness but including a brief introduction to general topological spaces.

Prerequisite: MATH 4330 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5335. Survival Analysis.**

This course introduces concepts and methods in the analysis of survival data. Topics include characteristics of survival data; basic functions; parametric models for survival time; maximum likelihood estimation of survival functions; two-sample test techniques; regression analysis with parametric and semi-parametric models; and mathematical and graphical methods for model checking. Prerequisite: Math 5305 with a grade of "B" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5336. Studies in Applied Mathematics.**

Topics selected from optimization and control theory, numerical analysis, calculus of variations, boundary value problems, special functions, tensor analysis, or other subfields of applied mathematics are studied. Repeatable for credit with different topic emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MATH 5338. Advanced Independent Study in Mathematics or Statistics.**

This course gives graduate students specializing in mathematical or statistical subjects the opportunity to study specialty subjects from individual Mathematics faculty's research interests. Work may consist of theoretical or empirical research or reviewing and integrating existing literature on the subject. Repeatable once for credit with different emphasis. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**MATH 5340. Scientific Computation.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using a computer algebra system. Symbolic numerical and graphical techniques will be studied. Applications will be drawn from science, engineering, and mathematics. A knowledge of differential equations is expected.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MATH 5345. Regression Analysis.**

This course introduces formulation and statistical methodologies for simple and multiple regression, assessment of model fit, model design, and criteria for selection of optimal regression models. Students will develop skills with the use of statistical packages and the writing of reports analyzing a variety of real-world data. Prerequisite: MATH 2472.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5350. Combinatorics.**

This course, covers permutations, combinations, Stirling numbers, chromatic numbers, Ramsey numbers, generating functions, Polya theory, Latin squares and random block design. Prerequisite: MATH 3398 or consent of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5355. Applied and Algorithmic Graph Theory.**

This course is designed to emphasize the close tie between the theoretical and algorithmic aspects. The topics may include basic concepts such as connectivity, trees, planarity, coloring of graphs, matchings, and networks. It also covers many algorithms such as Max-flow Min-cut algorithm, maximum matching algorithm, and optimization algorithms for facility location problems in networks. Prerequisite: MATH 5388 or MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5358. Applied Discrete Mathematics.**

Boolean algebra, counting techniques, discrete probability, graph theory, and related discrete mathematical structures that are commonly encountered in computer science. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5360. Mathematical Modeling.**

This course introduces the process and techniques of mathematical modeling. It covers a variety of application areas from the natural sciences. Emphasis is placed on deterministic systems, stochastic models, and diffusion. Prerequisite: [MATH 2393 and MATH 3323 both with grades of "D" or better and MATH 5301 with a grade of "C" or better] or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5373. Theory of Functions of Real Variables.**

This course will discuss those topics that will enable the student to obtain a better grasp of the fundamental concepts of the calculus of real variables and the more recent developments of this analysis. Prerequisite: MATH 4315 with a grade of "C" or better, or departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5374. Numerical Linear Algebra.**

This course introduces tools that mathematical scientists use with vectors and matrices. Applications include least squares and eigenvalue problems, and systems of equations from applied mathematics. The stability of algorithms to perturbations are considered. Theory is balanced with numerically implementing algorithms, in particular for iterative methods for large, sparse systems. Prerequisite: MATH 3377 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5376A. Design and Analysis of Experiments.**

This course introduces fundamental concepts in the design of experiments, justification of linear models, randomization and principles of blocking. It also discusses the construction and analysis of basic designs including fractional replication, composite designs, factorial designs, and incomplete block designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376B. Analysis of Variance.**

This course introduces basic methods, one-way, two-way ANOVA procedures, and multifactor ANOVA designs. Prerequisite: Approval of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 5376D. Statistical Applications in Genetics and Bioinformatics.**

The statistical concepts and methods to be covered include important probability distributions, analysis of variance, regression analysis, hidden Markov model, and Markov Chain Monte Carlo methods. These methods will be used to address important and challenging questions arising in the analysis of large genetic and bioinformatic datasets. Prerequisite: Math4305 or equivalent.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376E. Introduction to Data Science.**

This course introduces basic concepts and methods in the field of data science. Topics include data wrangling, data exploration and visualization, optimization, deep learning, supervised learning subjects such as nearest-neighbor techniques, regression, Lasso, linear discriminant analysis, logistic regression, tree-based models, neural networks, as well as unsupervised learning subjects such as market basket analysis and cluster analysis, and random forests. The material will be approached with a blend of theory and application, and will include programming in Python, R, or another modern, popular language of the instructor's choice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5376F. Introduction to Probability Theory and Models.**

This course covers the definitions, constructions, theorems, and techniques to build and analyze probability models. The emphasis of this class is the active construction and analysis of probability models. However, we will develop a rigorous treatment of the requisite abstract theory in service of this goal. Topics include conditional expectation, the convergence of random variables, weak and strong law of large numbers, central limit theorem, random walk, Martingales, and Brownian motion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5381. Foundations of Set Theory.**

A formal study of the theory of sets, relations, functions, finite and infinite sets, set operations and other selected topics. This course will also train the student in the understanding of mathematical logic and the writing of proofs. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5382. Foundation of Real Analysis.**

A course covering the foundations of mathematical analysis. Topics include: real numbers, sequences, series, and limits and continuity of functions. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5384. Geometric Approach to Abstract Algebra.**

Definitions and elementary properties of groups, rings, integral domains, fields and vector spaces with great emphasis on the rings of integers, rational numbers, complex numbers, polynomials, and the interplay between algebra and geometry. Prerequisite: MATH 5381.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5386. Knots and Surfaces, An Introduction to Low-Dimensional Topology.**

Knot polynomials and other knot invariants. The topological classification of surfaces and topological invariants of surfaces. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5388. Discrete Mathematics.**

This course covers topics from: basic and advanced techniques of counting, recurrence relations, discrete probability and statistics, and applications of graph theory. Prerequisites: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5390. Statistics.**

This course will cover not only some of the basic statistical ideas and techniques but also the mathematical and probabilistic underpinnings of these techniques with an emphasis on simulations and modeling. The planning, conducting, analysis, and reporting of experimental data will also be covered. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5392. Survey of Geometries.**

A study of topics in geometry including geometrical transformations, the geometry of fractals, projective geometry, Euclidean geometry, and non-Euclidean geometry. Prerequisite: MATH 2472 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5393. Numerical Optimization.**

This course focuses on optimization methods for a broad range of applications, such as engineering and applied sciences. Subjects are the basic theory of optimization, numerical algorithms to locate points satisfying optimality conditions and to analyze the convergence properties. Prerequisites: MATH 2472 and MATH 3377 and MATH 3383, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Mathematics 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5472A. Experiencing the Hungarian Approach through Observation and Teaching Practicum.**

This course provides a first-hand experience in putting the Hungarian style guided discovery into practice. As part of the course, students will spend one week at a mathematics camp for secondary students that is being run using the Hungarian style of teaching. Students will observe mathematics classes, discuss pedagogy with camp instructors, and design and teach their own lesson to camp participants.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7111. Seminar in Teaching.**

Seminar on individual study projects concerned with selected problems in the teaching of mathematics. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MATH 7188. Seminar in Mathematics Education.**

Students are required to attend weekly research seminars in Mathematics Education and to give at least one research presentation in the seminar during the semester. This course is repeatable for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7199A. Dissertation.**

Original research and writing in Mathematics Education to be accomplished under direct supervision of the dissertation advisor. While conducting dissertation research and writing, students must be continuously enrolled each long semester.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7299A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7301. Studies in Mathematics.**

This course provides basic foundations in Mathematics for students entering the doctoral program in Mathematics or Mathematics Education. This course may be repeated. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MATH 7302. History of Mathematics.**

A study of the development of mathematics and of the accomplishments of men and women who contributed to its progress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7303. Analysis I.**

This course covers foundations of modern analysis. Topics include: sequences,  $\text{LimSup}$ ,  $\text{LimInf}$ , Sigma Algebras of sets that include open and closed sets, sequences of functions, pointwise and uniform convergence, lower and upper semi-continuity, Borel sets, outer measure, and Lebesgue measure. Prerequisite: MATH 4315.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7306. Current Research in Math Education.**

This course surveys the various current social, political, and economic trends in local, state, national, and international settings that are related to research in Mathematics Education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7307. Algebra I.**

Applications of Algebra and topics in modern algebra, including permutation groups, symmetry groups, Sylow theorems, and select topics from Ring Theory. Prerequisite: MATH 4307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7309. Topology I.**

A course in point-set topology emphasizing topological spaces, continuous functions, connectedness, compactness, countability, separability, metrizability, CW complexes, simplicial complexes, nerves, and dimension theory. Prerequisite: MATH 4330.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7313. Analysis II.**

This course covers the theory of integration with special emphasis on Lebesgue integrals. Topics include: Lebesgue integral, Bounded Convergence theorem, differentiation and integration, absolute continuity, and  $L_p$  spaces. Prerequisite: Math 7303.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7317. Algebra II.**

A study of the important algebraic structures of rings and fields. Topics covered include rings, ideals, modules, polynomial rings, Euclidean algorithm, finite fields, and field extensions. Topics also include an introduction to Galois Theory with an emphasis on the geometric applications. Prerequisite: MATH 7307.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7319. Topology II: Algebraic Topology.**

This course covers the fundamental concepts and tools of algebraic topology. Topics include the fundamental group, covering spaces, homotopy type, the higher homotopy groups, singular homology theory, and the computation of homology groups via exact sequences and applications. Prerequisite: MATH 7307 and MATH 7309.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7321. Graph Theory.**

Topics in this course include trees, connectivity of graphs, Eulerian graphs, Hamiltonian graphs, planar graphs, graph coloring, matchings, factorizations, digraphs, networks, and network flow problems.

Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7323. Theories of Knowing and Learning in Mathematics Education.**

This course surveys the major theories of knowing and learning that have influenced mathematics education. These theories include behaviorism, constructivism, sociocultural theories, situated cognition, and others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7324. Curriculum Design & Analysis.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques that are related to curriculum design in Mathematics Education for grade levels P-16.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7325. Statistics 1.**

A study of the mathematical and probabilistic underpinnings of the techniques used in statistical inference. Topics covered include sampling, sampling distributions, confidence intervals, and hypothesis testing with an emphasis on both simulations and derivations. Prerequisite: Math 2321 and Math 3305.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7328. Instructional Techniques & Assessments.**

This course examines, analyzes, and evaluates the various concepts, topics, methods, and techniques of instruction in Mathematics Education and the related assessment procedures for each for grade levels P-20.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7331. Combinatorics.**

This course is a study of fundamental principles of combinatorics. Topics include: permutations and combinations, the Pigeonhole principle, the principle of inclusion-exclusion, binomial and multinomial theorems, special counting sequences, partitions, posets, extremal set theory, generating functions, recurrence relations, and the Polya theory of counting. Prerequisite: MATH 3398.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7335. Statistics II: Linear Modeling.**

A study of the formulation and statistical methodologies for fitting linear models. Topics include the general linear hypothesis, least-squares estimation, Gauss-Markov theorem, assessment of model fit, effects of departures from assumptions, model design, and criteria for selection of optimal regression models. Prerequisite: MATH 3377 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7346. Quantitative Research Analysis in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and use of appropriate design methodologies to achieve the strongest possible evidence to support or refute a knowledge claim. Prerequisite: MATH 7306 and MATH 7325.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7354. Advanced Qualitative Research.**

This course encompasses the techniques and tools needed for the development, investigation, and demonstration of competence in conducting qualitative research in mathematics education. Principles of qualitative data analysis are a significant focus of the course, with particular attention given to specific methods used to code and analyze data. Prerequisite: ED 7352 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356B. Advanced Qualitative Research.**

This course encompasses investigation, development, and demonstration of competence, design, and execution for mathematics education problems in qualitative research. Prerequisite: ED 7352 or CI 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7356C. Action Research in Mathematics Education.**

This course examines underlying theory and issues in action research model and the development of action research projects. Prerequisites: MATH 7346 or ED 7352.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7358. Advanced Quantitative Research in Mathematics Education.**

This course surveys the various research techniques used in quantitative analysis for mathematics education and covers topics such as experimental design, statistical analysis, and the use of appropriate design methodologies to achieve the most substantial evidence to support or refute a knowledge claim. Prerequisite: MATH 7346 with a grade of "B" or better or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7361. Seminar in Advanced Mathematics.**

Material in course will vary with the interest of students and faculty. A detailed study of subject matter may be chosen from advanced areas of analysis; algebra; topology and geometry; applied mathematics; and probability and statistics. This course is repeatable for credit when subject matter varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7363A. COMPLEX ANALYSIS.**

This course is a brief introduction to the complex number system and basic point-set topology of the complex plane, followed by a proof-based and rigorous study of the principal results of the analysis of functions of a single complex variable. Prerequisite: MATH 4315 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363B. NUMERICAL ANALYSIS.**

This course will involve the analysis of algorithms from science and mathematics, and the implementation of these algorithms using computer algebra systems. Symbolic, numerical, and graphical techniques will be studied. Applications will be drawn from the sciences, engineering, and mathematics. Prerequisite: MATH 3323 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363C. FUNCTIONAL ANALYSIS.**

This course presents the three basic fundamental theorems of functional analysis: the Hahn-Banach theorem, the uniform boundedness theorem, and the open mapping theorem. Prerequisite: MATH 7303 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7363E. Numerical Analysis II.**

This course will involve the analysis and numerical implementation of algorithms to solve partial differential equations. Applications will be drawn from science, engineering, and mathematics. Topics include the numerical solution of linear partial differential equations and the related linear systems of equations. Prerequisite: MATH 7363B with a letter grade of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**MATH 7363F. Functional Analysis II.**

This course will involve the analysis of infinite dimensional vector spaces including spaces of functions, measures, and distributions. Topics include Fourier transforms, theory of Banach spaces, and operator theory. Prerequisite: MATH 7363C with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366A. Teaching Post-Secondary Students (Developmental Math, Service Courses, and Majors).**

This course examines how to develop and teach post-secondary students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisites: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366B. Teaching K-12 Students (Elementary, Middle School, and High School).**

This course examines how to develop and teach K-12 students. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366C. Teaching Teachers (In-Service; Pre-Service).**

This course examines how to prepare teachers of mathematics. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366D. Teaching Specialized Content.**

This course will be an in-depth study of a specialized content area in mathematics with an emphasis on teaching. The specific content area will vary by instructor. Examples include Euclidean Simplex Geometry and Discrete Probability Spaces with Implications for Public School Curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7366E. Developmental Mathematics Curriculum.**

This course surveys the research, development, and evaluation of the scope and sequence of developmental mathematics curriculum. The course references the recommendations of government agencies and professional organizations and allows for the investigation of research-based models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366F. Research in Undergraduate Mathematics Education I.**

Students will develop the requisite knowledge to become a good consumer of Research in Undergraduate Mathematics Education (RUME) research. The course will cover the theoretical underpinnings of current and historic RUME research. Students will develop the knowledge to understand relevant theoretical stances and the role they play in research. Prerequisite: Math 7306 or permission from the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7366G. Research in Undergraduate Mathematics Education II.**

In this course, students will develop necessary knowledge to design/ conduct RUME research via a topic-driven look at current RUME research. Core topics include proof, analysis/calculus, abstract algebra, linear algebra, and differential equations. Students will develop a depth of knowledge related to these topics and engage in research design and development. Prerequisite: MATH7306 and MATH7366F.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7367B. ADV GROUP THEORY.**

This course covers topics including properties of solvable, p-solvable and nilpotent groups, group actions, transfer theorems, simple groups and composition series, the generalized Fitting subgroup, automorphism groups, classical groups and linear representations of groups. Prerequisite: MATH 7307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369C. Low-dimensional topology.**

This course is an introduction to low-dimensional topology. Topics include surfaces, 3-manifolds, knots, and 4-manifolds. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369D. Characteristic Classes.**

This course is an introduction to vector bundles and characteristic classes. Topics covered include Stiefel-Whitney classes, Chern classes, Euler class, Pontrjagin classes, and their computation. Additional topics may include manifold immersion problems. Prerequisite: MATH 7317 and MATH 7319 both with grades of a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7369E. Differential Geometry.**

This course is an introduction to modern tools of differential geometry. Topics covered include manifolds, Riemannian metrics, connections, covariant derivatives, geodesics, curvatures, extrinsic and intrinsic computations. Other possible topics include hyperbolic geometry, Lie groups, Chern-Weil theory, surfaces of prescribed mean curvature, the Gauss-Bonnet theorem, and the Cartan-Hadamard theorem. Prerequisite: MATH 7307 and MATH 7309 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7371A. Advanced Graph Theory.**

Topics in this course include Turan's problems, Ramsey theory, random graph theory, extremal graph theory, algebraic graph theory, domination of graphs, distance problems, and applications. Prerequisite: MATH 7321.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371B. Advanced Combinatorics.**

Topics in this course include Block designs, Latin squares, combinatorial optimization problems, coding theory, matroids, difference sets, and finite geometry. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371C. Combinatorial Number Theory.**

A study of fundamental techniques in combinatorial number theory. Topics will include Waring's problem, additive number theory, and probabilistic methods in number theory. Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371D. Discrete Optimization.**

A study of some fundamental techniques in discrete optimization. Topics include discrete optimization, linear programming, integer programming, integer nonlinear programming, dynamic programming, location problem, scheduling problem, transportation problem, postman problem, traveling salesman problem, matroids, and NP-completeness. Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371E. Algorithms and Complexity.**

A study of some fundamental concepts of computability and complexity. Topics include polynomially bounded problems, NP-complete problems, exponentially hard problems, undecidable problems, and reducibility.

Prerequisite: MATH 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371F. Probabilistic Methods in Discrete Mathematics.**

A study of some fundamental probabilistic techniques used to solve problems in graph theory, combinatorics, combinatorial number theory, combinatorial geometry, and algorithm. Topics include linearity of expectation, alterations, second moment, local lemma, correlation inequalities, martingales, Poisson paradigm, and pseudo-randomness.

Prerequisites: MATH 7321 and 7331.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371G. Applied Discrete Mathematics.**

This course introduces fundamental concepts in logic, Boolean algebra, and binomial coefficients; and applications in different fields such as complexity of algorithms and network theory. Prerequisites: MATH 2472 and MATH 4307, all with a grade of "C" or better, or with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7371H. Combinatorial Networks.**

Combinatorial Networks is an area of study of certain types of networks using combinatorial methods extensively. This course introduces fundamental basics as well as the latest development in this area of research. Prerequisite: MATH 5307/7307 with a grade of "C" or higher.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7373B. Partial Differential Equations I.**

This course covers the theory and application of partial differential equations, typical equations of mathematical physics, Cauchy problem for equations of the first order, classification of second-order equations, Cauchy problem for second-order hyperbolic equations, Duhamel's principle, potential theory and elliptic equations, maximum principle, and parabolic equations. Prerequisite: MATH 3323, 3373 and 3380 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373C. Partial Differential Equations II.**

This course covers the existence and uniqueness theory for boundary value problems of partial differential equations (PDE) including the topics linear evolution equations, variational techniques, non-variational techniques, Hamilton-Jacobi equations, conservation laws. Prerequisite: MATH 7373B with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7373G. Spectral Methods.**

This course covers the essentials of spectral collocation methods with an emphasis on numerically implementing algorithms. The problems studied will include ordinary and partial differential equations connected with fluid mechanics, quantum mechanics, waves, and other fields. The techniques used will include both Fourier and Chebychev methods. Prerequisite: MATH 7363E with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375C. Time Series Analysis.**

A study of the theory of time-dependent data. The analysis includes modeling, estimation, and testing; alternating between the time domain; using autoregressive and moving average models and the frequency domain; and using spectral analysis. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375D. Advanced linear Modeling.**

The course provides an extension of regression methodology to more general settings where standard assumptions for ordinary least squares are violated. Topics include generalized least squares, robust regression, bootstrap, regression in the presence of autocorrelated errors, generalized linear models, and logistic and Poisson regression. Prerequisite: MATH 7335.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7375E. Computational Statistics.**

This course focuses on commonly used sampling and optimization algorithms in statistics. Topics include accept-reject method, importance sampling, Markov Chain Monte Carlo algorithms, Fisher scoring algorithm, expectation-maximization algorithm, and minorization-maximization algorithm. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375F. Multivariate Data Analysis.**

This course focuses on statistical methodologies based on multivariate analysis. Topics include multivariate normal distribution, tests of hypothesis on means, multivariate analysis of variance, discriminant analysis, principal component analysis, factor analysis and canonical correlation analysis. Prerequisite: MATH 5305 and (MATH 3376 or MATH 3377) with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375G. Bayesian Methods.**

This course focuses on Bayesian statistical analysis and associated theories. Topics include one-parameter and multi-parameter Bayesian models, choices of priors, formulation of regression models in the Bayesian framework, and related data analysis. Prerequisite: MATH 5305 or equivalent with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7375I. Advanced Statistical Learning.**

This course covers the theoretical foundations in statistical learning and deep learning. Topics include the framework of empirical risk minimization, metric entropy, Vapnik-Chervonenkis dimension, Rademacher and Gaussian complexity, symmetrization and chaining techniques, contraction principle, uniform law of large numbers, sample complexity, and neural networks. Prerequisite: MATH 7337 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378A. Problem Solving, Reasoning, and Proof.**

A study of the fundamental concepts of problem solving, logic, set theory, and mathematical proof and applications of these concepts in mathematics curriculum for grades P-20. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378B. Connecting and Communicating Math.**

This course examines one of the basic principles involved in mathematics education: Connecting and Communicating Mathematics. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378C. Representing Fundamental Math Ideas (Function, Data Analysis, and Enumeration).**

This course examines the basic principles involved in mathematics education. The process of representing fundamental mathematical ideas will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378D. Math Technologies.**

This course examines the basic principles involved in mathematics education: Technology. This fundamental theme will be reviewed, researched, and discussed. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378E. Developmental Mathematics Perspectives.**

This course examines developmental mathematics-specific strands including technological course support and placement tools/decisions. Issues related to the first mathematics core course required of undergraduates will also be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MATH 7378F. Research on Mathematical Problem Solving in Secondary Schools.**

In this course a careful study is made of elementary techniques for problem solving in a variety of domains, including algebra, number theory, combinatorics, geometry, and logic puzzles. Students will learn these techniques by actually working on a collection of problems in each of these areas. Students will read and examine research about various aspects of problem solving and research in math education that includes both teacher training and student learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378G. Discourse Processes, Traditions, and Analysis in Mathematics Education.**

Discourse and discourse analysis have been used to answer research questions across disciplines throughout the humanities and social sciences. This course will focus on theory and methods for the analysis of discourse in mathematical settings. We will learn how different approaches to discourse are used to understand mathematics learning. Prerequisite: MATH 7306.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7378H. Equity in Mathematics Education.**

Equity in Mathematics Education is a course examining research on equity issues in mathematics education. These equity issues will range from race, culture, class, and gender as they relate to the teaching, learning, and schooling of mathematics education. We will look at how equity is framed within the field of mathematics education, what has been addressed, and what has not been conceptualized. The course will help students understand the literature in the field, critique the extant research literature, design research, and consider important facets of teaching for various student groups. Prerequisite: MATH 7306 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MATH 7385. Independent Study in Mathematics.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of mathematics. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7386. Independent Study in Mathematics Education.**

Student will work directly with a faculty member and develop in-depth knowledge in a specific topic area of Mathematics Education. Topics vary according to student's needs and demands. Repeatable with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7389. Internship.**

In this course, students will work under the supervision of a faculty member to gain practical knowledge in their field. Student experience can come from industry, government agencies, or other sources but must directly apply to furthering knowledge of applications of mathematics or mathematics education.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MATH 7396. Mathematics Education Research Seminar.**

Collaborative research projects with faculty through identifying an educational issue, reviewing literature, creating a research question, designing a methodology, analyzing data, drawing conclusions, implications, and creating a draft of a publishable paper. Prerequisite: MATH 7356, and ED 7352 or MATH 7346, all with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7399A. Dissertation.**

This course represents a Mathematics or Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MATH 7599A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7699A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MATH 7999A. Dissertation.**

This course represents a Mathematics Education student's dissertation enrollments. The course can be repeated as necessary. The dissertation credit (18 hours) will not be awarded until the dissertation is submitted for binding. Prerequisite: completion of the core and required concentration courses, or approval of student's dissertation advisor.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MTE 5301E. Visual Models for Middle School Mathematics.**

This course uses visual models to motivate understanding of the fundamental concepts underlying middle school mathematics.

Pedagogical techniques to engage middle school students will also be addressed including inquiry-based instructional methods utilizing these visual models.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301F. Implementing New Mathematics Curriculum.**

In this course we will investigate the keys to successfully implementing new curriculum. Two main aspects considered are: 1) the mathematical content knowledge required for a new curriculum and 2) how to build a community of practice which provides support during the implementation process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5301G. Mathematics for Teaching.**

A study of the current trends and topics found in the secondary school mathematics curriculum taught from an advance perspective. Course context will be flexible and topics will be selected on the basis of student needs and interests.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5302A. Quantitative Reasoning.**

This course covers current pedagogy, curriculum, and methods related specifically to the teaching of middle school mathematics. Some of the topics explored are curriculum theory, instructional theory, learning theory, problem solving, national and state standards and assessment, discovery learning, assessment methods, manipulative, and technology in the classroom.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**MTE 5313. Geometry and Measurement.**

This course will focus on using spatial reasoning to investigate the concepts of direction, orientation, shape and structure; using mathematical reasoning to develop and prove geometric relationships; using logical reasoning and proof in relation to the axiomatic structure of geometry; using measurement of geometry concepts to solve real-world problems. 5315 Algebraic Reasoning. (3-0) This course will focus on using algebraic reasoning to.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MTE 5315. Algebraic Reasoning.**

This course will focus on using algebraic reasoning to investigate patterns, make generalizations, formulate mathematical models, and make predication; using properties, graphs, and applications of relations and function to analyze, model and solve problems; and making connections among geometric, graphic, numeric and symbolic representation of functions and relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5321. Probability and Statistics.**

This course will deal with using graphical and numerical techniques to explore data, characterize patterns, and describe departures from patterns; designing experiments to solve problems; understanding the theory of probability and its relationship to sampling and statistical inference and its use in making and evaluating predication. Prerequisite: MTE 5315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MTE 5323. Logic and Foundations of Mathematics.**

This course will consist of an introduction to fundamental mathematical structures and techniques of proof. Topics will include: logic, set theory, number theory, relations, and functions. Emphasis will be placed on communication about mathematics and construction of well-reasoned explanations. Prerequisite: MTE 5313 and MTE 5319 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MCS 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. Focus is on data collection, analysis, and writing of thesis. No thesis credit is awarded until student has completed MCS 5399B.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MCS 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. Focus is on data collection, analysis, and writing of thesis. No thesis credit is awarded until student has completed MCS 5399B.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MCS 5301. Research Methods in Merchandising and Consumer Studies.**

This course covers the evaluation of research concepts, methods, and strategies in family and consumer sciences. Topics include the nature of scientific research, sampling, measurement, data collection, data analysis, and evaluation of research reports.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MCS 5302A. Merchandising in the Experience Economy.**

Students will use an interdisciplinary approach and applicable theories to understand consumer demand and the impact on product and service development and transformation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MCS 5302B. Merchandising Strategies in Domestic and International Markets.**

This course will emphasize strategic planning as a result of analysis of current trends in domestic and global markets.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MCS 5302C. Buying, Planning and Allocation.**

This course will examine strategies in buying, planning and allocation in the retail setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MCS 5303. Sustainable Textiles.**

This course is an in-depth study of the relationship of fibers, fabrics, finishes and textile products end-uses with a particular focus on their impact on sustainability.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MCS 5330. Merchandising and Consumer Theory and Research.**

Students will learn how to critically evaluate theoretical concepts in merchandising theory, seminal merchandising literature, research, and methodology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MCS 5331. Strategic Merchandise Planning.**

Students will synthesize past and present trends to forecast demand for value-added merchandise that satisfies the needs of individuals, families, and communities. Students will strategically analyze and evaluate consumer feedback in the planning process for profitable merchandising enterprises.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MCS 5332. Innovation in the Global Market.**

This course addresses how to create value and growth through innovation in new and existing global markets with a focus on identification of theories and models to understand the innovation and consumer adoption process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MCS 5333. Global Sourcing and Distribution.**

The critical evaluation and integration of opportunities and challenges encountered in the manufacturing, distribution, and final acquisition of textile and apparel products in the global environment will be examined in this course. Restricted to Merchandising and Consumer Studies majors only or consent of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MCS 5336. Culture, Society, and Dress.**

This course will examine social science theories and concepts as they relate to dress, appearance, and the body. Fashion trends and consumer adoption patterns will also be explored using social science theories to analyze consumer behavior and predict future market directions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MCS 5341. Ethics in Merchandising and Consumption.**

Students in this course will identify ethical issues that result from consumer-business interaction. Ethical decision-making will be discussed as it impacts consumer well-being, long-term business success and the conventions of acceptable business practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MCS 5342. Sustainable Consumer Economy.**

This course is an in-depth study of the role of consumption in the development of sustainable systems including the family, natural resources and economics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MCS 5346. Foundations of Merchandising and Consumer Studies.**

This course will cover the foundations of merchandising and consumer studies. Topics will include consumer decision-making and market behavior, the fashion supply and production systems, textile materials and sourcing, merchandise pricing and effective product management throughout the product life cycle, and fashion promotion. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MCS 5390. Merchandising and Consumer Studies Practicum.**

This course will provide an opportunity for students to obtain professional knowledge and skills in a site that is associated with merchandising and consumer studies. This is a field-based experience. This course is graded on a CR/NC basis. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MCS 5391. Seminar in Merchandising and Consumer Studies.**

The course is an in-depth study of two or more topics or emerging issues of particular relevance to merchandising and consumer studies professionals. This course may be repeated once with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MCS 5398. Directed Study in Merchandising and Consumer Studies.**

Students will complete individual work with specific guidance from graduate faculty. The work may include participation in research, professional practice, and/or critical review of the scientific literature on topics such as sustainability, consumer education or business ethics.

This course may be repeated once for credit when topics vary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MCS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. Focus is on identification of thesis topic, review of literature, and research design. No thesis credit is awarded until student has completed the thesis in MCS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MCS 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. Focus is on data collection, analysis, and writing of thesis. No thesis credit is awarded until student has completed MCS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MCS 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. Focus is on data collection, analysis, and writing of thesis. No thesis credit is awarded until student has completed MCS 5399B.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MCS 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. Focus is on data collection, analysis, and writing of thesis. No thesis credit is awarded until student has completed MCS 5399B.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MS 1000. Leadership Laboratory.**

This course concentrates on practical leadership training. Must be taken concurrently with all other MS courses. Repeatable for credit with different emphasis.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MS 1211. Foundations of Officership.**

This course introduces the Army profession and the role of the commissioned officer. It focuses on leadership, ethics and military customs as well as practical skills like physical fitness and stress management. Corequisite: MS 1000 with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MS 1212. Basic Leadership.**

This course is designed to broaden the introduction to the Army and the skills needed to be a successful Army officer. It focuses on leadership, communication and problem solving as well as nutrition and personal development. Corequisite: MS 1000 with a grade of "D" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MS 2211. Individual Leadership Studies.**

This course is designed to develop the student's self-confidence, leadership skills and problem solving abilities. It focuses on critical thinking, communication and conflict resolution skills.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MS 2212. Leadership and Teamwork.**

This course focuses on self-development guided by group processes. Experiential learning activities are designed to challenge current beliefs, knowledge and skills. This course also provides equivalent preparation for the ROTC Advanced Course and the Leaders Training Course.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MS 2313. American Military Studies and Battle Analysis.**

This course is designed to study Military History as it applies to the principles of war and current military doctrine. Students will analyze historical battles and lessons learned and apply them to the modern battlefield. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MS 3311. Leadership and Problem Solving I.**

This course is designed to enable a student without prior military experience to rapidly integrate into the cadet battalion and perform successfully. Key elements are introduction to physical fitness, how to plan and conduct training, basic tactical skills and military reasoning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MS 3312. Leadership and Problem Solving II.**

This course is designed to enable a student without prior military experience to rapidly integrate into the cadet battalion and perform successfully. Key elements are introduction to physical fitness, how to plan and conduct training, basic tactical skills and military reasoning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MS 4311. Leadership and Management.**

This course is designed to help cadets make informed career decisions and it continues their education in Army operation, training management, communications and leadership. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MS 4312. Officership.**

This course focuses on completing the transition from cadet to lieutenant. It includes a basic foundation of military law, skills and information on leadership and military science, application and demonstration of knowledge and mastery of military skills reasoning. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MS 4313. Independent Study in Military Science.**

This course will be designed to meet the needs of the individual student. It will be a directed and closely monitored program targeted at the students' weaknesses/interests. The course will primarily deal with topics pertinent to the military profession; such areas as leadership, management, ethics, law and their application. Course will require week/bi-weekly progress review with instructor. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**MU 1000. Freshman Departmental Recital.**

Attendance and observation of weekly recitals. Concurrent enrollment in freshman-level applied lessons and the appropriate major ensemble are required. Corequisites: MUSP 1120 or MUSP 1130 or MUSP 1140 or MUSP 1150 or MUSP 1160 or MUSP 1170 or MUSP 1220 or MUSP 1230 or MUSP 1240 or MUSP 1250 or MUSP 1260 or MUSP 1270 or MUSP 1280.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MU 1112. Basic Musicianship.**

A study of music fundamentals: reading rhythms, pitches in bass and treble clefs, spelling, notating, and identifying key signatures, intervals and chords. Prerequisite: Music major status.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 1115. Aural Skills I.**

In this course students will cover sight singing, dictation, keyboard exercises, and improvisation of musical structures and styles studied in MU 1315. Corequisite: MU 1315 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1116

**MU 1116. Aural Skills II.**

This course covers sight singing, dictation, keyboard exercises, and improvisation of musical structures and styles studied in MU 1316.

Prerequisite: MU 1115 and MU 1315 with a grade of "C" or higher.

Corequisite: MU 1316.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1117

**MU 1125. Life-Skills for Musicians.**

In this course students will develop essential life skills as they prepare for the transition from university student to professional musician. Course topics include study skills, professional communication, basic pedagogy, introduction to personal finance, healthcare, finding a job, job benefits, and independent living.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 1150. Introduction to Music Technology.**

Introduction to current computer applications in music. Including MIDI and sequencing, notation, internet communication, and digital audio.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 1180. Recording Practicum I.**

Independent study in sound recording. Students develop aural and practical skills necessary to produce high quality recordings. Full major status in SRT is required.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 1182. Recording Practicum II.**

Development of aural skills associated with audio production and recording. This course is a continuation of MU 1180, Recording Practicum I. Full major status in SRT is required. Prerequisite: MU 1180 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 1312. Essential Musicianship.**

Detailed instruction in fundamentals of music theory, including but not limited to notation, meters, scales, key signatures, intervals and chords. This course is designed primarily for non-Music majors and Music minors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1301

**MU 1315. Music Theory I.**

In this course, students study basic counterpoint and analysis of diatonic music. Students learn four-part voice-leading principles via tonic-function and dominant-function harmonies. Corequisite: MU 1115 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1311

**MU 1316. Music Theory II.**

This course covers the analysis and model composition of diatonic music, including voice-leading with tonic, pre-dominant, and dominant-function triads and 7th-chords. Topics include phrase structures, small forms, and an introduction to applied chords. Prerequisite: MU 1115 and MU 1315 with a grade of "C" or higher. Corequisite: MU 1116.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1312

**MU 2000. Sophomore Departmental Recital.**

Attendance and observation of weekly recitals. Concurrent enrollment in sophomore-level applied lessons and appropriate major ensemble is required. Corequisites: MUSP 2120 or MUSP 2130 or MUSP 2140 or MUSP 2150 or MUSP 2160 or MUSP 2170 or MUSP 2220 or MUSP 2230 or MUSP 2240 or MUSP 2250 or MUSP 2260 or MUSP 2270 or MUSP 2280.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MU 2104. Writing About Music.**

This course focuses on writing and research skills in music, including the use and documentation of sources. In addition to written exercises, assignments include studying professional writing samples about music, such as concert reviews, program notes, and research essays. Full major status in Performance required. (WI).

**1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MU 2115. Aural Skills III.**

This course covers sight singing, dictation, keyboard exercises, and improvisation of musical structures and styles studied in MU 2315.

Prerequisite: MU 1116 and MU 1316 with a grade of "C" or higher.

Corequisite: MU 2315.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 2116

**MU 2116. Aural Skills IV.**

This course covers sight singing, dictation, keyboard exercises, and improvisation of musical structures and styles studied in MU 2316.

Prerequisite: MU 2115 and MU 2315 with a grade of "C" or higher.

Corequisite: MU 2316.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 2117

**MU 2123. Foundations of Music Education.**

This course introduces principles of aesthetics and philosophy, as well as their practical application in music education.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 2153. Problems in Music.**

This course is conducted as an independent study on one or more music topics not covered in another course and is open to students on an individual basis by approval of the Director of the School of Music. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 2180. Recording Practicum III.**

This course allows students to continue to develop aural and practical skills in sound recording to produce high-quality recordings. Full major status in SRT required. Prerequisites: MU 1182 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 2182. Recording Practicum IV.**

Students will develop the aural skills associated with audio production and recording. This is a continuation of MU 2180 Recording Practicum III. Full major status in SRT required. Prerequisite: MU 2180 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 2215. Contemporary Musicianship I.**

This course explores musical parameters (harmony, melody, tempo, rhythm, meter, form, and instrumentation) in contemporary rock and pop genres as analyzed through listening and created via performance and composition. Contemporary notation methods, lead sheet symbols, and the Nashville number system are used to create musical scores.

Prerequisite: MU 1116 and MU 1316 both with grades of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 2216. Contemporary Musicianship II.**

This course explores musical parameters (harmony, melody, tempo, rhythm, meter, and instrumentation) in country and reggae genres as analyzed through listening and created via performance and composition. Contemporary notation methods, as well as lead sheet symbols and the Nashville number system, are used to create musical scores.

Prerequisite: MU 2215 with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 2241. Fundamentals of Diction in Singing I.**

In this course students study the International Phonetic Alphabet (IPA) and its application to English and Italian lyric diction. Students will learn the basics of singer's diction for these languages and demonstrate their knowledge through written examination, speaking, and singing. Corequisite: MUSP 1120 or MUSP 1220 or MUSP 2120 or MUSP 2220 or MUSP 3120 or MUSP 3220 or MUSP 4220 any with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 2242. Fundamentals of Diction in Singing II.**

In this course students study the International Phonetic Alphabet (IPA) and its application in German and French lyric diction. Students will learn the basics of singer's diction for these languages and demonstrate their knowledge through written examination, speaking, and singing.

Prerequisite: MU 2241 with a grade of "C" or better. Corequisite: MUSP 1120 or MUSP 1220 or MUSP 2120 or MUSP 2220 or MUSP 3120 or MUSP 3220 or MUSP 4220 any with the grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter



**MU 2253. Problems in Music.**

The course is conducted as an independent study on one or more music topics and is open to students on an individual basis by approval of the Director of the School of Music. May be repeated for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 2303. Survey of Music Literature.**

An introduction to western European art music from the Middle Ages into the 21st-century through listening examples, readings, and class lectures. The course covers representative works by major composers and introduces conventional musical forms/styles associated with various genres in each of the musical periods. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1307

**MU 2310. Guitar Class I.**

An introductory course primarily for the non-music major. This course offers the opportunity to study tuning, hand positions, chords, accompaniment patterns, strumming and introductory music reading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 2313. Introduction to Fine Arts.**

An introductory course designed to give the student a fundamental understanding of the creation and appreciation of diverse modes of expression through the visual and performing arts. This course may not be repeated for credit by taking ART 2313, DAN 2313, or TH 2313.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050

**Grade Mode:** Standard Letter

**TCCN:** HUMA 1315

**MU 2315. Music Theory III.**

This course covers the analysis and model composition of chromatic music, with a focus on voice-leading principles. Topics include modulations and larger forms. Prerequisite: MU 1116 and MU 1316 with a grade of "C" or higher. Corequisite: MU 2115.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 2311

**MU 2316. Music Theory IV.**

This course covers the analysis and model composition of music from the 20th- and 21st-centuries. Topics include, but are not limited to, impressionism, polytonality, parallelism, quartal/quintal harmonies, secundal harmonies, polyrhythms, octatonicism, minimalism, modes, serialism, and set theory. Prerequisite: MU 2115 and MU 2315 both with grades of "C" or better. Corequisite: MU 2116 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** MUSI 2312

**MU 2353. Problems in Music.**

The course is conducted as an independent study on one or more music topics and is open to students on an individual basis by approval of the Director of the School of Music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 3000. Junior Departmental Recital.**

This course requires attendance and observation of weekly recitals. Concurrent enrollment in junior-level applied lessons and the appropriate major ensemble are required. Corequisites: MUSP 3170; MUSP 3220; MUSP 3230; MUSP 3240; MUSP 3250; MUSP 3260; MUSP 3270; MUSP 3280.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MU 3050. Junior Recital.**

Preparation and performance of the junior recital for music performance majors. Corequisites: Concurrent enrollment with applied lessons and major ensemble required for all Music Performance majors. Pre-requisite or Corequisite: MUSP 3170 or MUSP 3220 or MUSP 3230 or MUSP 3250 or MUSP 3260 or MUSP 3270 or MUSP 3280.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 3140. Instrumental Performance Literature.**

In this course students will survey repertoire for wind bands/orchestras from all musical periods/styles, including music for beginning bands/orchestras to works for collegiate/professional ensembles. Activities include: listening, score study, instrument transpositions, programming, contest preparation and student-led wind band/orchestra reading sessions. Prerequisite: ART 2313 or DAN 2313 or MU 2313 or TH 2313 any with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 3141. Fundamentals of Diction in Singing I.**

This course, the first of a two semester Diction sequence, is designed to acquaint the student singer with the International Phonetic Alphabet (IPA), correct pronunciation of Italian and German consonants and vowels, and the diction rules of these languages. This course does not take the place of a language requirement. Corequisite: MUSP 1120 or MUSP 1220 or MUSP 2120 or MUSP 2220 or MUSP 3120 or MUSP 3220 or MUSP 4220; with a grade of "C" or better.

**1 Credit Hour. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3142. Fundamentals of Diction in Singing II.**

This course, the second of a two-semester Diction sequence, is designed to acquaint the student singer with the International Phonetic Alphabet (IPA), correct pronunciation of French and English consonants and vowels, and the diction rules of these languages. This course does not take the place of a language requirement. Prerequisite: MU 3141 with a grade of "C" or better. Corequisite: MUSP 1120 or MUSP 1220 or MUSP 2120 or MUSP 2220 or MUSP 3120 or MUSP 3220 or MUSP 4220.

**1 Credit Hour. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3155. Mariachi Rehearsal Techniques & Literature.**

This course will explore mariachi ensemble literature for K-12 school mariachi programs and effective mariachi rehearsal techniques. Topics will include a review of age appropriate literature, conducting, lesson plan creation, ensemble setup, rehearsal pacing, error detection/correction, programming, and performance techniques for mariachi ensembles in the K-12 setting. Prerequisite: MU 2115 and MU 2315 both with grades of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3180. Recording Practicum V.**

This course allows students to continue to develop aural and practical skills necessary to produce high quality recordings. Full major status in SRT required. Prerequisites: MU 2182 with a grade of "C" or better. Corequisite: MU 3383.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3182. Recording Practicum VI.**

Students will develop the aural skills associated with audio production and recording. This is a continuation of MU 3180, Recording Practicum V. Full major status in SRT required. Prerequisite: MU 3180 with a grade of "C" or better. Corequisite: MU 3384.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3207. Instrumental Conducting I.**

This course covers instrumental conducting fundamentals such as beat pattern, baton techniques, score reading, cuing, subdivisions, fermatas, and releases. The class will function as an ensemble and each student will conduct assignments approximately once each week. Requires successful completion of the Upper Level Competency Review in Music Studies.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3208. Choral Conducting I.**

This course covers choral conducting fundamentals such as beat pattern, baton technique, score reading, cuing, subdivisions, fermatas, and releases. The class will function as an ensemble and each student will conduct assignments approximately once each week. Requires successful completion of the Upper Level Competency Review to enroll.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3217. Instrumental Conducting II.**

An application of the principles of conducting to instrumental music, including score reading and problems of interpretation. Some choral conducting experience will be included. Prerequisite: MU 3207 with a grade of "C" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 3227. Choral Conducting II.**

An application of the principles of conducting choral music, including score reading and problems in interpretation. Some instrumental conducting experience will be included. Prerequisite: MU 3208 with a grade of "C" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3233. Jazz Theory and Improvisation I.**

This course is a study of the musical theory basics used in jazz improvisation and composition, focusing on best practices in its practical application and pedagogy. In addition to a theoretical and applied approach, students will also examine historical and cultural considerations, as they relate to performance. (MULT) BM majors only. Prerequisites: MU 1316 with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 3234. Jazz Theory and Improvisation II.**

This course is a continuation of MU 3233, with particular attention to developing skills in the use of scales and modes (including major and minor pentatonic scales), modal playing, and jazz nomenclature. (MULT) BM majors only. Prerequisites: MU 3233 and MUSE 3127, all with a grade of "C" or better or permission of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 3241. A Survey of Instrumental Performance Literature.**

This course is an overview of repertoire for wind bands/orchestras from all musical periods/styles, including music for beginning bands/orchestras to works for collegiate/professional ensembles. Activities include: listening, score study, instrument transpositions, programming, contest preparation and student-led wind band/orchestra reading sessions. Upper-level status is required. Prerequisite: ART 2313, DAN 2313, MU 2313, or TH 2313; with a grade of "C" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3242. Survey of Choral Performance Literature.**

The course covers detailed consideration of literature of all periods appropriate for choral ensembles and includes discussions on repertoire selection/performance problems peculiar to all ensemble sizes.

Assignments give students opportunity to develop their own approach to vocal challenges that face high school and junior high singers, including arranging choral music. Prerequisites: MU 3208 and MU 3254, all with a grade of "C" or better. Corequisite: MU 3227.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3253. Band/Orchestra Methods.**

This course is designed to introduce fundamental principles of effective instrumental music instruction (such as assessment, planning, arranging, etc.), rehearsal techniques, and administration of secondary school music programs. This course will provide opportunities for students to conduct and rehearse instrumental ensembles, present teaching demonstrations, and conduct independent scholarship projects related to teaching. Prerequisites: [MU 2316 or MU 3207 or MUSP 3145 or MUSP 3147] and [MUSP 3155 or MUSP 3157] both with a grade of "C" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3254. Choral Methods.**

This course provides practical experience in developing, teaching and maintaining a successful choral program at the secondary level. Assignments are designed to give students the opportunity to develop approaches to the basic challenges that face high school/middle school choral directors. Students will share ideas and evaluate each other's work. Prerequisite: MU 2316 with a grade of "C" or better. Corequisite: MU 3208.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3263. Marching Band Techniques.**

An examination of the techniques required to program, design, and instruct a successful marching band show. The class will discuss different types of design concepts currently being employed throughout the country, but also to construct and chart those designs.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3269. Current Trends in Music II.**

A study of melodic and harmonic techniques for keyboard percussion instruments, sight-reading techniques using Sol-Fa, and a survey of the folk music of Europe and the Americas. Prerequisite: MU 3340 with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3308. History of Rock Music.**

A survey of the evolution of rock styles, contributions of important performers, and musical techniques involved in the creation and performance of rock music. The course focuses on the first three decades of rock history.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3310. Guitar Class II.**

Primarily for the non-music major, the course includes the opportunity for development of more advanced techniques in accompaniment, music reading and solo guitar techniques. Prerequisite: MU 2310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3315. History and Analysis of Music from Antiquity through the Seventeenth Century.**

This course provides a comprehensive musicianship approach to the study of music from antiquity through the seventeenth century. Approaches include history, aesthetics, repertoire, performance practice, and conceptual frameworks specific to sacred and secular traditions, domestic music, and genres associated with popular song, dance, and drama. (MULT) (WI) Prerequisite: MU 1316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**MU 3316. History and Analysis of Music in the Eighteenth and Nineteenth Centuries.**

This course provides a comprehensive musicianship approach to the study of music in the eighteenth and nineteenth centuries. Approaches include history, aesthetics, repertoire, performance practice, and conceptual frameworks specific to classical traditions, domestic music, and genres associated with popular song, dance, and the theater. (MC) (WI) Prerequisite: MU 1316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**MU 3317. History and Analysis of Music in the Twentieth and Twenty-First Centuries.**

This course provides a comprehensive musicianship approach to the study of music from the turn of the twentieth century to the present. Approaches include history, aesthetics, repertoire, performance practice, and conceptual frameworks specific to popular song, film music, jazz, rock, experimental trends, classical traditions, crossover genres, and influential technologies. (MC) (WI) Prerequisite: MU 1316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**MU 3318. World Music Cultures.**

In this course students will be equipped with practical and conceptual tools to enhance their enjoyment and understanding of indigenous, folk, classical and popular music traditions around the globe, in their historical, social, political, and spiritual contexts. This course engenders respect for a diversity of cultures through the lens of music. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**MU 3340. Current Trends in Music I.**

A study of the components of music and their concepts. An emphasis on singing and rhythmic performance skills, and aesthetic awareness through listening. Prerequisite: MU 2123 with a grade of "C" or higher.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 3355. Mariachi Rehearsal Techniques & Literature.**

This course explores mariachi ensemble literature for K-12 school mariachi programs and effective mariachi rehearsal techniques. Topics include a review of age-appropriate literature, conducting, lesson plan creation, ensemble setup, rehearsal pacing, error detection/correction, programming, and performance techniques for mariachi ensembles in the K-12 setting. Students apply course concepts as they conduct lessons in the mariachi teaching lab. Prerequisite: MU 2115 and MU 2315 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3370. Music for the Elementary Classroom.**

This course is an introduction to basic music skills for the elementary classroom teacher. The course includes practical application and development of strategies and instructional techniques necessary for effective integration of music experiences in the elementary classroom curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3372. Inclusive Excellence in the Music Classroom.**

In this course, students will develop skills for creating equitable and inclusive music classrooms. Topics will include culturally responsive music teaching, World Music Pedagogy (including ethnomusicological perspectives regarding transcription and arranging in the transmission of music cultures), history and repertoire of global musics, and universal design for learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3375. History of Jazz.**

Jazz originated in America and has been of great importance in the development of the 20th Century music. Topics will include the structure and history of jazz, the contributions of jazz to contemporary music, and the chronological development of jazz experienced through recordings and live performances. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 3380A. Women in Jazz.**

Overview of jazz history from its New Orleans origins to the present focusing on the contributions of women. Major style periods researched include early jazz/swing, bebop, cool, hard bop, free jazz, jazz fusion, and contemporary trends. Emphasis will be placed on the development of critical listening skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**MU 3380B. Music and Film.**

This course is an exploration of historical traditions and functions of Hollywood film music. Students will apply music theory and dictation skills to analyze scores and explain how film music's characteristics and associated cultural connotations combine with image to create new meaning. Prerequisite: MU 2116 and MU 2316, all with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 3380C. Rock Harmony.**

Theoretical analysis of popular and rock music incorporating extensive ear training components such as recognition of chords and progressions. Further analysis of the individual stylistic details in rock songs as well as comparison to traditional tonal harmony and form. Pre-requisite: MU 1312 with a "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 3380D. History of Blues.**

This course explores the role of the blues in American popular music, tracing the history of the genre from its origins to its influence on rock and other related styles, surveying important recording labels and related figures. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**MU 3380E. Teaching World Music Cultures Through World Music Pedagogy.**

This course prepares prospective and practicing teachers to teach world music cultures in their music classroom at the K-12 level. Culturally relevant pedagogy, multicultural education, and ethnomusicology also serve as the underpinnings towards creating an inclusive and equitable classroom. Prerequisite: MU 3340; with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 3381. Recording Techniques I.**

Introduction to audio recording techniques. Topics include acoustics, electronics, microphones, microphone techniques, loudspeakers, and operating principles of common recording equipment. Full major in SRT required. Prerequisite: MU 1182 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3382. Recording Techniques II.**

A continuation of MU 3381. Topics include: operating principles of common recording equipment, fundamentals of analog and digital recording, signal flow, equalization, and sound effects processors. Full major in SRT required. Prerequisite: MU 3381 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 3383. Recording Techniques III.**

Principles and practices of microphone and mixing techniques. Full major in SRT required. Prerequisite: MU 3382 with a grade of "C" or better. Corequisite: MU 3180.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MU 3384. Recording Techniques IV.**

Audio tape and disc recording and their applications in a variety of settings and genres. Full major in SRT required. Prerequisite: MU 3383 with a grade of "C" or better. Corequisite: MU 3182.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**MU 4000. Senior Departmental Recital.**

This course requires attendance and observation of weekly recitals.

Concurrent enrollment in senior-level applied lessons and the appropriate major ensemble may be required.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**MU 4050. Senior Recital.**

Preparation and performance of the senior recital. Prerequisite or Corequisites: MUSP 4170 or MUSP 4220 or MUSP 4230 or MUSP 4240 or MUSP 4250 or MUSP 4260 or MUSP 4270, or MUSP 4280, with a grade of "C" or better.

**0 Credit Hours. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 4152. Problems in Music.**

The course is conducted as an independent study on one or more topics in music and is open to students on an individual basis by approval of the Director of the School of Music.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 4156. Mariachi Arranging Techniques.**

This course introduces analysis and arranging techniques for the mariachi ensemble. Topics include instrument families and their ranges, basic manuscript techniques, and standard mariachi orchestration techniques for voicing and scoring within the different song styles. (MULT) Prerequisite: MU 2316 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 4157. Mariachi Ensemble Teaching Lab.**

This course provides students with the knowledge to become effective directors of Mariachi ensembles within the public school/university systems. Mariachi curriculum/repertoire/rehearsal techniques appropriate to middle school/high school/post-high school ensembles are discussed and applied within the setting of a performing ensemble. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter



**MU 4170. Mariachi Arranging.**

This course will introduce analysis and arranging techniques for the mariachi ensemble. Topics will cover instrument families and ranges, basic manuscript techniques, standard mariachi orchestration techniques for voicing and scoring within the different song styles.

Prerequisite: MU 2316 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4180. Recording Practicum VII.**

This course allows students to continue to develop the aural and practical skills necessary to produce high quality recordings. Full major in SRT required. Prerequisite: MU 3182 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4182. Recording Practicum VIII.**

Students will develop the aural skills associated with audio production and recording. This is a continuation of MU 4180, Recording Practicum VII. Full major status in SRT required. Prerequisite: MU 4180 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4185. Senior Research Project.**

A study of the student's senior recital literature resulting in a thorough research paper on the theoretical, historical, technical and stylistic aspects of the compositions. Concurrent enrollment in Senior Recital, senior level applied lessons, and appropriate major ensemble are required. Prerequisites or Corequisites: MU 4050 and MUSP 4170 or MUSP 4220 or MUSP 4230 or MUSP 4240 or MUSP 4250 or MUSP 4260 or MUSP 4270 or MUSP 4280.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 4234. Arranging Techniques for School Music Ensembles.**

This class will introduce the many techniques involved in arranging for a wide variety of school music ensembles. Content will include an examination of the various instrument families, basic manuscript techniques (both manual and computer aided) and various orchestration techniques for voicing and scoring. Prerequisites: MU 2316; MU 3207; MUSP 3145 or 3147; MUSP 3155 or 3157; All with grades of "C" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4244. Jazz Theory and Improvisation III.**

This course is a continuation of MU 3234 and explores advanced concepts in jazz theory including symmetrical scales, chord substitutions, re-harmonization, pentatonic and exotic scale forms. Classes will focus on best practices in practical application and pedagogy and also examine historical and cultural considerations related to performance. (MULT) Prerequisite: MU 3234 and MUSE 3127, all with a grade of "C" or better or permission of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 4245. Jazz Composition and Arranging.**

This course is an in-depth exploration of various commercial writing styles and instrumentations, focusing on Pop, Latin, and Jazz. Students will analyze the writing styles of prolific 20th-century Big Band Arrangers, and learn to write music for all types of commercial applications, and styles, for all levels of musicians. (MULT) Prerequisite: MU 4244 with a grade of "C" or better or permission of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 4253. Problems in Music.**

The course is conducted as an independent study on one or more music topics and is open to students on an individual basis by approval of the Director of the School of Music.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 4257. Vocal Pedagogy I: Voice Science.**

This course explores the anatomy/physiology of the human voice, the acoustic properties that govern resonance, vocal health, and the philosophy of singing and teaching. It is designed for Bachelor of Music majors with a concentration in voice. Restricted to Music Studies or Music Performance majors, with a vocal concentration. Co-requisites: MUSP 3220 or MUSP 4220 with a grade of "C" or better, or by Instructor Permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 4259. Vocal Literature.**

This course is a detailed consideration of vocal literature from approximately 1600 through the 20th century, focusing on different cultures of the world. It covers major composers and developments in the genre. Repertoire selection and performance problems peculiar to the various styles will be discussed. Prerequisites: Bachelor of Music with vocal concentration and MU 2142. Corequisite: MUSP 3220 or MUSP 4220 with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 4260. Vocal Pedagogy II: Methods.**

This is a comparative study of various pedagogical methods and ideas that covers a wide range of historical and contemporary pedagogy treatises. Students will explore exercises and vocalises for general voice development, peer teaching, and techniques to address/correct specific vocal problems. Prerequisite: MU 4257 with a grade of "B" or better. Corequisites: MUSP 3220 or MUSP 4220 with a grade of "D" or better, or by Instructor Permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4261. Guitar Pedagogy.**

This course is an intensive study of instructional methodologies for guitar from beginning to advanced levels that includes both one-on-one teaching and group lessons. Corequisite: MUSP 3260 or MUSP 4260.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4262. Guitar Literature.**

This course is an intensive study of music repertoire for guitar, including solo, chamber, and orchestral music, as well as relevant music history and literature, performance practice, and rehearsal techniques. Emphasis will be given to literature of the student's primary instrument. Corequisite: MUSP 3260 or MUSP 4260.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4263. Keyboard Pedagogy.**

This course is an intensive study of instructional methodologies for keyboard from beginning to advanced levels that includes both one-on-one teaching and group lessons. Corequisite: MUSP 3230 or MUSP 4230.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4264. Keyboard Literature I.**

This course is an intensive study of music repertoire for keyboard from 1700 to 1850, including solo, chamber, and orchestral music, as well as relevant music history and literature, performance practice, and rehearsal techniques. Emphasis will be given to literature of the student's primary instrument. Corequisite: MUSP 3230 or MUSP 4230.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4265. Keyboard Literature II.**

This course is an intensive study of music repertoire for keyboard from 1850 - today, including solo, chamber, and orchestral music, as well as relevant music history and literature, performance practice, and rehearsal techniques. Emphasis will be given to literature of the student's primary instrument. Corequisite: MUSP 3230 or MUSP 4230.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4266. Woodwind Pedagogy.**

This course is an intensive study of instructional methodologies for woodwinds from beginning to advanced levels that includes both one-on-one teaching and group lessons. Corequisite: MUSP 3240 or MUSP 4240.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4267. Woodwind Literature.**

This course is an intensive study of music repertoire for woodwinds, including solo, chamber, and orchestral music, as well as relevant music history and literature, performance practice, and rehearsal techniques. Emphasis will be given to literature of the student's primary instrument. Corequisite: MUSP 3240 or MUSP 4240.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4268. Brass Pedagogy.**

This course is an intensive study of instructional methodologies for brass from beginning to advanced levels that includes both one-on-one teaching and group lessons. Corequisite: MUSP 3250 or MUSP 4250.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4269. Brass Literature.**

This course is an intensive study of music repertoire for brass, including solo, chamber, and orchestral music, as well as relevant music history and literature, performance practice, and rehearsal techniques. Emphasis will be given to literature of the student's primary instrument. Corequisite: MUSP 3250 or MUSP 4250.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4270. Percussion Pedagogy.**

This course is an intensive study of instructional methodologies for percussion from beginning to advanced levels that includes both one-on-one teaching and group lessons. Corequisite: MUSP 3170 or MUSP 3270 or MUSP 4170 or MUSP 4270.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4271. Percussion Literature.**

This course is an intensive study of music repertoire for percussion, including solo, chamber, and orchestral music, as well as relevant music history and literature, performance practice, and rehearsal techniques. Emphasis will be given to literature of the student's primary instrument. Corequisite: MUSP 3170 or MUSP 3270 or MUSP 4170 or MUSP 4270.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4272. String Pedagogy.**

This course is an intensive study of instructional methodologies for strings from beginning to advanced levels that includes both one-on-one teaching and group lessons. Corequisite: MUSP 3260 or MUSP 4260.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4273. String Literature.**

This course is an intensive study of music repertoire for strings, including solo, chamber, and orchestral music, as well as relevant music history and literature, performance practice, and rehearsal techniques. Emphasis will be given to literature of the student's primary instrument. Corequisite: MUSP 3260 or MUSP 4260.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4310. Guitar Class III: Rock, Country, Blues.**

Designed primarily for the non-music major. Continued study of advanced techniques including scales, arpeggios, strumming patterns and advanced accompanying styles. Analysis and performance of musical styles including rock, country and blues. Prerequisite: MU 3310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4312. Guitar Class IV: Rock, Country, Blues.**

Designed primarily for the non-music major. Continued study of advanced techniques including soloing techniques, accompaniment techniques. Detailed analysis of performance styles emphasizing the styles of contemporary performers. Prerequisite: MU 4310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4330. Form and Analysis.**

Principles of form and analysis developed through the in-depth application of analytical systems to the musical repertoire through the nineteenth century. Prerequisites: MU 2316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4332. Contemporary Analytic Techniques.**

Detailed study and analysis of selected compositions from the early twentieth century to the present; analytical projects. Prerequisite: MU 2316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4334. Orchestration.**

Study of the characteristics of individual instruments; writing for various combinations; study of scores of different periods; techniques of instrumentation, arranging, and orchestration; listening to recorded and live performances. Prerequisite: MU 2316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4336. 18th-Century Counterpoint.**

A study of 18th-century contrapuntal techniques as found in choral preludes, inventions and fugues, among other forms. Prerequisite: MU 2316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4343. Jazz Pedagogy.**

A study of repertoire selection and evaluation, phrasing and articulation, rhythm section techniques, methods of instruction, and review of current teaching styles in American jazz programs, including contest preparation and the teaching of basic improvisation. (MULT) Prerequisites: MU 2116 and MU 2316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 4351. Problems in Music.**

The course is conducted as an independent study on one or more music topics and is open to students on an individual basis by approval of the Director of the School of Music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 4353. Problems in Music.**

The course is conducted as an independent study on one or more music topics and are open to students on an individual basis by approval of the Director of the School of Music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 4354. Business in Music.**

A preparation of students and future musicians for a career in music. The course will discuss the various career options available to aspiring musicians and the paths to take to pursue these options.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4355. Mariachi Arranging Techniques.**

This course applies analysis to the arranging of music for the mariachi ensemble. Topics include instrument families and their ranges, basic manuscript techniques, and standard mariachi orchestration techniques for voicing and scoring within the different song styles. Prerequisite: MU 2316 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4358. Advanced Musicianship Skills.**

This course focuses on developing advanced musicianship skills, specifically highlighting sight singing, error detection, transcription, dictation, and improvisation. The repertoire for this course includes western and non-western music of various styles and modalities. Prerequisite: MU 2116 and MU 2316 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4385. Advanced Audio Recording Techniques.**

Application of theoretical skills in recording, mixing, and editing concert music. Full major in SRT required. Prerequisite: MU 3384 with a grade of "C" or higher. Corequisite: MU 4180.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 4386. SRT Internship.**

Practical experience in audio recording under professional supervision. Provides the opportunity for students to demonstrate professional competencies, based on prior theoretical and laboratory experiences. Full major in SRT required.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5113. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5130A. Writing About Music.**

Focusing on basic writing skills, research, and the use and documentation of sources. Course centers on the process of writing about music. Besides written exercises, the assignments include the study of such professional writing samples as concert reviews, program abstracts, and research essays. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5130B. Diction for Singers.**

An in-depth study of the pronunciation of singing in Italian, German, English, and French incorporating the International Phonetic Alphabet through the use of lecture and laboratory sessions for practical application. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5135. Exploring 21st Century Music Education.**

This course provides music education graduate students a general overview of current issues and questions in music education, techniques for building a better understanding of core issues, and necessary instruction/investigation for thesis/capstone project. Students leave this class with a general knowledge of many current topics and tools to further investigate topics of interest.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5150. Exploring Twenty-first Century Music Education.**

In this course, students will survey current issues and questions in music education while further developing a primary topic of interest for their thesis/capstone project. Topics will be driven by student interest and the discourse within the field but will be centered around: student-centered pedagogies (e.g., democratic education, culturally responsive pedagogy, popular music education, DEI, and social-emotional learning), performance/teacher anxiety (e.g., music performance anxiety, imposter phenomenon, and teacher self-efficacy), teacher experiences and burnout (e.g., early career teacher experiences, expert teacher tendencies, burnout in music education, finances, technology, administrative experiences, and competition), and writing specific content (e.g., refining APA style and.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5192. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5213. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated with different emphasis for additional credit. Prerequisite: Consent of the graduate advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5230A. Music Theory.**

A study of the materials of counterpoint and harmony as evaluated through listening and analysis of literature, and application through composition. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5230B. Aural Learning.**

Development and application of theory concepts through singing, playing, and dictation. This course does not earn graduate degree credit.

Prerequisite: Consent of the graduate music advisor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5235. Music Education Capstone.**

This course allows for a wide overview of the field of music education, providing students with a broad scope to facilitate their thesis/capstone project. The course also creates space in the degree for discussions and readings related to the most recent issues and concerns of the field.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5254. Piano Pedagogy I.**

History, methods, and materials of piano pedagogy. Includes the application of technical and musical fundamentals to beginning levels of teaching. Prerequisites: Piano pedagogy or piano performance majors or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5255. Piano Pedagogy II.**

Advanced methods and materials of piano pedagogy. Includes the application of technical and musical fundamentals to intermediate and advanced levels of teaching. Prerequisites: Piano Pedagogy I or instructor's permission.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5301. Musicology Seminar in Contemporary Issues.**

This course offers advanced immersion into current trends and literature in the field of musicology, centering a distinct issue and its related frameworks at each time of offering. Sample issues are Music, Gender, and Sexuality; Ecomusicology; Sound Studies; Methods, Methodologies and Frameworks; among others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5310. Music in the Baroque era.**

This course is a study of diverse genres and repertoires from the 1600s to the early 1700s, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5313. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5314. Music in the Twentieth and Twenty-First Centuries.**

In this course the students will study diverse genres and repertoires of the twentieth and twenty-first centuries, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5315. Music in the Middle Ages and Renaissance.**

In this course students will study diverse genres and repertoires from the 450s to the 1600s, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MU 5316. Music and the Dramatic Arts.**

This course covers diverse genres and repertoires in music and the dramatic arts, antiquities through the present, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with such disciplines as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5317. Independent Study in Music.**

Study of special interest that offers professional improvement and growth in the field of music. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5318. Song Literature.**

This course is an historical survey of the art song, emphasizing Western European and American repertoires. Students will articulate stylistic differences within the art song repertory, use analytical methods appropriate for a variety of text settings, and develop greater proficiency at writing about music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5320. Music in the Eighteenth Century.**

In this course students will study diverse genres and repertoires in the eighteenth century, with a focus on the Western world; course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5322. Advanced Instrumental Techniques.**

Evaluation of teaching methods, materials, and literature of wind/percussion or string instruments. Students must have taken instrumental conducting in their undergraduate degree program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5323. Vocal Music Education Methods.**

Study of the anatomy of the human voice and evaluation of the scientific data and historical beliefs concerning voice pedagogy with emphasis in teaching voice in the class, private studio, as well as within a variety of choral settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5325. Research in Music Education I.**

Examination of methodologies, techniques, and procedures for interpreting and conducting research in music education. Relevant studies in music education will be critiqued, with an emphasis on preparation of a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5326. Research in Music Education II.**

A continuation and culmination of a research project in the field of music education as developed and proposed in MU 5325. Prerequisite: MU 5325 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5328. Foundations of Music Education.**

The cognitive psychology, historical perspective, and philosophical issues that provide the basis for contemporary music education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5329. Psychology of Music.**

This course investigates the psychological foundations of music and examines interdisciplinary approaches to the study of music and the human experience. Topics will include music perception, physiological responses to music, music and the brain, musical attributes, music learning, music therapy, and the measurement of musical behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5330A. History and Analysis of Music.**

A comprehensive musicianship approach to the study of music from the earliest times to the present using techniques of stylistic and structural analysis. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5330B. Advanced Theory.**

Principles of form and analysis, counterpoint, orchestration, and contemporary analytic techniques developed through in-depth study of musical repertoire. This course does not earn graduate degree credit. Prerequisite: Consent of the graduate music advisor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling|Topics

**Grade Mode:** Leveling/Assistantships

**MU 5331. Vocal Pedagogy I: Voice Science.**

This course explores the anatomy/physiology of the human voice, the acoustic properties that govern resonance, vocal health, and philosophy of singing and teaching. Co-requisites: MUSP 5120 or MUSP 5220 or MUSP 5320 with a grade of "C" or better, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5332. Vocal Pedagogy II: Methods.**

This is a comparative study of various pedagogical methods and ideas, including historical and contemporary treatises. Students will explore exercises and vocalizes for general voice development, address and correct specific vocal problems, and engage in peer teaching.

Prerequisite: MU 5331 with a grade of "B" or better. Co-requisites: MUSP 5120, MUSP 5220, or MUSP 5320, or permission of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5333. Teaching and Learning in the Music Classroom.**

In this course students will examine music content delivery, pedagogy (including lesson planning, instructional design, etc.), assessment, and other aspects of teaching and learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5334. Introduction to Graduate Study in Music.**

Techniques and materials of research, emphasizing bibliography, library usage, collection, and interpretation of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5337. Techniques of Contemporary Music.**

This course surveys a cross-section of important technical innovations and developments in twentieth-century music, with special focus on music since 1945. Students will read documents outlining aesthetics, analyze music written in a variety of styles, write analytical papers, and using a variety of techniques, compose exercises. Enrollment requires a passing grade on the Graduate Music Theory Placement Exam or Instructor approval. Prerequisite: MU 5357 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5340. Music in the Nineteenth Century.**

This course is a study of diverse genres and repertoires in the nineteenth century, with a focus on the Western world. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5341. Jazz Perspectives.**

In this course students will study diverse genres, repertoires, discographies, and stylistic trends associated with jazz, with a focus on the Americas. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5342. Jazz Pedagogy.**

Jazz pedagogy is an in-depth study of the history, methodologies, resources, and techniques of jazz pedagogy and the development of jazz ensemble rehearsal skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5343. Jazz Improvisation.**

This course is a detailed study of the evolution of melodic, harmonic, and rhythmic structures used by jazz improvisers and composers from the 1930s to present day.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5344. Jazz Arranging.**

This course provides a comprehensive study of jazz composition, arranging, and improvisation theory, emphasizing writing for jazz ensembles using harmony, scales, and improvisation in a variety of styles, and providing necessary skills to be a successful jazz or commercial composer/arranger.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5345. Piano Literature I.**

This course is designed to expand first-hand familiarity with the literature for the keyboard from the Baroque to Early Romantic era (Bach to Schumann). It will be divided into five chronological segments, discussing the major composers and their contemporaries. Ten composition genres will be discussed during the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5346. Piano Literature II.**

This course is designed to expand first-hand familiarity with the literature for the piano, which will be divided into six chronological segments. These segments will discuss the most significant composers and their contemporaries in the 19th and 20th centuries and their major piano compositions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5350. Musical Styles.**

Developing a broader musical understanding through critical listening, technical analyses, and written assignments in various musical styles, including the late classical, romantic, and present eras. Prerequisite: MU 5357 with a grade of "B" or better, or a passing grade on the Graduate Music Theory Placement Exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5351. Schenkerian Analysis.**

An introduction to the techniques and methods of music analysis as developed by Heinrich Schenker (1868-1935). This course will cover reductive analysis, structural levels in tonal music, and graphing techniques. Prerequisite: MU 5357 with a grade of "B" or better, or passing grade on music theory entrance exam.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5352. Foundations of Musicology.**

This course is an introduction to the concepts, methodologies, and scholarly trends central to the discipline of musicology. Prerequisite: MU 5334 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5353. Ensemble Rehearsal Techniques.**

Course is designed for performance ensemble conductors. Includes supervision, administration, and rehearsal techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5355. Pedagogy of Music Theory.**

Developing teaching methods and broader understanding through critical study of materials, organization, techniques, and problems of music theory and comprehensive musicianship courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Time Conflicts Permitted

**Grade Mode:** Standard Letter

**MU 5357. Graduate Music Theory.**

Graduate-level studies in music theory and aural skills. The course covers melody, harmony, counterpoint, form, as well as sight-singing, performing, and dictation. This course does not earn graduate degree credit. Consent of the graduate studies coordinator is required.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**MU 5358. Advanced Musicianship.**

This course is designed to develop graduate-level skills in music sight reading, dictation, fundamental keyboard skills, and keyboard harmonization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5359. Post-Tonal Music Analysis.**

This course is the study and application of methodologies and terminology that are used to analyze post-tonal concert music of the 20th and 21st centuries. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5360. Music in the United States.**

This course is a study of genres and repertoires of the United States of America from the 1600s to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5361. Methods and Methodologies of Music Analysis.**

This course will cover the examination of selected analytical techniques, methods and methodologies, critical approaches, or musical repertoires, including semiotic analysis, computer-assisted music analysis, analysis of thematic processes, functional analysis, phrase structure analysis, as well as category and feature analysis. Prerequisite: MU 5357 with a grade of "B" or better, or permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5362. Instrumental Pedagogy I.**

This course explores instrument-specific pedagogy from the beginner through the advanced levels. Students will peruse instrument-specific pedagogical works, solo literature, and articles, and will complete a teaching assignment requiring them to implement pedagogical techniques, diagnose common performance problems, and suggest solutions. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 or MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5363. Instrumental Pedagogy II: Teaching Internship.**

This class provides students with supervised teaching experience. In this capstone course, students will apply pedagogical principles for instruction on their primary instrument in the private lesson setting. Their teaching will be monitored and evaluated by an applied professor throughout the semester. Prerequisite: MU 5362 with a grade of "B" or better. Co-requisites: MUSP 5130 or MUSP 5140 or MUSP 5150 or MUSP 5160 or MUSP 5170 or MUSP 5230 or MUSP 5240 or MUSP 5250 or MUSP 5260 or MUSP 5270 or MUSP 5330 or MUSP 5340 or MUSP 5350 or MUSP 5360 or MUSP 5370, or permission of the instructor.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5364. Intelligent Music Teaching.**

This course focuses on fundamental philosophical principles of effective instrumental music instruction and includes application of those principles in teaching. Students will develop a realistic perspective of their strengths and weaknesses as a developing professional and will develop business skills necessary to create a successful private lesson studio.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MU 5365. Computing in Music.**

Development of concepts and skills related to current computer technology in music. Exploration and use of computer software, MIDI, and other productivity tools for application to music education, music administration, music research, and music composition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5366. Salsa Arranging.**

Analysis and arranging music for a Salsa ensemble. Topics will cover instrument ranges, orchestration techniques, and styles. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5367. Music in the Caribbean.**

In this course students will study diverse genres and repertoires of the Caribbean from pre-colonization to the present, with a focus on the Hispanic Circum-Caribbean. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5368. Music in Mexico.**

In this course students will study diverse genres and repertoires of Mexico and Mexican-American communities of the United States from pre-colonization to the present. The course scope includes current historiographic and analytical research perspectives, as well as relevant musicological perspectives intersecting with disciplines such as sociology, gender studies, aesthetics, and criticism. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5369. History of Music in Latin America.**

This course is a study of the musical panorama of Latin America; Pre-Columbian, colonial, folk, urban, academic, and transnational genres are introduced and discussed in historical, socio-political, and stylistic context. It also includes an introduction to the scope and methods of research in Latin American music studies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MU 5371. Choral Literature I: Madrigal/Partsong.**

This course is a comprehensive study of madrigals and partsongs from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5372. Choral Literature II: Oratorio and Other Secular Major Works.**

This course is a comprehensive study of oratorios and other secular major works from the Western canon of choral repertoire.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5373. Choral Literature III: Liturgical Year - Motet, Anthem, Cantata.**

This course is a comprehensive study of motets, anthems, cantatas, and other genres associated with the liturgical calendar and the Revised Common Lectionary from the canon of Western choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5374. Choral Literature IV: Missa Brevis, Missa Solemnis, & Requiem.**

This course is a comprehensive study of the Roman Catholic Mass and Requiem Liturgies as they have been set to music by composers associated with the Western canon of choral music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 53750. Contemporary Discourse in Music Education.**

This course entails an examination of topics from contemporary music education research. Students examine contemporary research and the potential for application in their future/current classrooms.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**MU 5377. Innovation in Music Performance: Sound Lab.**

This course is designed to engage students in listening and in sound creation/composition and to develop skills and the capacity for improvisation that will equip artists for readiness in evolving cultural and performance situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MU 5381. Inclusive Excellence in the Music Classroom.**

This course prepares prospective and practicing music teachers to create an equitable, inclusive, and thriving classroom that meets the needs of all students by incorporating culturally responsive teaching, multicultural education, world music pedagogy, ethnomusicological perspectives, and by addressing the needs of students with exceptionalities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5382. History of Music Education in the United States.**

This course entails an examination of music education in the United States. The major historical developments and contemporary trends are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MU 5392. Introduction to Music Instruction in Higher Education.**

This course provides techniques for Graduate Teaching/Instructional Assistants concerning selected problems in 1) the teaching of music in the classroom, private instruction and ensemble environments; and 2) the development of a career in field in higher education. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**MU 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Music 5399B. Students working toward the M.M. degree with a thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MU 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Cannot be taken unless a Thesis Proposal has been submitted. Students working toward the M.M. with thesis are expected to enroll in thesis each semester in which faculty supervision is received.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**MUSE 3009. Opera Production.**

Opera production is a performance class where practical skills are applied in a production setting. The class is designed to produce and perform a fully staged opera or opera scenes program. Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 3106 with a grade of "C" or better.

**0 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3026. Student Chamber Music.**

Small student organized and led performing groups coached by area faculty as necessary.

**0 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**MUSE 3027. Jazz Seminar.**

Jazz faculty and guest artists meet with Jazz Performance majors to address topics outside the scope of the student's other daily coursework. The seminar will provide lectures and performance opportunities that focus on skills related to professional jazz performance practices. (MULT).

**0 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 3028. Latin Music Studies Seminar.**

Latin music faculty and guest artists meet with Latin music majors to address topics outside the scope of the students' other daily coursework. The seminar will provide lectures and performance opportunities that focus on skills related to professional Latin performance practices.

Corequisite: MUSP 1220 or MUSP 2220 or MUSP 3220 or MUSP 4220 or MUSP 1230 or MUSP 2230 or MUSP 3230 or MUSP 4230 or MUSP 1240 or MUSP 2240 or MUSP 3240 or MUSP 4240 or MUSP 1250 or MUSP 2250 or MUSP 3250 or MUSP 4250 or MUSP 1260 or MUSP 2260 or MUSP 3260 or MUSP 4260 or MUSP 1170 or MUSP 2170 or MUSP 3170 or MUSP 4170.

**0 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3099. Concert Ensemble.**

This is a major ensemble that provides experience for music majors to improve their performance skills in a mixed ensemble setting. May be repeated for credit. Restricted to full majors in Music.

**0 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3100. Mariachi Lince de Oro.**

This course is an introduction to the mariachi genre. Traditional mariachi repertoire is distributed, rehearsed, memorized, and performed.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3101. Bobcat Basketball Band.**

The Bobcat Basketball Band performs for all home men's and women's basketball games that do not fall over a university break. The group travels for all postseason tournaments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3102. Salsa Del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3103. Mariachi Nueva Generación.**

This course is a performing ensemble specializing in Mexican folk music.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 3104. Panorama Steel Drum Band.**

A performing ensemble specializing in Caribbean steel drum band music. May be repeated for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 3105. Vocalibre.**

A select vocal ensemble specializing in chamber music, including madrigal and jazz literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3106. Opera Workshop.**

Opera Workshop is a skills-based class designed for developing opera singers to learn and apply skills that prepare them for professional performance. This course may be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3107. Opera Theatre.**

This course is designed to take the knowledge and skills learned in MUSE 3106-Opera Workshop class and build on those skills while applying those skills to more advanced work. Students will learn and perform operatic roles, chamber opera pieces, or one-act operas. Prerequisite: MUSE 3106 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3108. Orquesta del Rio.**

Performing ensemble specializing in Latin and South America music. May be repeated for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 3109. Opera Production.**

Opera Production is a performance class where practical skills are applied in a production setting. The class is designed to produce and perform a fully staged opera or opera-scenes program. Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 3106 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3120. Bobcat Marching Band.**

This ensemble performs at all home and select away football games utilizing traditional and corps-style marching. The ensemble is focused on delivering entertaining and high-powered halftime shows while supporting Bobcat Football. The band also performs in exhibitions for high school band events. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3122. Aurora Voce.**

Aurora Voce is a highly selective chamber chorale ensemble that is open by audition to all treble singers across campus. Performing in this ensemble provides the singers opportunities to explore high quality and challenging repertoire that spans a wide variety of styles, historical periods, and genres.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3123. Concert Band.**

This ensemble provides playing experiences for non-music majors and music majors who want to improve their skills and serve as a lab ensemble for conducting students. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3124. Treble Voice Choir.**

This is a performing ensemble course, specializing in choral literature for treble voices. This course may be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3125. Men's Choir.**

Performing ensemble specializing in choral literature for men's voices. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3126. Chamber Music.**

Small group performing ensembles focusing on chamber literature of mixed and similar instrumental music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3127. Jazz Combo.**

A small performance ensemble designed to develop improvisational skills and individual musical creativity through performance of standard jazz literature. May be repeated for credit.

**1 Credit Hour. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3130. Wind Symphony.**

Major instrumental ensemble comprised of the most outstanding wind and percussion students who are selected by audition. The group is dedicated to the performance of the finest wind repertoire, whether a contemporary works for winds, or transcriptions from the orchestral repertoire. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3131. Symphonic Winds.**

Major instrumental ensemble consisting primarily of music majors and talented non-music majors. This ensemble performs a broad range of full ensemble repertoire, representative of all historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3140. Texas State Chorale.**

Auditioned major choral ensemble specializing in performances of literature from the Renaissance and 20th Century. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3141. University Singers.**

Major choral ensemble that performs a variety of literature, including masterworks, from the 17th Century to the present. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3150. Texas State Symphony Orchestra.**

A full symphony orchestra that performs standard orchestra literature, as well as oratorio, concerto, and opera accompaniments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3151. Chamber Orchestra.**

Auditioned orchestra designed to perform advanced level symphonic literature with repertoire representing several of historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3160. Jazz Ensemble.**

The jazz based ensemble performs advanced arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3161. Jazz Orchestra.**

The jazz based ensemble performs intermediate arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3162. Jazz Lab Band.**

The jazz based ensemble performs beginning arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3170. Accompanying.**

A coaching seminar for pianists to develop reading and accompanying skills. May be repeated for credit. Prerequisite: Piano major.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3180. Mystorium for Contemporary Music Ensemble.**

An ensemble course focusing on the performance and analysis of contemporary music in all styles and media. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 3190. Guitar Ensemble.**

Chamber guitar ensemble designed to provide interaction with fellow guitarists, develop musicianship as ensemble performer, and to familiarize student with music from different periods through a variety of literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5101. Bobcat Basketball Band.**

The Bobcat Basketball Band performs for all home men's and women's basketball games that do not fall over a university break. The group travels for all postseason tournaments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5102. Salsa Del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5103. Mariachi Nueva Generación.**

This course is a performing ensemble specializing in Mexican folk music.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5104. Panorama Steel Drum Band.**

A performing ensemble specializing in Caribbean steel drum band music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5105. VocaLibre.**

A select vocal ensemble specializing in chamber music, including madrigal or jazz literature. May be repeated for credit. Prerequisite: Enrollment in major choral ensemble.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5106. Opera Workshop.**

Opera Workshop is a skills-based class designed for developing opera singers to learn and apply skills that prepare them for professional performance.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5107. Opera Theatre.**

Students will learn and perform operatic roles, chamber opera pieces, or one-act operas. Concurrent enrollment in Applied Voice is recommended.

Prerequisite: MUSE 5106 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5108. Orquesta del Rio.**

Performing ensemble specializing in Latin and South American music. May be repeatable for credit. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5109. Opera Production.**

This course is designed for students to participate as performers in a full opera production or in the production of opera scenes. It will also prepare students for future professional opera performance engagements.

Concurrent enrollment in Applied Voice is recommended. Prerequisite: MUSE 5106 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5122. Aurora Voce – Auditioned Treble Voice Choir.**

Aurora Voce is a highly selective chamber chorale ensemble that is open by audition to all treble singers across campus. Performing in this ensemble provides the singers opportunities to explore high quality and challenging repertoire that spans across a wide variety of styles, historical periods, and genres.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5123. Concert Band.**

This ensemble provides playing experiences for non-music majors and music majors who want to improve their skills and serve as a lab ensemble for conducting students. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5124. Women's Choir.**

Performing ensemble specializing in choral literature for women's voices.

May be repeated for credit.

**1 Credit Hour. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5125. Men's Choir.**

Performing ensemble specializing in choral literature for men's voices.

May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5126. Chamber Music.**

Small group performing ensembles focusing on chamber literature of mixed and similar instrumental music. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5127. Jazz Combo.**

A small performance ensemble designed to develop improvisational skills and individual musical creativity through performance of standard jazz literature. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5128. Conducting Seminar.**

A seminar based course focusing on conducting technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or permission by the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5129. Afro-Caribbean Lab.**

This course is an experimental ensemble of flexible size and instrumentation that specializes in advanced arranging, performance, and improvisation involving Afro-Caribbean styles and rhythms. An audition is required for placement in this ensemble. (MULT).

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSE 5130. Wind Symphony.**

Major instrumental ensemble comprised of the most outstanding wind and percussion students who are selected by audition. The group is dedicated to the performance of the finest wind repertoire, whether a contemporary works for winds, or transcriptions from the orchestral repertoire. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5131. Symphonic Winds.**

Major instrumental ensemble consisting primarily of music majors and talented non-music majors. This ensemble performs a broad range of full ensemble repertoire, representative of all historical periods and styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5140. Texas State Chorale.**

Auditioned major choral ensemble specializing in performances of literature from the Renaissance and 20th Century. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5141. University Singers.**

Major choral ensemble that performs a variety of literature, including masterworks from the 17th Century to the present. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5150. Texas State Symphony Orchestra.**

A full symphony orchestra that performs standard orchestra literature, as well as oratorio, concerto, and opera accompaniments. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5160. Jazz Ensemble.**

The jazz-based ensemble performs advanced arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5161. Jazz Orchestra.**

The jazz-based ensemble performs intermediate arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5162. Jazz Lab Band.**

The jazz-based ensemble performs beginning arrangements of contemporary popular music in various styles. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5170. Accompanying.**

A coaching seminar for pianists to develop reading and accompanying skills. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSE 5180. Mystery for Contemporary Music Ensemble.**

An ensemble course focusing on the performance and analysis of contemporary music in all styles and media. May be repeated for credit. Prerequisite: Music (Composition Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSE 5190. Guitar Ensemble.**

Chamber guitar ensemble designed to provide interaction with fellow guitarists, develop musicianship as an ensemble performer, and to familiarize the student with music from different periods through a variety of literature. May be repeated for credit. Prerequisite: Music (Guitar Performance Specialization) major status.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 1120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. BA in music status is required as well as MU 1000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1121. Vocal Techniques.**

Vocal Techniques. Vocal instruction focusing on technique, musicality and performance for the beginning singer. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. BA in music status is required as well as MU 1000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**MUSP 1135. Piano Techniques I.**

This is an introductory course to develop piano technique and musical style through sight-reading, scales, chords, harmonization, and improvisation.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1181

**MUSP 1136. Piano Techniques II.**

Beginning level course to develop piano technique and musical style through sight-reading, scales, chords, harmonization, and improvisation. Prerequisites: MUSP 1135 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** MUSI 1182

**MUSP 1137. Piano Techniques III.**

Intermediate level course to develop piano technique and musical style through sight-reading, scales, chords, harmonization and improvisation. Prerequisite: MUSP 1136 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1138. Piano Techniques IV.**

Advanced level course to develop piano technique and musical style through sight-reading, scales, chords, harmonization and improvisation. Prerequisite: MUSP 1137 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. BA in music status is required as well as MU 1000, and the appropriate major ensemble must be taken concurrently.

Corequisite: MU 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. BA in music status is required as well as MU 1000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. BA in music status is required as well as MU 1000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Music major status is required as well as MU 1000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 1000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1180. Introduction to Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1230. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or permission from instructor.

Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Corequisite: MU 1000 with a grade of "C" or better; MUSE 3120, MUSE 3123, MUSE 3130, MUSE 3131, MUSE 3150, MUSE 3160, MUSE 3161, MUSE 3162; with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 1325. Class Piano for Non-Music Majors.**

This course explores aspects of music in the context of developing basic keyboard skills. In addition to developing technical proficiency at the piano, students learn the basics of music theory and aural skills, while exploring various genres of music, including classical and modern styles.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. BA in music status is required as well as MU 2000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 2000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2125. Applied Voice for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual vocal development. May be repeated for credit. Permission from instructor required to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. BA in music status is required as well as MU 2000, and the appropriate major ensemble must be taken concurrently.

Corequisite: MU 2000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2135. Applied Keyboard for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual keyboard development. May be repeated for credit. Permission from instructor required to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. BA in music status is required as well as MU 2000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 2000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2145. Applied Woodwind for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual woodwind development. May be repeated for credit. Permission from instructor required to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. BA in music status is required as well as MU 2000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 2000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2155. Applied Brass for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual brass development. May be repeated for credit. Permission from instructor required to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. BA in music status is required as well as MU 2000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 2000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2165. Applied String for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual string development. May be repeated for credit. Permission from instructor required to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. This course may be repeated for credit. Music major status is required as well as MU 2000, and the appropriate major ensemble must be taken concurrently. Corequisite: MU 2000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2175. Applied Percussion for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual percussion development. May be repeated for credit. Permission from instructor required to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2185. Applied Composition for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual composition development. May be repeated for credit. Permission from instructor required to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2191. Electronic Music I.**

Theoretical and working knowledge of sound synthesis, MIDI, and computer-based composition emphasizing practical applications using available software and instruments. Major subject areas: hardware and software, virtual instruments, sampling & playback devices, timbre control, MIDI synchronization, sequencing, digital audio workstations, editing, mixing, notation, and composition. Full major in SRT required.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2192. Electronic Music II.**

Continuation of the theoretical/working knowledge of sound synthesis, MIDI, and computer-based composition emphasizing practical applications using available software and instruments. Major subject areas: hardware & software, virtual instruments, sampling & playback devices, timbre control, MIDI synchronization, sequencing, digital audio workstations, editing, mixing, notation, and composition. Full major in SRT required. Prerequisite: MUSP 2191.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2225. Applied Voice for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual vocal development. May be repeated for credit. Permission from instructor required to enroll.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2230. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2235. Applied Keyboard for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual keyboard development. May be repeated for credit. Permission from instructor required to enroll.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2245. Applied Woodwind for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual woodwind development. May be repeated for credit. Permission from instructor required to enroll.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2255. Applied Brass for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual brass development. May be repeated for credit. Permission from instructor required to enroll.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2265. Applied String for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual string development. May be repeated for credit. Permission from instructor required to enroll.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Corequisite: MU 2000 with a grade of "C" or better; MUSE 3120, MUSE 3123, MUSE 3130, MUSE 3131, MUSE 3150, MUSE 3160, MUSE 3161, MUSE 3162 or equivalent; with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 2285. Applied Composition for non-majors.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance for individual composition development. May be repeated for credit. Permission from instructor required to enroll.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3131. Jazz Piano Techniques I.**

Beginning piano techniques, introducing scales and chords used in the jazz idiom. (MULT) Prerequisite: MUSP 1136 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 3132. Jazz Piano Techniques II.**

Continuing study of piano technique in the jazz idiom and application of skills through performance and arranging. (MULT) Prerequisites: MUSP 3131 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 3140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3145. Woodwind Techniques I.**

Basic teaching and performance techniques of the clarinet and saxophone. Requires successful completion of the Upper Level Competency Review in Music Studies or permission from the instructor to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3147. Woodwind Techniques II.**

Basic teaching and performance techniques of the flute and double reeds. Requires successful completion of the Upper Level Competency Review in Music Studies or permission from the instructor to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**MUSP 3155. Brass Techniques I.**

Basic teaching and performance techniques of the high brass instruments. Requires successful completion of the Upper Level Competency Review in Music Studies or permission from the instructor to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Perspective

**Grade Mode:** Standard Letter

**MUSP 3157. Brass Techniques II.**

Continuation of the basic teaching and performance techniques of the low brass instruments. Requires successful completion of the Upper Level Competency Review in Music Studies or permission from the instructor to enroll.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Perspective

**Grade Mode:** Standard Letter

**MUSP 3160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3165. String Techniques.**

Basic teaching and performance techniques of the violin, viola, cello and double bass. Full major in Music Studies required.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3166. String Techniques Practicum.**

In this course students will apply string pedagogy through various teaching activities. Corequisite: MUSP 3165 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Music major status required as well as MU 3000 and the appropriate major ensemble must be taken concurrently. Corequisite: MU 3000.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3175. Percussion Techniques.**

Basic teaching and performance techniques of marching and concert percussion. Full major in Music Studies required.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3191. Electronic Music III.**

Further exploration into the theoretical and working knowledge of sound synthesis, MIDI, and computer-based composition emphasizing practical applications using available software and instruments. Major subject areas: hardware and software, virtual instruments, sampling & playback devices, timbre control, MIDI synchronization, sequencing, digital audio workstations, editing, mixing, notation, and composition. Prerequisite: MUSP 2192 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3192. Electronic Music IV.**

Final studies in the theoretical and working knowledge of sound synthesis, MIDI, and computer-based composition emphasizing practical applications using available software and instruments. Major subject areas: hardware and software, virtual instruments, sampling & playback devices, timbre control, MIDI synchronization, sequencing, digital audio workstations, editing, mixing, notation, and composition. Prerequisites: MUSP 3191 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3195. Instrumental Techniques for Choral Students.**

This course introduces basic teaching and performance techniques of band and orchestral instruments, instrumental ensembles and instrumental music programs for music students who consider instrumental music a secondary skill area. Full major in Music Studies, vocal concentration required.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3196. Jazz and Latin Ensemble Techniques.**

This course explores the basic teaching and performance techniques of instrumentation, arranging and pedagogy in the areas of jazz and multicultural ensembles. Full major in Music Studies, instrumental concentrations. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 3197. Choral/Vocal Techniques.**

This course will prepare instrumental music studies students with knowledge of and practice in basic vocal/choral techniques along with guidance in the choosing of appropriate choral literature in order that they may be successful in developing, directing, and maintaining choral programs in elementary-secondary schools. Full major in Music Studies required.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required

**Grade Mode:** Standard Letter

**MUSP 3220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance. May be repeated for credit.

Prerequisite: Music major status or permission from instructor.

Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3230. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3241. Woodwind Techniques - Single Reeds.**

In this course students will develop specific skills and knowledge for successful performance and instruction. Basic techniques of playing and teaching clarinet and saxophone, such as instrument assembly, embouchure, playing position, articulation, and arranging/orchestrating for single reeds, will be presented.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3247. Woodwind Techniques - Flute and Double Reeds.**

In this course students will develop specific skills and knowledge for successful performance and instruction. Basic techniques of playing and teaching flute, oboe, and bassoon, such as instrument assembly, embouchure, playing position, and articulation; orchestrating for flute and double reeds; and arranging, will be presented.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or permission from instructor.

Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3251. Brass Techniques - High Brass.**

This course will aid students in developing specific skills and understandings necessary for successful instrumental music teaching including: teaching, playing, and orchestrating/arranging for high brass instruments; lesson planning; and professional practice.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3255. Wind Instrumental Techniques for String Students.**

This course is designed to introduce basic teaching and performance techniques of the major wind instruments, with a focus on instructing full orchestra. Students will observe, practice, and teach wind instruments in various settings. Full major in Music Studies, string concentration and Upper-Level review completion required. Prerequisite: MUSP 3165; MUSP 3265; with grades of "C" or higher.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3257. Brass Techniques - Low Brass.**

This course will aid students in developing specific skills and understandings necessary for successful instrumental music teaching including: teaching, playing, and orchestrating/arranging for low brass instruments; lesson planning; and professional practice.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3261. Mariachi Trumpet Techniques.**

This course addresses playing and teaching the trumpet within the Mariachi Ensemble. Topics cover history, tuning, stylistic playing techniques, and contemporary teaching methods.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3262. Mariachi Violin Techniques.**

This course addresses playing and teaching the violin within the Mariachi Ensemble. Topics cover history, tuning, stylistic playing techniques, and contemporary teaching methods.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3263. Mariachi Vihuela Techniques.**

This course addresses playing and teaching the vihuela within the Mariachi Ensemble. Topics cover history, tuning, stylistic playing techniques, and contemporary teaching methods.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3264. Mariachi Guitarrón Techniques.**

This course addresses playing and teaching the Guitarrón within the Mariachi Ensemble. Topics cover history, tuning, stylistic playing techniques, and contemporary teaching methods.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3265. String Techniques II.**

This course is designed to review beginning-level techniques and to introduce intermediate and advanced-level techniques related to string teaching and playing. Techniques and concepts will be explored through historical perspectives, pedagogical approaches, performance (on primary and secondary instruments), observations of teaching, and teaching experiences. Prerequisite: MUSP 3165 with a grade of "C" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3266. Mariachi Voice Techniques.**

This course addresses singing and teaching within the Mariachi Ensemble. Topics cover history, tuning, range, stylistic singing techniques, contemporary teaching methods, and the foundations of vocal pedagogy.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3275. Percussion Techniques.**

In this course students will acquire skills and the basic techniques required for performance in the areas of drums, keyboard, timpani, marching percussion, accessory instruments, and drum set. Particular attention will be given to teaching materials and suggested pedagogical approaches for each area.

**2 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3355. Wind Instrumental Techniques for String Students.**

In this course students will explore basic teaching and performance techniques of the major wind instruments, with a focus on instructing full orchestra. Students observe, practice, and teach wind instruments in various settings. Prerequisite: MUSP 3165 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 3365. String Techniques II.**

This course is designed to review beginning-level techniques and to introduce intermediate and advanced-level techniques related to string teaching and playing. Techniques and concepts will be explored through historical perspectives, pedagogical approaches, performance (on primary and secondary instruments), observations of teaching, orchestration/arranging for strings, and teaching experiences. Prerequisite: MUSP 3165 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. Co-requisite: MUSP 4230.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. Co-requisite: MUSP 4240 with a grade of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. Co-requisite: MUSP 4260.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4164. Mariachi Melodia Techniques.**

This course provides students with the fundamentals of playing and teaching the melodic instruments associated with the Mariachi ensemble, with specific emphasis on the voice, violin, and trumpet. Topics will cover history, tuning, and stylistic techniques associated with each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 4165. Mariachi Armonia Techniques.**

This course provides students with the fundamentals of playing and teaching the rhythm/harmony instruments in the Mariachi ensemble, with specific emphasis in the guitarrón, vihuela/guitar, and the harp. Topics will cover history, tuning, strumming, and stylistic techniques specific to each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 4170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4230. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 4350. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or permission from instructor. Corequisites: Departmental Recital and appropriate major ensemble; Departmental Recital must be taken at the same level as lessons.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5100. Mariachi Lince de Oro.**

This course provides learning opportunities for students interested in an introduction to the mariachi genre. Traditional mariachi repertoire is distributed, rehearsed, memorized, and performed.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5101. Graduate Recital.**

A full-length, public recital in the appropriate applied music area. Should be taken simultaneously with a final semester of applied music instruction by those students in performance degree plans.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5120. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5127. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit. Prerequisite: Conducting Major or consent of the instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**MUSP 5130. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5140. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5150. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5160. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5164. Mariachi Melodia Techniques.**

This course provides students with the fundamentals of playing and teaching the melodic instruments associated with the Mariachi ensemble, with specific emphasis on the voice, violin, and trumpet. Topics will cover history, tuning, and stylistic techniques associated with each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5165. Mariachi Armonia Techniques.**

This course provides students with the fundamentals of playing and teaching the rhythm/harmony instruments in the Mariachi ensemble, with specific emphasis in the guitarrón, vihuela/guitar, and the harp. Topics will cover history, tuning, strumming, and stylistic techniques specific to each instrument. This course is repeatable for credit three times. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5166. Latin Music Methods.**

This course provides students with knowledge that is essential to become effective directors of Mariachi and Salsa ensembles. Instruments, styles, repertory, and resources that are related to these ensembles will be discussed. (MULT).

**1 Credit Hour. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5170. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5175. Afro-Cuban Hand Drumming.**

The fundamentals of playing and teaching Afro-Cuban Drums. Topics will cover history and knowledge of styles of the various Afro-Cuban percussion instruments. (MULT).

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**MUSP 5180. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5185. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5220. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5227. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit.

Prerequisite: Conducting Major or consent of the instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5230. Applied Keyboard.**

In this course students will participate in supervised private coaching and instruction that focuses on technique, musicality, literature, and performance in the keyboard area. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5240. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5250. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5260. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5270. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5280. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5285. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5320. Applied Voice.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the vocal area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5327. Applied Conducting.**

Through supervised private coaching, instruction focuses on baton technique, musicality, score reading, literature and performance in the conducting area, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated for additional credit.

Prerequisite: Conducting Major or consent of the instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5330. Applied Keyboard.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the keyboard area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5337. Advanced Conducting.**

Music performance class designed for further development of baton technique, score reading, and rehearsal preparation with special emphasis on analysis and musical styles. May be repeated once with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**MUSP 5340. Applied Woodwind.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the woodwind area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5350. Applied Brass.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the brass area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5360. Applied String.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the string area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5370. Applied Percussion.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the percussion area. May be repeated for credit. Prerequisite: Music major status or consent of instructor.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**MUSP 5380. Applied Composition.**

Through supervised private coaching, instruction focuses on technique, musicality, literature, and performance in the composition area. May be repeated for credit.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**MUSP 5385. Electronic Music Composition.**

Introduction to recording and tape manipulation techniques of music concrete, electro-acoustical music techniques involving digital and analog synthesizers, and the MIDI environment. May be repeated for credit.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**NHT 4301. Planning and Development of Nature and Heritage Tourism.**

This course applies basic planning and development principles to the special issues of nature and heritage tourism. Particular emphasis is placed on locational analysis, site analysis, and planning for sustainable use. Prerequisite: GEO 2110 or GEO 2410 either with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NHT 4302. Internship in Nature and Heritage Tourism.**

Students will work in private or public sector settings to gain practical experience in the planning, development and management of nature and/or heritage tourism. NHT internships frequently require students to develop and deliver content (online and/or in-person) to increase recipients' awareness of and appreciation for geography and the environment. Students will be expected to perform at high professional standards and will interpret the internship experience within the context of current literature. Prerequisite: NHT 4301 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 3110. Health Assessment Across the Life Span Practicum.**

This course requires demonstrated competency in the performance and documentation of physical assessments of well individuals and nursing care plans using the nursing process, critical thinking, and evidence-based practice. Apply teaching/learning principles in meeting the education needs of patients and demonstrate measures to maintain confidentiality of personal health information.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 3121. Essentials of Nursing Care Practicum.**

This course requires the use of nursing process and clinical reasoning principles to provide safe, effective, patient-centered care. Evidence-based practices will be used when performing essential nursing skills and procedures to care for patients experiencing acute and chronic alterations in health status.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 3221. Essentials of Nursing Care.**

This foundation course focuses on basic concepts related to essential nursing care of patients across the life span. Integration of knowledge of family systems, evidence-based practice, clinical reasoning, and the nursing process to provide safe, effective, patient-centered care will occur.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**NURS 3230. Healthcare Systems.**

Access and barriers to healthcare, past and current healthcare policy, and the professional nurse's role in policy and delivery of healthcare, will be emphasized. Qualitative and quantitative research in relation to healthcare systems, evidence based nursing practice, and ethical topics will be discussed.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 3240. Nursing Care Across the Life Span Practicum.**

This course uses clinical experiences to apply the nursing process in providing safe, effective, and quality care to patients and families across the life span. Clinical reasoning and judgment will be used to provide ethical, holistic, and patient-centered nursing care, promote health, prevent disease, and manage illness.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 3241. Acute Nursing Care of Adults Practicum.**

This course requires students to use evidence-based and collaborative practice principles in providing safe, effective, and quality care to adult patients experiencing acute, rapidly changing, life-threatening alterations in health status. Clinical reasoning and judgment will be used to provide ethical, holistic, patient-centered nursing care, manage illness, and promote health.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 3250. Health Assessment Across the Life Span.**

Conducting health histories and physical assessments of well individuals and developing nursing care plans that include patient age-specific health promotion, illness prevention, and risk factors will be emphasized. Assessments will encompass cultural domains, diversity, belief systems, and the implications for traditional as well as complementary and alternative healthcare.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 3260. Psychiatric Mental Health Nursing Practicum.**

This course utilizes clinical experiences to promote application of the nursing process in providing quality care to those experiencing mental health issues across the life span. Competency in using evidence-based practices to promote health, prevent disease, and manage illness will be developed.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 3300. Foundations of Professional Nursing Practice.**

This course explores the history of nursing in the context of the evolving healthcare system. Laws, regulations, and ethical guidelines impacting nursing licensure and professional practice will be examined. The delivery of patient and family-centered, evidence-based, and safe quality care will be explored. (WI) (MULP).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Multicultural Perspective|Writing Intensive

**Grade Mode:** Standard Letter

**NURS 3302. Research and Ethics.**

Introduction to critical appraisal of qualitative and quantitative research, and application of research and evidence-based processes used to improve decision-making and patient care outcomes across health settings. Integration of theory, information systems, clinical judgment, interprofessional perspectives and analysis of ethical conduct provide a foundation for learning the research process. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**NURS 3360. Psychiatric Mental Health Nursing.**

This course applies theories, concepts, knowledge, and skills for the comprehensive nursing care of those coping with mental health issues. Building on a liberal education, this course integrates theories of mental illness, psychopathology, and current research findings as they relate to the presentation of symptoms and holistic management of care.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 3430. Pathophysiology and Pharmacology for Nurses.**

Introduction and overview of pathology, clinical pharmacology and pharmacotherapeutics, including how major drugs are used therapeutically for age-specific clients. Other topics to be covered include drug laws and regulations, patient and nurse safety.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 3440. Nursing Care Across the Life Span.**

This foundational course focuses on the use of clinical reasoning and judgment to provide collaborative care to patients across the life span experiencing chronic and acute alterations in health status. Content is presented based on evidence-based practice and the prevalent health needs of patients. Prerequisite: NURS 3430 with a grade of "C" or better.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**NURS 3441. Acute Nursing Care of Adults.**

This course focuses on the use of evidence-based practice and clinical reasoning and judgment to provide collaborative care to adult patients experiencing acute, rapidly changing, life-threatening alterations in health status.

**4 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4160. Maternal and Newborn Nursing Practicum.**

This course is the clinical companion to NURS 4260. Concepts, knowledge, and skills taught in NURS 4160 will be applied to both simulation lab and clinical settings. Evidence-based, developmentally and culturally appropriate nursing care in a variety of patient-care settings will be emphasized.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 4170. Pediatric Nursing Practicum.**

This course is the clinical companion to NURS 4270. Concepts, knowledge, and skills taught in NURS 4270 will be applied in the simulation lab and clinical settings. Evidence-based, developmentally and culturally appropriate nursing care in a variety of patient-care settings will be emphasized.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 4201. Professional Growth and Empowerment.**

This course focuses on issues related to professional practice, career planning, personal goal setting, and empowerment of self and others. Factors related to job performance, performance expectations and evaluation, reality orientation, and commitment to lifelong learning will be discussed.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4204. Policy, Ethics, and Advocacy in Professional Nursing Practice.**

This course explores the baccalaureate prepared nurse's role informing the public policy process. Nursing jurisprudence, principles of nursing ethics, patient safety advocacy, standards and scope of nursing practice, professional boundaries, nursing peer review, and whistleblower protections are emphasized to prepare students to influence the U.S. Health Care System and society.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4205. Healthcare Information Technology in Nursing Practice.**

This course emphasizes nursing informatics and technology used in healthcare settings to research, support and implement safe quality patient care. Nursing administrative applications, pre-care and care support, electronic health records, clinical information systems, telehealth, informatics promoting community and consumer health, HIPAA, and technology to enhance collaboration in healthcare are covered.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4211. Nursing Care in Complex Health Practicum.**

This course focuses on providing care to patients with complex health alterations and life situations. Nursing care to patients in a variety of settings will be provided using the concepts of therapeutic communication and collaborative interventions with a focus on the complexity of the patient's or family's needs.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 4260. Maternal and Newborn Nursing.**

This course applies the nursing process and evidence-based practice to the care of maternal and newborn patients in a variety of healthcare settings. The course emphasizes the use of the nursing process to provide care to individuals and families that is developmentally and culturally focused.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4270. Pediatric Nursing.**

This course applies the nursing process and evidence-based practice to the care of pediatric patients in acute, outpatient and non-acute care settings. The course emphasizes the use of the nursing process to provide care to individuals and families that is developmentally and culturally appropriate.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4280. Community and Population Health Nursing Practicum.**

Clinical experiences will expose students to a variety of community and public health environments, health programs and policies in order to learn how nursing care is delivered to populations in community settings.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit



**NURS 4302. Role Transition to Professional Nursing.**

This didactic course focuses on role responsibility and accountability for transition into baccalaureate nursing practice. Emphasis is given to core professional standards and ethical values fundamental to nursing. Principles of professional communication, critical thinking, and role socialization will be integrated within an organizational context for professional growth. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**NURS 4303. Safety and Quality in an Interprofessional Environment.**

This course emphasizes the professional nurses' role in application of evidence based quality improvement and risk reduction strategies that promote safe environments while maximizing resources and opportunities for positive patient outcomes. Participation in highly effective Interprofessional teams is emphasized with concepts applied to local, national and international health issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**NURS 4311. Nursing Care in Complex Health.**

This course explores traditional and contemporary nursing concepts related to complex health alterations, compensations, and environments across the life span. Therapeutic communication, education, and collaborative interventions with diverse individuals and groups are emphasized including the use of complementary and alternative modalities to meet the needs of patients.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**NURS 4341. Leadership and Management of Nursing Care Practicum.**

Leadership and management skills in a variety of nursing care situations will be applied. Nursing unit leadership and staff assignments based on assessment of client needs, resources, priorities, and competencies of staff will be covered. Assessment and evaluation of the provision of evidence-based nursing care will be performed.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**NURS 4351. Leadership and Management of Nursing Care.**

Students discuss leadership and management theories related to organizational nursing roles, including competencies required for complex change, performance improvement, and transformational leadership. Organizational contexts, structure, processes, and culture, in leading and directing patient centered care are examined, along with relationships between governance structures, practice environments, and positive patient outcomes. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**NURS 4380. Community and Population Health Nursing.**

This course explores concepts of Community-Oriented Nursing Practice with an emphasis on using the nursing process to assess the health of communities and diverse populations. Public Health Nursing Practice and Community-Based Nursing Practice are discussed with an emphasis on health promotion and the prevention of disability and disease.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**NURS 5102. Advanced Health Assessment Practicum.**

This course emphasizes advanced health assessment techniques and skills common to patient evaluation and development of differential diagnoses. Advanced physical assessment skills and identification of common signs and symptoms related to physical examination will be developed. (60 practicum hours) Corequisites: NURS 5202 and NURS 5301 both with grades of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5111. Diagnostic Reasoning and Procedures Practicum.**

This course examines clinical laboratory diagnostics, imaging tests, and procedures commonly practiced in primary care by advanced practice nurses. Students will learn diagnostic reasoning and clinical decision-making skills through virtual and case simulations. Additionally, students will learn procedures in on-campus intensives as part of the clinical requirements of the course. Students complete 45 practicum hours in this course. Corequisite: NURS 5209 and NURS 5210 and NURS 5301 and NURS 5351 all with grades of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5112. Advanced Psychiatric Assessment and Clinical Interview.**

This course provides a foundation for psychiatric assessment and clinical interview techniques to determine mental health status of clients throughout the lifespan. Additionally, psychiatric differential diagnosis, standardized screening tools, and documentation of a psychiatric assessment are emphasized. Prerequisite: NURS 5301 with a grade of "B" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5135. Foundations of Leadership Practicum.**

This course serves as a companion course to NURS 5335. This practicum course provides experiential learning through foundational development in the nursing leader role utilizing leadership theories, frameworks, and best practices based on evidence. Practicum experiences examine leadership styles, organizational designs, and cultures in healthcare. Additionally, self-reflection, relationship-building, and healthcare team dynamics will be examined in the clinical setting. Corequisite: NURS 5335 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5165. Quality Improvement Practicum.**

This course serves as a companion course to NURS 5265. This practicum course provides experiential learning through application of evidence-based practice. Using quality improvement science, students will critically appraise research and apply high quality evidence to improve healthcare processes and systems in the clinical setting. Corequisite: NURS 5265 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5185. Financial Management Practicum.**

This course serves as a companion course to NURS 5285. This practicum course provides experiential learning through application of business and financial concepts in healthcare settings. Students will participate in budget and staffing processes in the healthcare facility. Additionally, using strategic and financial management constructs, students will develop a proposed healthcare business plan. Prerequisite: NURS 5260 and NURS 5262 both with grades of "B" or better. Corequisite: NURS 5285 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5190. Transition to Practice: The Advanced Practice Nurse as Healthcare Provider.**

This course is designed for students preparing for the entry level role of a nurse practitioner. Students will examine a more in-depth view of the nurse practitioner role specific to licensure, malpractice, national certification and exam, and prescriptive authority including controlled substances. Prescriptive delegation, DEA, and other advanced practice nurse role socialization aspects are explored. Prerequisite: NURS 5111 and NURS 5209 and NURS 5210 and NURS 5250 and NURS 5255 and NURS 5256 and NURS 5257 and NURS 5301 and NURS 5303 and NURS 5345 and NURS 5346 and NURS 5351 and NURS 5354 and NURS 5391 all with grades of "B" or better. Corequisite: NURS 5392 and NURS 5393 both with grades of "B" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5195. Nursing Leadership Role Practicum.**

This course serves as a companion course to NURS 5395. This practicum course provides experiential learning in operational, administrative, and strategic competencies related to the nurse leader role. This practicum experience promotes synthesis of leadership theories, quality, and risk management in the healthcare environment. Additionally, resilience, professionalism, and policy development will be examined in the clinical setting. Prerequisite: NURS 5185 and NURS 5165 and NURS 5135 all with grades of "B" or better. Corequisite: NURS 5395 with a grade of "B" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5205. Healthcare Leadership and Finance for Advanced Nursing Practice.**

This course explores leadership concepts and complexity of changing healthcare systems for the advanced nursing role. Healthcare economics, innovation, and resource stewardship are examined. Change management and leadership theories guide students to create a leadership philosophy. Rich leadership perspectives and diversity from various professional fields are examined through reflective practice. Prerequisite: NURS 5301 and NURS 5351 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5208. Health Policy, Ethics, and Issues in Advanced Nursing Practice.**

This course prepares students as advocates and change agents in health policy development, implementation, and evaluation. Current professional, ethical, and legal issues that influence advanced practice nursing, nursing education and the health care delivery system are presented. The importance of collaborative engagement in health care policy and economics at the local, national, and global levels is emphasized. Prerequisite: NURS 5205 and NURS 5301 and NURS 5303 and NURS 5351 all with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5209. Advanced Health Assessment.**

This course provides the foundation for advanced health assessment techniques and skills common to family practice across the lifespan. Emphasis is placed on interviewing skills, a methodical approach to physical examinations to formulate differential diagnosis. Documentation using informatics and electronic medical records is presented. Content incorporates physiological, psycho-social, spiritual, cultural, diversity, developmental, and integrative components of health. Corequisite: NURS 5111 and NURS 5210 and NURS 5301 all with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5210. Advanced Health Assessment Practicum.**

This course serves as the companion course to NURS 5209. Emphasis is placed on the development of advanced health assessment techniques and skills common to patient evaluation and development of differential diagnoses for patients across the lifespan. Advanced interview skills, physical assessment skills, and identifying common signs and symptoms related to physical examination will be developed through lab, simulation, and clinical practicum experiences. Students complete 90 practicum hours with emphasis in advanced health assessment skills. Corequisite: NURS 5301 and NURS 5209 and NURS 5351 and NURS 5111 with grades of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**NURS 5230. Psychiatric Mental Health Diagnostics and Clinical Management for Pediatric Clients.**

This course provides a foundation for evidence-based assessment, diagnosis, and clinical management of pediatric and adolescent clients with acute and chronic psychiatric disorders. Psychiatric theories, psychotherapies, health promotion and culturally sensitive interventions are examined. Establishing the provider-client therapeutic partnership is also explored. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 all with grades of "B" or better.

Corequisite: NURS 5233 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5233. PMH Diagnostics and Clinical Management for Pediatric Clients Practicum.**

This course serves as a companion course to NURS 5230. This practicum course applies health promotion, assessment, and diagnostic skills in managing care of pediatric and adolescent clients with acute and chronic psychiatric disorders through integration of evidence-based psychiatric theories, psychotherapy, psychopharmacology, and alternative-based interventions. Working with a preceptor, students will facilitate therapies, create and evaluate treatment plans, and collaborate as part of interprofessional teams to deliver holistic care. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 all with grades of "B" or better. Corequisite: NURS 5230 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5243. PMH Diagnostics and Clinical Management for Adult and Geriatric Clients Practicum.**

This practicum course serves as a companion course to NURS 5340.

The course teaches application of health promotion, assessment, and diagnostic skills in managing care of adult and geriatric clients with acute and chronic psychiatric disorders through integration of psychiatric theories, psychotherapy, psychopharmacology, and alternative-based interventions. Working with a preceptor, students will facilitate therapies, create and evaluate treatment plans, and collaborate as part of the interprofessional team to deliver holistic care. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 and NURS 5230 and NURS 5233 all with grades of "B" or better. Corequisite: NURS 5340 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5250. Mental Health Wellness and Illness in Primary Care.**

This course examines behavioral and mental health wellness and illness in the context of family practice. Application of evidence-based knowledge to provide clinical management of patients across the lifespan with common psychiatric-mental health problems is emphasized.

Screening, crisis intervention, and various therapies are presented, as well as referrals and interprofessional approaches to care. Prerequisite: NURS 5301 and NURS 5303 and NURS 5351 all with grades of "B" or better. Corequisite: NURS 5111 and NURS 5209 and NURS 5210 all with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5255. Pediatric and Adolescent Primary Care Practicum.**

This course serves as a companion course to NURS5354. Students will apply and refine skills using an evidence-based approach for health promotion, disease prevention, and management of common acute and chronic illnesses for pediatric and adolescent patients using family centered and developmental perspectives. Students complete 120 practicum hours with emphasis in pediatric primary care. Prerequisite: NURS 5111 and NURS 5209 and NURS 5210 and NURS 5250 and NURS 5345 and NURS 5346 all with grades of "B" or better. Corequisite: NURS 5354 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5256. Geriatric Primary Care.**

This course examines holistic assessment, prioritizing differential diagnosis, and integrative clinical management of older adult and geriatric patients using family centered perspectives (ages 65+). Emphasis is placed on health promotion, disease prevention, and management of common acute and chronic illness including polypharmacy and end of life considerations. Prerequisite: NURS 5354 and NURS 5255 both with grades of "B" or better. Corequisite: NURS 5257 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5257. Geriatric Primary Care Practicum.**

This course serves as a companion course to NURS 5256. Students will refine skills using an evidence-based approach for health promotion, disease prevention, and integrative clinical management of common acute and chronic illness for geriatric patients and families. Comprehensive health status assessment, end of life care, and complex chronic health issues are addressed. Students complete a 90 hour practicum for this course. Prerequisite: NURS 5354 and NURS 5255 both with grades of "B" or better. Corequisite: NURS 5256 with a grade of "B" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5260. Organizational Development: Culture, Communication, & Interprofessional Concepts for Nurse Leaders.**

This course provides students a foundation in organizational theories and dynamics to support the nursing leader's role in improving system-level outcomes in healthcare organizations. The role of patient experience, communication strategies, and interprofessional team dynamics within the context of the organization will be explored. In addition, methods to influence and lead change in healthcare systems will be examined. Prerequisite: NURS 5335 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5261. Informatics and Innovation in Nursing Leadership.**

This course provides students with skills in healthcare informatics in the context of the nursing manager or executive. Utilization of information systems and technology to lead innovative change and quality improvement processes are emphasized. Prerequisite: NURS 5335 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5262. Healthcare Finance and Strategic Management Foundations.**

This course provides students with the foundation in financial acumen of business models and healthcare delivery systems. Students will learn mechanics of strategic management that includes use of standard industry tools and techniques to collect and analyze data to develop components of a strategic plan in the context of healthcare. Prerequisite: NURS 5335 and NURS 5260 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5263. Fostering Human Performance and Systems Thinking.**

This course builds on nursing leadership competencies for effective human resource management within complex, adaptive healthcare environments. Students will learn and integrate into practice concepts associated with human resources management and performance including nature of work, compensation and benefits, workforce planning, recruitment and hiring. Additionally, training and development, employee appraisal, and union-management relations will be explored. Prerequisite: NURS 5335 and NURS 5260 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5264. Health Policy, Law, and Ethics.**

This course prepares students as advocates and change agents in health policy development, implementation, and evaluation. Current professional, ethical, and legal issues that impact nurse leaders and influence health care delivery are presented. The importance of collaborative engagement in health care policy at the local, national, and global levels is emphasized. Prerequisite: NURS 5335 and NURS 5260 both with grades of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5265. Evidence-Based Practice, Quality Improvement, and Healthcare Systems.**

This course lays a foundation for students to utilize research evidence and its role in supporting evidence-based practice. Content guides students to identify existing problems in clinical practice and healthcare systems through the translation of evidence into practice using quality improvement methods. Critical appraisal of research skills and opportunities to apply high quality evidence to improve healthcare processes and systems will be examined. Corequisite: NURS 5165 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5285. Business and Financial Management in Healthcare.**

This course provides students with business, accounting, and financial concepts in the context of healthcare delivery systems. Emphasis is placed on staffing, budgets, revenue, and cost management for the role of the nurse leader. Additionally, entrepreneurship and business plans are explored. Prerequisite: NURS 5260 and NURS 5262 both with grades of "B" or better. Corequisite: NURS 5185 with a grade of "B" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5301. Advanced Pathophysiology.**

In preparation for advanced practice, this course will expand understanding of the pathophysiology underlying dysfunctions and interrelatedness of the processes of normal physiology and pathophysiology across the continuum of disease and return to wellness. Applications will be made utilizing lifespan perspectives of the process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5303. Advanced Pharmacotherapeutics.**

This course provides advanced knowledge in selecting pharmacologic agents and specific drugs, based on acute and chronic health problems in diverse populations. Knowledge of pharmacologic groups, indications and contraindications, dosing with special needs groups, adverse effects, and collaborative monitoring of pharmacotherapy and alternative therapies will be developed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5312. Neuroscience, Epigenetics, and Psychopharmacology.**

Building on previous knowledge of advanced pathophysiology and pharmacology, this course presents advanced concepts of neuroscience, epigenetics, and psychopharmacology that contribute to mental health and psychiatric disorders across the lifespan. Clinical management of psychotropic medication in the treatment of psychiatric disorders and mental illness are discussed and emphasis is placed on biologic actions, neurobiology, safe prescribing, and treatment response of psychiatric medication management. Pertinent laboratory diagnostics and neuroimaging related to psychiatric health and illness are also analyzed. Prerequisite: NURS 5301 and NURS 5303 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5335. Foundations of Leadership and Executive Nursing Practice.**

This course emphasizes organizational and systems leadership by synthesizing principles of leadership, management, and change theory. Various leadership styles, organizational designs in healthcare, and leadership sustainability are explored. Corequisite: NURS 5135 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5340. PMH Diagnostics and Clinical Management for Adult and Geriatric Clients.**

This course provides a foundation for evidence-based assessment, diagnosis, and clinical management of adult and geriatric clients with acute and chronic psychiatric disorders. Psychiatric theories, psychotherapies, health promotion and culturally sensitive interventions are examined, and emphasis is placed on the provider-client therapeutic partnership. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 and NURS 5230 and NURS 5233 all with grades of "B" or better. Corequisite: NURS 5243 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5345. Young and Middle Adult Primary Care.**

This course focuses on holistic assessment, formulating differential diagnoses, and integrative clinical management of young and middle adult primary care patients (ages 18-65). Course content includes health promotion and maintenance, including sexual, perinatal, and reproductive considerations of the child-bearing family. Management of common acute and chronic illness in this age group in the context of family centered perspectives and rural considerations are also emphasized. Prerequisite: NURS 5209 and NURS 5210 and NURS 5301 and NURS 5111 and NURS 5351 all with grades of "B" or better. Corequisite: NURS 5346 and NURS 5303 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5346. Young and Middle Adult Primary Care Practicum.**

This course serves as a companion course to NURS5345. Students will apply theory to practice skills using an evidence-based approach for health promotion, sexual, perinatal, and reproductive care for the child-bearing family. This course provides experience to refine diagnostic reasoning skills for management of common acute and chronic illness in young and middle adult aged patients using a family centered approach. Students complete 180 practicum hours with emphasis in young and middle adult primary care. Prerequisite: NURS 5209 and NURS 5210 and NURS 5301 and NURS 5111 and NURS 5351 all with grades of "B" or better. Corequisite: NURS 5345 and NURS 5303 both with grades of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5351. Theoretical Foundations and Role Development of Advanced Integrative Nursing.**

This course explores historical processes and role development in advanced nursing practice. Theories and frameworks that guide and inform advanced nursing practice and scholarly inquiry are examined. Integration of theories from nursing, integrative care, and related disciplines provide a foundation for the graduate student to transition into the advance practice role and form a basis for evidence-based practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5354. Pediatric and Adolescent Primary Care.**

This course emphasizes holistic assessment, formulating differential diagnosis, and integrative clinical management of pediatric and adolescent patients (ages 0-21). Content includes primary care approach health promotion, disease prevention, and managing common acute and chronic illnesses of increasing complexity using family-centered and developmental perspectives. Perspectives of underserved and rural populations in a variety of clinical settings will be explored. Prerequisite: NURS 5345 and NURS 5346 and NURS 5250 all with grades of "B" or better. Corequisite: NURS 5255 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5360. Leadership Science: Foundational Thinking Skills, Governance, & Community & Provider Relationships.**

This course will emphasize leadership skills in communication, leadership styles and organizational theory. Communication will focus on conflict resolution, presentation skills, and relationship building. Delivery systems, leadership styles, and demand for nursing will be examined. Complexity science, systems theory, and diversity required for organizing health care will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**NURS 5361. Leadership Science: Performance and Quality Improvement.**

This course will articulate performance improvement activities using evidence-based metrics to align patient outcomes with organizational goals. Methods for using quality metrics and action plans will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**NURS 5362. Leadership Science: Patient Safety, Risk Management, Legal and Regulatory Requirements.**

This course will examine areas of risk and liability. Students will develop systems that identify early warning indicators of problems and will explore "just in time" reporting. The concept of sentinel events and root cause analysis will be explored. Accreditation standards, legal regulations, and compliance requirements will be integrated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5363. Leadership Science: Evidence-Based Practice for Nurse Leaders.**

The students will explore evidence-based practice (EBP) for nurse leaders. This EBP course will equip nurses with the skills needed to effectively engage in EBP, to serve as EBP champions and mentors, and to lead projects within healthcare facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5364. Leadership Science: Health Care Finance and Workforce Planning.**

This course will emphasize workforce planning for nursing and the application of general principles of accounting. Twenty hours will be allocated to the development of a department operational and capital budget in collaboration with a nurse director or executive. Negotiation and monitoring of contracts and contract compliance will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**NURS 5365. Leadership Art: Ethics, Diversity, and Relationship Building.**

This course will explore theories of culture and will include legal regulations that govern diversity. The relationship between medical ethics and corporate compliance will be explored. Methods for creating a trusting environment will be evaluated and the need for relationships with providers and academia will be illustrated.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5366. Leadership Art: Health Policy and Advocacy.**

This course will focus on the need for leaders to belong to professional organizations to affect policy and advocacy. Participation in legislative activities will be promoted at the state and national levels. The impact of nurse leaders serving on boards that govern health care activities and organizations will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5367. Leader Within: Professional Accountability, Succession Planning and Reflective Practice I.**

This course provides a mentored experience for the synthesis of critical thinking and reflections from didactic work with the practice of nursing leadership. Observational and independent learning activities will result in a Part I of the final capstone project reflecting culmination of program objectives.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**NURS 5368. Leader Within: Professional Accountability, Succession Planning and Reflective Practice II.**

This course is designed to be the culminating mentored experience for the synthesis of critical thinking and reflections from didactic work with the practice of nursing leadership. Students will evaluate and present their final capstone project, reflecting summation of program objectives.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**NURS 5370. Psychiatric Mental Health Integrative Clinical Management Across the Lifespan.**

This course builds on previous courses to further develop competency in the PMHNP role in comprehensive, integrative clinical management for clients with complex psychiatric disorders across the lifespan, while utilizing current evidence-based practice guidelines. Self-directed management, crisis intervention and stabilization, and interprofessional collaboration of care in a variety of settings are emphasized. Additionally, innovative care modalities such as telehealth are explored to reach rural and underserved clients, special populations, and diverse communities. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5102 and NURS 5230 and NURS 5233 and NURS 5340 and NURS 5243 all with grades of "B" or better. Corequisite: NURS 5373 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5371. Clinical Prevention and Population Health.**

Students will examine an overview of global and national population health including social determinants of health, health disparities, cultural diversity, and clinical prevention with an emphasis in evidence-based practice. Resources will be discussed in relation to the availability, barriers, and access in the community and rural areas. Prerequisite: NURS 5301 and NURS 5303 and NURS 5351 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5373. Psychiatric Mental Health Integrative Clinical Management Across the Lifespan Practicum.**

This course serves as a companion course to NURS 5370. This culminating lifespan practicum course provides experiential learning through further development of competency in the PMHNP role in comprehensive, integrative clinical management for special populations and clients with complex psychiatric disorders, utilizing current evidence-based practice guidelines. Practicum experiences emphasize crisis intervention and stabilization, guided self-directed management, and collaboration in an interprofessional environment in a variety of psychiatric settings. Additionally, innovative care modalities such as telehealth are explored to reach rural and underserved clients and diverse communities. Prerequisite: NURS 5312 and NURS 5112 and NURS 5301 and NURS 5303 and NURS 5102 and NURS 5230 and NURS 5233 and NURS 5340 and NURS 5243 all with grades of "B" or better. Corequisite: NURS 5370 with a grade of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5391. Translational Science for Evidence Based Practice and Innovation Capstone.**

Students will explore evidence-based practice (EBP) for advanced nursing practice professionals. This course will equip graduate nursing students with the skills needed to effectively critique and engage in EBP, to serve as EBP champions and mentors, and to lead projects and innovation within healthcare facilities. Emphasis is placed on completion of a quality improvement or scholarly project, under the direction of a faculty member, which synthesizes advanced practice knowledge and skills to address substantive advanced nursing practice issues. Prerequisite: NURS 5255 and NURS 5354 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5392. Integrative Family Primary Care.**

This course emphasizes health promotion and complex, integrative clinical management of patients and families with co-morbidities utilizing both traditional and complementary or alternative methods based on evidence and research. Integration of complex primary healthcare considerations and clinic-based emergency interventions are examined. Prerequisite: NURS 5256 and NURS 5257 and NURS 5391 all with grades of "B" or better. Corequisite: NURS 5190 and NURS 5393 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5393. Integrative Family Primary Care Practicum.**

This course serves as the companion course to NURS5392. Students will master skills in utilization of holistic assessment, integrative clinical decision making, and designing interventions and treatment plans in a variety of clinical settings as they prepare for entry level into advanced practice nursing. Emphasis is placed on management of co-morbidities and complex patient management for patients across the lifespan integrating both traditional and complementary or alternative methods as part of the treatment plan. Students complete 180 practicum hours in this course. Prerequisite: NURS 5256 and NURS 5257 and NURS 5391 all with grades of "B" or better. Corequisite: NURS 5190 and NURS 5392 both with grades of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NURS 5395. Nursing Leadership and Administration Role Development.**

This course provides students the opportunity to synthesize leadership, organizational, and financial skills as they complete preparation for transition to the nurse leader role. Leadership perspectives and diversity from nursing and other professional fields are examined through reflective practice. #Additionally, policy advocacy and development, and disaster management are examined. #Prerequisite: NURS 5335 and NURS 5135 and NURS 5265 and NURS 5165 and NURS 5391 and NURS 5285 and NURS 5185 all with grades of "B" or better. Corequisite: NURS 5195 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 1162. Food Systems Laboratory.**

This course provides for application of the management techniques and concepts of planning, preparation, cost analysis, and evaluation covered in NUTR 1362. Corequisite: NUTR 1362 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 1362. Food Systems.**

Nutrition, food science, and management principles in planning, procuring, preparing, preserving, evaluating, and serving food to fulfill dietary requirements of individuals and diverse cultural groups. Includes federal legislation, environmental issues, and culinary principles. (MULT) Corequisite: NUTR 1162 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**NUTR 2162. Food Science Laboratory.**

Students engage in laboratory techniques and exercises related to food, chemistry, microbiology, nutrition, food palatability, and food safety. Corequisite: NUTR 2362 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 2360. Nutrition Science.**

The science of human nutrition with emphasis on nutrient digestion, absorption, and excretion; nutrient metabolism, requirements, and sources. Prerequisite: BIO 1330 or CHEM 1341 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** BIOL 1322

**NUTR 2361. Nutritional Assessment.**

This course focuses on the principles and techniques of assessing nutritional status, presentation of interviewing and nutrition counseling theories, development of individualized nutrition diagnoses, and introduction to educational tools and community nutrition resources. Practical application is provided through assignments and in-class experiences. Prerequisite: NUTR 2360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 2362. Food Science.**

Students learn the scientific principles underlying the relationships among food, chemistry, microbiology, nutrition, and food safety as related to the major food groups. Co- or prerequisite: NUTR 2162 with a grade of "C" or better. Prerequisite: BIO 1330 or CHEM 1341 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 3303. Research Methods in Nutrition Science.**

This course will focus on the evaluation of research concepts, methods, and strategies used in nutrition research. Topics include epidemiological, community, clinical, animal, and cell culture models, study design, statistical analysis and dissemination of research findings. Students will locate, read, and evaluate scientific literature. Prerequisites: BIO 2430 or [BIO 2451 and BIO 2452] all with grades of "C" or better and CHEM 1342 and CHEM 1341 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**NUTR 3362. Nutrition and Health.**

For non-science majors. Involves the study of the nutrients and their function in promoting health throughout the life span. Includes standards for consumer selection of a proper diet and analysis of nutrition-related health problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 3363. Nutrition for Wellness and Fitness.**

Students will study the causes and treatment of overweight and obesity and the effects of dietary and lifestyle choices on attainment and maintenance of health and prevention of chronic diseases. Basic exercise physiology is introduced and dietary recommendations for sports, fitness and prevention of eating disorders are also presented. Prerequisite: NUTR 2361 and NUTR 3367 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 3364. The Science of Nutrition and Exercise.**

This course focuses on basic nutritional science, with emphasis on the physiological and biochemical importance of nutrition to physical performance, health, and fitness. The use and efficacy of ergogenic aids will be investigated. The course requires reading and interpreting the scientific literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 3367. Nutrition and Physiology.**

This course integrates the study of nutrition with other biological sciences, focusing on cellular and molecular physiological processes related to digestion, absorption, transport, and metabolism of nutrients and other dietary components. Prerequisite: NUTR 2360 and [BIO 2430 or BIO 2451 or BIO 2452 or BIO 3421] both with grades of "C" or better and CHEM 1341 and CHEM 1342 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4167. Food Systems-Production & Management Laboratory.**

This course provides for the application of the management techniques and concepts of institutional food production covered in NUTR 4367. Prerequisite: NUTR 1362 and NUTR 2360 both with grades of "C" or better. Corequisite: NUTR 4367 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4301. Career Exploration in Nutrition and Foods.**

Students engage in applied experience under the supervision of a professional mentor in nutrition and foods-related professions, services, businesses, and/or research. (Capstone Course). Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4350. Hospitality.**

Focus on the principles underlying operations in the hospitality industry. Concepts include residential and lodging operations, guest expectations, food, beverage, and maintenance services, promotions, budget control, personnel and security.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4360. Medical Nutrition Therapy.**

This course explains the physiological and biochemical abnormalities of certain disease states of human body systems with emphasis on diet modification as a therapeutic measure. Prerequisite: NUTR 4365 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4361. Biochemical Nutrition.**

A study of the biochemical and physiological foundations of nutrition. Information pertaining to cytology, biochemical structure of nutrients, energy transformations, nutrient-drug interactions, and the anatomy, physiology, and nutrient metabolism of major organ systems is covered. Prerequisite: NUTR 3367 with a grade of "C" or better. Corequisite: [CHEM 2150 and CHEM 2350] or CHEM 3375 or CHEM 4375 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4362. Nutrition and Genetics.**

This course will examine the specific processes in intermediary nutrient metabolism and their genetic regulation. The effects of nutrients on gene expression, cell signaling, cell physiology, and disease processes will also be explored. Prerequisite: NUTR 3367 and BIO 1330 and BIO 1130 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4363. Nutrition Counseling and Education.**

Study of teaching/learning styles and development of counseling skills to improve the nutritional status of individuals, families, and groups. Development of effective nutrition education materials and media communications. Prerequisite: NUTR 4365 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**NUTR 4365. Nutrition in the Life Span.**

This course provides for the in-depth study of the normal growth, development, and nutritional requirements associated with pre-pregnancy, pregnancy, infancy, childhood, adolescence, and the older adulthood. (WI) Prerequisite: NUTR 2361 and NUTR 3367 and NUTR 3303 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**NUTR 4366. Equity and Policy in Nutrition.**

This course addresses the influence of government, interest groups, media, and industry on nutrition policy decisions, public and private funding, nutrition education, the food supply and food choices, and includes discussion of equity and ethical considerations that have an impact on public health. (WI) Prerequisite: NUTR 3303 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**NUTR 4367. Food Systems-Production & Management.**

Students study the principles, policies, and procedures for planning, procurement, staffing, production, evaluation, and research in institutional food service. Topics include systems design, decision hierarchy, organizational structure, and personnel selection, training, and management. Prerequisite: NUTR 1362 and NUTR 2360 both with grades of "C" or better. Corequisite: NUTR 4167 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 4391. Independent Study in Nutrition and Foods.**

Independent reading and/or research on a specific topic related to students' primary area of interest. Work may consist of research, reviews, and integration of existing literature, or other appropriate independent work. May be repeated once for credit with approval of instructor. (WI).

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**NUTR 5199B. Thesis.**

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**NUTR 5299B. Thesis.**

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**NUTR 5300. Foundation Studies in Human Nutrition.**

This course is designed for students who do not have a sufficient background in the foundations of nutrition and food science to be successful in graduate level courses. This course does not earn graduate degree credit. Course is repeatable. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**NUTR 5302F. Nutritional Supplements.**

An advanced study of the efficacy of dietary supplements. Both nutrient and non-nutrient supplement components will be discussed. Clinical trials, epidemiological data and molecular mechanisms of action of dietary supplements will be compared to manufacturer's claimed action. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**NUTR 5302G. Pediatric Obesity.**

An advanced study of pediatric obesity, including causes, economic and health related consequences, evidence-based treatment and prevention strategies. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**NUTR 5305. Seminar in Nutrition and Disease.**

An advanced study of a selected topic in nutrition concerning nutrients and functional foods and their role in disease prevention or treatment. Class topics will enter on clinical trials, epidemiological data and molecular mechanisms of action concerning the ability of nutrients to prevent or treat disease. Repeatable for credit when topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**NUTR 5306. Seminar in Nutrition in the Lifespan.**

An advanced study of a selected topic in nutrition and the lifespan from a multidisciplinary perspective, including review of scientific literature in nutrition, physiology, biochemistry, sociology, exercise sports science, epidemiology, endocrinology and genetics. Repeatable for credit when topic varies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5320. Diet Therapy and Pathophysiology.**

This course will study the physiological and biochemical abnormalities of certain disease states as they relate to the human body's systems placing emphasis on diet modification as a therapeutic measure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5350. Research Methods in Nutrition and Food Science.**

Evaluation of research concepts, methods, and strategies used in nutrition and food science research. Topics include the nature of scientific research, sampling, measurement, data collection, types of research methodology, use of data analysis and management software, and evaluation of research reports.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5355. Advanced Independent Study in Nutrition.**

Individual work with specific guidance from graduate nutrition faculty. Work may include participation in research, professional practice, and/or critical review of the scientific literature. Course may be repeated once for credit when topics vary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5360. Practicum for Dietetic Internship.**

Students observe and engage in the practice of dietetics under the supervision of practitioners in facilities for health care, public health, and food systems. Repeated twice to meet requirements to complete the dietetic internship program. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**NUTR 5361. Advanced Food Systems Administration.**

Techniques and procedures for management, service, and marketing of meals in commercial and noncommercial food service facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5362. Advanced Medical Nutrition Therapy.**

Advanced study of medical nutrition therapy with emphasis on application of principles and techniques of nutritional assessment emphasizing current clinical nutrition practices. Current scientific literature will be used extensively to discuss most recent advances in the area of medical nutrition therapy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5363. Advanced Community Nutrition.**

Assessment of the nutritional needs of the community and of programs that serve the needs. Experiences include survey techniques, nutritional education, and management of programs to meet specific nutritional needs through community agencies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**NUTR 5364. The Science of Nutrition and Exercise.**

An advanced course focusing on the physiological and biochemical impact of nutrient intake on physical performance, health and fitness. Special emphasis will be placed on the investigation of a variety of dietary supplements, including purported ergogenic aids. The course requires significant reading and interpreting of the scientific literature.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5366. Macronutrient Metabolism.**

An advanced study of the biochemical and physiological foundations of nutrition and metabolism and its relevance to health and wellness. Scientific literature pertaining to biochemical structure, metabolism and physiological regulation of macronutrients and water-soluble vitamins.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5367. Micronutrient Metabolism.**

An advanced study of the biochemical and physiological foundations of nutrition with emphasis on fat-soluble vitamins and minerals. Current scientific information pertaining to structure, metabolism and physiological regulation of these micronutrients.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5371. Externship in Human Nutrition.**

Structured practical experience in human nutrition, food science, food biotechnology. Supervision provided by a member of the graduate faculty and a designated individual at the work site. Requires a minimum of 150 hours of supervised experience. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**NUTR 5372. Advances in Nutrition Policy and Ethics.**

This course considers the disparate influences on the US food supply, on federal and state nutrition and food-related policies, and ultimately, on individual dietary intake. Potential influences, including current state and federal policies, industry, interest groups, and the media, driven by economics and ethical consideration, will be addressed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5374. Advanced Nutrition and Genetics.**

This course will examine the specific processes in intermediary nutrient metabolism and their genetic regulation. The effects of nutrients on gene expression, cell signaling, cell physiology, and disease processes will also be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5375. Advances in Life Span Nutrition.**

An advanced study of the nutritional requirements throughout the life span involving a multidisciplinary approach including, biochemistry, endocrinology and genetics, and perspectives of human psychological and social development. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**NUTR 5399A. Thesis.**

Initial thesis enrollment. Focus is on identification of thesis topic, review of literature, research design and preparation of thesis proposal. No thesis credit is awarded until completion of NUTR 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**NUTR 5399B. Thesis.**

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**NUTR 5599B. Thesis.**

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**NUTR 5999B. Thesis.**

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**OCED 3310. Human Problems in the Workplace.**

Overview of problems that supervisors, teachers, and co-workers encounter in business/industry, social service, military, or education.

This range of problems interferes with communication, performance, and development of proficiency in school/work. Perspectives and reports on the incidence of these problems will be presented, as well as actions for these human problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 3350. Introduction to Interdisciplinary Studies for the Bachelor of Applied Arts and Sciences Degree.**

Students in this course will apply critical and reflective thinking to develop an individualized plan consisting of interdisciplinary studies courses that meet their career goals. Students will also assess their needs for earning credits through prior learning assessment (PLA), and identify potential capstone projects aligned with their professional goals. Prerequisite: 2.25 Overall GPA; Texas State GPA of 2.25. Corequisite: OCED 4350.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 4111. Independent Study in Occupational Education.**

This is an independent study course that allows research on topics in occupational education related to a student's interests. Work may include individual research, critical reviews or integration of existing bodies of knowledge. Course may be repeated for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**OCED 4302. Trends and Issues in OWLS.**

This course examines emerging trends and issues impacting today's workplace. Topics may include aging workforce, financial and mental wellness, and diversity.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 4325. Development and Change in Organizations.**

This course focuses on organization development and change in government, private business, not-for-profit, and educational organizations. Topics covered include evaluation models, interventions at the organization, individual, and team levels, as well as change management strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 4350. Adult Development and Career Planning.**

This course introduces students to human development, learning theory, transition theory, interdisciplinary studies, career planning and assessment, and goal setting relevant to developing a professional growth plan. (WI). Prerequisite: 2.25 Overall GPA; Current Texas State students must also have a Texas State GPA of 2.25. Corequisite: OCED 3350.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**OCED 4360. Bachelor of Applied Arts and Sciences Capstone Part 1.**

This is the first part of a two-part capstone devoted to the development of the student's supervised capstone project. Proposal development, review of literature, creation of timelines, and task analysis are stressed. Following instructor approval, work on the capstone project begins in this course. (WI) Prerequisites: OCED 3350 and OCED 4350 both with grades of "D" or better and instructor approval. Corequisites: OCED 4361 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 13 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**OCED 4361. Bachelor of Applied Arts and Sciences Capstone Part 2.**

This is the second part of a two-part capstone devoted to the development of the student's supervised capstone project. Application of knowledge, abilities, and skills acquired in the degree program is stressed. It requires extensive reports and documentation. (WI) Corequisite: OCED 4360 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 13 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**OCED 5101. Instructional Skill Development.**

Graduate assistants are required to enroll in this course to be prepared to instruct/assist with classes in Occupational/Career and Technology Education. Topics covered are essential teaching strategies, techniques, evaluation design, online instruction, and effective instructional, motivational techniques. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**OCED 5300. Interdisciplinary Research Methods.**

Basic and advanced concepts related to interdisciplinary research. Special emphasis will be placed on technical writing skills, electronic analysis of databases, appropriate statistical treatment of data, development and validation of instruments, and interdisciplinary research design and procedures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5301. Applied Interdisciplinary Research Part 1.**

The instructional intent is to provide the graduate students with an opportunity to apply their research skills. Students are carefully monitored and mentored in initiating, performing, and documenting their individualized research project. Prerequisite: OCED 5300 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5302. Applied Interdisciplinary Research Part 2.**

This course is the final course in the interdisciplinary research series. It requires the development of a comprehensive final research report including extensive tables and graphs. Students must also be prepared to present the findings of the research to the Occupational Education faculty and students at the Graduate Research Forum. Prerequisite: OCED 5301 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5303. Reflective and Experiential Learning Techniques.**

This course prepares graduate students for a field-based practicum. Students learn reflection and experiential learning techniques useful in the domain of careers, workplace, and leadership. They also locate, develop, and propose a professional practicum experience. Corequisite: CTE 5330 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5304. Professional Practicum.**

This course engages students in a field based experience designed in OCED 5360C, the previous course in the sequence. Students implement their practicum of approximately 120 hours in a work-based setting and concurrently collect ongoing reflections of their experience.

**3 Credit Hours. 1 Lecture Contact Hour. 8 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5310. Human Problems in the Workplace.**

Overview of problems that supervisors, teachers, and co-workers encounter in business/industry, social service, military, or education. This range of problems interferes with communication, performance, and development of proficiency in school/work. Perspectives and reports on the incidence of these problems will be presented, as well as actions for these human problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5311. Technology, Change, and Innovation in Organizations.**

This course provides students with opportunities to discover and apply theoretical perspectives on managing innovations within various organizational settings, such as work teams, departments, non-profits, governmental, businesses, and educational institutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5315. The Principles of Extramural Funding.**

This course explores competencies of locating external agency funding for occupational, workforce, and leadership research, teaching and extension. The principles of producing a competitive proposal that includes multi-, cross- and inter-disciplinary collaborations are also discussed. The development of the grant proposal, implementation, budget, and evaluation plan will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5360B. Critical Thinking in the Workplace.**

This course provides students with an opportunity to examine workplace decision making in terms of critical thinking. Current occupational approaches to critical thinking will be emphasized. Students will participate in simulations and case studies of critical thinking for the workplace.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**OCED 5360F. The Basics of Extramural Funding.**

Emphasizing professional relationships of mutuality, collaboration, and respect for the client system, this course helps students develop knowledge and skills to enhance organizational resources, particularly in developing programs, raising funds, writing grant proposals, and marketing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**OCED 5361. Human Systems in the Workplace.**

This course provides an overview of complexity science and systems theory. Students will explore how systematic inquiries are conducted within organizations, examine topics related to organizational dynamics, and apply systems theory to practical problems in organizations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**OCED 5362. Leadership Development.**

This course examines leadership within the contexts of organization and workforce settings. Students will explore interdisciplinary approaches to leadership roles, topics related to leadership in organizations and the workplace, and practical application of leadership theories in real-life situations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 1305. Philosophy and Critical Thinking.**

A study of universal philosophical problems and their solutions with a view toward developing clear thinking about knowledge, belief, and value. Approximately one half of this course will focus on the student's critical thinking skills. Credit cannot be given for both PHIL 1305 and PHIL 3301. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** PHIL 1301

**PHIL 1320. Ethics and Society.**

Study of ethics, its recent focus on social problems, and new fields of inquiry, including environmental ethics, ethics in business, professions, technology and sport. Also such global issues as poverty, minority rights, and stem cell research. Emphasis on development and application of principles of critical thinking and moral reasoning. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** PHIL 2306

**PHIL 2311. History of Philosophy Before 1600.**

Early Greek, Roman, and medieval systems of thought. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** PHIL 2316

**PHIL 2312. History of Philosophy Since 1600.**

Modern philosophical thought through the 19th century. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** PHIL 2317

**PHIL 2330. Elementary Logic.**

A study of the nature and forms of correct reasoning, both deductive and inductive.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PHIL 2303

**PHIL 3314. American Philosophy.**

Examination of contributions of Americans to perennial philosophical issues. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3315. Contemporary Philosophy.**

Selected readings in late 19th and 20th century philosophy: existentialism, positivism, analytic philosophy, phenomenology, and pragmatism. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3316. Existentialism and Phenomenology.**

A study of the nature of human experience and existence in the philosophies of Kierkegaard, Nietzsche, Husserl, Heidegger, Sartre, Merleau-Ponty, and Camus. Topics will include freedom, dread, emotion, death, other minds, faith, and the past as experienced by the individual. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3317. Science and Religion.**

An examination of modern science and religion, and an analysis of the issues and ideas involved in the relationships between them. (WI) (MULT) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3318. Reason, God, and Nature.**

This course is an analysis of the concept of God, terms predicated on God, and theological propositions. Topics include determining the nature of religious utterances and comparison of religious claims with those of everyday life, scientific discovery, morality, and imaginative expression. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3320. Ethics.**

This course is a study of classical and contemporary philosophical inquiries into our knowledge of the "good" and the grounds of moral obligation. (WI) Prerequisite: [PHIL 2311 or PHIL 2312] and PHIL 2330 both with grades of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3321. Contemporary Moral Problems.**

This course is an exploration of philosophical dimensions of contemporary moral problems such as abortion, euthanasia, poverty, animal rights, nuclear war, and privacy in a computer age. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3322. Professional Ethics.**

This course is a study of major topics in business and professional ethics, including what a profession is, whether it differs from business, and what is involved with the moral education, social responsibilities, and ethical standards of professionals and business people. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3323. Environmental Ethics.**

Study of ethical issues associated with the environment including nature, use, preservation, and restoration of the environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 3324. Meaning of Life.**

Investigation of major theories of the meaning of life in Western and Eastern philosophies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3325. Philosophy of Sex and Love.**

Critical survey of major thinking on sex and love from ancient to modern times. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3326. Philosophy and Sport.**

This course is an examination of philosophical issues in sport, including the social significance of sport, ethical issues, gender equity, sport and race, mind and body in sport, aesthetics, sport and self-knowledge, and the connection of sport and philosophy. (WI) (MULT) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3331. Philosophy of Law.**

This course is an examination of the major theses which have been set forth in the history of jurisprudence including foundations of law, natural law, legal positivism, and the judicial process. (WI) Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3332. Social and Political Philosophy.**

This course is a critical examination of major theories concerning the organization of societies and governments. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3333. Feminist Theory.**

In this course students examine major feminist theories including liberal feminism, Marxist feminism, radical feminism, and post-modernist feminism with an eye especially to revealing the complexity and diversity of contemporary feminist thought. (MULT) (WI). Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 or WS 3376 or WS 3377 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3334. Philosophy of Economics.**

In this course students are introduced to the various theoretical frameworks that have and continue to inform scholarship in philosophy of economics. Participants explore differences and commonalities between distinct theoretical traditions (including liberal, Marxist, post-structuralist, positivist, neo-liberal, rational choice) and learn to critically examine the nature of economic phenomena and the possibilities of knowledge in economics. Participants also develop tools to appraise economic outcomes, institutions, and processes. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 3340. Philosophical Logic.**

Study of the logic of propositions through propositional calculi, formal proofs, and first-order functional calculi. Also included is an investigation into the philosophical assumptions and implications of formal systems and the axiomatic method as used in logic and mathematics, including the concepts of completeness and consistency. Prerequisite: PHIL 2330 or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 3351. Philosophy and Literature.**

The course explores the relation between philosophy and literature. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter



**PHIL 4301. Applied Philosophy.**

This course explores the practical application of methods and teaching of philosophy to religion, science, morality, politics, art, or literature. The study of one or more of these areas will demonstrate how philosophy contributes to the identification of issues as well as their resolution. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4302. Dialogue.**

Study of literature about the nature, purpose, and significance of dialogue along with active participation in the dialogues of the Department of Philosophy's Dialogue Series. (WI) Prerequisite: PHIL 1305 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4303. Philosophy of Technology.**

This course is a study of philosophical and ethical dimensions of technology including the nature of technology and technological progress, the relation of humans to the technological environment, whether technology is value-laden, and the social character of technology. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4304. Philosophy of Language.**

Students will examine the nature, structure, and uses of language and its role in conceptualizing and attempting to solve perennial philosophical problems. Features of language such as meaning, reference, truth, verification, and speech acts will be investigated and applied to issues of metaphysics and ontology, epistemology, ethics, and theory construction. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4327. Bioethics.**

In this course students will study ethical issues, dilemmas, codes of conduct, and social responsibilities of health care professionals and bioresearchers. Additionally, students will critically examine issues of ethics and justice in healthcare systems, clinical practice, and biotechnology. (WI) Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4350. Philosophy of the Arts.**

This course is a critical and historical analysis of the nature of aesthetic experience and creative genius. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4351. Philosophy of Education.**

Study of major philosophical theories on nature, values, and purpose of education. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4355. Philosophy of Science.**

This course is a study of the major theories concerning the nature and value of science and the scientific method. (WI) Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4356. Philosophy of Knowledge.**

This course is a study of the major theories concerning knowledge, belief, certainty, and perception. (WI) Prerequisite: [PHIL 2311 or PHIL 2312] and PHIL 2330 both with grades of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4360A. Ethics and Dementia.**

This course provides an opportunity to examine ethical challenges posed by dementia for those with dementia, family members, caregivers, healthcare systems, policy makers, and others. Participants will critically explore ethics and dementia in clinical, social/cultural, everyday life, policy, end-of-life, and individual perspectives. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4360B. Moral Psychology.**

This course provides an introduction to the major theories, issues, and research relevant to the field of moral psychology. Drawing from a variety of fields—philosophy, social psychology, cognitive psychology, developmental psychology, and evolutionary theory—we will investigate what morality is, how it develops, and how it functions in society.

Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4360C. Philosophy, Nonviolence, Sustainability, and Social Change.**

In this course students will study themes and concepts related to nonviolence, sustainability, and social change. Participants will critically examine the works of thinkers such as Thoreau, Addams, Tolstoy, Gandhi, King, and Chavez. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4360D. Military Ethics.**

This course is a systematic study of ethical issues in military life and military action, and of such concerns as the relation of the military to the nation state and the relation of the military to civil society. Additional topics include ethical issues in cyber warfare, the military and privacy, and ethical issues of military life and actions across cultures and nations. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4360E. Ethics and Philosophy of Friendship.**

In this course students explore the nature, meaning, and theories of friendship. Participants examine historical and contemporary accounts of friendship, with special attention given to the ethical dimensions of each account. Additional topics include the intersection of friendship with marriage and partnership, professional relationships, work, disabilities, race, sexuality, and religion. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4360F. Biopolitics, Governmentality, and Ungovernability.**

This course is an introduction to (1) biopolitics, or the government of life, (2) governmentality, or the frameworks, modalities, and mechanisms of governance, and (3) ungovernability, or the limits of and resistances to governance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4361A. Philosophy of Biology.**

In this course students will explore foundational questions in biology concerning the justification of biological theories, methods and concepts. Possible topics include concepts of fitness, units of selection, adaptationism, species, phylogenetic inference, homology, developmental systems, neuroscience, behavioral evolution, cooperation, altruism, evolutionary psychology, evolutionary ethics, cultural evolution, and race and gender. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4361B. Philosophy of the Human Sciences.**

This course is a survey of current debates about the structure, nature, role, methodologies, scope, and aim of the human sciences. Prerequisite: Phil 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4361C. Philosophy of Emotion.**

In this course students examine the understandings of emotions as developed in the history of philosophy, including topics such as somatic theories, cognitive theories, and philosophical accounts of feelings, mood, and other affective experiences. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4361D. Philosophy of Mind.**

In this course, students analyze historical and contemporary philosophical attempts to explain the mind. Prerequisite: PHIL 1305 or PHIL 1320 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4361E. Philosophy and Ethics of Virtual Reality.**

In this course, students investigate philosophical and ethical issues in virtual reality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4361F. Ethics of Artificial Intelligence and Big Data.**

In this course, students will explore ethical dimensions of Artificial Intelligence and Big Data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4362A. History of Analytic Philosophy.**

Students in this course will examine major thinkers, works, theories, and problems of analytic philosophy. Topics will include the philosophy of language, logic, philosophy of mathematics, philosophy of mind, philosophy of science, metaphysics, epistemology, ethics, metaethics, and philosophical methodology. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4362B. 19th-Century Philosophy.**

This course offers a detailed introduction to central figures of 19th-century European philosophy such as Hegel, Marx, Kierkegaard, and Nietzsche in the context of their responses to the Enlightenment, the condition of modernity, the growth of democracy, nationalism, capitalism, Darwin, secularization, and the critical project of Kant. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4362C. Late 20th Century French Philosophy.**

This course offers a detailed introduction to central figures of 20th-century French philosophy such as Derrida, Foucault, Bergson, and Sartre in the context of their responses to technology, war, the condition of modernity, the growth of democracy and the so-called European Project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4363A. Philosophy and Science Fiction.**

In this course students will examine intersections between philosophy and science fiction around topics such as the nature of reality, the existence and nature of the divine, the limits of human knowledge, the meaning of free will, the notions of personhood, the nature of morality, and the meaning of life. Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4370. Metaphysics.**

This course is a systematic study of metaphysical problems by examination of classical and modern texts. Topics considered will involve being and unity, mind and matter, God, causation and necessity, free will and determinism. (WI) Prerequisite: [PHIL 2311 or PHIL 2312] and PHIL 2330 both with grades of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4371. Asian Philosophy.**

The course covers mainly Chinese and Indian philosophy, such as Confucianism, Taoism, Buddhism. How do people in the orient look at the meanings of life, the nature of the world and their place in the world? This course shall shed light on these issues. May be repeated for credit. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4372. Latin American Philosophy.**

Study of ancient Latin American thought, including Mayan, Aztec, Toltec, and Incan, pre- and post conquest Latin American philosophy, contemporary Latin American philosophy, and the thinking of Latin Americans in the U.S. (WI) (MULT) Prerequisite: PHIL 1305 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4373. Themes in Africana Philosophy.**

In this course students will examine philosophy and philosophical practice as it emerges from the historical experiences of African Americans and the African Diaspora. Participants in the course will evaluate how the African-American philosophical tradition alters conventional philosophical accounts of subjectivity, knowledge, time, language, history, embodiment, memory, and justice. (WI) (MULT) Prerequisite: PHIL 1305 or PHIL 1320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PHIL 4388. Problems in Philosophy.**

Independent study of specific problems in philosophy. Open to students on an individual or small group basis by arrangement with the Department of Philosophy. Problem area, bibliography, and study paper outline are to be approved by the instructor. May be repeated once for additional credit. Prerequisite: PHIL 1305 or PHIL 1320 or PHIL 2311 or PHIL 2312 or PHIL 2330 any with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5100. Practicum in Teaching Philosophy.**

This course orients Instructional Assistants to the principles of teaching philosophy responsibly. Topics include grades, evaluation of written work, classroom management, academic values, and teaching style. This course is required for all new Instructional Assistants in Philosophy. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**PHIL 5101. Responsible Conduct of Research and Research Ethics.**

In this course students will examine issues, concepts, and cases in research ethics and the responsible conduct of research. Designed to meet NSF and NIH requirements for training, topics will include research integrity, conflicts of interest, authorship, peer review, human and animal experimentation, mentorship, data, and values in science. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**PHIL 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5301. Applied Philosophy.**

Practical application of methods and teaching of philosophy to such major areas of human experience as religion, science, morality, politics, art, or literature. The study of one or more of these areas will demonstrate how philosophy contributes to the identification of issues as well as their resolution.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5302. Dialogue.**

Study of literature about the nature, purpose, and significance of dialogue along with active participation in the dialogues of the Department of Philosophy's Dialogue Series.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5303. Philosophy of Technology.**

Study of philosophical and ethical dimensions of technology including the nature of technology and technological progress, the relation of humans to the technological environment, whether technology is value-laden, and the social character of technology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5304. Philosophy of Language.**

This course will examine the nature, structure, and uses of language and its role in conceptualizing and attempting to solve perennial philosophical problems. Features of language such as meaning, reference, truth, verification, and speech acts will be investigated and applied to issues of metaphysics and ontology, epistemology, and theory construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5305. Philosophical Writing.**

The course focuses on theoretical and methodological foundation necessary for producing philosophical works suitable for submission to conferences or journals. Students will analyze the standards for and engage in the process of developing papers for professional presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5306. Foundation Studies.**

Foundation Studies in Philosophy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5314. American Philosophy.**

This course is an examination of contributions of Americans to perennial philosophical issues, including the tradition of American Pragmatism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5320. History of Ethics.**

This course is a survey of major ethical theories in the Western philosophical tradition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5322. Professional Ethics.**

Study of major topics in business and professional ethics, including what a profession is, whether it differs from business, and what is involved with moral education, social responsibilities, and ethical standards of professional and business people.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5323. Environmental Ethics.**

Study of ethical issues associated with the environment including the nature, use, preservation, and restoration of the environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5324. Meaning of Life.**

Investigation of major theories of the meaning of life in Western and Eastern philosophies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5325. Philosophy of Sex and Love.**

Critical examination of major philosophical theories on sex and love from ancient to modern times.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5326. Philosophy and Sport.**

An examination of the philosophical issues that arise in sport. Topics include the social significance of sport, amateurism, the ethics of competition, the meaning of violence within sports, and other related issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PHIL 5327. Medical Ethics and Bio-ethics.**

Study of ethical issues, dilemmas, codes of conduct, and social responsibilities of health care professionals and bio-researchers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5328. Major Work or Theme in Ethics.**

This course examines in detail a single significant work, theme or issue in ethics. May be repeated with a different focus.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5329. Food Ethics.**

Eating raises hard moral questions. This course explores those question as well as potential answers. Standard topics include the nature of the food system, global hunger, food justice, consumer ethics, industrial agriculture and its alternatives, the plight of workers, overconsumption, and public health.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5331. Philosophy of Law.**

This course is a systematic study of the nature and function of law and of such problems as the relation of law to morality, and the justification of punishment. Additional topics include the nature of legal reasoning and interpretation, theories of law, and salient features of legal systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5332. Social and Political Philosophy.**

In this course students engage in an intensive examination of issues in political and social philosophy, including democracy, civil disobedience, anarchism, totalitarianism, and the nature of the state. Participants develop knowledge of major theories, concepts, and methodologies in social and political philosophy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5333. Feminist Theory.**

This course serves as an in-depth introduction to the various theoretical frameworks that have and continue to inform scholarship in feminism. Participants explore differences and commonalities between distinct feminist theoretical traditions (liberal feminism, Marxist feminism, post-structuralism, psychoanalysis, queer theory) and learn to critically engage accounts of identity, difference, social movement, globalization, nationalism, and social change.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**PHIL 5334. Philosophy of Economics.**

This course serves as an in-depth introduction to the various theoretical frameworks that have and continue to inform scholarship in philosophy of economics. Participants explore differences and commonalities between distinct theoretical traditions (including liberal, Marxist, post-structuralist, positivist, neo-liberal, institutionalist, rational choice) and learn to critically examine the nature of economic phenomena and the possibilities of knowledge in economics. Participants also learn to appraise, including ethical appraisal of economic outcomes, institutions, and processes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5340. Philosophical Logic.**

The course is an examination of the conceptual frameworks of and philosophical challenges to classical and alternative logics. Special attention will be paid to the use of the logics within metaphysics, the axiomatic method as used in logic and mathematics, philosophy of language, philosophy of mind, and meta-ethics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5351. Philosophy of Education.**

Study of major philosophical theories on nature, value, and purpose of education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5355. Philosophy of Science.**

An examination of some of the fundamental concepts in science, including relevant evidence, induction, explanation, and commitments when accepting a scientific theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5356. Philosophy of Knowledge.**

The course will consist of a close examination of topics in the philosophical theory of knowledge, such as skepticism, defining knowledge, the nature of justification, perception, and truth.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5360A. Ethics and Dementia.**

This course provides an opportunity to examine ethical challenges posed by dementia for those with dementia, family members, caregivers, healthcare systems, policy makers, and others. Participants will critically explore ethics and dementia in clinical, social/cultural, everyday life, policy, end-of-life, and individual perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5360B. Moral Psychology.**

This seminar provides an introduction to the major theories, issues, and research relevant to the field of moral psychology. Drawing from a variety of fields—philosophy, social psychology, cognitive psychology, developmental psychology, and evolutionary theory—we will investigate what morality is, how it develops, and how it functions in society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5360C. Philosophy, Nonviolence, Sustainability, and Social Change.**

In this course students will study themes and concepts related to nonviolence, sustainability, and social change. Participants will critically examine the works of thinkers such as Thoreau, Addams, Tolstoy, Gandhi, King, and Chavez. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**PHIL 5360F. Biopolitics, Governmentality, and Ungovernability.**

This course is an introduction to (1) biopolitics, or the government of life, (2) governmentality, or the frameworks, modalities, and mechanisms of governance, and (3) ungovernability, or the limits of and resistances to governance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361A. Philosophy of Biology.**

In this course students will explore foundational questions in biology concerning the justification of biological theories, methods and concepts. Possible topics include concepts of fitness, units of selection, adaptationism, species, phylogenetic inference, homology, developmental systems, neuroscience, behavioral evolution, cooperation, altruism, evolutionary psychology, evolutionary ethics, cultural evolution, and race and gender.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361B. Philosophy of the Human Sciences.**

This course is a survey of current debates about the structure, nature, role, methodologies, scope, and aim of the human sciences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361C. Philosophy of Emotion.**

In this course students examine the understandings of emotions as developed in the history of philosophy, including topics such as somatic theories, cognitive theories, and philosophical accounts of feelings, mood, and other affective experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361D. Philosophy of Mind.**

In this course, students analyze both historical and contemporary philosophical attempts to explain the mind.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361E. Philosophy and Ethics in Virtual Reality.**

In this course, students investigate philosophical and ethical issues in virtual reality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5361F. Philosophy and Ethics of Artificial Intelligence.**

In this course, students will explore philosophical and ethical dimensions of Artificial Intelligence.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5362A. Analytic Philosophy.**

Students in this course will examine major thinkers, works, theories, and problems of analytic philosophy. Topics will include the philosophy of language, logic, philosophy of mathematics, philosophy of mind, philosophy of science, metaphysics, epistemology, ethics, metaethics, and philosophical methodology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5362B. 19th Century Philosophy.**

This course offers a detailed introduction to central figures of 19th-century European philosophy such as Hegel, Marx, Kierkegaard, and Nietzsche in the context of their responses to the Enlightenment, the condition of modernity, the growth of democracy, nationalism, capitalism, Darwin, secularization, and the critical project of Kant.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5363A. Philosophy and Science Fiction.**

In this seminar students will examine intersections between philosophy and science fiction around topics such as the nature of reality, the existence and nature of the divine, the limits of human knowledge, the meaning of free will, the notions of personhood, the nature of morality, and the meaning of life.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHIL 5372. Latin American Philosophy.**

Students in this course study ancient Latin American thought, including Mayan, Aztec, Toltec, and Incan; pre- and post- conquest Latin American philosophy; contemporary Latin American philosophy; and the thinking of Latin Americans in the U.S.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 5373. Themes in Africana Philosophy.**

In this course students will examine philosophy and philosophical practice as it emerges from the historical experiences of African Americans and the African Diaspora. Participants in the course will evaluate how the African-American philosophical tradition alters conventional philosophical accounts of subjectivity, knowledge, time, language, history, embodiment, memory, and justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PHIL 5388. Problems in Philosophy.**

Independent study open to students on individual or small group basis. May be repeated for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHIL 5395. Internship in Applied Philosophy.**

Structured practical experience in applied philosophy at a private or public setting. Supervision will be provided both by a member of the graduate faculty and by a key individual in the workplace. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis on PHIL 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHIL 7101. Responsible Conduct of Research and Research Ethics.**

In this course students will examine issues, concepts, and cases in research ethics and the responsible conduct of research. Designed to meet NSF and NIH requirements for training, topics will include research integrity, conflicts of interest, authorship, peer review, human and animal experimentation, mentorship, data, and values in science. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**PHIL 7323. Environmental Ethics and Sustainable Aquatic Resources.**

Examination of the ethical implications of environmental use and management policies and practices, with emphasis on sustainable aquatic resources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHIL 7355. Philosophy of Science.**

Students in this course will investigate the nature and processes of scientific inquiry; the role of values in generating and using scientific knowledge; some of the fundamental concepts in science, including relevant evidence, induction, explanation; and the intellectual commitments made when accepting a scientific theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PFW 1101. Lifetime Fitness & Wellness.**

To develop knowledge, skills, and physical activity behaviors associated with personal fitness and wellness.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1110A. Aerobic Conditioning.**

This course covers a variety of aerobic conditioning formats.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** PHED 1164

**PFW 1110B. Group Fitness.**

This course will include various types of aerobic/cardio exercise formats.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** PHED 1164

**PFW 1110E. Beginning Jogging & Conditioning.**

Beginning Jogging/Conditioning.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1110G. Beginning Weight Lifting.**

Beginning Weight Lifting.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1110K. Restricted Fitness Activities.**

Restricted Fitness Activities.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1130A. Beginning Basketball.**

Beginning Basketball.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1130B. Soccer.**

Soccer.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140A. Football Varsity.**

Football Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140B. Basketball–Men's Varsity.**

Basketball–Men's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140C. Basketball–Women's Varsity.**

Basketball–Women's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140D. Track & Field–Men's Varsity.**

Track & Field–Men's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140E. Track & Field–Women's Varsity.**

Track & Field–Women's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140F. Volleyball – Women's Varsity.**

Volleyball – Women's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140G. Baseball–Men's Varsity.**

Baseball–Men's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140H. Softball–Women's Varsity.**

Softball–Women's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1140I. Soccer-Women's Varsity.**

Soccer-Women's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1149. Strutters.**

Strutters.

**1 Credit Hour. 1 Lecture Contact Hour. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1150B. Beginning Bowling.**

Beginning Bowling.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1150D. Beginning Golf.**

Beginning Golf.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1150G. Restricted Leisure Activities.**

Restricted Leisure Activities.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1154. Leisure/Recreation Activities.**

Leisure/Recreation Activities.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1154B. Challenge Course Facilitation.**

This course provides an overview of leadership theories and skill development for indoor/outdoor challenge course activities, with an emphasis on safety management. Students will develop skills necessary to facilitate either high or low elements of a challenge course. May be repeated once with different emphasis for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** PHED 1164

**PFW 1154C. Backpacking.**

Backpacking.

**1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PFW 1155G. Racquetball.**

Racquetball.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1155H. Beginning Tennis.**

Beginning Tennis.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1155N. Pocket Billiards.**

Pocket Billiards.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1160B. Beginning Volleyball.**

Beginning Volleyball.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1165A. Golf–Men's Varsity.**

Golf–Men's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1165C. Tennis–Women's Varsity.**

Tennis–Women's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1165D. Golf – Women's Varsity.**

Golf – Women's Varsity.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1165E. Varsity Cheerleaders.**

Varsity Cheerleaders.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1190A. Canoeing.**

Canoeing.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1190F. Beginning Scuba.**

Beginning Scuba.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**TCCN:** PHED 1164**PFW 1201. Advanced and Master Scuba Diving.**

Students will gain advanced level scuba diving skills. Prerequisite:

PFW 1190F with a grade of "D" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1204. Underwater Photography.**

Underwater Photography.

**2 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter**PFW 1301. Social and Behavioral Dimensions of Physical Fitness and Wellness.**

Students will explore the role of physical activity in a healthy and productive society. The course focuses on social and cultural influences on motivation, values and beliefs related to physical activity, as well as the impact of physical activity on individual, community, and population.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.****Course Attribute(s):** Soc & Behav Sciences Core 080**Grade Mode:** Standard Letter**PFW 2301. Rescue SCUBA Diver /Diving First Aid for Professional Divers.**

This course trains divers in the knowledge and skills needed to manage risks and effectively handle limited in-water problems and diving related emergencies. The rescue portion includes assists, transports, surface rescues and rescues from depth involving both boat- and shore-based skin and scuba divers. The first aid portion includes duty of care and emotional response, dive emergency preparation, response and assessment, Oxygen first aid, AED, CPR for the healthcare professional, secondary care, and hazardous marine life injuries/first aid. Students with a SCUBA Diver or Advanced SCUBA Diver certification from another agency or institution will be accepted provided the student's diving. Prerequisite: PFW 1190F or PFW 1201 or equivalent any with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.****Course Attribute(s):** Exclude from 3-peat Processing**Grade Mode:** Standard Letter



**PT 7114. Professional Issues.**

This course serves as an introduction to the historical, current, and future issues faced by the physical therapy profession and to the need for lifelong professional development.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7116. Health Promotion and Wellness in Physical Therapy I.**

This course will include an in-depth investigation of the concepts of health promotion and wellness and, based on evidence, their relationship to each other and to health and wellness outcomes. The role of, theories of, and interventions for behavior change will be explored as tools to promote health and well-being.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7125. Clinical Decision Making I.**

This course introduces students to a systematic method of clinical decision making for patient management in physical therapist practice, including examination, evaluation, intervention, communication, and documentation in a patient-centered context. Students will consider physical, psychosocial, cultural, environmental, and ethical factors in making decisions for patient case studies including the clinical application of pain neuroscience education.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7130. Clinical Education Orientation.**

This course provides an orientation to the requirements of the clinical education course sequence including patient education as well as the legal, ethical and professional requirements of physical therapy practice.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7135. Clinical Decision Making II.**

In this course, students apply a systematic method of clinical decision making to adult and pediatric patients with a variety of diagnoses using case studies. Students apply a systematic approach to ethical decision-making and gain insight into the physical therapist and physical therapist assistant team. This course includes application of pain science and an introduction to motor behavior.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7150. Directed Clinical Experience.**

This course is a structured clinical experience in which the student will demonstrate the application of knowledge and clinical skills acquired during didactic coursework in the clinical environment. This course is completed in the Texas State Physical Therapy Clinic. This course is repeatable for credit.

**1 Credit Hour. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PT 7155. Clinical Decision Making III.**

This course prepares students to apply a systematic method of clinical decision making to the geriatric patient. Students will consider physical, psychosocial, cultural, environmental, and ethical factors in making decisions for geriatric patient based on case studies. The course includes application of pain science for chronic pain and discussion of patient-centered end-of-life decisions.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7157. Research in Physical Therapy III.**

This course is a continuation of the DPT research sequence that culminates in a supervised project to analyze outcomes in a defined area of clinical practice. Prerequisite: PT 7327 and PT 7347 and instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**PT 7165. Clinical Decision Making IV.**

This course uses a body systems approach for students to apply previously learned knowledge and skills for differential diagnosis in the context of clinical decisions about when and how a referral to a physician or other healthcare provider is necessary. Students will identify warning signs (red flags) and urgent or life-threatening situations which require a referral to a medical specialist.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7176. Health Promotion and Wellness in Physical Therapy II.**

The role of the physical therapist in health promotion, wellness, and prevention at the community and population levels will be explored. Using the framework of a social ecological model, strategies for community assessment and prevention of disease and disability related to movement will be performed through service learning activities.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7190. Independent Study in Physical Therapy.**

An in-depth independent study of a singular problem or related problem in the dynamic field of physical therapy and health care. Emphasis will be on the relevance of the problem and the value to the participant. May be repeated twice for credit.

**1 Credit Hour. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PT 7197. Research in Physical Therapy IV.**

This course is a continuation of the DPT research sequence that culminates in a supervised project to analyze outcomes in a defined area of clinical practice. The course includes completion of data collection and analysis for an oral presentation and final paper. Completion of this last course is required for graduation.

**1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7211. Anatomy I: Structural Anatomy.**

This course is an introduction to the structure and function of the human body with emphasis on the skeletal, muscular, nervous, and integumentary systems. Content includes basic neurological screening and an introduction to palpation of the human body, embryology, and vasculature.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7231. Anatomy II – Spine.**

Study of static and dynamic aspects of the vertebral column and skull including bony landmarks, muscular, ligamentous attachments, and blood and nerve supply will be studied through lecture, lab, dissection of human cadavers, and independent study.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7241. Anatomy III - Lower Extremity.**

This course is an in-depth study of the static and dynamic aspects of the lower extremity including bony landmarks, muscular/ligamentous attachments, and blood/nerve supply. These topics will be studied through lecture, lab, dissection of human cadavers, and independent study.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7251. Anatomy IV - Upper Extremity.**

Study of static and dynamic aspects of the upper extremity including bony landmarks, muscular, ligamentous attachments and blood and nerve supply studied through lecture, lab, dissection of human cadavers, and independent study.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7263. Body Systems III – Diagnostics.**

This course presents pharmacology and diagnostic imaging as related to physical therapist practice. Content emphasizes expected and adverse effects of selected medications and documentation of results of medical imaging procedures.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7268. Advanced Therapeutic Interventions.**

This course provides expansion of clinical reasoning and intervention skills for neuromusculoskeletal impairments. Advanced clinical cases, including pediatric, adult neurological and orthopaedic impairments, afford students the opportunity to hone manual and handling skills, utilize advanced forms of exercise and incorporate pain science in comprehensive patient treatment. Prerequisite: PT 7428 with a grade of "C" or better.

**2 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7274. Current Issues in Physical Therapy.**

Current issues that are not required by accreditation and/or that are not included in other courses are presented in this course to ensure students are prepared for success in full-time clinical education experiences.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7312. Patient Care Skills I.**

This course introduces students to basic patient care skills in physical therapist practice. Topics include body mechanics, patient positioning, mobility, transfers, patient communication and instruction skills, patient rights, and documentation format.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7313. Body Systems I – Pathology.**

This course presents normal and abnormal organ system function as related to physical therapist practice with emphasis on the musculoskeletal, neuromuscular, cardiovascular/pulmonary, and integumentary systems. Content includes tissue inflammation and repair, infection, degenerative processes, and changes related to processes of aging.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7326. Neuroscience I: Functional Neuroanatomy.**

This course addresses the structure and function of the central, peripheral, and autonomic nervous systems in the context of lifespan human development.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7327. Research in Physical Therapy I.**

Three-course sequence introducing the physical therapy student to research and statistical methodologies. This initial course emphasizes the application of basic principles of the scientific method for: 1) critically reviewing physical therapy literature; 2) developing research proposals; and 3) identifying the tools necessary for analysis and assessment of clinical practice patterns.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7328. Examination Techniques.**

This course introduces foundational physical therapist examination and screening techniques for patients across the lifespan. Students will perform basic orthopedic, neurologic, cardiopulmonary, and integumentary exam and screening techniques, identify and correct or adapt to substitutions, and interpret results. An emphasis will be placed on anatomical structures, body mechanics, handling skills, professional communication, and positioning.

**3 Credit Hours. 1 Lecture Contact Hour. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7333. Body Systems II – Cardiopulmonary Systems.**

This course addresses the concepts of fitness, health, wellness, and normal and abnormal function of the cardiovascular, pulmonary, and metabolic systems in physical therapist practice. Content emphasizes basic principles of care in electrocardiography, exercise testing, exercise prescription, cardiac rehabilitation, and pulmonary rehabilitation.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7336. Neuroscience II.**

This course covers examination and evaluation techniques and rehabilitation interventions for individuals with neurologic diseases, disorders, and dysfunction across the lifespan. Content emphasizes motor development, motor control, motor learning, postural control, and recovery of function in the context of relevant models of practice, models of disablement, hypothesis-oriented clinical practice, and theories of motor control.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7346. Neuroscience III.**

This course continues to cover examination and evaluation techniques and rehabilitation interventions for individuals with neurologic diseases, disorders, and dysfunction across the lifespan. Content builds on topics covered in PT 7326 and PT 7336 including motor development, motor control, motor learning, postural control, and recovery of function in the context of relevant models of practice, models of disablement, hypothesis-oriented clinical practice, and theories of motor control.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7347. Research in Physical Therapy II.**

This course is part of a 3-course sequence introducing the physical therapy student to research and statistical methodologies. This second course emphasizes the proposal writing aspect of research, building on knowledge of research methods and statistics gained in PT 7327. Includes introduction to statistical software packages used for data-analysis and generating bibliographic material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7356. Neuroscience IV.**

This course covers the physical therapy management of individuals with neurologic diseases, disorders, and dysfunction affecting postural control across the lifespan. Content emphasizes the application of relevant neuroanatomy and physiology concepts to specialized populations in rehabilitation.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7364. Management Issues.**

This course is the study of basic management theories, principles, and practices as they relate to the delivery of physical therapist practice, reimbursement resources and issues, and internal and external forces that impact physical therapist practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PT 7370. Clinical Education I.**

This course is a full-time clinical education experience in which the student will apply the theory and clinical skills acquired during previous didactic coursework in the clinical setting.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PT 7428. Therapeutic Interventions.**

This course provides an introduction to therapeutic interventions and their role in preventing loss of, restoring, and improving movement. Students will learn how to identify the diseased/injured tissue and/or body system, and how to use targeted movement-related interventions (physical agents, soft tissue mobilization, therapeutic exercise) to enhance movement.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7462. Patient Care Skills II.**

This course covers physical therapist care of medically complex patients with multi-system involvement. Content focuses on integumentary care/wound management, acute care/ICU, orthotics, and prosthetics. Complicating factors such as age, malnutrition, pain, obesity, diabetes, and other comorbidities are included.

**4 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7480. Clinical Education II.**

This course is a full-time clinical education experience in which the student will apply the theory and clinical skills acquired during previous didactic coursework in the clinical setting.

**4 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PT 7481. Clinical Education III.**

This course is a full-time clinical education experience in which the student will apply the theory and clinical skills acquired during previous didactic coursework in the clinical setting.

**4 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PT 7539. Musculoskeletal I – Spine.**

Study of static and dynamic aspects of the vertebral column and skull studied through lecture, lab, literature review, and independent study. Knowledge and skill will be integrated to identify problems, prognosis, functional goals, and to develop comprehensive intervention programs related to the spine, including preventative health planning.

**5 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7549. Musculoskeletal II - Lower Extremity.**

Study of static structural and dynamic aspects of the lower extremity. Emphasizes the effects and affects of forces on function. Clinical decision-making involving the integration of knowledge and skill to identify problems, establish goals, and develop comprehensive physical therapy programs related to the region of study.

**5 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7559. Musculoskeletal III - Upper Extremity.**

Study of static structural and dynamic aspects of the upper extremity. Emphasizes the effects and affects of forces on function. Clinical decision-making involving the integration of knowledge and skill to identify problems, establish goals, and develop comprehensive physical therapy programs related to the region of study.

**5 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**PT 7690. Clinical Education IV.**

This course is a full-time clinical education experience in which the student will apply the theory and clinical skills acquired during previous didactic coursework in the clinical setting.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 1115. General Physics I Laboratory.**

First of two laboratory courses in General Physics for science-related majors. The course introduces students to the basics of measurement. Topics cover mechanics and heat. Corequisite: PHYS 1315 or PHYS 1335 either with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1101

**PHYS 1125. General Physics II Laboratory.**

This is the second of two laboratory courses in general Physics. The course introduces the students to experimental measurements and demonstration of principles of electricity, magnetism, optics, modern physics, electromagnetic waves. Corequisite: PHYS 1325 or PHYS 1345 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1102

**PHYS 1310. Elementary Physics I.**

This course is a non-mathematical survey of mechanics, properties of matter, heat, and sound. These topics are described conceptually with applications relating to the world around us. PHYS 1310 and PHYS 1320 are designed for the liberal arts student. The order in which they are taken is not important. They are not recommended for pre-engineering students or majors and minors in science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1305

**PHYS 1315. General Physics I.**

This is the first course in a two semester sequence which is a survey of the basic laws and principles of physics and includes the topics of mechanics and heat. The course is designed for students whose program requires technical physics, but who are not pre-engineering students or majors or minors in physics. Prerequisite: [MATH 1315 or MATH 1317 or MATH 2321 or MATH 2417 or MATH 2471 with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Mathematics score of 520 or better] or [SAT Math section score of 550 or better] or [Next-Generation Advanced Algebra and Functions Test score of 263 or better]. Corequisite: PHYS 1115 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Co-requisite(s):** PHYS 1115

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1301

**PHYS 1320. Elementary Physics II.**

This course is a non-mathematical survey of electricity, magnetism, light, relativity, and atomic and nuclear physics. These topics are described conceptually with applications relating to the world around us. PHYS 1310 and PHYS 1320 are designed for the liberal arts student. The order in which they are taken is not important. They are not recommended for pre-engineering students or majors and minors in science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1307

**PHYS 1325. General Physics II.**

This is the second course in a two semester sequence which is a survey of the basic laws and principles of physics and includes the topics of waves, light, electricity and magnetism. This course is designed for students whose program requires technical physics, but who are not pre-engineering students or majors or minors in physics. Prerequisites: PHYS 1315 or PHYS 1335 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Co-requisite(s):** PHYS 1125

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1302

**PHYS 1335. General Physics I for Life Sciences Majors.**

This is the first course in a two-semester sequence which surveys the fundamental principles of physics. This focus of this first course is on the topics of mechanics, fluids, and heat. The course is designed for biology, pre-health, and life-science majors whose program requires technical physics. Credit for both PHYS 1335 and PHYS 1315 cannot be given.

Prerequisite: [MATH 1315 or MATH 1317 or MATH 2321 or MATH 2417 or MATH 2471 with a grade of "C" or better] or [ACT Mathematics score of 24 or better] or [New ACT Mathematics score of 25 or better] or [SAT Mathematics score of 520 or better] or [SAT Math section score of 550 or better] or [AAF score of 263 - 300]. Corequisite: PHYS 1115 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 1340. Astronomy: Solar System.**

A study of the solar system. Topics included are a study of the sun, the planets and their satellites, the comets, and other components of the solar system. Some aspects of telescopes and ancient astronomy will be included also.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** ASTR 1304

**PHYS 1345. General Physics II for Life Science Majors.**

This is the second course in a two-semester sequence which surveys the fundamental principles of physics. The focus of this second course is on the topics of oscillations, light, and electrical phenomena. This course is designed for biology, pre-health, and life-science majors whose program requires technical physics. Prerequisite: PHYS 1315 or PHYS 1335 with a grade of "C" or better. Corequisite: PHYS 1125 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 1350. Astronomy: Stars and Galaxies.**

A study of the universe beyond the solar system. Topics included are a study of the stars and star clusters, nebulae, galaxies, and an introduction to some aspects of cosmology.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** ASTR 1303

**PHYS 1365. Physics for Educators.**

This studio-style course introduces physics concepts through active exploration and discussion of physical phenomena. Course content includes developing concepts of force and motion, light, sound, waves, electricity, magnetism, energy, and conservation laws. Focus is on how physics helps make sense of everyday experience, and on the learning and teaching of children in grades K-8.

**3 Credit Hours. 4 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** PHYS 1310

**PHYS 2125. Mechanics Laboratory.**

This course introduces students to experimental methods in the study of motion, forces, energy, momentum, and other topics in mechanics. This laboratory course is designed to accompany PHYS 2325. Corequisite: PHYS 2325 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2126. Electricity and Magnetism Laboratory.**

This course introduces students to experimental methods in the study of electric charges and fields, electric circuits, magnetic materials, and electromagnetic induction. This laboratory course is designed to accompany PHYS 2326. Corequisite: PHYS 2326 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2135. Waves and Heat Laboratory.**

This course introduces students to experimental methods in the study of geometrical and physical optics and of thermodynamics. This laboratory course is designed to accompany PHYS 2335. Corequisite: PHYS 2335 with a grade of "D" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter



**PHYS 2150. Professional Development for Beginning Physicists.**

This course introduces to physics majors career options and opportunities for internships, scholarships, and research internal and external to the university. The course also develops essential practical skills for job seekers. Prerequisite: PHYS 2326 and PHYS 2126 and PHYS 2335 and PHYS 2135 all with grades of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2230. Introduction to Computational Modeling for Physics.**

This course is an introduction to computational concepts and tools that physicists use for data analysis, simulation and modeling, and visualization in research and dissemination. Python and its various libraries are emphasized. Prerequisite: PHYS 2325 and PHYS 2125 with grades of "C" or better. Corequisite: [PHYS 2326 and PHYS 2126] or [PHYS 2335 and PHYS 2135] with grades of "C" or better.

**2 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2325. Mechanics.**

This course covers the principles of introductory classical mechanics through problem-solving and research-validated interactive instruction. Corequisite: MATH 2471 with a grade of "C" or better and PHYS 2125 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2326. Electricity and Magnetism.**

This course covers the principles of classical electricity and magnetism through problem-solving and research-validated interactive instruction. Prerequisite: PHYS 2325 and [MATH 2472 or MATH 2473] with grades of "C" or better. Corequisite: PHYS 2126 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Life & Phys Sciences Core 030|Life & Phys Sciences CAO 093|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 2335. Waves and Heat.**

This course covers the principles of thermodynamics, geometric optics, and physical optics through problem solving and research-validated interactive instruction. Prerequisite: MATH 2471 and PHYS 2325 with grades of "C" or better. Corequisite: [MATH 2472 or MATH 2473] with a grade of "C" or better and PHYS 2135 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3210. Physics Cognition and Pedagogy.**

This course is an introduction to physics-specific pedagogy and the methods and results of physics education research (PER). Students will investigate relevant literature in PER and cognitive science, engage in discussions about physics teaching and learning, and reflect on their own teaching practice in the role of Physics Learning Assistants. (WI).

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 3301. Musical Acoustics.**

A survey of the physics of sound and acoustic measurement. Special emphasis will be placed on sound production, propagation, and perception as applied to music.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3311. Classical Mechanics.**

This course discusses the fundamentals of classical mechanics focusing on the physical description of the behavior of single and multiple particle systems. Topics include advanced problem-solving strategies for systems with position and velocity dependent forces, simple harmonic oscillators, and non-inertial reference frames. Prerequisite: PHYS 2335 and PHYS 2135 with grades of "C" or better. Corequisite: PHYS 3320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3312. Modern Physics.**

This course is an introduction to the foundations of modern physics, including the following topics: relativistic mechanics, foundational experiments in the development of quantum mechanics, light and energy, wave nature of particles, and nuclear physics. Prerequisite: PHYS 2335 and PHYS 2135 with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3313. Astrophysics.**

This course surveys a variety of issues in astrophysics through problem solving, quantitative measurements, and theoretical reasoning. Topics include celestial mechanics, stellar dynamics and evolution, galaxy evolution, and cosmology. Corequisite: PHYS 3312 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3315. Thermodynamics.**

This course is a fundamental study of thermodynamics and statistical mechanics. Prerequisite: MATH 3323 and [(PHYS 2335 and PHYS 2135) or (ENGR 2300 and PHYS 2326 and PHYS 2126)] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3318. Galactic and Extragalactic Astrophysics.**

A survey of the physical properties, dynamics, and distribution of galaxies. Topics include the contents, origin, and evolution of the Milky Way and other galaxies; the large-scale distribution of galaxies in groups, clusters and superclusters; interactions between galaxies; dark matter; active galaxies and supermassive black holes; high redshift Universe.

Prerequisite: PHYS 3313 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3320. Introduction to Mathematical Physics.**

This course is an introduction to the mathematical methods of theoretical physics with emphasis on development of mathematical tools used in upper division core physics courses. Students will also develop their ability to communicate mathematical ideas in the context of physics.

Prerequisite: MATH 2393 and PHYS 2326 and PHYS 2126 all with grades of "C" or better. Corequisite: MATH 3323 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 3411. Advanced Physics Laboratory.**

This course is an introduction to experimental modern physics, with emphasis on the design and assembly of physics apparatus and the development of practical skills for controlling and automating data collection. (WI) Prerequisites: PHYS 2326 and PHYS 2126 with grades of "C" or better. Corequisites: PHYS 2335 and PHYS 2135 with grades of "C" or better.

**4 Credit Hours. 2 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 3416. Applied Electronics.**

This Laboratory/lecture course is an introduction to electronic test bench methods for the construction, operation and analysis of important DC/AC circuits utilizing resistors, capacitors, diodes, BJTs, FETs, and OpAmps. The behavior of the circuits will be modeled in SPICE. Elementary semiconductor device physics and microfabrication methods will be discussed. (WI) Prerequisites: PHYS 2326 and PHYS 2126 and PHYS 2335 and PHYS 2135 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 3417. Optics.**

This course is a one-semester survey of geometrical and physical optics accompanied by laboratory experience. Topics covered include electromagnetic waves and their propagation, geometrical optics, polarization, interference, diffraction, Fourier optics, and holography. (WI) Prerequisites: PHYS 2326 and PHYS 2126 and PHYS 2335 and PHYS 2135 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 3418. Methods in Observational Astrophysics.**

This course is an introduction to methods and instrumentation used in observational astrophysics. Topics include image processing, data acquisition and analysis, and detectors for data across the electromagnetic spectrum. Prerequisite: PHYS 2326 and PHYS 2126 and PHYS 2335 and PHYS 2135 all with grades "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 4121. Undergraduate Research.**

This course represents a student's research project in physics to be carried out under the supervision of a faculty member. The student must contact a faculty member in advance to arrange the topic and specific course objectives. This course may be repeated for credit. Prerequisite: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4221. Undergraduate Research.**

This course represents a student's research project in physics to be carried out under the supervision of a faculty member. The student must contact a faculty member in advance to arrange the topic and specific course objectives. This course may be repeated for credit. Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4305. Statistical Physics.**

Statistical physics is the study of energy flow and energy distributions within systems in equilibrium. Students will explore a range of phenomena including black-body radiation, diffusion, phase transitions, and magnetism. Emphasis will be placed on topics of entropy, probability, free energy, Boltzmann distributions, and the atomic behavior of these systems. Prerequisite: MATH 3323 and PHYS 3312 and PHYS 3320 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4310. Electromagnetic Field Theory I.**

An introduction to the electromagnetic field theory of classical physics for static fields. Topics included will be the electrostatic field, polarization and dielectrics, electrostatic energy, magnetic field of steady currents, magneto static energy, and magnetic properties of matter. Prerequisite: [MATH 2393 or MATH 3373] and MATH 3323 and PHYS 3320 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4311. Condensed Matter Physics.**

Application of physics principles to solid materials. Topics include crystal structure and the reciprocal lattice, including x-ray diffraction, crystal binding and elastic properties, lattice vibrations, energy bands, semiconductors and metals. Prerequisite: PHYS 3312 and PHYS 3320 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4312. Quantum Mechanics I.**

This course introduces students to quantum mechanics. Topics include mathematical foundations, fundamental postulates, time development, and one dimensional problems. Prerequisite: PHYS 3312 PHYS 3320 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4315. Electromagnetic Field Theory II.**

An introduction to the electromagnetic field theory of classical physics for time varying fields. Topics included will be electromagnetic induction, time varying electric and magnetic fields, Maxwell's equations, electromagnetic energy, electromagnetic waves and radiation, and a brief introduction to some specialized topics. Prerequisite: PHYS 4310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4320. Selected Study in Physics.**

Topics are chosen in theoretical and experimental areas of current interest in physics with specific topic to be discussed agreed upon prior to registration. May be repeated once with different emphasis and professor for additional credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4321. Undergraduate Research.**

A research project in physics to be carried out under the supervision of a faculty member by upper division physics majors. Student must contact a faculty member in advance to arrange topic and specific course objective. Course may be repeated only as an elective towards the BS or BA in physics. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4330. Relativity.**

This course includes a review of special relativity, an introduction to the mathematics of tensor calculus and differential geometry, and covers such topics from general relativity as the Schwarzschild solution, black holes, tests of general relativity, cosmological models, gravitational waves, and the Einstein equation. Prerequisite: PHYS 3312 and PHYS 3320 with a grade of "C" or better. Corequisite: PHYS 3311 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4345. Biophysics.**

This course applies the principles of physics to the study of living organisms. An emphasis will be placed on the topics of structure, fluids, diffusion, entropy, probabilities, and stochastic processes, as well as on scientific modes of thinking, including modeling, estimation, and data analysis. Prerequisite: PHYS 3320 and PHYS 2230 and PHYS 2335 and PHYS 2135 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 4350F. Astronomical Spectroscopy.**

A lecture course introducing students to spectroscopy in astronomy, with particular emphasis on molecular spectroscopy. The course will cover a broad range of aspects including the development of spectroscopy in astronomy, the theory of atomic and molecular spectra, spectra in different astrophysical environments, instrumentation and data reduction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**PHYS 4350G. Nuclear and Particle Physics.**

This course covers the theoretical, phenomenological, and experimental foundations of nuclear and particle physics including the fundamental forces, particles, and composites. An emphasis will be on the fundamental structure of nucleus (nuclear masses and nuclear sizes), nuclear interactions (alpha, beta, and gamma radiation), Fission, Fusion, beyond nuclear physics (quarks and leptons as basic constituents of matter), brief introduction to the Standard model: electroweak interactions, Higgs boson, QCD and basic nuclear Astrophysics (nucleosynthesis of stellar particles). Prerequisite: PHYS 2326 and PHYS 2126 and PHYS 3312 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Topics

**Grade Mode:** Standard Letter

**PHYS 4350H. Optical Materials and Characterization Methods.**

This course is an introduction to optical properties of solids including electronic and vibrational transitions in inorganic and organic thin films and multilayers. Various optical characterization methods and techniques will be reviewed including Raman, FTIR, Photoluminescence, and X-ray Fluorescence spectroscopy. Students will learn to work with those characterization methods and learn how to interpret the various spectra.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 4360. Physics Cognition and Pedagogy II.**

This course addresses historical, philosophical, and cognitive perspectives on the learning, teaching, and discovery of physics, including results from contemporary research on learning. It is recommended for students pursuing teacher certification. Prerequisite: PHYS 3210 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**PHYS 5100. Professional Development.**

This course covers topics related to teaching, research, and employment responsibilities. The completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Course is repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**PHYS 5110. Seminar in Physics.**

A course designed to acquaint the graduate student with current research areas in physics. May be repeated twice for total of three semester hour's credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5200. Professional Development.**

This course covers topics related to teaching, research, and employment rights and responsibilities. It provides a brief background on teaching and learning theories and consists of organized practice teaching. Completion is required as a condition of employment for graduate instructional and teaching assistants. This course does not earn graduate degree credit.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**PHYS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5302. Electricity and Magnetism.**

An introduction to the electromagnetic field theory of classical physics for static fields. Topics included will be the electrostatic field, polarization and dielectrics, electrostatic energy, magnetic field of steady currents, magneto static energy, and magnetic properties of matter. This is a graduate leveling course in Electricity and Magnetism (stacked with PHYS 4310). This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**PHYS 5303. Quantum Mechanics.**

This course is an introduction to quantum mechanics. Topics include mathematical foundations, fundamental postulates, time development, and one dimensional problems. This is a graduate leveling course in Quantum Mechanics (stacked with PHYS 4312). This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**PHYS 5304. Experimental Research Methods.**

This is a laboratory based course introducing experimental methods used in physics research with emphasis on quantum effects through materials synthesis and characterization methods. The specific experiments are chosen by department faculty on topics of current research interests. The students are exposed to different research topics through laboratory rotations. Prerequisite: Instructor approval. Corequisite: PHYS 5314 with a grade of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5312. Advanced Quantum Mechanics.**

This course is a study of quantum mechanics including combination of two or more quantum mechanical systems, addition of angular momentum, time independent perturbation theory, and time dependent perturbation theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5313. Mathematical Methods of Physics.**

This course is a survey of mathematical methods of physics at the graduate level focusing on complex analysis of analytic functions (Laurent expansions and evaluation of residues) and methods of solving both ordinary and partial differential equations (Frobenius' method and Sturm-Liouville theory) with applications to mechanics and electromagnetic theory.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5314. Statistical Physics.**

This course is an introduction to the laws of statistical physics and their application to realistic problems at the graduate level. The topics include a brief review of equilibrium thermodynamics, Boltzmann and Gibbs distribution, Fermi-Dirac and Bose-Einstein statistics, derivation of Planck's Law and black-body radiation, and heat capacity of solids.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5320. Solid State Physics.**

This is an introductory course at the graduate level intended for students who have not had a previous course in Solid State Physics. Topics covered include crystal structure, the reciprocal lattice, x-ray diffraction, lattice vibrations, electronic band structure, and optical, transport and magnetic properties of metals and semiconductors including applications. Prerequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5322. Semiconductor Device Microfabrication.**

This experimental methods course provides an in-depth overview of the physics and technology of semiconductor device micro and nano fabrication. Topics include materials used in electronic devices, thin film deposition, wet and dry etching, lithography processing, and topics relevant to semiconductor research and devices. Fabrication and characterization techniques will be covered. Corequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**PHYS 5324. Thin Film Synthesis and Characterization Laboratory.**

This advanced experimental course is designed as a research group project experience with emphasis on nanoscale device fabrication. All projects are conducted in university facilities with state-of-the-art thin film growth, processing, and characterization facilities. Prerequisite: PHYS 5322 with a grade of "C" or better. Corequisites: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5327. Semiconductor Device Physics.**

This course demonstrates how solid state physics applies to describing important examples of thin film device operation with emphasis on semiconductor devices. Additional topics may include photon and phonon effects on electronic properties, quantum phenomena, many body effects in solids, carrier transport properties, micro-electromechanical systems, and materials interface issues. Corequisite: PHYS 5314 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5328. Advanced Solid State Physics.**

Review of models of a solid and energy band theory. Additional topics may include interaction of electromagnetic waves with solids, lattice vibrations and phonons, many body effects in solids, device physics, quantum phenomena, carrier transport properties, current device configurations, and materials interface problems. Prerequisite: PHYS 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5331. Electromagnetic Field Theory.**

This course is an introduction to electrodynamics at the graduate level using rigorous mathematical formulation. Topics include methods of solving problems in electrostatics and magnetostatics, boundary value problems and Green's Functions, fields in media, and Maxwell's Equations and time varying fields.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**PHYS 5332. Materials Characterization.**

This course covers skills and knowledge required for microscopy methods including optical microscopy, scanning electron microscopy, scanning tunneling electron microscopy, atomic force microscopy, and confocal microscopy. Topics covered include x-ray and neutron diffraction techniques including structure analysis, powder and glancing angle diffraction, pole figure, texture analysis, and small angle scattering. Prerequisite: PHYS 5312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 5334. Relativity.**

This course includes a review of special relativity, an introduction to the mathematics of tensor calculus and differential geometry, and such topics from general relativity as the Schwarzschild solution and black holes, tests of general relativity, cosmological models, and applications of relativity in the global positioning system (GPS).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PHYS 5350F. Astrophysics.**

This course surveys a variety of issues in astrophysics through problem solving, quantitative measurements, and theoretical reasoning. Topics include celestial mechanics, stellar structure and evolution, star formation, and supernova remnants.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350G. Electrical and Magnetic Characterization Methods.**

This course introduces electric and magnetic characterization methods important to metals, magnetic and semiconductor materials and devices. Various measurement techniques and methods will be reviewed. Students will learn to work with characterization tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350H. Astronomical Spectroscopy.**

A lecture course introducing students to spectroscopy in astronomy, with particular emphasis on molecular spectroscopy. The course will cover a broad range of aspects including the development of spectroscopy in astronomy, the theory of atomic and molecular spectra, spectra in different astrophysical environments, instrumentation and data reduction. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350I. Advanced Computational Methods for Physics.**

In this course students will learn and practice the Python computer language along with several of its scientific modules to model, visualize & analyze complex physical systems that cannot be described by mathematical equations with analytical solution. Special attention will be paid to programming techniques for data manipulation & analysis of large amounts of data residing in multiple data sets. The Python implementation of the (free) Anaconda distribution will be utilized. No previous knowledge of Python or programming required since a basic training will be provided in the first lectures, which will serve as an introduction or refresher for students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5350J. Optical Materials and Characterization Methods.**

This course is an introduction to optical properties of solids including electronic and vibrational transitions in inorganic and organic thin films and multilayers. Various optical characterization methods and techniques will be reviewed including Raman, FTIR, Photoluminescence, and X-ray Fluorescence spectroscopy. Students will learn to work with those characterization methods and learn how to interpret the various spectra.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PHYS 5360. Physics Education Research: Teaching & Learning.**

This course is an introduction to pedagogical issues in physics, including their related philosophical analysis and empirical research studies on student learning. Students will be guided to read, analyze, and present existing scholarly research that justifies approaching certain physics topics from particular perspectives and with particular instructional methods. The course is appropriate for future researchers in physics education and future physics teachers at secondary and post-secondary levels.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**PHYS 5370. Problems in Advanced Physics.**

Open to graduate students on an individual basis by arrangement with the Department of Physics. May be repeated with prior approval of the department. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHYS 5395. Fundamentals of Research.**

Course is available to graduate students only at the invitation of the department. May be repeated with prior approval of the department. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PHYS 5398. Industry Internship.**

Supervised work experience in an appropriate high tech industry. Students will be required to keep a daily journal and make a final presentation (both written and oral) describing their accomplishments.

**3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in PHYS 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PHYS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PS 2304. Introduction to Political Science.**

This course is an introductory survey of the discipline of political science, focusing on the history, scope, and methods of the field and the substantive topics in the discipline. Prerequisite: POSI 2310 or POSI 2320 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 3300. Basic Political Ideas.**

This course examines fundamental ideas of the Western political tradition including conservatism, liberalism, socialism, democracy, and totalitarianism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3301. Basic Political Institutions.**

This course examines political institutions emphasizing the fundamentals of political science research/analysis, the tools used in bibliographical research, and methods of locating and presenting data for comparing political institutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3311. American Political Thought: From the Colonial Period to Civil War.**

This course examines the development of American political ideas from the colonial period through the Civil War. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3312. American Political Thought: From Reconstruction to Present.**

This course examines the development of American political ideas from Reconstruction to the present. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3313. Contemporary Political Theory.**

This course examines selected theories, ideologies, and movements in 20th and 21st century political theory. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3314. Politics and Personality.**

This course is an undergraduate seminar exploring the relationship between political behavior and human motivation. Topics include: psychological perspectives and political theory, personality and political orientation, and the political personality. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3315. Quantitative Research in Political Science.**

This course introduces statistical theories and quantitative analyses, and examines methodological concepts, definitions and procedures, various hypotheses testing and integrated research applications in the discipline of Political Science. Prerequisite: MATH 1312 or MATH 1315 or MATH 1316 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 or HON 2302A or HON 2302B any with a grade of "C" or better. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3321. Campaigns and Elections.**

This course examines the dynamics of American political campaigns and elections at the federal and state level. The analysis and discussion will include theoretical evaluations of voting, campaigns, and elections as well as technical and practical information about campaign strategies. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3322. Political Parties and Party Politics.**

This course examines the American political party system, including its history and organization, suffrage, nominations, elections, campaigns, and the related areas of public opinion and pressure group activities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3323. Congress and the Legislative Process.**

This course examines the dynamics of lawmaking and legislative politics in the United States. This course analyzes, compares, and evaluates the structure, party organization, rules of procedure, and actual operation of the Congress and of selected state legislatures (including Texas). Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3324. The American Presidency.**

This course examines, in depth, both the presidency of the United States and the individuals who have held it.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3325. State and Local Government.**

This course examines the organization, functions, and powers of state, county, and municipal governments in the United States with particular reference to patterns of such governments in Texas. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3326. Issues and Interest Groups: Power and Pressure in America.**

This course examines selected issues at the state and national level and the interest groups which attempt to influence governmental decisions about them. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3327. The American Founding.**

This course examines the origins, nature, and foundations of the American Constitutional system with special emphasis on the Federalist and Anti-Federalist debates and the writing of the Constitution. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3328. Politics in Film.**

This course examines films which explicitly address political issues such as racism in the United States, the conflict between public duty and private conscience, politics and media manipulation, and the role of perception in all the actions people take.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3331. The Supreme Court and the Judicial Process.**

This course examines the judiciary, focusing upon the politics of judicial selection and the decision-making process of the judiciary as well as the position of the judiciary in the entire political process. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3332. Constitutional Law: Basic Structures and Principles.**

This course examines and analyzes, through a constitutional case study approach, the fundamental principles of governmental structure with an emphasis on the office and powers of the President, Congress, and inter-governmental relationships in the main body (Articles I through VII) of the U.S. Constitution. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3333. Constitutional Law: Individual Liberties.**

This course examines the area of constitutional interpretation commonly known as civil liberties or the relations between the individual and the government. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3334. Civil Law in American Society.**

This course examines the structure and functions of government, especially the judiciary, together with the laws regulating private social relations, (e.g., property law, tort law, etc.), and the relations between legal policies and societal goals and regulations. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3341. Comparative Politics.**

This course introduces students to the subfield of comparative politics through an examination of recent political history, political institutions, party systems, and public policies of some of the world's most important countries (including the United Kingdom, Germany, France, Russia, China, Iran, India, South Africa, Mexico and others).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3342. African Politics.**

This course examines the government and politics of African political systems in light of the traditional political cultures, the colonial and post-colonial experience and the diversity of regime experimentation with special attention to the struggle for genuine democracy. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3343. Government and Politics of Latin America.**

This course is a comparative analysis of political systems in Latin America, examining the impact of sociocultural and economic factors on political attitudes and behaviors. Special emphasis will be placed on the political systems of Mexico, Cuba, and Brazil. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3344. Government and Politics of Europe.**

This course examines the political history and political institutions of Europe and the European Union. Special emphasis will be placed on the political systems in the United Kingdom, France, Italy, Germany, and Russia. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3345. Government and Politics of Russia.**

This course examines the domestic and foreign policy of the former Soviet Union, examined both historically and analytically. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3346. Government and Politics of Asia.**

This course examines political development in the nations of Far East and South Asia, special consideration will be placed on the political systems of China, Japan, and India. (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 3347. Politics of Modern Southeast Asia.**

This course examines the political and economic significance of Southeast Asia through comparative analysis; it will include an empirical and conceptual examination of the political dynamics of the region. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3348. Revolution and Nationalism.**

This course examines the phenomena of modern revolution and nationalism focusing on different countries in various geographical areas such as the Middle East, Latin America, and others. This course is repeatable once with a different emphasis for an additional three credit hours. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3349. Latin America Party Politics: Theory and Practice.**

This course examines some key insights in party and party system theory and practice. Latin America is the regional referent for examining themes, and country examples are studied in depth to illustrate the theory. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 3351. Introduction to International Studies.**

This course examines critical interdisciplinary questions pertaining to all courses in the International Studies Program. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3352. Theories of International Politics.**

This course examines theories and concepts in the study of international relations. Major theoretical works and illustrative case studies will be critically analyzed. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3353. Issues in World Politics.**

This course examines major issues in world politics, international relations, and comparative politics. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3354. United States-Latin America Relations.**

This course examines United States-Latin America relations as a subset of US global relations and US foreign policy. This course will examine policies, problems, and attitudes with a detailed analysis of U.S. relations with selected countries. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 3355. International Human Rights.**

This course explores the role of human rights in global politics, including the impact of state and non-governmental organizations' actions on the issue of human rights.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4310A. Natural Law and Virtue Ethics.**

This course examines the development of natural law and virtue ethics theory from ancient through contemporary thought. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4310B. Topics on Freedom of Speech and Thought.**

This course considers freedom of speech and thought as foundational conditions in liberal conceptions of human flourishing. The course will combine a close reading of modern and contemporary authors with an analysis of recent controversies implicating these freedoms, such as debates about hate speech and political correctness. Corequisite: PS 3300 or PS 3301.

**3 Credit Hours. 0 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4311. Ancient and Medieval Political Thought (Greeks to 1600).**

This course examines classical and medieval political theory from Plato to Machiavelli. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4312. Modern Political Theory (1600 - 1900).**

This course examines the development of modern political ideas; and the meaning and relationships of the significant ideologies of our time including democracy, capitalism, the welfare state, socialism, fascism, and communism. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter



**PS 4313. The Holocaust.**

This course is an undergraduate seminar on The Holocaust. Topics include: victims and perpetrators, antisemitism, and representation of The Holocaust in film and fiction. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4314. Liberalism and Its Critics.**

This course examines the origins, nature, and evolution of one of the most influential intellectual traditions in modern Western political theory, liberal individualism, as well the views of its critics. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4315. The Politics of Dystopia.**

This course examines the idea of political utopia and the many ways in which it might be twisted into a darker, less-than-perfect society. Content will focus, in particular, on the relationship between fictional dystopias in novels and films, and political reality in 21st-century America. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4320A. American Political Culture.**

The course will explore selected problems related to American political culture through an examination of Alexis de Tocqueville's classic study, Democracy in America. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4320B. The Evolution of the United States Constitution.**

This course studies the relationship between politics and the US Constitution. Emphasis is placed on the evolution of the US Constitution from a political, historical, and theoretical perspective.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4320C. Freedom in America.**

This course explores enduring questions about freedom in America. How has freedom in American society developed? Should limits be placed on individual freedom? Can individual freedom be harmful for American society? Why do defenders of community worry about the fissiparous consequences of unlimited freedom? How do defenders of liberty respond to these concerns? While freedom is perhaps Americans' favorite word, we will see that Americans have debated both the value and meaning of freedom throughout American history. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 with any grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4321. American Foreign Policy.**

This undergraduate seminar examines the roles of major institutions, American political culture, and the international setting in the making of American foreign policy. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4322. African American Politics.**

This course examines the political, cultural, and historical facets of the African American experience. The course will include a study of appropriate constitutional law cases, representation, identity, urban politics, protest movements, and ideology. Particular attention will be given to how these themes develop in Texas and the Southwest. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4323. Latina/o Politics.**

This course examines the participation of Latinos in US politics. Both formal political participation in electoral politics and involvement in grassroots and social movements are considered. While all Latino groups will be considered, the course has a special emphasis on the Mexican/Chicano experience in Texas and the Southwest. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4324. Women in Politics.**

This course examines the role of women in political life. The course will examine women's influence on politics as well as how various public policies affect women. Topics may include feminism, electoral politics, political representation, and the internal politics of women's groups. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4325. Texas Politics.**

This course examines the history, culture, institutions, issues, and policies of the Texas political system. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4326. Media and Public Opinion.**

This course examines how the media influences public opinion and voting behavior. Specific topics include media functions in campaigns and elections, media bias, new media, and media effects on political attitudes and behaviors. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4327. Religion and American Public Life.**

This course examines the ways in which religious beliefs and groups have influenced the course of American democratic experience, and the ongoing debate regarding the proper role of religion in American public life. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4330A. Environmental Law & Policy.**

This course examines the institutions, implementation, and regulation of American environmental law and policy. Laws and regulations explored can cover jurisdictions ranging from municipal, regional, state, federal, and international levels. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4330B. Free Speech and Democracy in the Digital Age.**

This course blends law, philosophy, history and political science in examining the role of free expression in the digital age. It will begin with an overview of various theories supporting the right of free expression and the historical development of free speech from the English common law to current struggles over free speech and what constraints on its practice are acceptable. The course will then consider modern challenges to free expression and democratic discourse posed by technology and the private companies that control much of the modern public square. Global threats to freedom of expression will also be examined. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 all with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4331. Islamic Law and Politics.**

This undergraduate seminar is an examination of the origins, development, divisions, law, and politics of Islam. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4332. The Politics of U.S. Economic Policy.**

This course examines the issues of political economy prominent in American public life. Emphasis will be placed on the constitutional, partisan, and sectional aspects of such issues as the Bank of the United States, slavery, gold standard, the Great Depression, banking, income distribution, and the Affordable Care Act. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4333. Issues in Law and Public Policy.**

This course examines selected legal issues by focusing on their relationship to public policy. Alternative views, social consequences, political responses, and legal issues resulting from alternative positions are considered. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4334. Legal Theories and Research.**

This course examines the American Legal System. Emphasis will be placed on the origins and development of law, the different sources of law, the process of legal research and analysis, and methods for interpreting and applying constitutional, statutory and case law. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4340A. Government and Politics of Japan.**

This course is a comparative analyses of political systems in Japan, examining the impact of sociocultural and economic factors on political attitudes and behaviors. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4340B. Authoritarian Regimes.**

While democracy became the most common political regime type around the world in the 1990s, many authoritarian regimes have continued to persist or have emerged in countries such as China, Cameroon, Saudi Arabia, Russia, and Venezuela. How do these regimes emerge and function in the presence of popular demands for democratization and leadership challenges from authoritarian regime elites? How do authoritarian regimes collapse and what are the prospects for democracy in current authoritarian regimes? How do authoritarian regimes act in international relations? This course applies these broad questions to past and present authoritarian regimes around the world. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4340C. Comparative Political Institutions.**

This course introduces students to the effect of institutions on political outcomes in developing countries. The role of formal institutions, informal institutions, and institutional weaknesses to understand political dynamics will be explored and analyzed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 4340D. Mexican Politics.**

The course delves into Mexico's XX century authoritarian period and its transition to democracy, including the workings of Mexico's institutions in the post 2000 era, and the evolution of US-Mexican relations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 4340E. Civil War.**

This course provides an in-depth look at how civil wars begin and end, the dynamics in the conduct of civil wars, and the domestic and international consequences of civil wars. Case studies of post-WWII civil wars around the world will be used to illustrate theories of civil war and to speculate on the likely onset or termination of civil war in particular countries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4341. Civil-Military Relations in Comparative Politics.**

This course examines the primary empirical and normative theories of civil-military relations. Students will investigate the state of civil-military relations in the United States and around the globe. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4342. Economic Development in Latin America.**

This course examines the economic history of and current obstacles to economic development in Latin America. It explores the Import Substitution Industrialization Era, the debt crisis of the 1980s, free market economics, and the nature and revival of economic populism. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4343. Politics of Democratization in Developing Countries.**

This course examines the third wave of democratization in the developing world and the multiple challenges facing these new democracies. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4344. The Politics of Extremism.**

This undergraduate seminar examines international terrorism and extremist politics in America. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4345. Model International Institution Competition.**

This course is an applied introduction to diplomacy focusing on issues relevant to international institutions, in which students will engage in debate and role-playing. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4346. Organization of American States.**

This course is an introduction to major issues of the OAS including its functions and limitations and the evolving relations among member-states.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4350A. U.S. National Affairs and Homeland Security.**

This course examines current issues of national and international importance from political, economic, and social perspectives. Corequisite: PS 3300 or PS 3301 or POSI 3300 or POSI 3301 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4351. International Conflict and Security.**

This course examines historical and spatial patterns of conflict (including war, terrorism, and economic coercion) from the perspectives of Realist, Idealist, and Marxian schools of thought. It will also examine strategies for conflict prevention and resolution such as deterrence, arms-control, collective security, and "building democracy." (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4352. International Law.**

This course will examine the nature, functions, sources, scope, practice, and development of public international law as both a legal and political process. Students will research contemporary international problems and participate in a Moot International Court of Justice. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4353. International Organizations.**

This course examines the historical roots of international organizations, the development of the League of Nations, and the evolution of the United Nations. The nature, process, and function of contemporary international organizations will be analyzed. Non-governmental organizations, transnational organizations, and multi-national corporations will be assessed. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4354. Politics of International Economic Relations.**

This course examines the institutional structure of interstate economic relations, trade and monetary regimes, foreign investment, foreign aid, and development policies of governments. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4355. US National Security Strategy.**

This course examines the decision-making processes and the substantive debates pertaining to issues of modern American national security policy and strategy. Emphasis may be placed on the theory of strategy and grand strategy, great power challenges from Russia and China, transnational threats, and the tools of power such as the use of military, intelligence, economic, and diplomatic means to advance strategic goals. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4379. Independent Study.**

This course is an individualized study including independent reading and/or research on various problem areas of political science. Instructor will approve specific problem area, bibliography, and student paper outline. Prerequisite: Instructor approval. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4380. Internship in Government.**

This course is designed for students to gain practical experience while participating in the ongoing work of a selected governmental or nonprofit unit. Interns will work under the joint direction of faculty and intern supervisors. One hundred fifty hours of service during the semester is required of interns. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4398. Practicum in Political Science: Concepts, Resources, and Applications in the Study of Politics.**

This course is designed to ensure familiarity with basic concepts and approaches used in the study of politics. This course is required of all B.A. students seeking a teaching certification; it may be taken as a substitute for PS 4399 for Political Science non teacher certification majors. Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PS 4399. Senior Seminar in Political Science.**

This course includes intensive reading, research, writing, and discussion focusing on different sub-fields in political science and is required of all political science majors. May be repeated once for additional credit with different instructor and department approval. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**PS 4680. Internship in Government.**

This course is designed for students to gain practical experience while participating in the ongoing work of a selected governmental or nonprofit unit. Interns will work under the joint direction of faculty and intern supervisors. Three hundred hours of service during the semester is required of interns. (WI) (MULT) Corequisite: PS 3300 or PS 3301 either with a grade of "D" or better.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PS 5100. Instructional Methods Practicum for Graduate Assistants.**

This course introduces key concepts and practices in the teaching of college introductory political science courses. It provides regular in-service training and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. It is repeatable 3 times with different emphases and with a maximum of 4 credit hours.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**PS 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in a Thesis B course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PS 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in a Thesis B course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PS 5300. Foundation Studies in Political Science.**

Students develop knowledge and skills required for success in graduate-level coursework in Political Science. Course content varies depending on academic preparation. This course does not earn graduate degree credit. The approval of the graduate program director is required. It is repeatable 3 times with different emphases and with a maximum of 12 credit hours.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**PS 5301. Approaches to the Study of Political Science.**

This course provides an intensive introduction to the advanced study of political science. It focuses on the key concepts, variables, and approaches used to describe, explain, and predict political phenomena. It also discusses key normative theories and the variety of methodologies used in political science.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5302. Political Research and Methodology.**

This course is a topical seminar for the exploration of problems in the scope and the methods of political science and public administration. The course emphasizes quantitative methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5310. Studies in Ancient and Medieval Political Thought.**

This course covers selected topics in Greek and Roman political theory, patristic understanding of politics, and the political theory of the Middle and High Middle Ages. This course includes study of the writings and thought of Thucydides, Plato, Aristotle, Cicero, Augustine, Al-Farabi, John of Salisbury, Aquinas, and others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5311. Social Contract Theory.**

This course is an examination of the social contract, consent, and popular sovereignty in early modern thought. Attention is given to the work of Thomas Hobbs, John Locke, Jean Jacques Rousseau, and Immanuel Kant (as well as others) and to their critics both then and now.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5312. Roots of American Constitutionalism.**

This course examines the origins and evolution of the ideas which inform the American constitutional system, includes an examination of classical, Christian, medieval, Renaissance, and Enlightenment thought that, combined with the British liberal tradition, laid the groundwork for the American experiment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5313. Justice and Liberty in American Thought.**

This course examines the concepts of justice and liberty in American thought from the seventeenth century to the present. Attention is given both to the nature of liberty and justice and to their practical requirement as understood by various American thinkers, including statesmen, reformers, social scientists, and philosophers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**PS 5315. Contemporary Perspectives in Modern Liberalism.**

This course is a brief review of the history and development of modern liberalism and the ensuing response and contemporary alternatives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5316. The Crisis of Liberalism and The Future of Democracy.**

This course is an examination of the nature and intellectual foundations of the liberal tradition and the implications of the crisis besetting contemporary theory for the future of democratic government.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5317. Theological Perspectives in Modern Democracy.**

This course explores the influence of religion on the rise of modern democracy and the efforts of various religious thinkers to explore the nature and foundations of democratic government.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5318. The Problem of Power and the Crisis of Modernity.**

This course is an examination of the crisis of modernity and its implications for humanity's future.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5330A. Nuclear Weapons in International Politics.**

This course examines the effects of nuclear weapons on international politics. The course begins with a comparative historical account of the nuclear arms race and efforts to achieve nuclear arms control and disarmament. It then shifts to examine contemporary theories of nuclear proliferation and the case studies which illumine them. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**PS 5330B. Tocqueville and American Democracy.**

This course considers Tocqueville's Democracy in America. Topics include the relationship between aristocracy and democracy; the instability of democracy; the antidotes to these instabilities; the significance of habit in Tocqueville's thought; the case for American Exceptionalism; and the importance of religion for democracy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 5330C. Party Systems in Latin America.**

The course examines some key insights in party and party system theory and practice. Latin America is the regional referent for examining these themes, and country examples are studied in considerable depth to illustrate the theory. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**PS 5330D. Problems in Political Science: International Humanitarian Affairs.**

This course inquires into the intellectual legacy of international humanitarian issues, including forced migration, refugee problems, moral issues related to humanitarian intervention and emergency aid issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**PS 5330E. Religion and American Political Culture.**

An examination of the ways in which religious beliefs and institutions have shaped American political culture; the ways in which American culture has influenced these beliefs and institutions; and the ongoing debates regarding the proper role of religion in American public life.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 5330F. Topics in Comparative Politics of European and Developing Countries.**

This course explores the recent political history, institutions, party systems, and economic policies of some of the major countries in the globe. The course is devoted to the study of individual advanced European democracies as well as important developing nations, including China, Iran, Russia, Mexico, India and South Africa.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 5330H. Topics in Political Science: Seminar on Freedom of Speech and Thought.**

This course considers freedom of speech and thought as foundational conditions in liberal conceptions of human flourishing. The course will combine a close reading of modern and contemporary authors with an analysis of recent controversies implicating these freedoms, such as debates about hate speech and political correctness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 5330J. Authoritarian Regimes.**

While democracy became the most common political regime type around the world in the 1990s, many authoritarian regimes continue to persist or have emerged in countries such as China, Cameroon, Saudi Arabia, Russia, and Venezuela. How do these regimes emerge and function in the presence of popular demands for democratization and leadership challenges from authoritarian regime elites? How do authoritarian regimes collapse and what are the prospects for democracy in current authoritarian regimes? How do authoritarian regimes act in international relations? This course surveys the existing literature on these questions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PS 5332. Problems in American Foreign Relations.**

This course is a seminar based on selected topics in American foreign policy and United States involvement in international relations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5334. Texas Politics.**

This course examines some of the traditional debates over federalism, intergovernmental relations, and different ways people compare the states. It introduces Texas political institutions and its political history as well as examines some of the current Texas public policy questions such as education, criminal justice, and economic development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5335. The Role of Interests in America.**

This course examines the role of interest groups and other organizations in the United States. Students learn about the range of social and economic interests presently active in our country and what observers from a variety of perspectives believe this activity implies for the health of our political system.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5336. Property, Liberty, and Popular Sovereignty.**

This course examines the role, status, and power of property in demographic societies. It takes a modified historical approach to the subject, tracing attitudes regarding property from before the American Revolution until today. Although the emphasis is on the United States, the course reviews property in other societies where appropriate.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5337. American Political Culture.**

This course explores selected problems related to American political culture with particular emphasis on the question of the cultural preconditions of free government. Beginning with Alexis de Tocqueville's classic study of American political culture, the course explores different Tocquevillian themes in a contemporary American context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5338. American Political Discourse.**

This class identifies the way political discourse and social and political cultures connect within Americans' minds. Diverse theoretical perspectives will be used to explore the phenomena involved in social and political issues regarding values, meanings, norms, and prejudices and methods of improving political discourse within American political culture.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5339. The American Presidency.**

The course entails an historical analysis of presidential elections from 1789 to the present day. In addition, students examine and engage in reasonable speculations about the upcoming elections.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5340. Congress and the Legislative Process.**

This course examines the American legislative process with a focus on Congress. The framework for the course is based on three themes: 1) the "dual Congress," i.e., the notions of deliberation versus representation; 2) the distribution of power in Congress and its consequences; and 3) the bicameral nature of Congress.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5341. Seminar in Constitutional Law and Theory.**

This course examines selected issues in constitutional theory, including the theory of judicial review, and constitutional interpretation. It examines the debate on constitutional interpretation in light of cases dealing with the First Amendment freedom of speech, press, and religion, and with substantive due process and the equal protection clause.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5356. The British Political Order Since 1900.**

This course examines British policy from 1901 to the present and the major events that affected British history and politics. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5357. Russian Politics and Josef Stalin.**

This course examines Josef Stalin's personal and public life, analyzes his accomplishments and failures, and generates a summative assessment of his impact on Russian and global politics. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5359. Comparative Democratization.**

This course examines the inner workings of autocracies and democracies in the developing world, as well as processes of regime transitions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5360. Economic Development in Developing Nations.**

This course examines some of the factors that account for economic development/underdevelopment in developing nations. The factors examined include political, economic and institutional variables. These underlying variables reveal the multi-causal nature of socio-economic development. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5361. Government and Politics of African States.**

This course examines governments and politics of African states. It examines the nature of domestic and international politics, the precolonial politics and political culture, the impact of the colonial period on politics, several cases of post-colonial successes and failures, the critical nature of external involvement in the politics, and the settings of civil war. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5362. Problems of Democracy in Latin America.**

This course examines the main structural and institutional obstacles that stand in the way of high quality democracy in Latin America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5363. Party Systems in Latin America.**

The course examines some key insights in party and party system theory and practice. Latin America is the regional referent for examining these themes, and country examples are studied in considerable depth to illustrate the theory. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5371. American Grand Strategy.**

This course examines the making of American grand strategy and the scholarly debates surrounding the various strategic options to best advance the long-term national interest. The class examines theories of grand strategy, as well as historical and modern examples, and focuses on drawing parallels and lessons for the present and the future.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5375. Seminar in International Relations Theory.**

This course is designed to engage students in the major theoretical and conceptual traditions of international relations in order to assess the complex issues, developments and events constituting international politics. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5377. Problems in International Organizations.**

This course analyzes the structure, functions, and role of the international organizations in the international system. The course addresses the role of international regions, regional organizations, functional agencies, and bilateral organizations. The procedures and processes on international argument and policy-making are studied through participation in a model security council. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**PS 5378. Problems in International Law.**

This course examines the nature, functions, and scope, of international law. It addresses several major areas including legal sources, diplomatic practice, territorial jurisdiction, legal personality, the law of state responsibility, asylum law, human rights, and the law of war. The course is heavily research oriented and includes moot court arbitration. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**PS 5379. Problems in International Political Economy.**

This course examines theories and issues in international political economy. The course emphasizes the political and economic conditions conducive to the development of cooperative international economic behavior among countries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**PS 5380. International Conflict and Security.**

This course deals with the field of security studies. Security studies focuses on what Clausewitz famously called "politics by other means": war. This course centers on three enduring topics: the causes of war, the use of force, and the future of warfare. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PS 5389. Internship in Government.**

This course offers students practical experience in the on-going work of a selected governmental unit. The student is evaluated on the basis of a research paper, work journal, and work performance. The approval of the graduate program director is required. It may be repeated once with different emphasis and with a maximum of 6 credit hours.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5390. Political Science Curriculum Development.**

This course is designed for graduate students with a social science teacher emphasis who are interested in teaching dual credit courses on federal or state government. The course focuses on practical teaching matters including, construction of syllabi, delivering effective lectures, teaching formats, test construction, and grading practices Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5391. Political Science Teaching Practicum.**

This course is designed for graduate students with a social science teacher emphasis who are interested in teaching dual credit courses. Prerequisite: PS 5390 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PS 5398. Directed Reading and Research.**

This course is an advanced reading and/or research on various topics in political science under the direction of a graduate faculty member. It may be repeated once with different emphasis and professor for a maximum of 6 credit hours. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PS 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until a student has completed the thesis under a Political Science Thesis B course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PS 5399B. Thesis.**

This course represents a student's continuing thesis enrollments.

The student continues to enroll in a Thesis B course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PS 5599B. Thesis.**

This course represents a student's continuing thesis enrollments.

The student continues to enroll in a Thesis B course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PS 5999B. Thesis.**

This course represents a student's continuing thesis enrollments.

The student continues to enroll in a Thesis B course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**POSI 2310. Principles of American Government.**

A survey of the principles of political science, of the American system of government, and of the origins and development of the constitutions of the United States and Texas. Satisfies the legislative requirements for teacher certification.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Govt/Pol Science Core 070

**Grade Mode:** Standard Letter

**TCCN:** GOVT 2306

**POSI 2320. Functions of American Government.**

This course is a study of functions performed in the American system of government, both national and state, within the framework of the U.S. and Texas Constitutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Govt/Pol Science Core 070

**Grade Mode:** Standard Letter

**TCCN:** GOVT 2305

**POR 1410. Beginning Portuguese 1.**

Introduction to listening, speaking, reading, and writing skills within a Brazilian cultural framework. Students who take POR 1410 toward degree requirements must also complete POR 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** PORT 1411

**POR 1420. Beginning Portuguese II.**

Continued practice in listening, speaking, reading, and writing skills within a Portuguese cultural framework. Students who take POR 1410 toward degree requirements must also complete POR 1420. (MULT) Prerequisites: POR 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** PORT 1412

**POR 2310. Intermediate Portuguese I.**

Continued development and review of all language skills within a Portuguese cultural framework. (MULT) Prerequisite: POR 1420 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** PORT 2311

**POR 2320. Intermediate Portuguese II.**

More advanced practice in all language skills with greater emphasis on reading with a Portuguese cultural framework. (MULT) Prerequisite: POR 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** PORT 2312

**POR 3308. Advanced Composition and Conversation through the Brazilian Short Story.**

This course will help students advance their knowledge of the Portuguese language through the reading, discussion, and analysis of modern and contemporary Brazilian short stories. By reading the works of renowned writers students will be able to expand their vocabulary and develop fluent reading and writing skills. (WI) (MULT) Prerequisite: POR 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PSY 1300. Introduction to Psychology.**

A survey of the major principles derived from research on human and animal behavior. Topics studied include learning, thinking, motivation, emotion, personality, the senses, perception, and the form and functions of the nervous system. PSY 1300 with a grade of "C" or better is required for most other Psychology courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080

**Grade Mode:** Standard Letter

**TCCN:** PSYC 2301

**PSY 2100. Professional Seminar.**

This course examines the characteristics of Psychology as a discipline and profession. Coverage includes current trends in Psychology and its subfields, degree options in Psychology and its subfields as they relate to professional and/or career issues, and how to be an intelligent consumer of discipline-specific data and information. Prerequisite: PSY 1300 with a grade of "C" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 2101. Introduction to Statistics Laboratory.**

This statistics laboratory course provides an introduction to descriptive and inferential statistics used in psychological research with an emphasis on data analysis techniques through the use of computer applications (ex., SPSS, R, etc.). Prerequisite: PSY 1300 with a grade of "C" or better. Corequisite: PSY 2301 with a grade of "C" or better.

**1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 2301. Introduction to Statistics.**

The course provides an introduction to statistical methods in behavioral sciences with special emphasis on application to psychological research. The topics covered include descriptive statistics, principles of statistical inference and common hypothesis testing techniques such as z-test, t-tests, analysis of variance, correlation and regression, and selected non-parametric tests. Prerequisite: PSY 1300 and [MATH 1312 or MATH 1315 or MATH 1317 or MATH 1319 or MATH 2321 or MATH 2417 or MATH 2471] both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PSYC 2317

**PSY 2311. Psychology of Human Sexuality.**

A psychological and physiological examination of the human sexual experience from conception through old age. Current research findings serve as a basis for study. Major consideration is given to the human sexual system, the sexual act, sexual attitudes and behavior, and sexual complications. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** PSYC 2306

**PSY 3300. Lifespan Development.**

Survey of the psychology of human development from the pre-natal period through adulthood. Emphasis placed on cognitive, motivational, and physiological processes of development in childhood and adolescence. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**PSY 3312. Adolescent Psychology.**

A developmental psychology course designed to examine the complex characteristics of human cognitive and emotional life during the period of adolescence. Emphasis is directed toward the basis of behavior, interpersonal relationships, development, growth, and motivation. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3313. Psychology of Adulthood and Aging.**

The development of individuals in the post-adolescent period, particularly after middle age. Topics studied include social, psychological, and physiological changes and problems associated with the aging process. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3314. Psychology of Consciousness.**

This course is an introduction to the study of consciousness from the perspective of psychology, neuroscience, and the natural sciences. Topics reviewed included philosophical foundations, cognitive and neuroscientific approaches, the physical correlates of consciousness, introspection, sleep and dreaming and altered states of consciousness. (WI) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3315. Psychopathology.**

An introduction to the study of psychopathology: (1) issues in defining and evaluating it, (2) examples, (3) theories and research attempting to categorize, describe, and explain it, and (4) approaches used to prevent or change it when it is deemed a problem by the individual and/or society. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3316. Personality Psychology.**

A comprehensive introduction to research, theory, and application in the field of personality. Individual differences and situation influences are examined concerning authoritarianism, achievement motivation, anxiety, intelligence, self-concept, interpersonal attraction, aggression, sexuality, and altruism. An integrative model is suggested for describing and predicting human behavior. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3321. Sensation and Perception.**

An introduction to the processes of perception. Topics will include perceptual measurement, the physiological bases of perception, basic visual processes, and basic haptic, olfactory, and gustatory processes. Prerequisite: PSY 1300 and PSY 3402 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3322. Brain and Behavior.**

This course covers research findings and theoretical concepts concerned with the physiological, anatomical, and pharmacological bases of behavior. Topics include sensory systems, the physiological mechanisms of motivation, and the physiological correlates of associate processes such as learning. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3323. Evolution and Behavior.**

The course provides a contemporary understanding of human behaviors, emotions, and cognitions through an examination of Darwin's theories of natural selection, sexual selection, and mental evolution. Relevant interdisciplinary perspectives from philosophy, history, anthropology, archaeology, biology, ethology, and genetics are incorporated.

Prerequisites: PSY 1300 and PSY 3300 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3325. Psychology of Persuasion.**

This course uses a socio-psychological perspective to understand the dynamics of persuasion and propaganda. It applies selected theories and research on social influence, persuasion and attitude change to such areas as political and educational campaigns, product advertising, mass media and public opinion. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3331. Social Psychology.**

The study of how people influence each other. The course covers such topics as conformity, inter-personal attraction, prejudice, and aggression. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3332. Psychology of Women.**

The special problems and demands made on the woman within modern western culture. Topics studied include status, roles, values, opportunities, expectations, stress, and self-realization of the modern woman. (MULT) (WI) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3333. Industrial Psychology.**

The study of applying psychological knowledge and techniques to the modern industrial environment. Topics studied include employee needs, attitudes, selection, testing, boredom, motivation, anxiety, and job satisfaction. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3334. Psychology of Human Diversity.**

Explanations about how the environment, genetics and culture shape human differences, and how these differences are linked to world progress and understanding are addressed. (WI) (MULT) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3335. Forensic Psychology.**

Examines the relationships between psychology and the processes of the American courtroom. Sample issues to be addressed include; (a) What psychological theories are used to explain jury decisionmaking? (b) How accurate is the memory of eyewitnesses? (c) How do characteristics of defendants influence juries? Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3336. Sport Psychology.**

This course examines the relationships, psychological concepts, and individual's thoughts regarding sports, health and exercise. Sample topics include (1) current theoretical perspectives of personality factors at sports and exercise, (2) why people engage in sports, (3) exercise adherence, (4) mental skills, and (5) the psychological effects of sports and exercise. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3337. Psychology of Prejudice, Discrimination, and Hate.**

This course will explore psychological theories and factors that underlie prejudice, discrimination, and hate. Although the course will focus primarily on these issues as they have developed and influence realities in the United States, global issues will also be explored. (MULT) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**PSY 3338. Service Learning: Protecting the Vulnerable.**

This course examines clinical, legal and psychosocial conditions of adults who, due to mental illness, developmental impairments, brain injuries or aging, are declared "incapacitated" and have court-appointed guardians. Students will serve as the probate court representatives who inspect living conditions and services for individuals under the court-ordered guardianships. Prerequisite: PSY 1300 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 3341. Cognitive Processes.**

This course covers the acquisition and use of knowledge, contemporary research on perception, pattern recognition, memory, thinking, problem solving, and language comprehension. (WI) Prerequisite: PSY 1300 and PSY 3402 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3350. Cognitive Behavioral Therapies.**

The course provides theory, research, and application of psychological principles that affect humans in education, business, and personal life. Emphasis is placed on effective use of reinforcement, classroom management, self-control, relaxation, and assertiveness. (WI) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3361. Health Psychology.**

Surveys contemporary theory and research on body/mind interaction in physical and mental health. Emphasis on personality, psychosocial, and stress factors in physical health. Other topics include the effects of physical health on psychological well being, pain management, longevity and aging, and coping with illness and dying. (WI) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3402. Experimental and Research Methods.**

This course introduces students to basic instruction in experimental design, data collection, and technical report writing in Psychology. By examining applications of various methodologies, this course provides information on the steps involved in crafting and executing empirical research projects as well as instruction on procedures and software. (WI) Prerequisite: PSY 1300 and PSY 2101 and PSY 2301 all with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 3404. Advanced Research Methods.**

The course provides students with the opportunity to conduct original research in psychology using best practices in research methods. Course requirements include obtaining IRB approval, conducting research, analyzing results and presenting findings in a professional setting. (WI) Prerequisite: PSY 1300 with a grade of "C" or better and PSY 3402 with a grade of "B" or better and instructor approval.

**4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 4318. Psychological Tests and Measurements.**

The course provides an introduction to basic principles, research, and theories on testing and measurement of psychological constructs. It includes validity, reliability, item analysis, administration, scoring, and interpretation of existing tests and measures, and construction of new measures including surveys and other psychological instruments. Prerequisites: PSY 1300 and PSY 2101 and PSY 2301 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 4342. Learning and Memory.**

A study of memory and learning in humans and animals. Attention is given to comparative cognition, cognitive and neuropsychological aspects of memory, and memory deficits. (WI) Prerequisite: PSY 1300 and PSY 3402 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PSY 4350. Reality Therapy/Choice Theory.**

This course focuses on Glasser's concepts of Choice Theory and Reality Therapy. This course explores how the "total behaviors" and choices we make impact our lives, the kinds of relationships we want to have with others, health and quality of the life. (WI) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 4352. Introduction to Clinical Psychology.**

Overview of clinical psychology. Emphasis on current theories and methods of individual psychotherapy. Class discussions of readings, films, audiotapes, and live examples illustrating approaches. Experiential learning via class exercises in pairs and small groups and by role-playing both therapist and client in a series of helping sessions. (WI) Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 4390B. Emotion and Human Behavior.**

This course will provide an advanced understanding of the multifaceted phenomenon of emotion and its effect on human behavior. Students will be introduced to the philosophical and theoretical underpinnings of emotion, the various individual emotions (e.g. fear, anger, happiness) and will learn how emotion can affect physical and psychological health.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 4390N. Psychopharmacology.**

This course reviews psychopharmacology topics including: neuronal and chemical mechanisms underlying drug action; environmental factors modulating the impact of drugs on emotion, cognition, perception and behavior; the processes underlying drug dependency, tolerance, and withdrawal; and the implications for drug abuse treatment and prevention strategies, especially concerning adolescents. Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 4390P. Human Factors and Ergonomics.**

This course examines characteristics of people that are applicable to the design of systems and technological devices. This course will illustrate how methods and principles of human factors and ergonomics enhance the usability, safety and performance of human-machine systems.

Prerequisite: PSY 1300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 4390Q. Introduction to Developmental Disabilities.**

This course will provide students with perspectives on the causes, manifestations, and treatment of developmental disabilities throughout the lifespan. Historical views and societal issues will be investigated along with current practices and research. Prerequisite: PSY 1300 and PSY 3315 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 4390R. Intermediate Statistics.**

This course introduces statistical methods designed for psychological research with multiple independent variables. Topics include factorial analysis of variance and multiple regression. Interpreting interaction effects is a main focus. This is a practice-based course that will cover both the theoretical constructs and also step-by-step computer procedures. Prerequisite: PSY 1300 and PSY 2101 and PSY 2301 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 4390S. Latinx Psychology.**

This course examines psychological perspectives of the Latinx experience. The importance of culture and its links with the mental health, educational attainment, sexuality, gender expression, and the health of Latinos will be explored. Additionally, the course will address the impact of prejudice, discrimination, and acculturation on Latinxs. Students are expected to gain an appreciation and understanding of the influence of Latinx culture on human behavior, an enhanced awareness of challenges facing Latinxs, and critical thinking skills in evaluating the validity of psychological knowledge about Latinxs. Prerequisite: PSY 1300 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**PSY 4391. History and Theory.**

Study of the evolution of psychology as a science through a systematic review of the principal scientific and philosophic antecedents of modern psychology, and analysis of the status of the major contemporary theoretical schools. (WI) Prerequisite: PSY 1300 and PSY 3402 both with grades of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 4393. International Psychology.**

The course focuses on the history, status, and future directions of scientific and professional psychology throughout the world. It requires reading about, discussing, and writing about the relatively new specialty area of international psychology. The objective is to deepen students' knowledge of psychology's relevance to the solution of global problems. Prerequisite: PSY 1300 with a grade of "C" or better. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PSY 4395. Individual Study.**

Students design and execute original research, or engage in extensive fieldwork, in the field of psychology under the supervision of a faculty member. All students planning to attend Graduate School are advised to enroll in the course. May be repeated once for additional credit. Prerequisite: PSY 1300 and PSY 3402 both with grades of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**PSY 4396. Internship in Psychology.**

Extensive field work in a professional setting related to psychology. May be repeated once for additional credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PSY 5105. Practicum in Teaching Psychology.**

This course will examine processes and strategies designed to improve the teaching and learning process. Students will be introduced to learning and instructional theory and selected concepts, issues, and strategies of instructional planning, delivery, management, and evaluation. This course does not earn graduate degree credit. Repeatable with different emphasis. Prerequisite: Instructor approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**PSY 5198. Research Seminar.**

Taken in two consecutive semesters, this seminar provides an orientation to the graduate program and the steps required for thesis completion.

Topics include the discussion of research interests, critiquing literature, and topic selection; developing and submitting a research proposal; selecting a thesis committee; and thesis completion and submission. Restricted to M.A. students in Psychological Research.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5199B. Thesis.**

This course represents a student's continuous thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PSY 5299B. Thesis.**

This course represents a student's continuous thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PSY 5306. Psychological Development: Theories & Research.**

This course is an advanced coverage of biological, social, and cognitive development throughout the lifespan. Topics include cognitive developmental theory, sensory/perceptual development, language development, infant attachment, the development of gender roles, moral development, and issues related to aging. Prerequisite: PSY 3300 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5310. Advanced Psychopathology.**

This course offers a critical analysis of the definition and classification of psychopathology and experiences and an in-depth study of theories and research on causes, remediation, and prevention. Prerequisite: PSY 3315 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5311. Univariate and Bivariate Statistics.**

This course introduces students to univariate and bivariate statistical concepts and techniques used in psychology research (e.g., probability, sampling distributions, t-tests, and analysis of variance, correlation). Emphasis is placed on developing skills in data analysis including the selection of appropriate techniques, using data analysis software, and interpretation of statistical results. Prerequisite: PSY 2301 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**PSY 5318. Assessment in Psychology.**

The course will provide an overview of assessment instruments commonly used by psychologists and neuropsychologists in research and practice. Basic psychometrics such as validity and reliability also will be covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5320. Principles of Measurement and Statistics.**

The course emphasizes classical measurement theory, including reliability and validity of measurement instruments commonly used in psychology, and reviews descriptive statistics with a focus on correlation and regression. Prerequisite: Course in undergraduate statistics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5321. Multivariate Statistics.**

This course introduces students to multivariate statistical techniques commonly used in psychological research such as analysis of variance and covariance, multiple regression, and factor analysis. Emphasis is placed on developing applied skills in data analysis: selection of appropriate statistical techniques, using data analysis software, and interpretation of statistical results. Prerequisite: PSY 5311 with a grade of "B" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**PSY 5324. Biological Bases of Behavior.**

This course provides an overview of the nervous system structure and function appropriate to the overall field of Psychology in order to foster an appreciation of the biological determinants of behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5326. Neuropsychological Assessment.**

This course will introduce principles of neuropsychological assessment including assessment procedures, interpretation of results, neuropathology, and the range of neuropsychological functions to be assessed. This course will also cover the characteristics and administration of several neuropsychological assessment instruments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5335. Foundations of Health Psychology.**

This course will utilize a biopsychosocial approach to understand the psychology of wellness and disease. Topics include stress, coping, pain, social support, and chronic illness. Special emphasis will focus on physiological responses, psychoneuroimmunology, and somatization.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5345. Psychopharmacology.**

This course explores: (1) the reasons that humans and animals consume mind altering substances called psychoactive drugs, (2) the neuronal, chemical, and hormonal mechanisms underlying drug action, and (3) the environmental factors that modulate the impact of psychoactive drugs on emotional, cognitive, perceptual and behavioral expression in humans and animals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5348. Health Psychology: Prevention and Intervention.**

This course will focus on primary, secondary and tertiary prevention and intervention strategies to enhance health and wellness. Topics will include health-promoting behaviors, risky health behaviors, theories of health behavior change, the process of medical care, and treatment adherence. Special emphasis will be on planning, implementation, and assessment of interventions. Prerequisites: PSY 5335 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5352. Psychological Therapies.**

This survey course on evidence-based psychological interventions focuses on the active mechanisms by which therapies work and their application to specific diagnostic categories and conditions. Interpersonal, behavioral, cognitive-behavioral, and dialectical behavior therapies will be highlighted along with newer empirically-based therapies such as Acceptance and Commitment Therapy and mindfulness approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**PSY 5360G. Forensic Psychology.**

Examination of the relationships between psychology and the Criminal Justice system. Emphasis is placed on how psychology variables influence how individuals carry out their duties within the system. Sample topics include: (a) psychology and jury decision-making, (b) accuracy/impact of eyewitnesses testimony, and (c) how characteristics of defendants influence juries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**PSY 5360H. Psychology of Women.**

The course includes an in-depth examination of the development of women's roles and gender differences as well as a consideration of women's relationships, sexuality, employment, and diversity. Special topics such as women and violence will also be covered. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**PSY 5360N. Advanced Statistical Methodology.**

An overview of commonly used statistical methods in scientific research, with a core focus on generalized linear mixed models for individual studies and meta-analysis for study aggregation. Analyses will be implemented primarily in the R statistical programming environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 5360O. Applied Biostatistics in Health Research.**

This course will examine methodological approaches and applied biostatistics in health research. Emphasis on non-parametric univariate and multivariate statistical tests. Prerequisite: PSY 5311 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 5360P. Psychology of Culture and Diversity.**

This course provides a graduate level introduction to psychological theories and methods that examine the links between culture and human behavior, affect and cognitions. The course explores the relevance of these links to life development, mental health, social and gender identity, and sexuality. The student is expected to gain critical thinking skills in evaluating the validity of psychological knowledge within a cultural context. More importantly, the students are expected to gain an appreciation and understanding for cultural variation in human behavior across different cultures and an enhanced awareness and ability to work with a culturally diverse and multicultural population.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PSY 5362. Cognitive Neuroscience.**

This course provides a comprehensive introduction to cognitive neuroscience: the study of the biological basis of cognitive processes such as perception, attention, memory, language, and decision-making. This is a seminar course that will cover theoretical constructs, methods, and current research findings in cognitive neuroscience. Prerequisite: PSY 3322 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5366. Individual Study.**

Students design and execute original research or engage in extensive fieldwork in the field of psychology under the supervision of a faculty member. May be repeated once for credit. Prerequisite: PSY 5391 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PSY 5367. Research Seminar in Social Psychology.**

The course provides an in-depth examination of selected topics in social psychology. The focus of student commitment and responsibility is learning about social psychology and actively producing psychological knowledge. The course covers the research process and concludes with each student developing a research proposal.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5370. Learning, Cognition, and Motivation.**

Basic problems in the acquisition of responses, treating with such constructs as reinforcement, extinction, retention, forgetting, problem solving, motivation, and punishment. Major theories are treated through attention to classical experiments, but greatest emphasis is given to contemporary research. See Educational Psychology 5370.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5373. Human Memory and Memory Disorders.**

This course provides a comprehensive overview of topics in human memory including different types of memory and the brain structures involved. Special emphasis will be given to problems with memory including aging memory, amnesia, and Alzheimer's disease. This course will cover current theories of memory with discussions of cutting-edge research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5374. The Psychology of Language.**

This course provides a grounding in the cognitive theories/models of the major areas of language research: acquisition, comprehension, and production. It also provides an overview of the cognitive processes involved in several specific topic areas in language, such as syntax, semantics, discourse, prosody, bilingualism, neuro-linguistics, sign language, and reading.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5381. Introduction to Psychophysiology.**

This course will provide an overview of the principles, theory, and applications of using physiological measures to study mental processes. This course will illustrate how the use of psychophysiological measurements can enhance our understanding of brain/mind/behavior relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5391. Research Methods & Experimental Design.**

Problems in psychology, emphasis on research procedures. A research project is required of each student. Restricted to M.A. students in Psychological Research.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5398. Internship in Psychology.**

Students engage in extensive field work in a professional setting related to psychology. Prerequisite: PSY 5311 and PSY 5321 and PSY 5391 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PSY 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in PSY 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PSY 5399B. Thesis.**

This course represents a student's continuous thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PSY 5599B. Thesis.**

This course represents a student's continuous thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PSY 5999B. Thesis.**

This course represents a student's continuous thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PA 3300. Introduction to Public and Nonprofit Administration.**

This course introduces students to the fundamentals of public and nonprofit administration including the context, nature, and structure of public and nonprofit administration in America; management of public organizations; and challenges of the future.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 3301. Political Institutions and Public Service.**

This course examines the fundamental political institutions and values of American democracy. The role of public service as it relates to government and nonprofit administration is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 3310. Public Finance Administration.**

This course introduces students to fiscal administration and budgeting at different levels of government and nonprofit organizations in the United States. The course includes a wide range of theoretical and applied aspects of fiscal policy and financial administration. Both expenditures and revenues are examined. Prerequisite: MATH 1312 or MATH 1315 or MATH 1316 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 or HON 2302A or HON 2302B any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 3311. Analytical Techniques.**

This course introduces quantitative analytical methods and fundamental statistics ranging from descriptive to inferential procedures. Emphases will be placed on appropriate analytical techniques, use of software for data analysis, interpretation of results and crafting of professional reports based on data analysis. Prerequisite: MATH 1312 or MATH 1315 or MATH 1316 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 or HON 2302A or HON 2302B any with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 3314. State and Local Government.**

This course examines state and local government structure, organization, functions, powers and processes. The role of American and Texas state and local government institutions in the formulation and implementation of public policy will be covered. Corequisite: PA 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 3316. Metropolitan Politics.**

This course examines the political institutions and processes of urban and suburban America. Key contemporary metropolitan policy issues are used to highlight underlying tensions in policy formation and implementation. This course emphasizes the unique problems of cities and major metropolitan areas. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PA 3330. Public Personnel and Human Resource Administration.**

This course introduces the laws, context, procedures, personnel structures, techniques, and challenges associated with managing personnel in government and nonprofit organizations. Emphases will be placed on strategic planning for human resources, position classification, selection, recruitment, compensation and benefits, training, performance appraisal, collective bargaining and other aspects of personnel management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 3340. Administrative Law.**

This course examines the rule making, adjudication, and enforcement powers of federal and state agencies. The course also examines statutes that confer authority on such agencies and challenges to their constitutionality, as well as the principles that the courts employ to scrutinize agency actions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 3350. Public Policy Process.**

This course examines the theories, processes and practices of public policy formulation, implementation and evaluation. Emphasis may vary and include but not be limited to environment and sustainability issues, energy, social and economic policies.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 3351. Urban Management and Regional Policy.**

This course provides a critical introduction to the key aspects of regional and urban management and policy. Students will study how urban administration practices and regional policies influence the form and function of American cities. Corequisite: PA 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 4340. Issues in Law and Public Policy.**

This course examines contemporary legal issues and their relationship to public policy. Emphasis may include environmental protection, sustainability, climate change, voting rights, capital punishment, gun rights, and electronic challenges to privacy rights from the perspective of bureaucratic functions and non-profits. Corequisite: PA 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 4352. Comparative Public Administration.**

This course surveys the field of Public Administration emphasizing aspects of administration and public policy systems in the US and compares them with administration and public policy systems of other countries. Corequisite: PA 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 4362. Government, Nonprofit and American Business.**

This course examines the role of American business in public policy. It examines how the public, private and nonprofit sectors interact in the policy process. This includes ways in which policy and politics shape business and nonprofit culture and how businesses and nonprofits influence policy implementation through contracting. Corequisite: PA 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 4370. Ethics in American Government.**

This course examines key ethical and cultural challenges in public service, including service in government and in nonprofit and voluntary organizations. Content includes but is not limited to ethical theory and analysis, and examination of ethical issues in areas such as healthcare, privacy, accountability, education, research, planning, elections, and policy. Corequisite: PA 3301 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 4389. Internship in Public Administration.**

This course provides students with meaningful work in public administration as interns in public or nonprofit organizations. Under faculty supervision, students complete 150 hours of service and conclude their internship by completing a report on their work experience. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**PA 4398. Research in Public Administration.**

This course will examine basic concepts and approaches used in the study of public administration. Emphasis will be placed on identifying, locating, and employing resources to assist in understanding public administration at all governmental levels. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PA 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PA 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PA 5300. Introduction to Public Policy and Administration.**

This course introduces students to the study and practice of US public administration and policy. It also focuses on the dynamics of the democratic governance process.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5310. Public Finance Administration.**

This course examines the applied aspects of public finance including operating budgets, revenue estimation, capital budgeting, financial planning, budgetary decision-making, cost benefit analysis, and life-cycle costing. In addition, strategies for budget justification, presentation, and implementation are examined. The use of various budgetary tools and techniques are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5311. Introduction to Statistical Analysis.**

This course applies quantitative methods to problems faced by public administration practitioners. Topics include the use of descriptive and inferential statistics as they apply to decision-making in public management. Students gain hands-on experience with data collection, analysis, and interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5312. Program Evaluation and Administrative Statistical Analysis.**

This is an advanced course in the application of quantitative methods for the evaluation of public policies and programs. The course emphasizes the administrative and managerial environment. Prerequisite: PA 5311 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5313. Public Sector Economics.**

This course presents basic concepts of economics as applied to the public sector. Principles of economics for policy analysis and management are examined in the context of collective action, public choice, resource allocation, and service delivery. The course also examines the financing of national, state, and local governments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5314. Public Administration and Information Technology.**

This course explores the use of information technology in the public sector. It emphasizes the issues that public administrators need to know concerning the impact of information technology on their organizations. The course covers E-Democracy, E-Governance, Enterprise Architecture, Public Management Information Systems (PMIS), E-Procurement, and E-Commerce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5315. Public Performance Management.**

This course examines public sector performance management and measurement as tools for improving strategic planning, resource allocation, organizational learning, and internal operational processes. It also examines accountability, managerial performance, and evaluation processes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5320. Organizational Theory, Change, and Behavior.**

This course analyzes classic and contemporary literature on organizational theory and behavior in the public sector. Emphasis is placed on history and development of organizational theory and core concepts such as organizational culture, power, and change. The implications of organizational theory for democratic governance are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5330. Public Personnel Administration.**

This course introduces students to public personnel functions from a managerial perspective. Examples of topics covered include: recruitment and selection, performance evaluation, discipline, collective bargaining, classification, and compensation. Constructive leadership of government personnel that encourages a more competent, motivated, and representative administration workforce is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5331. Labor Management Relations.**

This course examines the historical development of public employee unions and the effects of collective bargaining agreements on personnel policy development. Public laws concerning collective bargaining procedures and strategy on the part of public managers are covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5332. Management Practices in Public Personnel Administration.**

This course is a seminar-based examination of selected topics in public personnel administration including job analysis, position classification, test construction, performance appraisal, succession planning, and affirmative action. The role of the personnel office as a strategic partner in accomplishing organizational goals is also explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5340. Introduction to Public Law.**

This course examines the regulatory environment, legal requirements, and constraints that public officials face when carrying out their duties. The use of online research tools to find administrative materials and analyze public law issues is emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5350. Public Policy Processes.**

This course is an overview of the process of public policymaking including policy formulation and implementation. Emphasis is placed on actors in the policy process and on the political environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5351. Urban Sustainability Policy.**

This course examines the basic components of urban transportation and land use policy. In addition to building an understanding of the historic foundation of urban policy and planning, students explore the underlying concepts related to sustainability to analyze underlying tensions and potential connections across policy spheres.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5352. Comparative Public Administration.**

This course examines differences in various national administrative systems and the role of international organizations. It explores differences that influence various public policy issues from countries around the world. Policy issues examined include poverty, human rights, health care, and the environment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter



**PA 5353. Ecology and the Politics of Sustainability.**

This course is an exploration of problems and policies dealing with air, water, waste, energy use, natural resources, sustainability, and global environmental issues. This class highlights the historical drivers of environmental policy. Implementation strategies, policy mechanisms, and compliance adherence are also examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5355. Environmental Policy.**

This course will introduce students to the public policy process and the details of U.S. environmental policy and administration. Problems and policies dealing with air, water, solid waste, hazardous waste, energy use, natural resources, climate change, sustainability, and global environmental governance will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5361. Introduction to the Nonprofit and Voluntary Sector.**

This course provides a foundation for understanding the history, scope, and function of the American nonprofit and voluntary sector. It includes an examination of the conceptual and theoretical underpinnings of the sector, and assessment of the role of these organizations in society, and their impact on public policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5362. Alternative Public Service Delivery Systems.**

This course examines alternative delivery of public services. The reliance on market mechanisms, contracting out, and privatization are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5370. Public Management and Ethics.**

This course explores issues of morality and ethics in the public sector. It also considers subjects such as administrative discretion, the public interest, democratic values, and dissent. The course aims to formulate a frame of reference for judging behavior and clarifying our role and responsibility as moral agents.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5380A. Texas Water Law and Policy.**

This course examines the chief policy issue that will determine the future of Texas: how state and local agencies administer the state's ground- and surface water legal regimes. With the legal and regulatory framework in place, the course investigates pressing water policy issues that confront Texas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PA 5380B. Environmental Litigation.**

This course conducts an in-depth examination of researching, filing, and litigating claims under federal and state environmental statutes. The course focuses on the aspects of environmental litigation that make it different than its non-environmental counterparts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**PA 5387. Research Practicum.**

This course uses structured group research to analyze a current policy, management, or administrative issue. A professor-led research team completes a final report detailing findings and recommendations for action. May be repeated once for additional credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5388. Directed Reading and Research.**

This course guides students in directed reading and research on various topics in public policy and administration under the direction of a graduate faculty member. The course may be repeated once with a different emphasis for additional credit for a maximum of 6 credit hours. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5389. Internship in Government.**

This course provides students with the opportunity to integrate classroom learning with practical experience. Students with little or no work experience related to public service are required to complete an internship. Students considering a career change should consider an internship. May be repeated once for additional credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5390. Applied Research Methodology.**

This course is an introduction to applied research methods in the public sector. Topics include the scientific method, research design, measurement, qualitative research, and sampling. Data collection methods such as survey research, content analysis, and secondary data analysis are also covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PA 5397. Research Design and Proposal Development for Public Administration.**

This course prepares students for the demands of academic and professional writing. Students learn how to identify a public problem, develop a research purpose statement, and complete a literature review around a conceptual framework. This course prepares the student for their Applied Research Project (ARP). Prerequisite: PS 5390 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5398. Applied Research Project.**

This course serves as the capstone experience for MPA students. Students complete an original and empirical Applied Research Project (ARP), complete an oral defense of the ARP, and prepare the ARP for publication. Prerequisite: PA 5397 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PA 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in public administration.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PA 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PA 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PA 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PH 1310. Foundations of Personal Health.**

This course provides an introduction to personal health and wellness topics including nutrition, mental health, sexual health, and physical fitness with an emphasis on health trends and health behaviors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PHED 1304

**PH 1320. Introduction to Public Health.**

This course provides students a basic understanding of U.S. and global public health systems. Students are also introduced to various public health settings, specific careers in public health, and public health certifications.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 2338. Substance Use and Abuse.**

This course explores the impact of substance use and abuse on personal, public, and population health. Course content includes current statistics and information on substance use and abuse issues and substance prevention interventions with a focus on public health prevention strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PHED 1346

**PH 2340. Community Health.**

This course acquaints students with issues, trends, developments, and principles in community health. The course also provides an overview of selected topics, such as epidemiology, community organization, and program planning. Corequisite: PH 1320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3301. Environmental Health.**

This course is an examination of the ecological impact resulting from contemporary sociopolitical action and its resulting influence on human health.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3315. Statistics in Public Health.**

This course emphasizes analysis and interpretation of health-related data. Descriptive and inferential statistics (including measures of central tendency and variability, estimation, ANOVA, and regression) will be used to understand factors associated with current health-related issues. (WI) Prerequisites: MATH 1312 or MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PH 3321. Health in the School Setting.**

This course offers a foundation in health methods and activities to provide resources for the elementary and secondary school teacher. Provides an overview of current school health issues: Whole School, Whole Community, Whole Child model, mental health, personal health, family life, substance abuse, and violence in the school setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3330. Inclusion and Diversity in Women's Health.**

This course is designed to explore the health care concerns unique to women and to provide students with opportunities to create strategies to improve women's health. Particular attention will be given to issues that affect women in under-served populations and how to more effectively serve their needs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3348. Prevention of Disease.**

This course provides an overview of the etiology of communicable and chronic diseases with special emphasis on health promotion activities to reduce the incidence of disease in communities and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3350. Consumer Health.**

This course focuses on consumer health and decision making with regard to the selection of health products and services. Students will learn how to effectively evaluate health information with emphasis on consumer literacy, public policy, and consumer products and services.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3360. Issues in Human Sexuality.**

The course provides a study of human sexuality as a lifelong process of acquiring information and forming healthy attitudes, beliefs, and values regarding sexuality. Human sexuality's impact on personal and public health will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3370. Epidemiology.**

This course introduces students to epidemiological concepts including determinants of health and patterns of disease in populations, population health descriptive techniques, use of health indicators and secondary data sources. Students will focus on epidemiology in community health assessment and program evaluation, and development of public health strategies and policy. Prerequisite: MATH 1312 or MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 or HON 2302A or HON 2302B and with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3374. Global Health.**

This course focuses on principles of international health in global populations. Students explore roles of health educators collaborating with providers of health services to diverse populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 3376. Worksite Health Promotion.**

The purpose of this course is to introduce students to worksite health promotion. The focus of the course is on planning, implementing, and evaluating worksite health promotion programs. The course addresses other contemporary health issues, policies, and considerations that affect worksite health promotion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 4100. Professional Development in Public Health.**

This course provides the opportunity for students to obtain a community or public health promotion internship and to actively participate in professional development activities including conferences, development of resumes and interaction with health professionals. If a student is planning to complete an internship, this course must be completed during the semester immediately prior.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 4331. Health Disparities.**

This course explores social determinants of health and health disparities in the U.S. and globally. Students explore past and existing public health initiatives to address health disparities in various U.S. and global communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 4335. Public Health Leadership.**

This course allows students to develop discipline-specific leadership skills and a personal leadership philosophy which will help in managing public health and health promotion programs. Topics include leadership philosophy, staffing, programming, budgeting, public relations, facilities, and evaluations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PH 4336. Health Behavior Theory.**

This course introduces students to health behavior theory, including cognitive, operant, and social theories of motivation and behavior, behavior change theory, social marketing, and social ecology. Students will also learn about the role of behavior theory in health promotion practice and public health interventions. (WI) Prerequisites: PH 1320 and PH 2340 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PH 4347. Independent Study in Public Health.**

This course is designed for undergraduate students who display potential for independent research in public health. Students work individually with faculty to develop an independent research study/project in public health. Open on an individual basis by arrangement with the division chair. May be repeated for credit with different emphasis. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**PH 4360. Internship in Public Health.**

This part-time internship involves the application of public health concepts to a community or public health setting. Students participate in the work of a health organization/agency and complete a semester-long project. A minimum of 200 contact hours is required. (WI) Prerequisite: PH 4100 with a grade of "C" or better and a minimum 3.0 major GPA and departmental approval. Corequisite: PH 4640 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**PH 4640. Public Health Program Planning and Evaluation.**

Students apply professional knowledge and skills to the development of public health programs. Topics include needs assessment, data gathering techniques, instrument design, data and statistics, and the interpretation, reporting, and application of findings for program development. Cultural competency and communication are covered. (WI) Prerequisite: PH 1320 and PH 2340 both with grades of "C" or better. Corequisite: PH 4336 with a grade of "C" or better.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PH 4660. Internship in Public Health.**

This internship involves the application of public health concepts to a community or public health setting. Students participate in the work of a health organization/agency and complete a semester-long project. A minimum of 400 contact hours is required. (WI) Prerequisites: PH 4100 and PH 4640 both with grades of "C" or better and a minimum 3.0 major GPA and departmental approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**PH 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PH 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PH 5301. Environmental Health Issues.**

This course is an examination of the ecological impact on the environment resulting from contemporary sociopolitical action and its resulting influence on human health. Students will be guided to research and interpret evidence-based information on major current environmental issues facing local, national, and global communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5302. Current Issues in Public Health.**

This course will investigate the contemporary issues impacting public health on the local and national levels. Particular attention will be paid to the goals and objectives of the U.S. Healthy People Initiative and the ten essential public health services. Topics will focus on emerging trends in morbidity and mortality as identified by public health governing institutions, while exploring historical and current perspectives on public health practice. Students will examine the impact of current issues on the roles and responsibilities of the Certified Health Education Specialist.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5303. Social Determinants of Health.**

This course explores the social ecological conditions which impact health and quality of life among various communities. Public health impact of socioeconomic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context will be analyzed. The link between social determinants and the U.S. Healthy People Initiative will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5305. Grant Proposal Writing in Public Health.**

This course provides the fundamentals of writing grant proposals in the social sciences. Instruction covers how to package a successful proposal from start to finish, including defining program objectives, selecting approaches and a plan, and preparing a program evaluation and budget.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5310. History and Philosophy of Public Health Education and Promotion.**

This course is an intensive study of historical and philosophical contributions to public health education and promotion program development. Current political issues, public health issues, and influential cultural changes are examined. Focus is placed on developing a professional philosophy of practice in public health education and promotion practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5312. Writing for Public Health Professionals.**

This course provides a systematic approach to improve technical and professional writing skills. Specifically, theory-based methods for establishing a productive writing habit, generating and editing text, and self-identifying and self-correcting writing problems are presented. Writing for and application of public health research are emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5315. Applied Behavioral Statistics in Public Health.**

This course focuses on the study of introductory and intermediate statistics and procedures commonly used in public health practice and research. Emphasis will be placed on application of statistical models, analysis software, and interpretation of findings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5320. Foundations of Public Health.**

This course is an in-depth study of past and current public health programs. The course focuses on the examination of public health programs, policies, and systems that have impacted health status in different populations. A collection of current case-studies will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5321. Advanced Health Behavior Theory.**

This course focuses on the presentation and critical analysis of the role of theory in health behavior, the description of different theories being utilized in health research and interventions, and the application of these theories to interventions and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5325. Ethical Principles in Public Health.**

This course provides an in-depth analysis of ethical standards, principles, and behaviors related to the field of public health. Students will explore how to apply, monitor, and model ethical standards in the profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5331. Health Disparities.**

This course explores social determinants of health and health disparities in the U.S. and globally. Students explore past and existing public health initiatives to address health disparities in various U.S. and global communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5335. Public Health Leadership.**

This course covers structured experiences for developing administrative leadership for public health programs. Included are leadership philosophy, staffing, programming, budgeting, public relations, facilities, and evaluations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5345. Public Health Issues in Human Sexuality.**

This course provides for an in-depth study of human sexuality as a lifelong process of acquiring information and forming healthy attitudes, beliefs, values, and practices regarding sexuality. Students analyze information and resources for implementing and advocating for quality inclusive instruction, policies, and evidence based approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5346. Public Health Research and Population Surveillance.**

This course focuses on research models used in public health and population surveillance. Students learn how to design data collection strategies for research and program evaluation in the social and behavioral sciences and public health initiatives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5347. Independent Study in Public Health.**

This course allows for independent study of one or more problems in public health that hold special interest for a student or offers opportunity for professional improvement and growth. Open on an individual basis by special arrangement with the Program Coordinator. Repeatable once with a different emphasis. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PH 5348. Disease Prevention and Health Promotion.**

This course provides an overview of the etiology of communicable and noncommunicable diseases with special emphasis on public health initiatives and health promotion activities which reduce the incidence and burdens of disease in both individuals and communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**PH 5350. Advanced Public Health Program Planning and Evaluation.**

Students examine social ecological influences on population health in the context of public health program development. Students explore the use of epidemiological data to assist in developing health education and health promotion programs. Concepts include needs assessment, strategy selection, coalition development, implementation plans, and evaluation approaches.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5360. Internship in Public Health.**

This 200-hour internship provides students with professionally related experience. Students may work with diverse target audiences in public health settings. The internship is approved and supervised by a Program Coordinator or assigned faculty. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PH 5370. Applied Epidemiology.**

Applied epidemiology is the science of tracking diseases and disease determinants in populations. Students will explore principles of epidemiology and biostatistics, as well as methods of disease and behavior surveillance. This course highlights the use of surveillance data to develop public health interventions and prevention programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5374. Global Public Health.**

This advanced course focuses on principles of international health with global populations. Emphasis is placed on assessing, planning, implementing, and evaluating prevention strategies. Students explore roles of health educators collaborating with providers of health services to diverse populations. Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5376. Health Promotion in the Workplace.**

In this course, students will learn the standard approaches of developing and implementing evidence-based workplace health promotion programs. The course will focus on practical methods for needs assessment, intervention development, and program evaluation in various workplace settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**PH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in PH 5399B. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PH 5660. Internship in Public Health.**

This course requires students to complete a 400-hour internship to gain professional experiences. Students may work with diverse target audiences in public health settings. The internship is approved and supervised by a Program Coordinator or assigned faculty. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**PH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**PH 7321. Applied Theories of Health Behavior.**

This course focuses on the presentation and critical analysis of the role of theory in health behavior, the description of different theories being utilized in health research and interventions, and the application of these theories to interventions and research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is completed. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**1 Credit Hour. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**QFE 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is completed. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**2 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**QFE 5310. Microeconomic Theory and Applications.**

This course provides a rigorous introduction to the methods of microeconomic theory and quantitative applications. Topics covered include consumer and producer theory, decision-making under uncertainty, markets and competition, general equilibrium, and game theory. Along with each topic, applications to empirical work are conducted by discussing and re-producing quantitative results of journal articles. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5315. Macroeconomic Theory and Applications.**

This course explores macroeconomic policy arguments at an advanced level. Topics include traditional and modern theories of income, price, employment, long-run economic growth, business cycle models, role of monetary and fiscal policy in promoting economic stability, and empirical applications of macroeconomic theories. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5320. Econometrics.**

This course combines theoretical framework of regression models with empirical applications in economics, finance, and public policy. Topics include different modeling techniques, assessment tools, and application of computer-assisted regression analysis to business and economic problems. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5330. Financial Theory and Corporate Policy.**

This course provides an introduction to theories fundamental to the field of finance, with specific emphasis on corporate finance applications. Topics covered include theories of utility, state-preference, mean-variance optimization, asset pricing, and capital structure, as well as introduction to option pricing theories applied to corporate finance. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5335. Financial Analytics.**

This course explores open-source software in a Finance context. This is a hands-on practical programming course with step-by-step source code. Students learn major financial models related to investments and corporate finance and how to write their own code to implement models in real-world scenarios as well as visualize and analyze financial data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5340. Financial Econometrics.**

This course explores corporate finance and asset pricing models in application of economic and financial data. Topics include estimation and inferences of financial models, principle component/factor analysis, capital asset pricing, volatility modeling, risk management, derivative pricing, portfolio allocation/optimizations, simulating financial systems, among others. Analytical software will be used to estimate models.

Prerequisite: QFE 5320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5353. Fixed Income Analysis.**

This course covers the valuation of a wide variety of fixed income securities and their derivatives, including money-market instruments, government bonds, repurchase agreements, interest-rate swaps, mortgage-backed securities, and corporate bonds. It focuses on analytic tools used in bond portfolio management and interest rate risk management. Prerequisite: FIN 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5369. Internship.**

This course is based on experiential learning. Students will integrate both professional and academic experiences through an internship with an external employer. Prerequisite: Must have completed 12 graduate hours and other prerequisites may be specified by the employer with the consent of Program Director and department chair and instructor approval.

**3 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5390A. International Economics.**

This course examines open economy macroeconomics and monetary issues of international economics. Topics include international financial markets, exchange rates, trade policies, international monetary systems, international financial crises and contagions, and applications of theory with data on international macroeconomic & financial behavior. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better or advisor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**QFE 5390B. Research Topics in Sports Economics.**

This course provides a statistically rigorous introduction to the field of sports economics at the graduate level. Students will be required to read recent literature in the field of sports economics, with a focus on empirical research using data from US professional baseball, US and English professional soccer, and US collegiate sports. Research topics will cover both theoretical background and empirical results, covering such topics as the demand for sport, the structure of the sports industry, and the labor markets of sport. Prerequisite: QFE 5310 and QFE 5320 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**QFE 5392A. Financial Markets and Institutions.**

This course focuses on US financial markets and institutions, with a lesser focus on their international counterparts. Topics covered include the characteristics and roles of the various financial markets including money and capital markets, equity and debt markets; relationships between the financial markets and financial institutions; interest rate fundamentals; and the impact of regulators and central banking on financial markets and institutions. Prerequisite: ECO 2314 and ECO 2315 and FIN 3312 and MATH 1329 and QMST 2333 all with grades of "B" or better or advisor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**QFE 5392B. Securities Law.**

This course explores the role of U.S. federal securities laws that enable market participants to make legal, ethical, and strategic business decisions. Topics covered include the Securities Act of 1933, the Securities Exchange Act of 1934, Sarbanes-Oxley, Dodd Frank, and other topical legislation, as well as global regulatory, judicial, and litigation trends.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5392C. Active Portfolio Management.**

This course focuses on practical applications of the modern portfolio theory. It develops innovative processes to uncover raw signals of asset returns and convert them to superior return forecasts. These forecasts are used to construct portfolios and control risk. This course also teaches how to use economics, econometrics, and operation research to solve complicated practical investment problems. It additionally covers a comprehensive set of concepts for guiding the process of active investment management. Prerequisite: QFE 5330 and QFE 5320 both with grades of "C" or better or advisor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**QFE 5392D. Financial Derivatives with Python.**

This course covers financial derivatives, their pricing and their use for hedging. The types of derivatives studied are futures, forwards, vanilla and exotic options. Mathematical tools such as binomial trees, Monte Carlo methods, implied volatilities, replication portfolios, and calculation of the Greeks are introduced. Python programming language is used to implement the covered models. Prerequisite: QFE 5330 and QFE 5320 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**QFE 5395. Independent Study.**

This course focuses on individual in-depth study. Students, in consultation with a faculty member, choose a selected area of study in Quantitative Finance or Economics on a specialized project. Prerequisite: instructor and program director.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**QFE 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Quantitative Finance & Economics. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**QFE 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is completed. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**QFE 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is completed. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**QFE 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is completed. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**RTT 3120. Clinical Simulation Lab I.**

Students are provided instruction and simulated practice in a controlled laboratory setting. This course provides first-year students foundational clinical set-up skills from which to build on during the clinical learning practicum course.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 3121. Clinical Simulation Lab II.**

Students are provided instruction and simulated practice in a controlled laboratory setting. This course provides instruction, demonstration and participation in immobilization, positioning and simulation with the aid of an anthropomorphic phantom. Students will learn aspects of simulation for basic treatment delivery applications.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 3220. Directed Clinical Learning I.**

Students will observe the basic operations of the radiation oncology clinic while interacting with the multidisciplinary team involved in providing treatment and care. The student will be introduced to oncology terminology, equipment, and techniques used for treatment. Learning is achieved through direct patient care, with instruction, demonstration and direct supervision.

**2 Credit Hours. 1 Lecture Contact Hour. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 3221. Directed Clinical Learning II.**

Students will gain additional skills in clinical procedures, interaction with patients and professional personnel. Students apply knowledge from previous clinical learning experience under the supervision of a registered radiation therapist. Students are tested on intermediate clinical radiation therapy skills.

**2 Credit Hours. 1 Lecture Contact Hour. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 3300. Patient Care in Radiation Oncology.**

This course will focus on basic nursing concepts involved in providing care for the cancer patient. Topics to be included in the class will be cancer as a chronic health problem, social roles and cancer, multidisciplinary approach to patient care, psychosocial dimension of cancer, in-treatment examinations, follow-up examinations, emergency management, chemotherapy and nutritional aspects of treating patients with cancer.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 3301. Introduction to Radiation Oncology.**

An overview of radiation oncology and the role of the radiation therapist. Presentations will orient the student to the physical and biological basis of radiation equipment, procedures, tumor pathology, and patient interaction. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**RTT 3302. Radiologic Science and Medical Imaging.**

This course will cover the principles governing production of radiation, interaction of radiation with matter, and protection of the radiation worker and patient from exposure. Basic principles of x-ray equipment, exposure factors, latent image formation, and processing of radiographs are presented. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 3310. Physics of Radiation Therapy I.**

Students will learn the principles of radiation physics as they apply to the treatment and care of the cancer patient. Course will include a thorough review of x-ray production, fundamental principles, concepts and terminology. Topics studied include measurements, general principles, structure of the atom, structure of the matter, electrostatics, magnetism, electrodynamics, electromagnetism, rectification and production and properties of radiation and radiographic techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 3314. Radiation Therapy Sectional Anatomy.**

The course provides instruction in identifying cross-sectional anatomy to develop the ability to make anatomic correlations between multiple planes of view. Major organs, lymphatics, vessels are emphasized as related to the clinical significance in the field of radiation therapy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 3350. Radiobiology.**

This course will cover the principles of cell response to radiation, including tissue sensitivity, survival, repair and the latent effects of irradiated tissue. Topics to be covered include the development of radiation science, cellular targets for radiation action, target theory, physical/ chemical factors affecting radiation response, biological factors, repair and recovery, fractionated doses and dose rate, early/ acute effects of whole body exposure, late/chronic effects of whole body exposure, and radiation protection dose guidelines.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4120. Clinical Simulation Lab III.**

Students are provided instruction and simulated practice in a controlled laboratory setting. A continuation of RTT 3121. This course provides instruction, demonstration, and participation in immobilization, positioning and simulation with the aid of an anthropomorphic phantom. Students will learn aspects of simulation for basic intermediate treatment delivery applications.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4121. Clinical Simulation Lab IV.**

Students are provided instruction and simulated practice in a controlled laboratory setting. A continuation of RTT 4120. This course provides instruction, demonstration and participation in immobilization, positioning and treatment simulation. Students will learn aspects of simulation for basic, intermediate, and some advanced treatment delivery applications.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4122. Clinical Simulation Lab V.**

Students are provided instruction and simulated practice in a controlled laboratory setting. A continuation of RTT 4121. This course provides instruction, demonstration and participation in immobilization, positioning and treatment simulation. Students will learn aspects of simulation for basic, intermediate, and some advanced treatment delivery applications.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4189. Radiation Therapy Literary Scholarship and Manuscript Writing.**

This intensive writing course provides instructions in research strategies, critical review and analysis of peer reviewed publications. An introduction to scholarly resources and professional manuscript development using peer reviewed journal guidelines for the profession of radiation therapy. This course prepares students for RTT 4191 Radiation Therapy Seminar. (WI).

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**RTT 4190. Professional Issues in Radiation Therapy.**

This capstone course provides a comprehensive review of the program curriculum and clinical practice in the field. Current radiation therapy treatment management techniques and issues are presented for analysis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4191. Radiation Therapy Seminar.**

This course is a continuation of RTT 4189. The course provides instruction in the completion of a final draft for the student's technical manuscript. The course work builds from the completed manuscript and draws from the material and knowledge gained in RTT 4189 to develop a formal presentation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4220. Directed Clinical Learning III.**

Students will continue to develop skills during this clinical course. Progressive interaction with patients and professional personnel are monitored as students practice radiation therapy in a supervised setting. Additional areas include problem solving, identifying machine components and basic side effect management. Students will demonstrate competence in beginning, and intermediate procedures.

**2 Credit Hours. 1 Lecture Contact Hour. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4221. Directed Clinical Learning IV.**

The course provides students the opportunity to continue to develop confidence and increased skill in simulation and treatment delivery. Students will demonstrate competence in beginning, intermediate, and some advanced procedures through supervised clinical instruction, progressing through a competency-based educational sequence.

**2 Credit Hours. 1 Lecture Contact Hour. 24 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4222. Directed Clinical Learning V.**

The students will complete their clinical training by practicing all the skills they have learned in the classroom, lab, and clinical practicum. The students will continue demonstrating proficiency while completing the Skills Competency Checklist.

**2 Credit Hours. 1 Lecture Contact Hour. 24 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4291. Radiation Therapy Registry Review.**

This course provides a comprehensive review of the program curriculum and clinical practice in the field. Current radiation therapy treatment management techniques and issues are presented for analysis.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter



**RTT 4310. Physics of Radiation Therapy II.**

Students will continue to learn the principles of cell response to radiation. Topics covered will include properties of x-ray and gamma radiation, radiation units, x-ray production, photon interactions, beam characteristics, radioactivity, treatment units, and particle irradiation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4330. Quality Assurance.**

Students will study quality assurance tests related to patient charts, treatment accessories, patient communication devices, machine reading and safety devices. Emphasis on quality control procedures to include Continuous Quality Improvement (CQI), Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and responsibilities of each team member in relation to quality assurance duties.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4331. Operational Issues in Radiation Therapy.**

Course content is designed to focus on various radiation therapy operational issues. Accreditation, CQI development and assessment techniques will be presented. Human resource issues and regulations impacting the radiation therapist will be examined. Topics include the role of network information systems within the radiation oncology department. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**RTT 4360. Dosimetry I.**

This course will cover the basic concepts in treatment planning and clinical dosimetry. Students will learn to identify treatment preparation processes and needs for beam modifying devices. Students will also be taught isodose charts for several treatment arrangements and be able to calculate a variety of external beam treatment formulas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4361. Dosimetry II.**

Students will learn additional concepts in treatment planning and clinical dosimetry addressed in Dosimetry I. Computerized treatment planning applications will enhance the understanding of medical dosimetry.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Lab Required

**Grade Mode:** Standard Letter

**RTT 4370. Clinical Radiation Oncology I.**

The first of a two-part course, this course advances the student's knowledge of neoplastic disease management. Instruction will focus on the regional anatomy and physiology, epidemiology and etiology, detection and diagnosis, diagnostic procedures, histopathology, patterns of spread principles of treatment, staging, and prognosis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RTT 4371. Clinical Radiation Oncology II.**

The second of a twopart course, this course is a continuation of disease specific instruction. Instruction will focus on the regional anatomy and physiology, epidemiology and etiology, detection and diagnosis, diagnostic procedures, histopathology, patterns of spread, principles of treatment, staging, and prognosis. Prerequisite: RTT 4370 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RDG 3215. Residency-Based Assessing Literacy: Early Childhood Through Grade Six.**

This course will examine principles of literacy assessment to guide literacy instruction for all children, including culturally and linguistically diverse students, and plan appropriate instruction in a residency-based setting. As this is part of a multi-course, residency-based experience, students must apply in advance for placement and meet program-specific prerequisite requirements. Prerequisite: Admittance to Educator Preparation Program and A minimum 2.75 overall GPA and Departmental Approval.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 3221. Residency-Based Literacy Instruction for EC-6.**

This course will allow students to critically analyze and apply current literacy methods and materials with a focus on ESL theories and methodologies. As this is part of a multi-course, residency-based experience, students must apply in advance for placement and meet program-specific prerequisite requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental Approval.

**2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 3311. Teaching English Phonology, Orthography, and Morphology.**

This course focuses on what educators need to know about the English language in order to teach phonics, spelling, and vocabulary effectively. The course is rooted in a linguistic and historical exploration of language change through usage, but focuses on applied understanding of these concepts in PK-12 reading and writing instruction. Topics include the linguistic underpinnings of decoding instruction, the structure of English orthography and its influence on spelling instruction, and the role of etymology/morphology in generative vocabulary instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 3312. Reading and Writing Instruction for Children with Special Needs.**

Course focuses on classroom reading instruction for children not making average progress in literacy. Course topics: nature and identification of literacy difficulties, including dyslexia; modification of instruction for children with special needs; diagnostic teaching, teacher/program effectiveness and legal requirements of special populations. Prerequisite: RDG 3311 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 3315. Assessing Literacy: Early Childhood Through Grade Six.**

This course examines principles of literacy assessment to guide literacy instruction for all children, including culturally and linguistically diverse students, and plan appropriate instruction in a field-based setting. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 3320. Integrating Reading and Writing.**

This course focuses on the integration of reading and writing with other subject areas, especially social studies, with special attention given to ESL methodologies for language arts instruction. The workshop approach for reading and writing is emphasized. (WI) (MULP) Prerequisite: RDG 4320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Writing Intensive

**Grade Mode:** Standard Letter

**RDG 3321. Literacy Instruction for Early Childhood Through Grade Six.**

This course engages students in the critical analysis and application of current literacy methods and materials, with a focus on ESL theories and methodologies. Course is taught in a field-based setting. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. (WI) (MULT) Prerequisite: Admittance to Educator Preparation Program and 2.75 Overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**RDG 3323. Teaching Literacies in the Content Areas.**

This course focuses on content-specific literacies in secondary teaching fields with an emphasis on reading, writing, and other 21st Century literacies in support of content-area learning. Topics include strategies for differentiating instruction across a variety of content areas, honoring socio-cultural dimensions of literacy, writing to learn, assessing literacies using various methods, and adapting instruction to meet student learning needs. Numerous content areas will be addressed. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 4310. Content Reading.**

This course provides information about instruction in the elementary content areas with emphasis on the effective use of textbooks and tradebooks. Course topics include: nature and purpose of content instruction and reading, text selection, use of tradebooks, comprehension, inquiry learning and problem solving, and assessment and meeting individual needs in content reading. As this is part of a multi-course, field-based experience, students must apply in advance for placement and meet program-specific prerequisite and corequisite coursework requirements. Prerequisite: Admittance to Educator Preparation Program and 2.75 overall GPA and Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 4315. Critical Media Literacy for Educators.**

This course examines critical media literacy and how to critically engage with, and make sense of, the media, including social media. This course helps students develop the analytic tools needed to examine media content and make more informed choices as an active audience. Students develop the critical skills to analyze, deconstruct, and reconstruct media messages, and develop lessons to help their middle school students to do the same. As this is part of a multi course, field based experience, students must apply in advance for placement and meet program specific prerequisite requirements. Prerequisite: Admittance to Educator Preparation Program and a minimum 2.75 overall GPA and departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**RDG 4320. Language and Literacy in Diverse Communities.**

This course includes the examination of sociolinguistic theories and an introduction to culturally responsive teaching of literacy. Topics address social identity factors, ethnicity, language variation, bilingualism, and the acquisition of Standard American English with implications for effective literacy instruction. (MULT) Prerequisite: CI 2310 or CI 2311 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 4330. Teaching Reading/Language Arts in Middle School.**

This course examines how the teaching of reading/language arts is informed by theory and research. Students will analyze the foundations of reading and language arts as disciplines, reading/language arts curricular issues, reading/language arts pedagogy, controversial issues in reading/language arts pedagogy, and the construction of conceptual, inquiry-based units. Prerequisites: RDG 4320 and (RDG 3311 or RDG 3312 or RDG 3320) both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**RDG 4380. Independent Study in Reading Instruction.**

Analysis and interpretation of selected topics of special interest in reading and language arts instruction. Topics and instructors will vary from semester to semester. Repeatable for credit with different emphasis. Prerequisites: Admittance to the Educator Preparation Program; 2.75 Overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**RDG 5310. Teaching Literacy with Children's and Young Adult Literature.**

Course focuses on current research and methods for using children's and young adult literature, including multicultural literature for literacy instruction in grades EC-12. Students will explore different genres and evaluate and select literature for instruction across the curriculum.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5320. Foundations of Literacy Instruction.**

Course surveys reading and writing theories, processes, and models; theoretical bases of literacy instruction, stages of literacy development; the relationship between oral language and literacy; and classic and current quantitative and qualitative literacy research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5321. Literacy Teaching and Learning in the Early Years: EC-Grade 3.**

This course focuses on effective literacy instruction in early childhood through third grade. Topics covered include early literacy skills, science of reading, culturally and linguistically relevant practices with young children, literacy-play connections, and engagement. The course examines reading curricula, early literacy assessment, and selection of diverse material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5322. Teaching Reading in the Elementary and Middle Schools.**

Course focuses on effective literacy instruction in elementary and middle schools, including the following areas: word identification, spelling, word study, vocabulary instruction, comprehension strategy instruction, fluency, critical literacy, and engagement. The course examines reading curricula, instructional assessment, and selection of material.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5324. Developing Content Area Literacy in Middle and Secondary Schools.**

Course examines literacy development in middle and secondary school content areas. Topics include classroom assessment, development of strategic literacy, fluency, critical thinking, lifelong attitudes, interests, study strategies, and literacy in multiple sources of narrative and information text ranging from textbooks to electronic texts. Prerequisite or corequisite: CI 5363.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5326. Developmental Literacy in the Middle and Secondary Schools.**

Course focuses on effective literacy instruction for middle- and secondary-school students who struggle with literacy. The course also addresses reading curricula and instruction, assessment, and materials selection. RDG Majors, Minors, and MRT candidates only, or with permission of instructor.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5331. Literacy Methods for Linguistically and Culturally Diverse Students.**

Course topics include linguistic and literacy challenges unique to students whose native language or dialect is not English and innovative methods for teaching literacy to linguistically and culturally diverse students. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5334. Family Literacy.**

Family literacy is an intergenerational program that integrates adult literacy and emergent literacy education. This course will provide students with the knowledge and abilities to manage a family literacy program. Students will analyze related learning theories, population needs, program structures, and policy issues, including diversity and accountability. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5335. Basic Academic Literacy.**

This course examines basic literacy needs and appropriate instructional strategies for traditional and non-traditional students entering college. Content covers basic to academic literacy, analysis of instructional strategies, comprehension, fluency, vocabulary, decoding, and phonemic awareness.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5340. Connecting Reading and Writing in the Classroom.**

This course focuses on the relationships between reading and writing; the connections among written language, oral language, and thinking; and the organization of integrated reading and writing instruction in grades EC-12, including workshop techniques and thematic teaching.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5341. Writing Pedagogy in the P-12 Classroom.**

In this course, students will examine theories, research, and practice in writing instruction in P-12 classrooms. Students will reflect on process and subsequently use this information for their own practice and instruction. They will also examine and develop standards, curricula, and policies at district, state, and national levels. Prerequisite: RDG 5340 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5345. Assessment-Driven Literacy Instruction.**

Course focuses on classroom literacy assessment, interpretation of assessment results, and designing and implementing effective literacy instruction based on assessment results. Course concentrates on the special needs of individual readers within the classroom setting and includes interpretation of formal assessments. Prerequisite: RDG 5322 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5350. Literacy as Sociocultural Practice.**

Using a social constructivist lens, this course examines broadening conceptions of literacy and what it means to be literate in the 21st century. Students learn about current research, theory and practice pertaining to sociocultural models of literacy and literacy instruction. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 5370A. New Literacies.**

Course is an in-depth study of research and theory pertaining to the New Literacy Studies (NLS). Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Topics

**Grade Mode:** Standard Letter

**RDG 5370B. Social, Cultural, and Political Contexts of Literacy Instruction.**

This course explores implications of social, cultural, and political contexts for literacy instruction/policy. Students examine how literacy policies are created, shaped, and implemented and the impact of policies on how literacy is defined. Repeatable for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5370C. Foundations of Integrated Reading & Writing Pedagogy.**

The purpose of this course is to develop, explore and reflect on literacy as social practices within a community.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 5370D. Community Literacy.**

The purpose of this course is to explore and reflect on literacy as social practices within a community, informing effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**RDG 5371. Foundations of Postsecondary Integrated Reading & Writing Pedagogy.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5372. New Literacies Studies in Developmental Education.**

This course focuses on the research and instructional practice of New Literacies Studies for post-secondary developmental education. It includes an examination of diverse ways in which multiple digital technologies broaden and change the demands on those literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5374. Foundations of Postsecondary Developmental Reading and Writing Theory.**

This course examines core theories of postsecondary literacy. Emphasis will be placed on historical, theoretical, and pedagogical models relevant to methods of teaching postsecondary developmental reading and writing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5375. Postsecondary Developmental Reading and Writing Assessment.**

This course examines the history, theory, research, policy, and practice related to reading and writing assessment at the postsecondary level. Students will survey various placement, diagnostic, informal, affective and non-cognitive, and exit-level measures.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5376. Postsecondary Disciplinary Literacies.**

This course examines core principles of disciplinary literacy. Students will examine the theory, research and pedagogical practices of literacy across the disciplines with an emphasis on understanding the potential for postsecondary learners and developmental education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5380. Independent Study in Reading Research.**

In-depth analysis and interpretation of selected research topics of great current interest in reading and language arts. Topics and instructors will vary from semester to semester. May be repeated with different topics for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 5381. Internship in Postsecondary Developmental Literacy Education.**

This course is designed for students to gain experiences working in postsecondary developmental literacy contexts. Students must complete a one-semester, 150-hour internship at a site approved by their instructor and the site supervisor. Students develop an individualized learning plan and submit a comprehensive portfolio documenting their internship activities.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**RDG 5395. Teaching Academic Literacy to Adults.**

Course focuses on teaching academic literacy to older students and adults in post-secondary settings. Topics include: the literacy needs of adult learners in formal schooling; appropriate assessment strategies; instructional methodologies, materials, and resources; and the school-based groups, schools, and agencies that serve these students.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6330. Language Acquisition and Development for Literacy Instruction.**

Course topics include first and second language learning; dialect acquisition and development; theories and stages of language development; language diversity; and language disorders. Students read and interpret research and study language development of EC-12 children from varying linguistic backgrounds.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 6333. Reading Specialist Capstone: Professionalism and Professional Development.**

Course will focus on using interpretations of assessment data, literacy research, and state/national curriculum/assessment requirements to demonstrate leadership and design/deliver professional development/coaching for literacy assessment and instruction. Capstone students will also work in approved educational settings to demonstrate the roles of the Reading Specialist (including literacy teacher, interventionist, leader, and coach) in a 160-hour supervised internship. Reading Specialist Candidates only. Prerequisites: Departmental Approval.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**RDG 6336. Reading Specialist Internship I: Designing and Evaluating Literacy Research in Schools.**

This course focuses on designing, conducting, and interpreting quality, school-based research to guide literacy instructional decision-making. Internship students will work in approved educational settings to demonstrate the roles of the Reading Specialist including literacy teacher, leader, coach, and researcher. Prerequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326. Corequisites: RDG 5310, RDG 5320, RDG 5322, and RDG 5326.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter



**RDG 7301. Theory and Research of Literacy.**

This course examines the current theories and basic research of literacy development from psychological, cultural, linguistic, educational, and epistemological frameworks.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7302. Theory and Research of College Basic Literacy.**

This course examines basic literacy needs and instructional strategies for students within postsecondary institutions. Topics include comparison of basic and academic literacy, research and theory relevant to literacy development in college contexts, analyses of historical and current curricular approaches, and evaluation of instructional strategies and materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7303. Theory and Research of College Academic Literacy.**

This course examines academic literacy needs and instructional strategies for students in college. Topics include comparisons of academic, workplace, and new literacies and instructional strategies and materials for developing vocabulary, comprehension, and critical and strategic reading in multiple sources of information.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7304. Theory and Research of Literacy Instruction for Culturally and Linguistically Diverse Readers.**

This course examines the historical and contemporary understandings of language acquisition and instruction; foundational knowledge of literacy research and cultural and linguistic difference; instructional practices, including culturally responsive instruction, linguistic differences, and creating supportive literacy environments; curriculum, assessment, and evaluation; and critical literacy perspectives. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RDG 7305. Theory and Research of College Literacy Assessment.**

This course reviews literacy assessment theory, research, policy, and practice in postsecondary contexts. Topics include accountability, standards-based curricula, cultural and linguistic effects, assessment-driven instruction, reliability and validity, interpretation, and different types of instruments (high-stakes, placement, diagnostic, classroom tests, and qualitative instruments).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7306. Literacy Research Seminar.**

This course explores research and policy papers in literacy and literacy education, examines methodology and conclusions, and considers additional research questions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7307D. Multimodal Critical Discourse Studies.**

This course introduces students to multimodal critical discourse analysis as both a theoretical framework stemming from multimodal semiotics and a set of analytic tools for uncovering dominant ideologies in print language and visual representations. Through a survey of critical discourse analysis approaches and methods including transitivity analysis, deixis, multimodal metonymy and metaphor analysis, and visual analysis, students will examine underlying assumptions perpetuated by representations of developmental education from external policy-driving organizations. Additionally, students will explore the potential for developmental educators to harness multimodal representations of their students and practice in order to reclaim the narrative of developmental education.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7307E. Theory, Research, and Practice of Disciplinary Literacies.**

This course examines core principles of disciplinary literacies. Students will examine the theory, research, and pedagogical practices of literacies across the disciplines with an emphasis on understanding the potential for postsecondary learners and Developmental Education practices.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7307F. Curriculum Design in Developmental Education.**

This course focuses on principles and processes of curriculum design and implementation in developmental education contexts, including examination of emerging research and issues. The course pedagogy also engages students in independent curriculum research, planning, and problem-solving.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**RDG 7371. Theory and Research of Postsecondary Integrated Reading and Writing.**

This course examines the theory, research, and practice of an integrated reading and writing approach to postsecondary literacy instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7372. Theory and Research of New Literacies Studies in Developmental Education.**

This course focuses on the theory and research of New Literacies Studies, which affects instructional practice in postsecondary Developmental Education. It includes an examination of diverse theories and models of multiple digital technology literacies necessary for communicating within the academic and workplace communities of the 21st century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RDG 7373. Community Literacies.**

This course focuses on exploring, understanding, refining, and reflecting on literacy as social practices within a community that informs effective curriculum and instruction for K-16 school settings, adult literacy programs, and informal environments. Students will explore ethnographic research as a means to inform instruction and complete a service learning project. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**REC 1310. Introduction to Recreation and Leisure Services.**

This course includes brief historical backgrounds, professional opportunities, present status, past and present leaders of the recreation services profession. Role of leisure time in our social structure, professional responsibility, familiarization with current issues and trends, and professional literature. Lecture and field trips. A grade of "C" or better in this course is required to enroll in any upper division Recreation Studies courses.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PHED 1336

**REC 1330. Introduction to Outdoor Recreation.**

This course provides students with an overview of the role the natural world plays in recreation and leisure services. The course will focus on values of outdoor recreation, adventure recreation, environmental impact, and the role of government in the provision and protection of outdoor recreation programs and resources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 1370. Introduction to Recreational Therapy.**

This course surveys history, philosophy, terminology, and professional opportunities within recreational therapy. An overview of interventions, settings, clientele, and services supporting functional improvements and enhancing quality of life are explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 2330. Leadership in Recreation and Leisure Services.**

Discussion of leadership theories and skill development for indoor-outdoor games and sports. A weekly required lab includes leading and participating in group activities to develop leadership skills.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 2335. Recreation Program Development.**

This course introduces students to basic principles and procedures for developing recreation programs that respond to human needs.

This course provides students with opportunities to acquire and utilize recreation programming skills. Prerequisite: REC 1310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** PHED 1336

**REC 2336. Directed Field Experience in Programming Recreation.**

This course provides field-based experiences in programming and leadership with a selected recreation agency. Online learning modules and communications guide the work and professional reflections.

Prerequisite: REC 2335 with a grade of "C" or better and a minimum 2.0 Texas State GPA and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 2370. Planning Recreational Therapy Services.**

This course engages students in course content and service learning to develop knowledge and skills in program planning and implementation used in a variety of therapeutic recreation settings. Students will gain an understanding of theoretical models and learn how to apply these models to activity and task analysis. Prerequisites: REC 1370 with a grade of "C" or better. Corequisites: REC 1310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 3325. Recreation Administration.**

This course covers administrative practices relevant to entry-level professionals in the recreation industry. Topics include foundations of management, decision-making, planning, coordination of resources, and ethics. Prerequisite: REC 2335 with a grade of "C" or better and [MATH 1312 or MATH 1315 or MATH 1316 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 or HON 2302A] with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 3335. Advanced Recreation Program Development.**

Students will develop advanced program planning skills through the integration of theories and models of program development, consideration of diverse target markets, performing needs assessments, and planning for risk management issues. Students will apply these planning skills through an applied project. Prerequisite: REC 2335 with a grade of "C" or better. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REC 3340. Recreation Facilities Operations and Maintenance.**

This course content includes theories and processes in the development, operation, maintenance, and management of various recreational facilities. Prerequisite: REC 2335 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 3351. Evaluation of Leisure Service Programming.**

This course focuses on methods, techniques, and application of the evaluation process related to a wide variety of leisure service functions including clientele and prospective participants, programs, personnel, facilities, organizations, and literature. (WI) Prerequisite: REC 2335 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REC 3370. Assessment and Documentation in Recreational Therapy.**

This course introduces students to selecting, utilizing, and interpreting assessment instruments, and to the processes used to document assessment results and client progress used in recreational therapy practice. Prerequisite: HIM 2360 and REC 1370 and REC 2370 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 3371. Facilitation and Processing in Recreational Therapy.**

This course presents an overview of concepts, methods, and techniques used in the selection and implementation of therapeutic facilitation and interventions used in recreational therapy practice. Students will apply current research and theoretical perspectives to the selection and implementation of therapeutic interventions. In addition, processes for leading therapeutic groups, facilitation techniques, and counseling techniques will be introduced in relation to recreational therapy practice. Focus will be on development of skills necessary to implement evidence-based goal-directed outcomes. Prerequisite: REC 1370 and REC 2370 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 3380. Practicum in Outdoor Recreation.**

This practicum involves a 200 hour field-based experience during which a student will complete leadership and administrative tasks in an approved outdoor recreation services agency. The practicum is co-supervised by a faculty and an agency representative. This course may be taken two times with different outdoor recreation services agencies. Prerequisite: REC 1310 and REC 1330 both with grades of "C" or better and a minimum 2.25 Major GPA and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 13 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**REC 4318G. Cross Cultural Studies in Recreation & Sport Facility Design.**

This course will introduce theories and provide practical experience in the design, development, operation, maintenance, administration of various recreation and sport facilities. Students will compare facility amenities from the United States with those in another country. Students will have behind the scenes tours of recreation and sport facilities and parks, meet with managers from all sectors of the recreation and sport industry, and learn from faculty abroad. It is specifically for students participating in the Study Abroad program offered by Recreation Studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**REC 4318H. Recreation & Sport Research in a Cross-Cultural Context.**

This course involves the examination of concepts, techniques, and processes that are applied in conducting evaluation/research. Students will identify an area of interest related to recreation, sport or leisure and complete a research project comparing the subject area in the United States to the country being visited. Students will tour recreation and sport facilities as well as visit cultural, historic and scenic locations in and around the city where we will be staying. It is specifically for students participating in the Study Abroad program offered by Recreation Studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**REC 4330. Entrepreneurial Management in Recreation Services.**

This course provides a study of entrepreneurial management of leisure services. The focus will be on financial management related to profit centers including planning, legal liability, record keeping, and revenue management. Prerequisite: REC 2335 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 4335. Outdoor Recreation Programming.**

In this course, students apply principles and procedures for developing and leading recreation programs in a variety of specialized, outdoor environments. Students will demonstrate competencies for Leave No Trace certification. Prerequisite: REC 1330 and REC 2335 both with grades of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 4337. Independent Study in Recreation Administration.**

This course consists of individual study related to recreation administration under direct supervision of a faculty member. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**REC 4350. Employee Supervision in Recreation and Leisure Services.**

This course presents theories and methods relating to recruitment, selecting, hiring, training, disciplining, and discharging employees. This course also addresses legal issues related to personnel supervision. Prerequisite: REC 2335 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 4370. Principles of Recreational Therapy.**

This course will cover the principles and administrative aspects of recreational therapy services including standards of practice, code of ethics, comprehensive program design, and issues related to professionalism. Prerequisite: REC 1370 and REC 2370 and REC 3370 and REC 3371 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 4371. Application of Evidence-Based Practice in Recreational Therapy.**

This course provides a theoretical and practical foundation for applying the recreational therapy process with persons with various types of disabilities across the lifespan. Focus will be on developing skills necessary to implement evidence-based interventions culminating in the design and application of a comprehensive case study. Prerequisite: REC 1370 and REC 2370 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 4380. Seminar in Recreation Trends and Issues.**

This capstone seminar addresses trends in leisure services. Emphasis is on the interactional effects of diverse services, consumers, and environments. The course should be taken in the last spring semester preceding enrollment in REC 4680 or REC 4681. (WI) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REC 4680. Internship in Community Recreation.**

This internship involves a 400 hour field-based experience during which a student will complete administrative tasks in an approved recreation services agency. The work is co-supervised by a faculty and an agency representative trained in the recreation field. Prerequisites: REC 1310 and REC 2335 and REC 2336 and REC 3325 and REC 4380 all with grades of "C" or better and all major coursework must be completed and a minimum 2.25 Major GPA and instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 30 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 4681. Internship in Recreational Therapy.**

This internship involves experiential learning over a long semester during which a student will work (a minimum of 14 weeks and 560 hours) in a recreational therapy setting under direct professional supervision by a Certified Therapeutic Recreation Specialist (CTRS) and a faculty member with CTRS credential. Prerequisites: REC 1310 and REC 1370 and REC 2335 and REC 2336 and REC 2370 and REC 3325 and REC 3370 and REC 3371 and REC 4370 and REC 4371 and REC 4380 all with grades of "C" or better and all major coursework completed and a minimum 2.25 Major GPA and instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 35 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5199B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5299B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5310. Philosophical Foundations of Recreation and Sport Management.**

This course introduces and explores the meanings of recreation, sport, and leisure behaviors and services from historical, philosophical, sociological, and political perspectives. Students will develop a philosophical view of recreation and sport based on exploration of the history as well as consideration of the nature of the individual and society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5318P. Inclusive Recreation for Individuals with Disabilities.**

This course engages students to understand the meaning of social inclusion as it pertains to people with disabilities, along with current trends and best practices related to inclusive sport and recreation services for people with disabilities. Course content will prepare students to enhance inclusive service delivery in a variety of settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**REC 5318Q. Evaluation of Recreation and Sport Programs.**

This course will focus on practical applications of program evaluation techniques. Directed readings will cover the history of evaluation as well as methods and approaches designed for different customers, locations and program types. Prerequisite: REC 5380 with a grade of "C" or better or instructor permission.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**REC 5321. Issues and Trends in Recreational Therapy.**

This is a seminar-style course during which students investigate current trends related to the provision of recreational therapy services, research, education, and professional advocacy. Prerequisite: REC 5328 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5325. Philosophical Foundations of Recreational Therapy.**

This course examines the history, theory, and philosophy of therapeutic recreation such as service models, standards, and legislation. The use of recreational therapy in supporting the attainment and maintenance of well-being of people with differing characteristics and abilities is explored. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5326. Recreational Therapy Planning and Implementation.**

This course provides an advanced examination of the recreational therapy process with a focus on planning and implementation of individualized services and supports for persons with disabling conditions. Students will analyze interventions, modalities, instruction, leadership, supervision, and leisure counseling techniques in relation to program planning and implementation. Prerequisite: REC 5327 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5327. Assessment, Evaluation, and Documentation in Recreational Therapy.**

This course provides an in-depth examination of the assessment and documentation phases used in recreational therapy. Students will select, administer, score, interpret, and report standardized and specialized assessment instruments and documentation methods. Corequisite: REC 5325 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5328. Advanced Principles of Recreational Therapy.**

This course provides an in-depth examination of the principles of organizing, funding, and managing recreational therapy services within a variety of settings. Topics include analysis of professional credentialing, policies, standards of practice, ethical behavior, and regulatory guidelines as they relate to recreational therapy are applied to advancing the profession. Prerequisite: REC 5327 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5329. Evidence-based Practice in Recreational Therapy.**

This course explores the application of research evidence to the planning and delivery of recreational therapy within a variety of service settings. The emphasis is on locating, critically appraising, analyzing, and producing evidence related to treatment modalities and techniques for recreational therapy practice. In addition, the course will apply evidence-based practice in relation to therapeutic facilitation techniques and interventions. Prerequisite: REC 5328 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5330. Organizational Leadership in Recreation and Sport Management.**

This course provides an exploration of management issues related to the role of the leader as a conduit for effectiveness in recreation and sport management service agencies. Content will include practices associated with managing human resources such as hiring, supervising, evaluating, and compensating. Content will include examination of federal and state laws impacting employment and the manager's role in operationalizing both legislative mandates and agency policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5337. Independent Study in Recreation and Sport Management.**

This course includes individual study related to recreational administration or sport management under direct supervision of a faculty member. May be repeated for additional credit at the discretion of the department chair.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**REC 5338. Internship in Recreational Therapy.**

This course provides students the opportunity to complete an intensive, on-site internship under the supervision of a nationally Certified Therapeutic Recreation Specialist. Students will complete a minimum of 560 hours and 14 weeks in a recreational therapy setting. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**REC 5340. Social Psychology of Recreation and Sport.**

This course provides an introduction and overview of the personal, social and social-psychological contexts of leisure; utilizing current literature the course will focus on examining sport and recreation behavior from psychological, sociological and social-psychological constructs that are contributing to a contemporary, interdisciplinary understanding of the leisure phenomenon.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5346. Literature and Research in Recreation and Sport Management.**

The course provides an analytical investigation of research techniques and steps necessary to address research questions related to professional practice. Students will examine methods of locating and securing research findings and reports and develop the ability to discuss current literature in the field of recreation and sport.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5350. Legal and Ethical Issues in Recreation and Sport Management.**

This course focuses on legal and ethical issues related to recreation and sport management. Tort law, participant rights, accessibility, credentialing, and others are topics to be addressed in this course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5360. Financial Management in Recreation and Sport Management.**

This course is a study of financial concepts, principles, and techniques as they relate to recreation and sport delivery systems. These include full cost accounting, pricing, financial management, and alternative funding proposals. Prerequisite: REC 5380 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5372. Technology-Mediated Places of Leisure: Aspirations towards a life of leisure.**

This course focuses on the technology-leisure experience interaction, supported by knowledge of layout, design, and functions of homes, cities, and outdoor environments. Students will develop an understanding of how technology is incorporated into the experience of physical spaces and create proposals for technological enhancements appropriate to these varied places of leisure.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5373. Innovative Technology Solutions and Applications in Recreation and Leisure.**

This course is a study of operational competence in selected technologies including the development of research skills in user need articulation and technology augmentation. Students will critically investigate technology usage in leisure service delivery. Students will develop the ability to diagram and write for analytical purposes, fieldwork and experiences, and collaborative work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5380. Organizational Planning in Recreation and Sport Management.**

This course provides students with organizational planning and administration tools developed and tested within the recreation and sport industries. Topics may include the exploration of programming and organizational theory, administrative processes, and the application of the organizational principles to the recreation and sport delivery systems. Emphasis will be placed on various planning functions including strategic, evaluation, and marketing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5381. Outdoor Program Leadership and Administration.**

Within the role of leadership and administration, students will become knowledgeable in the theoretical foundations of outdoor programs, adventure programming, and wilderness travel. The history of thought surrounding natural places and outdoor recreation will be examined throughout the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5382. Facility Management in Recreation and Sport Services.**

The course provides an overview of practice of facility management. Explorations will include the role of facility manager, work management functions, and user interaction. In addition, students will investigate concepts of health and safety, accessibility, environment and sustainability, technologies, sourcing, emergency preparedness, and space interrogation. Basics of design drawing literacy and evaluation will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REC 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in REC 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5399B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5599B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REC 5999B. Thesis.**

This course represents a student's continued thesis enrollment. No thesis credit is awarded until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**REL 1300. World Religions.**

This course is a survey and comparative study of some of the major religious traditions and practices of the world including Judaism, Christianity, Islam, Hinduism, Buddhism, Taoism, Confucianism, and the Indigenous Religions. Students learn to analyze problems from different perspectives, and gain skills useful for working with diverse populations. Recommended as an entry course for religious studies minors. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Lang, Phil & Culture Core 040|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**TCCN:** PHIL 1304

**REL 2310. Introduction to the Hebrew Bible.**

An introduction to the contemporary academic study of the Hebrew Bible ("Old Testament") and related Near Eastern and Second Temple Jewish literature. Representative texts will be examined using the historical and literary methods of scholarship. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**REL 2315. Introduction to the New Testament.**

An introduction to the contemporary academic study of the New Testament, including apocryphal and post-canonical works. Representative texts will be examined using the historical and literary methods of scholarship.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**REL 2321. Founders, Prophets and Saints.**

Critical analysis of the life, works, and thought of a major religious figure, e.g., Jesus, Paul, Luther, St. Teresa, Maimonides, the Baal Shem Tov, Mohammad, al-Ghazzali, Rumi, Buddha, Gandhi. May be repeated for credit. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**REL 2330. What is Religion?.**

In this course, students examine different theories and claims about what religion is and does. Participants examine competing views and approaches to see what is persuasive. Students are introduced to methodologies in religious studies, learn to analyze problems from different perspectives, develop critical thinking competencies, and gain skills useful for working with diverse populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REL 2350. Mediterranean and European Religions.**

This course is a survey of religions that originated in the Near East, Mediterranean, and Europe, with emphasis on the ancient to medieval periods. The course includes Judaism, Christianity, and Islam, in the contexts of Egyptian, Persian, Greco-Roman, and old European traditions. Students learn to analyze problems from different perspectives, and gain skills useful for working with diverse populations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**REL 2360. Asian Religious Traditions.**

This course is a survey of the major religious traditions originating in Asia: Hinduism, Buddhism, Taoism, and others. Basic doctrines and practices will be covered in an historical framework. Students learn to analyze problems from different perspectives, and gain skills useful for working with diverse populations. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**REL 3320. Judaism.**

This course surveys the history, practices, core texts, and major movements of Rabbinic Judaism, from the destruction of the Second Temple to the contemporary global scene. Some attention is also given to earlier Israelite religion, dissident movements, mysticism, and Jewish communities beyond the Euro-American zone.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REL 3330. Religious Controversy in America.**

Students in this course analyze religious controversies and crises in America from the colonies to the present in order to interpret the role of religion in American history, culture, law, and politics. Topics include the Salem Witch Trials, the Jim Jones massacre, and Ten Commandments monuments on government property. Students develop communication competencies and learn to critically interpret data (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REL 3335. Cults and New Religious Movements.**

This course investigates New Religious Movements (NRMs) primarily within the contemporary American context. Controversial and emerging religions can be approached from many angles. Accordingly, the course introduces students to a variety of theoretical perspectives and approaches for studying NRMs. Students are encouraged to develop communication competencies and to learn to critically interpret data (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REL 3340. Religion, Literature, and the Arts.**

The course features a thematic selection of literary and artistic works in order to examine the connections and disconnections between the aesthetic and religious aspects of human culture. Students develop communication competencies. May be taken twice for credit with different topics. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**REL 3342. The Homeric Epic: The Iliad and the Odyssey.**

A close reading of the Iliad and the Odyssey in English translation, with emphasis on philosophical and religious issues. Prominent topics include the gods, religious rituals, heroic ethics, and the human condition. The course also considers the concept of a classic in religion and literature. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**REL 3361A. Religion and Film.**

This course examines how religions are reflected in film and how films have taken on some of the functions of religion. Students develop communication competencies. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**REL 3361B. Mysticism.**

This course explores the dimension of mysticism that pervades both Western and Eastern religious traditions. We will analyze the nature of mystical experiences through a study of key figures and texts, and examine its peculiar relationship to language, arts, and human subjectivity and its place in the wider social context. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**REL 3361C. Philosophical Issues in Judaism, Christianity, and Islam.**

This course provides a comparative perspective on philosophical issues that arise in Judaism, Christianity, and Islam, including the nature of God, reason and revelation, and religious ethics. Readings are drawn from both classical and contemporary sources. Students learn to analyze problems from different perspectives, develop critical thinking competencies, and gain skills useful for working with diverse populations. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**REL 3370. Mythology and Cosmology.**

This course examines human efforts to address questions of cosmic origins, with a global, comparative survey of cosmogonic (creation) myths and a historical approach to modern cosmology. It examines the features and functions of mythopoetic and scientific thought, and reflects philosophically on questions of origin and meaning. Students gain skills useful for working with diverse populations and learn to analyze problems from different perspectives. May be taken twice for credit with different topics. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**REL 3372. Apocalypticism.**

An historical-cultural survey of end-of-the-world literature, art, and thought in Western Civilization, from ancient Judaism and Christianity to the present. Historical and scientific methods provide the framework for this course. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REL 3381. The Philosophical and Spiritual Heritage of India.**

Indian philosophers predominantly present a spiritual, multi-dimensional outlook on the nature of reality and human consciousness; they combine reason, experience, yoga and meditation as methods of inquiry. This course explores Indian spiritual philosophy from the time of the ancient Vedas to the contribution of modern sages. Students gain skills useful for working with diverse populations. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**REL 3383. An Introduction to Chinese Religions.**

This course examines the religious history of China from 3000 BCE to the present-day. It covers beliefs, practices, and histories of the four major religious communities in China—Buddhism, Daoism, Confucianism, and “Popular Religion”—as well as expressions of minority religions in China such as Islam and Christianity. Students gain skills useful for working with diverse populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REL 3385. Buddhism.**

This course surveys the main ideas, myths, symbols and practices of the diverse forms of Buddhism. Students explore and evaluate the manner in which Buddhist perspectives have influenced social values and arts in the South East and East Asian cultures. Students gain skills useful for working with diverse populations. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**REL 3386. Yoga: Principles and Practice.**

This course is an in-depth study of the principles and the practice of yoga. Students explore the yogic conception of the mind and the body and how it relates to psychoanalytic and neuroscientific frameworks. Students also examine the parallels between the discipline of yoga and practices in other religious traditions. Students gain skills useful for working with diverse populations and learn to analyze problems from different perspectives.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REL 3390. Religion, Health, and Embodiment.**

This course is a survey of religious beliefs and practices relevant to embodiment, health, disease, disability, aging, and death. The approach is comparative, with non-exclusive emphasis on Jewish and Christian primary material. Students develop critical thinking and communication competencies, and gain skills useful for working with diverse populations. Prerequisite: [PHIL 1305 or PHIL 1320] and REL 1300 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REL 4300. Advanced Methods in Religious Studies.**

This course provides a rigorous grounding in the intellectual tradition of academic religious studies. It includes the major theorists and a sustained examination of the problem of method. This course is strongly urged for RS minors and students intending graduate work in the field. Prerequisite: ANTH 3305 or ANTH 3322 or ANTH 3326 or ANTH 3332 or ANTH 3349 or ANTH 4320 or ARTH 2301 or ARTH 2302 or ENG 3329 or HIST 3312 any with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**REL 4388. Issues in Religion.**

Independent study of specific topics in religion. Open to students on an individual or small group basis. May be repeated for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**REL 5300. Advanced Methods in Religious Studies.**

This course provides a rigorous grounding in the intellectual tradition of academic religious studies. It includes the major theorists and a sustained examination of the problem of method. The graduate course prepares students to position themselves within the field, construct robust research questions, and apply appropriate methods in their scholarship.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**REL 5365. Philosophical Issues in Judaism, Christianity, and Islam.**

A comparative perspective on philosophical issues that arise in Judaism, Christianity, and Islam, including the nature of God, reason and revelation, and religious ethics. Readings will draw on both classical and contemporary sources, in dialogue with the secondary literature and methodological issues in religious studies. Prerequisite: PHIL 4300 or PHIL 5300 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**REL 5388. Independent Study.**

Independent graduate study of topics in religious studies. Only available with approval of a faculty member. Topics vary. Repeatable for credit with different topics and instructors. Permission of instructor required to enroll. Prerequisite: REL 4300 or REL 5300 either with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**RC 2213. Introduction to Respiratory Care.**

This course offers an in-depth overview of the respiratory care profession to acquaint the student with the responsibilities of the respiratory therapist as part of healthcare team. Progression of the profession, career opportunities, past and future impact of profession on patient recovery and health maintenance, and medical gas therapy will be covered.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3112. Pharmacology.**

A comprehensive study of pharmacology principles. Receptor theory, clinical applications of medications, and historical analysis of first-generation medications will be covered. Current medication trends and recommendations are also examined.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3125. Pulmonary Function Testing.**

This course examines the most common pulmonary function tests, their techniques, and the pathophysiology that may be evaluated by each test. Pulmonary function equipment, calibration, and the American Thoracic Society guidelines will be discussed. Laboratory practice of performing the tests will be provided to develop skills for testing patients.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3313. RC Clinical Practice I.**

This course provides an introduction to respiratory care clinical skills, including vital signs, chest assessment, infection control, aerosolized medication delivery, oxygen therapy, hyperinflation therapy, and airway clearance. This course prepares the student for direct patient care to be performed in more advanced courses. Direct patient care is performed under close supervision.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3314. Respiratory Care Instrumentation.**

Through lectures and lab exercises, students are acquainted with concepts of design, function, and operation of basic respiratory care equipment. Oxygen cylinders, regulators, flowmeters, oxygen analyzers, oximeters, oxygen adjuncts, humidifiers, nebulizers, airways, and pressure cycled ventilators will be covered. The course also covers respiratory pharmacology, decontamination of equipment, and arrhythmia recognition.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3315. Cardiopulmonary - Renal Anatomy & Physiology.**

This course provides an in-depth human gross anatomy study of the cardiac, respiratory, and renal systems. Clinical application of pulmonary anatomy and physiology will also be explored.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3316. Fundamentals of Respiratory Care.**

This course provides a study of theories and modalities utilized in delivering, monitoring, and evaluating basic respiratory therapeutics to patients with compromised respiratory function in various healthcare settings. Aspects of artificial ventilation, arterial blood gas analysis, lung volume diagnostics, and hyperinflation intervention will be covered in patient scenarios.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3321. Cardiopulmonary Pathology.**

As an introduction to the assessment, treatment, and pathophysiology of respiratory diseases, this course focuses on the signs, symptoms, etiology, pathophysiology, diagnosis and treatment of selected diseases. Utilizing clinical simulation software to develop critical thinking regarding assessment, diagnostic data gathering. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**RC 3322. Critical Care Concepts.**

This course provides students with an in-depth study of selected respiratory care techniques with an emphasis on the care of critically ill patients. Critical skills and knowledge of mechanical ventilation, bedside diagnostic techniques, patient monitoring, and rehabilitation are explored in the critical care setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3323. RC Clinical Practice II.**

Students perform clinical procedures and interact with patients and professional personnel in a healthcare institution under the supervision of a respiratory therapist. Students gain direct patient care experience as presented in medical/surgical and pediatric clinical situations. Preparatory instruction is provided for mechanical ventilation and other critical care procedures.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter



**RC 3324. Critical Care Instrumentation.**

A comprehensive study of advanced equipment and technology utilized in the critical care, homecare, pulmonary rehabilitation and blood gas lab settings. Lectures and class activities will detail hardware for hemodynamic monitoring, supplemental oxygen administration, noninvasive monitoring, blood gas measurement, quality control and assurance and mechanical ventilator concepts.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3332. Hemodynamics.**

This course is an advanced study of cardiovascular hemodynamic measurements. Normal cardiovascular physiology and measures are examined, as well as variations caused by disease. Current clinical trends and practices in hemodynamic procedures are also explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3333. RC Clinical Practice III.**

A supervised clinical education experience in which the student administers advanced respiratory therapeutics to patients in the adult critical care setting. Diagnostic and monitoring procedures, including arterial blood gases, bedside physiologic monitoring, airway care, advanced pulmonary function testing, ventilator management will be performed according to physician orders.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 3334. Neonatal Respiratory Care.**

An in-depth study of neonatal utero development, fetal lung development, fetal circulation, and cardiovascular changes at birth. Neonatal respiratory emergencies, neonatal respiratory diseases and management, congenital defects, and respiratory care procedures specific to the neonate will be discussed. A specific emphasis on neonatal mechanical ventilation will be included.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4211. Respiratory Care Research.**

This course provides an introduction to applied experimental design, research ethics, and data analysis focusing on the respiratory care profession. Students will participate in each step the research process from developing a personal research hypothesis and research design through IRB submission. Prerequisite: HP 3302 or equivalent.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4216. Disease Management.**

The course offers an in-depth description of common therapeutic modalities and treatment protocols used to offset the anatomic alterations and pathophysiologic mechanisms activated by selected disorders. Students will develop an understanding of how therapies work to offset the anatomic alterations of lungs caused by disease. Prerequisite: Instructor approval.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4221. Leadership and Management for Respiratory Care Professionals.**

This course is designed to comprehensively examine the dynamic evolution of respiratory care as a profession. The role of the respiratory care professional in the areas of leadership, management, and professional ethics will be explored with regards to the profession's impact on legislation, regulation, and politics. (WI).

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**RC 4223. ICU Internship.**

Through affiliations with agencies, hospitals and selected treatment centers, the student interns in the intensive care setting by providing patient care and administering critical care therapeutics. Analysis and clinical application of advanced ventilator care of patients is emphasized along with patient care diagnostics and management in the ICU.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**RC 4224. Research Seminar.**

This course is a study of the research process from a review of research design to methodology implementation including data collection, statistical analysis, and presentation of a research proposal on a topic in the respiratory care discipline. The course provides direct research experience culminating in a research paper and presentation. Prerequisite: RC 4211 with a grade of "C" or better.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4225. Specialization Internship.**

This course provides the student with an internship opportunity to gain clinical experience in sub-specialty areas including pediatrics, adult intensive care, neonatal intensive care, pulmonary function testing, home care/durable medical equipment, subacute care, pulmonary rehabilitation, polysomnography, education, and research. Specific specialty offerings will be based on clinical availability.

**2 Credit Hours. 0 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Credit/No Credit

**RC 4309. Pulmonary Diagnostics.**

The course examines various pulmonary diagnostic techniques and the pathophysiology associated with each diagnostic measurement in disease management and clinical research. The course will provide an in-depth presentation of clinical indications for various diagnostic analyses including the ethical responsibilities associated with clinical research.

Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4311. Interdisciplinary Healthcare.**

This course introduces the respiratory care student to the role that respiratory therapists play within the interdisciplinary healthcare team. The course will allow students to gain experience in developing and applying strategies to improve patient outcomes through the inclusion of the respiratory therapist with various appropriate healthcare disciplines.

Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**RC 4312. Critical Care Clinical Simulation.**

Students will analyze concept review in preparation for national board examinations and evidence-based care. Classroom and laboratory instruction will demonstrate cumulative review of the Therapist Multiple Choice and the Clinical Simulation Examination national board exams. Clinical simulation case studies will be assessed reflecting real-life patient scenarios.

**3 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4314. Advanced Ventilator Concepts.**

This course provides an in-depth study of specific adult mechanical ventilators addressing traditional and proposed ventilator classification, various methods of operation, parameter interrelationships and ventilator patient monitoring. Lectures and class activities will focus on ventilator analysis of several contemporary volume-, time-, pressure- and flow-cycled ventilators with advanced graphics interpretation required.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4316. RC Clinical Practice IV.**

This course provides an advanced intensive care clinical education requiring students to monitor and administer critical care therapeutics on assigned patients in the adult and neonatal critical care setting. Cardiopulmonary diagnostic experience will be gained through arterial blood gas and co-oximetry assessment with ventilator graphic analysis.

**3 Credit Hours. 0 Lecture Contact Hours. 16 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4317. Pulmonary Rehabilitation.**

This course is designed to introduce students to the medical, ethical, and insurance reimbursement issues of pulmonary rehabilitation, homecare, and sleep diagnostic facilities. The role of therapists in case management, treatment requirements, and discharge planning along with the impact of legislation, regulations, and politics will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4318. Independent Study in Respiratory Care.**

This course provides the student an in-depth study on a topic or healthcare problem impacting respiratory care. The course may be repeated for credit with a different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4322. RC Practitioner Seminar.**

Students will research and present selected case studies by students to physicians, therapists, and colleagues. Presentations will emphasize total patient management with etiology, symptoms, pathophysiology, diagnosis, and treatment of specific diseases including asthma, pulmonary embolism, CHF, COPD, ARDS, neurologic diseases, inhalational injury, pneumonia, sleep disordered breathing, AIDS, and drug overdose. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**RC 4324. Sleep Medicine and Polysomnography.**

This course introduces the respiratory care student to sleep medicine and polysomnography. The course will present topics on sleep stages, sleep architecture, and sleep disorders. Basic and advanced treatment options of selected sleep disorders will be discussed. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4333. Neonatal Critical Care.**

This course will provide the Respiratory Care student with advanced knowledge on the management of the neonatal patient in the critical care environment. The course will expose the student to advanced therapeutics and mechanical ventilation strategies. Course content will prepare the student for the role of neonatal specialist. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions

**Grade Mode:** Standard Letter

**RC 4334. Adult Critical Care.**

This course provides professional enrichment for practitioners with a conceptual foundation for adult critical care medicine. The course will provide an in-depth presentation of advanced respiratory therapy therapeutics and procedures caring for adults in the intensive care unit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Health Professions|Writing Intensive

**Grade Mode:** Standard Letter

**RC 5211. Polysomnography Instrumentation.**

Designed to teach the function, operation, and design of electroneurodiagnostic equipment. Monitoring devices, electrode application, and patient connection will be covered in detail. Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5214. Sleep Staging and Diagnostics.**

Advanced study of waveform characteristics and montage development, filters, and PSG electronics. Signal pathways, reference electrodes, impedance checking and filter settings in calibration waves will be covered. Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5215. Clinical Polysomnography-Sleep Staging.**

Advanced clinical education in sleep staging rules, light, delta and REM sleep scoring and analysis. EEG, EMG, ECG and respiratory events will be discussed in depth and are components of the polysomnogram report.

A research project and presentation will be assigned by the faculty.

Prerequisite: Instructor approval.

**2 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5301. Advanced Cardiopulmonary Physiology.**

An in-depth study of cardiovascular and respiratory physiology. This course investigates pathologic physiological changes, adaptive mechanisms, and interrelationships of the cardiopulmonary systems. Students will apply advanced cardiopulmonary physiology to the management of patients requiring respiratory care services.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5302. Clinical Practice Guidelines and Respiratory Care Protocols.**

An examination of the roles of clinical practice guidelines and protocols in the continuum of patient care. Analysis of the development, modification, initiation, and evaluation of patient outcomes will be covered. Barriers to protocol practice and strategies for implementation will be explored. Evidence-based outcomes will be summarized through literature reviews.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5303. Respiratory Care Research Methods and Design.**

Provides an in-depth study of medical research including evaluation of published, peer-reviewed research designs. Students examine research articles and evaluate evidence-based research findings. Topics include: research ethics, sampling and research design, test statistics, conclusions, and practical versus statistical significance. Students will explore research protocol development, research proposals, and project management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5304. Cardiopulmonary Disease Patient Education.**

A comprehensive study of patient education and self-management of cardiopulmonary disease exacerbations including disease information, prevention and treatment. Programs for patient self-assessment, treatment efficiency, adjustment of drug regimen, behavior modification, and nicotine addiction will be examined. Methods for documenting outcomes and patient behavior modification will be covered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5305. Respiratory Care Applied Research.**

This course offers an opportunity to apply research methods and design concepts. Students will design and submit a research proposal to the Texas State University's Institutional Review Board (IRB) for approval. Prerequisite: RC 5303 with a grade of "B" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5306. Academic Leadership in Respiratory Care.**

Introduction to the foundations necessary to build a strong understanding of academic administration, fiscal planning, curriculum development, and outcomes assessment for respiratory therapist programs. Topics include preparation of annual accreditation reports, organization of clinical practice rotations, the role of advisory committees, and integration of didactic, laboratory, and clinical experiences.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5307. Advanced Respiratory Care Seminar.**

In-depth discussion of topics related to current issues and trends in the profession and the impact on patient care services. Includes journal review, group discussion, project development, and online presentation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5308. Advanced Cardiopulmonary Diagnostics and Therapeutics.**

An overview of advanced cardiopulmonary diagnostic and therapeutic procedures addressing selected disorders including asthma, chronic obstructive lung diseases, restrictive lung diseases, pulmonary edema, congestive heart failure, and cardiac disorders. International disease standards and classifications established by the World Health Organization with appropriate treatment protocols will be discussed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5309. Advanced Respiratory Care Practice.**

This course is an exploration of advanced Respiratory Care topics to optimize practice in the healthcare environment. The course will address best practice recommendations and evidence-based research to enhance and expand the role of respiratory therapists. Topics will be presented through a translational medicine lens to bridge the gap between theory and practice. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5310. Fundamentals of Polysomnography.**

Introduction to the physiology of sleep, including sleep neurology, sleep architecture, and classification of sleep disorders. Review of basic cardiac physiology and ECG arrhythmia recognition. Sleep pathologies will be discussed according to etiology, pathophysiology, symptoms, diagnosis, treatment, and prognosis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**RC 5311. Advanced Mechanical Ventilation Practice.**

This course is an exploration of advanced mechanical ventilation in the acute care setting. This course will consist of in-depth review of current and emerging mechanical ventilation strategy and protocol. Mechanical ventilation content will be focused on invasive and non-invasive support mechanisms with a goal of bridging theory and practice. Evidence-based research, patient case studies, and video waveform analysis will be used to reinforce learning. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RC 5313. Polysomnographic Therapeutic Intervention.**

In-depth study of the treatments available for sleep apnea including, CPAP, BiPAP, oxygen therapy, patient adjunctive fitting, surgical intervention, and the role of the sleep tech in titration. Special attention will be given to titration algorithms, nocturnal seizure disorder studies, REM behavior disorder studies, MSLT's, and MTW's. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**RC 5316. Respiratory Care Curriculum Development.**

This course prepares the respiratory therapist for a role as an educator in an academic and industry setting. The course focuses on building foundational knowledge of respiratory care curriculum and instruction. Topics include adult learning theory, writing objectives, online and in-person instruction, exam preparation, item analysis, and providing feedback. National organization curriculum recommendations will be integrated into the course content.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RUSS 1410. Beginning Russian I.**

This course is an introduction to listening, speaking, reading, and writing skills within a Russian cultural framework. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RUSS 1420. Beginning Russian II.**

This course provides continued instruction and practice in listening, speaking, reading, and writing skills within a Russian cultural framework. (MULT) Prerequisite: RUSS 1410 with a grade of "D" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RUSS 2310. Intermediate Russian I.**

This course provides continued development and review of all language skills within a Russian framework.(MULT) Prerequisite: RUSS 1420 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RUSS 2320. Intermediate Russian II.**

This course provides more advanced practice in all language skills with greater emphasis on reading within a Russian cultural framework.(MULT) Prerequisite: RUSS 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**RUSS 3302. Advanced Russian I.**

This course provides students an opportunity to develop advanced-level oral and written communication skills in the Russian language, along with enhanced comprehension skills in listening and reading. The course focuses on vocabulary and sentence building; listening and reading comprehension; and pronunciation practice. Prerequisite: RUSS 2320 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RUSS 4301. Advanced Russian through Film.**

This course focuses on Russian and Soviet films. In addition to the thematic and formal aspects of the films, the course examines their social, historical, and cultural contexts. Course activities allow students to develop their skills in reading, writing, speaking, and listening.

Prerequisite: RUSS 3301 or RUSS 3302 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**RUSS 4390. Studies in Russian Language and Culture.**

Students will conduct independent study projects in Russian language and culture. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPSY 5178. Independent Study.**

This course includes individual problems or research topics designed to place emphasis on selected areas of study. It may be repeated for additional credit at the discretion of the department chair.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPSY 5300. Interviewing, Counseling, and Consulting in School Psychology.**

This course includes acquisition of skills for conducting interviews, counseling, consulting, and collaborating with children, adolescents, and adults. The emphasis is upon the development of basic communication skills that can be applied by the school psychologist in a variety of multicultural contexts, with an emphasis on family-school collaboration. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPSY 5355. Assessment of Culturally and Linguistically Diverse Students.**

This course will focus on the psychoeducational assessment of students from culturally and linguistically diverse backgrounds for purposes of special education eligibility and for instructional decision making. A major emphasis is placed on learning nonbiased assessment methods and procedures to assess language proficiency, intelligence, academic skills and personality-behavioral functioning. (MULT) Restricted to students in the School Psychology SSP Program. Prerequisite: SPSY 5394 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPSY 5356. Psycholinguistics of Second Language Acquisition.**

This course will focus on the linguistic and psycholinguistic underpinnings of the bilingual brain. It will provide a comprehensive introduction to the foundations of bilingualism, covering language processing, and language acquisition. Topics will include simultaneous and sequential bilingualism, language selection and switching, cognitive consequences of bilingualism, and the bilingual brain. Prerequisite: SPSY 5355 and SPSY 5394 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5360. Crisis Prevention, Intervention, and Response in the Schools.**

This course provides access to core knowledge related to fostering school safety and healthy learning environments, preventing school violence, preparing for crisis events that may impact the school community, and responding to school crises. It emphasizes research that informs best practices and provides fundamental information to promote leadership on school safety teams.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5376. Psychoeducational Assessment.**

This course is designed to teach the selection, administration, scoring, and interpretation of selected standardized, individual tests of general intelligence and achievement for children and adolescents of varying abilities and from diverse racial/ethnic and linguistic backgrounds. The main focus of the course is on theories and measurement of intelligence and academic abilities, the administration and interpretation of selected tests, integrated report writing, and the development of recommendations to address limitations and strengths. (MULT) Prerequisites: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPSY 5377. Social, Emotional, and Behavioral Assessment.**

This course covers the evaluation of personality, mental status, and behavior. This includes the theoretical bases, construction, administration, scoring, and interpretation of structured and projective personality tests with integrative report writing emphasizing the assessment of emotional disturbance and behavior disorders. Prerequisite: SPSY 5376 with a grade of a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5378. Problems - School Psychology.**

This course includes individual problems not related to thesis or research problems. It is designed to place emphasis on selected areas of study. It may be repeated for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**SPSY 5379. Prevention and Treatment of Child and Adolescent Psychological Disorders: Individual, Group, and Sch.**

This course is an advanced investigation into the prevention and treatment of child and adolescent psychopathology. This course includes features of common childhood psychological disorders and empirically based strategies for preventing and treating these disorders. This course will cover individual, group, and schoolwide techniques by emphasizing culturally responsive Cognitive Behavioral Therapy (CBT), Acceptance and Commitment Therapy (ACT), and Social and Emotional Learning (SEL) approaches. Prerequisite: SPSY 5377 and SPSY 5380 both with grades of a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5380. Individual and Group Counseling Techniques for School Psychology.**

This course focuses on the acquisition and practice of techniques used in counseling interventions with children and adolescents in school settings. Individual and group counseling techniques are emphasized, along with a review and refinement of techniques for interviewing and consulting with parents. (MULT) Prerequisite: SPSY 5300 with a grade of a "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5381. Independent Study.**

This course provides opportunity for individual work on problems or research topics of interest to the student and relevant to the field of school psychology. Course may be repeated once for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPSY 5385. Ethics, Standards, and Procedures in Professional School Psychology.**

This course includes the presentation of historical foundations, role and functions, and procedures used by psychologists in the school setting. Emphasis includes ethical and legal issues, professional standards, state and federal law, and organization and operation of the schools as applied to the mental health and education of exceptional learners. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPSY 5386. Consultation and Professional Issues in School Psychology.**

This course presents models of consultation as they apply to the professional development and ethical position of the school psychologist. The course emphasizes the consultative role in relation to school administrators, guidance and counseling personnel, teachers, parents, students, and referral sources. (MULT) Prerequisite: SPSY 5300 and SPSY 5385 both with grades of "B" or better. Corequisite: SPSY 5389 with a grade of "CR" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPSY 5387. Data-Based Decision-Making in Evaluation and Intervention.**

This course covers advanced techniques for assessment of special populations, including early childhood, and integration of information from a variety of sources for the development of educational interventions. A problem solving approach that focuses on linking evaluation and intervention processes will be utilized throughout the course. (MULT) Prerequisite: SPSY 5376 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPSY 5388. Psychometrics for School Psychologists.**

This course covers measurement theory and applications for school psychologists. Topics include the statistical foundations of psychological measurement, interpretation of standardized scores, test development, reliability, validity, factor analysis, and bias and fairness in testing.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5389. Practicum in School Psychology.**

Three practicum experiences occur in a school or agency setting with supervision by on-site and university supervisor. This course must be repeated for a total of nine credit hours. (MULT) Prerequisite: SPSY 5376 and SPSY 5385 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Credit/No Credit

**SPSY 5390. Applied Behavior Analysis for School Psychologists.**

This course will cover behavior-analytic assessment strategies and intervention techniques used to prevent and address challenging behavior and teach prosocial behaviors that support successful academic functioning of students with and without disabilities. The primary goal for the course is for learners to become familiar with the role of school psychologists in conducting functional behavior assessments and utilizing that information to develop individualized plans to meet the needs of different learners. Prerequisite: SPSY 5387 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5391. Research Seminar.**

This course provides students with knowledge of the nature and techniques of social science research. Students will develop research literacy through critical reading and examination of both quantitative and qualitative research. Additional emphasis is given to the relationship and application of science to professional practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPSY 5394. Multicultural Issues in School Psychology.**

The course provides a broad overview of the psychosocial, psychoeducational and multicultural issues surrounding the delivery of psychoeducational services to students in school systems. The course will help the student develop cross-cultural sensitivity when conducting assessments, providing consultation and performing other interventions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPSY 5395. Basic Psychopharmacology.**

This course introduces knowledge of psychopharmacology with children and adolescents, including brain-behavior relationships, psychopathology, and research methods, with application to childhood disorders for which medication is often prescribed. Emphasis is placed on informed consultation with parents, teachers, and medical professionals regarding children prescribed psychotropic medications. Prerequisite: SPSY 5300 and SPSY 5376 and SPSY 5377 and SPSY 5382 and SPSY 5385 all with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5396. Biological Bases of Behavior.**

This course covers atypical disorders of brain development or function, particularly those likely to be encountered in the practice of school psychology. It includes an overview of neuropsychological and other tests with emphasis on development of a comprehensive assessment and intervention model through interpretation and critique or case studies. Prerequisite: SPSY 5376 and SPSY 5377 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5398. Alternative Evaluation, Intervention, and Student Outcomes.**

This course introduces students to the practice of curriculum based assessment in the context of a problem solving model of psychological services in the schools. Lectures, assignments, and activities develop competencies in the areas of non-traditional assessment, development of academic interventions, and the evaluation of student outcomes.

Prerequisite: SPSY 5387 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPSY 5399B. Essentials for the Assessment of Autism.**

This course will focus on evidence-based practices in the assessment of autism spectrum disorder. This is an experiential course in which students will apply relevant assessment skills under faculty supervision in a clinic-based setting [i.e., Clinic for Autism Research, Evaluation and Support (CARES)]. Prerequisite: SPSY 5376 and SPSY 5377 and SPSY 5388 and SPSY 5387 all with grades of a "B" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Credit/No Credit

**SPSY 5399C. Fostering Self-Care and Wellness in School Communities.**

This course will cover experiential strategies for promoting self-care and wellness among school professionals (e.g., school psychologists, administrators, school counselors, teachers). Students will become familiar with the literature on stress and burn-out among educators and the empirically based strategies for promoting emotional, physical, and mental well-being. In this course, students will engage in a wellness assessment, identify wellness goals, and implement personal self-care strategies throughout the course. Students will also work together to develop individual, social, and systemic plans for integrating self-care and wellness practices in their school communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SPSY 6301. Professional Internship in School Psychology.**

Professional internship may be a continuation of the supervised school based experience or a placement in an appropriate alternative setting with supervision by a licensed psychologist. A minimum of 600 clock hours of experience is required. Prerequisite: SPSY 5389 with a grade of "CR" or better and a grade of "B" or better in all SPSY program coursework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPSY 6302. Professional Internship in School Psychology.**

Professional internship may be a continuation of the supervised school based experience or a placement in an appropriate alternative setting with supervision by a licensed psychologist. A minimum of 600 clock hours of experience is required. Prerequisite: SPSY 5389 with a grade of "CR" or better and grades of "B" or better in all SPSY program coursework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 1350. Introduction to Social Work.**

This introductory survey course includes the nature, function, and various types of social work practice, acquainting the student with the history, scope, and values of the profession.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** SOCW 2361

**SOWK 2320. Love and Relationships.**

This elective course explores the nature of attraction, friendship, love, and human sexuality, enabling students to enhance their own personal and professional relationships.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 2375. Social Services in the Community.**

This undergraduate course introduces the organizations and policies involved in social services delivery. Students participate in 50 hours of work as supervised observers and volunteers in selected social service agencies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** SOCW 2362

**SOWK 3305. Seminar in Human Behavior and Social Environment I.**

This course provides an overview of human functioning in the environment by studying eco-systems and developmental frameworks. It builds knowledge and values for practice with task groups, organizations, and communities. Prerequisite: SOWK 2375 with a grade of "C" or better. Corequisite: SOWK 3420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 3312. Alcoholism and Chemical Dependence.**

This elective course focuses on commonly used and abused drugs as well as the dynamics and treatment of addiction and alcohol abuse. It emphasizes direct social work interventions aimed at addiction prevention and treatment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 3332. Helping Troops Transition Back to their Families and Communities: The Invisible Wounds of War.**

The course examines topics at the individual, family, group, organizational, and community levels related to troops who are returning from current combat operations and their families. It reviews the needs, community resources, and policies in place for helping them and their families make this transition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 3340. Social Work Research.**

This course builds foundation-level scientific research skills in critical thinking, knowledge of program and practice evaluation, and a philosophy of generalist social work practice. Prerequisite: [CJ 3347 or HP 3302 or HP 3325 or PSY 2301 or SOCI 3307] and SOWK 3425 both with grades of "C" or better. Corequisite: SOWK 4356 and SOWK 4425 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 3420. Social Work Practice I.**

This course studies generalist theory and application of social work practice with individuals, families, and groups, including introductory data collection, assessment, intervention planning, and evaluation. (WI) Prerequisite: SOWK 2375 with a grade of "C" or better. Corequisite: SOWK 3305 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**SOWK 3425. Social Work Practice II.**

This undergraduate course emphasizes generalist social work practice with task groups, organizations, and communities, examining data collection, assessment, intervention, planning, implementation, and evaluation. Students develop and implement a community-based project. (WI) Prerequisites: SOWK 3420 with a grade of "C" or better. Corequisites: SOWK 4305 with a grade of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**SOWK 4300E. Statistics for Social Work Online.**

This course builds foundation scientific research skills. Students develop critical thinking skills, knowledge of program and practice evaluation, and a philosophy of generalist social work practice.

**3 Credit Hours. 45 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 4300F. International Social Work.**

This course covers basic theoretical and practical approaches to empowerment, social and economic justice, and human rights. Particular cultures and specific global problems are examined in-depth to promote student acquisition of an international worldview for human global change based on social work values and research-informed practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 4300K. Innovative Community Engagement with Vulnerable Populations.**

This hybrid, service-learning, Study-in-America course will require students to identify, examine, and critically analyze social service programs in Central Texas and Los Angeles, California which provide services to vulnerable populations (persons experiencing poverty, homelessness, food insecurity, criminal justice issues, etc.). The impact of socio-economic and community-based social justice issues is analyzed within the context of human development over the life course with an emphasis on the impact of positive individual and community development. Cultural dynamics are examined in conjunction with issues of equity, justice, and community service provision. This course is designed to be highly experiential.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 43000. Modern Day Colonialism and Indigenous People.**

This course is a hybrid, service-learning, Study-in-America course that will require students to identify, examine, and critically analyze the history of colonialism on the culture, allocation of resources, oppression, and contribution to on-going risks and strengths in Hilo, Hawaii. Additional components of the course include: 1) required travel to various agencies, communities, and areas of interest throughout Hilo, Hawaii; 2) required participation in synchronous online learning, asynchronous learning, and two pre-travel orientations; and 3) active participation in service-learning/volunteer activities within a human service agency in Hilo, Hawaii.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Perspective|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOWK 4300P. Perspectives in Global Social Work Ethics.**

This course provides undergraduate students with an overview of perspectives on global social work ethics, while affording opportunities to problem-solve practice-related international ethical dilemmas. Prerequisite: [SOWK 1350 or SOWK 2375] with a grade of "D" or better.

**3 Credit Hours. 45 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 4301. School Social Work.**

This course is an overview of social services in schools. Topics covered include: educational issues, conceptual frameworks, education and mental health policies, and service delivery systems. Special attention is paid to cultural diversity, special populations within education, parent-school collaboration, community liaisons, referral systems, and educational systems change. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 4302. Hip Hop and Social Justice for Individual and Community Change.**

In this course, Hip-Hop culture is introduced within the context of human development over the life course with an emphasis on positive individual and community well-being. Cultural dynamics are viewed alongside art's role in the social and political history of the United States including issues of equity and justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 4303. Spirituality and Social Work Practice.**

This course provides a basic framework of knowledge, values, and skills necessary for ethical and effective spiritually-relevant practice. It examines spirituality as an integral component of a strengths-based approach to social work practice with diverse and/or vulnerable clients. It integrates a contemporary global perspective with critical self-reflection. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 4304. Animal-Assisted Therapy.**

This course is an introduction to the human-animal bond and its therapeutic applications. The course connects students with an extensive network of handlers and facilities in a wide range of disciplines with applied animal-assisted therapy programs. Students learn to plan professional, ethical, goal-directed, individualized and group animal-assisted therapy activities and programs that incorporate peoples from a variety of populations, in a variety of settings, as well as animal welfare. The course assists students in earning American Kennel Club (AKC) Canine Good Citizen certification so they may prepare for future therapy-dog training and certification. Prerequisite: SOWK 1350 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4305. Seminar in Human Behavior and Social Environment II.**

This course integrates knowledge from social sciences and SOWK 3305, focusing on individuals, families, and small groups functioning in environments. It uses a bio-psychosocial perspective, expanding on eco-systems, developmental, and values frameworks. (WI) Prerequisite: SOWK 3305 with a grade of "C" or better. Corequisite: SOWK 3425 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**SOWK 4307. Ghana: Human Rights and Social Justice.**

This course focuses on human rights and applied social justice in a global context from an interdisciplinary standpoint. The course helps students develop the capacity to apply human rights and social justice knowledge and skills to interdisciplinary practice with individuals, communities, and families in a global context. This international-based service learning course intentionally integrates community service, academic learning, and civic learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4310. Diversity and Social Justice in Social Work.**

This undergraduate course focuses on knowledge and skills necessary for effective, ethical, and just practice, exploring interpersonal and institutional dynamics of racism, sexism, heterosexism, homophobia, classism and other forms of oppression and their effects on providing social services to diverse populations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 4315. Child Welfare.**

This undergraduate elective course analyzes child welfare services available to abused and neglected children in their own homes, in substitute care, and through the community, emphasizing social work intervention with children and their families.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4318. Social Work and Health Care.**

This undergraduate elective course provides a generalist view of social work practice in mental health and public health, considering the social problems that affect health care, and ethical and effective intervention strategies and service delivery systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4320. Social Work with Older Adults.**

This undergraduate elective gives a comprehensive introduction to contemporary social problems, values, and issues affecting older adults, and effective and ethical intervention strategies and service delivery systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4333. Comparative Social Work Ethics for Education Abroad.**

This course assists students in expanding their basic level of knowledge, values, and skills in the area of ethics in social work, while participating in the Education Abroad program. Prerequisite: SOWK 1350 and SOWK 2375 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4334. Social Work During the Education Abroad Experience.**

This course assists students in exploring social work processes, social service provision and services to special populations in an international context during the Education Abroad experience. Prerequisite: SOWK 1350 and SOWK 2375 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4355. Policy Practice.**

This course is an overview of social policy and legislation and the processes of influencing public policy. It links policy with a broad range of social work service areas.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4356. Professionalism in Social Work.**

This course builds skills in self-presentation, in taking responsibility for personal and professional growth, in learning professional behaviors in organizations, and in presenting court testimony. Prerequisite: SOWK 3425 and SOWK 4305 both with grades of "C" or better. Corequisite: SOWK 3340 and SOWK 4425 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 4360. Directed Study in Social Work.**

This one-semester undergraduate course highlights individualized reading, independent study and projects, and guided instruction. It is offered to superior students by the professor's invitation and with the consent of the BSW Coordinator. This course may be repeated once for credit with different emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 4374. Generalist Field Integrative Seminar I.**

In this course students engage in generalist social work practice in agencies, supervised by degreed social worker professionals and the field liaison. Students complete this integrative lecture-based seminar concurrently with a field practicum (SOWK 4975) in a social service agency. Prerequisite: SOWK 3340 and SOWK 4356 and SOWK 4425 all with grades of "C" or better. Corequisite: SOWK 4975 with a grade of "credit".

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 4425. Social Work Practice III.**

This undergraduate course emphasizes interpersonal and communication skills necessary for effective, ethical generalist social work practice. Students translate theory into helping behaviors through practice and feedback to develop competent skills for beginning field placement. (WI) Prerequisites: SOWK 3425 and SOWK 4305 both with grades of "C" or better. Corequisites: SOWK 3340 and SOWK 4356 both with grades of "C" or better.

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Lab Required|Writing Intensive

**Grade Mode:** Standard Letter



**SOWK 4975. Generalist Field Practicum II.**

This course provides students with experiential opportunities for generalist social work practice in social service agencies applying micro, mezzo, and macro level knowledge. Prerequisite: SOWK 3340 and SOWK 4356 and SOWK 4425 all with grades of "C" or better. Corequisite: SOWK 4374 with a grade of "B" or better.

**9 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5111. Foundation Part-Time Field Practicum I.**

This course is supervised internship/practicum for beginning generalist social work practice. Students apply knowledge gained in an online integrative seminar to their work with individuals, families, groups, and communities for a minimum of 180 contact hours at a human service agency. Prerequisite: SOWK 5313 and SOWK 5314 both with grades of "B" or better. Corequisite: SOWK 5376 with a grade of "B" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5300E. Social Work and Health Care.**

This elective course provides a generalist view of social work practice in mental health and public health, considering the social problems that affect health care, and ethical and effective intervention strategies and service delivery systems. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5300F. International Social Work.**

This course covers advanced theoretical and practical approaches to empowerment, social and economic justice, and human rights. Particular cultures and specific global problems are examined in-depth to promote student acquisition of an international worldview for human global change based on social work values and research-informed practice.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5300H. Comparative Social Work Ethics in Canterbury.**

This course assists students in expanding an intermediate level of knowledge, values, and skills in the area of ethics in social work. The NASW Code of Ethics (US) and the National Codes of Ethics from the International Federation of Social Workers are used.

**3 Credit Hours. 12 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5300I. Social Work and Social Services in Canterbury.**

The purpose of this course is to assist the student in exploring social work processes, social service provision and services to special populations in Canterbury, England. Agency visits or primary research will guide learning.

**3 Credit Hours. 12 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5300J. Introduction to Trauma Informed Care.**

This advanced course focuses on culturally relevant knowledge and skills for theory-based, therapeutic assessment and intervention with diverse families and groups. The course emphasizes systemic, critical analysis of contemporary mental health practice using a psychosocial, strengths-based framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5300K. Innovative Community Engagement with Vulnerable Populations.**

This service-learning, Study-in-America course will require students to identify, examine, and critically analyze social service programs which provide services to vulnerable populations (persons experiencing poverty, homelessness, food insecurity, criminal justice issues, etc). Additional components of the course include travel to and participation in service-learning/volunteer activities in Louisiana.

**3 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5300M. ADVANCED INTERVENTION WITH INTIMATE PARTNERSHIPS (COUPLES).**

This advanced course focuses on culturally relevant knowledge and skills for theory based, therapeutic assessment and intervention with diverse intimate partnerships. The course emphasizes systemic, critical analysis of contemporary mental health practice using a psychosocial, strengths-based framework.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5300N. Social Work Practice in the Criminal Justice System.**

This graduate elective course explores an integrated approach to social work practice in the criminal justice system. It provides a comprehensive framework of knowledge, values, and skills for effective and ethical practice serving diverse and vulnerable clients and communities. It assumes an evidence-based and strengths-oriented social justice perspective to contemporary challenges and opportunities. It engages students in a process of self-reflection that assists them in developing an individualized professional model of potential practice in this critically relevant field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 53000. Modern Day Colonialism and Indigenous People Study in America.**

This course is a hybrid, service-learning, Study-in-America course. It requires students to identify, examine, and critically analyze the history of colonialism on the culture, allocation of resources, oppression, and contribution to on-going risks and strengths in Honolulu, Hawaii. Additional components of the course include required travel to various agencies, participation in online learning, and two pre-travel orientations, and active participation in service-learning/volunteer activities within a human service agency in Honolulu, Hawaii. Prerequisite: Minimum 3.0 TXST GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOWK 5301. School Social Work.**

This course explores the role of social workers in the school setting. Students learn about the unique challenges of providing social services within the educational environment. Interventions for working with children and youth in at risk situations are also introduced and practiced. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5302. Hip Hop and Social Justice for Individual and Community Change.**

Contemporary issues of equity and justice are investigated for potential influences on health and well-being. Students will compare professional application of Hip Hop integrated strategies within therapeutic, education, physical health, and afterschool and summer programs. Students will learn the interdisciplinary aspects of community-based strategies to promote equity and justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5303. Spirituality in Social Work Practice.**

This course provides an advanced-level framework of knowledge, values, and skills necessary for ethical and effective spiritually-relevant practice. It examines spirituality as an integral component of a strengths-based approach to social work practice with diverse and/or vulnerable clients. It integrates a contemporary global perspective with critical analysis and assessment. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5304. Adventure Therapy: Theory, Research & Practice.**

The course examines theory, practice and research in adventure therapy and engages the learner in hands on practice experience in outdoor, adventure therapy activities. The course guides students towards best practices in the use of adventure therapy as an innovative intervention that can be used in social work practice and other disciplines, with individuals, families and groups in a variety of settings.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5307. Ghana: Human Rights and Social Justice.**

This course focuses on human rights and applied social justice in a global context from an interdisciplinary standpoint. The course helps students develop the capacity to apply human rights and social justice knowledge and skills to interdisciplinary practice with individuals, communities, and families in a global context. This international-based service learning course intentionally integrates community service, academic learning, and civic learning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5308. Human Behavior in Individual and Family Social Environments.**

This foundation graduate course presents individual and family dynamics across the life cycle, centering on human development, individual and group strengths, and the effects of cultural diversity. It enhances critical thinking and assessment skills about human behavior in social environments, and incorporates material on professional values, ethics, and social justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5309. Human Behavior in Local and Global Social Environments.**

This foundation graduate course explores human functioning in the environment by studying families, groups, communities, organizations, and societies in local and global contexts. Through learning content on diversity, populations at risk, and social and economic justice, students build critical thinking and assessment skills using developmental and eco-systems frameworks. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5310. Social Welfare Policy and Services.**

This foundation course studies the United States' social welfare system, emphasizing how social welfare policies affect diverse populations. Topics include social welfare history; and policy development, implementation, evaluation, and values.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5312. Social Work Intervention in Drug Addiction & Abuse.**

This course focuses on commonly used and abused drugs as well as the dynamics and treatment of addiction. It emphasizes social work intervention aimed at addiction prevention and treatment.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5313. Foundation Social Work Practice I.**

This foundation course explores generalist social work theory and practice methodology in problem-solving with individuals, families, and groups, emphasizing data collection, assessment, intervention planning, and evaluation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5314. Foundation Social Work Practice II.**

This foundation skill-development course emphasizes generalist social work practice with task groups, organizations, and communities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5315. Social Work Intervention in Child Abuse & Neglect.**

This course considers child welfare services available to abused and neglected children in their own homes, in substitute care, and through the community, emphasizing social work intervention with children and their families.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5316. Foundation Social Work Practice III.**

This foundation course develops the student's interpersonal and communication skills with clients and other professionals. Students must demonstrate competence in interviewing, assessment, and planning skills. Students learn to collect data to support assessment, plan intervention, and evaluate practice. Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5317. Social Work Research.**

This foundation course builds introductory scientific research skills in critical thinking and knowledge of program and practice evaluation. It prepares students to read, interpret, and critique research with skepticism and rigor and to perform various research and social work practice activities. Prerequisite: SOWK 5308 and SOWK 5313 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5319. Diagnostic Assessment.**

This advanced course examines how individuals, families, and groups interact with the social environment, emphasizing mental health and adaptive capacity, theories of the etiology and development of mental and emotional disorders, and how culture affects mental health.

Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5320. Advanced Administrative Leadership Practice I: Introduction to Management.**

This advanced skill-development course emphasizes social work practice in managing small and large organizations. Students develop knowledge and skills in social work management and supervision in non-profit and public organizations. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5322. Advanced Social Policy and Social Justice.**

This advanced course, a study of social legislation affecting disadvantaged persons, emphasizes policy analysis, values, and advocacy through studying social policy history; developing, implementing, and evaluating policy; and influencing social and economic justice. (MULT) Prerequisite: Department approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5323. Advanced Social Work Research.**

This advanced course builds knowledge and skills for systematically evaluating programs and practice. It enhances effective and ethical social work practice by teaching skills necessary to design, implement, and empirically assess intervention with client and programs. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5324. Advanced Direct Practice with Families.**

This advanced course focuses on theories, research, and models of practice with families. It emphasizes a systems orientation to assessment and intervention, and integrates issues of self-awareness and human diversity. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5325. Advanced Administrative Leadership Practice III: Challenges and Innovations.**

This advanced course expands knowledge and skills by exploring how theories, supervision and management interventions, and social work values are applied to diverse organizational environments. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5326. MC/MP Advanced Direct Practice with Individuals.**

This advanced course examines intervention theories and builds specialized skills for effective, ethical practice with individuals. It examines how culture influences individuals, and discusses how to assess individuals from multiple perspectives. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5327. Advanced Direct Practice with Groups.**

This advanced course develops effective, ethical group practice skills, including assessment from multiple perspectives, facilitation of group process and intervention, evaluation, and addressing needs of diverse populations. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5328. Interdisciplinary Perspectives on Aging.**

This interdisciplinary course provides a graduate-level foundation in knowledge and skills used to address a wide range of needs among the aging population, their families, and support systems. Biophysical, psychosocial, and environmental perspectives will be integrated into development of culturally competent approaches to work with elders in many fields.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5329. Organizational Development.**

This advanced course examines organizational and inter-organizational social service delivery contexts; how funding, mandate, and organizational arrangements influence services; and factors to consider in modifying existing organizations. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5332. Helping Troops Transition Back to their Families and Communities: The Invisible Wounds of War.**

The course examines topics at the individual, family, group, organizational, and community levels related to troops who are returning from current combat operations and their families. It reviews the needs, community resources, and policies in place for helping them and their families make this transition.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5339. Selected Topics in Social Work.**

Students study relevant social work topics in depth. Topics, such as social work in schools or in health care, are selected according to students' needs and professional trends. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 5360. Directed Study in Social Work.**

This one-semester course highlights individualized reading, independent study and projects, and guided instruction. It is offered by invitation of the professor and with the consent of the MSW Coordinator. It may not be repeated for credit. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5370. Advanced Program Planning and Grant-Based Resource Development.**

This advanced course emphasizes social work practice in building and developing non-profit and public human services organizations. Course topics include: determining organizational needs and priorities; identifying resources to address needs and priorities; and pursuing grant-funded resources to address organizational needs. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5371. Advanced Assessment, Leadership, and Supervision in Social Service Organizations.**

This advanced course focuses on observational and interview-based evaluations of organizational functioning related to change, diversity, ethical decision-making, budgeting, and implementation of action plans. The course also focuses on development of supervisory strategies to effectively lead and transform an organization. Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOWK 5372. Advanced Diagnostic Assessment and Intervention with Individuals.**

This advanced course focuses on culturally relevant diagnostic assessment of and intervention with individuals based on current theory. The course emphasizes critical analysis of contemporary mental health practice using a psychosocial framework. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5373. Advanced Intervention with Families and Groups.**

This advanced course focuses on culturally-relevant knowledge and skills for theory-based, therapeutic assessment and intervention with diverse families and groups. The course emphasizes systemic, critical analysis of contemporary mental health practice using a psychosocial, strengths-based framework. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOWK 5376. Foundation Field Integrative Seminar I.**

This course is an integrative seminar for generalist social work practice in social service agencies applying micro, mezzo, and macro level knowledge. The content of the course includes social work competencies, ethical values, professional development, and basic knowledge of social work practice and the profession overall. This seminar course is completed by students enrolled in full-time and part-time. Prerequisite: SOWK 5313 and SOWK 5314 both with grades of "B" or better. Corequisite: SOWK 5111 or SOWK 5577 either with a grade of "Credit".

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 5378. Advanced Field Practicum I.**

This course is the first part of the advanced MSW field practicum in which students participate in a field seminar course in conjunction with completing field practicum hours at an agency. Field seminar provides the opportunity for students to apply and critically analyze social work knowledge gained in core. Prerequisites: SOWK 5370 and SOWK 5371 and SOWK 5372 and SOWK 5373 all with grades of "B" or better and a minimum 3.0 Overall GPA. Corequisite: SOWK 5379 or SOWK 5979 either with a grade of "Credit".

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOWK 5379. Advanced Part-Time Field Practicum I.**

This course is taken in conjunction with SOWK 5378 as Part I of the advanced/final field practicum courses for part-time students requiring completion of a minimum of 270 hours of internship in a social service agency. This course requires application of classroom knowledge to address complex level social justice issues. Prerequisite: SOWK 5370 and SOWK 5371 and SOWK 5372 and SOWK 5373 all with grades of "B" or better and a minimum 3.0 Overall GPA. Corequisite: SOWK 5378 with a grade of "B" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5411. Foundation Part-Time Field Practicum II.**

This second foundation part-time course continues a supervised internship/practicum focused on generalist social work practice in agencies for a minimum of 180 clock hours, applying classroom knowledge to work with individuals, families, groups, and communities. Prerequisites: SOWK 5376 with a grade of "B" or better and SOWK 5111 with a grade of "credit".

**4 Credit Hours. 1 Lecture Contact Hour. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5577. Foundation Full-Time Field Practicum II.**

This course provides experiential learning opportunities through application of complex micro, mezzo, and macro level knowledge in social service agencies. This is the second course of the foundation full-time field sequence, and requires completion of 360 hours. This course is completed by students enrolled full-time only. Prerequisite: SOWK 5313 and SOWK 5314 both with grades of "B" or better. Corequisite: SOWK 5376 with a grade of "B" or better.

**5 Credit Hours. 0 Lecture Contact Hours. 24 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5679. Advanced Part-Time Field Practicum II.**

This is the second part of the advanced practicum course sequence for part-time students requiring completion of a minimum of 270 hours in a social service agency. This course continues the experiential learning process initiated in SOWK 5379 including application of classroom knowledge to address complex level social justice issues. Prerequisite: SOWK 5378 with a grade of "B" or better and SOWK 5379 with a grade of "Credit" and a minimum 3.0 Overall GPA.

**6 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOWK 5979. Advanced Field Practicum II.**

This course is taken in conjunction with SOWK 5378 and is the advanced/final field practicum course in the final field course sequence for full-time students requiring completion of 540 hours of internship in a social service agency. This course requires application of classroom knowledge to address complex level social justice issues. Prerequisite: SOWK 5370 and SOWK 5371 and SOWK 5372 and SOWK 5373 all with grades of "B" or better and a minimum 3.0 Overall GPA. Corequisite: SOWK 5378 with a grade of "B" or better.

**9 Credit Hours. 0 Lecture Contact Hours. 35 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 1310. Introduction to Sociology.**

A survey of the basic concepts in sociology including social organization, culture, socialization, groups, and human population leading to the development of a sociological perspective of human behavior. SOCI 1310 and SOCI 3300 may not both be counted for credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Soc & Behav Sciences Core 080|Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SOCI 1301

**SOCI 3307. Statistics for the Behavioral Sciences.**

The application of descriptive and inferential statistics of behavioral science data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**SOCI 3317. Popular Culture and Society.**

The content of popular culture, including movies, television, genre novels, popular music, fads and fashion, sports, contemporary folklore, festivals and celebrations, clothing and body decoration, and related cultural material, is examined and analyzed for social significance. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3318. Applied Data Analysis.**

This course introduces the student to some of the uses of various existing statistical software packages including proper application, limitations, and interpretations of results. Prerequisite: SOCI 3307 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3320. Population Dynamics.**

A study of the composition of the world's population, focusing on growth, problems, politics, and controls. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3322. Sociology of Latinos and Immigration.**

This class will examine the impact that immigration and migration have on the growth of the Latino population as well as current debates surrounding immigration and its future in the U.S.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3323. Sociology of Consumption.**

Consumption is an integral part of social life in the United States, shaping how we see ourselves and others. While consumption can enhance consumers' lives, it is linked to a host of social and environmental problems. This course critically examines such problems and explores alternatives to the way of life that is consumerism.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3324. Social Stratification.**

The study of inequality as it relates to occupational, educational, religious, political, and other social activities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3325. Social Deviance.**

Theoretical and descriptive analysis of the major types of deviant behavior.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3327. Sociology of Racial and Ethnic Relations.**

This course focuses upon sociological perspectives in understanding race, ethnicity, and the relations between minority and majority groups with special reference to the American scene. (MULT) (MULP).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3328. Complex Organizations.**

The study and analysis of complex organizations, bureaucracies, and professions and their influence on individuals and society and its institutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3329. Life Course Sociology.**

This course examines major sociological approaches to the study of the human life course. Theoretical approaches reviewed include age stratification, the life course perspective, and constructivist and critical approaches to the life course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3330. Globalization and Development.**

This course covers the sociology of globalization and development. Students will learn about theories of globalization; the effects of globalization on cultural, economic and political life; and factors at different levels of analysis affecting socioeconomic development, security, human rights, and democracy around the world. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3331. Social Movements.**

This course examines social movements – the repeated display of collective action outside sanctioned political channels to bring about social change. Different theoretical approaches to social movements are reviewed to determine how movements organize, attract members, utilize resources, ideologically frame their issues, and engage in nonconventional tactics to influence public policy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3333. The Sociology of Popular Music.**

This course explores the dynamic and interactive relationships between music, culture, and society. Popular American music - from blues, gospel, ragtime, jazz, country, and swing to rock, disco, punk, alternative, and rap - will be analyzed as reflections of culture, as society's "voice," and as a powerful instrument of socialization and social change. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3334. Mind and Society.**

This course provides an overview of mental health and illness with an emphasis on how social environments and structures influence mental well-being. The course explores the causes and consequences of mental health disorders. The course examines policies and programs aimed at improving mental health in society.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3337. The Family.**

A comparative study of the family in various cultures, both historical and contemporary, with attention to the family in terms of social organization, social change, and social disorganization. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3338. Family Problems.**

This course applies sociological knowledge to common problems encountered in families: spouse and child abuse, elder abuse, catastrophic illness, suicide, unemployment, poverty, teen pregnancy, aging and gender issues. Worldwide traditions and norms affecting the institution of the family are also reviewed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3340. Sociology of Sport and Leisure.**

The theories and research in leisure and popular culture will serve as the broad framework. An emphasis will be placed on the sub-area of sport sociology, including such topics as sport and aggression, competition, children, women, minorities, professionalism, and others. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3343. Criminology.**

The various theories of crime, the cause of crime, areas of crime, treatment of criminals through the courts, punishment, reform, education, probation, and parole, and means of crime prevention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3347. Juvenile Delinquency.**

Delinquency in modern society, basic factors and conditions of juvenile delinquency, and the problem of delinquency control. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3349. Drugs and Society.**

A sociological examination of the social context of drug abuse with emphasis on the social factors, processes, and institutions that impact drug abuse. Applications of sociological theories and research methods will be studied. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3350. Gender and Society.**

This course examines the relations between gender roles throughout the world. Special attention is given to changes in these roles and the consequences of such changes for societies, including familial, marital, and sexual relationships. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3353. Urban Society.**

A study of urbanization as a social phenomenon with attention to traditional sociological studies of the community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3358. Work and Society.**

This course will explore sociological studies of work and occupations, including the structure of work, economic changes, and concerns of workers such as earnings, promotions, and unemployment. It is divided into three main topics: the social organization of work, current work trends, and inequalities at work. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3363. Medical Sociology: The Sociology of Health and Illness Behavior.**

An examination of the social determinants and consequences of human health, morbidity, and mortality, including considerations of health institutions, organizations, professionals, and clients. Social epidemiology of human diseases and mortality and changing relationships of acute and chronic diseases are stressed. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SOCI 3365. Society and Environment.**

This course addresses issues emerging from the reciprocal relationship between society and its environment. The impacts of social and economic organization, social class, and government policies on the physical and social milieu will be examined in order to produce a better understanding of social and environmental interactions. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3367. Sustainable Cities.**

This course uses sociological insight to develop a broader understanding of key concepts and debates about the sustainability of cities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3372. Food and Society.**

This course surveys the sociological study of food. Students will examine how people in societies socially construct "food"; how people obtain food and the implications of this process for our health, economy, and environment; and how food relates to issues of race-ethnicity, social class, and gender. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3375M. Latinos and Aging.**

This course offers an understanding of the growing Latino aging population in American society, highlighting issues related to their social, familial, economic, physical, and mental well-being. This course will also cover social programs, health and human service needs, and social policies affecting Latino elders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 3375N. Urban Sociology in Comparative Perspective.**

Topics include the historical development of cities, cities as engines of culture, planning, and gentrification. The comparative emphasis permits analysis of London in light of corresponding phenomena in American cities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 3375O. Culture and Society in Comparative Perspective.**

Topics include cultural change and diffusion and social concerns such as inequality, gender, popular culture, etc. The comparative emphasis permits analysis of these phenomena in England vis-à-vis the United States.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 3375P. Sociology of Religion: A Global Perspective.**

This course is an introduction to the tools and concepts central to the sociological study of religion and religiosity. It takes a global perspective on religions, inspecting the ideas of classic and modern sociological theorists concerning the various roles, functions, conflicts, prejudices and symbols of religion.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 3383. Aging and Society.**

This course is an introduction to the sociology of aging and social gerontology. It employs a multicultural perspective to examine diversity in the aging process as influenced by societal forces. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 3384. The Sociology of Death and Dying.**

A study of the sociological and social psychological perspectives on death and dying in contemporary societies with particular emphasis on the meanings of death, on dying as a social process, and on death in the context of both social organization and the life cycle.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3390. Technology and Society.**

The subject of this course is the relationship between technologies and social institutions. Topics covered may include but are not limited to theories of sociotechnical change, diffusion, social constructivism, modernity and rationalism, and case studies of transformative technologies such as the clock, the car, and the birth control pill.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 3395. Sociology of Sexuality.**

Sexuality is explored from a social constructionist perspective, in contrast to essentialist and biological determinist perspectives dominating the Western understanding of sexual roles and behavior. Sexual identity, desire, behavior, response, and health are viewed as socially constructed, largely in response to concerns about societal order. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 4306. Sociological Theory.**

This course examines classical sociological theories and the contemporary theories that follow from them. The major approaches covered are functionalism, conflict theory, symbolic interaction, and phenomenology. (WI) (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SOCI 4308. Quantitative Research Methods.**

Basic issues in social research are introduced, while emphasizing design and analysis of quantitative research studies. Research exercises culminate in a major research paper analyzing secondary data from The General Social Survey. Critique of published research articles is also required. (WI) Prerequisite: SOCI 3307 with a grade of "D" or better. Corequisite: SOCI 3318 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**SOCI 4309. Qualitative Research Methods.**

This course examines issues in the sociological research process with an emphasis on qualitative methods. Students will design, propose, and submit a qualitative study based on an extensive review of the sociological literature. (WI) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**SOCI 4360. Directed Study.**

A course of independent study open to superior students. May be repeated with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 4690. Internship in Applied Sociology.**

This course is a supervised work experience related to students' career interests. Requirements include seminars and a 300-hour internship for 15 weeks during long semesters or 10 weeks in the summer. This course is limited to BS majors who meet all prerequisites and can be taken for credit only once.

**6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**SOCI 5105. Practicum in Teaching Sociology.**

An introduction to key concepts and practices in the teaching of college course in Sociology. Provides regular in-service training and planned periodic evaluations of instructional responsibilities. Required for first-year teaching and instructional assistants in the Sociology Department. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**SOCI 5110. Proseminar in Sociology.**

This course will orient new graduate students to the department and the profession. Topics include presentations at professional meetings, academic writing and publishing, and putting together curriculum vitae.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5198B. Applied Research Practicum II.**

This course represents a student's continuing enrollment to complete the practicum project. The student continues to enroll in this course until the practicum project is approved by the practicum committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5300. Foundation Studies in Sociology.**

This course provides prerequisite knowledge required for success in graduate-level coursework in Sociology. Course content varies depending on academic preparation. This course does not earn graduate degree credit. Repeatable up to 12 hours with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

**Grade Mode:** Leveling/Assistantships

**SOCI 5306. Sociological Theory Seminar.**

This graduate theory course examines the role of social theory in the historical and contemporary quest for knowledge and understanding of society. The first half of the course emphasizes the European Classics. The second half of the course is devoted to contemporary theory. Emphasis throughout will be on using theory to better understand current events and everyday life experiences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5307. Advanced Statistics for the Social Sciences.**

Application of advanced statistical theory and methods to the analysis of social data. Prerequisite: SOCI 3307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5308. Seminar in Quantitative Research Methods.**

The application of research methods to social science with emphasis on direct, practical experience in research. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5309. Seminar in Qualitative Research Methods.**

This course examines qualitative methods in Sociology. Topics include examples of classical and modern qualitative research, and issues related to qualitative research. Students critique qualitative studies and conduct and defend a qualitative project. Departmental approval needed for non-majors.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5316. Seminar in Deviation and Social Problems.**

A systematic analysis of contemporary social problems and various types of social deviation. Emphasis is on the socialization process as it relates to social problems and human deviation. The sociological explanation of underlying factors will be stressed. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5318. Seminar in Advanced Data Applications.**

This course will cover the application of various statistical techniques, such as chi-square, correlation, and regression while introducing statistical analysis to students using software such as SPSS. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5319. Seminar in Social Psychology.**

A critical appraisal of the major theories and theorists found in Social Psychology with emphasis on their application to contemporary social and psychological issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5320. Seminar in Demography.**

A seminar in the study of population with emphasis on sources of demographic data, techniques of demographic analysis, and population composition and forecasts. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5322. Impact Analysis Research.**

This course is designed to introduce students to the assessment of organizational impact. It addresses both the historical development and social functions of evaluation, as well as practical application of assessment research. Emphasis will be on appropriate research design, implementing the design, and analysis of data.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5323. Grant Writing for the Social Sciences.**

This course offers an applied approach to developing grant-writing skills for the social scientist. It will cover all aspects of proposal development including idea generation, funding source identification, project description, project plan, project management, evaluation methods, and budget preparation strategies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5350. Seminar on the Sociology of Gender.**

This course is a graduate level seminar on the study of gender in sociology with a focus on issues of race, ethnicity, social class, and sexuality. We will examine the major contemporary scholarly debates about gender and explore how gender issues are embedded in different institutions and organizations. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5351. Introduction to Dementia Studies.**

This course is an introduction to the social-scientific study of the causes and consequences of dementia, as well as to issues related to the care of persons with dementia.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5352. Dementia and Caregiving.**

This course for the Dementia and Aging Studies degree covers current research on policy and support for caregivers of persons with dementia, with an emphasis on the applied sociological focus of caregiver training and education. The course also addresses broader public sociology issues of caregiving and healthcare.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5353. Seminar in the Community.**

A study of contemporary urban society with emphasis on understanding the social structure as a prerequisite to planning and problem solving at the community level. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SOCI 5354. Theoretical Perspectives in Aging and Dementia.**

This course discusses theories of aging from biological, psychological, and social science perspectives. The course also demonstrates how these theories can be applied to analyzing various aging issues, particularly the social care of persons with Alzheimer's disease and other dementias.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5355. The Social Psychology of Dementia.**

This course analyzes the social construction of dementia and salient social psychological theories, concepts, and research in dementia studies. It investigates the social psychology of dementia in relation to mind, identity, stereotypes, prejudice, attributions, socialization, emotions, social interaction and the impact of institutions on the self.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5356. End of Life Care.**

This course focuses on issues of dying and death. Topics covered include symptom management, palliative care, hospice, pain control, life-sustaining treatment and spiritual, legal and ethical issues related to dying and death. Also covered will be different religious views on euthanasia, dying, death, and funerals.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5357. Gender and Aging in Society.**

This course is a seminar on the study of gender and aging. This seminar will examine issues of aging identities, the aging body, sexuality, health and medicine, and caregiving among older adults. This course emphasizes the aging experience in our culture as a fundamentally gendered phenomenon. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5359. Seminar in Drugs and Society.**

A sociological examination of the use of legal and illegal drugs in society, with emphasis on topics such as the "war on drugs," the pharmaceutical industry, and drugs as technologies of medicalization, as well as incentives to social change. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5361. Aging and Dementia: Racial and Ethnic Minorities.**

This course provides an analysis of how race and ethnicity affect aging and dementia, with particular emphasis on the United States. The course examines health and quality of life of racial and ethnic minorities in later life, social factors that influence these differences, and means of intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5362. Rural Aging and Dementia.**

This graduate course examines aging and dementia issues in rural America. Demographic trends, cultural and economic changes, and intervention strategies will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5363. Seminar in Medical Sociology.**

A seminar on selected topics of human health and health care organizations. Topics to be stressed include: social causes and consequences of morbidity and mortality, professionalization and socialization of health care practitioners, organization of health institutions, and demographic changes in health problems and needs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5364. Clinical Gerontology: Interventions for Elders and Persons with Dementia.**

This course takes a clinical sociology perspective in studying the issues of the aged and persons with dementia. The approach is humanistic and multidisciplinary, seeking to improve the quality of older persons' lives by assessing situations and reducing problems using analysis and intervention.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5366. Social Inequality: Race, Class, and Gender in the United States.**

This course investigates the topic of social inequality. The intersections of class, race and gender as they produce inequality are explored, along with theoretical perspectives and empirical evidence informing the study of social inequality.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 5367. Seminar in Sustainable Cities.**

This course analyzes the complex relationship between urbanization and environmental change from a sociological perspective. Overarching themes include sustainability and environmental justice. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5368. Seminar in Environmental Sociology.**

This course situates societies within their ecological context and vice versa. Focusing upon social and environmental interactions, including the interactions of social organization, inequality, and policy, provides a comprehensive understanding of the physical and social milieu. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5370. Seminar in Sociology of Racial and Ethnic Relations.**

This course examines the dynamics of dominant and subordinate social groups. The course focuses on racial, ethnic, and class differences. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5371. Directed Study.**

Course of independent study open to individual students only at the invitation of the faculty member with the approval of the department chair and the graduate advisor. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SOCI 5383. Seminar on Aging.**

This course provides graduate students with an opportunity to examine national and global issues involved with the aging process and population aging from a social scientific and multicultural perspective. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5388F. Seminar in Poverty.**

This course is a graduate seminar on the sociological study of US poverty and social mobility. We will examine poverty measurement and trends, poverty-related social policies, theories for explaining poverty and mobility, and the intersection of poverty and social mobility with issues of gender, race, family structure, and place. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388G. Seminar in Food and Society.**

This graduate course focuses on the sociological study of food. It examines the current food system and its interactions with macro-level social institutions, as well as individual identity and well-being. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SOCI 5388H. Advanced Statistical Analysis II.**

The focus of this course is advanced data analysis. This course will cover topics such as regression, limited dependent variables analysis, and time series analysis. A secondary aim is to demonstrate data analyses using popular software packages. Prerequisite: SOCI 5307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5388J. Applied Survey Research.**

This course offers an applied approach to learning about survey methods. The course links research on survey construction and implementation to practical applications in which students solve problems associated with real-world survey instruments. Students will learn appropriate survey research terminology, as well as how to communicate in an effective and non-technical manner to others in need of survey assistance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SOCI 5390. Seminar in Globalization and Development.**

This seminar explores issues related to socioeconomic development and change, particularly in the "Global south." The course will focus on factors affecting development and underdevelopment around the world. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5395. Global Insecurity.**

This graduate seminar covers global, socially constructed risks perceived as threats to sustainable development. Topics include theories of globalization and insecurity; an assessment of threats to democracy and human rights, the environment, food security, public health and safety; as well as local, national and international responses to these threats. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SOCI 5398A. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5398B. Applied Research Practicum.**

Directed impact analysis project in a government agency, business, or non-profit organization requiring the student to apply skills and demonstrate knowledge gained in course work. The project topic will be determined jointly by the faculty supervisor, the student, and the research site. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SOCI 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SOCI 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SOCI 7307. Advanced Social Statistics.**

In this course students learn to apply advanced statistical theory and methods to the analysis of social data. Prerequisite: SOCI 3307 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SOCI 7318. Seminar in Advanced Statistical Applications.**

This course is an advanced applied data analytics course that covers statistical mediation/moderation, regression, and analysis of limited dependent variables. The course will utilize multiple software packages including, but not limited to the following: SPSS, Stata, R. Prerequisite: SOCI 5307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 1410. Beginning Spanish I.**

Introduction to listening, speaking, reading, and writing skills within a Spanish cultural framework. Students who take SPAN 1410 toward degree requirements must also complete SPAN 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SPAN 1411

**SPAN 1420. Beginning Spanish II.**

Continued practice in listening, speaking, reading, and writing skills within a Spanish cultural framework. Prerequisite: SPAN 1410 with a grade of "C" or better. Students who take SPAN 1410 toward degree requirements must also complete SPAN 1420. (MULT).

**4 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SPAN 1412

**SPAN 2310. Intermediate Spanish I.**

Continued development and review of all language skills within a Spanish framework. (MULT) Prerequisite: SPAN 1420 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SPAN 2311

**SPAN 2320. Intermediate Spanish II.**

More advanced practice in all language skills with greater emphasis on reading within a Spanish cultural framework. (MULT) Prerequisite: SPAN 2310 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**TCCN:** SPAN 2312

**SPAN 3301. Literatures of Spain I.**

Students will study significant literary texts of the Iberian Peninsula from the Muslim conquest in 711 A.D. through 1700. The course will also consider the literature's historical, religious, social, and political contexts. Prerequisite: SPAN 3309 with a grade of "C" or better. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3302. Literatures of Spain II.**

Students will study significant literary texts of the Iberian Peninsula from the Enlightenment through the twenty-first century. The course will also consider the literature's historical, social, and political contexts. Prerequisite: SPAN 3309 with a grade of "C" or better. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3305. Latin American Literatures I.**

Students will study literary texts in Latin American from the period before the Conquest through the Colonial and Independence periods. The course will also consider the literature's historical, religious, social, and political contexts. Prerequisite: SPAN 3309 with a grade of "C" or better. (MULT) (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3306. Latin American Literatures II.**

Students will study literary texts of Latin American from Modernismo to the twenty-first century. The course will also consider the literature's historical, social, and political contexts. (MULT) (WI) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3307. Advanced Composition for Spanish Heritage Speakers.**

This is an advanced composition course for students who have grown up in an environment in which Spanish is spoken. It is designed to improve writing skills in Spanish through reading and responding to texts in Spanish. Students may not apply credit to their degree plans for both SPAN 3307 and 3308. (MULT) Prerequisite: SPAN 2320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3308. Advanced Composition.**

This advanced composition course is designed to improve writing skills in Spanish through reading and responding to texts in Spanish. Students may not apply credit to their degree plans for both SPAN 3307 and SPAN 3308. (WI) (MULT) Prerequisite: SPAN 2320 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3309. Introduction to Hispanic Literature and Literary Analysis.**

This course focuses on writing skills, literary analysis, and the reading of selected works from Spanish, Latin American and Hispanic literature. (MULT) (WI) Prerequisite: SPAN 2320 with a grade of "C" or better. Corequisite: SPAN 3307 or SPAN 3308 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3310. Spanish Phonetics and Phonemics.**

Articulatory phonetics and sound discrimination and production; phonemic and allophonic variants; geographical and social distribution. (MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 3311. Business Spanish I.**

This course focuses on the use of written and oral Spanish in global business contexts, as well as exploring economic, demographic, and cultural factors that influence commercial interactions in the Hispanic world. Topics include business management, banking, and human resources. (WI)(MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3312. Business Spanish II.**

This course focuses on the use of written and oral Spanish in global business contexts, as well as exploring economic, demographic, and cultural factors that influence commercial interactions in the Hispanic world. Topics include marketing, financing, and imports/exports. (WI) (MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3313. Spanish and Media.**

This course provides an overview of mass communication in Spanish-speaking regions of the world. Students explore the use of radio, television, newspapers, and the internet as practiced in various Hispanic cultural contexts. Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 3314. Translation Practice and Theory.**

This course is an introduction to Spanish translation for upper-division students. Students approach translation as a method of improving their reading comprehension—a fundamental skill for translators—while increasing overall Spanish language proficiency and acquiring the cultural competence required to address the complexities of the translation process. Prerequisite: SPAN 3307 or SPAN 3308 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 3315. Spanish for Health Professions.**

This course focuses on the use of oral and written Spanish in U.S. and global health professions. Topics include: general and diagnostic health-related terminology in Spanish; communication with Spanish-speaking patients, families, and other health professionals; and the impact of cultural factors on health matters in Hispanic communities. (WI) Prerequisite: SPAN 3307 or SPAN 3308 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3340. Advanced Spanish Grammar and Stylistics.**

This course places major emphasis on syntax, usage, and grammatical nomenclature. (MULT) Corequisite: SPAN 3307 or SPAN 3308 either with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 3370. Spanish Civilization.**

Students will study the civilizations and cultures of Spain. The course provides a background for understanding Spanish society. (MULT) (WI) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 3371. Latin American Civilization.**

Students will study the cultures of Latin America and the Hispanic U.S. The course provides a background of the history and civilization of both groups. (MULT) (WI) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4300. Professional Internship in Spanish.**

This course is a supervised work experience in a Spanish-speaking environment. Students will work a minimum of 140 hours, performing duties at least 80% in Spanish. Other requirements include internship reports as required by course instructor. (MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 4302. The Spanish Novel.**

Students will study selected novels of Spain from the 16th through the 21st century. The course will also consider the literature's historical, religious, and political contexts. (MULT) (WI) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4311. Historical Aspects of Hispanic Linguistics.**

Course designed to develop knowledge and skills required for analysis and discussion of structural and external aspects of the history of the Spanish language with special focus on word formation and social aspects of language variation. The course provides an overview of morphology, sociolinguistics, and historical linguistics. (MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 4312. Contemporary Aspects of Hispanic Linguistics.**

This course is designed to develop knowledge and skills required for analysis and discussion of the structural and social aspects of the Spanish language. The course provides an overview of semantics, syntax, pragmatics, dialectology, and language acquisition in Spanish. (MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 4330. The Latin American Novel.**

Students will study selected novels from Latin America. The course will also consider the literature's historical and political contexts. (MULT) (WI) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4341. Gabriel Garcia Marquez.**

Students will read and analyze works by Nobel Prize author Gabriel Garcia Marquez, focusing on literature, history, politics and art of Latin America. (WI)(MULT) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4342. Don Quijote.**

Students will read and analyze Miguel de Cervantes' Don Quijote. The course will also consider the novel's literary sources and historical and cultural context. (WI)(MULT) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter



**SPAN 4350. Hispanic Film.**

Students will study Hispanic artistic, cultural, and historical issues through film and selected readings. (WI) (MULT) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4361. Hispanic Poetry.**

Students will read and analyze selected poems from Latin America and Spain. The course will consider the cultural and historical contexts of the works. (MULT) (WI) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4362. Hispanic Drama.**

Students will read and analyze selected plays from Latin America and Spain. The course will also consider the cultural context of the works. (MULT) (WI) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4370. Hispanic Literature of the Southwest.**

Students will study the Hispanic literature of the Southwest in order to have a better understanding of the cultural diversity of the region. (WI) (MULT) Prerequisite: SPAN 3309 a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4380A. Hispanic Nobel Prizes in Literature.**

Hispanic Nobel prizes in Literature. (WI) (MULT) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4380F. Mexican Literature.**

This course focuses on the most representative works of Mexican Literature produced since Mexican Independence in the early 19th century. Course objectives include a better understanding of major literary trends and the cultural development of Mexican society since its beginning as an independent republic. (WI) (MULT) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4380G. Women, Minorities and Marginal Groups in Medieval Spanish Literature.**

This course will present some of the principal literary works which portray women, religious minorities and marginal groups in medieval Spain. Special focus will be given on deconstructing historical myths and stereotypes based on behavioral, religious and sexual identity as reflected by the authors and their selected works. (WI) (MULT) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4380H. Nature and Nation in Latin American Literature.**

Students will study the interaction of nature and nation in Latin American literature after Independence by taking into account both Western and indigenous approaches to nature. Students will read a selection of literary works that reinforce and/or contest notions of nature, nation and cultural identity. (WI) (MULT) Prerequisite: SPAN 3309 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics|Writing Intensive

**Grade Mode:** Standard Letter

**SPAN 4390. Studies in Spanish Culture, Language, or Literature.**

The course is generally available only to graduating seniors who have completed several advanced courses or graduate students with special needs. Repeatable for credit with different emphasis. (MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 4600. Professional Internship in Spanish.**

This course is a supervised work experience in a Spanish-speaking environment. Students work a minimum of 280 hours, performing duties at least 80% in Spanish. Other requirements include internship reports as required by course instructor. (MULT) Prerequisite: SPAN 3308 or SPAN 3307 with a grade of "C" or better and instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 18 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5100. Practicum in Teaching Spanish.**

Required as a condition of employment for graduate teaching and instructional assistants in their initial semester of employment. The course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**SPAN 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5303. Spanish for Health Professionals.**

This course is designed for graduate students in the health professions who require knowledge of Spanish in the professional settings of nutrition, physical therapy, nursing, and respiratory therapy. Students develop elementary communicative proficiency and accuracy in the use of the Spanish language with Spanish-speaking clients, with an emphasis on oral communication. Along with basic structures and vocabulary utilized in health-care contexts, students learn essential information about Hispanic cultures. The course cannot be counted for credit in the Spanish M.A. program.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5310A. Voyages and Encounters in Spanish American Literature.**

Thorough analysis of historical and fictional voyages. The course will address how encounters with indigenous, ethnic minority, and foreign cultures have influenced the development of individual, national and regional identities in Spanish America. Readings will include accounts of the Conquest, colonial texts, and literature for the 19th and 20th centuries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310B. Don Quijote.**

A close reading of the classic Spanish novel Don Quijote by Miguel de Cervantes. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310C. Poetry of Spain and Spanish America.**

A focus on the genre of poetry through a close reading of a selection of classical and contemporary poets from Spain and Spanish America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310D. Hispanic Literature: Gabriel García Márquez.**

A study of selected works of Nobel Prize author Gabriel García Márquez, focusing on literature, history, politics, and popular culture of Latin America. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310E. Hispanic Literature: Hispanic Film.**

A study of Hispanic cultural issues through film and additional readings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5310F. Contemporary Mexican Narratives.**

This course focuses on contemporary Mexican narratives. Students will study Mexico's literary trends such as La nueva narrativa, the Crack Generation, women's literature, and the new historic and testimonial fictions, in order to better understand the cultural process of the Mexico's society in the late 20th and early 21st centuries. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Topics

**Grade Mode:** Standard Letter

**SPAN 5311. Studies in Medieval and Golden Age Spanish Peninsular Literature.**

Selections of fiction, poetry, theatre, essay, and film of medieval and Golden Age Spain. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5312. Studies in Spanish Peninsular Literature from the Eighteenth Century to the Present.**

Selections of fiction, poetry, theatre, essay, and film of Spain from the eighteenth century to the present. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5313. Studies in South American Literatures.**

Selections of fiction, poetry, theatre, essay, and film of South America. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5314. Studies in Central American and Caribbean Literatures.**

Selections of fiction, poetry, theatre, essay, and film of Central America and the Caribbean. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5315. Studies in Mexican and Mexican-American Literatures.**

Selections of Mexican and Mexican-American fiction, poetry, theatre, essay, and film. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5316. Studies in Spanish Peninsular Culture.**

Culture, history, and society in literature, film, art, music, folklore, and mass media of Spain. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5317. Studies in the Cultures of the Americas.**

Culture, history, and society in literature, film, art, music, folklore, and mass media of the Americas. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5318. Advanced Composition and Research Methods.**

This course focuses on the study of composition and grammar, textual analysis, and research methods. It may be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5319. Synchronic Spanish Linguistics.**

In this course students learn about Spanish dialectology, phonology, regional variation, migration impacts on language variety, issues of language maintenance and death, syntax, and current theories of language contact and koineization (i.e., the formation of new dialects). May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5320. Diachronic Spanish Linguistics.**

Evaluation of aspects of history of the Spanish language including pronunciation, word formation, sentence structure, dialects, and relations to other languages. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5321. Spanish Applied Linguistics.**

This course provides an overview of the major areas of applied linguistic research including: current theories in second language acquisition, teaching methodologies, bilingualism, performance, syntax, and computer assisted learning. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5322. Spanish for the Professions.**

Topics vary and include the study of Spanish for business, law, medicine, criminal justice, and/or the social sciences. May be repeated once with different emphasis for additional credit. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5323. Translation History and Theory.**

This course introduces students to the history and theory of translation. Students analyze historical and contemporary translation practices and theories and the inherent challenges and complexities of translating a source text into a target language. Students translate texts in a variety of genres to acquire proficiency in producing accurate translations from English to Spanish and Spanish to English. Prerequisite: 3.0 GPA in 12 hours of advanced undergraduate Spanish.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5324. Applied Translation Methods.**

This course is an introduction to applied translation methods. Students practice the specific tasks involved in the vocabulary, sentence structure, and cultural complexities of the translation process in Spanish and English while acquiring the proficiency to produce professional translations in fields such as advertising, business, healthcare, law, sports, and journalism. It may be repeated once for credit when its topic varies. Prerequisite: 3.0 GPA in 12 hours of advanced undergraduate Spanish.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPAN 5325. Professional Internship in Spanish.**

This course is a supervised work experience in a Spanish-speaking professional environment. Students will work a minimum of 140 hours, performing duties at least 80% in Spanish. Other requirements include internship reports as required by course instructor. (MC).

**3 Credit Hours. 0 Lecture Contact Hours. 9 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPAN 5390. Studies in Spanish Culture, Language, or Literature.**

Independent study under supervision of a graduate faculty member in Spanish, with in-depth readings and research on a specific topic. May be repeated once with different emphasis for additional credit. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPAN 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in Spanish 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPAN 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding. Graded on a credit (CR), progress (PR), no-credit (F) basis.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPAN 5600. Internship.**

This course consists of an internship of at least four weeks duration in the United States or in a Spanish-speaking country. Interns work with organizations that use Spanish in a professional context. Internships may be complemented by lectures, observations, interviews, or other activities relevant to the student's academic and professional interests. Graduate advisor approval required. Prerequisite: Completion of 18 credit hours required for the Master of Arts with a major in Spanish.

**6 Credit Hours. 0 Lecture Contact Hours. 12 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SPAN 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SPED 2360. Survey of Exceptionalities.**

Course provides for the examination of types, characteristics, and causes of various exceptionalities; identifies federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 3338. Educating Students with Emotional/Behavioral Disorders.**

This course addresses topics associated with teaching students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT) Prerequisites: If SPED 2360 is taken prior to this course, students must have earned a "C" or better. Corequisites: SPED 2360.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 3390. Assessing Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude; academic achievement; social, emotional, and motor development; and includes implications of these results for instruction or remediation. (MULT) Prerequisites: SPED 4345 with grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 4310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of program. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 4340. Evidence-Based Instructional Practices for Students with Mild or Moderate Disabilities.**

This course delineates evidence-based instructional theories and practices for students with mild or moderate disabilities and targets curricular and instructional design for students who need specialized methods for successful learning. Topics include curriculum-based measurement and progress monitoring, evidence-based strategies matched to presenting characteristics, and evidence-based inclusion models. (MULT) Prerequisite: SPED 2360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 4344. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 4345. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT) Prerequisites: SPED 2360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 4374. Classroom and Behavior Management Strategies for Students with Disabilities.**

Effective strategies for classroom management. Topics include: common management problems, evaluation of classroom management approaches, strategies for preventing behavior problems, teaching new behaviors, increasing desired group and individual behaviors, and positive strategies for reducing inappropriate group and individual behaviors. (MULT) Prerequisites: SPED 2360 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 4381. Educating Students with Intellectual and Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques pertaining to individuals with intellectual and developmental disabilities. Techniques include specialized assessment and instructional strategies, functional curriculum development, transition planning, positive behavior supports, and assistive technologies. (MULT) Prerequisites: Must be declared as seeking All-Level Special Education teacher certification or with a Special Education minor; if SPED 2360 is taken prior to this course, students must have earned a "C" or better. Corequisite: SPED 2360.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 4389. Special Education Practicum.**

This course provides opportunities for students to design and apply assessment, planning, and instructional strategies. Students may be required to instruct in one or more content areas including academic, life, social, prevocational or vocational and/or communication skills. Prerequisites: SPED 3338 and SPED 3390 and SPED 4340 and SPED 4374 and SPED 4381 all with grades of "C" or better and a minimum 2.75 overall GPA.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter



**SPED 5310. Independent Study in Special Education.**

This course is an-depth study of selected topics of current interest in special education. Coursework is completed on an independent study basis with a faculty member and available only with permission of instructor. May be repeated for credit. (MULT) Prerequisite: Departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5311. Teaching Language Arts to Students with Disabilities.**

Course provides effective, research-based instruction for struggling readers, including basic literacy and adaptations to facilitate students' access to the general education curriculum. Basic literacy content will be presented, including information about phonological awareness, word study and spelling, fluency, comprehension, and writing across content areas. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5313. Education Students with Emotional/Behavioral Disorders.**

Specific strategies and issues associated with effective instruction of students with emotional/behavioral disorders. Content includes an overview of definitions and characteristics, etiological factors, assessment for diagnosis and intervention planning, treatment options, including methods and materials for effective instruction, collaborative interagency services, and current issues. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5314. Advanced Educational Strategies for Students with Autism.**

This course examines theories and specialized instructional strategies pertaining to the education of children and youth with Autism Spectrum Disorders. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5316. Basic Concepts & Principles in Applied Behavior Analysis.**

This course covers the basic concepts and principles of applied behavior analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5333 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5317. Introduction to Intervention in Early Childhood.**

This course provides an introduction to Early Intervention/Early Childhood Special Education. This course focuses on content related to best intervention practice for children with developmental delay and disability. Topics will include infant, toddler, and early childhood development; naturalistic developmental interventions; family-centered practices; routine-based intervention; activity-based instruction; and transdisciplinary assessment and intervention. Coverage spans core intervention areas in early intervention, such as social emotional development, language and pre-literacy, motor skills in a variety of settings for service delivery, including home, community, and center-based contexts. Issues of racial, cultural, and linguistic diversity will be emphasized.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5319. Advanced Specially Designed Instruction for Students with Disabilities.**

This course covers advanced methods for providing specially designed instruction for students with disabilities, including dyslexia. The course presents advanced approaches on how to plan, present, and evaluate instructional sequences for students with disabilities, with a focus on how to modify lessons based on individual student needs. Prerequisite: SPED 5318 and SPED 5340 both with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5321. Teaching Mathematics to Students with Disabilities.**

This course identifies evidence-based practices for teaching mathematics skills and concepts to students with disabilities. This course covers empirically validated instructional procedures addressing teaching mathematics to students with exceptional learning needs, emphasizing curriculum-based measurement and assessment, error analysis, selecting instructional strategies, and implementing differentiated mathematics instruction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5322. Applied Behavior Analysis Professional Seminar.**

This course describes three primary career options for professional behavior analysts (i.e., school-based, clinical therapy, and research/PhD program) and highlights strategies for finding employment and initiating a successful first year in the field.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5324. Ethics, Trends & Issues in Treatment of Students with Autism/Developmental Disabilities.**

This course prepares special education teachers, behavior analysts, and other professionals associated with the education and treatment of students with autism for the ethical issues encountered in schools, homes, and clinics. This course emphasizes the ethical guidelines for responsible conduct established by the Behavior Analyst Certification Board. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. (MULT) Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5326. Educating Students with Mild Disabilities.**

Course provides information about modifications for students with mild disabilities. Characteristics of special education categories discussed with primary emphasis on learning disabilities. Role of classroom management and classroom teacher's role with students with mild disabilities addressed. Methods for individualizing instruction under a variety of classroom conditions presented. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5327. Educating Students with Autism and Other Developmental Disabilities.**

This course provides an overview of student characteristics and appropriate instructional techniques for individuals with developmental disabilities. Topics include specialized assessment and evidence-based practices, functional curriculum development, transition planning, medical and physical management, and assistive technologies. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5328. Philosophy of Behaviorism.**

This course covers the philosophical assumptions that underlie the science of behavior analysis. Course topics include pragmatism, selectionism, determinism, empiricism, and parsimony as well as the history and dimensions of behavior analysis. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5329. Language Development and Intervention for Special Populations.**

This course covers typical and atypical language development and intervention programming for individuals with significant language delays or disorders. Topics include assessment of language and social communication, individualized program development, and specialized language interventions across settings. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5333. Measurement and Experimental Design in Applied Behavior Analysis.**

This course covers content that allows for systematic progress monitoring and experimental analysis of data by professional behavior analysts and teachers. Topics include operational definitions of behavior, direct and indirect measurement of behavior, design and implementation of experimental designs, graphing and interpretation of data, dependent and independent variables, internal and external validity, and types and uses of various single subject research designs. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Corequisite: SPED 5316 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5334. Assessment and Evaluation of Students with Disabilities.**

The course provides information about formal and informal assessment for the identification of cognitive aptitude, academic achievement, social, emotional, and motor development, as well as the implications of these results for instruction and remediation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5336. Behavior Assessment in Applied Behavior Analysis.**

This course is designed for individuals who will be responsible for assessment of behavior from a behavior analytic perspective. Topics will include reviewing records, documenting the need for behavior analytic services, conducting preference assessments, identifying functions of problem behavior, conducting functional assessment/analyses, and interpreting functional assessment data. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5340. Principles and Practices of Effective Instruction.**

This course provides study of research-based instructional theory and practices for students with disabilities. Focus is on instructional methods and curriculum for students with disabilities in special education settings. Topics include curricular planning, curriculum-based measurement, evidence-based strategies for facilitating student learning, and unique curricular needs of students with disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5350. Special Education Law.**

This course will provide students with a history of special education litigation and legislation. Specifically, students will gain a deep understanding of the Individuals with Disabilities Education Improvement Act, along with other major legislation and policy governing the provision of special education services. Students will become familiar with federal statutes and regulations concerning assessment and evaluation procedures, due process and mediation, discipline, individual education plans (IEP's), free appropriate education (FAPE), and least restrictive environment (LRE).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5354. Advanced Studies in School Discipline, Order, and Safety.**

This course provides advanced study of issues related to school discipline, order, and safety. Topics include historical perspectives, studies of school discipline and safety, effects of school disorder, policies and practices in school discipline, disproportionality in school discipline, school-wide positive behavior supports, and trans-disciplinary and comprehensive approaches to school discipline. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5355. Characteristics of Students with Learning Disabilities.**

This course reviews the latest research on learning disabilities in each developmental area. The focus is on identification and eligibility issues. Topics include changing definitions, medical aspects, cognition and language characteristics, personality and social characteristics, generic instructional approaches, technology, and issues in the future of learning disabilities. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5356. Advanced Practices in Learning Disabilities/Inclusion.**

This course reviews research-based instructional strategies for students with learning disabilities, focusing on proven practices and on improving instructional decision-making across content areas and grade levels. Topics include: understanding learning disabilities, response to intervention, individualized educational plans, differentiating instruction, assessment, collaborative partnerships, and facilitating content-area instruction and study skills. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5360. Survey of Exceptionality.**

Course provides for the examination of types, characteristics, and etiologies of various exceptionalities; identification of federal laws as they relate to various populations; and serves as an introduction to the education of exceptional students in the home, school, and community. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5375. Behavior Management: School Application of Applied Behavior Analysis.**

Course topics include planning and utilizing behavioral techniques such as functional assessment, behavioral recording, differential reinforcement, antecedent manipulation, generalization training, and self-management. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5376. Advanced Intervention Practices for Challenging Behavior.**

This course prepares behavior analysts, school psychologists, teachers, and other professionals responsible for the education and treatment of individuals with developmental disability and/or behavior disorders to use applied behavior analysis to treat severe problem behavior. The focus is on severe behaviors not ameliorated by typical classroom management and intervention. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5378. Personnel & Program Supervision Management for Behavior Analysts.**

This course provides an in depth examination of best practices relative to supervision and management of both individual client programs and personnel within the field of applied behavior analysis. The course covers monitoring client progress, making data-based decisions, and collaborating with other professionals and families. Students will also learn effective staff training techniques, methods of reinforcing staff behavior and increasing staff motivation, designing group contingencies and self-management, collecting and analyzing data on staff performance, addressing challenging issues/behaviors among staff, and ethical and supervisory requirements of the Behavior Analyst Certification Board. This course is most applicable to students in Autism/ABA. Prerequisite: SPED 5316 and SPED 5333 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5380. Positive Behavior Interventions and Supports in Schools.**

This course covers theory, issues, and applications of Positive Behavior Interventions and Supports (PBIS) in school settings. Topics include history and foundations of PBIS; PBIS assessment and evaluation; and best practices in behavior and academic interventions in PBIS programs. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5382. Advanced Practices in Educating Students with Emotional/Behavioral Disorders.**

This course covers advanced principles, concepts, and practices related to educating students with Emotional/Behavioral Disorders. Emphasis will be on school-based services, including advanced, evidence-based instructional and behavioral interventions for improving academic, social, and behavioral outcomes. (MULT) Prerequisite: SPED 5313 and SPED 5375 both with grades of "C" or better. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5384. Behavior Change Procedures & Implementing Interventions.**

This advanced course will focus on instructional strategies designed to increase appropriate behaviors as well as decrease challenging behaviors. Reinforcement strategies, extinction, group contingencies, and token systems will be covered. This course is most applicable to students in the Autism/Applied Behavior Analysis concentration; those students will be given priority for enrollment. Prerequisite: SPED 5316 and SPED 5333 with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5386. Advanced Techniques in Applied Behavioral Analysis.**

Course covers advanced principles of Applied Behavior Analysis, including assessment and development of interventions. Topics include foundations and ethics of ABA, the analysis of verbal behavior, functional behavior analysis, single subject design, and program development and evaluation. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SPED 5389. Special Education Practicum.**

This supervised practicum focuses on design and implementation of educational programs for students with disabilities including assessment, planning, instruction, progress reporting, and development of annual goals and objectives. A student may take two of the prerequisites concurrently with SPED 5389. (MULT) Prerequisite: SPED 5311 and SPED 5313 and SPED 5314 and SPED 5340 and SPED 5355 and 5360 and SPED 5375 all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content

**Grade Mode:** Standard Letter

**SPED 5391. Clinical Practicum in Autism Spectrum Disorders.**

This course provides intensive field experience working with students with autism. Skills to be practiced include interventions based on applied behavior analysis, assessment of learning needs, behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5392. Field Based Practicum in Behavior Disorders/Positive Behavior Supports.**

This course provides intensive field experience working with students with behavior disorders in school settings to include practices based in positive behavior supports, applied behavior analysis, assessment of learning needs and behavior function, application of instructional and behavioral interventions, and evaluation of student progress. Repeatable for credit. Prerequisite: SPED 5313 and SPED 5375 and SPED 5380 all with grades of "C" or better. Corequisite: SPED 5382 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 8 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5394. Field Based Practicum in Learning Disabilities.**

This course provides intensive field experience working with students who are at-risk of or who have learning disabilities. Skills to be practiced include assessment of learning needs, instruction planning and implementation, and evaluation of student progress. Repeatable for credit.

**3 Credit Hours. 3 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**SPED 5395. Registered Behavior Technician Practicum.**

This course covers the basic concepts and principles of Applied Behavior Analysis. Topics include behavior and response class, stimulus and stimulus class, respondent and operant conditioning, reinforcement and punishment, automatic and socially mediated contingencies, extinction, stimulus control, generalization and maintenance, rule governed and contingency shaped behavior, and the verbal operants. This course includes a practicum which concludes with a Competency Assessment to become a Registered Behavior Technician.

**3 Credit Hours. 3 Lecture Contact Hours. 5 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5179A. Student Affairs Administration at Minority Serving Institutions.**

This course focuses on student affairs and higher education administration at Minority Serving Institutions. Course content includes historical context of MSIs, current landscape of MSIs, programs and services fostering student success at MSIs, and key issues and challenges facing MSIs.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5179B. Staffing and Supervision in Student Affairs.**

This course includes various topics relevant to student affairs staffing and supervision. Students will be exposed to current theories and research about each topic and will learn how to translate that information to professional practice. The major purpose of the course is to broaden the knowledge base and repertoire of skills of supervision for those who aspire to administrative leadership positions in higher education.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5179C. Crisis Management in Higher Education.**

The course serves as an introduction to crisis management in higher education. The focus will be various crises faced by colleges and universities; the planning, prevention, response, and recovery from institutions and leadership; and student advocacy. These crises may include environmental and health problems, natural disasters, psychological issues, criminal acts, abuses of student records, media relations, campus disturbances, and other issues.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5179D. Compassion, Resiliency, and Practitioner Well-Being.**

This course focuses on student affairs administration through the lens of compassion, resiliency, and practitioner well-being. With an intrapersonal lens combined with a focus on student affairs administration, students will learn about trauma-informed frameworks, self-care and well-being, resiliency, self-compassion, and compassion for others. Students will consider these topics in connection to crisis response in higher education.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5179E. First-Year Student Transitions and Interventions.**

This course focuses on the first-year college student experience with a focus on the challenges, opportunities, engagement, retention, and intentional intervention. Students will be exposed to relevant theories and research about student transitions and timely interventions, and they will focus on how to translate the theory and research to professional practice.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5179F. Teaching and Learning in Higher Education Curricular and Co-Curricular Contexts.**

In this course students will learn and model evidence-based practices for engaging undergraduate students in both curricular and co-curricular learning. The course focuses on college teaching pedagogies and learning science. Students will learn current theories and research about how college students learn, including cognitive and affective aspects of learning. Students will gain knowledge in writing learning outcomes, designing authentic learning experiences using inclusive teaching practices, engaging students in learning activities, and conducting formative and summative assessments.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**SAHE 5179G. Inclusive Excellence in Higher Education.**

This course will allow students to go beyond theoretical concepts and explore practical strategies for inclusive excellence that can be used in today's higher education workplace. Students will dive into strategic planning, interviewing skills, and exploration of how today's cultural and resource centers support student success through building a sense of belonging and promoting inclusion.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5179H. Advancing Student Success in Higher Education.**

This course will introduce the history and best practices in student success, instill the importance of utilizing technology to help make data-informed decisions, and equip students with essential skills and strategies to increase the number of students earning a post-secondary degree. The course will explore how institutions define student success and strategic goal setting to reach positive outcomes.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5179I. Supporting Student Mental Health and Wellbeing for Academic and Personal Success.**

This course focuses on wellbeing and mental health as a pivotal topic for student success inside and outside of the classroom. Student Affairs practitioners benefit from recognition and understanding of mental health related stressors facing college students and their contributors. A focus on evidence-based prevention strategies and infusion of mental health related supports across student affairs program areas can provide tools for students to enhance their perseverance and resilience. Student will gain a repertoire of strategies for combating compassion fatigue and burn out as they experience the demands of working with students in distress.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5179J. Critical Examination of Student Development and its Future for Student Affairs.**

This course will review several categories of student development theories and examine forces in student affairs and higher education critical to how theory, particularly identity theory, may or may not be applicable to the profession in the future. Students will consider how to create future student affairs and higher education environments that support students' growth and development.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 5311. Advising and Facilitating Student Groups and Organizations.**

Designed for student affairs professionals, this course focuses on effectively advising and facilitating a diverse array of student groups and organizations. Topics include: one-on-one and group advising, collaboration, group facilitation, conflict resolution/mediation, supervision, mentoring, teamwork, and teambuilding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5322. Legal Issues and Governance in Higher Education.**

This course provides for the identification and understanding of the legal issues that influence institutions of higher education. There is also a focus on governance of postsecondary institutions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5323. Assessment, Strategic Planning, and Evaluation in Student Affairs.**

This course covers the theoretical bases for assessment techniques; research design; strategic planning; developing, managing, and evaluating student affairs programs including information management and computer applications in higher education; and methods of needs analysis applicable to college student populations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5335. Leadership in Student Affairs.**

This course provides an examination of leadership in student affairs and higher education through the study of leadership and organizational theory. Additionally, the course focuses on student leadership development. Students will be prepared to apply their knowledge of leadership theories and models to practice leadership and develop leadership in others.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5339. Higher Education and Student Affairs Administration.**

This course provides an overview and examination of higher education and student affairs administration with a focus on institutional programs, services, practices, resources, and best practices that support student engagement and success.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5340. College Student Development: Theory & Practice.**

This course seeks to provide in-depth understanding of developmental needs and issues of college and university students, identifies ways to enhance learning by considering developmental and environmental effects, and offers practice in creating learning opportunities that consider developmental needs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5348. Professional Development in Student Affairs.**

Professional development plays an important role in student affairs. This course will allow students to learn more about professional development, professional associations, and conferences. Students will also create a professional development plan and will develop a conference proposal that they could submit to a professional conference.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5354. Basic Helping Skills.**

This course will assist students with the development of basic communication, crisis assessment, and referral skills, through the use of role playing and modeling. It provides didactic and experiential activities to facilitate the acquisition of skills essential to helping in the student affairs context.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5380. Interpersonal and Group Facilitation.**

This course is designed to give students both a theoretical and practical foundation in the knowledge, understanding, and skills needed to effectively facilitate groups and group development. Communication, facilitation, peer leadership, and experiential learning are the focus of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5387. Research Methods in Student Affairs.**

Understanding research is an important part of higher education administration. This course focuses on research measurement and design procedures for addressing issues in student affairs in higher education. Students will learn quantitative and qualitative methods as well as fundamentals for reviewing, understanding, and applying research literature. Corequisite: SAHE 5390 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5388. Internship I - Student Affairs.**

With a focus on bridging theory and practice, Internship I focuses on applying professional and theoretical knowledge to a student affairs internship setting and making meaning of one's internship experience. The course involves in-class meetings and clocked internship hours. Repeatable with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SAHE 5389. Internship II - Student Affairs.**

With a focus on career development, Internship II emphasizes applying coursework and practice to students' future careers. The course includes functional area exploration, resume and cover letter development, job search strategies, and interviewing skills. The course involves in-class meetings and clocked internship hours. Repeatable with departmental approval.

**3 Credit Hours. 1 Lecture Contact Hour. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SAHE 5390. Student Affairs Functions and Professional Orientation.**

This course covers the history of student affairs in higher education; the context in which student affairs exists in higher education; the theories used in student affairs work and its philosophical foundations; and the mission, goals, and programs of selected functions in student affairs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content

**Grade Mode:** Standard Letter

**SAHE 5392. Student Affairs Capstone.**

As a culminating and capstone experience, this course provides the opportunity for students to synthesize their learning from their coursework and their professional field experiences (internships and graduate assistantships). Students will analyze case studies, engage in critical self-reflection, discuss current events and issues, engage in practices that promote well-being, and focus on career planning.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SAHE 5393. Inclusion and Belonging in Higher Education.**

This course focuses on the awareness, knowledge, skills, and competencies necessary to serve and support students from multiple and diverse backgrounds. Further, the course focuses on strategies and approaches to addressing higher education institution aims of inclusion and belonging. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SAHE 7178. Independent Study.**

This course focuses on individual research topics. Students choose a selected area of study and work independently on a specialized project. Repeatable with departmental approval.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SAHE 7345. Gender and Sexuality in College.**

This course examines the role of gender and sexuality in the college experience. Designed using feminist theory and a social justice framework, the course includes topics of gender identity development, intersectionality, and multiple identities, sexual orientation, gender privilege and oppression, gender disparities in achievement and persistence, femininity, and masculinity. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**SAHE 7378. Independent Study.**

This course focuses on individual research topics. Students choose a selected area of study and work independently on a specialized project. Repeatable with departmental approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SAHE 7379C. Professional Development in Student Affairs.**

Professional development plays an important role in student affairs. This course will allow students to learn more about professional development, professional associations, and conferences. Additionally, students will attend a professional conference and explore the theme of the conference through readings and meetings with professional association leaders and speakers.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 7379E. Intergroup Dialogue.**

This course is designed to give students both a theoretical and practical foundation in the knowledge, understanding, and skills needed to effectively facilitate intergroup dialogue. While providing foundational grounding in the theory and pedagogy of intergroup dialogue, the course directs particular attention to intergroup dynamics.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 7379F. Interpersonal and Group Facilitation.**

This course is designed to give students both a theoretical and practical foundation in the knowledge, understanding, and skills needed to effectively facilitate groups and group development. Communication, facilitation, peer leadership, and experiential learning are the focus of the course.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SAHE 7379G. Project-Based Applications in Student Affairs.**

In this course students engage in project-based applications in the field of student affairs. Students will select a project of their choice and implement the project with support of faculty and practitioners in the field. Students will engage in reflection and document their project for their portfolio.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**SUST 5105. Practicum in Teaching.**

This course is an introduction to key concepts and practices in the teaching of college courses. It provides regular in-service training and planned periodic evaluations of instructional responsibilities. It is required for first-year teaching and instructional assistants in the MA and MS in Sustainability programs. This course does not earn graduate degree credit.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**SUST 5197. Directed Study.**

This course involves individual work with specific guidance from graduate faculty. Work may include participation in research, professional practice, and/or critical review of the related literature. Course may be repeated once for credit when topics vary.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SUST 5198B. Professional Project II.**

This course represents a student's continuing enrollment to complete the professional project. The student continues to enroll in this course until the project is completed and approved by the committee.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**SUST 5199B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5297. Directed Study.**

This course involves individual work with specific guidance from graduate faculty. Work may include participation in research, professional practice, and/or critical review of the related literature. Course may be repeated once for credit when topics vary.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SUST 5299B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5301. Seminar in Sustainability.**

The seminar in sustainability is an opportunity for students to learn about issues from a wide-ranging set of perspectives. The seminar is, by design, interdisciplinary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SUST 5397. Directed Study.**

This course involves individual work with specific guidance from graduate faculty. Work may include participation in research, professional practice, and/or critical review of the related literature. Course may be repeated once for credit when topics vary.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SUST 5398. Professional Project.**

This course involves individual work related to a professional topic or project with specific guidance from graduate faculty. The project requires the completion of a rigorous paper that is the culmination of the final paper/project for the non-thesis degree in Sustainability Studies.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**SUST 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until the student has completed the thesis in SUST 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5399B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5599B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**SUST 5999B. Thesis.**

This course represents a student's continuing thesis enrollment. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 1311. Engineering Design Graphics.**

This course provides an introduction to the fundamentals of technical drawing and the related graphical tools used to communicate engineering design concepts. The topics include two dimensional graphics, orthographic projections, geometric dimensioning and tolerancing, computer-aided graphics, parametric solid modeling, and introduction to three dimensional graphics.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 1363. Manufacturing Processes I.**

The course will provide an overview of the manufacturing processes. Major emphasis is placed on machining theory, setup and tooling. Metal forming and fabrication procedures are introduced. Joining and assembly includes welding, mechanical fastening, adhesive bonding and surface finishing concepts. Laboratory demonstrations and tutorials involve machining, joining and forming techniques.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 1393. Manufacturing Processes II.**

The course involves the fundamentals of casting and molding processes. Emphasis is placed on casting terminology, molding sand, molding processes, pattern making, coremaking and quality control. Ferrous and non-ferrous alloy composition and casting geometry are explored. Plastic and composite forming concepts are included. Microelectronic manufacturing principles and processes are introduced. Prerequisite: TECH 1363 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 2190. Industrial Internship.**

This is a supervised experiential learning course in various technical disciplines as appropriate to a student's degree program. This work-integrated learning course helps the student link theory with practice. Prerequisites: Instructor approval and a minimum 2.25 major GPA.

**1 Credit Hour. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Credit/No Credit

**TECH 2310. Computer-Aided Design.**

In this course, principles of 3D modeling are introduced in the preparation of drawings for manufacturing processes. Emphasis includes the parametric solid modeling of machine elements, geometric dimensioning, and tolerancing. The laboratory component involves production of engineering drawings and simulations connecting this course to computer-aided engineering. Prerequisite: ENGR 1304 or TECH 1311 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 2340. Environmental Technology I.**

This course emphasizes the fundamental chemical, biological, ecological and hydrological principles, and mass and energy balances involved in solving environmental problems. Specific environmental areas covered include water, water quality and wastewater treatment. Environmental regulations and testing as pertinent to water will be covered. Prerequisite: CHEM 1335 and [PHYS 2325 or PHYS 1315] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 2344. Power Technology.**

This class deals with understanding the basic laws of thermodynamics. It probes efficiency and examines energy-converting devices from the inputs, processes, outputs model. Internal combustion engines, electric motors, hydraulic, pneumatic, and gearing systems, and fuel analysis are reviewed from a practical and theoretical perspective. Prerequisites: [MATH 1315 or MATH 1317 or MATH 2417 or MATH 2471] and [(PHYS 1115 and PHYS 1315) or (PHYS 2325 and PHYS 2125)] all with grades of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 2351. Statics and Strength of Materials.**

This course covers principles of statics and strength of materials to include forces, equilibrium, friction, centroids, and stress/strain relationships, axial stress and deformation, thermal stress and deformation, stress concentrations, factor of safety, torsional stress, beam stresses and combined stress. Prerequisite: [CSM 2342 or ENGR 2300 or CIM 3420] and [(PHYS 1115 and PHYS 1315) or (PHYS 2325 and PHYS 2125)] all with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 2370. Electricity/Electronics Fundamentals.**

This course covers fundamentals of safety, Ohm's Law, series, parallel, and series/parallel circuits, meters, relays, DC/AC circuit analysis and basic semiconductors.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TCCN:** ENGR 2305

**TECH 3322. Development of Technology.**

The role of technology in the development of Western World culture is studied from a technical perspective. Social repercussions resulting from the introduction of foundational technical developments are reviewed. Examples of technical areas examined are agriculture, transportation, manufacturing, engineering, defense, and communications. Readings focus discussions and papers on specific topics and encourage synthesis level understanding. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**TECH 3340. Environmental Technology II.**

This course covers air pollution, solid waste and hazardous waste management, sustainability and risk management. Environmental regulations and testing as pertinent to soils, sediments, residual and air will be covered. Prerequisite: TECH 2340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 3344. Applied Thermofluids.**

This course covers basic concepts, first and second laws of thermodynamics, and thermodynamic properties. Heat transfer by conduction, convection, and radiation, as well as fluid statics and fluid dynamics will also be discussed. Prerequisite: PHYS 2325 and PHYS 2125 and TECH 2344 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 3345. Principles of Lean Systems.**

The course provides an in-depth understanding of the lean principles as they apply to manufacturing and service organizations with emphasis on lean tools and concepts such as Value Stream Mapping, 5S, kaizen, waste, takt/cycle time, visual control, six-sigma, mistake proofing, single piece flow, cell design and pull systems. (WI) Prerequisite: TECH 3364 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter



**TECH 3354. Applied Dynamics.**

This course provides the fundamentals of modeling dynamics of mechanical systems, including both particles and rigid bodies, mathematically. Topics covered include basic theory of engineering mechanics, mechanics of rigid bodies, Newton's Laws, work and energy relationships, principles of impulse and momentum, and the application of kinetics and kinematics to solve engineering problems. Prerequisite: TECH 2351 and MATH 2472 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 3357. Facilities Planning and Design.**

This project-based course provides students with a practical knowledge of designing efficient facility layout and material handling system. Systematic layout planning (SLP) based on a product and process information is studied in depth. Simulation tools are used for flow analysis. Prerequisites: TECH 2310 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 3364. Quality Assurance.**

This course covers the principles of quality management and control to include basic probability and statistics concepts, control charts for attributes and variables, statistical process control, sampling plans and methods, quality audits, and quality costs. Prerequisite: IE 3320 or MATH 2328 either with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 3370. Electronics.**

This course is a study of the characteristics of basic electronic circuits and their component parts. Course content includes the use of electronic test equipment, inductance, capacitance, reactance, impedance, rectification, switching, amplification, and electronic circuit fabrication. Prerequisite: EE 2400 or TECH 2370 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 3373. Communication Systems.**

This course deals with basic principles of communication systems. Specific topics include analysis of signals and systems, modulation techniques (digital and analog), analysis of transmitters and receivers, networking, and wireless communication systems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 4330. Foundry & Heat Treatment.**

The technical aspects of foundry and heat treatment of ferrous and non-ferrous metals are reviewed. Students gain proficiency with interpretation of binary phase diagrams, mathematical modeling of gate and runner systems, micro-structural analysis, process cost evaluation, sand casting, and investment casting. The course includes writing technical reports and conducting experiments. Prerequisites: ENGR 2300 and [ENGR 1313 or ENGR 1304 or TECH 1311] and [MFGE 2332 or TECH 1393 or ME 3361] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**TECH 4340. Design for Environment.**

This course covers the basic principles of design for environment. Topics covered include: industrial ecology, resource depletion, product design, process design, material selection, energy efficiency, product delivery, use, end of life and life cycle analysis. Prerequisite: TECH 3340 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 4362. Manufacturing Process Engineering.**

This course will provide students with fundamentals of manufacturing processes planning and engineering. Major emphasis will be placed on make-buy analysis, tolerance analysis and dimensional control, tool and fixture design, process and material selection, design for manufacturing, design for assembly, and process planning. Prerequisites: TECH 1393 and TECH 2310 both with grades of "C" or better.

**3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 4365. Machine Elements: Dynamics and Design.**

Principles of the design of mechanical components; theories of failure; material selection; design of shafts, gears, cams, fasteners, springs and brakes; dynamics; balancing of machinery and vibration control are studied. Prerequisite: TECH 2310 and TECH 2351 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 4372. Electronic Devices and Circuits.**

This course covers transistor configurations, field effect transistors and circuits, voltage regulation, amplifier feedback principles, operational amplifiers and circuitry, and unijunction transistors and applications. Prerequisites: EE 2400 or TECH 2370 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 4373. Control Systems and Instrumentation.**

This course is an introduction to modern control systems and instrumentation. Topics covered include transducers, sensors, actuators, instrumentation, open and closed loop control systems, PID controllers, programmable logic controllers and ladder logic, and computer interface software and hardware. Prerequisites: EE 2400 or TECH 2370 either with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 4374. Digital Systems.**

This course covers solid state digital electronics from basic concepts to current industrial needs in terms of logic gates, number systems counters, registers, sequential control circuits, and shift register generator. Prerequisite: [PHYS 2326 and PHYS 2126] or TECH 2370 with a grade of "C" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 4380. Industrial Safety.**

This course introduces the field of industrial safety with emphasis on compliance with Federal and State regulations. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**TECH 4381. Senior Design I.**

This course is the first of a two-course sequence involving the application of technical and non-technical skills and knowledge, using a multidisciplinary team-based approach, for solving real-world problems related to product and process development. The topics include systematic product design, requirements analysis, material and process selection, project management, cost estimation, design documentation and presentation, prototyping, fabrication, and design test and verification. Prerequisite: EE 3400 or TECH 3340 or TECH 3370 or TECH 3345 any with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Writing Intensive

**Grade Mode:** Standard Letter

**TECH 4382. Senior Design II.**

This course is the second of a two-course sequence involving the application of technical and non-technical skills and knowledge, using a multidisciplinary team-based approach, for solving real-world problems related to product and process development. The topics include systematic product design, requirements analysis, material and process selection, project management, cost estimation, design documentation and presentation, prototyping, fabrication, and design test and verification. Prerequisite: TECH 4381 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 4390. Internship.**

Supervised on-the-job professional learning experience in construction, manufacturing, electronics, and other technical areas. This course provides practical work experience in their particular field of interest. Repeatable for credit. (WI) Prerequisites: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering|Dual Enrollment Permitted|Time Conflicts Permitted|Writing Intensive

**Grade Mode:** Standard Letter

**TECH 4392. Micro and Nano Manufacturing.**

This course covers the basic principles of micro and nano manufacturing. Emphasis is placed on the process descriptions, terminology, equipment requirements, and processes for micro and nano systems. Basic physics and process chemistry is combined with control schemes to arrive at overall systems descriptions. Prerequisite: [CHEM 1335 or CHEM 1341] and [PHYS 1325 or (PHYS 2326 and PHYS 2126)] all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 4395. Automated Manufacturing Systems I.**

This course primarily deals with automation in industrial systems. In particular, this course focuses on automation and control technologies in manufacturing systems at machine and device levels. Included in its structure are areas such as fundamentals of industrial automation, sensors and actuators, numerical control, robotics, and PLC. Prerequisites: TECH 2310 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 4396. Automated Manufacturing Systems II.**

This course primarily deals with automation, simulation, and digitization in industrial systems. Course topics include discrete-event simulation of manufacturing systems, automated quality control and inspection, automated identification, industrial Internet of Things, automated material handling, automated data acquisition systems, and applied finite element analysis. Prerequisites: TECH 4395 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required

**Grade Mode:** Standard Letter

**TECH 4397. Special Problems.**

The investigation of a special topic by developing the problem, researching the topic, and presenting the findings as they apply to industry/technology. This course will be applicable to all areas of technology, and must be done only with the approval of the cooperating faculty member and Department Chair. Repeatable for credit with different emphasis. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Dif Tui- Science & Engineering

**Grade Mode:** Standard Letter

**TECH 4398. Senior Design.**

This course deals with application of technical and non-technical skills and knowledge using a multidisciplinary team-based approach for solving real-world problems related to product and process development. The topics include systematic product design, requirements analysis, project management, cost estimation, documentation and presentation, prototyping, fabrication and concurrent engineering. (WI) Prerequisites: EE 3400 or TECH 3340 or TECH 3370 or TECH 4372 or TECH 4395 any with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Dif Tui- Science & Engineering|Lab Required|Writing Intensive

**Grade Mode:** Standard Letter

**TECH 5100. Academic Instruction for Technology.**

The course is seminar based and covers topics related to teaching and employment responsibilities. Completion of this course is required as a condition of employment for graduate assistants. This course does not earn graduate degree credit. Repeatable with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TECH 5195. Industrial Internship.**

This course is a supervised experiential learning course in Technology Management. This work integrated learning course helps the student link theory with practice. Repeatable for credit. Prerequisites: Instructor approval.

**1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**TECH 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5300. Academic Instruction for Graduate Instructional Assistants.**

This course is designed to develop and enhance the professional and technical skills of graduate instructional assistants. Topics covered may include, but are not limited to, teaching skills, technical skills, ethical and legal issues, safety, and laboratory management. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TECH 5310. Product Design and Development.**

This course provides an overview of the new product realization process, focusing on systematic product design, including problem identification, product planning, conceptual design, and embodiment design. Standard CAD tools are employed for product modeling.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5311. Computer-Aided Engineering.**

This course teaches the application of computer hardware and software to the design of products and of systems. Specific topics include geometric modeling, the development of computational methods, and an overview of engineering analysis software. Additional topics may include finite element analysis, manufacturing simulation, solidification modeling, and rapid prototyping.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TECH 5315. Engineering Economic Analysis.**

This course covers economic analytical techniques used in engineering decision-making. Topics include time-value of money, comparing alternatives, depreciation, replacement, and income tax considerations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5364. Robust Product and Process Design.**

Provides the student with in-depth knowledge of inferential statistics as applied to design of robust processes and products. Topics covered include probability distributions, ANOVA, fractional factorial design, response surface method, orthogonal arrays, and Taguchi method. Prior experience with introductory-level statistics is assumed. Prerequisite: TECH 5394 with a grade "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5365. Industrial Project Management and Scheduling.**

This course introduces students to industrial management system concepts and applications relating to management operations, system design, implementation and management, case studies of practices, and application of theory to practical problems.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5380. Principles of Information and Communication Technology Management.**

This course, in a case-based learning environment, integrates concepts and principles of information and communication technology (ICT) including mobile communication and Internet of Things (IoT). Analysis and evaluation of advanced ICT management examples demonstrate issues and strategies of modern ICT management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5382. Industrial Ecology and Sustainability Engineering.**

This course covers the principles of life cycle analysis (LCA) of engineered products and processes. Topics include industrial ecology, resource depletion, product design, process design, material selection, energy efficiency, product delivery, use, and end-of-life considerations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5384. Problems in Technology.**

In this course graduate students investigate a particular topic by developing a technical problem, researching the topic, and presenting the findings. Plans will be developed on an individual basis with strict faculty supervision. It may be repeated for credit with the permission of the department chair. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TECH 5385. Readings in Technology.**

A study of the ethical and moral viewpoints typically associated with American society as related to the development and introduction of new technology and engineering. Past, present, and future issues will be studied with selected readings focusing on industrial related problems and issues.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5387. Advanced Facilities Planning.**

This course is an in-depth study of technical problems encountered in designing, equipping, arranging, and specifying facility requirements for industrial and technical training facilities.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5390. Research in Technology.**

This course examines the scientific method, including theory formulation, deductive reasoning, hypothesis generation, observation, inductive reasoning, and theory revision. Categories of research are compared and contrasted as regards methodology. Experimental research relating to significant industrial problems, including design considerations, internal and external validity, and appropriate analytical techniques, is studied in-depth. The course includes an introduction to data analysis and its proper interpretation.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TECH 5391. Advanced Manufacturing Systems.**

This course introduces various advanced tools, technologies, and strategies in modern manufacturing. Topic coverage emphasizes state-of-the-art in factory automation, as well as global and smart manufacturing enterprises. Specific topics include process automation and control, advanced manufacturing processes, intelligent manufacturing control, and information and communication technology (ICT) in manufacturing.

**3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5392. Fundamentals of Microelectronics Manufacturing.**

This course is an introduction to integrated circuit fabrication. Topics include crystal growth, wafer preparation, epitaxial growth, oxidation, diffusion, ion implantation, thin film deposition, lithography, etching, device and circuit formation, packaging, and testing. A significant part of the course is a project focusing on circuit design and simulation or on process design. Laboratory component involves the actual production and testing of a functional semiconductor device.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5394. Design of Experiments.**

This course covers fundamentals of designing industrial experiments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TECH 5395A. Structure and Properties of Alloys.**

This course is an advanced exploration of the structure and properties of engineering alloys. Strengthening mechanisms of alloys are explored with specific applications to the alloys studied. The processing, properties, and structure of ferrous and nonferrous alloys are explored including new and emerging alloys. Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TECH 5398. Directed Project.**

This course is a formal investigation into a business or industry problem. The directed project is an applied research project that is more extensive than an independent study and less extensive than a thesis. The course culminates in a detailed project report and oral presentation. Prerequisite: TECH 5394 with a grade of "C" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Credit/No Credit

**TECH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Technology 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TECH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 1111. Production Crew.**

This course provides students with vital production experience in the operation of a live theatrical event.

**1 Credit Hour. 1 Lecture Contact Hour. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 1121. Musical Theatre Singing Technique I.**

This course in vocal instruction focuses on technique, musicality and performance for the Musical Theatre performer.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1122. Musical Theatre Singing Technique II.**

This course in vocal instruction continues the work done in TH 1121 and focuses on technique, musicality and performance for the Musical Theatre performer. Prerequisite: TH 1121 with a grade of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1210. Introduction to Musical Theatre.**

This course introduces students to musical theatre through song, score, libretto, character analysis and performance. Students look at both classic and contemporary musical theatre style, structure and content with an emphasis on performance and acting the song. Students will also gain an introductory knowledge of the musical theatre canon.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1211. Score and Libretto Analysis - Acting the Song.**

In this course students will work on musical theatre performance through song, score, libretto, character analysis and performance. Students take a comprehensive look at both classic and contemporary musical theatre style, structure and content. Additional focus will be placed on knowledge of the musical theatre canon and its leading professionals. Prerequisite: TH 1210 with a grade of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1260. Musical Theatre Jazz I.**

This course focuses on beginning jazz dance technique for Musical Theatre students including jazz walks, weight shifts, isolations, stretches, and combinations. Combinations are designed to challenge and enhance the students' knowledge of the various styles and methodologies of jazz dance and to develop performance and choreographic abilities in these styles.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 1280. Musical Theatre Ballet I.**

This course introduces the basic technique and steps of classical ballet to Musical Theatre students. Basic barre exercises, positions and traveling steps of the ballet movement vocabulary will be taught and practiced for mastery. Students will also gain an understanding of ballet as a performing art.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 1312. Musical Theatre Musicianship I.**

This course offers detailed instruction in fundamentals of musicianship for the Musical Theatre performer, including notation, meters, scales, key signatures, intervals, chords, and sight singing. Equal emphasis is placed on practical skills and theoretical analysis of the musical theatre canon.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**TH 1314. Musical Theatre Musicianship II.**

This course offers continued practice of the essential elements of musicianship for the Musical Theatre performer including higher levels of ear training and sight-singing. Equal emphasis is placed on practical skills and theoretical analysis of the Musical Theatre canon. Prerequisite: TH 1312 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1320. Filmmakers History of Film.**

This course introduces the student filmmaker to the history of film taken from the perspective of the practicing filmmaker. This is a study of how technological change, socio-economic forces and art trends inside and outside the medium itself affected the technique, craft and style of filmmakers from each period.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1330. P&P 101: Entrepreneurial Theatre-Making.**

This course prepares students entering the BFA Performance & Production Program with the skills and knowledge necessary to create a personal career plan. Students experiment with different creativity-generating processes and are introduced to a variety of theatre-making roles and paths that reflect current practices of the industry. Students investigate the ingredients of successful collaboration and build project teams united in a common artistic goal. With the knowledge gained from these experiences, students curate a personal degree plan optimized to provide them with a skillset tailored to their individual strengths and interests.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TH 1340. Voice and Diction.**

The human voice and the sounds of speech. The student's own voice and pronunciation will be the primary concern, using practice sessions to develop more acceptable patterns of voice and sound.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** DRAM 2336

**TH 1345. Voice I: Vocal Production.**

In this course students will explore basic principles of vocal production and anatomy, including vocal variety and in-depth exploration of vocal identity. Emphasis is placed on breath work, alignment, vocal support, range, flexibility and health.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1350. Introduction to Theatrical Design.**

Course introduces the freshman theatre major to the four primary areas of theatrical design: costume design, scenic design, sound design, and lighting design. Each area's practice is explored and analyzed through a series of exercises that incorporate design projects.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1353. Film Production Practices.**

This course provides an introduction to the art and practice of filmmaking. Students analyze the components of a film and examines the tools of filmmaking, including the camera, script, sound equipment, and editing software.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1354. Movement I.**

In this course students will explore movement for the stage. This introduction to movement course equips the actor with tools from multiple movement methodologies, including practical training in kinesthetic response, increased flexibility, and partner work and acrobatics, animating the interplay between these techniques and performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** DRAM 1322

**TH 1355. Movement II.**

A continuation of Movement I and the exploration of kinesthetic response for the actor, using movement techniques in class performances and further research into the techniques of Alexander, Feldenkrais, and Laban. Prerequisite: TH 1354 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 1364. Beginning Acting.**

In this course students examine, understand, and apply the fundamentals of acting technique and personal artistry, and the interplay between the two. This course lays the foundation for Intermediate Acting and Movement I.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TCCN:** DRAM 1351

**TH 1365. Intermediate Acting.**

Intermediate Acting. (2-1) Classroom exercises designed to continue the exploration of the actor's inner resources; additional work on discovering techniques of developing a character. May be taken by non-majors independently. Prerequisite: TH 1364 with a grade of "D" or better.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TCCN:** DRAM 1352

**TH 1369. Introduction to Dramatic Writing.**

In this course students will examine the essential elements of dramatic structure in literature written for theatre, film, and episodic programming. Students explore fundamental script elements during a semester of assigned writing, readings, script analysis, and critiques. Through this application, students develop their ability to write in all performance mediums. Completing this course increases the ability to identify each medium's appropriate format, act structure, craft, and style. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TH 2111. Theatre Activities.**

A course designed to provide credit for participation in theatre activities. May be repeated to a total of four credits.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TCCN:** DRAM 1120

**TH 2210. Musical Theatre Devising.**

In this course students will develop their unique artistic voice applied to performance, and scene study skills by creating an original performance piece with a focus on personal, social, and justice-oriented themes. Students will collaborate as a creative ensemble in devising, producing, marketing, and performing in the project. Prerequisite: TH 1210 and TH 1211 both with grades of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 2211. Applied Musical Theatre Musicianship Through Performance.**

In this course students will learn to utilize their deepening knowledge of harmony, form, orchestration, and motivic cohesion as a critical tool for expanding insight into characterization, emotional context, and storytelling. This course is a continuation of Music Theater Musicianship II and Intermediate Acting and functions as a bridge between singing and acting. Prerequisite: TH 1210 and TH 1211 both with grades of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 2261. Musical Theatre Jazz II.**

This course focuses on intermediate jazz dance technique for Musical Theatre students including complex weight shifts, syncopations, coordination and isolation techniques. Exercise and floor combinations are designed to challenge and improve previously obtained motor skills and to enhance knowledge of correct mechanics of dance as a performing art.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 2281. Musical Theatre Ballet II.**

This course introduces intermediate technique and steps of classical ballet to Musical Theatre students. Intermediate barre exercises, positions and traveling steps of the ballet movement vocabulary will be taught and practiced for mastery. Students will also gain an understanding of ballet as a performing art.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 2313. Introduction to Fine Arts.**

An introductory course designed to give the student a fundamental understanding of the creation and appreciation of diverse modes of expression through the visual and performing arts. This course may not be repeated for credit by taking ART 2313, DAN 2313, or MU 2313. (MULT) (MULP).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Creative Arts Core 050|Multicultural Perspective

**Grade Mode:** Standard Letter

**TCCN:** HUMA 1315

**TH 2315. Film Directors Analysis.**

This course takes a filmmaker-centered approach to the study of individual directors and explores how they utilized technique, craft and style to achieve effects in the telling of their film stories. Students trace the career of a chosen filmmaker from their earliest films to their latest. Prerequisite: TH 1353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 2330. Stagecraft and Stage Lighting.**

This class teaches the facilities, tools, materials and techniques used to build scenery safely and effectively in the modern theatre. It also covers the facilities, tools, and techniques used to safely and effectively read a light plot, hang and focus stage lighting instruments. It includes a hands-on lab.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TH 2345. Voice II: Experiencing Speech.**

In this course students will focus on the ability to use speech articulators in order to allow full, healthy production of a wide variety of speech sounds. Emphasis is placed on full speech flexibility and ability to accurately create any sound the character requires. Prerequisite: TH 1345 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 2354. Characterization.**

This is a studio acting course in which the student explores and develops techniques of creating a role. Prerequisite: TH 1340 and TH 1365 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TCCN:** DRAM 2351

**TH 2355. Introduction to Playwriting.**

This course focuses on reading and analyzing contemporary plays, as well as short-form writing exercises, leading to the creation of original scenes. Students will read and deconstruct four contemporary plays as well as engage in various short-form writing exercises culminating in an original scene as their final creative project.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3111. Theatre Activities.**

This course is designed to provide credit for participation in theatre activities. It typically involves working on a departmental production. May be repeated for credit with different emphasis.

**1 Credit Hour. 1 Lecture Contact Hour. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3120. Musical Theatre Singing Technique Private Instruction.**

This course is for advanced, private study in musical theater singing technique. Via private instruction, students will study multiple areas of musical theatre singing technique including singing for the microphone, belting, placement, and diverse musical theater styles (pop, rock, Golden Age, contemporary musical theater, etc). Prerequisite: TH 1122 with a grade of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3150. Pop Rock Repertoire Building.**

This class develops repertoire and vocal styles in 12 pop/rock genres of music, preparing students for the current demands of the musical theatre industry, including building repertoire for their professional audition books. Prerequisite: TH 1211 with a grade of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3251. Musical Theatre Tap I.**

This course covers the basic steps of tap technique and how they apply to musical theatre. Students learn coordination, rhythmic variations, and performance skills through a series of tap combinations and exercises. They also explore the concepts of dancing as an ensemble.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3252. Musical Theatre Tap II.**

This course expands on skills covered in Musical Theater Tap I. Basic steps are perfected and more difficult steps and combinations are learned. Longer sequences set to Musical Theatre and contemporary music are mastered, and attention is given to ensemble work, rhythmic variations, and performance skills.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3262. Musical Theatre Jazz III.**

This course focuses on advanced jazz dance technique for Musical Theatre students including complex coordination and combinations requiring increased levels of technique, strength and flexibility. Emphasis is on developing ability to quickly master challenging choreography while continuing to develop new skills. There is a continuing emphasis on biomechanics and choreography. Prerequisite: TH 2261 with a grade of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3271. Musical Theatre Dance I.**

This course involves the study of dance as it pertains to Musical Theatre performance. Along with technique fundamentals, students hone the skills necessary for effective character development, storytelling, and auditioning. The course also covers some styles that make up Musical Theatre including Traditional Broadway, Charleston, Hip-Hop, and various Ballroom dances. Prerequisite: TH 2281 and TH 2261 both with grades of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3272. Musical Theatre Dance II.**

This course involves the study of dance, movement, and staging for Musical Theatre and culminates in student-choreographed works from Musical Theatre productions. It includes strategies for learning and performing dance combinations as they occur in professional dance auditions. It also explores styles such as Fosse, Contemporary, and Commercial Dance. Prerequisite: TH 3271 with a grade of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3282. Musical Theatre Ballet III.**

This course introduces advanced technique and steps of classical ballet to Musical Theatre students. Advanced barre exercises, positions and traveling steps of the ballet movement vocabulary will be taught and practiced for mastery. Students will also gain an understanding of ballet as a performing art. Prerequisite: TH 2281 with a grade of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3305. Theatre in the Community.**

This course combines community service (creating theatre for or with non-profit community organizations that serve at-risk populations) with readings, discussions, and collaboration on societal applications of performing arts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3310. Voice III: Heightened Text.**

In this course students will continue to develop the fundamentals of voice and speech for the stage while exploring heightened text. Students will learn tools for deciphering text and develop skills to vocally interpret what they've gleaned from the text. Prerequisite: TH 2345 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3320. History of the Theatre I.**

A study of the theatre and its place in the social and cultural evolution from primitive civilization to 1700. Selected examples of theatre literature are studied. (WI) (MULT & MULP).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Writing Intensive

**Grade Mode:** Standard Letter

**TH 3321. History of the Theatre II.**

A study of the theatre and its place in the social and cultural evolution from 1700 to the present. Selected examples of theatre literature are studied. (WI) (MULT) (MULP).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Perspective|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**TH 3322. History of Musical Theatre.**

Course examines the history of musical theatre, from its antecedents through its Golden Age to present-day issues. In the process students will study musical theatre's elements and structure, as well as its creators, including major librettists, composers, lyricists, designers, directors, choreographers, and performers.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3325. Film Directors Workshop.**

This course addresses strategies used by the student filmmaker in approaching the directing of performance for film and television. The focus is on the director-actor relationship, script analysis, rehearsal strategies, beat-by-beat text breakdowns, staging exercises, and techniques for communicating and working with actors. Prerequisite: TH 1353 and TH 4363 both with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3330. Advanced Stagecraft.**

This course covers the facilities, tools, materials, equipment and techniques used to safely produce, from a technical standpoint, live theatrical performances. The course includes woodworking, metal working, stage rigging, stage lighting, audio and, in general, good stage hand practices. Prerequisite: TH 2330 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3331. Theatrical Drafting: By Hand.**

This course is a study of manual drafting techniques for theatrical designers and technicians. Prerequisite: TH 2330 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3332. Introduction to Stage Properties.**

This course introduces students to the categories of theatrical properties, as well as the practices and processes of the theatrical Prop Master as they pertain to the execution of a collaborative production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3333. Creating Comedy: Crafting Stand-Up, Sketch, and Improv.**

This course breaks down the craft of writing comedy in various mediums and provides an understanding of the basic history of American comedy from the eras of Vaudeville to digital. In addition to studying the history of comedy, students will also develop their own jokes, stand-up material, sketches and podcasts.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3335. Properties Construction.**

This course focuses on specific construction techniques and materials utilized by professional prop artisans for the construction of theatrical properties. Students are introduced to the practices of the theatrical Prop Master as they pertain to the execution and planning of prop construction projects.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3337. Sound Technology.**

This course examines audio technology, the components of sound systems, and their application for live entertainment, including theatre and dance productions. This technical knowledge is the basis of the sound designer's skill set. Prerequisites: TH 1350 and TH 2330 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3338. Stage Lighting.**

This course in stage lighting design assumes basic knowledge of lighting technology equivalent to that learned in TH 2330. This class encompasses research, observation, group discussion, and practical "hands-on" projects with emphasis on learning to see light and developing a common language for light and the lighting design process. Prerequisite: TH 2330 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**TH 3339. Latinx Theatre and Performance.**

This course explores Latinx theatre that addresses the highly contested and geopolitical border that separates the US from Latin America. It focuses on how Latinx theatre creates counternarratives within the country. Students will study the borderlands as a place of latinidades, the multiple community voices of the region. Throughout the semester they will read dramatic, theoretical, and historical texts and examine the work of various border-crossers in the western hemisphere.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**TH 3340. Intro to VFX and Compositing.**

This course introduces the techniques, craft and art of visual effects and compositing using Adobe After Effects. Students organize, research and execute projects based on advanced techniques in visual effects and compositing, covering topics such as 2D and 3D animation, matte painting and color correction. Prerequisite: TH 4342 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**TH 3341. Film Sound.**

In this course student filmmakers will be introduced to the creative use of sound in the film and television industries. All the core aspects of film sound will be covered from production sound, dialogue, ADR, sound effects, sound design, foley, music/score and mixing. Prerequisite: TH 1353 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**TH 3342. Television/Film Performance.**

This course is a practical laboratory course in television and film performance techniques, including procedures and requirements for professional engagements. Prerequisites: TH 1365 and [TH 3361 or TH 3364] both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**TH 3343. Stage Makeup.**

A practical course in developing techniques used in applying stage makeup. Emphasis is placed on painting, and contouring the face to achieve the desired effect. Special projects include fantasy makeup and mask making.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**TH 3344. Costume Stagecraft.**

A single semester introduction to garment production for the entertainment industry. Emphasis is placed on hand and machine stitching techniques, as well as an introduction to pattern drafting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Lab Required  
**Grade Mode:** Standard Letter

**TH 3346. Historical Costume Research.**

In this course students will explore clothing, accessories, and customs of a variety of historical periods and cultures as an approach to period costume productions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**TH 3350. Technical Production.**

This course provides hands-on experience to qualified advanced students in technical theatre utilizing a series of rotating topics. Selected topics may include stage rigging, sound systems, remote device management, technical direction and/or technical writing/drawing. May be repeated for credit with different emphasis. Prerequisite: TH 2330 with a grade of "D" or better instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Course Attribute(s):** Exclude from 3-peat Processing  
**Grade Mode:** Standard Letter

**TH 3351. The Craft of the Stagehand in the Live Entertainment Industry.**

The purpose of this course is to provide the student with proper training in the variety of skills that are needed in order to work professionally as a Stagehand in live entertainment performance venues across the United States and around the world.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter

**TH 3352. Stage Rigging for the Live Entertainment Industry.**

The purpose of this course is to provide the student with instruction and opportunity to become proficient with safely employing basic rigging techniques that are common in live performance venues throughout the United States. Prerequisite: TH 2330 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**  
**Grade Mode:** Standard Letter



**TH 3354. Safety for the Production of Live Entertainment Events.**

This course will provide students with the resources necessary to incorporate good safety and health practices into their professional career in the live entertainment industry. Based on standards from the Occupational Safety and Health Act, the Event Safety Alliance, and other current resources, students will learn to make informed decisions during the planning and execution of live events to ensure the safety of all event participants. Prerequisite: TH 2330 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3355. Playwriting.**

In this course students will study play fundamentals (structure, dialogue, and mechanics), and guidance and discussion of representative plays. Prerequisite: TH 2355 or TH 1369 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3358. Screenwriting.**

In this course students study the art and craft of writing screenplays. Through script readings, film viewings, and writing several original short scripts, students will learn story structure, character development, and a practical process for screenwriting. Prerequisite: TH 2355 or TH 1369 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TH 3359. Advanced Screenwriting.**

In this course, students will pitch, outline and write a draft of an original feature-length screenplay. Prerequisite: TH 3358 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3360. Beginning Stage Combat.**

This is an introductory course in stage combat with a hands-on approach emphasizing actor safety, dramatic requirements of the script, and historical accuracy.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3361. Improvisation for the Actor.**

This class develops the student's understanding of the fundamentals of improvisation as both a performance art and a rehearsal technique, expanding the actor's versatility and enhancing confidence in performance and communication skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3362. Musical Theatre Performance for the Actor.**

This course is an introduction to the dynamic world of musical theatre through song analysis and performance, class exercises for the body and the voice, as well as an initial look at both classic and contemporary musical theatre style, structure, and content.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3363. Stage Combat Stick Fighting.**

This class covers Stick Fighting techniques from around the world and how to incorporate them safely into a play or film. Students learn safe handling and use of all types of fighting sticks including, but not limited to, European Quarterstaff, Japanese Bo-Staff, Irish cane fighting, and Philippino Arnis. Prerequisite: TH 3360 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3364. Acting Realism.**

This is a studio course emphasizing the theories and methods of Stanislavsky in order to create characters in realistic drama. Prerequisites: TH 1365 and [TH 1340 or TH 1345] both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3365. Acting Styles.**

This class explores a selected sample of theatre performance styles. The global history of performance includes many different uses of language, movement, gesture, relationship-to-audience, and storytelling intention. Instructors lead students through a curated sample of performance literature that could include Greek, Asian, Jacobean, Shakespearean, Moliere, Comedy of Manners, African, Latinx, and Brecht. This instructor-curated, performance-based curriculum can span theatre from 550BC to the late 19th century, providing students the opportunity to explore various forms of performance style. Prerequisite: TH 1365 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3366. Stage Combat Single Sword.**

This course develops students single-sword techniques and how to incorporate them safely into a play or film. Students will learn to safely handle single swords and how to build stage combat choreography using a hands-on approach emphasizing actor safety, dramatic requirements of the script, and historical accuracy. Prerequisite: TH 3360 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3367. Theory and Analysis.**

A study of dramatic theory and play analysis for production, including the study of forms, styles, and methods. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TH 3370. Creative Drama.**

Emphasis on process drama theory and using creative drama as both an art form and as a teaching tool. Through class activities, students will develop effective facilitator skills and incorporate innovative strategies for teaching traditional material in non-traditional ways.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3375. Production Design for Film.**

This course covers the structure and operation of an art department on a film production, as well as the fundamentals and application of production design for film and TV. Prerequisite: TH 1353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 3390. BFA Pre-Professional Apprenticeship I.**

Intensive work in one of the following career paths: Acting, design, and theatre technologies, costuming.

**3 Credit Hours. 2 Lecture Contact Hours. 4 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 3396. Musical Theatre Audition Technique.**

This course concentrates on musical theatre audition preparation and performance on an advanced level. Students will expand their analytical, professional and creative skills through performance work, mock auditions, "Business of the Business" labs, and a comprehensive research project. Students will create a portfolio of specific and personalized audition material. Prerequisite: TH 1210 and TH 1211 and TH 2210 and TH 2211 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TH 4120. Musical Theatre Singing Technique Private Instruction.**

This course is for advanced, private study in musical theater singing technique. Via private instruction, students will study multiple areas of musical theatre singing technique including singing for the microphone, belting, placement, and diverse musical theater styles (pop, rock, Golden Age, contemporary musical theater, etc). Prerequisite: TH 1122 and TH 3120 both with a grade of "D" or better.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4251. Musical Theatre Tap III.**

This course expands on skills covered in Musical Theatre Tap II. Intermediate and advanced tap steps are explored and attention is given to learning important pieces in the classic and contemporary tap canon as well as tap audition techniques. Focus is given to rhythmic clarity, agility, improvisation, and performance skills. Prerequisite: TH 3252 with a grade of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4271. Musical Theatre Dance III.**

This course provides an examination of the history and development of Musical Theatre dance styles, including an in-depth study of significant works of choreographers, including Agnes de Mille, Jack Cole, Jerome Robbins, Bob Fosse, Michael Bennett, and Andy Blankenbuehler. Prerequisite: TH 3282 and TH 3262 both with grades of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4272. Musical Theatre Dance IV.**

This is an advanced Musical Theatre dance class that will focus on building advanced technical and performance skills as well as displaying competence in a variety of styles. Students will also develop partnering skills. Prerequisite: TH 4271 with a grade of "D" or better.

**2 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4301. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry. May be repeated once for credit. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4302. Contemporary Theatre Workshop.**

This course examines some of the major plays, playwrights, themes and styles in contemporary theatre in the United States. Students will read, analyze, research, and perform in scenes from many different types of contemporary performance, including realism, musical theatre, classical adaptation, surrealism, and devised work.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4303. Multicultural Perspectives in American Theatre.**

This course explores the literature, history, and performance challenges of the many voices and perspectives that make up American Theatre. In addition to exposure to brief historical overviews, students will read key literary texts and perform monologues and scenes.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4304. Web Series Creation.**

In this course, students explore entertainment series that are designed specifically for publication on the Internet. Students will create, develop, identify a target audience, and write scripts for two short episodes of an original web series. In addition, students will work in groups to write a script, produce, and publish an episode for an original audio drama series. The production of the original web series takes place in TH 4305 Advanced Web Series Creation. Prerequisite: TH 1369 with a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4305. Advanced Web Series Creation.**

This course is a continuation of TH 4303 Web Series class. Students will story edit, produce, direct, publish and market two episodes of their own web series. Prerequisite: TH 4304 with a grade of "B" or better and TH 1353 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4307. Properties Effects.**

This course focuses on specific construction techniques and materials utilized by professional prop artisans for the construction of theatrical special effects. Students are introduced to the practices of the theatrical Prop Master as they pertain to the execution and planning of prop special effects projects.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4308. Musical Theatre Choreography.**

This course examines the role of choreography in musical theatre and explores the choreographic process. Students study the history and theoretical principles of musical theatre choreography as well as obtain the practical skills needed to create staging and choreography for a musical theatre production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4310. Theatre Curriculum Development.**

Course builds on a requisite knowledge of basic educational theory and lesson plan structure with an emphasis on developing and implementing a successful Theatre curriculum. Practical and effective strategies for teaching middle school and high school Theatre will be examined.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TH 4311. Training the Teaching Artist.**

A teaching artist is, by definition, a two-career professional: a working artist and a working educator. This course explores the artistic, teaching, and business aspects of working as a teaching artist. Students create a job portfolio and teach a short residency in a classroom setting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4312. P&P Business Startup.**

This course examines career and market research and analyzes current industry trends to develop an individual theatrical business plan.

Students investigate and explore for-profit and nonprofit business structures. Prerequisite: TH 1330 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4315. Actor Artist Aesthetic.**

In this course students hone writing skills focused on creating original, "devised" theatre pieces. They investigate designated themes, experimenting with a variety of literary devices, movement techniques, and approaches to storytelling. This process culminates in creating collaborative ensemble-based pieces, as well as solo performance work. A foundation in movement is strongly recommended. Prerequisite: TH 1354 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4320. Directing Theatre Activities.**

Designed to assist any teacher in directing theatre activities. During the course, students will direct plays or scenes. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4321. The Art of Voiceover and Voice Acting.**

In this course, students enhance their listening skills, determine their vocal "brand" or type, and learn various industry reads and the necessary corresponding voice skills. Students learn how to research and cut copy, create commercial, industrial, and cartoon demos, recording etiquette, and how to take vocal direction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4323. Shakespeare Through Performance.**

This intensive summer study abroad program immerses students in the language and culture of Shakespeare's plays. Incorporating a performance-based approach to the study of Shakespeare, this course includes theatrical workshops taught by professionals at leading international theatres, including the Royal Shakespeare Company.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4324. Shakespeare: Text and Context.**

This intensive study abroad program immerses students in the language and culture of Shakespeare's plays. In Stratford, academic workshops are led by scholars from the Shakespeare Birthplace Trust. Through immersion in the cultural environment in which the plays were produced, students gain insight into the context that shaped Shakespeare's theatre.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4325. Shakespeare Ensemble.**

This class provides students with the opportunity to build an ensemble production of an abridged Shakespearean play. Using text analysis, character building, and clear storytelling, students create an adaptable production that can be performed in schools, libraries, and other community locations. Prerequisites: TH 1340 and TH 1365 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4326. Design for Theatre Educators.**

This course prepares teaching certification students for the execution of technical elements relating to a dramatic production. The class draws heavily from guidelines established by the University Interscholastic League (UIL) Handbook governing One-Act Play competitions.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4327. Technical Theatre Production for Educators.**

This class guides students through exercises highlighting tool safety, scenery construction and proper stage protocols. Students build and repair scenery, hang a UIL light plot, hang masking curtains, design lights and audio for all the Texas State Summer High School Theatre Camp productions. Prerequisite: TH 4326 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4328. Arts Leadership for the 21st Century.**

In this course the students will serve on the Jeremy Torres Lab Theatre Board as well as serve as assistant directors on departmental productions. During the course, students either produce the Jeremy Torres Lab Theatre season or assistant direct a departmental production.

**3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4329. Television Writing.**

In this course students study the process of writing a half-hour episodic television series. Students will learn fundamentals of TV scriptwriting, including story pitching, episode beat sheets, story and character development, culminating in a finished pilot script for an original thirty-minute television series. Prerequisite: TH 1369 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4330J. Drawing for the Designer.**

In this course students will cultivate drawing & rendering skills for scenic, lighting, and costume design. The student will be exposed to different rendering media such as water color, colored pencil and ink markers.

Prerequisite: TH 1350 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4330O. Smartphone Cinema in Paris.**

In this course students will explore Paris through smartphone cinema. The student will participate in real world explorations of the literal paths of the earliest French filmmakers, including but not limited to Alice Guy Blache, George Melies, and the Lumiere Brothers. Students will analyze the work and the paths of Francois Truffaut, Jean Conteau and Agnes Varna.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4330R. Oregon Shakespeare Festival Intensive.**

This course examines theatre production at the regional theatre level by exposing students to the work of the Oregon Shakespeare Festival. Students will study issues of translating the current season's nine plays from script to stage, as well as analyze the perspectives and choices that inform each production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331A. Auditions: The Business of Acting.**

This course equips the actor with the skills necessary to enter the professional world. Students will create an effective audition portfolio which may include two self-taped contrasting one-minute monologues, a resumé, a headshot, a professional bio, and/or a professional website. Prerequisite: TH 1365 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331B. Realism: Chekhov & Contemporary American Playwrights.**

This course will give undergraduate actors mastery of the fundamental tools for undertaking a successful rehearsal process, including Stanislavski-based text work as the initial stage for exploration and discovery of a dramatic text. Text work serves as a means of collectively investigating text, fostering strong director/actor collaborations, and laying a foundation for a richly exploratory rehearsal period. For the sake of this class, the rehearsal process is an exploration of the connection, meaning and specificity required to embody the character and plot of a play actively and truthfully. Prerequisite: TH 1365 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331C. Non-Realism in Theater, 1950-Present.**

The class will allow directors and actors to collaborate on scene studies from plays written in the second half of the twentieth century, as well as in the twenty-first century, going up to the present day. Genres and styles studied may include: absurdism, magical realism, dystopias, and intersectional plays. Prerequisite: TH 1365 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331D. New Play Workshop.**

Undergraduate actors will collaborate with MFA Directors and guest playwrights on a reading of a new play. Additionally, through this process, students will develop techniques for delving into the core themes and ideas of a new play so that it can be truthfully realized in performance.

Prerequisite: TH 2355 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331E. Devising for Performers.**

In this course students develop devised theatre and live performances, individually and collectively, in conjunction with critique methods that collectively move the work forward. Through the creation of new work and community critique of that work, student artists build a common language out of their unique interests and contemporary devising methodologies. Through devising, acting, writing, designing and creating original solo and group performances, students will expand their artistic skillset.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331G. Live Sound Audio Engineering and Mixing.**

In this course, students will examine the role of audio engineering and the live sound industry. Students will explore all aspects of audio engineering and mixing in order to meet the industry standards in the field of audio production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331H. Technical Design Solutions for the Stage.**

This course will provide students with the tools necessary to safely and creatively plan, problem-solve, and execute the production of scenery, special projects, and special effects for the stage. Students will explore various challenges faced by technical directors, property supervisors, and associated artisans. They will learn both common and unique solutions for those problems. Prerequisite: TH 2330 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331I. Advanced Acting For Film & TV.**

In this course, students will expand their knowledge in the field of acting for film and television by applying skills on a film set or location. In addition, this course culminates in a final "reel", which the student can use for their own promotional materials as they enter the workforce.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331P. Performing Postdramatic Theatre: Embodying the Unconventional.**

In this course students will explore postdramatic theatre terminology, principles, and practices, equipping them to become versatile, innovative, and boundary-pushing theatre artists who redefine the art of live performance. This course will introduce students to avant-garde techniques and concepts that transcend conventional boundaries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331S. Directing Musical Theatre & Shakespeare in an Educational Setting.**

In this course students will examine basic educational theory and lesson plan structure with an emphasis on the study of directing musicals and Shakespeare productions. Practical and effective strategies for directing musical theatre and Shakespeare productions in the middle school and high school theatre environment will be explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331V. Vectorworks II.**

This course is an advanced study of computer techniques and procedures using Vectorworks in the preparation of technical drawings and digital previsualization for theatrical scenic and lighting design.

Prerequisite: TH 4356 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4331Z. The History of Early French Films.**

In this course students will explore the origins and explorations of Filmmaking in France. This immersive education experience will take students to significant sites and experiences in Paris with optional tours to iconic, historical film locations from cinema produced in Paris, the City of Light, with preparation and foundation in the preceding semester of study.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter



**TH 4332. Theatre in Education.**

This course provides an in-depth examination of Applied Theatre as it is used in a variety of settings, including elementary and middle school classrooms, recreation facilities, and in community outreach programs.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4333. Advanced Television Writing.**

In this course students explore the process of writing a one-hour episodic television series pilot. Students will create an idea for an original one-hour television series, write a beat sheet for the pilot episode, write and re-write the pilot episode script, and create and present a pitch deck.

Prerequisite: TH 4329 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4334. Stage Management.**

This is a seminar course in stage management, focusing on organization, techniques, and practices for managing stage productions from initial planning through performance.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4335. Stage Management Practicum.**

This course is a hands-on practicum in which select students stage manage a departmental production, from auditions through the completion of the production. Prerequisite: TH 4334 with a grade of "D" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 10 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4336. Production and Company Management for the Arts.**

The goal of this course is to examine the job duties (and sometimes overlapping tasks) of members of a theatrical/producing arts team with a focus on company managers, stage managers, production managers, and the producing process. Focus also includes an emphasis on group management and organizational tools.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Topics

**Grade Mode:** Standard Letter

**TH 4337. Sound Design.**

This course provides an exploration of the sound design process and practical application for live entertainment, including theatre and dance productions. It involves an exploration of the sound design process and practical application through class projects. Prerequisite: TH 3337 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4338. Lighting Design.**

This course will concentrate primarily on the aesthetics of stage lighting covering such topics as color; script analysis; use of light in creating both static and dynamic visual compositions; development and graphic representation of a theatrical lighting design; and psychological and physiological responses pertaining to visual perception. Prerequisites: TH 1350 and TH 2330 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4340. Business of Film.**

This course focuses on how film projects are put together, from development to production, with an emphasis on job opportunities that are available in the film industry. Where applicable, working professionals are brought in as guest lecturers to provide a hands-on perspective of working in the film industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4341. Short Film Development.**

This course focuses on the essential elements that go into the pre-production phase of developing a short film project. Emphasis is on script research, writing, budgeting, scheduling, finance, and development. Prerequisite: TH 1353 and TH 3358 both with grades of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4342. Film Editing.**

This course will introduce students to the theory and application of film editing practices beginning with an in-depth study of several software applications. The students engage in the artistry of film editing utilizing workflows across multiple formats including fiction, documentary, and commercial. Prerequisite: TH 1353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4343. Film Producing.**

This course introduces students to the roles and responsibilities that contribute to the successful production of narrative films across multiple formats: short, feature, commercial, documentary and web. Utilizing industry-standard software tools, the student works through stages of development, budgeting, scheduling and on set production. Prerequisite: TH 1353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4344. Advanced Sound Design.**

This course focuses on the use of a digital audio workstation in the composition of music, sound, and scoring of theatrical moments on stage, as well as explores recording techniques. It also examines dramaturgical aspects of sound design. It is project-based, and includes a wide range of topics based on student interest and instructor discernment. Prerequisite: TH 3337 and TH 4337 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4345. Costume Design.**

In this course students will explore the role of a costume designer with specific focus on the costume design process. Projects will include developing skills in script analysis, character development, research, and drawing and rendering techniques.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4346. Advanced Costume Design.**

Continued development of costume design skills. Includes research as well as advanced drawing and rendering techniques. Repeatable for credit with different emphasis. Prerequisite: TH 3344 and TH 4345 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4347. Pattern Making.**

Pattern Making is a single semester exploration of the skills and techniques of pattern drafting and draping. Through guided practice and project work, students will enhance their understanding of garment planning and production. Prerequisite: TH 3344 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4348. Mask Making.**

Mask Making is a single semester course focusing on the practical craft and techniques of mask making for the live entertainment industry. Through guided practice students will be introduced to various materials and techniques in sculpting, casting, and molding for theatre. Prerequisite: TH 3344 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4349. Hat Making.**

In this course students will explore the design and execution of headwear. Through guided practice students will examine the materials and techniques that will provide a strong foundation in millinery design and construction. Prerequisite: TH 3344 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4351. History of Architecture and Interiors for Theatrical Design.**

This course is a study of architecture and interiors throughout history as it impacts design for theatre. Students will look at periods of design from ancient Egypt to the late Twentieth Century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4352. Armor Making.**

Armor Making is a single semester course in the construction of armor for the live entertainment industry. Through guided practice students will gain experience with various materials and techniques used in this specialized area of garment construction. Prerequisite: TH 3344 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4353. Wig Making and Styling.**

Wig Making is a single semester study of the principles of wig making and wig styling for the live entertainment industry. Through guided practice, students will learn to ventilate and style synthetic wigs and small ventilated appliances. Prerequisite: TH 3344 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4354. Special Effects Makeup.**

Special Effects Makeup is a single-semester exploration of the advanced makeup techniques and the creation and application of prosthetic appliances within the context of character design and production for the entertainment industry. Prerequisite: TH 3343 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4355. Scene Painting.**

In this course students will study the theory and practice of scene painting for the theatre, with hands-on projects implementing various scene-painting techniques. Students will also have the opportunity to work as scenic artists on departmental productions.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4356. Theatrical Drafting: Vectorworks.**

This course is a study of computer techniques and procedures used in the preparation of design and technical drawings for theatrical scenery and lighting. Prerequisites: TH 3331 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4357. Scene Design.**

A study of scene design for theatre, focusing specifically on process of scenic designer with practical assignments including renderings and scaled models. Prerequisites: TH 1350 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4358. Drama and Adaptation.**

This course covers the development of new theatrical scripts based on existing stories and source material. Students explore a variety of potential source materials, pitch adaptation ideas from multiple sources, and complete a written script.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4360. Problems in Theatre.**

Problems in Theatre. (3-0) Designed to give supervised experience to qualified advanced students in theatre history, playwriting, directing, acting, technical, or other theatre problems. Research problems or actual production problems may be chosen. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4361. Voice IV: Dialects For Actors.**

In this course students will expand their knowledge of the International Phonetic Alphabet and learn a methodical approach to accurately speak in regional American, and international dialects of English. Prerequisite: TH 3310 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4363. Directing For Film.**

This course is an in-depth examination of directing theories and procedures for film with practical filming and editing exercises. Prerequisites: TH 1353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4364. Directing I.**

This course is a study of the fundamentals of directing with practical experience provided by directing scenes. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**TH 4365. Directing II.**

A study of directing different dramatic styles. Students will direct a one-act play during regular semesters. Prerequisite: TH 4364 with a grade of "D" or better. (WI).

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Writing Intensive

**Grade Mode:** Standard Letter

**TH 4366. Directing III.**

In this course, student directors will create theatre projects inspired by contemporary immersive theatre-making methods. Student directors will re-imagine how to stage their work, investigating the role of the audience, and how they use the space. Students will explore innovative and creative approaches around language, intention, and structure. Prerequisite: TH 4364 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4368. Cinematography.**

This course will introduce the student filmmaker to intermediate and advanced concepts in camera, lighting and image delivery across multiple platforms: motion picture, television and the web. Utilizing the latest tools in digital videography, the student will learn to apply story analysis to their on-set decision making. Prerequisite: TH 1353 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4369. Film Production Intensive.**

In this course students explore the duties, expectations and protocols of each position on set, from camera and lighting to sound and assistant directing. They will learn rules for communication, including 'walkie lingo' and receive hands-on instruction for various technologies that exist for digital film production. While learning all of the written and unwritten rules for film and TV production, the student filmmaker will confront, evaluate and overcome all manner of logistical issues. This course will prepare them for their first day on set. Prerequisite: TH1353 with a grade of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4371. Producing the Independent Feature Film.**

In this course students investigate the unique processes, challenges and opportunities offered when choosing to produce a low-budget feature film through an independent approach. The student will take a current feature screenplay through each stage of development and pre-production, production, post, festival, sales, and distribution. The student will act as Executive, Producer, Line Producer, Assistant Director, Post Supervisor, and Sales agent featuring the full life cycle of a feature film. Prerequisite: TH 1353 and TH 4343 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4372. Theory and Practice of Dramaturgy.**

Study of the practical application of historical research and textual analysis in the production of period plays and new works. Emphasis upon the dramaturg as an instrument of collaboration between members of the artistic team and as a facilitator of audience outreach. Prerequisite: TH 3367 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4373. Advanced Film Directing.**

This course is an in-depth examination of narrative filmmaking that includes screenplay analysis, storyboarding, scheduling the shoot, directorial techniques, staging actors, camera placement, filming on location, and editing. Prerequisite: TH 3358 and TH 4363 and TH 4343 and TH 4368 and TH 4342 all with grades of a "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4375. Advanced Playwriting.**

This course focuses on an in-depth study of the techniques of playwriting and the variety of styles that a playwright might employ. The course culminates with the writing of a full-length play. Prerequisite: TH 3355 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4376. Advanced Lighting Design.**

This course focuses on advanced principles of light design and lighting aesthetics. It covers the variable elements one encounters during the design process as it applies to stage lighting. Prerequisite: TH 4338 with a grade of "D" or better and instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4377. Advanced Scene Design.**

This course emphasizes working with directors and other designers in creating a design for the stage. Students will improve verbal and visual communication skills as well as further develop drawing/painting/modeling/drafting skills. The course involves multiple projects including creating an original performance art piece with a director and other designers. Prerequisite: TH 4357 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4378. Play Development Lab.**

This course provides a laboratory workshop development process for new plays. It provides a structured environment for rigorously revising student-written works. Prerequisite: TH 4375 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4380. Advanced Scenic Painting.**

Students will further develop scenic art skills, with an increased emphasis on realized practical production work, and a focus on planning, sampling, and managing of theatrical production paint processes.

Prerequisite: TH 4355 with a grade of "D" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4381. Automated Lighting.**

Automated Lighting will explore and practice methods and approaches for basic uses of multi-attribute lighting technology. We will investigate a variety of moving light and LED technology and control as well as methods of properly documenting and cueing with these complex tools.

Prerequisite: TH 3338 and TH 4338 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4382. Welded Scenery for the Live Entertainment Industry.**

This course offers a hands-on study of the principles and practices utilized in the fabrication of steel framed stage scenery for the live entertainment industry. Emphasis will be on safely cutting, prepping and welding mild carbon steel. Tools used include steel cutting saws, grinders and MIG welder. Prerequisite: TH 2330 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4385. Lighting Console Programming.**

This course explores basic, intermediate, and advanced skills and techniques used in modern console programming for a variety of lighting systems used in the entertainment industry. The course incorporates programming specifics for consoles from a variety of manufacturers.

Prerequisite: TH 3338 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4386. Lighting and Projection Design for Dance.**

This course covers the skills and techniques used in lighting and projection design for dance performances. Students explore innovative choreographers and designers who use both established and emerging technologies in lighting and projection design for dance. Prerequisite: TH 3338 and TH 4338 both with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4388. Advanced Cinematography.**

In this course students use their visual creativity and knowledge of craft to solve problems, express ideas, and reveal truth through the moving image. This course will also emphasize the role of leadership the Director of Photography, Gaffer, Key Grip, and 1st Assistant Camera must serve on a set. This course will address both the technical and aesthetic aspects of cinematography with an emphasis on mastering the tools, and developing techniques and operating methods that will prepare the student filmmaker for a working career. Prerequisite: TH 1353 and TH 4368 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4390. BFA Pre-Professional Apprenticeship II.**

Intensive laboratory work in individual and group theatre methods for the actor, designer, or technician. Each apprenticeship from BFA II to V will focus upon a specific theatrical discipline for the actor, i.e. advanced vocal work, music theatre, performing Shakespeare, performing new scripts, advanced movement techniques, and further development of internal process.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4391. BFA Pre-Professional Apprenticeship III.**

A continuation of laboratory work for the actor. Each apprenticeship from BFA II-V will focus on a specific theatrical discipline for the actor, i.e. advanced vocal work, music theatre, performing Shakespeare, performing new scripts, advanced movement techniques, and further development of the internal process.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required

**Grade Mode:** Standard Letter

**TH 4392. BFA Pre-Professional Apprenticeship IV.**

A continuation of laboratory work for the actor. Each apprenticeship from BFA II-V will focus on a specific theatrical discipline for the actor, i.e. advanced vocal work, music theatre, performing Shakespeare, performing new scripts, advanced movement techniques, and further development of the internal process.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4393. BFA Pre-Professional Apprenticeship V.**

This course is a continuation of laboratory work for the actor. Each apprenticeship from BFA II-V focuses on a specific theatrical discipline for the actor, i.e. advanced vocal work, music theatre, performing Shakespeare, performing new scripts, advanced movement techniques, and further development of the internal process.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 4394. Senior Film Capstone Project.**

In this course students assemble a production team comprised of a Producer, Director, DP and Production Designer with a script that has already been developed in Short Film Development. This creative team immediately goes into production on the final culminating film shoot for their undergraduate careers. The course guides each production team through the subsequent post-production process, reshoots, final deliverables and festival and marketing campaign. This course is designed to work in conjunction with Short Film Development and act as a capstone course for graduating seniors. Prerequisite: TH 1353 and TH 4341 both with grades of "B" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 4396. Musical Theatre Industry Showcase and Business of the Business.**

This course prepares students for their Industry Showcase and concentrates on transitioning into the professional industry utilizing a series of "Business of the Business" labs designed to prepare students to run their business with skills including contract negotiations, agent interviews, marketing and branding, and financial planning. Prerequisite: TH 1210 and TH 1211 and TH 2210 and TH 2211 and TH 3396 all with grades of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Grade Mode:** Standard Letter

**TH 4601. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry; it is intended for students who do a full-time internship over the summer or during the fall or spring semesters. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5199B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5299B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit



**TH 5301. Drama Research.**

An examination of problems and research techniques in drama. Historical, critical, descriptive, and experimental research approaches will be surveyed and basic procedures in research report writing will be considered.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5302. Text Analysis, Research and Interpretation.**

This course reviews various methods of analysis of a dramatic text. This includes inductive, deductive, structural, and methodical approaches. It also examines techniques for production research and explores issues of interpretation that affect the development of a play's translation into a production on stage.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5303. Devising Theatre.**

This interdisciplinary course will focus on the creation of original work that incorporates a strong visual component. Individual artistic development is addressed along with the particular challenges of devising theatrical work through non-traditional methods.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5304. Web Series Creation.**

This course focuses on the techniques of creating a web series, script writing and development. It explores the fundamentals of film production and web publication, including marketing and identifying a target audience.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5305. Web Series Creation II.**

This course is a continuation of the Web Series course and specifically focuses on production of a web series. Students will write, direct, and produce their own web series for publication on the internet. Prerequisite: TH 5304 with a grade of "C" or better.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5306. Fundamentals of Environment for the Stage.**

This course is a practical exploration of the processes and techniques for the development of the stage environment by scenic and lighting designers within the context of live production. Theoretical projects provide focus on establishing a common vernacular and emphasize analysis, research, and problem-solving. In-class studio sessions develop efficient presentation techniques and effective graphic skills.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5307. Fundamentals of Character for the Stage.**

This course is a practical exploration of the processes and techniques for character development from the perspective of a director and costume designer within the context of live production. Theoretical projects provide focus on the development of a common vernacular and emphasize problem-solving skills. In-class studio sessions will develop analysis, research, clear and efficient presentation skills, as well as graphic skill development.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5308. Musical Theatre Choreography.**

This course examines the role of choreography in musical theatre and explores the choreographic process. Students study the history and theoretical principles of musical theatre choreography as well as obtain the practical skills needed to create staging and choreography for a musical theatre production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5310. Graduate Assistant Development.**

This course is required as a condition of employment for graduate teaching and instructional assistants. This course covers topics related to employment responsibilities. This course does not earn graduate degree credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Graduate Assistantship|Exclude from Graduate GPA

**Grade Mode:** Leveling/Assistantships

**TH 5312. Collaborative Theory.**

This course examines the nature of collaboration within the context of the live entertainment production processes. Particular attention is focused on understanding psychological/sociological viewpoints in effective collaborative work environments.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5313. History of Directing and Scenography.**

This course is a historical survey of the work of directors and designers. Particular emphasis will be on seminal production plans for notable directors and designers of the 20th and 21st centuries.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5314. History of Material Culture - Pre 20th Century.**

This course is an historical survey of material culture and its influence on theatrical production pre-twentieth century. Attention is placed on research of the architecture, interiors, fashion, theatre literature, and technical innovations of seminal periods from Greco-Roman through 19th century.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5315. History of Material Culture - 20th and 21st Centuries.**

This course is a historical survey of material culture and its influence on theatrical production in the twentieth- and twenty-first centuries. Along with anthropological research, attention is placed on the influences that shaped seminal practitioners of theatrical production.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5316. Artist Brand Development & Management.**

This course focuses on the creation of a professional brand and marketing toolkit for practitioners in the live entertainment industry. Basic principles of business practices including accounting, tax law, networking, and unions are also explored.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5323. Shakespeare Through Performance.**

This intensive summer study abroad program immerses students in the language and culture of Shakespeare's plays. Incorporating a performance-based approach to the study of Shakespeare, this course includes theatrical workshops taught by professionals at leading international theatres, including the Royal Shakespeare Company.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5324. Shakespeare: Text and Context.**

This intensive study abroad program immerses students in the language and culture of Shakespeare's plays. In Stratford, academic workshops are led by scholars from the Shakespeare Birthplace Trust. Through immersion in the cultural environment in which the plays were produced, students gain insight into the context that shaped Shakespeare's theatre.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5330. Stage Management.**

An in-depth seminar in stage management, including organization, techniques, and practices for managing stage productions from initial planning through performance.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5331. Television Writing.**

This course focuses on the techniques of writing for television, including both half-hour situational comedies and hour-long dramas. Students will pitch story ideas, develop beat sheets, write treatments, and complete written scripts. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5332. Stage Properties.**

This course trains students in the craft, artistry and management of stage properties for careers in theatre, film and the entertainment industry.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5333. Advanced Television Writing.**

This course focuses on the techniques of creating a television series, including script writing and development, film production, and post-production editing. Students will spin off a character from a network or cable television series and create a new series based on that character. Graduate students will act as co-producers. Prerequisite: TH 5331 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5334. Figure Drawing for Costume Design.**

In this course students will practice drawing the human figure using traditional media, techniques and applications. Intended for the theatre designer, this course places special emphasis on aspects of the relationship between fabric and the human figure.

**3 Credit Hours. 3 Lecture Contact Hours. 1 Lab Contact Hour.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5338. MFA Lighting Studio.**

This course concentrates primarily on the aesthetics of stage lighting, and covers such topics as viewers' psychological and physiological responses as they pertain to visual perception; color; script analysis; use of light in creating both static and dynamic visual compositions; development and graphic representation of a theatrical lighting design; and creation of materials necessary to communicate design intentions.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5339. Previsualization.**

In this course, students explore software and strategies for discovering and communicating lighting sequences prior to technical rehearsals. The course assumes proficiency in Vectorworks, Lightwright, and conventional console programming.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5340. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Lab Required

**Grade Mode:** Standard Letter

**TH 5341. Dramatization and Adaptation.**

This course focuses on the development of new theatrical scripts based on existing stories and source material. Students will explore a variety of potential source materials, pitch adaptation ideas, and complete a written script. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5342. MFA Studio I.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5343. MFA Studio II.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5345. MFA Costume Studio.**

MFA Costume Studio is a course that explores character design for live entertainment, as well as, topics that pertain to the work of a Costume Designer. Through guided practice, students will master the design process while working from both traditional and non-traditional sources.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5346. Historical Costume Research.**

This course is a study of clothing, accessories, and customs of selected theatrical periods as an approach to costuming period plays.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5347. Advanced Costume Construction.**

Advanced studies in the construction of costumes for the stage, techniques in sewing, pattern drafting/design as well as accessories/crafts construction.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5348. Graphic Representation.**

Students will study and practice drawing and painting techniques, as well as rendering with other media, including markers.

**3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5350. Second Year Project.**

Students in the second year of the MFA in Theatre will direct, design, or write for a departmental production. The course includes a written report of the project that demonstrates an understanding of the creative process of the chosen discipline. Prerequisite: Instructor approval.

**3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5352. MFA Studio III.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5353. MFA Studio IV.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5354. Playwriting.**

A seminar in the art and craft of playwriting, from initial idea through a completed draft of a play. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5355. Scene Painting.**

Theory and practice of scene and costume painting as developed in the Italian Renaissance and continuing into new media available today. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5356. Theatrical Drafting: Vectorworks.**

This course is a study of computer techniques and procedures used in the preparation of design and technical drawings for theatrical scenery and lighting.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5357. MFA Scenic Studio.**

MFA Scenic Studio is a seminar course based on design, emphasizing presentation and justification of executed renderings or models for selected plays. Emphasis is on styles of staging, settings, lighting and properties, and their relationship to the complete production. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5358. Screenwriting.**

This course offers a comprehensive study of the art and craft of writing screenplays. During a semester of intensive writing, readings, script analyses, and critiques, writers complete assignments in storytelling, character, structure, and script development. Each writer completes a full-length screenplay as the capstone project for the semester.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5359. Advanced Screenwriting.**

This course focuses on the development and revision of full-length screenplays. May be repeated for credit with different emphasis.

Prerequisite: TH 5358 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5360. Problems in Theatre.**

Designed to give supervised experience to qualified advanced students in theatre history, playwriting, directing, acting, technical, or other theatre problems. Research problems or actual production problems may be chosen. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5361. Oregon Shakespeare Festival Intensive.**

This course examines theatre production with a specific focus on directors and directing at this country's largest Shakespeare theatre, the Oregon Shakespeare Festival. Students will study issues of translating the current seasons' nine plays from script to stage, as well as analyzing the perspectives and choices of each director's production.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5362. Vectorworks II.**

This course is an advanced study of computer techniques and procedures using Vectorworks in the preparation of technical drawings and digital previsualization for theatrical scenic and lighting design

Prerequisite: TH 5356 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5363. Directing for Film.**

An in-depth examination of directing theories and procedures for film with practical filming and editing exercises. May be repeated with different emphasis for additional credit.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5364. MFA Directing Seminar I.**

In this course students develop their skills in analysis, research, staging, and production.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5365. Backgrounds of Modern Drama.**

An analysis of those developments in dramatic literature that formed the basis of modern drama. Primary emphasis will be on nineteenth- and twentieth-century European and American drama.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5367. Studies in Dramatic Theory and Criticism.**

The study of dramatic theory and criticism from Aristotle to the present.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5369. Contemporary World Theatre and Drama.**

Studies of current trends in world theatre and drama.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5371. Classical and Renaissance Drama.**

Seminar in Greek, French Neoclassical, and English Renaissance theatre, with intensive examination of selected works by Sophocles, Euripides, Shakespeare, and Marlowe. Primary focus will be on analysis of the plays as performance texts, and on the historical cultural environments in which the plays were created and first performed.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5372. Theory and Practice of Dramaturgy.**

Study of the practical application of historical research and textual analysis in the production of period plays and new works. Emphasis upon the dramaturg as an instrument of collaboration between members of the artistic team and as a facilitator of audience outreach.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5373. Advanced Film Directing.**

An in-depth examination of narrative filmmaking that includes screenplay analysis, storyboarding, scheduling the shoot, directorial techniques, staging actors, camera placement, filming on location, and editing.

Prerequisite: TH 5363 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5375. Advanced Playwriting.**

This course focuses on an in-depth study of the techniques of playwriting and the variety of styles that a playwright might employ. The course culminates with the writing of a full-length play. Prerequisite: TH 5354 with a grade of "C" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5378. Play Development Lab.**

This course provides a laboratory workshop development process for new plays. It provides a structured environment for rigorously revising student-written works. Prerequisite: TH 5375 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5379. Digital Rendering for Theatrical Design.**

This course is a study of computer techniques and procedures used in graphic representation for theatrical design. Students will work primarily with Photoshop, with references to other programs such as Illustrator, Vectorworks, Sketchup, and Painter as necessary. Students will explore and practice techniques to create scenic renderings, costume renderings, lighting sketches, and paper props as well as techniques for editing production photos, creating collages, and producing publicity materials.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5380. Advanced Scenic Painting.**

Students develop scenic art skills, with an increased emphasis on realized practical production work, and a focus on the planning, sampling, and management of theatrical production paint processes. Prerequisite: TH 5355 with a grade of "C" or better or instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5381. Automated Lighting.**

Automated Lighting will explore and practice methods and approaches for basic uses of multi-attribute lighting technology. We will investigate a variety of moving light and LED technology and control as well as methods of properly documenting and cueing with these complex tools.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5382. MFA Studio V.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis. This course now has variable content based on the composition of students.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TH 5383. MFA Studio VI.**

This course is designed to expand and refine advanced technical competencies, creativity, and methods of working in the student's area of emphasis.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5384. Non-Theatrical Design.**

This course explores career opportunities in non-theatrical design fields including theatre design, television, corporate events, architectural lighting, and visual management for retail.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5385. Lighting Console Programming.**

This course covers the skills and techniques used in modern console programming for a variety of lighting systems used in the entertainment industry. The course includes programming specifics for consoles from a variety of manufacturers. Special focus is placed on execution and presentation of console programming research.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5386. Lighting and Projection Design for Dance.**

This course covers the skills and techniques used in lighting and projection design for dance. The students explore innovative choreographers and designers who use both established and emerging technologies in lighting and projection design. Special focus is placed on research presentations.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Standard Letter

**TH 5387. MFA Directing Seminar II.**

In this course students experience choosing, preparing, and directing a theatrical production from analysis to performance. Attention is given to theatre organization and management.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**TH 5398. Final Creative Project.**

Students write, direct, or design a major university theatre production, demonstrating mastery in their area of emphasis. A written report of the project must be approved by a faculty committee. This requirement for the MFA in Theatre is usually taken in the final year of study.

**3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.**

**Grade Mode:** Standard Letter



**TH 5399A. Thesis.**

This course represents a student's initial thesis enrollment. No thesis credit is awarded until student has completed the thesis in Theatre 5399B.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5399B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5599B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**TH 5640. Professional Internship.**

This course provides professional hands-on experience in the theatre or film industry; it is intended for students who do a full-time internship over the summer or during a regular full semester. Prerequisite: Instructor approval.

**6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.**

**Course Attribute(s):** Lab Required

**Grade Mode:** Standard Letter

**TH 5999B. Thesis.**

This course represents a student's continuing thesis enrollments. The student continues to enroll in this course until the thesis is submitted for binding.

**9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.**

**Grade Mode:** Credit/No Credit

**US 1100. University Seminar.**

University Seminar is an introduction to the nature and aims of university education, with special emphasis on the value of broad learning. US 1100 is required of all undergraduate students entering the university with 0-15 semester credit hours completed since high school graduation.

**1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing

**Grade Mode:** Standard Letter

**WS 3376. Introduction to Women's, Gender, and Sexuality Studies.**

This course introduces students to the key concepts of women's, gender, and sexuality studies with a focus on the diversity of cultural experiences within the United States. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**WS 3377. Gender, Sex, and Power.**

This course examines the relationship between gender, sex, and power in cross cultural contexts to investigate key debates and current research within the field of Women's, Gender, and Sexuality Studies. Gender roles in societies outside the U.S. will be examined. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**WS 4377. Intersections of Race, Class, Gender, and Sexualities.**

This course critically examines how race, class, gender, and sexuality intersect to shape the lived experiences of a wide array of communities in the United States. Students cannot receive credit for both WS 4377 and AAS 4377. (WI) Prerequisite: WS 3376 with a grade of "D" or better.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Writing Intensive

**Grade Mode:** Standard Letter

**WS 4388. Independent Research in Women's Studies.**

Independent study course open to advanced students on an individual or small group basis. The research area in Women's Studies, bibliography, and study paper outline are to be approved by the instructor. (WI) (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Exclude from 3-peat Processing|Multicultural Content|Writing Intensive

**Grade Mode:** Standard Letter

**WS 5376. Images of Women.**

This course, one of two multidisciplinary team-taught women's studies courses, is a survey of the changing images of women in the U.S. since 1800 through the eyes of historians, writers, artists, orators, the media, and educators. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**WS 5377. Realities of Women.**

This course, one of two multidisciplinary team-taught women's studies courses, is a study of the realities faced by women in the U.S. today- including biological and psychological differences in males and females, politics and law, the work force, and the home. Gender roles in societies outside the U.S. will also be examined. (MULT).

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**WS 5388. Independent Research in Women and Gender Studies.**

Independent research course open to students on an individual or small group basis. The research area in Women and Gender Studies, bibliography, and study paper outline are to be approved by the instructor. (MULT) Prerequisite: Instructor approval.

**3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.**

**Course Attribute(s):** Multicultural Content

**Grade Mode:** Standard Letter

**Current Faculty (p. 3949)****President Emeriti (In Perpetuity) (p. 3983)****Regents' Professor and University Distinguished Professor Emeriti (In Perpetuity) (p. 3983)****University Distinguished Professor Emeriti (In Perpetuity) (p. 3983)****Distinguished Professor Emeriti (In Perpetuity) (p. 3984)****Professor Emeriti (Lifetime Designation) (p. 3986)****Associate Professor Emeriti (Lifetime Designation) (p. 3989)****Assistant Professor Emeriti (Lifetime Designation) (p. 3991)****Instructor Emeriti (Lifetime Designation) (p. 3991)****University Distinguished Professor Award (p. 3991)****Regents' Professor (p. 3991)****Regents' Teacher Award Winners (p. 3992)****Retired Faculty (Lifetime Designation) (p. 3992)**

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- V (p. 3980)
- W (p. 3981)
- X (p. 3982)
- Y (p. 3982)
- Z (p. 3983)

**A**

Aamot, Craig A, Senior Lecturer, M.M., Texas State University

Abate, Cassandra Ann, Associate Professor, M.F.A., San Diego State University

Abel, Michael Gregory, Senior Lecturer, Ph.D., University of Tennessee Knoxville

Abili, Michael Q Spencer Jones, Lecturer, M.Ed., Texas State University

Abo-Zaed Arar, Eman, Assistant Professor, Ph.D., Tel Aviv University

Abramovitch, Amitai, Associate Professor, Ph.D., Tel Aviv University

Abreu Mendoza, Carlos, Associate Professor, Ph.D., Univ North Carolina - Chapel Hill

Abshire, Roger Paul, Senior Lecturer, Ph.D., University of Houston

Acee, Taylor W, Professor, Ph.D., University of Texas at Austin

Ackerson, Carla J, Clinical Lecturer, Ed.D., Texas A&M Univ-Commerce

Adams, Laura L, Lecturer, Ph.D., Univ of Texas Southwestern Med Ct

Adi, Mohamad Nadim, Assistant Professor, Ph.D., University of Salford

Adversario, Jan Alipante, Lecturer, Ph.D., Texas State University

Agugom, Michael Ndubuisi, Lecturer, M.F.A., Texas State University

Agwuele, Augustine, Professor, Ph.D., University of Texas at Austin

Ahlbach, Connor Thomas, Lecturer, Ph.D., University of Washington

Ahlman, Todd Michael, Associate Professor of Practice, Ph.D., University of Tennessee Knoxville

Ahmed, Mohammad Iqbal, Assistant Professor, Ph.D., Kansas State University

Ahn, Mira, Professor, Ph.D., Virginia Poly Inst & State Univ

Ahrens, Jennifer N, Clinical Associate Professor, Ph.D., Texas State University

Al-Tameemi, Weam M, Lecturer, Ph.D., University of North Texas

Alanis, Emmanuel, Associate Professor, Ph.D., Texas A&M University

Alberton, Amy Malorie, Assistant Professor, Ph.D., Univ of Windsor

Alcala, Sylvia G, Lecturer, M.A., Ashford University

Alexander, Lonny, Lecturer, B.A., Texas State University

Alfaro, Edna C, Associate Professor, Ph.D., Arizona State University

Alfau, Antonio de Jesus, Lecturer, M.A., University of Texas at Austin

Ali, Moonis, Professor, Ph.D., Aligarh Muslim University

Aljunaidy, Mais, Lecturer, Ph.D., University of Alberta

Alkire, Linda, Associate Professor, Ph.D., University of Manchester

Allen, Brian Sterling, Associate Professor, M.F.A., Bard College

Allen, James Clark, Lecturer, B.B.A., Lamar University

Allison, Jeffrey Corbin, Lecturer, Ph.D., University of Texas at Austin

Almeida, Alex Danilo, Assistant Professor, ,

Almikati, Abdurrahman, Lecturer, Ph.D., American University of Beirut

Almstrum, Vicki Lynn, Lecturer, Ph.D., University of Texas at Austin

Alter, Thomas Edgar, Assistant Professor, Ph.D., Univ of Illinois at Chicago

Alvarez, Travis Ray, Lecturer, M.A., Wake Forest University

Alvear, Graciela, Lecturer, M.Ed., Univ of Texas Rio Grande Valley

Amacher, Carla Laureen, Lecturer, Ed.D., Concordia University Texas

Ament, Jillian Lynn, Lecturer of Practice, B.A., Texas State University

Anderson, Audwin L, Associate Professor, Ph.D., Texas A&M University

Anderson, Lindsey Nicole, Lecturer, M.S.W., Washington Univ in St. Louis

Anderson, Ryan Gerald, Assistant Professor, Ph.D., Virginia Poly Inst & State Univ

Anderson, Sidney Thomas, Associate Professor, Ph.D., Florida State University

Andress, Timothy Trey, Lecturer, M.A., Univ of Nebraska - Lincoln

Andrews, Jordan Kelly, Lecturer, B.F.A., Texas Christian University

Andrews, Leigh'Ann White, Lecturer, M.F.A., University of Iowa

Angelow, David E, Lecturer, M.B.A., Univ of Wisconsin-Madison

Angulo, Juan Ramon, Senior Lecturer, M.S., Texas A&M Univ Kingsville

Antu, Anna Laura, Lecturer, M.S.N., University of Texas at El Paso

Arar, Khalid, Professor, Ph.D., Anglia Ruskin University

Arevalo, Amy Dawn, Lecturer, M.S.N., Texas A&M Univ-Corpus Christi

Arevalo, Israel Eduardo, Lecturer, M.A., Univ of Texas Rio Grande Valley

Ari, Arzu, Associate Dean, College of Health Professions and Regents' Professor, Ph.D., Georgia State University

Armentrout, Debra Lynn, Lecturer, M.Ed., Texas A&M Univ Kingsville

Armstrong, Sonya Lee, Professor, Ed.D., Univ of Cincinnati Main Campus

Arnio, Ashley Nichole, Associate Professor, Ph.D., Florida State University

Arnold, Charles B, Senior Lecturer, M.A., Texas State University

Arowojolu, Olaniyi S, Lecturer, Ph.D., University of Idaho

Arreguin, Leah Ariana, Lecturer, Ph.D., University of Arizona

Arrington, Carter Thomas, Lecturer, B.M., University of Texas at Austin

Asbell, Stephanie Ames, Associate Professor, D.M.A., University of Texas at Austin

Ash, Gwynne Ellen, Professor, Ph.D., University of Georgia

Ashford-Hanserd, Shetay Nicole, Chair - Associate Professor, Ph.D., University of South Florida

Asiabanpour, Bahram, Professor, Ph.D., University of Southern California

Aslan, Semih, Associate Professor, Ph.D., Illinois Institute of Technology

Aspbury, Andrea, Senior Lecturer, Ph.D., Univ of Nebraska

Assaf, Lori Czop, Professor, Ph.D., University of Texas at Austin

Assistant Vice Provost and Professor, Matthew S, Professor, Ph.D., Univ of South Carolina Columbia

Atkins, Dane, Lecturer, Ph.D., Texas State University

Atkinson, Stephanie Dawn, Lecturer, M.S., Texas State University

Auer, Kevin Jeffrey, Lecturer, M.A., University of Texas at Austin

Aung, Thu Ya, Lecturer, Ph.D., Texas State University

Ausbrooks, Angela R, Interim Dean, College of Applied Arts and Professor, Ph.D., The University of Texas at Austin

Austin, Benjamin Munro, Lecturer, M.F.A., Texas State University

Austin, Jasmine Terrell, Assistant Professor, Ph.D., Univ of Oklahoma Norman Campus

Avenatti, Alyssa Marie, Lecturer, M.M., Texas State University

Averyt, Beverly, Lecturer, M.Ed., Texas State University

Awoniyi, Stephen A, Associate Professor, Ph.D., Indiana University Bloomington

Ayres, Lindsay Elizabeth, Lecturer, J.D., Baylor University

## B

Babcock, Jonathan P, Professor, D.M.A., University of Hartford

Bacak, Brittany Renee, Lecturer, M.S.W., Texas State University

Backstrom, Jesse Donald, Assistant Professor, Ph.D., Texas A&M University

Badrinarayanan, Vishag A, Professor, Ph.D., Texas Tech University

Baer, Ana Carrillo, Professor, M.F.A., University of Colorado Boulder

Baeza, Raul Antonio, Lecturer, M. Arch., Univ of Texas at San Antonio

Baginski, Anastasia P, Lecturer, Ph.D., Univ of California-Irvine

Bagnulo, Ashleen, Associate Professor, Ph.D., University of Notre Dame

Bagnulo, Vince A, Senior Lecturer, Ph.D., University of Notre Dame

Bailey, Amaka Okeke, Lecturer, Ph.D., Capella University

Bajackson, Robert E, Lecturer, M.A., Texas A&M Univ-Commerce

Baker, Brian Lee, Lecturer, J.D., South Texas College of Law

Baker, Candace K, Lecturer, Ph.D., Southern Illinois Univ Carbondale

Baker, Diana Kay, Lecturer, M.S., Univ of Houston - Clear Lake

Baker, Sage Marie, Lecturer, M.F.A., Texas State University

Balanoff, Howard R, Professor, D.Ed., Texas A&M University

Balcer, Mary K, Lecturer, M.Ed., Texas State University

Ballard, Tina Marie, Lecturer, Ph.D., Northern Illinois University

Balmaceda Wheelock, Yuri Vladimir, Lecturer, B.S., Univ of the Incarnate Word

Baltzly, Vaughn Bryan, Associate Professor, Ph.D., Univ of Maryland College Park

Balzarini, Rhonda Nicole, Assistant Professor, Ph.D., Univ of Western Ontario

Balzhiser, Deborah Ann, Associate Professor, Ph.D., Illinois State University

Banerjee, Suparno, Professor, Ph.D., Louisiana State Univ A&M College

Banta, Emily Margaret, Assistant Professor, Ph.D., Rutgers State Univ New Brunswick

Banta, Marilyn R, Senior Lecturer, Ph.D., University of Nevada, Reno

Banzatti, Andrea, Assistant Professor, Ph.D., ETH Zurich

Barcenas Pardo, Alejandro, Associate Professor, Ph.D., Univ of Hawaii at Manoa

Barfield, Heather Leigh, Lecturer, Ph.D., University of Texas at Austin

Barr, Geoffrey Ira, Lecturer, J.D., St. Mary's University

Barrera, Roberto, Senior Lecturer, Ph.D., Texas A&M University

Barton, Andrew Curtis, Lecturer, M.A., Texas State University

Bartz, Ezra J, Senior Lecturer, D.M.A., University of Texas at Austin

Bashore, Tammy Lois, Lecturer, M.S., Univ of Nebraska - Lincoln

Bastola, Kamal, Lecturer, M.S., Texas State University

Baumgartner, Lisa Marie, Professor, Ph.D., University of Georgia

Baylor, Debbie A, Senior Lecturer, D.P.T., College of Saint Scholastica

Bazan, Orphalinda, Lecturer, M.Ed., Texas State University

Beale-Rosano-Rivaya, Yasmine C, Chair - Professor, Ph.D., Univ of California-Los Angeles

Beatty, Caroline C, Professor, D.M.A., University of Michigan-Ann Arbor

Beauvais, Bradley Michael, Associate Professor, Ph.D., Penn State University Park

Becerra, Enrique P, Professor, Ph.D., Florida Atlantic University

Bedford, Sergio Cesar Benjamin, Lecturer, M.S., Texas State University

Behmann, Fawzi, Lecturer, M.B.A., Queens Univ Kingston

Behnke, Andrew Owen, Professor, Ph.D., Purdue University Main Campus

Behnke, Angela Nicole, Lecturer, M.Ed., Texas State University

Behrmann, Rachel Alexis, Lecturer, MSE, University of Texas at Austin

Belcik, Kimberly Dawn, Clinical Associate Professor, Ph.D., University of Texas at Austin

Bell-Metereau, Rebecca L, Professor, Ph.D., Indiana University Bloomington

Benavidez, Noe, Lecturer, M.Ed., Texas State University

Bender, Stacey H, Senior Lecturer, Ed.D., Univ of North Carolina-Greensboro

Benedikt, Amelie F, Senior Lecturer, Ph.D., University of Texas at Austin

Benitez, Sylvia, Lecturer, MHIM, Texas State University

Bennett, David Evan, Lecturer, M.A., Texas State University

Bensman, Todd Jay, Lecturer, M.A., Naval Postgraduate School

Benton, Amy D, Associate Professor, Ph.D., Univ of California, Berkeley

Bergh, Joel Justin, Senior Lecturer, Ph.D., University of Delaware

Berglund, Adam Michael, Lecturer, BSRA, Texas State University

Berglund, Rose M, Lecturer, M.Ed., Texas State University

Berlage, Nancy Kay, Associate Professor, Ph.D., Johns Hopkins University

Bernstein, Beth Ann, Senior Lecturer, Ph.D., Univ of New Mexico Main Campus

Bertling, Teresa S, Senior Lecturer, M.A., Univ of the Incarnate Word

Berumen-Flucker, Brenda, Assistant Professor, Ph.D., Old Dominion University

Besch, Christopher Michael, Assistant Professor, D.M.A., Rice University

Betancourt, Jose Alberto, Associate Professor, D.P.H., George Washington University

Betancourt, Tania, Professor, Ph.D., University of Texas at Austin

Betros, Glynda B, Senior Lecturer, M.S., Texas State University

Betz, Katherine Gregory, Lecturer, M.A., State Univ of NY Coll at Oneonta

Beverly, Harlan Titus, Lecturer, Ph.D., Oklahoma State University

Beyer, Andrea Elizabeth Blackert, Lecturer, M.M., Yale University

Bezner, Janet Rose, Chair - Professor, D.P.T., Rocky Mtn Univ of Health Prof

Bhalla, Nandini, Assistant Professor, Ph.D., Univ of South Carolina Columbia

Bhandari, Keshav, Lecturer, Ph.D., Texas State University

Bhattacharyya, Sonalee, Lecturer, Ph.D., Texas State University

Biediger-Friedman, Lesli M, Associate Professor, Ph.D., Texas Tech University

Billingsley, Glenna M, Chair - Associate Professor, Ph.D., Texas State University

Bishop, Elizabeth A, Associate Professor, Ph.D., University of Chicago

Bishop, James Matthew, Assistant Professor, Ph.D., Univ of Cincinnati Main Campus



Bishop, Jessica Lynn, Professor, Ph.D., University of Texas at Austin

Bishop, Sherwood, Lecturer, M.S., University of Texas at Austin

Bitney, Catherine Suzanne, Clinical Assistant Professor, Ph.D., The New School

Black, Stephen L, Associate Professor, Ph.D., Harvard University

Blair, John M, University Distinguished Professor, Ph.D., Tulane University

Blair, John P, Director ALERRT Center and Professor, Ph.D., Michigan State University

Blalock, Sarah Martin, Associate Professor, Ph.D., University of North Texas

Blanchard-Boehm, Denise, Professor, Ph.D., University of Colorado Boulder

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Blasingame, Dale C, Associate Professor of Practice, M.A., Texas State University

Blevins, Mallorie Nicole, Lecturer, M.S.C.J., Texas State University

Blue, Sarah A, Associate Professor, Ph.D., Univ of California-Los Angeles

Blum, Peggy Lynn, Lecturer, M.B.A., Argosy University, Phoenix

Blunk, Elizabeth M, Associate Professor, Ph.D., University of Texas at Austin

Boden, Carrie J, Professor, Ph.D., Kansas State University

Boehm, Richard G, Professor and Jesse H. Jones Distinguished Chair in Geographic Education, Ph.D., University of Texas at Austin

Bogar, Daniel Thomas, Lecturer, M.B.A., University of St. Thomas

Bohonos, Jeremy William, Assistant Professor, Ph.D., Univ of Illinois Urbana-Champaign

Bonazzo Romaguera, Claude M, Senior Lecturer, Ph.D., University of Texas at Austin

Bond, J Nathan, Professor, Ph.D., University of Texas at Austin

Boney, William Nelson, Assistant Professor, Ph.D., Carnegie Mellon University

Bonner, Timothy H, Professor, Ph.D., Texas Tech University

Booker, Roger L, Lecturer, M.Ed., Texas State University

Boone, Shaleka Renita, Lecturer, M.Ed., Louisiana State Univ Shreveport

Booth, Chad, Associate Dean, College of Science and Engineering and Associate Professor, Ph.D., Univ of Southern Mississippi

Borden, Callie Ranee, Lecturer, M.Ed., Texas State University

Borges, Bradley Donald, Senior Lecturer, M.S., Univ of Arkansas Main Campus

Borstein, Samuel, Assistant Professor, Ph.D., University of Tennessee Knoxville

Bourgeois, Eugene J, Provost and Executive Vice President of Academic Affairs and Professor, Ph.D., University of Cambridge

Bousman, Charles B, Professor, Ph.D., Southern Methodist University

Bouzard, Gayle G, Senior Lecturer, M.Ed., Texas State University

Bouzard, James Christian, Lecturer, D.Min., Austin Presbyterian Theol Sem

Bower, Matthew Eugene, Senior Lecturer, Ph.D., The University of Memphis

Bowers, Eric James, Lecturer, M.S.R.L.S., Texas State University

Bowers, Harry Toulmin, Senior Lecturer, M.S.I.S., Texas State University

Bowers, Jessica Ree, Clinical Assistant Professor, M.S., Texas State University

Bowman, Scott W, Professor, Ph.D., Arizona State University

Boyd, Carolyn Elizabeth, Research Associate Professor, Ph.D., Texas A&M University

Boynt, Kirsten Janele, Lecturer, M.M., Texas State University

Brackney, Laura Rose, Lecturer, D.M.A., Arizona State University

Brafford, Tasia Lorissa, Assistant Professor, Ph.D., University of Oregon

Branham, Amber Dawn, Lecturer, B.S.F.C.S., Texas State University

Bravo Moix, Marie Karen, Lecturer, M.A., Texas Woman's University

Brecheen, Daveda Karanas, Assistant Professor, M.M., Arizona State University

Breining, Linda Nenno, Lecturer, B.A., University of Colorado Boulder

Brenek, Dennis Eugene, Lecturer, M.F.A., Union Institute

Brennan, Mary C, Dean, College of Liberal Arts and Professor, Ph.D., Miami University

Brentnell, Lauren Carroll, Senior Lecturer, Ph.D., Prairie View A&M University

Brewer, Crystal Marie, Clinical Lecturer, M.S.N., Concordia University Texas

Brewster, Billy Eugene, Associate Professor, Ph.D., Univ of Illinois Urbana-Champaign

Brezinski, Heather Renee, Lecturer, Ed.D., Texas A&M University

Bricker, Hannah Catherin, Lecturer, M.Ed., Texas State University

Brimbal, Laure Katrine Mae, Assistant Professor, Ph.D., The Graduate Ctr, City Univ of NY

Brinkman, Mark Jerry, Lecturer, ,

Brittain, William J, Regents' Professor, Ph.D., California Inst of Technology

Brizendine, Kelli Chace, Lecturer, J.D., St. Mary's University

Brooks, Jodi M, Senior Lecturer, M.Ed., Texas State University

Brooks, Lisa Leilani, Lecturer, MSA, Central Michigan University

Brooks, Maneka Deanna, Associate Dean, College of Education and Associate Professor, Ph.D., Stanford University

Brooks, Richard S, Lecturer, M.S.W., Texas State University

Browder, David Blake, Lecturer, M.Ed., Texas State University

Brown, Aaron Matthew, Assistant Professor, M.F.A., Baylor University

Brown, Andrea Nicole, Assistant Professor, Ph.D., University of Texas at Austin

Brown, Christopher Ralph, Associate Professor, J.D., University of Texas at Austin

Brown, James Edward, Asst Professor of Practice, B.S., Georgia Southern University

Brown, Kaysie Seitz, Associate Professor, M.F.A., Case Western Reserve University

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Supple, Jerome H\*, President Emeritus, (4/1/89-8/31/02)

Trauth, Denis M, President Emeritus, (8/7/02-6/30/22)

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Baccus, John T, Regents' Professor and University Distinguished Professor Emeritus of Biology, (9/1/75-8/31/11)

Beebe, Steven Arnold, Regents' Professor and University Distinguished Professor Emeritus of Communication Studies, (8/1/86-5/31/18)

Butler, David R, Regents' Professor and University Distinguished Professor Emeritus of Geography, (7/16/97-8/31/19)

Chavkin, Nancy F, Regents' Professor and University Distinguished Professor Emerita of Social Work, (9/1/87-8/31/17)

de la Teja, Jesús F, Regents' Professor and University Distinguished Professor Emeritus of History, (9/1/91-8/31/17)

Dunn, Dennis J, Regents' Professor and University Distinguished Professor Emeritus of History, (9/1/70-8/31/18)

Estaville, Lawrence E\*, Regents' Professor and University Distinguished Professor Emeritus of Geography, (7/16/94-12/20/18)

Olson, Donald W, Regents' Professor and University Distinguished Professor Emeritus of Physics, (9/1/81-8/31/19)

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Williams, Marvin Lee, University Distinguished Professor Emeritus of Communication Studies, (9/1/74-5/31/12)

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Andrews, Gregory A, Distinguished Professor Emeritus of History, (9/1/88-8/31/09)

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Barton, James Gabriel\*, Distinguished Professor Emeritus of Communication Studies, (6/1/46-1/15/80)

Bechtol, William\*, Distinguished Professor Emeritus of Curriculum and Instruction, (8/1/77-2/16/98)

Blanchard, Lydia A\*, Distinguished Professor Emerita of English, (9/1/83-5/31/07)

Bowles, Ira Renay\*, Distinguished Professor Emeritus of Music, (9/1/47-7/15/86)

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Grayson, Nancy J, Distinguished Professor Emerita of English, (9/1/68-8/31/17)

Hannon, Daniel L\*, Distinguished Professor Emeritus of Theatre, (9/1/81-5/31/98)

Hannon, Herbert H\*, Distinguished Professor Emeritus of Biology, (9/1/60-8/31/89)

Hardy, Thomas, Distinguished Professor Emeritus of Biology,  
(11/012/07-8/31/22)

Hargett, Sheila A, Distinguished Professor Emeritus of Theatre and Dance,  
(9/1/71-5/31/16)

Hatcher, Barbara A, Distinguished Professor Emeritus of Curriculum and  
Instruction, (7/15/75-8/31/08)

Haynes, Martha L Brunson\*, Distinguished Professor Emerita of English,  
(9/1/67-7/15/98)

Hays, Joan C\*, Distinguished Professor Emeritus of Dance,  
(9/1/64-5/31/03)

Hazlewood, Donald G, Distinguished Professor Emeritus of Mathematics,  
(9/1/71-8/31/11)

Henderson, Richard B\*, Distinguished Professor Emeritus of Political  
Science, (6/1/49-5/31/84)

Hennessy, Michael J, Distinguished Professor Emeritus of English,  
(9/1/80-1/15/18)

Homeyer, Linda E, Distinguished Professor Emerita of Counseling,  
Leadership, Adult Education, and School Psychology, (9/1/95-5/31/18)

Houston, Ralph H\*, Distinguished Professor Emeritus of English,  
(9/1/37-7/31/78)

Hurt, Charles R, Distinguished Professor Emeritus of Music,  
(8/29/77-8/31/20)

Irvin, James D, Distinguished Professor Emeritus of Chemistry and  
Biochemistry, (9/1/73-5/31/10)

Jorgenson, Christabel B, Distinguished Professor Emerita of School  
Psychology, (9/1/76-7/15/98)

Jorgenson, David E\*, Distinguished Professor Emeritus of Sociology,  
(9/1/76-5/31/99)

Joy, Glenn C, Distinguished Professor Emeritus of Philosophy,  
(9/1/65-5/31/14)

Juel, Martin Oliver\*, Distinguished Professor Emeritus of Curriculum and  
Instruction, (9/1/50-5/31/81)

Kissler, Betty Jane\*, Distinguished Professor Emerita of History,  
(9/1/58-8/31/93)

Koke, Joseph R, Distinguished Professor Emeritus of Biology,  
(9/1/78-7/15/11)

Laird, Edgar S\*, Distinguished Professor Emeritus of English,  
(9/1/66-5/31/11)

Larsen, Robert D, Distinguished Professor Emeritus of Geography,  
(9/1/73-12/31/14)

Leder, Priscilla G, Distinguished Professor Emerita of English,  
(9/1/88-5/31/12)

Longley, Glenn, Distinguished Professor Emeritus of Biology,  
(6/1/69-8/31/14)

Makowski, Elizabeth M\*, Distinguished Professor Emerita of History,  
(7/16/93-5/31/19)

Margerison, Kenneth H, Distinguished Professor Emeritus of History,  
(9/1/72-8/31/22)

McBride, Michael H, Distinguished Professor Emeritus of Journalism and  
Mass Communication, (9/1/83-5/31/01)

Meixner, Wilda F\*, Distinguished Professor Emerita of Accounting,  
(9/1/86-1/15/08)

Morgan, Celia A, Distinguished Professor Emerita of Economics,  
(9/1/71-1/15/94)

Myers, Thomas H, Distinguished Professor Emeritus of Physics,  
(7/1/08-8/31/20)

Newsom, Rollo K, Distinguished Professor Emeritus of Sociology and  
Folklore, (9/1/66-7/15/96)

Ney, Charles, Distinguished Professor Emeritus of Theatre and Dance,  
(9/1/01-7/31/21)

Norris, William Elmore\*, Distinguished Professor Emeritus of Biology,  
(9/1/49-8/31/82)

Northcutt, Robert A, Distinguished Professor Emeritus of Mathematics,  
(9/1/64-7/15/06)

Ogletree, Shirley M, Distinguished Professor Emeritus of Psychology,  
(9/1/77-7/15/17)

Olney, Robert J\*, Distinguished Professor Emeritus of Management,  
(1/16/82-1/31/09)

Olson, Marilyn S, Distinguished Professor Emerita of English,  
(1/16/83-8/31/19)

Patterson, Larry T, Distinguished Professor Emeritus of Marketing,  
(7/15/80-5/31/01)

Pattison, Patricia, Distinguished Professor Emerita of Finance and  
Economics, (8/15/03-8/31/17)

Patton, Robert E, Distinguished Professor Emeritus of Health and Human  
Performance, (9/1/62-7/31/12)

Penn, Beverly, Distinguished Professor Emerita of Art and Design,  
(9/9/90-5/31/22)

Piersol, Darrell T\*, Distinguished Professor Emeritus of Management,  
(9/1/82-1/15/97)

Pino, David J, Distinguished Professor Emeritus of Music,  
(9/1/67-5/31/12)

Pohl, James W\*, Distinguished Professor Emeritus of History,  
(1/16/64-7/15/11)

Renfro, Paula C, Distinguished Professor Emeritus of Journalism and  
Mass Communication, (9/1/83-5/31/07)

Rogers, J Lloyd\*, Distinguished Professor Emeritus of Education,  
(6/1/36-8/31/73)

Rose, Francis L, Distinguished Professor Emeritus of Biology,  
(7/16/91-5/31/08)

Ross-Gordon, Jovita M, Distinguished Professor Emeritus of Counseling,  
Leadership, Adult Education, and School Psychology, (9/1/01-5/31/19)

Salem, Philip J, Distinguished Professor Emeritus of Communication  
Studies, (9/1/74-5/31/16)

Schmidt, John C, Distinguished Professor Emeritus of Music,  
(9/1/77-5/31/21)

Schultz, Clarence D\*, Distinguished Professor Emeritus of Sociology,  
(9/1/65-7/31/90)

Shell, Lon R, Distinguished Professor Emeritus of Agriculture,  
(9/1/71-7/15/01)

Skinner, Douglas D, Distinguished Professor Emeritus of Music,  
(9/1/73-8/31/11)

Smith, Milton L\*, Distinguished Professor Emeritus of Educational  
Administration, (9/1/77-1/15/90)

Stimmel, D Theron, Distinguished Professor Emeritus of Psychology,  
(9/1/69-8/31/08)

Stone, William E, Distinguished Professor Emeritus of Criminal Justice  
and Criminology, (9/01/81-8/31/22)

Stutts, Mary Ann, Distinguished Professor Emeritus of Marketing,  
(9/1/82-7/15/13)

Swinney, Everette\*, Distinguished Professor Emeritus of History,  
(9/1/57-7/15/96)

Walts, Robert W\*, Distinguished Professor Emeritus of English,  
(9/1/59-5/31/87)

Webber, Jo A, Distinguished Professor Emerita of Curriculum and  
Instruction, (9/1/86-5/31/12)

Weller, Eric C\*, Distinguished Professor Emeritus of Art and Design,  
(9/1/78-8/31/08)

Wheeler, Richard Wade, Distinguished Professor Emeritus of Psychology,  
(9/1/69-5/31/11)

Whiteside, Bobby, Distinguished Professor Emeritus of Biology,  
(9/1/67-5/31/00)

Wilson, Miles S, Distinguished Professor Emeritus of English,  
(9/1/80-8/31/15)

Wilson, Ryce Neal, Distinguished Professor Emeritus of Art and Design,  
(1/23/71-5/31/09)

Yager, Billy J, Distinguished Professor Emeritus of Chemistry and  
Biochemistry, (9/1/62-5/31/01)

Zedler, Empress Young\*, Distinguished Professor Emerita of Special  
Education, (3/1/48-8/31/79)

\* Deceased

Abrahamson, Royce L, Professor Emeritus of Management,  
(9/1/65-8/31/96)

Allen, Judy L, Professor Emerita of Social Work, (9/1/77-7/31/16)

Alley, Debbie Ruth, Professor Emeritus of Theatre and Dance,  
(9/1/13-1/15/23)

Allison, Elizabeth A, Professor Emerita of English, (9/1/99-2/13/19)

Archer, Richard L, Professor Emeritus of Psychology, (9/1/82-7/15/17)

Bandy, Carroll L, Professor Emeritus of Mathematics, (1/16/78-5/31/17)

Battle, Jennifer L, Professor Emeritus of Curriculum and Instruction,  
(9/1/94-8/31/11)

Bell, James D, Professor Emeritus of Management, (9/1/85-1/15/17 )

Bible, Jon D, Professor Emeritus of Finance and Economics,  
(9/1/85-5/31/16)

Biggs, Mary Jo, Professor Emerita of Organization, Workforce, and  
Leadership Studies, (9/1/04-1/31/22)

Blankmeyer, Eric C, Professor Emeritus of Finance and Economics,  
(9/1/82-1/15/14)

Boone, Michael D, Professor Emeritus of Counseling, Leadership, Adult  
Education, and School Psychology, (7/16/88-5/31/14)

Brinckmeyer, Lynn, Professor Emerita of Music, (8/1/05-5/31/23)

Brooks, Ann, Professor Emerita of Counseling, Leadership, Adult  
Education, and School Psychology, (9/1/04-8/31/20)

Burke, George C, Professor Emeritus of Health Administration,  
(9/1/84-5/31/09)

Butler, Janet B, Professor Emeritus of Accounting, (8/25/03-8/31/19)

Canabal, Marie E, Professor Emeritus of Family and Consumer Sciences,  
(8/1/06-8/31/12)

Carson, C Dee, Professor Emeritus of Agriculture, (9/1/77-8/31/01)

Chahin, T Jaime, Professor Emeritus of Organization, Workforce, and  
Leadership Studies, (10/1/87-8/6/23)

Champion, James J, Professor Emeritus of Spanish, (9/1/74-8/31/00)

Chavkin, Allan R, Professor Emeritus of English, (9/1/79-8/31/21)

Cheatham, Thomas Richard, Professor Emeritus of Communication  
Studies, (8/1/78-8/31/14)

Chiodo, Beverly A, Professor Emeritus of Marketing, (9/1/68-5/31/11)

Costello, J Michael, Professor Emeritus of Theatre and Dance,  
(9/1/01-5/31/22)

Crixell, Sylvia L, Professor Emeritus of Family and Consumer Sciences,  
(9/1/90-7/15/21)

Davis, Barbara H, Professor Emeritus of Curriculum and Instruction,  
(9/1/96-7/15/14)

Davis, Bob, Professor Emeritus of Agriculture, (8/1/88-5/31/00)



Davis, Robert A, Professor Emeritus of Computer Information Systems and Quantitative Methods, (9/1/02-7/31/15)

Day, Susan B, Professor Emerita of Sociology, (9/1/79-8/1/22)

Dolezal, Charles H, Professor Emeritus of Curriculum and Instruction, (1/15/77-5/31/05)

Earl, Richard A, Professor Emeritus of Geography, (9/1/91-5/31/19)

Easter, David C, Professor Emeritus of Chemistry and Biochemistry, (9/1/93-5/31/16)

Echeverria, Miriam B, Professor Emerita of Modern Languages, (9/1/87-5/31/18)

Eure, Jack D, Professor Emeritus of Marketing, (9/1/69-5/31/06)

Evans, Patricia A, Professor Emerita of English, (9/1/76-7/31/11)

Fite, Kathleen E, Professor Emerita of Curriculum and Instruction, (9/1/73-7/31/20)

Flaherty, Daniel J, Professor Emeritus of Accounting, (8/15/97-1/15/06)

Flammang, Robert A, Visiting Professor Emeritus of Finance and Economics, (9/1/91-5/31/07)

Ford, Ramona L, Professor Emeritus of Sociology, (9/1/79-5/31/00)

Friedman, BJ, Professor Emeritus of Family and Consumer Sciences, (9/1/85-5/31/15)

Galvan, Roberto Arispe, Professor Emeritus of Modern Languages, (6/1/64-7/15/83)

Garber, James F, Professor Emeritus of Anthropology, (1/16/82-8/31/19)

Garofalo, Charles P, Professor Emeritus of Political Science, (9/1/82-5/31/17)

Gordon, Jeffrey L, Professor Emeritus of Philosophy, (9/1/78-8/31/15)

Gowens, Paul R, Professor Emeritus of Finance and Economics, (9/1/80-5/31/18)

Gratz, Robert D, Professor Emeritus of Communication Studies, (9/1/69-12/31/14)

Green, Donald C, Professor Emeritus of Respiratory Care, (9/1/65-8/31/92)

Greer, Carole, Professor Emeritus of Art and Design, (9/1/77-1/15/07)

Gross, Dalton H, Professor Emeritus of English, (9/1/66-5/31/04)

Habingreither, Robert B, Professor Emeritus of Engineering Technology, (9/1/78-8/31/21)

Hager, H Stephen, Professor Emeritus of Music, (9/1/83-5/31/16)

Hammond, Dicky E, Professor Emeritus of Curriculum and Instruction, (7/15/80-11/30/97)

Harter, Rod A, Professor Emeritus of Health and Human Performance, (6/1/09-12/31/22)

Hartman, Gary A, Professor Emeritus of History, (9/1/95-8/31/18)

Heaberlin, Dickie M, Professor Emeritus of English, (9/1/67-8/31/20)

Hegde Niezgoda, Asha L, Professor Emerita of Family and Consumer Sciences, (9/15/01-5/31/23)

Herkimer, Allen G, Professor Emeritus of Health Administration, (9/1/86-5/31/96)

Holt, Elvin, Professor Emeritus of English, (9/1/83-8/31/20)

Huerta, Mary E, Professor Emeritus of Curriculum and Instruction, (9/1/07-1/15/21)

Humphrey, Joseph L, Professor Emeritus of Accounting, (9/1/72-7/15/09)

Johnson, Maurice A, Professor Emeritus of Health and Human Performance, (9/1/73-6/30/11)

Johnston, Walter Edward, Professor Emeritus of Computer Information Systems and Quantitative Methods, (9/1/80-7/15/98)

Kalsi, Marie-Louise S, Professor Emerita of Philosophy, (1/16/85-5/31/01)

Kens, Paul A, Professor Emeritus of Political Science, (9/1/87-5/31/22)

Kimmel, James R, Professor Emeritus of Geography, (1/16/91-5/31/13)

Knox, Karen S, Professor Emerita of Social Work, (9/1/95-12/31/17)

Koehn, Robert D, Professor Emeritus of Biology, (9/1/67-5/31/02)

Kolbe, William D, Professor Emeritus of Art, (7/10/64-5/31/92)

Laman, Jean B, Professor Emeritus of Art and Design, (9/1/73-5/31/11)

Laman, Jene T, Professor Emeritus of Family and Consumer Sciences, (7/16/76-5/31/14)

Laumer, Jack C, Professor Emeritus of Music, (9/1/77-5/31/18)

Ledbetter, Kathryn, Professor Emeritus of English, (6/1/00-5/31/21)

LeSage, James, Professor Emeritus of Finance and Economics and Fields Endowed Chair in Urban and Regional Economic, (9/1/06-5/31/21)

Lewis, Melanie C, Professor Emeritus of Biology, (9/1/77-1/15/99)

Luizzi, Vincent L, Professor Emeritus of Philosophy, (9/1/76-5/31/22)

Macey, Susan M, Professor Emeritus of Geography, (9/1/88-5/31/14)

Martin, Gordon E, Professor Emeritus of Curriculum and Instruction, (1/1/81-1/15/16)

Martin, Roy B, Professor Emeritus of Computer Information Systems and Quantitative Methods, (9/1/86-5/31/05)

Mayo, Sandra, Professor Emeritus of Theatre and Dance, (6/1/01-1/15/18)

McClellan, Stanley A, Professor Emeritus of Engineering, (9/1/08-5/31/23)

McCoy, Ingeborg Ruberg, Professor Emeritus of German, (9/1/70-8/31/98)

McGee, John W, Professor Emeritus of Finance and Economics, (9/1/80-1/15/14)

Meaney, Karen S, Professor Emerita of Health and Human Performance, (8/1/09-7/31/22)

Michalk, Victor E, Professor Emeritus of Physics, (9/1/68-5/31/07)

Middlebrook, Bill J, Professor Emeritus of Management, (9/1/83-7/15/13)

Mijares, Tomas C, Professor Emeritus of Criminal Justice and Criminology, (9/1/90-10/30/19)

Mogab, John W., Professor Emeritus, Professor Emeritus of Finance and Economics, (9/1/81-8/31/20)

Montgomery, Rebecca, Professor Emeritus of History, (6/1/09-1/15/23)

Montondon, Lucille M, Professor Emeritus of Accounting, (9/1/89-8/31/16)

Moore, Nelwyn B, Professor Emeritus of Family and Consumer Sciences, (9/1/63-5/31/00)

Morgan, George W, Professor Emeritus of Computer Information Systems and Quantitative Methods, (1/16/82-5/31/04)

Morris, Roselyn E, Professor Emeritus of Accounting, (9/1/93-8/31/16)

Mullins, Wayman C, Professor Emeritus of Criminal Justice and Criminology, (9/1/84-5/31/21)

Murray, Tinker D, Professor Emeritus of Health and Human Performance, (9/1/84-1/15/18)

Neely, James Bert, Professor Emeritus of Music, (9/1/81-8/31/09)

Niblett, Michael L, Professor Emeritus of Art and Design, (7/1/10-5/31/23)

Nicosia, Ralph Timothy, Professor Emeritus of Curriculum and Instruction, (9/1/71-7/15/98)

Nielsen, Erik A, Professor Emeritus of Art and Design, (9/1/71-5/31/19)

Oles, Henry J, Professor Emeritus of Psychology, (9/1/71-1/15/92)

Oliver, Joseph R, Professor Emeritus of Accounting, (9/1/80-5/31/04)

Opheim, Cynthia L, Professor Emeritus of Political Science, (9/1/87-5/31/21)

Pankey, Robert B, Professor Emeritus of Health and Human Performance, (8/1/00-5/31/17)

Peirce-Burlson, Katherine L., Professor Emeritus of Journalism and Mass Communication, (9/1/88-8/31/20)

Perkins, David B., Professor Emeritus of Criminal Justice and Criminology, (9/1/88-8/30/20)

Perry, Reeves B, Professor Emeritus of Chemistry and Biochemistry, (9/1/66-1/15/99)

Petersen, James Frederick, Professor Emeritus of Geography, (9/1/80-5/31/17)

Pierson, Michael J, Professor Emeritus of Occupational Education, (1/16/75-7/15/06)

Plotts, Cynthia A, Professor Emerita of Counseling, Leadership, Adult Education, and School Psychology, (9/1/77-12/31/18)

Raffeld, Paul C, Professor Emeritus of Psychology, (9/1/84-1/15/06)

Rahe, Charles Hardin, Professor Emeritus of Agriculture, (12/1/98-1/15/15)

Raiborn, Cecily A, Professor Emeritus of Accounting, (9/1/06-5/31/19)

Randolph, Robert M, Professor Emeritus of English, (9/1/85-1/15/05)

Rast, Walter, Professor Emeritus of Biology, (6/1/01-8/31/12)

Rechner, Paula L, Professor Emerita of Management, (8/15/05-8/31/22)

Reeves-Marquardt, Dona, Professor Emeritus of Modern Languages, (9/1/61-5/31/94)

Riepe, Russell C, Professor Emeritus of Music, (9/1/72-5/31/13)

Rosenberg, Teya, Professor Emerita of English, (9/1/96-12/31/22)

Row, Brian G, Professor Emeritus of Art and Design, (9/1/77-1/15/14)

Rudzinski, Walter F, Professor Emeritus of Chemistry and Biochemistry, (9/1/79-1/15/15)

Ruiz, Maria Paez de, Professor Emeritus of Modern Languages, 5/10/78-1/15/98)

Rydl, Glen M, Professor Emeritus of Agriculture, (9/1/68-5/31/01)

Sanders, Barbara L, Professor Emeritus of Physical Therapy, (1/16/86-5/31/21)

Sanders, Donald E, Professor Emeritus of Finance and Economics, (9/1/79-5/31/20)

Scheuermann, Brenda K, Professor Emeritus of Curriculum and Instruction, (9/1/88-5/31/22)

Scheuermann, Brenda K, Professor Emeritus of Curriculum and Instruction, (9/1/88-5/31/22)

Short, Alvin P, Professor Emeritus of Sociology, (9/1/71-5/31/99)

Singh, Sukhjot, Professor Emeritus of Mathematics, (9/1/82-1/15/13)

Smart, Denise T, Professor Emeritus of Marketing, (1/5/00-8/31/23)

Smith, Bruce, Professor Emeritus of Journalism and Mass Communication, (4/13/00-8/31/15)

Smith, Karen H, Professor Emeritus of Marketing, (9/1/93-8/31/22)

Smith, LeAnne, Professor Emeritus of Theatre and Dance, (9/1/83-5/31/22)

Sodders, Richard P, Professor Emeritus of Theatre and Dance, (9/1/85-5/31/17)

Stea, David, Professor Emeritus of Geography, (7/16/97-8/31/06)

Stephens, Elizabeth Campbell, Professor Emerita of Curriculum and Instruction, (9/1/96-8/31/11)

Stephenson, Stanley D, Professor Emeritus of Computer Information Systems and Quantitative Methods, (9/1/81-8/31/04)

Stouffer, Willard B, Professor Emeritus of Political Science, (9/1/70-5/31/12)

- Stuessy, Joe, Professor Emeritus of Music, (8/1/03-8/31/07)
- Suckling, Philip W, Professor Emeritus of Geography, (7/1/05-5/31/15)
- Summers, Jim W, Professor Emeritus of Health Administration, (9/1/88-5/31/09)
- Taylor, Ruth A, Professor Emeritus of Marketing, (9/1/87-1/15/22)
- Temponi, Cecilia C., Professor Emeritus of Management, (9/1/93-5/31/20)
- Thicksun, Thomas L., Professor Emeritus of Mathematics, (9/1/81-8/31/20)
- Thomas, Naymond, Professor Emeritus of Music, (9/1/87-8/31/14)
- Torreon, Ricardo M, Professor Emeritus of Mathematics, (9/1/81-5/31/18)
- Trepagnier, Barbara, Professor Emerita of Sociology, (9/1/96-5/31/11)
- Tuff, Donald W, Professor Emeritus of Biology, (9/1/63-5/31/98)
- Wayment, Stanley G, Professor Emeritus of Mathematics, (9/1/86-5/31/12)
- Weinberger, George M, Professor Emeritus of Political Science, (9/1/73-5/31/10)
- Whalin, John Robert, Professor Emeritus of Music, (9/1/64-1/15/01)
- Wheeler, Larry J, Professor Curriculum and Instruction, (9/1/81-8/31/16)
- Whitenberg, David Calvin, Professor Emeritus of Biology, (9/1/65-7/31/93)
- Williams, Sue W, Professor Emerita of Family and Consumer Sciences, (6/1/85-8/31/14)
- Williamson, Bobby L, Professor Emeritus of Curriculum and Instruction, (9/1/66-5/31/93)
- Wilson, James A, Professor Emeritus of History, (9/1/70-7/15/01)
- Woolsey, Timothy D, Professor Emeritus of Music, (9/1/75-5/31/08)
- Wortham, Marshall Ross, Professor Emeritus of Art and Design, (9/1/65-8/31/98)
- Wright, Lloyd S, Professor Emeritus of Psychology, (9/1/74-5/31/00)
- Acosta, Maria T, Associate Professor Emeritus of Mathematics, (9/1/92-8/31/21)
- Batey, Andy H, Associate Professor Emeritus of Engineering Technology, (7/16/85-1/31/19)
- Beck, Shirley S, Associate Professor Emeritus of Curriculum and Instruction, (1/16/87-5/31/97)
- Boone, Joy L, Associate Professor Emerita of Health Services and Research, (9/1/81-7/31/98)
- Borm, Alfred Ervin, Associate Professor Emeritus of Mathematics, (1/15/65-1/31/93)
- Boucher, Brenda K, Associate Professor Emerita of Physical Therapy, (6/1/08-5/31/18)
- Brunner, Peggy Gregory, Associate Professor Emeritus of Music, (9/1/68-5/31/01)
- Byrum, David C, Associate Professor Emeritus of Curriculum and Instruction, (9/1/89-5/31/19)
- Cagniat, Pierre F, Associate Professor Emeritus of History, (1/16/88-5/31/20)
- Carns, Michael R, Associate Professor Emeritus of Educational Administration and Psychological Services, (6/1/85-1/15/08)
- Connolly, Colleen M, Associate Professor Emerita of Counseling, Leadership, Adult Education, and School Psychology, (1/16/99-5/31/14)
- Davis, Barbara H, Associate Professor Emeritus of Curriculum and Instruction, (1/16/98-7/15/14)
- Davis, Charles H, Associate Professor Emeritus of Quantitative Methods, (9/1/83-7/15/01)
- Dunn, Margaret E, Associate Professor Emeritus of Curriculum and Instruction, (7/24/78-3/31/01)
- England, Michael T, Associate Professor Emeritus of Journalism and Mass Communication, (9/1/93-8/31/23)
- Evans-Palmer, Teri E, Associate Professor Emeritus of Art and Design, (1/16/04-1/15/22)
- Falleur, David M, Associate Professor Emeritus of Clinical Laboratory Science, (9/1/74-8/31/20)
- Fleuriet, Cathy A, Associate Professor Emeritus of Communication Studies, (9/1/87-8/31/12)
- Gaddis, Marilyn T, Associate Professor Emeritus of Curriculum and Instruction, (9/1/78 - 8/31/94)
- Goodwin, Marilyn Wilson, Associate Professor Emeritus of Curriculum and Instruction, (1/16/98-7/15/14)
- Hall, Elizabeth Ann, Associate Professor Emeritus of Curriculum and Instruction, (9/1/90-6/30/03)
- Hankins, June Chase, Associate Professor Emerita of English, (9/1/84-5/31/10)
- Harkins, Cade J, Associate Professor Emeritus of Respiratory Care, (9/1/83-8/31/04)
- Hawkins, Catherine A, Professor Emerita of Social Work, (9/1/91-8/31/23)
- Hazlewood, Carol, Associate Professor Emerita of Computer Science, (9/1/86-8/31/11)
- Helm, Raymond, Associate Professor Emeritus of Agriculture, (9/1/67-8/31/85)
- Henry, William Gammon, Associate Professor Emeritus of Curriculum and Instruction, (9/1/67-5/31/90)
- Hindson, Theodore T, Associate Professor Emeritus of Political Science, (1/15/74-1/15/19)
- Hudiburg, Howard B, Associate Professor Emeritus of Music, (1/16/85-5/31/14)

Hughes, Billie E, Associate Professor Emeritus of Counseling and Guidance, (9/1/67-8/31/87)

Jackson, William R, Associate Professor Emeritus of Physics, (9/1/67-5/31/00)

Juarez, Ana M, Associate Professor Emerita of Anthropology, (1/16/95-1/15/21)

Kostroun, Phillip W, Associate Professor Emeritus of Clinical Laboratory Science, (11/10/75-1/15/08)

Leavell, Judy A, Associate Professor Emerita of Curriculum and Instruction, (9/1/93-8/31/06)

Lee, Kathryn S, Associate Professor Emeritus of Curriculum and Instruction, (9/1/99-5/31/19)

Lien, Violetta F, Clinical Associate Professor Emeritus of Curriculum and Instruction, (9/1/00-5/31/11)

McCabe, Thomas F, Associate Professor Emeritus of Computer Science, (9/1/80-1/15/05)

McKinney, Audrey M, Associate Professor Emerita of Philosophy, (9/1/88-5/31/18)

McLaren, John A, Associate Professor Emeritus of Criminal Justice, (1/16/80-8/31/15)

Merryman, Sandra S, Associate Professor Emerita of Psychology, (9/1/70-1/31/07)

Moody, Sandra West, Associate Professor Emeritus of Biology, (9/1/89-8/31/20)

Mooney, Robert T, Associate Professor Emeritus of Health Administration, (9/1/75-7/15/12)

Nicols, Kay McGlashan, Associate Professor Emerita of Management, (9/1/02-1/15/23)

Niekamp, Raymond, Associate Professor Emeritus of Journalism and Mass Communication, (9/1/00-8/31/21)

Ogden, Robert D, Associate Professor Emeritus of Computer Science, (9/1/83-7/15/04)

Ott, James R, Associate Professor Emeritus of Biology, (1/16/94-5/31/23)

Patterson, Thomas L, Associate Professor Emeritus of Medical Laboratory Science, (9/1/08-1/15/23)

Payne, Emily M, Associate Professor Emeritus of Curriculum and Instruction, (7/1/88-8/31/20)

Ploeger, Kristen G, Associate Professor Emerita of Computer Information Systems and Quantitative Methods, (9/1/83-12/31/16)

Polk, James E, Associate Professor Emeritus of Music, (9/1/90-5/31/06)

Radcliffe, Richard, Associate Professor Emeritus of Curriculum and Instruction, (9/1/01-8/31/13)

Ratliff, Ernest F, Associate Professor Emeritus of Mathematics, (9/1/71-5/31/07)

Redwine, Gerald DeWayne, Associate Professor Emeritus of Medical Laboratory Science, (9/1/08-8/31/23)

Reese, Marianne, Associate Professor Emerita of Educational Administration and Psychological Services, (6/1/92-1/31/06)

Reilly, Frank K, Professor Emeritus of Anthropology, (9/1/92-8/31/23)

Renfro, Robert Bruce, Associate Professor Emeritus of Journalism and Mass Communication, (9/1/85-5/31/06)

Resta, Virginia Kay, Associate Professor Emerita of Curriculum and Instruction, (9/1/91-7/31/16)

Ross, John K, Associate Professor Emeritus of Management, (9/1/80-7/15/12)

Sawey, Ronald M, Associate Professor Emeritus of Computer Science, (9/1/76-5/31/09)

Schmidt, Darlene H, Associate Professor Emeritus of Health, Physical Education and Recreation, (9/1/68-5/31/05)

Scholwinski, Edward Joe, Associate Professor Emeritus of Educational Administration and Psychological Services, (9/1/83-7/15/06)

Scott, Charlotte Robinson, Associate Professor Emeritus of Health, Physical Education and Recreation, (9/1/68-1/31/91)

Simpson, Thomas R, Associate Professor Emeritus of Biology, (9/1/89-8/31/17)

Smart, Dennis L., Associate Professor Emeritus of Management, (9/1/05-8/31/20)

Smith, Howard G, Associate Professor Emeritus of Accounting, (9/1/86-7/15/03)

Springer, Stephen B., Associate Professor Emeritus of Organization, Workforce, and Leadership Studies, (9/1/84-1/15/20)

Stalnaker, Sylvia D, Associate Professor Emeritus of Family and Consumer Sciences, (1/15/73-1/15/98)

Starling, Betty Ross Jones, Associate Professor Emeritus of English, (9/1/67-1/15/94)

Thompson, Glenda Sue, Associate Professor Emeritus of Family and Consumer Sciences, (9/1/84-5/31/07)

Tijerina, Mary S, Associate Professor Emerita of Social Work, (1/16/01-1/15/14)

Treanor, Betty M, Associate Professor Emeritus of Family and Consumer Sciences, (9/1/80-5/31/04)

Upchurch, Marian L, Associate Professor Emeritus of Health Services and Research, (9/1/78-7/31/01)

Watson, Dwight D, Associate Professor Emeritus of History, (7/16/99-8/31/17)

Werner, Patrice H, Associate Professor Emeritus of Curriculum and Instruction, (9/1/88-8/31/21)

Westerlund, Julie F, Associate Professor Emeritus of Biology, (9/19/97-5/31/23)

Williams, Tommy C, Associate Professor Emeritus of Art and Design,  
(9/1/70-5/31/06)

Windham, Billy L, Associate Professor Emeritus of Technology,  
(9/1/63-5/31/99)

Wood, Juli I, Associate Professor Emeritus of Music, (9/1/02-8/31/13)

Borchers, Ralph E, Assistant Professor Emeritus of Art and Design,  
(9/1/87-1/15/06)

Farr, Gerald G, Assistant Professor Emeritus of Biology, (9/1/69-8/31/14)

Goldsmith, James M, Assistant Professor Emeritus of Technology,  
(2/1/73-5/31/97)

Granato, Nancy O, Assistant Professor Emerita of Family and Consumer  
Sciences, (9/1/83-7/15/09)

Hastedt, Laura W, Assistant Professor Emeritus of Computer Information  
Systems and Administrative Sciences, (9/1/57-1/15/85)

Henson, Verna, Assistant Professor Emerita of Criminal Justice,  
(7/16/94-1/15/13)

Heudier, Jean-Pierre, Assistant Professor Emeritus of Modern Languages,  
(9/10/72-5/31/96)

Lee, Daniel H, Assistant Professor Emeritus of Mathematics,  
(9/1/67-5/31/06)

McCall, Carolyn A, Assistant Professor Emeritus of Curriculum and  
Instruction, (6/1/74-5/31/12)

Reeh, Albert F, Assistant Professor Emeritus of Health, Physical  
Education and Recreation, (9/1/60-5/31/91)

Stein, Marlowe Robin, Assistant Professor Emeritus of Music,  
(8/1/98-5/31/14)

Thompson, Robert B, Assistant Professor Emeritus of English,  
(9/1/70-5/31/99)

Tolbert, Evelyn Osman, Assistant Professor Emerita of English,  
(9/1/70-5/31/93)

Trinidad, Jose, Assistant Professor Emeritus of Finance and Economics,  
(9/1/94-7/15/13)

Webb, Frances M, Assistant Professor Emeritus of Music,  
(6/1/69-5/31/06)

Barrett, Patricia Ann, Instructor Emeritus of Physical Education,  
(9/1/71-7/15/98)

Kinlund, Neal W, Instructor Emeritus of Health, Physical Education, and  
Recreation, (9/1/73-7/30/06)

Shrader, Robert, Instructor Emeritus of Mass Communication,  
(9/1/77-8/31/01)

Tucker, Kenneth W, Instructor Emeritus of Curriculum and Instruction,  
(9/1/75-6/30/04)

Arzu Ari, Department of Respiratory Care (2022-2023)  
Cyrus Cassells III, Department of English (2022-2023)

Jason J. Kwak, School of Music (2021-2022)  
Jon S. Lasser, Department of Counseling, Leadership, and Adult  
Education (2021-2022)

Susan S. Morrison, Department of English (2020-2021)  
Rodney E. Rohde, Clinical Laboratory Science Program (2020-2021)

Duane Knudson, Health and Human Performance (2019-2020)  
Patricia Shields, Political Science (2019-2020)

William Brittain, Chemistry and Biochemistry (2018-2019)

Lawrence Estaville, Geography (2017-2018)

Gary Beall, Chemistry and Biochemistry (2016-2017)  
Nico Schuler, Music (2016-2017)

Dennis Dunn, History (2015-2016)  
Ditmar Hahn, Biology (2015-2016)

Donald Olson, Physics (2014-2015)

Ian Davidson, Music (2013-2014)  
Joycelyn Pollock, Criminal Justice and Criminology (2013-2014)

Michael Forstner, Biology (2012-2013)  
Vedaraman Sriraman, Engineering Technology (2012-2013)

Robert McLean, Biology (2011-2012)  
Paula Williamson, Biology (2011-2012)

Jesus Frank De la Teja, History (2010-2011)  
Robert Gorman, Political Science (2010-2011)

John Baccus, Biology (2009-2010)  
David Butler, Geography (2009-2010)  
Steven Furney, Health and Human Performance (2009-2010)  
M. Lee Williams, Communication Studies (2009-2010)  
Sharon Ugalde, World Languages and Literatures (2009-2010)

Max Warshauer, Mathematics (2007-2008)

Byron Augustin, Geography (2006-2007)  
Steven Beebe, Communication Studies (2006-2007)  
Nancy Chavkin, Social Work (2006-2007)

Arzu Ari, Department of Respiratory Care (2023)

Cyrus Cassells III, Department of English (2023)

Jason J. Kwak, School of Music (2022)

John S. Lasser, Department of Counseling, Leadership, Adult Education  
and School Psychology (2022)

Rodney E. Rohde, Clinical Laboratory Science Program (2021)

Susan S. Morrison, Department of English (2021)

Duane Knudson, Health and Human Performance (2020)  
Patricia Shields, Political Science (2020)

William Brittain, Chemistry and Biochemistry (2019)

Lawrence Estaville, Geography (2018)

Gary Beall, Chemistry and Biochemistry (2017)



Dennis Dunn, History (2016)  
Ditmar Hahn, Biology (2016)

Donald Olson, Physics (2015)

Ian Davidson, Music (2014)

Michael Forstner, Biology (2013)

Robert McLean, Biology (2012)

Jesus Frank De la Teja, History (2011)

John Baccus, Biology (2010)  
David Butler, Geography (2010)

Max Warshauer, Mathematics (2008)

Byron Augustin, Geography (2007)  
Steven Beebe, Communication Studies (2007)  
Nancy Chavkin, Social Work (2007)

Ann Burnette, Communication Studies (2020)  
Celeste Domsch, Communication Disorders (2020)  
Rachel Romero, Sociology (2020)

Cynthia Gonzales, Music (2019)  
Mayumi Moriuchi, World Languages and Literatures (2109)

Debra Feakes, Chemistry (2017)  
David Nolan, Journalism and Mass Communication (2017)

Alfau, Antonio de Jesus, Lecturer of Modern Languages,  
(1/16/08-7/31/10)

Allsup, Roxane C, Associate Professor of Curriculum and Instruction,  
(9/1/01-8/31/21)

Anderson, Mary A, Senior Lecturer of Curriculum and Instruction,  
(9/1/99-5/31/13)

Arledge, Jane A, Lecturer of Mathematics, (9/1/1-5/31/18)

Armentrout, Dede, Senior Lecturer of Biology, (8/1/02-5/31/08)

Atchison, Alan C, Senior Lecturer of History, (9/1/96-5/31/16)

Augustin, Harriet M, Lecturer of Management, (9/1/79-5/31/05)

Bajackson, Robert E, Senior Lecturer of Journalism and Mass  
Communication, (8/1/99-5/31/23)

Baker, Daniel G, Senior Lecturer of Health and Human Performance,  
(9/1/77-8/31/20)

Barclay, Stephen L, Lecturer of Computer Information Systems and  
Quantitative Methods, (9/1/88-5/31/04)

Beebe, Susan J, Senior Lecturer of English, (7/16/93-5/31/14)

Belchic, Albert M, Assistant Professor of Health Administration,  
(1/16/75-1/31/90)

Benavides, Ida M, Senior Lecturer of World Languages and Literature,  
(9/4/07-5/31/19)

Biggan, Elizabeth A, Clinical Assistant Professor of Nursing,  
(1/16/17-5/31/21)

Bird, Paula, Senior Lecturer of Music, (6/28/06-8/31/20)

Bishop, Janice P, Senior Lecturer of Theatre and Dance, (9/1/91-5/31/14)

Bishop, Sherwood, Senior Lecturer of Finance and Economics,  
(1/16/02-9/24/21)

Blanco, R Ivan, Clinical Assistant Professor of Management,  
(9/1/04-5/31/15)

Bos, Beth, Associate Professor Curriculum and Instruction,  
(7/16/07-12/31/16)

Bosworth, Anthony B, Senior Lecturer of Biology, (9/1/08-5/31/11)

Boyd, Shawn L, Lecturer of Nursing, (1/16/12-6/30/23)

Braud, Beverley M, Senior Lecturer of English, (9/1/83-5/31/17)

Brice, Clare C, Instructor of Physical Education, (9/1/86-1/31/05)

Brown, Claudia Shroyer, Senior Lecturer of Psychology, (9/1/02-12/31/12)

Cancino, Jeffrey M, Associate Professor of Criminal Justice,  
(6/1/05-4/30/16)

Carlson, Larry A, Senior Lecturer of Journalism and Mass Communication,  
(9/1/84-8/31/20)

Carlson, Larry A, Lecturer of Journalism and Mass Communication,  
(9/1/84-8/31/20)

Carpenter, David N, Senior Lecturer of Psychology, (1/16/91-5/31/14)

Carter, Mark L, Senior Lecturer of Geography, (9/7/94-12/31/20)

Cearley-Key, Terri, Lecturer of Curriculum and Instruction,  
(9/1/05-8/31/20)

Clark, Elizabeth J, Senior Lecturer of Journalism and Mass  
Communication, (9/1/08-5/31/20)

Cohen, Robin E, Senior Lecturer of English, (9/1/86-5/31/17)

Coleman, Margaret C, Lecturer of Curriculum and Instruction,  
(9/1/03-5/31/07)

Copeland, Thomas W, Lecturer of Theatre and Dance, 9/1/05-5/31/18)

Cornett, Michael, Senior Lecturer of Communication Studies,  
(9/1/04-5/31/17)

Covington, Barbara G, Associate Professor of Nursing, (6/1/08-5/31/19)

Crawford, Priscilla Ann, Senior Lecturer of Curriculum and Instruction,  
(7/16/98-5/31/15)

Critchfield-Jones, Nancy, Lecturer of Communication Studies,  
(9/1/86-5/31/05)

De la Colina, Maria G, Associate Professor of Curriculum and Instruction,  
(8/25/03-1/15/15)

DeHon, Rene, Senior Lecturer of Geography, (7/16/07-5/31/20)

Denton, Patricia L, Clinical Professor of History, (1/16/08-8/31/19)

Dietert, Judy G, Senior Lecturer of Management, (9/1/84-8/31/20)

Ditto, Charles, Senior Lecturer of Music, (1/16/00-5/31/20)

Doescher, Russell L, Senior Lecturer of Physics, (9/1/88-5/31/16)

Dombroski, Maria Leonor, Senior Lecturer of Curriculum and Instruction, (9/1/00-5/31/12)

Dorrycott, Joyce W, Lecturer of Political Science, (9/1/77-5/31/94)

Draman, Rexford Henry, Lecturer of Management, (9/1/16-8/31/23)

Drobeck, Bruce, Senior Lecturer of Family and Consumer Sciences, (9/1/10-5/31/16)

DuPont, Ann M, Senior Lecturer of Family and Consumer Sciences, (7/16/08-7/31/16)

Durrett, H John, Associate Professor of Computer Science, (9/1/76-8/31/21)

Eure, Diane M, Senior Lecturer of Accounting, (9/1/05-5/31/17)

Fields, Tina T, Associate Professor of Health Administration, (1/16/08-5/31/15)

Fink, Cary M, Associate Professor of Music, (6/1/88-5/31/16)

Fleming, Patricia A, Senior Lecturer of Music, (9/1/02-5/31/06)

Friedman, Stan, Senior Lecturer of Psychology, (9/1/87-5/31/15)

Fulton, Lawrence V, Professor of Health Administration, (1/16/15-1/15/23)

Garcia, John L, Associate Professor of Counseling, Leadership, Adult Education, and School Psychology, (1/20/92-8/31/13)

Garstka, John E, Associate Professor of Family and Consumer Sciences, (1/1/82-8/31/05)

Gibbons-Arhelger, Marilyn, Lecturer of Psychology, (11/26/01-1/15/19)

Grimes, Melissa J, Lecturer of Art and Design, (9/1/98-1/15/12)

Gu, Weizhen, Professor of Mathematics, (9/1/90-8/31/20)

Haddix, F Furman, Assistant Professor of Computer Science, (9/1/00-8/31/07)

Hager, Cassandra J, Senior Lecturer of Engineering Technology, (9/1/98-1/15/18)

Hanson, Susan K, Senior Lecturer of English, (9/1/85-1/15/18)

Hanzel, David W, Senior Lecturer of Engineering Technology, (9/1/88-8/31/21)

Harkins, Betty L, Senior Lecturer of Occupational, Workforce and Leadership Studies, (10/26/92-5/31/15)

Hefner, David, Senior Lecturer of Art and Design, (9/1/99-8/31/20)

Henderson, Richard D, Senior Lecturer of Political Science, (9/1/95-8/31/20)

Henton, David V, Clinical Assistant Professor of Social Work, (1/16/95-12/31/15)

Hermesmeier, Glen E, Senior Lecturer of Mathematics, (1/16/96-1/15/12)

Herring, Lawrence H, Senior Lecturer of Management, (1/16/96-8/31/17)

Hickman, Ada, Lecturer of Curriculum and Instruction, (6/1/90-8/31/02)

Hickman, Elmer J, Assistant Professor of Accounting, (9/1/78-8/31/93)

Hickman, Lois M, Senior Lecturer of SociologySenior Lecturer of Sociology, (8/16/98-5/31/19)

Hindson, Irene L, Lecturer of History, (9/1/85-5/31/19)

Horne, Francis R, Professor of Biology, (9/1/67-8/31/17)

Huston, Michael, Professor of Biology, (9/1/03-1/15/17)

Inbody, Donald S, Senior Lecturer of Political Science, (9/1/08-5/31/19)

Ingram, Ralph M, Senior Lecturer of History, (1/16/92-1/15/13)

James, Randall S, Lecturer of Finance and Economics, (9/1/12-1/15/18)

Jennings, John J, Senior Lecturer of Theatre and Dance, (9/1/82-5/31/19)

Jiang, Zhonghong, Professor of Mathematics, (7/16/07-5/31/17)

Johannessen, Bertha Gloria, Professor of Curriculum and Instruction, (8/1/09-1/15/16)

Johnson, Charles M, Associate Professor of Health Services Research, (8/16/76-1/15/06)

Johnson, Linda E, Lecturer of Communication Disorders, (1/16/10-8/31/21)

Johnson, Marion A, Lecturer of Health, Physical Education, and Recreation, (9/1/82-5/31/06)

Jolley, Patricia D, Senior Lecturer of Family and Consumer Sciences, (9/1/16-1/15-19)

Jones, Gordon, Senior Lecturer of Music, (9/1/03-8/31/20)

Jones, Theresa L, Senior Lecturer of Mathematics, (9/1/10-5/31/22)

Joseph, Dennis G, Associate Professor of Curriculum and Instruction, (9/1/87-8/31/18)

Kacmar, Karen M, Professor of Management and Fields Endowed Chair in Ethics and Corporate Responsibility, (9/1/14-12/31/20)

Khouri, Yvonne George, Associate Professor of Health Administration, (1/16/78-1/15/01)

Kilday, Carolyn, Lecturer of Art and Design, (8/25/03-5/31/23)

Knox, Martha E, Associate Professor of Health Services Research, (9/1/77-8/31/05)

Kopecky, Helen P, Lecturer of Finance and Economics, (8/1/81-5/31/85)

Krabbenhoft, Eloiese, Senior Lecturer of Art and Design, (9/1/03-5/31/16)

Labay, JoAnn, Senior Lecturer of English, (9/1/88-5/31/15)

Langerock, Nancy L, Senior Lecturer of Curriculum and Instruction, (9/1/02-12/31/22)

Larson, Lawrence A, Senior Lecturer of Engineering, (9/1/07-8/31/20)

Latson, Harvey H, Senior Lecturer of Health, Physical Education, and Recreation, (6/1/01-5/31/08)

Lawrence, Thomas L, Senior Lecturer of Physics, (1/16/03-5/31/09)

Lopes, Vicente, Professor of Biology, (1/16/05-5/31/19)

Lopez, Dora P, Clinical Lecturer of Radiation Therapy, (1/16/01-6/4/18)

Lopez, John A, Professor of Music, (6/14/92-8/31/21)

Lugones, Nestor A, Assistant Professor of Modern Languages, (9/1/00-7/15/05)

Lund, Merrie E, Senior Lecturer of Mathematics, (9/1/05-8/31/19)

Mallard, Arch R, Professor of Communication Disorders, (8/29/79-8/31/06)

Mann, Robert, Senior Lecturer of Journalism and Mass Communication, (1/16/05-5/31/10)

Margerison, Patricia S, Senior Lecturer of English, (9/1/84-7/31/11)

Martinez, Pablo, Associate Professor of Criminal Justice, (9/1/02-8/31/14)

Masterson, Lynn C, Senior Lecturer of Curriculum and Instruction, (1/16/06-7/15/20)

Mauck, Jeffrey, Senior Lecturer of History, (9/1/02-8/31/23)

McCabe, Diann A, Senior Lecturer of Honors, (9/1/91-8/31/17)

McCabe, Terence, Assistant Professor of Mathematics, (9/1/88-7/31/20)

McDonald, Jacquelyn, Clinical Associate Professor of Health and Performance, (9/1/06-7/31/22)

McGhee, Marla W, Associate Professor of Educational Administration and Psychological Services, (1/16/99-1/15/08)

Melbye, Floyd Jerome, Professor of Anthropology, (9/1/04-8/31/09)

Meritt, Julia Marion, Senior Lecturer of Curriculum and Instruction, (1/16/04-8/31/23)

Michell, Monica A, Senior Lecturer of Theatre and Dance, (9/1/89-7/31/15)

Miles, Charles J, Lecturer of Music, (1/16/07-5/31/21)

Miley, Sharon C, Senior Lecturer of Sociology, (9/1/90-5/31/10)

Milhomme, Albert J, Professor of Marketing, (9/1/93-8/31/06)

Moini, Mehdi, Senior Lecturer of Chemistry and Biochemistry, (11/1/08-6/30/10)

Moreau, John A, Senior Lecturer of Health and Human Performance, (1/16/83-5/31/14)

Moreita, Joan, Senior Lecturer of Curriculum and Instruction, (1/16/04-5/31/18)

Morgan, Elizabeth L, Clinical Assistant Professor of Family and Consumer Sciences, (8/25/03-8/31/15)

Morrison, Eileen, Professor of Health Administration, (9/1/04-5/31/19)

Murphy, Maxwell C, Lecturer of Criminal Justice, (1/16/88-5/31/95)

Murphy-Abdouch, Kim M, Clinical Associate Professor of Health Information Management, (9/1/10-5/31/22)

Nankervis, Bryan, Senior Lecturer of Mathematics, (9/1/04-5/31/19)

Nelms, Morris, Senior Lecturer of Music, (9/1/98-8/31/20)

Noble, Dorinda N, Professor of Social Work, (8/1/01-5/31/16)

Nugent, Gerard P, Lecturer of Computer Information Systems and Quantitative Methods, (1/16/14-5/31/17)

O'Kelley, Erin M, Clinical Assistant Professor of Health, Physical Education, and Recreation, (6/1/01-1/31/09)

Pankey, T Jill, Senior Lecturer of Art and Design, (9/1/02-3/31/17)

Pape, Dianne R, Senior Lecturer of Curriculum and Instruction, (9/1/84-5/31/18)

Pardo, Brian Evers, Lecturer of Music, (9/1/18-5/31/23)

Parent, Patricia C, Senior Lecturer of Political Science, (9/1/84-1/15/18)

Patschke, Ronald B, Lecturer of Mathematics, (9/1/04-5/31/15)

Payne, Dennis T, Lecturer of Communication Studies, (7/16/06-5/31/18)

Peeler, William R, Professor of Theatre and Dance, (9/1/88-8/15/21)

Perro, Jo Ann M, Senior Lecturer of Modern Languages, (9/1/99-5/31/13)

Perry, Robert C, Lecturer of Modern Languages, (9/1/79-8/31/95)

Pesthy, Carolyn, Senior Lecturer of Biology, (9/1/07-5/31/23)

Petray, Thomas Earl, Lecturer of Curriculum and Instruction, (9/1/13-5/31/13)

Pevoto, Barbara, Associate Professor of Occupational Education, (8/1/99-7/15/07)

Phillips, Ronn, Lecturer of English, (9/1/98-8/31/20)

Pieruccii, Caprice P, Senior Lecturer of Art and Design, (1/16/99-8/31/21)

Pohl, Patsy R, Senior Lecturer of English, (9/1/79-7/15/09)

Ponder, Elizabeth H, Lecturer of Accounting, (1/16/16-5/31/22)

Price, James W, Senior Lecturer of Theatre and Dance, (7/16/09-8/31/20)

Pritzker, Burton, Senior Lecturer of Art and Design, (1/16/05-5/31/17)

Rainey, Tammy R, Senior Lecturer of Health and Human Performance, (7/16/05-5/31/15)

Rast, Claudia, Lecturer of Biology, (1/16/02-5/31/12)

Reardon, Robert F, Associate Professor of Counseling, Leadership, Adult Education and School Psychology, (9/1/06-8/31/20)

Reichenau, Becky L, Senior Lecturer of Computer Science, (9/1/84-5/31/21)

Roaten, Gail K, Associate Professor of Counseling, Leadership, Adult Education, and School Psychology, (9/1/06-8/31/13)

Ross, Sherry A, Senior Lecturer of Accounting, (1/16/00-5/31/13)

Rowe, Scott L, Senior Lecturer of Engineering Technology, (9/1/84-1/15/17)

Scow, Roger D, Lecturer of Management, (9/1/83-5/31/97)

Seidman, Stephen B, Professor of Computer Science and Dean of the College of Science and Engineering, (8/1/09-5/31/15)

Selcraig, James T, Senior Lecturer of History, (9/1/92-5/31/19)

Sellers, Diana E, Assistant Professor of Developmental Education, (8/1/73-1/15/00)

Severance, Robert L, Senior Lecturer of Accounting, (9/1/01-7/15/15)

Siegenthaler, Peter D, Senior Lecturer of History, (9/1/04-5/31/19)

Sivitanides, Marcos P, Associate Professor of Information Systems and Analytics, (1/16/89-5/31/23)

Smith, James D, Lecturer of Criminal Justice, (9/1/75-9/1/88)

Smith, Maureen M., Senior Lecturer of Health and Human Performance, (9/1/86-8/31/20)

Smithe, David A, Senior Lecturer of Political Science, (6/1/13-5/31/22)

Spencer, David, Senior Lecturer of Criminal Justice, (9/1/01-8/31/12)

Stedman, Deborah, Lecturer of Educational Administration and Psychological Services, (1/16/01-1/31/09)

Stein, Richard, Senior Lecturer of Mathematics, (9/1/98-8/31/13)

Stewart, Sue L, Senior Lecturer of Communication Studies, (9/1/01-5/31/19)

Stone, Patricia A, Senior Lecturer of Theatre and Dance, (9/1/81-5/31/14)

Stouder, Nial Eugene, Professor of Physics, (2/15/99-2/28/06)

Streusand, Barry J, Lecturer of Chemistry and Biochemistry, (9/1/14-5/31/19)

Thomas, Cathy, Associate Professor of Curriculum and Instruction, (6/1/17-1/15/23)

Thomas, Linda D, Associate Professor of Health Information Management, (9/1/92-5/31/05)

Thompson, Steven C, Professor of Accounting, (9/1/04-12/31/14)

Tilka, Susan D, Senior Lecturer of English, (9/1/88-5/31/17)

Till, Leon G, Lecturer of Management, (1/16/87-5/31/97)

Todd, Mark E, Professor of Art and Design, (9/1/78-1/15/21)

Upchurch, Garland R, Associate Professor of Biology, (7/1/91-8/31/18)

Utle, Dan K., Lecturer of History, (1/16/09-5/31/20)

Viswanathan, Vishu R, Professor of Engineering, (9/1/12-1/15/22)

Vittrup, John B, Associate Professor of Technology, (9/1/87-5/31/91)

Walsh, Francis E, Associate Professor of Journalism and Mass Communication, (9/1/04-8/31/16)

Walter, Ronald B, Professor of Chemistry and Biochemistry, (9/1/88-6/23/20)

Westbrook, Thersa, Senior Lecturer of Mathematics, (1/16/08-7/15/23)

Wharton, Billy J, Instructor of Respiratory Care, (10/15/75-8/31/17)

Wiley, Gale F, Lecturer of Journalism and Mass Communication, (6/1/13-5/31/17)

Willson, Pamela C, Clinical Professor of Nursing, (9/1/14-8/31/20)

Wilson, Barbara D, Senior Lecturer of Occupational, Workforce, and Leadership Studies, (10/17/88-8/31/16)

Wilson, Olga M, Senior Lecturer of Journalism and Mass Communication, (9/1/09-5/31/19)

Wuestenberg, Pamela, Senior Lecturer of Health and Human Performance, (11/22/99-8/31/20)

Zapp, Teresa L, Senior Lecturer of Curriculum and Instruction, (1/16/10-5/31/21)

Zare, Khalil, Senior Lecturer of Engineering, (9/1/04-1/15/19)

Zielinski, Gary M, Senior Lecturer of Mathematics, (9/1/79-5/31/19)

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